

**THE MAINTENANCE ACTIVITIES OF TRUNK ROAD
33/4 BETWEEN KM 4.6 AND KM 14.4 ALONG THE
MEINRINGSPOORT PASS, WITHIN THE PRINCE
ALBERT AND OUDTSHOORN LOCAL
MUNICIPALITIES, WESTERN CAPE.**

EXTERNAL ENVIRONMENTAL AUDIT **CLOSURE REPORT
IN TERMS OF REGULATION 34 OF THE NEMA EIA
REGULATIONS, 2014 (AS AMENDED).**

DEFF REF. NO. 14/12/16/3/3/1/2226



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KAPPEC

3 December 2025

DETAILS OF THIS REPORT

Status of this Report	Final Closure Regulation 34 External Compliance Audit Report
Date Submitted	3 December 2025
Public Review Period	Not Applicable
Report Title	The Maintenance Activities of Trunk Road 33/4 Between km 4.6 and km 14.4 along the Meinringspoort Pass, within the Prince Albert and Oudtshoorn Local Municipalities, Western Cape.
Applicant	Western Cape Government: Department of Transport and Public Works Private Bag X9185 Cape Town 8000
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 The logo for KAPP Environmental Consultants features a stylized graphic on the left consisting of a green leaf-like shape and a blue circular element. To the right of this graphic, the word "KAPP" is written in large, bold, dark grey capital letters. Below "KAPP", the words "ENVIRONMENTAL CONSULTANTS" are written in a smaller, dark grey, all-caps sans-serif font.	

DISCLAIMER

This report has been prepared for Western Cape Government: Department of Transport and Public Works and is subject to and issued in accordance with the agreement with Kapp Environmental Consultant (Pty) Ltd. (KAPPEC).

The opinions expressed in this report have been based on the information supplied to KAPPEC by the Client and the relevant Environmental Assessment Practitioner. The Author has exercised all due care in reviewing the supplied information, but conclusions from the review are reliant on the accuracy and completeness of the supplied data. KAPPEC does not accept responsibility for any errors or omissions in the supplied information and does not accept any consequential liability arising from commercial decisions or actions resulting from them. KAPPEC accepts no liability or responsibility whatsoever for it in respect of any use of or reliance upon this report by any third party.

Opinions presented in this report apply to the site conditions and features as they existed at the time of the writing of this report, and those reasonably foreseeable.

Copying of this report without the permission of the Client and KAPPEC is not permitted.

LETTER OF UNDERTAKING AND STATEMENT OF INDEPENDENCE

I Renier Kapp, as the appointed independent Environmental Practitioner hereby declare that I:

- Will perform the work relating to the appointment in an objective manner, even if this results in views and findings that are not favourable to the applicant;
- Other than fair remuneration for work performed/to be performed in terms of this application, have no business, financial, personal or other interest in the activity or application and that there are no circumstances that may compromise my objectivity;
- Work performed for this study was done in an objective manner irrespective of how such findings may be favourable or not to the applicant;
- declare that there are no circumstances that may compromise my objectivity in performing such work;
- All facts and findings will be presented in an objective manner in accordance with my professional experience and information derived from the study;
- have expertise in conducting the independent audit, including knowledge of the relevant legislation and any guidelines that have relevance to the development; and
- All particulars furnished in this report are true and correct.



(Renier Kapp)

Signature of the Environmental Assessment Practitioner

Kapp Environmental Consultants (Pty) Ltd (KAPPEC)

Name of Company

3 December 2025

Date

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ABBREVIATIONS

MMP	Maintenance Management Plan
DEFF	Department of Environment, Forestry and Fisheries
DWS	Department of Water Affairs and Sanitation
EA	Environmental Authorization
EAP	Environmental Assessment Practitioner
ECO	Environmental Control Officer
EIA	Environmental Impact Assessment
EMP	Environmental Management Programme
DEO	Designated Environmental Officer
KAPPEC	Kapp Environmental Consultants
I&AP	Interested and Affected Parties
RE	Resident Engineer

APPENDICES

Appendix A:	Site Photographs
Appendix B:	Locality Plan
Appendix C:	Copy of Original EA
Appendix D:	Copy of Original EMPr
Appendix E:	Alien Management Programme
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INTRODUCTION

Kapp Environmental Consultants (Pty) Ltd. (KAPPEC) has been appointed by the Western Cape Government: Department of Transport and Public Works (the Applicant) as the independent environmental practitioners to undertake the final closure external compliance audit in fulfilment of Condition 15 of the Environmental Authorization (the EA) and Regulation 34 of the NEMA EIA Regulations, 2014 (as amended).

An Environmental Authorisation (EA) was granted to the Western Cape Government: Department of Transport and Public Works on February 18, 2021 (DEFF Ref: 1412/16/3/3/1/226) in terms of the National Environmental Management Act (NEMA), 1998 (Act. 107 of 1998), and the Environmental Impact Assessment (EIA) Amendment Regulations, 2010, and Regulation 34 of the NEMA EIA Regulations, 2014 (as amended).

The aim is to validate the contractor's compliance in terms of the approved EMP. The body of this report will incorporate the auditable conditions and requirements contained in both the EA and the EMP. The conditions of the EA have been summarized in the report including its corresponding level of compliance with each condition.

The methodology followed for conducting the environmental audit included:

- Compilation of background information for site visit.
- Documentation audit.
- Site Visit.
- Compilation of environmental audit report.
- Submission and circulation of environmental audit report.

The items have been included in table format and compliance will be indicated based on assigned colour significance as per Table 1 below:

TABLE 1: COMPLIANCE RATING

Colour	Compliance Rating Significance
GREY	A grey item indicates that a compliance rating is not relevant. Item is listed for awareness although will not/cannot be rated.
GREEN	An item is marked green to indicate complete compliance in line with the EMP.
YELLOW	An item is marked yellow to indicate sufficient compliance although possibly not as prescribed in the EMP.
ORANGE	An item is marked orange to indicate a non-compliance although the resulting impact is not deemed significant.
RED	An item is marked red to indicate a significant or ongoing non-compliance which needs to be addressed as per the EAP instruction.

PROJECT DESCRIPTION

The proposed project entails maintenance activities along Trunk Road 33/4, specifically between kilometer markers 4.6 and 14.4 through the Meiringspoort Pass, between De Rust and Prince Albert, located within the Prince Albert and Oudtshoorn Local Municipalities in the Western Cape. The scope of maintenance includes repairing edge breaks, reconstructing road shoulders, and installing new stone-pitched side drains. Additionally, the project will involve bitumen-treated base and asphalt repairs, clearing watercourse flow paths, addressing concrete spalling and cracking, repairing damaged concrete deck soffits, and reinstating previously inadequate concrete repairs. Measures will also be taken to protect concrete surfaces damaged by Alkali-Silica Reactions (ASR) and seal deck expansion joints, ensuring the road's safety and longevity while mitigating future structural issues.

Trunk Road 33/4 traverses along Farm Erin 180, Farm Erin 14, Portion 1 of Farm Betergevonden 19 and Farm de Uitvlugt 20. Furthermore, the proposed project entails the maintenance and resealing of Trunk Road 33/4, which extends approximately 22 kilometers north from De Rust to Klaarstroom through the Swartberg mountain range. This maintenance work will continue for an additional 7.1 kilometers in a northwesterly direction after passing through the town of Klaarstroom. Trunk Road 33/4 then exits Klaarstroom and turns north towards the Central Karoo. The maintenance and resealing of Trunk Road 33/4 (N12) conclude at this deviation.

Approximately 15 causeways between km 5.80 and km 14.10 are to be upgraded, and the following causeways and maintenance activities are proposed;

Causeway	Maintenance Activity
Meiringspoort Causeway No 4 B2689 at km 5.80	• Clear watercourse flow path. • Repair concrete spalling and cracking. • Protect ASR damaged and/or weathered concrete surfaces. • Seal deck expansion joints.
Meiringspoort Causeway No 5 B2698A at km 6.03	• Clear watercourse flow path. • Repair concrete cracking. • Protect ASR damaged and/or weathered concrete surfaces. • Seal deck expansion joints.
Meiringspoort Causeway No 6 B2698B at km 6.31	• Clear watercourse flow path. • Repair concrete cracking. • Protect ASR damaged and/or weathered concrete surfaces. • Seal deck expansion joints.
Meiringspoort Causeway No 7 B2698C at km 6.82	• Clear watercourse flow path. • Protect ASR damaged and/or weathered

	concrete surfaces. • Seal deck expansion joints.
Meiringspoort Causeway No 8 B2690 at km 7.73	• Clear watercourse flow path. • Repair concrete cracking. • Protect ASR damaged and/or weathered concrete surfaces. • Seal deck expansion joints.
Meiringspoort Causeway No 9 B2690A at km 8.49	• Repair concrete spalling and cracking. • Protect ASR damaged and/or weathered concrete surfaces. • Seal deck expansion joints.
Meiringspoort Causeway No 10 B2691 at km 8.76	• Clear watercourse flow path. • Repair concrete spalling and cracking. • Protect ASR damaged and/or weathered concrete surfaces. • Seal deck expansion joints.
Meiringspoort Causeway No 11 B2691A at km 9.25	• Repair concrete spalling and cracking. • Protect ASR damaged and/or weathered concrete surfaces. • Seal deck expansion joints.
Meiringspoort Causeway No 12 B2692 at km 9.54	• Reinstate previous poor concrete repairs. • Repair concrete spalling and cracking. • Protect ASR damaged and/or weathered concrete surfaces. • Seal deck expansion joints.
Meiringspoort Causeway No 13 B2692A at km 9.85	• Clear watercourse flow path. • Repair concrete spalling and cracking. • Protect ASR damaged and/or weathered concrete surfaces. • Seal deck expansion joints.
Meiringspoort Causeway No 14 B2693 at km 10.15	• Clear watercourse flow path. • Repair concrete spalling. • Seal deck expansion joints.
Meiringspoort Causeway No 15 B2694 at km 11.05	• Clear watercourse flow path. • Repair concrete cracking. • Protect ASR damaged and/or weathered concrete surfaces. • Repair damaged concrete deck soffit. • Seal deck expansion joints.
Meiringspoort Causeway No 16 B2695 at km 11.43	• Repair concrete spalling. • Protect ASR damaged and/or weathered

	concrete surfaces. • Seal deck expansion joints.
Meiringspoort Causeway No 17 B2695A at km 11.70	• Clear watercourse flow path. • Repair concrete spalling. • Reinstate previous poor concrete repairs. • Protect ASR damaged and/or weathered concrete surfaces. • Seal deck expansion joints.
Meiringspoort Causeway No 18 B2696 at km 14.10	• Repair concrete spalling and cracking. • Protect ASR damaged and/or weathered concrete surfaces. • Seal deck expansion joints.

The proposed rehabilitation and maintenance measures will adhere to Series 12000: Specifications for the Rehabilitation of Bridges, which supplement the COLTO Standard Specifications for Road and Bridge Works for State Road Authorities. Key categories of the proposed rehabilitation include repairing concrete spalling and cracks, protecting ASR-damaged and weathered concrete surfaces, repairing damaged and broken-out concrete, strengthening bridge decks, reinstating previous poor concrete repairs, reinstating culvert cell joint fillers, sealing bridge/culvert deck expansion joints, clearing bridge deck scuppers, adding structure number plates, clearing watercourse flow paths, protecting eroded foundations, and installing guardrails.

Specifically, the repair of concrete spalling involves mechanically removing all loose material until sound concrete is found, replacing deteriorated reinforcement, cleaning and priming surfaces, applying epoxy, and reinstating concrete with a fiber polymer-modified cementitious repair mortar. The entire repair area will then be overcoated with a waterproof agent and cured with mist spray. Repairing concrete cracks involves cutting, cleaning, and injecting epoxy into smaller cracks, while larger cracks will be square cut, cleaned, filled with epoxy, and finished with repair mortar.

To protect ASR-damaged and weathered concrete surfaces, the methodology includes thorough cleaning, applying bonding slurry, restoring with structural repair concrete, and applying a waterproof cementitious mortar. For repairing damaged or broken-out concrete, the process involves removing loose material, doweling in new reinforcement, cleaning, applying bonding slurry and anticorrosion primer, and casting new concrete.

Bridge decks that have slightly deflected will be monitored monthly, with the option to strengthen them with carbon fiber strips if significant deflection increases. The reinstatement of culvert cell joint fillers involves removing deteriorated fillers, placing backing cord, and filling joints with expansive cementitious grout. Sealing bridge and culvert deck expansion joints includes removing affected asphalt, cleaning joints, installing backing cord, sealing with silicon sealant, and repairing the asphalt layer.

Clearing bridge deck scuppers of debris and vegetation will ensure proper drainage, while installing bridge number plates involves placing structure number plates on steel pegs for major culverts and bridge B4493. Clearing the watercourse flow path includes removing overgrowth, debris, and sediment near the structure to ensure clear flow. To protect eroded foundations, gabions or mass concrete fill will be installed around the foundations.

LISTED ACTIVITIES

The EA subsequently authorised the applicant to undertake the underneath **listed activities**:

Government Notice No. 326 of 7 April 2017, Listing Notice 1

Activity 19

Activity Description:

The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse; but excluding where such infilling, depositing, dredging, excavation, removal or moving—

- (a) will occur behind a development setback;
- (b) is for maintenance purposes undertaken in accordance with a maintenance management plan;
- (c) falls within the ambit of activity 21 in this Notice, in which case that activity applies;
- (d) occurs within existing ports or harbours that will not increase the development footprint of the port or harbour; or where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies.

The removal of deposited material within the river blocking the flow of water through the structures triggered this activity.

Government Notice No. 326 of 7 April 2017, Listing Notice 3

Activity 12

Activity Description:

The clearance of an area of 300 square metres or more of indigenous vegetation,

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- i. On land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning; or
- ii. On land designated for protection or conservation purposes in and environmental Management Framework adopted in the prescribed manner, or a Spatial Development Framework adopted by the MEC or Minister.

The clearing of vegetation along sections of the road shoulders in addition to the clearing of vegetation impeding the structures.

Activity 23

Activity Description:

The expansion of

(ii) infrastructure or structures where the physical footprint is expanded by 10 square metres or more;

where such expansion occurs-

(c) if no development setback has been adopted, within 32 metres of a watercourse, measured from the edge of a watercourse;

Western Cape

i. Outside urban areas:

(cc) World Heritage Sites

The activity was triggered through the construction of new side drains, where needed along the stretch.

REGULATION 34 EXTERNAL AUDIT REQUIREMENTS

This section will attempt to detail the content requirements to be included as part of a Regulation 34 Audit Report as outlined in terms of Appendix 7 of Regulation 982 of the 2014 EIA Regulations.

Environmental audit report

The environmental audit report must provide recommendations regarding the need to amend the EMPr, and where applicable, the closure plan.

Objective of the environmental audit report

The objective of the environmental audit report is to

- a) report on –
 - i. the level of compliance with the conditions of the environmental authorisation and the EMPr, and where applicable, the closure plan; and
 - ii. the extent to which the avoidance, management and mitigation measure provided for in the EMPr, and where applicable, the closure plan achieve the objectives and outcomes of the EMPr, and closure plan;
- b) identify and assess any new impacts and risks as a result of undertaking the activity;
- c) evaluate the effectiveness of the EMPr, and where applicable, the closure plan; and
- d) identify shortcomings in the EMPr, and where applicable the closure plan, and
- e) identify the need for any changes to the avoidance, management and mitigation measures provided for in the EMPr, and where applicable, the closure plan.

Content of environmental audit reports

(1) An environmental audit report prepared in terms of these Regulations must contain –

- a) details of the –
 - i. independent person who prepared the environmental audit report; and
 - ii. expertise of the independent person that compiled the environmental audit report;
- b) a declaration that the independent auditor is independent in a for as may be specified by the competent authority;
- c) an indication of the scope of, and purpose for which, the environmental audit report was prepared;
- d) a description of the methodology adopted in preparing the environmental audit report;
- e) an indication of the ability of the EMPr, and where applicable, the closure plan to –
 - iii. sufficiently provide for the avoidance, management and mitigation of environmental

- impacts associated with the undertaking of the activity on an on-going basis;
- iv. sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the closure of the facility; and
 - v. ensure compliance with the provisions of environmental authorisation, EMPr, and where applicable, the closure plan;
- f) a description of any assumptions made, and any uncertainties or gaps in knowledge;
 - g) a description of any consultation process that was undertaken during the course of carrying out the environmental audit report;
 - h) a summary and copies of any comments that were received during any consultation process; and
 - i) any other information requested by the competent authority.

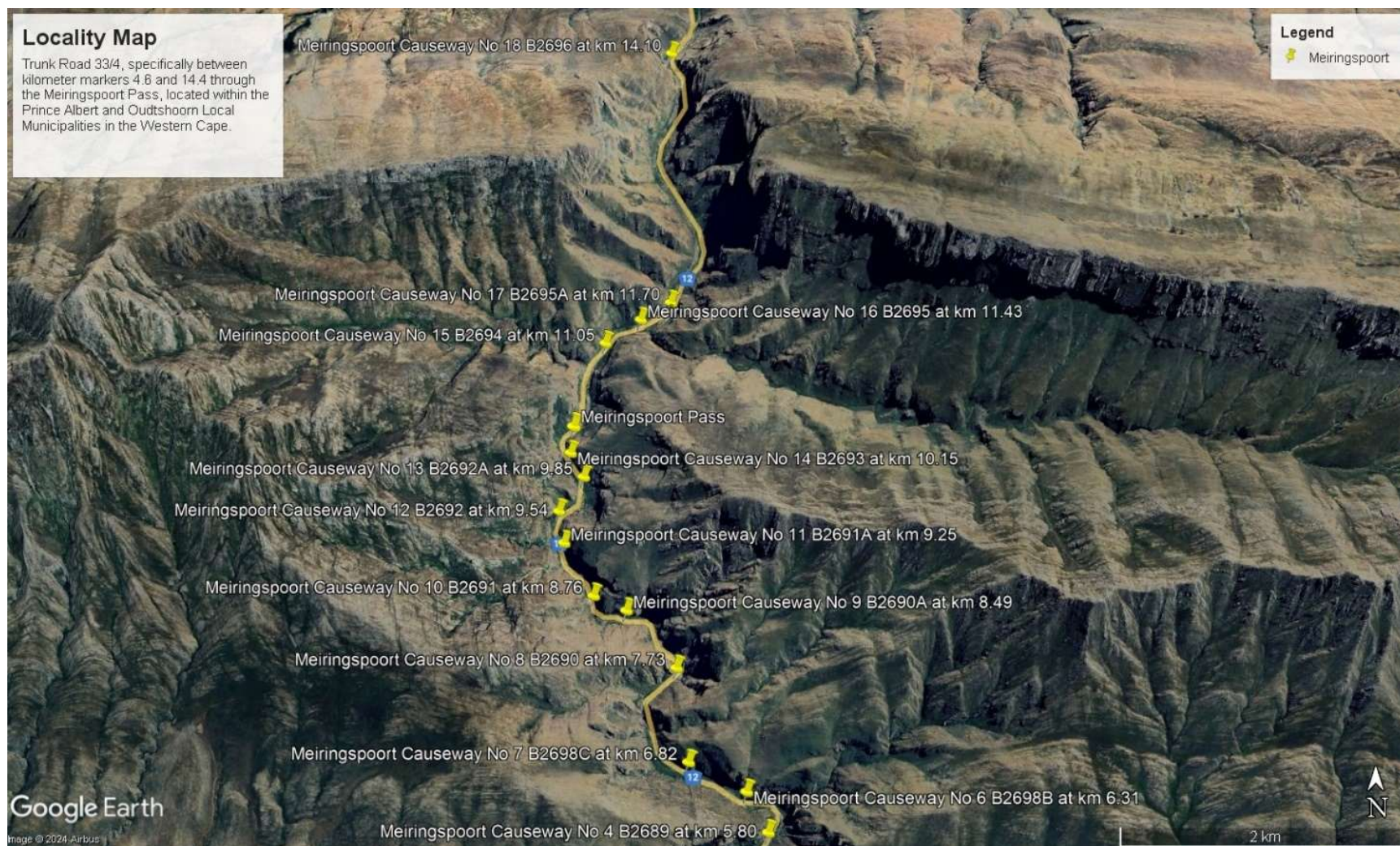


FIGURE 1: LOCALITY MAP OF PROPOSED ROAD SECTIONS AS PER THE EA

CONDITIONS OF AUTHORISATION

TABLE 2: ENVIRONMENTAL AUTHORISATION GENERAL CONDITIONS

No.	EA CONDITIONS	COMPLIANCE FINDING
3.	The holder of the authorization is responsible for ensuring compliance with the conditions contained in this Environmental Authorisation. This includes any person acting on the holder's behalf, including but not limited to, an agent, servant, contractor, sub-contractor, employee, consultant, or person rendering a service to the holder of the authorization.	The holder was responsible for the actions undertaken by all contractors and employees on site.
4.	The activities authorized may only be carried out at the properties as described above.	Trunk Road 33/4 traverses along Farm Erin 180, Farm Erin 14, Portion 1 of Farm Betergevonden 19 and Farm de Uitvlugt 20. Furthermore, the proposed project entails the maintenance and resealing of Trunk Road 33/4, which extends approximately 22 kilometers north from De Rust to Klaarstroom through the Swartberg mountain range. This maintenance work will continue for an additional 7.1 kilometers in a northwesterly direction after passing through the town of Klaarstroom. Trunk Road 33/4 then exits Klaarstroom and turns north towards the Central Karoo. The maintenance and resealing of Trunk Road 33/4 (N12) conclude at this deviation.
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 effected. In assessing whether to grant such acceptance/approval or not, the Department may request such information as it deems necessary to evaluate the significance and	No changes or deviations of the scope have been made to date.

	impacts of such changes or deviations, and it may be necessary for the holder to apply for further Environmental Authorisation in terms of the regulations. No changes or deviations of the scope have been made to date.	
6.	The holder of the Environmental Authorisation must apply for an amendment of the Environmental Authorisation with the Competent Authority for any alienation, transfer, or change of ownership rights in the property on which the activity is to take place.	No amendment application has been made by the holder, as no such change has occurred.
7.	This activity must commence within a period of ten (10) years from the date of issue of this Environmental Authorisation. If commencement of the activity does not occur within that period, the authorization lapses and a new application for Environmental Authorisation must be made in order for the activity to be undertaken.	A letter notifying the department of the intended commencement of activities was submitted to the Department on the 19 th of April 2022, notifying the department that the appointed contractor intends to commence with maintenance activities on the 4 th of May 2022, as granted in the Environmental Authorisation (EA) dated 18 February 2021. Formal ECO audit reports were conducted by Guillaume Nel Environmental Consultants (GNEC) up to September 2023. A closure report compiled in February 2024 was also provided.
8.	Construction must be completed within five (5) years of the commencement of the activity on site.	A letter to notify the department of the intended commencement of activities was submitted to the Department on the 19 th of April 2022. Construction commenced on the 4 th of May 2022 and the final formal closure ECO report dated February 2024. All activities on site were concluded by the end of February 2024.
9.	Commencement with one activity listed in terms of this Environmental Authorisation constitutes commencement of all authorized activities.	Noted and complied with.
10.	The holder of the authorization must notify every registered interested and affected party, in writing and within 14 (fourteen) calendar days of the date of this Environmental Authorization, of the decision to authorize the activity.	It is accepted that Sharples Environmental Services notified all the I&AP's after the approval of the EA on the 8 February 2021. Proofs of the notification were not obtained.

11.	The notification referred to must: 11.1 specify the date on which the authorization was issued; 11.2 inform the interested and affected party of the appeal procedure provided for in the National Appeal Regulations, 2014; 11.3 advise the interested and affected party that a copy of the authorization will be furnished on request; and 11.4 give the reasons of the Competent Authority for the decision.	It is accepted that Sharples Environmental Services notified all the I&AP's after the approval of the EA on the 8 February 2021. Proofs of the notification were not obtained.
12.	The authorized activity shall not commence until the period for the submission of appeals has lapsed as per the National Appeal Regulations, 2014, and no appeal has been lodged against the decision. In terms of Section 43(7), an appeal under Section 43 of the National Environmental Management Act, Act No. 107 of 1998, as amended will suspend the Environmental Authorisation or any provision or condition attached thereto. In the instance where an appeal is lodged you may not commence with the activity until such time that the appeal has been finalized.	Noted and complied with. No appeals were lodged after the I&APs were notified.
13.	The Site Maintenance Plan by Element Consulting Engineers (Pty) Ltd, attached as Appendix B of the BAR dated September 2022 is approved.	This is noted.
14.	The Environmental Management Programme (EMPr) submitted as part of the BAR dated September 2020 is approved and must be implemented and adhered to.	This is noted.
15.	The EMPr must be implemented and strictly enforced during all phases of the project. It shall be seen as a dynamic document and shall be included in all contract documentation for all phases of the development when approved.	The construction activities were conducted in line with the Environmental Management Plan. Some findings were noted within the ECO reports provided by GNEC, although the findings have all been rectified at the time of audit. On the 3rd of November 2022 a meeting was held between the

CapeNature team and the contactors of Actophambili Roads discussing a way forward regarding the fish observed along some of the causeways to be cleared. Accordingly, the following was determined;

We will place sandbags at Derde toll and Rooiuitspannings in the upstream side to prevent fish from entering the work area downstream.

We will place sandbags on the downstream side once a trench has been made for water to drain first.

The sandbags will be wrapped in knitted orange mesh to ensure no large material will filter through.

At Eerste there will be no Sandbags placed in the upstream area as it is too large and deep. We will dig a small trench to drain the water to flow downstream,

then we will place sandbags to prevent silt from flowing downstream.

The material dug out as discussed will be used to shape a neat berm on the sides to ensure the flow is uniform.

The large rocks etc at Derde toll will be used to fill a erosion hole close to the area where the material is being removed.

		<i>The TLB will only enter the area where we agreed to on site.</i> CapeNature hereby confirmed in writing that no fish relocation is necessary, and the required mitigation has been implemented via the above description. From the available ECO reports it is noted that a silt trap was installed downstream of the bridge and utilized during dewatering activities or works within watercourses to prevent siltation of watercourses.
16.	Changes to the approved EMPr must be submitted in accordance with the EIA Regulations applicable at the time.	No changes were made to the EMPr during the construction period.
17.	The Department reserves the right to amend the approved EMPr should any impacts that were not anticipated or covered in the BAR be discovered.	This is noted.
18.	The EMPr must be updated where the findings of the environmental audit reports, contemplated in Condition 25 below, indicate insufficient mitigation of environmental impacts associated with the undertaking of the activity, or insufficient levels of compliance with the environmental authorization or EMPr.	No changes were made to the EMPr or have been required during the construction period.
19.	The updated EMPr must contain recommendations to rectify the shortcomings identified in the environmental audit report.	No changes were made or requested to the EMPr during the construction period.
20.	The updated EMPr must be submitted to the Department for approval together with the environmental audit report, as per Regulation 34 of the EIA Regulations, 2014 as amended. The updated EMPr must have been subjected to a public participation process, which process has been agreed to by the Department, prior to submission of the updated EMPr to the Department for approval.	No changes were made to the EMPr or have been required during the construction period.

21.	In assessing whether to grant approval of an EMPr which has been updated as a result of an audit, the Department will consider the processes prescribed in Regulation 35 of the EIA Regulations, 2014 as amended. Prior to approving an amended EMPr, the Department may request such amendments to the EMPr as it deems appropriate to ensure that the EMPr sufficiently provides for avoidance, management, and mitigation of environmental impacts associated with the undertaking of the activity.	No changes were made or requested to the EMPr during the construction period.
22.	The holder of the authorisation must apply for an amendment of an EMPr, if such amendment is required before an audit is required. The amendment process is described in Regulation 37 of the EIA Regulations, 2014, as amended. The holder of the authorisation must request comments on the proposed amendments to the impact management outcomes of the EMPr or amendments to the closure objectives of the closure plan from potentially interested and affected parties, including the competent authority, by using any of the methods provided for in the Act for a period of at least 30 days.	No changes were made or requested to the EMPr during the construction period.
23.	The holder of the authorisation must appoint an experienced Environmental Control Officer (ECO) for the construction phase of the development that will have the responsibility to ensure that the mitigation/rehabilitation measures and recommendations referred to in this environmental authorisation are implemented and to ensure compliance with the provisions of the approved EMPr. 23.1 The ECO must be appointed before commencement of any authorised activities. 23.2 Once appointed, the name and contact details of the ECO must be submitted to the Director: Compliance Monitoring of the Department.	Guillaume Nel Environmental Consultants was appointed as ECO on the site and submitted monthly reports to DFFE.

	23.3 The ECO must keep record of all activities on site, problems identified, transgressions noted and a task schedule of tasks undertaken by the ECO. 23.4 The ECO must remain employed until all rehabilitation measures, as required for implementation due to construction damage, are completed and the site is ready for operation.	
24.	All documentation, e.g., audit/monitoring/compliance reports and notifications, required to be submitted to the Department in terms of this environmental authorisation, must be submitted to the Director: Compliance Monitoring of the Department.	Monthly ECO reports were submitted to DFFE during the construction phase.
25.	The holder of the environmental authorisation must, for the period during which the environmental authorisation and EMPr remain valid, ensure that project compliance with the conditions of the environmental authorisation and the EMPr are audited, and that the audit reports are submitted to the Director: Compliance Monitoring of the Department.	Monthly ECO reports were submitted to DFFE during the construction phase, which reflected the findings of the EA and EMPr and the compliance rating of each item.
26.	The frequency of auditing and of submission of the environmental audit reports must be as per the frequency indicated in the EMPr, taking into account the processes for such auditing as prescribed in Regulation 34 of the EIA Regulations, 2014 as amended.	Monthly ECO reports were submitted to DFFE during the construction phase. Kapp Environmental Consultants (Pty) Ltd. (KAPPEC) was appointed to conduct the required external environmental compliance audit and final closure audit.
27.	The holder of the authorisation must, in addition, submit environmental audit reports to the Department within 30 days of completion of the construction phase (i.e., within 30 days of site handover) and a final environmental audit report within 30 days of completion of rehabilitation activities.	A closure ECO report was compiled in April 2025 by Guillaume Nel Environmental Consultants and subsequently sent to all Departments.
28.	The environmental audit reports must be compiled in accordance with Appendix 7 of the EIA Regulations, 2014 as amended and must indicate the date of the audit, the name of the auditor and the outcome	Noted and complied with.

	of the audit terms of compliance with the environmental authorisation conditions as well as the requirements of the approved EMPr.	
29.	Records relating to monitoring and auditing must be kept on site and made available for inspection to any relevant and competent authority in respect of this development.	Noted and complied with.
30.	A written notification of commencement must be given to the Department no later than fourteen (14) days prior to the commencement of the activity. 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, as well as a reference number.	A letter to notify the department of the intended commencement of activities was submitted to the Department on the 19 th of April 2022 notifying the department that the appointed contractor intends to commence with maintenance activities on the 4th of May 2022 as granted in the Environmental Authorisation (EA) dated 18 February 2021.
31.	A written notification of operation must be given to the Department no later than fourteen (14) days prior to the commencement of the activity operational phase.	Guillaume Nel Environmental Consultants notified the Department of the closure of all construction activities, however proof of notification of commencement was not obtained.
32.	A copy of this Environmental Authorisation, the audit and compliance monitoring reports, and the approved EMPr, must be made available for inspection and copying: 37.1 to anyone on request; and 37.2 where the holder of the Environmental Authorisation has a website, on such publicly accessible website.	Noted and complied with.

ENVIRONMENTAL AUTHORISATION SPECIAL CONDITIONS AND COMPLIANCE

TABLE 3: ENVIRONMENTAL AUTHORISATION SPECIAL CONDITIONS

No.	EA CONDITIONS	COMPLIANCE FINDING
33.	A permit must be obtained from the relevant nature conservation agency for the removal or destruction of indigenous, protected, or endangered plant or animal species.	An authorization was obtained from the relevant conservation agency, Cape Nature in terms of Section 50 (5) of the NEM:PAA (Act) dated 12 June 2020. The comment authorization noted that <i>“CapeNature has provided comment on the Draft Basic Assessment Report (DBAR) application to Department of Environment, Forestry and Fisheries (DEFF). The Environmental Assessment Practitioner (EAP) has provided proof that all comments and recommendations outlined within Cape Nature comment have been addressed or will be adhered to. Therefore, CapeNature hereby grants permission for the aforementioned activities, in terms of Section 50(5) of NEM: PAA (Act 57 of 2003), as amended.”</i>
34.	The relocation of fish from work areas must be in accordance with the approved method statement for the Fish Relocation Plan, which is attached at Appendix E of the Environmental Management Programme (EMPr) submitted as part of the BAR dated September 2020.	On the 3rd of November 2022 a meeting was held between the CapeNature team and the contactors of Actophambili Roads discussing a way forward regarding the fish observed along some of the causeways to be cleared. Accordingly the following was determined; <i>We will place sandbags at Derde toll and Rooiuitspannings in the upstream side to prevent fish</i>

		<i>from entering the work area downstream.</i> <i>We will place sandbags on the downstream side once a trench has been made for water to drain first.</i> <i>The sandbags will be wrapped in knitted orange mesh to ensure no large material will filter through.</i> <i>At Eerste there will be no Sandbags placed in the upstream area as it is too large and deep. We will dig a small trench to drain the water to flow downstream,</i> <i>then we will place sandbags to prevent silt from flowing downstream.</i> <i>The material dug out as discussed will be used to shape a neat berm on the sides to ensure the flow is uniform.</i> <i>The large rocks etc at Derde toll will be used to fill a erosion hole close to the area where the material is being removed.</i> <i>The TLB will only enter the area where we agreed to on site.</i> CapeNature hereby confirmed that no relocation is necessary, and the required mitigation has been implemented via the above description.
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35.	Should any archaeological sites, artefacts, paleontological fossils, or graves be exposed during maintenance work, construction must be stopped immediately. The relevant heritage resource agency must be informed and the services of an accredited heritage practitioner must be contacted as soon as possible for further investigation.	No heritage remains were encountered on site.
36.	An integrated waste management approach must be implemented that is based on waste minimisation and must incorporate reduction, recycling, re-use, and disposal where appropriate. Any solid waste must be disposed of at a landfill licensed in terms of Section 20(b) of the National Environment Management Waste Act, 2008 (Act No. 59 of 2008).	Noted and have been incorporated into the EMPr. Minimal litter was observed as seen in the previous ECO reports and none during this External Audit.

SITE AUDIT FINDINGS

A final closure external audit was undertaken by Kappec in October 2025 for the completion of the contracted maintenance activities along Trunk Road 33/4, specifically between kilometer markers 4.6 and 14.4 through the Meiringspoort Pass.

The scope of maintenance included;

- Repairing edge breaks
- Reconstructing road shoulders and installing new stone-pitched side drains
- Bitumen-treated base and asphalt repairs
- Clearing watercourse flow paths
- Addressing concrete spalling and cracking
- Repairing damaged concrete deck soffits
- Protecting ASR damaged and/or weathered concrete surfaces
- Repairing damaged and broken-out concrete
- Strengthening bridge decks
- Reinstating culvert cell joint fillers
- Sealing bridge/culvert deck expansion joints
- Clearing bridge deck scuppers
- Adding structure number plates
- Protecting eroded foundations
- Installing guardrails

No formal site camp was required for the current phase of maintenance works, as the existing picnic areas were used for short-term operational needs, avoiding the need for any new or permanent camp establishment.

During the initial external audit conducted on 18 June 2024, heavy rains and flooding through Meiringspoort Pass—exceeding 100 mm in a short period—significantly compromised the evaluation of the repair and maintenance works. At that time, all authorized maintenance activities had been completed; however, the flood event resulted in some completed works being washed away or damaged, particularly in areas where cell joint fillers and epoxy putty had been applied. The flooding also deposited extensive vegetation debris and sedimentation throughout the causeways.

Following the June audit and after the cessation of flood-related disruptions, the contractor, Actophambili Roads, returned to site to undertake additional maintenance repairs to address the impacts of the flooding. All damaged elements—including traffic notice boards, guardrails, bollards, and sections of stone-pitched drains—were reinstated to their original condition. Sediment, debris, and accumulated runoff were fully removed from the causeways, and vegetation beneath the structures was cleared to restore unimpeded flow through the watercourses. Areas where joint fillers and epoxy applications had been damaged were also repaired, ensuring the structural

integrity of the culverts and causeway decks.

The previously repaired concrete spalling and cracks remained intact, and the newly executed reinstatement works proved stable at the time of the October 2025 audit. Road shoulder reconstructions, bitumen and asphalt repairs, and stone-pitched side drains were all found to be in good condition. Strengthening works carried out on the bridge decks remained sound, with no visible signs of distress. The bridge number plates installed earlier in the contract were present and undamaged.

Culvert cell joint fillers were confirmed to be in place following the contractor's return to site, and the bridge deck scuppers—previously cleared—were found functional after additional post-flood clearing. The earlier ECO reports confirmed appropriate environmental controls during construction, including the use of a silt trap downstream during dewatering. No evidence of concrete contamination in watercourses or inappropriate on-site waste disposal was observed.

All debris resulting from the flooding event, including uplifted bricks from the public parking area, had been removed, with the displaced bricks reinstated and the area restored. The site was clean, stable, and in a condition suitable for final closure.

Based on the October 2025 external closure audit, all maintenance works have been completed in accordance with the approved EA and EMPr requirements. All flood-related damages have been repaired, and the post-construction site reflects a high standard of environmental and structural compliance. The project can therefore be considered fully completed. *Photo records are attached as Appendix A.*

ENVIRONMENTAL MANAGEMENT PLAN COMPLIANCE

TABLE 4: ENVIRONMENTAL MANAGEMENT PLAN COMPLIANCE

No.	EMP REQUIREMENT	COMPLIANCE FINDING
1.	Method Statements The contractor must provide Method Statements on the protocols to be followed, and contingencies to be put in place as per the EMP. Method Statements need not be complex and lengthy, but must clearly state how, when and where the activity concerned will be undertaken, and must specify who will be responsible for undertaking each component of that activity. Method Statements must be prepared by the Construction Contractor and submitted to the ECO for approval before undertaking the activity concerned. The ECO and / or Competent Authority have the authority to request method statements for other activities, including but not limited to: • Establishment of site camp and stockpile area. • Cement/ concrete batching, disposal and emergency contingencies. • Topsoil and sub-soil storage/ stockpiling. • Storage of fuels and hazardous chemicals and emergency contingencies. • Waste management system. • Stormwater management and control. • Emergency preparedness plan/emergency response procedure.	All maintenance and repair activities have been completed, and during the final closure audit no Method Statements were required for scrutiny, as all works were already completed in accordance with the previously approved protocols.
2.	Site Camp	

2.1	The area chosen for the office and/or site camp must be the minimum reasonably required, which will involve the least disturbance to the environment.	No formal site camp was required for the repair and maintenance works; existing picnic/rest areas were used, and no additional disturbance occurred.
2.2	Choice of site for the contractor's camp requires the Engineers permission. A site layout plan must be submitted to the Engineer for approval. The contractor's camp may not be situated on a flood plain, on slopes greater than 1:3 (v:h), or within 32m of a water source. The site layout plan should make provision for site access, parking facilities, site offices, ablution facilities, designated first aid area, hazardous substance storage areas, batching plant, refuelling area (if necessary), and a maintenance area.	The initial camp location and layout plan were approved by the Engineer and complied with all siting restrictions. No new camp was established during the additional maintenance works.
2.3	The total area of the intended site camp should be stripped of all topsoil (as may be present) before any of the contractor's infrastructure or machinery is stored within the site camp.	Topsoil stripping had been conducted appropriately for the initial camp. No new clearing or topsoil disturbance occurred in 2025 as no camp was reinstated.
2.4	The site camp would need to be adequately fenced off along the boundary (preferably with 2m high fence and shade netting) and secured to prevent non-construction staff wandering around the site camp and possibly getting injured or posing a safety and security risk. Adequate signage needs to be in place, designating the site office/camp as a restricted area to non-construction people.	The original site camp was fenced and signposted as required. No camp infrastructure or fencing was needed during the post-flood repairs.
3.	Site Access and Demarcation	
3.1	The existing road network, where possible, should be used to access the construction site. All construction vehicles need to adhere to traffic laws. The speed of construction vehicles and other heavy vehicles must be strictly controlled to avoid dangerous conditions for other road users.	Only the existing road network was used for site access, and all traffic management measures remained in place. Damaged signage from the flood was repaired and reinstated.
3.2	As far as possible care should be taken to ensure that the local traffic flow pattern is not be too significantly disrupted and all vehicle	Construction vehicles operated within normal traffic patterns and did not obstruct traffic lanes. The short-duration repair works

	operators therefore need to be educated in terms of “best-practice” operation to minimise unnecessary traffic congestion or dangers. Construction vehicles should therefore not unnecessarily obstruct the access point or traffic lanes used to access the site. Construction vehicles also need to consider the load carrying capacity of road surfaces and adhere to all other prescriptive regulations regarding the use of public roads by construction vehicles.	caused no reported traffic disruptions.
3.3	Contractors shall construct formal drainage on all temporary haulage roads in the form of side drains and mitre drains to prevent erosion and point source discharge runoff.	New stone-pitched side drains were repaired to ensure adequate stormwater drainage at most of the causeways and works areas. Concrete side drains were also repaired as part of the works. No new temporary haul roads were created. Existing roads were used, and formal drainage structures remained intact and functional.
3.4	The working servitude must be demarcated on both sides using orange hazard netting prior to construction commencing. The demarcation work must be signed off by the Environmental Control Officer (ECO) before any work commences.	Working areas were previously demarcated and approved by the ECO. No new demarcation was required as the 2025 work occurred within existing footprints.
4.	Toilets and ablution facilities	
4.1	Chemical toilet facilities or other approved toilet facilities (1 for every 30 workers) must be used and located on the site in such a way that the toilets do not cause any form of pollution of the site. This is especially important in close proximity to any drainage lines. The toilets must be easily accessible and shall be secured to prevent them from blowing over or being pushed over. Toilets should be placed within the site camp as well as within reasonable proximity to working areas where construction teams are operating.	From the ECO reports provided, a chemical toilet was in place outside of the riverine area and its banks. No chemical toilets have remained in place on site. All rest stops along the causeways also had formal ablution facilities in place.
4.2	The toilets must be easily accessible and shall be secured to	The toilet has been removed from site on completion of

	prevent them from blowing over or being pushed over. Toilets should be placed within the site camp as well as within reasonable proximity to working areas where construction teams are operating.	construction activities. This item was not auditable at the time of the site visit.
4.3	The contractor shall ensure that no spillage occurs when chemical toilets are cleaned. The toilet shall be placed on level, bare ground. Performing ablutions outside toilet facilities are strictly prohibited. The toilets must be serviced regularly and kept in an orderly state.	The toilet has been removed from the site on completion of construction activities. This item was not auditable at the time of the site visit.
5.	Waste Management	
5.1	An integrated waste management approach should be adopted. Emphasis must be put on waste minimisation such as reduction, recycling and re-use, where possible. The appointed ECO must regularly inspect the waste storage and removal facilities to guarantee that the waste levels are acceptable, and that adequate waste management is ensuing.	As per the ECO reports, an integrated waste management approach was adopted, and minimal to no general waste was created by the maintenance activities.
5.2	Recycling bins for the various categories (paper, glass, plastic, etc.) should be provided. These bins must be emptied on a weekly basis and dropped off at a collection point for recycling-by-recycling companies. Bins must also be provided for builder's waste. These bins should be emptied on a regular basis and solid waste must be disposed of at a landfill licensed in terms of section 20 of the Environment Conservation Act, 1989 (Act No. 73 of 1989) or the National Environmental Management: Waste Act (Act No. 59 of 2008).	As per the ECO reports, an integrated waste management approach was adopted, and minimal to no general waste was created by the maintenance activities. All maintenance activities have since been completed, and all refuse bins and rubble have been removed from the site.
5.3	Any builder's waste that can be reused can be stockpiled in an area identified by the ECO. All bins shall not be allowed to overflow, since waste may blow around on site and into the surrounding environment. The bins must be water tight, windproof and scavenger proof and be clearly marked for the purpose of waste	As per the ECO reports, an integrated waste management approach was adopted, and minimal to no general waste was created by the maintenance activities. All maintenance activities have since been completed, and all refuse bins and rubble have been removed from the site.

	disposal.	
5.4	Biodegradable refuse generated from the office / site camp, construction areas, vehicle yard, storage area or any other area shall be handled as indicated above. Adequate waste receptacles, bins and skips should be available for the collection and removal of waste.	As per the ECO reports, an integrated waste management approach was adopted, and minimal to no general waste was created by the maintenance activities. All maintenance activities have since been completed, and all refuse bins and rubble have been removed from the site.
6.	Storage and Management of Hazardous and Construction Materials	
6.1	Storage areas must be designated and demarcated, and no unauthorised access shall be permitted.	From the ECO reports provided, no formal storage facilities were used during the maintenance works.
6.2	Storage areas should be secure so as to minimise the risk of crime, or access by children or animals. Material Safety Data Sheets (MSDSs) shall be readily available on site for all chemicals and hazardous substances to be used on site.	From the ECO reports provided, no formal storage facilities were used during the maintenance works.
6.3	Hazardous storage and refuelling areas must be bunded with an impermeable liner to protect groundwater quality. The bunding shall be capable of handling a volume 150% the volume of the container storing the substance.	From the ECO reports provided, no formal storage facilities were used during the maintenance works.
6.4	Storage areas containing hazardous substance/materials must be clearly sign posted.	From the ECO reports provided, no formal storage facilities were used during the maintenance works.
6.5	Firefighting equipment should be present on site at all times as per OHSA.	The ECO reports did not mention the presence or absence of firefighting equipment on site during the monthly audits. Construction has now been completed and this item could not be audited at the time of the site visit as the activities have been completed.
6.6	No materials are to be stored in unstable or high-risk areas such as in floodplains, watercourses or on steep slopes.	From the ECO reports provided, no formal storage facilities were used during the maintenance works.

6.7	Contaminated water containing fuel, oil, or other hazardous substances must never be released into the environment. It must be disposed of at a registered hazardous landfill site.	No physical remains of spills were noted during the site audit. The maintenance activities did not entail the use of any fuel, oil, or other hazardous substances.
7. 7.1	The Clearance of Vegetation and Vegetation Brush-Cutting Clearance of vegetation should only be undertaken as a last resort if the vegetation will or is damaging a given structure and/or if the vegetation is completely blocking the flow of water through the structure. Vegetation root systems provide unmatched soil stability and should not be cleared purely for aesthetic purposes. Where vegetation clearance is unavoidable, clearance should be undertaken by cutting the plants at their stems/trunk bases and treating the stumps with an herbicide to prevent them re-growing.	Only minimal vegetation clearing occurred, limited strictly to the removal of flood-deposited debris that obstructed the structures. No natural, intact vegetation was cleared or targeted for removal. The contractor confirmed that all flood debris was transported to and disposed of at the De Rust or Klaarstroom municipal waste facilities.
7.2	Where practical, the maintenance areas must be properly demarcated prior to activities being undertaken. The areas outside these demarcated areas must be regarded as No-Go areas.	Areas outside the approved works areas were strictly treated as No-Go areas. As per the ECO reports provided, no works occurred within the watercourses. All maintenance and repair works have now been completed.
7.3	Only the minimum amount of vegetation necessary to maintain the road, culverts and verge integrity must be cleared. All vegetation clearance must be done by means of manual labour, if possible.	Only minimal vegetation clearing occurred, limited strictly to the removal of flood-deposited debris that obstructed the structures. No natural, intact vegetation was cleared or targeted for removal. The contractor confirmed that all flood debris was transported to and disposed of at the De Rust or Klaarstroom municipal waste facilities.
8. 8.1	Removal, Moving/Excavation of Ground Material The maintenance area and site access must be properly demarcated. The area outside this demarcated area must be regarded as a No-Go area.	From the ECO reports, sediment was removed only to the extent necessary to restore the proper functioning of the structures. At km 19.5, the clearing was carried out manually due to limited access, which prevented the use of a TLB. The contractor confirmed that the recovered sediment was redistributed and

		reused at appropriate locations within the poort.
8.2	Where practically possible, existing two track or other access routes should be utilised and only as a last resort should temporary access routes be created.	The existing road network was used based on the supplied ECO reports for access to the construction sites as all sites are located along the road. No temporary access road was evident during the external site audit.
8.3	Only the minimum amount of excavations must be undertaken. Where practical and feasible, excavations should be done by means of manual labour. Use can be made of a Tractor-Loader-Backhoe (TLB) where excavation of large amounts of material needs to be excavated, removed, moved and deposited.	From the ECO reports, sediment was removed only to the extent necessary to restore the proper functioning of the structures. At km 19.5, the clearing was carried out manually due to limited access, which prevented the use of a TLB. The contractor confirmed that the recovered sediment was redistributed and reused at appropriate locations within the poort.
9.	Storage of Excavated Material	
9.1	All excavated material must be stored on a flat surface away from any drainage line or area susceptible to erosion. The location should be decided upon in consultation with the ECO.	Excavated sediment and debris from the flood were temporarily placed on flat, safe areas away from drainage lines and promptly removed/used. According to the ECO report, no formal stockpile areas were necessary.
9.2	Stored material should be protected from wind and water erosion, and this may entail covering the material with suitable shade cloth material (if and when necessary).	Excavated sediment and debris from the flood were temporarily placed on flat, safe areas away from drainage lines and promptly removed/used. According to the ECO report, no formal stockpile areas were necessary.
9.3	Excavated rock and sediments from the construction zone, and including any foreign materials, should not be placed within the delineated rivers and riparian areas in order to reduce the possibility of material being washed downstream.	Excavated sediment and debris from the flood were temporarily placed on flat, safe areas away from drainage lines and promptly removed/used. According to the ECO report, no formal stockpile areas were necessary.
10.	Activities within or within close proximity to a Watercourse	
10.1	Workers must receive to necessary training to make them aware of the possible pollution they may cause by the actions in close proximity to the watercourse. The construction area must be	According to the ECO reports, no maintenance and repair works, other than the removal of lodged vegetation debris, occurred within the watercourses.

	demarcated to deter labourers from entering the watercourse.	
10.2	The area beyond the demarcation must be regarded as a no-go area.	From the ECO reports, all areas outside the approved maintenance area are strict No-Go areas. This could not be audited at the time of the site visit as all the work had been completed.
10.3	Stormwater must be diverted away from the construction site by means of berms. Any diversions must be temporary in nature and no permanent walls, berms or dams may be installed within the river. Sandbags used in any diversion or for any activity within a watercourse must be in a good condition, so that they do not burst and empty sediment into the watercourse. Upon completion of the construction at the site, the diversions shall be removed to restore natural flow patterns.	According to the ECO reports, erosion control measures undertaken on site included the reinstatement of scoured embankments, the cleaning and sediment removal from side drains, and the reinstatement of side drains where flood-related damage had occurred. Sediment management controls, such as silt nets, had been installed during the works; however, several of these were damaged or washed out due to the exceptionally high flow volumes experienced during the flooding events.
10.4	Stockpiles of materials must not be placed in close proximity to the watercourse.	No stockpile areas were observed during the site audit conducted as the works have been completed. Excavated sediment and debris from the flood were temporarily placed on flat, safe areas away from drainage lines and promptly removed/used. According to the ECO report, no formal stockpile areas were necessary.
10.5	No refuelling of vehicles in close proximity to the watercourse. This must preferably be done in the site camp on an impermeable surface to prevent pollution of the soil.	No refuelling occurred near watercourses during the repairs.
10.6	A spill kit must be available at all times in the event of spillage. Polluted soil must be removed and disposed of at an appropriately licensed disposal facility.	This could not be audited at the time of the site visit, as all the work had been completed. No chemical or hydrocarbon materials were used for the works that took place. It should be noted that the ECO mentioned in his April 2025 ECO report that: <i>"The spill which took place within the Heritage Section of the Poort at approx. km7.73 was not construction-related, the incident was a member of the public which overturned a truck causing a</i>

		<i>hydrocarbon and onion seed spill into the watercourse. A spill remediation team was sent out by the insurance company, of the truck company, and the spill was proposed to be contained. In the opinion of the ECO the spill has not been rectified sufficiently. A bad smell is present, the contaminated water must be remediated as a matter of urgency to prevent further pollution of the environment."</i>
10.7	Adequate bins must be provided at all active construction sites along the road route. These bins must be fitted with lids to prevent the waste from blowing into the watercourses or surrounding vegetation.	This could not be audited at the time of the site visit as all the works have been completed. All refuse bins have been removed from the site.
11.	Erosion Control	
11.1	<u>Small scale</u> erosion and storm water control measures: These control measures will entail the use of shade netting barriers (or similar) or geo-fabric barriers in areas susceptible to erosion. These storm water control measures are usually placed directly across the path of flow of storm water. Poles and logs, staked in along the contours of a slope susceptible to erosion may also be used.	According to the ECO reports, erosion control measures undertaken on site included the reinstatement of scoured embankments, the cleaning and sediment removal from side drains, and the reinstatement of side drains where flood-related damage had occurred. Sediment management controls, such as silt nets, had been installed during the works; however, several of these were damaged or washed out due to the exceptionally high flow volumes experienced during the flooding events.
11.2	<u>Medium scale</u> erosion and storm water control measures: Small berms and benches cut into the slope as well as poles and logs, placed along the contours of the slope can be used for medium-scale erosion and storm water control.	Medium scale erosion and runoff was not identified as part of the ECO report findings and were thus no additional mitigation applied.
11.3	<u>Large scale</u> erosion and storm water control measures Large-scale erosion control is mainly accomplished with the use of temporary retention dams / settling ponds and large berms. The mode of operation is to undertake the maintenance activities while	Large scale erosion and runoff was not identified as part of the ECO report findings and were thus no additional mitigation applied.

	bearing in mind the possibility that a heavy rainfall event could occur at any moment. There may therefore be a need for larger berms to ensure that water does not have an unobstructed run from the top of a drainage line to the bottom. The ECO must advise in this regard.	
12.	Dust/Mud Dust production as well as sand on the road surface must be monitored and regularly controlled. Potable water cannot (as far as possible) be used as a means of dust suppression, alternative measures must be sourced.	From the ECO reports provided, no dust mitigation was required as no dusty conditions were identified. Furthermore, no indication of mud on the road surface was noted in the ECO reports, and the roads were clear at the time of the site visit conducted.
13.	Workshop equipment, maintenance and storage	
13.1	Workshop areas shall be monitored for oil and fuel spills and such spills shall be cleaned and remediated to the satisfaction of the EO or RE. Cleaning and remediation must be done with products that are in line with best environmental practices i.e. SunSorb	No specific workshop areas were designated during the maintenance period. This could not be independently audited at the time of the site visit as all the work had been completed.
13.2	All maintenance and washing of vehicles and equipment shall be done off-site as far as possible. During the servicing of vehicles or equipment, a suitable drip tray shall be used to prevent spills onto the soil.	Vehicle maintenance occurred off-site as required, with no on-site washing or servicing.
14.	Fires	
14.1	Absolutely no burning of waste is permitted.	No fires or fire remains were observed along the construction footprint during the time of audit and no findings in the ECO reports.
14.2	Fires will only be allowed in facilities specially constructed for this purpose within fenced Contractor's camps. Wood and/or charcoal are the only fuels permitted to be used for fires. The contractor must provide sufficient wood (fuel) for this purpose.	No fires or fire remains were observed along the construction footprint during the time of audit and no findings in the ECO reports.
15.	Rehabilitation and Site Re-Vegetation	

15.1	Site re-vegetation/rehabilitation: It is in our experience that vegetation encroaching on roads and associated drainage structures are undesirable for the longevity of roads and associated drainage structures. However, areas within the road reserve, including embankments, can be effectively stabilized using vegetation and/or jute geotextile.	Per the ECO reports provided, no disturbance or clearance of intact vegetation was required for the current maintenance and repair activities. Vegetation removal was limited strictly to clearing flood-deposited debris that obstructed structures and flow paths. No new stone-pitched drains, concrete drains, or widening of existing footprints formed part of the current works, and all repairs were undertaken within the previously established and authorised footprint of the causeways, road shoulders, and drainage structures. During the final closure audit, it was confirmed that natural vegetation within the road reserve and up to the causeways remained intact and undisturbed. As a result, no re-vegetation or rehabilitation measures were necessary. Please refer to the photo pages attached as Annexure A for confirmation.
15.2	No search and rescue has been recommended within this EMPr because the likelihood of transplanting any worthwhile species is very low considering the need for it to be watered for the first few months to ensure it can grow.	No Search and Rescue of vegetation species was undertaken prior to the commencement of works along the causeways.
15.3	In terms of rehabilitation of disturbed areas within the dry climate of the Klein Karoo and with the current water shortages faced by the Western Cape, it is not deemed practical to attempt to re-vegetate disturbed areas.	Given the local climate and limited disturbance, re-vegetation was not required, and the site has stabilised naturally.
16.	Bitumen Handling It must be ensured that if bitumen (or other environmentally hazardous substances) is applied to the road surface that measures are in place to prevent the substances from running down road	Bitumen surfaces were not altered during the repair phase. Existing surfaces showed no evidence of pooling or runoff issues.

	embankments or pooling alongside the road. These pools become fatal traps for any fauna traversing the road. If at any stage bitumen does run down the embankments or pools anywhere along the route, the spillage must be rectified immediately to prevent trapping of any fauna.	
17.	Material Handling (Cement Batching)	
17.1	Mixing and/or decanting of all chemicals and hazardous substances must take place on a tray, shutter boards, or on an impermeable surface and must be protected from stormwater.	Any small-scale concrete reinstatement occurred on previously approved, hardened surfaces, with no risk of contamination.
17.2	Cement/concrete batching is to be located in an area of low environmental sensitivity away from the river channel and pre-approved by the ECO. No batching activities shall occur on unprotected ground. Adequate surface protection will be required.	No visible residual signs of concrete works were noted within the watercourse nor on site during the audit. Any small-scale concrete reinstatement occurred on previously approved, hardened surfaces, with no risk of contamination.
18.	Alien Vegetation Clearance	
18.1	It is the contractor's responsibility to continuously monitor the area for newly established alien species during the contract and establishment period, which if present must be removed. Removal of these species shall be undertaken in a way which prevents any damage to the remaining indigenous species and inhibits the re-infestation of the cleaned areas. Any use of herbicides in removing alien plant species is required to be investigated by the ECO before use, for the necessity, type proposed to be used, effectiveness and impacts of the product on aquatic biota.	Minimal alien vegetation was observed along causeways where flood-deposited sediment remained on side banks. A secondary sweep is recommended to remove remaining alien seedlings and prevent future encroachment.
19.	Fauna	
19.1	Ensure all in-water activities or associated structures do not interfere with fish passage, constrict the channel width, reduce	A Fish Relocation Plan which was previously conducted for works within this watercourse was submitted and approved as part of this

	flows, or harm fish.	application to accommodate the fish and ensure that erosion or siltation from the works do not impact fish downstream. On the 3rd of November 2022 a meeting was held between the CapeNature team and the contactors of Actophambili Roads discussing a way forward regarding the fish observed along some of the causeways to be cleared.
19.2	The fish located within the area of disturbance need to be safely relocated to a similar habitat within immediate vicinity of the sites, prior to the commencement of activities at each site. It is not feasible to relocate all fish at once throughout the system's construction footprints. This relocation plan must therefore be implemented for each site individually just prior to each site becoming active. Retain a qualified environmental professional to ensure appropriate protocols and permits for relocating fish, and safely relocate trapped fish.	A Fish Relocation Plan which was previously conducted for works within this watercourse was submitted and approved as part of this application to accommodate the fish and ensure that erosion or siltation from the works do not impact fish downstream. On the 3rd of November 2022 a meeting was held between the CapeNature team and the contactors of Actophambili Roads discussing a way forward regarding the fish observed along some of the causeways to be cleared.
19.3	Contact Cape Nature for assistance with fish-related queries and immediately contact authorities if there are any fish mortalities.	On the 3rd of November 2022 a meeting was held between the CapeNature team and the contactors of Actophambili Roads discussing a way forward regarding the fish observed along some of the causeways to be cleared. Accordingly, the following was concluded; <i>We will place sandbags at Derde toll and Rooiuitspannings in the upstream side to prevent fish from entering the work area downstream.</i> <i>We will place sandbags on the downstream side once a trench has been made for water to drain first.</i>

The sandbags will be wrapped in knitted orange mesh to ensure no large material will filter through.

At Eerste there will be no Sandbags placed in the upstream area as it is too large and deep. We will dig a small trench to drain the water to flow downstream,

then we will place sandbags to prevent silt from flowing downstream.

The material dug out as discussed will be used to shape a neat berm on the sides to ensure the flow is uniform.

The large rocks etc at Derde toll will be used to fill a erosion hole close to the area where the material is being removed.

The TLB will only enter the area where we agreed to on site.

CapeNature hereby confirmed that no relocation is required, and the required mitigation has been implemented per the above methodology.

CONCLUSION

Based on the information reviewed and the final closure external audit conducted in October 2025, the contractor has sufficiently complied with the conditions of the Environmental Authorisation for the maintenance works within Meiringspoort Pass. Although the initial June 2024 floods caused damage to guardrailings, bollards, joint seals, and resulted in significant sediment and vegetation deposition along several causeways, these impacts were addressed during the subsequent maintenance and repair phase. All damaged infrastructure—including traffic signage, guardrails, bollards, and side drains—was reinstated, and all sediment and debris obstructing the watercourse flow paths were cleared to restore functional capacity.

The current maintenance and repair activities were undertaken entirely within the originally approved footprint, with no disturbance of intact vegetation and no requirement for rehabilitation. The EMPr was found to have been adequate and effective in mitigating environmental impacts associated with both the original works and the follow-up repair activities. However, it is recommended that **follow-up alien invasive vegetation clearing be undertaken**, particularly in areas disturbed by floodwaters, to ensure that invasive regrowth does not compromise watercourse functioning.

All works were observed to be completed at the time of the final audit. Accordingly, this conclusion is based on site observations and confirmation from the available ECO reports. The post-construction condition of the site aligns with the ECO's final closure findings, and it is evident that all authorised activities have been completed in accordance with the approved EA and EMPr requirements.

No specific contradictions between the EA and EMP were noted. This external audit report did not identify any significant non-compliance to the conditions of the Environmental Authorisation.

The outcome of this audit has not found insufficient mitigation of environmental impacts associated with the undertaking of the listed activities, nor has it found insufficient levels of compliance with the Environmental Authorisation. As such a public participation process in terms of Regulation 34(5) will not be undertaken.

In compliance with regulation 34(6) the holder of the EA must within 7 days of the date of submission of an environmental audit report to the competent authority, notify all potential and registered interested and affected parties of the submission of that report, and make such report immediately available –

- (a) to anyone on request; and
- (b) on a publicly accessible website, where the holder has such a website.

Compiled by:

A handwritten signature in black ink, appearing to be 'RK' with a large, sweeping flourish extending from the top right.

Renier Kapp
for KAPPEC

ANNEXURE A – SITE PHOTOGRAPHS

Maintenance of Causeway No 4 B2689 at km 5.80



Newly installed structure number plates.



Downstream of causeway No 4 B2689 with a cleared watercourse flow path.



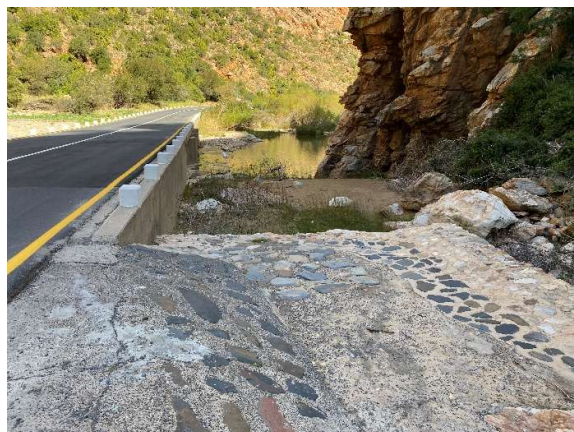
Repaired spalling and cracking observed downstream of Causeway No 4.



Upstream of causeway No 4 B2689 with a cleared watercourse flow path.



Visual upstream of the of the causeway with vegetation and sedimentation removed.



Stone-pitched side drains repaired downstream of Causeway 4.

Maintenance of Causeway No 5 B2698A at km 6.03



Newly installed structure number plates.



Indication of the skelmkloof causeway and stone-pitched side drains.



Downstream of causeway No 5 B2698A with cleared watercourse flow path.



Downstream of causeway No 5 B2698A with cleared watercourse flow path.



Evidence of strengthened bridge decks, reinstated cell joint fillers, and sealed deck expansion joints.



Repaired traffic notice boards.

Maintenance of Causeway No 6 B2698B at km 6.31



Visual of the bridge deck at causeway 6 as seen towards De Rust.



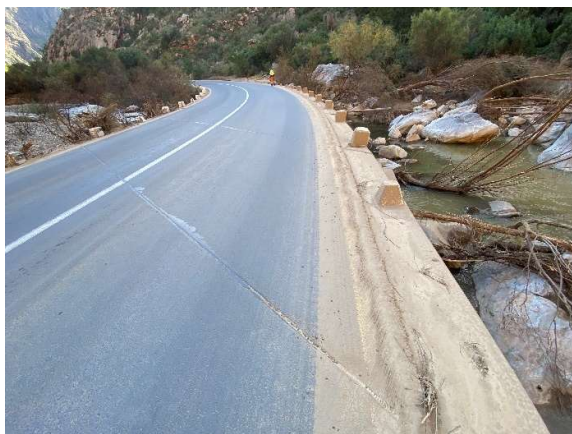
Evidence of strengthened bridge decks, reinstated cell joint fillers, and sealed deck expansion joints.



Vegetation debris cleared upstream of causeway 6.



Vegetation debris cleared upstream of causeway 6.



Evidence of strengthened bridge decks, reinstated cell joint fillers, and sealed deck expansion joints.



Repaired spalling and cracking with fibre polymer modified cementitious repair mortar.



Repaired cell joint fillers and mortar works downstream of causeway 6.



Repaired spalling and cracking with fibre polymer modified cementitious repair mortar.

Maintenance of Causeway No 7 B2698C at km 6.82



Newly installed structure number plate.



Upstream of Causeway No 7 B2698C with cleared watercourse flow path.



Downstream of Causeway No 7 B2698C with cleared watercourse flow path.



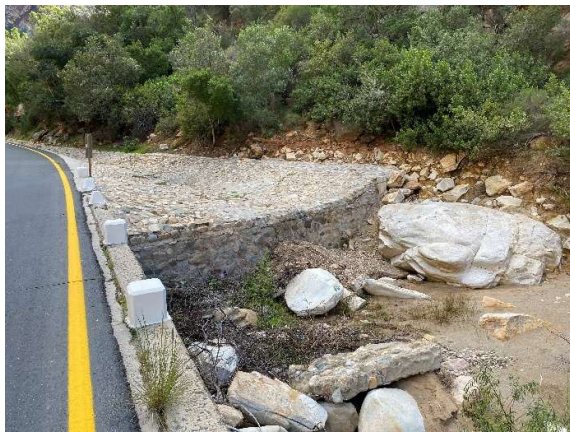
Downstream of Causeway No 7 B2698C with cleared watercourse flow path.



Downstream of Causeway No 7 B2698C with cleared watercourse flow path.



Repaired spalling and cracking with fibre polymer modified cementitious repair mortar.



Stone-pitched side drains downstream of causeway 7 as seen in the direction of De Rust.

Maintenance of Causeway No 8 B2690 at km 7.73



View of the road surface towards causeway no. 8.



Signage of the Dubbele causeway.



Newly installed stone-pitched side drains upstream of causeway 8.



Repaired bridge edge breaks with stormwater and erosion control measures upstream of causeway 8.



Newly installed stone-pitched side drains downstream of causeway 8.



Damages of bollards repaired after the initial audit findings.



Repaired deck edge breaks upstream of causeway 8.



Damages of guard railings and notice boards repaired upstream of causeway 8.



Maintenance of Causeway No 8 B2690 with cleared watercourse flow path.



Maintenance of Causeway No 8 B2690 with cleared watercourse flow path.

Maintenance of Causeway No 9 B2690A at km 8.49



Newly installed structure number plate downstream of causeway 9.



Newly installed stone-pitched side drains at causeway 9.



Damages of bollards repaired after the initial audit findings.



Visual upstream of causeway 9 with some vegetation debris.



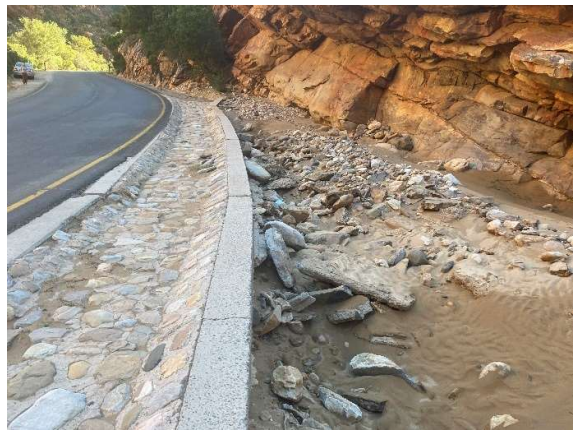
Visual downstream of causeway 9 with vegetation cleared.



Maintenance of Causeway No 9 with cleared watercourse flow path.



Evidence of strengthened bridge decks, reinstated cell joint fillers, and sealed deck expansion joints.



Stone-pitched side drains downstream of causeway 9.

Maintenance of Causeway No 10 B2691 at km 8.76



Upstream of the bridge deck at causeway 10 vegetation cleared and damages repaired.



Indication of the sand river causeway.



Upstream of causeway 10 where vegetation debris has been cleared.



Evidence of reinstated cell joint fillers, and sealed deck expansion joints upstream of causeway 10.



Downstream of Causeway No 10 with cleared watercourse flow path.



Downstream of Causeway No 10 with cleared watercourse flow path.

Maintenance of Causeway No 11 B2691A at km 9.25



Newly installed structure number plate at causeway 11.



Indication of the herrie river causeway.



Downstream of Causeway No 11 with cleared watercourse flow path.



Repaired public parking area at causeway 11.



Repaired side of the road where material was displaced.



Evidence of strengthened bridge decks, reinstated cell joint fillers, and sealed deck expansion joints



Cleared vegetation upstream of causeway 11.



Cleared vegetation downstream of causeway.

Maintenance of Causeway No 12 B2692 at km 9.54



Newly installed structure number plate.



Indication of the Witperde river causeway.



Cleared pipe culvert adjacent the causeway.



Cleared pipe culvert adjacent the causeway.



Upstream of causeway 12 debris cleared.



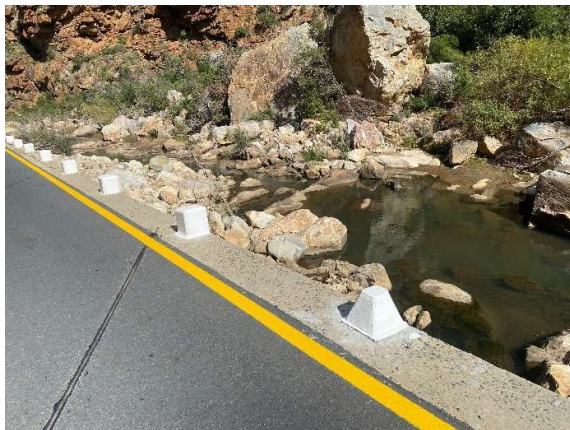
Repaired cell joint fillers, which has been dislodged during the recent floods.



Repaired deck edge breaks and cell joint fillers upstream of causeway 12.



Repaired and strengthened deck edge breaks.



Repaired spalling and strenghtening along the downstream of causeway 12.



Stone-pitched side drains downstream of causeway 12.



Downstream of Causeway No 12 B2692 with cleared watercourse flow path.



Evidence of strengthened bridge decks, reinstated cell joint fillers, and sealed deck expansion joints.

Maintenance of Causeway No 13 B2692A at km 9.85



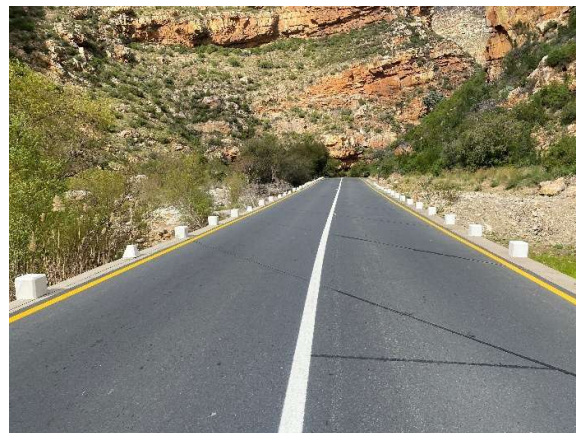
Downstream of causeway No 13 B2692A with cleared watercourse flow path and repair works evident.



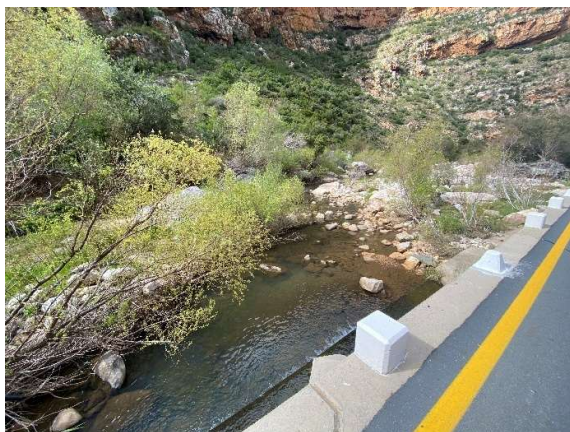
Indication of the Ou Tol river causeway.



Downstream of causeway No 13 B2692A with cleared watercourse flow path and repair works evident.



Evidence of strengthened bridge decks, reinstated cell joint fillers, and sealed deck expansion joints.



Downstream of causeway No 13 B2692A with cleared watercourse flow path and repair works evident.

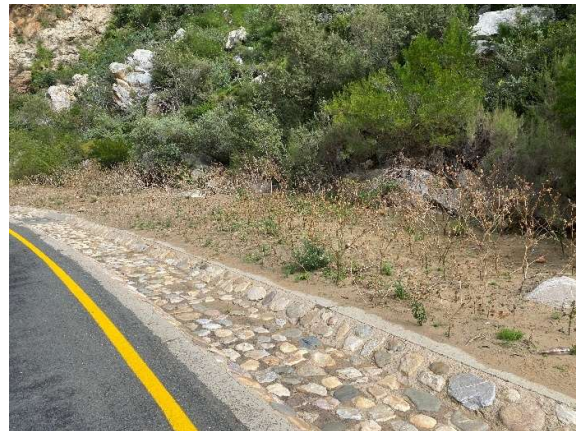


Newly installed name plate.

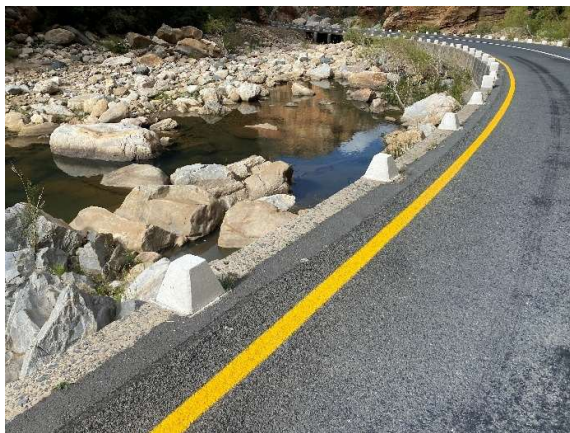
Maintenance of Causeway No 14 B2693 at km 10.15



Downstream of causeway No 13 B2692A with no debris present and repair works evident.



Stone-pitched side drains with new vegetation regrowth.



Upstream of causeway No 13 B2692A with cleared watercourse flow path and repair works evident.



Upstream of causeway No 13 B2692A with no debris present and repair works evident.



Bridge decks and expansion joints were strengthened at causeway 14.



Downstream of causeway No 13 B2692A with no debris present and repair works evident.



Downstream of causeway No 13 B2692A with no debris present and repair works evident.



Visual of the road surface across causeway 14.

Maintenance of Causeway No 15 B2694 at km 11.05



Indication of the witfontein river causeway.



Witfontein River Causeway No 15 B2694.



Stone-pitched side drains downstream of causeway 15.



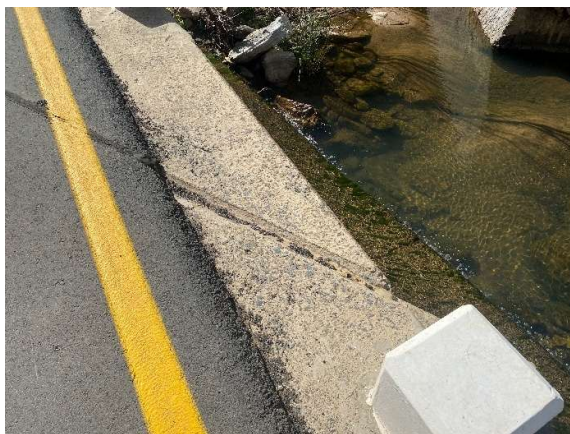
Maintenance of Causeway No 15 B2694 with cleared watercourse flow path.



Cleared and revegetated culvert along causeway 15.



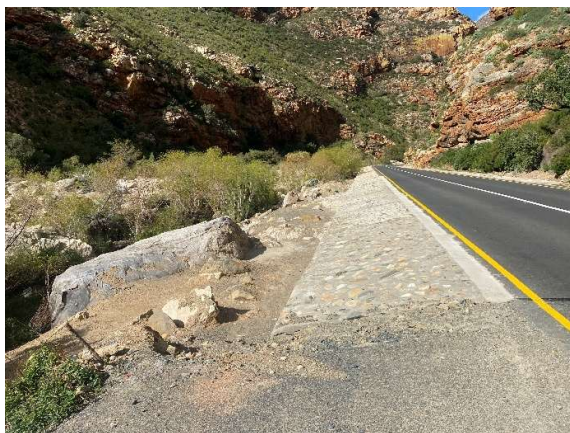
Cleared and revegetated culvert along causeway 15.



Repaired deck edge breaks and cell joint fillers downstream of causeway 15.



Evidence of strengthened bridge decks, reinstated cell joint fillers, and sealed deck expansion joints.



Stone-pitched side drains upstream of causeway 15.



Stone-pitched side drains upstream of causeway 15.

Maintenance of Causeway No 16 B2695 at km 11.43



Potable water pipeline downstream of causeway 16 still in good condition. Some sedimentation present.



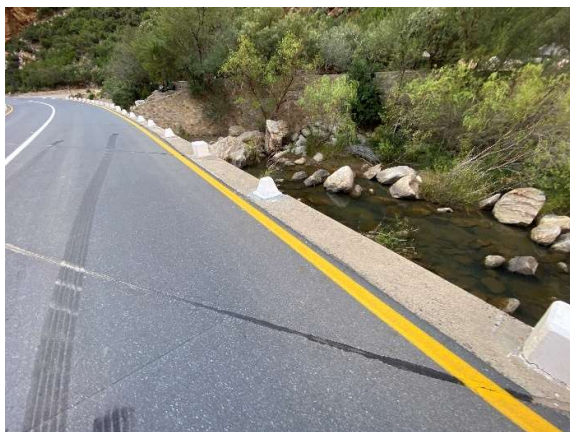
Potable water pipeline downstream of causeway 16 still in good condition.



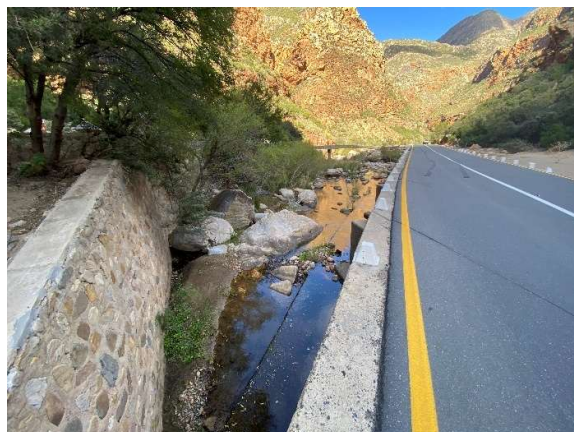
Some vegetation debris and sedimentation from recent floods downstream of causeway 16.



Sedimentation and vegetation debris removed downstream of causeway 16.

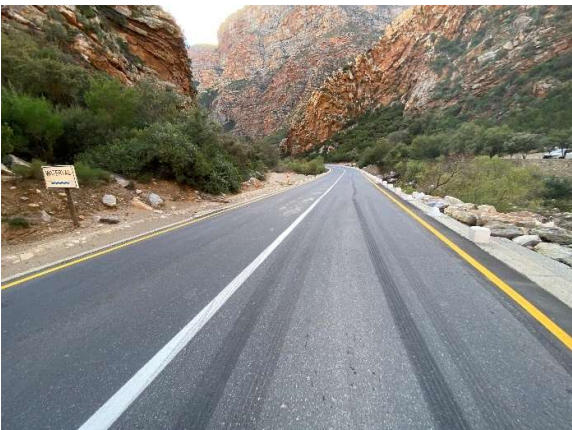


Evidence of strengthened bridge decks, reinstated cell joint fillers, and sealed deck expansion joints



Evidence of strengthened bridge decks, reinstated cell joint fillers, and sealed deck expansion joints

Maintenance of Causeway No 17 B2695A at km 11.70

	
Trunk road 33/4 kilometer beacon.	Visual of the causeway towards the south with vegetation debris cleared.
	
Visual of the causeway towards the south with vegetation debris cleared.	Stone-pitched side drains at causeway 17.
	
Downstream of causeway 17 as seen in the direction of De Rust towards the pedestrian bridge.	Indication of the waterval river causeway

Maintenance of Causeway No 18 B2696 at km 14.10

 A photograph showing a gravel area with a small white signpost that reads 'TRUNK 33/4' and '14.2' below it. The background consists of a rocky, vegetated hillside.	 A photograph of a paved road curving to the right, bordered by a yellow line. A white signpost on the left reads 'ONTPLOFFINGS' with a small blue wavy line below it. The background shows a steep, rocky hillside.
 A photograph showing a paved road curving to the left, bordered by a yellow line. The road surface is dark asphalt, and the surrounding area is rocky and vegetated.	 A photograph showing a paved road curving to the right, bordered by a yellow line. The road surface is dark asphalt, and the surrounding area is rocky and vegetated.
 A photograph showing a paved road curving to the left, bordered by a yellow line. The road surface is dark asphalt, and the surrounding area is rocky and vegetated.	 A photograph showing a paved road curving to the right, bordered by a yellow line. The road surface is dark asphalt, and the surrounding area is rocky and vegetated.



Condition causeway 18, sedimentation has been removed.



Repaired deck edge breaks and cement works evident downstream of causeway 18.



Downstream of causeway No 18 B2696 with cleared watercourse flow path.