



BASIC ASSESSMENT FOR THE FLOOD DAMAGE REPAIRS TO STRUCTURES ON MR309 IN SEWEEKSPOORT PASS, IN THE WESTERN CAPE PROVINCE

BACKGROUND INFORMATION DOCUMENT

Project Background

The Seweweekspoort Pass, located on MR309 approximately between km 40.9 to 58.1, is a gravel road that meanders through the narrow gorge of the Seweweekspoort, linking the towns of Laingsburg and Ladismith, Western Cape. The road was originally constructed to serve as a link between inhabitants on either side of the Swartberg. The pass is now incorporated in the Swartberg Nature Reserve that is joined to the Gamkapoort Nature Reserve and Towerkop Nature Reserve. The gravel road crosses the Seweweekspoort River numerous times in a short distance of 18km making the road susceptible to flood damage. Structures have been constructed over many years consisting mostly of one or two pipes. The result is that even small rain events cause the road to be flooded with ensuing damage to the river crossings and the road that requires repair work to be done by the Eden District Municipality and the Central Karoo District Municipality since the border is half way through the Seweweekspoort. Overtopping of the road leads to damage to both the causeways and sections of road at several crossings. At certain sections, where the river

runs parallel to the road, flooding causes the road surface material to be completely washed away.

Purpose of this Document

The Background Information Document serves to inform Interested and Affected Parties (I&APs) of the need of the project, as well as the permitting process to be followed. It also indicates how you can become involved in the project.



Project Location

The starting point for the area of study is located at the northern end of the pass at KM40.9 (Figure 1). The study area ends 17.2 km away at the southern end point at KM58.1. Most of the study area is located within the formally protected Towerkop Nature Reserve, with the southern portion also forming part of a Mountain Catchment Area. The Western Cape Biodiversity Framework assigns a portion of the southern end and a small portion at the northern end of the study area as Critical Biodiversity Areas (CBA) and Ecological Support Areas (ESA). A significant proportion of the study area falls within a formally protected area and within a World Heritage Site. The main freshwater features in the study area are the Seweweekspoort River, a tributary of the Kobus Tributary (J25B) in the Gouritz River System. There are some tributaries and valley bottom wetland areas associated with the river within the area where the road will be upgraded.

The roadway and associated structures are already in existence adjacent to or within the Seweweekspoort River System. The existing road, together with some other physical modifications to the freshwater features in the upper catchment area, has resulted in the current deteriorated ecological condition of the river and its associated wetland areas.

Description of the Project

The proposed project involves the upgrading of the Seweweekspoort Pass causeway and repairing structures damaged by floods along the MR309 route. The Eden District Municipality and Central Karoo District Municipality have identified which structures require repair work or upgrading. There are 30 existing structures of which major upgrading works would need to be undertaken at 27 sites- thus the Western Cape Government Roads Network Branch has undertaken to upgrade the road.

The design width of the structures is proposed to have a 6m clear width between guide blocks and not materially wider than the gravel road which is narrower in many parts of the pass. Typical sizes for the structures will be 2m to 8m wide, perpendicular to the flow of the river, and structures will be aligned with the direction of the river. Rectangular causeways with larger clear spans (few

piers) are preferred to pipe causeways as the risk of blockage will be greatly reduced. The sizing of openings will allow floods with a 2 year return period to pass through drainage openings under the deck slab. Concrete approach slabs are to be omitted as far as possible due to under scour risks and expensive repairs.

The pass cannot be closed for traffic during construction activities as farmers, tourists and residents of the area make use of the road. The proposed strategy to prevent disruption of traffic flow would entail temporary deviations at 23 river-crossing sites. This would require removal of natural vegetation next to each crossing and the construction of temporary gravel sections to divert the traffic, however deviations will be kept to a minimum footprint and revegetated post construction. A site visit was undertaken by the environmental impact assessment team (including the Freshwater Ecologist, Botanist and Heritage Specialist), the project engineers and the applicant to determine the deviation routing that would have the least environmental impact on the sensitive environmental surroundings.

As part of the Environmental Assessment process, botanical, freshwater and heritage assessments have been undertaken in order to determine the impacts of the proposed traffic deviations, upgrades and repair work.

Environmental Permitting Process

In terms of the National Environmental Management Act (Act No. 107 of 2002) as amended (NEMA), a Basic Assessment process will be required in order to obtain Environmental Authorisation for the proposed project. The proposed project will trigger activities listed in the Environmental Impact Assessment Regulations, and will require compliance with the stipulations of the legislation listed below:

- Environmental Impact Assessment Regulations of 2014- as amended:
 - GNR 324, Amendment of the Environmental Impact Assessment Regulations Listing Notice 3 of 2014
 - GNR 327, Amendment of the Environmental Impact Assessment Regulations Listing Notice 1 of 2014
- The project has also triggered the need for a Water Use Licence given that the Pass crosses numerous points along the Seweweekspoort River- triggering

water uses in the National Water Act, (Act No. 36 of 1998- as amended), as follows:

- Section 21 (c)
- Section 21 (i)

The application and associated specialist studies was conducted by BlueScience (Pty) Ltd, and submitted in March 2017 to the Breede-Gouritz Catchment Management Agency.

Other key environmental legislation applicable to this project are:

- The National Environmental Management: Biodiversity Act (Act No. 10 of 2004)
- The National Environmental Management: Protected Areas Act
- National Heritage Act (Act No. 25 of 1999)

Basic Assessment Report and Environmental Management Programme

A Basic Assessment Report (BAR) and Environmental Management Programme (EMPr) will be distributed for public review and comment before submission to the National Department of Environmental Affairs (DEA) who as been identified as the Competent Authority for this project. All comments received will be communicated to the DEA and relevant authorities, and included in the final BAR.



Public consultation forms an integral component of the Basic Assessment process as key issues and concerns from I&APs can be identified and addressed accordingly. Public consultation will be undertaken in terms of legislative requirements. All interested and affected landowners have been registered as I&APs for the Seweweekspoort Pass project, and will be notified of this BA process. All registered I&APs will receive a copy of the BAR and EMPr. Issues and concerns can be raised via the Environmental Assessment Practitioner (EAP) within 30 days of issuance.

Copies of the application and supporting documentation are available at the Laingsburg Public Library (Van Riebeeck Street, Laingsburg, 6900) as well as the Ladismith Public Library (21 Queen Street, Ladismith, 6655). Electronic copies can be emailed upon request, and are available online as follows:

<https://www.hatch.com/SeweweekspoortBasicAssessment>

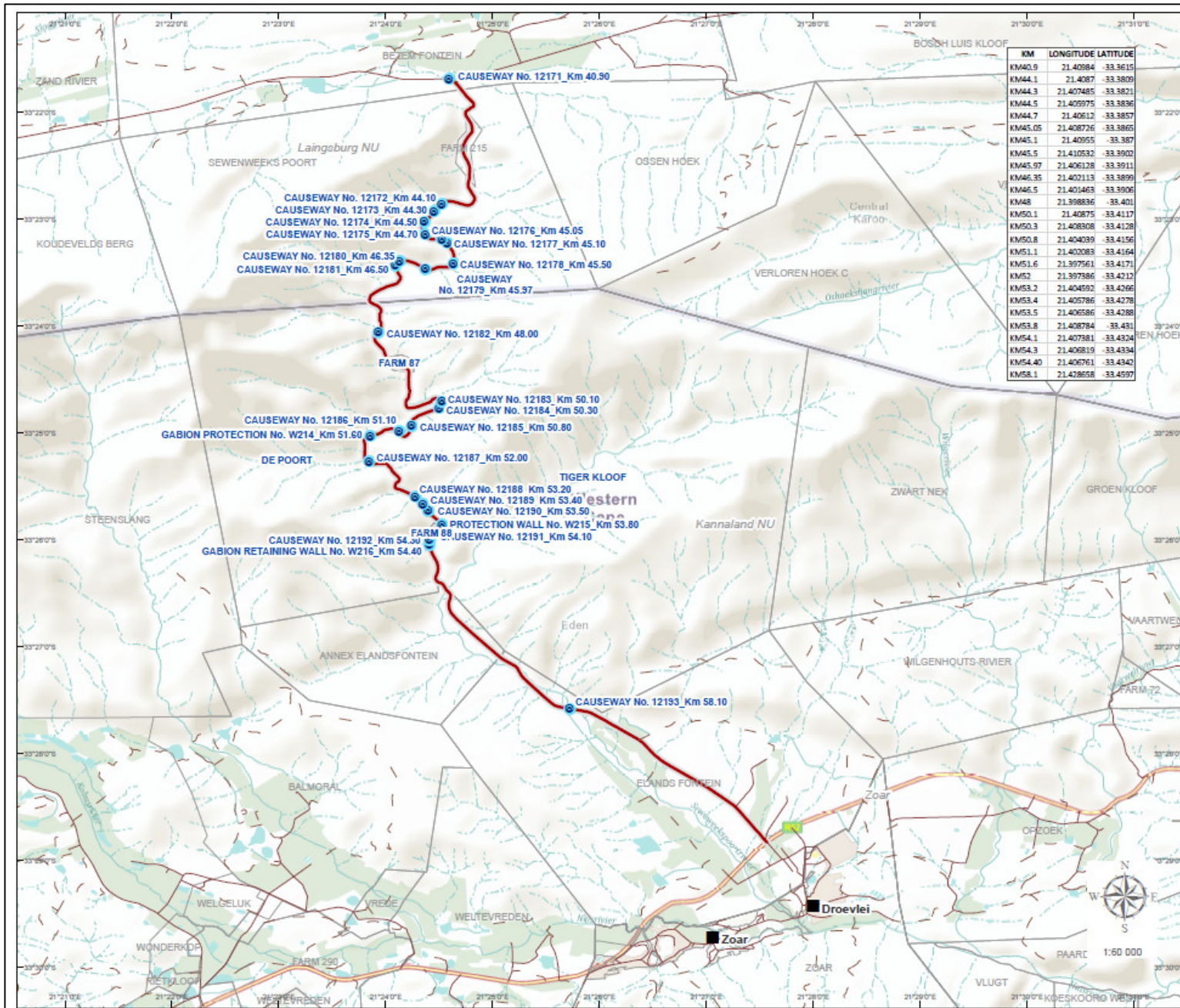
Contact Details

All issues and concerns can be submitted via email, telephone , post or fax, as follows:

EAP:	Hatch Africa (Pty) Ltd
Contact person:	Evert Jacobs
Telephone:	27 (0)41 817 1100
Email:	evert.jacobs@hatch.com

The Pubic Participation Process documents and BAR can also be accessed by scanning the QR code below

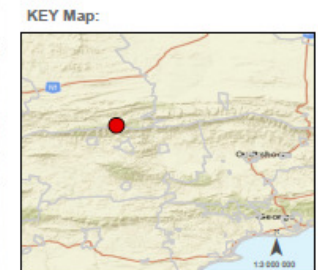




KM	LONGITUDE	LATITUDE
KM40.9	21.40984	33.3615
KM44.1	21.4087	33.3809
KM44.3	21.407485	33.3821
KM44.5	21.405975	33.3836
KM44.7	21.40612	33.3857
KM45.05	21.408726	33.3865
KM45.1	21.40955	33.387
KM45.5	21.410532	33.3902
KM45.97	21.406128	33.3911
KM46.35	21.402113	33.3899
KM46.5	21.401463	33.3906
KM48	21.398836	33.401
KM50.1	21.40875	33.4117
KM50.3	21.408308	33.4128
KM50.8	21.404039	33.4156
KM51.1	21.402083	33.4164
KM51.6	21.397561	33.4171
KM52	21.397386	33.4212
KM53.2	21.404592	33.4266
KM53.4	21.405786	33.4278
KM53.5	21.406586	33.4288
KM53.8	21.408784	33.431
KM54.1	21.407381	33.4334
KM54.3	21.406819	33.4334
KM54.40	21.406761	33.4340
KM58.1	21.428658	33.4597

- ### Legend
- Town
 - Seweweekspoort Pass Structures
 - Seweweekspoort Pass
 - Track/Footpath
 - Secondary/Other Road

Coordinate System: GCS WGS 1984
 Datum: WGS 1984
 Units: Degree



CLIENT:
WESTERN CAPE GOVERNMENT
 DEPARTMENT OF TRANSPORT
 AND PUBLIC WORKS

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PROJECT TITLE:
**FLOOD DAMAGE REPAIRS TO STRUCTURES
 IN THE EDEN AND CENTRAL KAROO
 DISTRICT MUNICIPAL REGIONS -
 SEWEEKSPOORT PASS**

MAP TITLE:
 LOCALITY MAP

DATE COMPLETED:
 JUNE 2017

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