



**Western Cape  
Government**

## Executive Summary

### DR 1797 Road Upgrade Project

**DEA&DP Reference Number TBC**

Hatch project no.: H357403

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# **Executive Summary of the DR 1797 Road Upgrade Project**

## **1. Introduction**

The Western Cape Provincial Government: Department of Transport and Public Works (WCG) objectives are to upgrade, rehabilitate and maintain provincial roads within the Western Cape Province, provide Expanded Public Works Programme (EPWP) work opportunities, develop emerging Construction Industry Development Board (CIDB) contractors and contribute towards black economic empowerment within the local communities.

The WCG have appointed Hatch Africa (Pty) Ltd. (Hatch) as the engineering consultant, as well as the Environmental Assessment Practitioner (EAP), to undertake the periodic maintenance of various road within the Province.

The specific objectives of this project are to:

- Carry out periodic maintenance, in the form of an asphalt overlay, on the TR2/12 (R102) from km 14.14 to km 37.25
- Carry out slip repairs on the TR2/12 at km 23.62, 35.19, 36.79 and 36.95
- Rehabilitate OP 7220 (minor road) from km 0.00 to km 1.49
- Upgrade the DR 1797 (Redford Road) from km 0.00 to km 4.87.

An environmental authorisation review was conducted for the TR2/12, OP 7220 and DR 1797 to determine potential permitting requirements for the upgrade works. It was determined that all proposed maintenance activities for the TR2/12 and OP 7220 will remain within the road reserve and thus no Environmental Authorisation is required. However, portions of the DR 1797 upgrade work will extend beyond the road reserve, including the construction of a major culvert, resulting in the need for Environmental Authorisation to be obtained for the proposed activities.

## **2. Project Information**

### **2.1 Project Location**

The WCG's objective is to upgrade, rehabilitate and maintain provincial roads within the Western Cape Province. This project's main objective is to upgrade the DR 1797 from km 0.00 to km 4.87 from a gravel road (Class 4) to a tarred road (Special Class 4).

The DR 1797 is located just over 25 km from the town of Plettenberg Bay, within the Garden Route District Municipality (formally Eden District Municipality), in the Western Cape Province (refer to Figure 2-1).

The predominant land use within the surrounding area is classified as Agriculture. The following landcover activities have been observed along the DR 1797:

- **Cultivated fields / orchards / vines:** Several farming activities occur along the existing DR 1797 road – these activities range from cattle farming to viticulture and crop cultivation
- **Natural vegetation:** The existing DR 1797 road runs through a Critical Biodiverse Area (CBA) and several Ecological Support Areas (ESAs), as well as an indigenous forest at km 3.5
- **Accommodation:** Accommodation facilities observed, appear to be accessed via the existing DR 1797 road
- **Residential:** Small holdings were observed along the existing DR 1797 road, these appear to be accessed via the existing DR 1797 road
- **Forestry:** The existing DR 1797 road ends at a forestry plantation. Timber trucks access the plantation via the existing DR 1797 road.

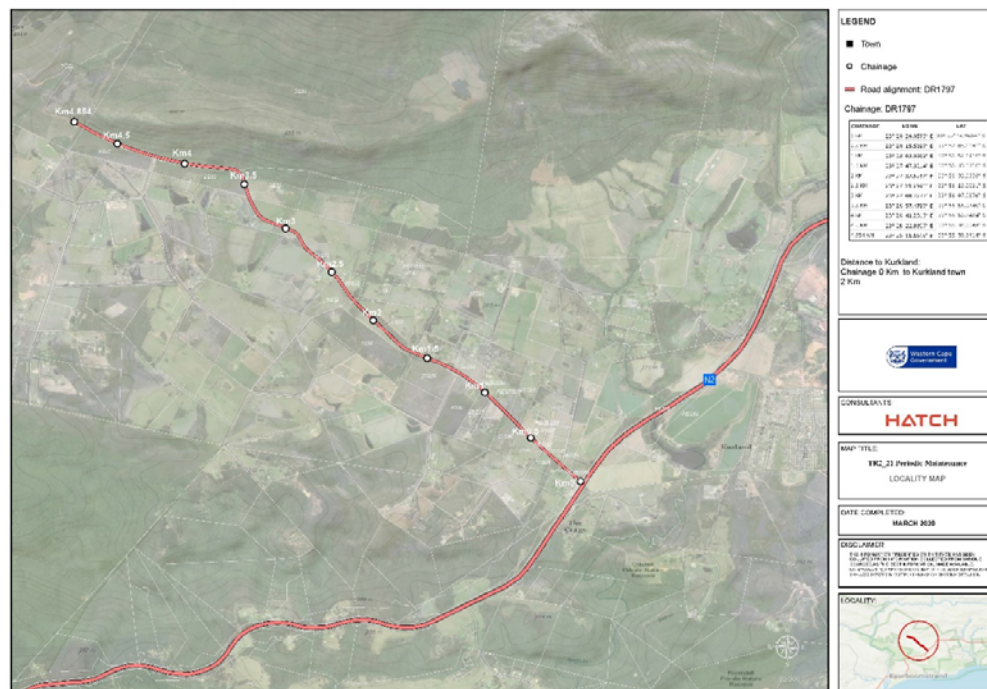


Figure 2-1: Location of the DR 1797 Road

## 2.2 Expropriation Areas

The DR 1797 road upgrade will require vertical and horizontal realignment to allow for a 60 km/hr design speed. Due to this, there are small areas along the DR 1797 which will require expropriation (Figure 2-2).

The landowners which will be affected by the expropriation, have already been contacted and are currently in discussions with the WCG.



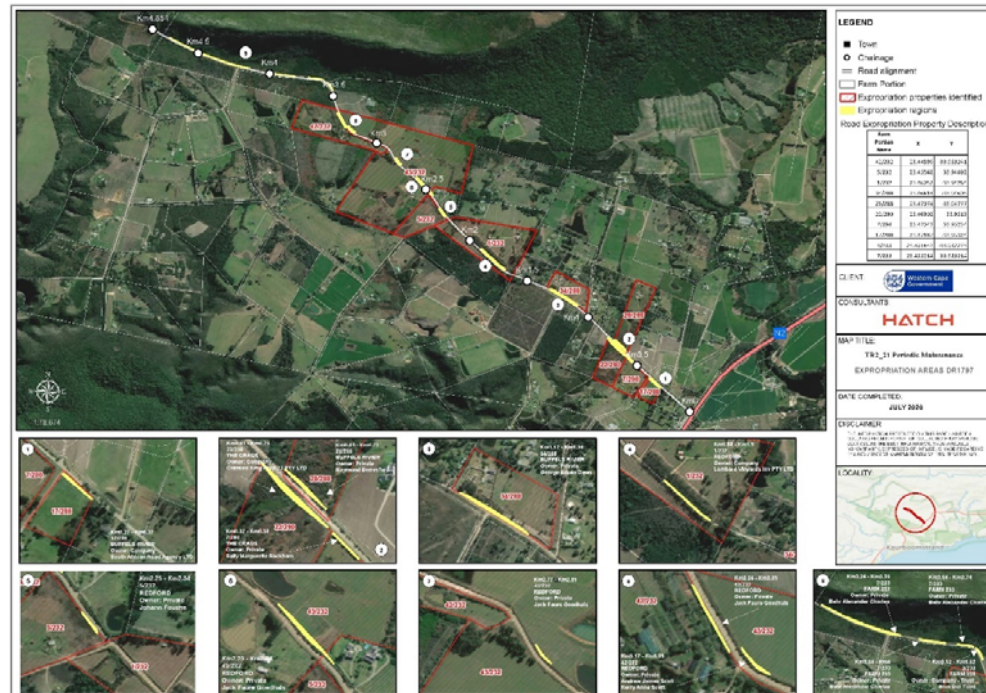


Figure 2-2: Map indicating the expropriation areas along the DR 1797 Road

## 2.3 Status Quo of the DR 1797

The DR 1797 road upgrade project's main objective is to upgrade the road from a gravel road (Class 4) to a tarred road (Special Class 4). The following activities will be undertaken as part upgrade works:

- Vertical and horizontal realignment between km 0.00 and km 4.87 which entails cut and fill operations
- Construction of a temporary widening for the accommodation of traffic during half width construction
- Construction of a new pavement between km 0.00 and km 4.87, including the following:
  - Excavation of the wearing course and underlying layers to the required depth
  - Preparation of the roadbed
  - Construction of a selected subgrade of at least G7 quality
  - Construction of a C4 stabilised subbase layer
  - Construction of a G4 graded crushed stone base layer
  - Construction of a 20 mm single seal with two layers (Cape seal)

- Construction of a new major culvert at km 0.705
- Construction of subsoil drainage and unlined earth drain structures along the route
- Erection of additional signs and the replacement of missing signs, as well as the replacement of existing signs in poor condition
- Re-establishment of permanent road markings
- Expropriation and moving of the fence line where required.

### **2.3.1 *Boundaries of the Site***

The DR 1797 is a dual lane, single carriageway and is situated in the jurisdiction of the Garden Route District Municipality (formerly known as the Eden District Municipality). The upgrade of road DR 1797 will be from km 0.00 (left off the N2 and just past The Craggs Petrol Station) to km 4.87. The limit of construction for the DR 1797 commences at the N2 at km 0.00 and completes at km 4.87.

### **2.3.2 *Existing Road Geometry***

Generally, the road moves through an area of “rolling” and “mountainous” terrain. In terms of the Road Infrastructure Strategic Framework of South Africa (RISFSA), the DR 1797 (from km 0.00 to km 4.87) is currently classified as a Class 4 gravel road.

The average gravel surfacing width is 6.6 m and consists of two lanes of an average width of 3.3 m, with no defined gravel shoulders.

The objective of the project is to upgrade the surfacing width to conform to a Special Class 4 consisting of 2 by 3.4 m wide lanes with a 300 mm gravel shoulder on each side.

### **2.3.3 *Horizontal and Vertical Alignment***

Upgrading of the existing gravel road will require adjustments to the vertical and horizontal alignment. The new alignment shall allow for a 60 km/hr design speed, with advanced warning signage at the sharp curve situated at km 3.4, and will tie into all existing access roads along the section.

### **2.3.4 *Intersections and Access Roads***

The DR 1797 starts at the intersection off the N2 (the Craggs) which is km 0.00. There are twenty-one accesses which intersect with the DR 1797 and three OP road intersections. All of these intersections are at grade on this section of the DR 1797. All minor and major farm accesses, as well as the three OP road intersections, are to be constructed as part of the upgrade.



**Figure 2-3: Km 0.00 intersection with the N2 (The Craggs)**



Figure 2-4: OP roads and access roads

### 2.3.5 Side Drains

The drainage along this route has been deemed inadequate. Subsoil drains and unlined side drains are to be constructed along the road.



Figure 2-5: Various examples of the inadequate side drainage along the DR 1797

### 2.3.6 Structural Work

The only structural work which will be conducted on the DR 1797, will be the replacement of minor culverts and the construction of one major culvert at km 0.705.

#### 2.3.6.1 Minor Culverts

There are a few minor culverts along the DR 1797 which have been installed and constructed in the past. The majority of these minor culverts are in terrible condition and need to be replaced as part of the road upgrade.





**Figure 2-6: Inadequate minor culverts along the DR 1797**

The majority of the minor culverts are blocked with natural vegetation due to the lack of maintenance since initial installation. There are some areas along the road where new culverts will be installed; however, these are not working correctly as ponding was observed on either side of the road where the culverts were installed.



**Figure 2-7: Blocked minor culverts**

All minor culverts will be replaced and cleaned out to ensure there is adequate drainage.

#### 2.3.6.2 *Major Culverts*

Currently, there are no major culverts along the DR 1797. As part of the upgrade activities, it has been identified that a major culvert is required at km 0.705 where a tributary of the Whiskey Creek crosses the DR 1797. This will involve the construction of a new double cell reinforced concrete culvert with cell dimensions of 2.4 m wide x 1.5 m high. Downstream, the culvert will have wing walls and an apron slab with erosion protection works consisting of a gabion mattress. At the commencement of construction, the upstream side shall be surveyed, as the vegetation currently prevents access to this area. The upstream side will likely have a drop-in inlet structure.



**Figure 2-8: Location of major culvert construction**

### **2.3.7 Roadside Furniture**

Roadside furniture consists of:

- Road markings
- Road signs
- Fencing
- Guardrails.

#### **2.3.7.1 Road Markings**

Currently, the DR 1797 is a gravel road and there are no road markings. Once the road has been upgraded to a Special Class 4 road, markings and new road studs will be applied in accordance with the latest SADC Road Traffic Signs Manual and as specified.

#### **2.3.7.2 Road Signs**

All the road signs along the DR 1797 were observed to be in poor condition. Due to this, new road signs, as well as the replacement of existing signs, are required. In addition, any other signage which is required will be erected where necessary.



**Figure 2-9: Poor quality road signs**

#### **2.3.7.3 Fencing**

The condition of the fencing along the route varies from fair to poor. It is anticipated that about 50% of the length of the existing fencing shall be replaced.





**Figure 2-10: Fencing along the DR 1797**

#### 2.3.7.4 Guardrails

Currently, there are no guardrails installed along the DR 1797. However, based on the upgrade activities, guardrails will be erected in areas which have a high elevation compared to the surrounding land.

### 3. Proposed Construction Activities

It is envisaged that the upgrade of the DR 1797 will be carried out under long term half-width lane closures, commencing at the end of the project (km 4.87) and working back towards the start of the project (km 0.00) to allow construction of the major culvert (km 0.705). Traffic shall be controlled by means of a stop and go system during the day and a traffic light signalling system at night.

The proposed construction strategy envisaged for the upgrade of the DR 1797 per identified period, is to be carried out in the sequence of work shown in the construction strategy below:

- Phase 5A (km 3.64 to km 4.87)
- Phase 5B (km 2.70 to km 3.64)
- Phase 5C (km 1.43 to km 2.70)
- Phase 5D (km 0.00 to km 1.43)
- Phase 6 (km 0.50 to km 0.90) (Culvert no. 12270 at km 0.705 over a tributary of the Whiskey Creek).

For Phase 5A – 5D of the construction of DR 1797, the following will be conducted:

- Installation of moveable temporary barriers and channelization devices on the Left Hand Side (LHS) of the roadway
- Construction of a temporary widening on the LHS (within the road reserve)
- Relocation of the moveable temporary barriers and channelization devices to a new centreline of the roadway

- Excavation of existing pavement layers to the required depth or fill for the proposed new pavement structure on the Right Hand Side (RHS)
- Construction of new minor culverts (only Phase 5C and 5D)
- Construction of new pavement layers of the lane as specified
- Construction of a 20 mm single seal with two slurry layers on the RHS
- Relocation of the moveable temporary barriers and channelization devices to the LHS of the newly constructed RHS lane
- Excavation of existing pavement layers to the required depth or fill for the proposed new pavement structure on the LHS
- Construction of new pavement layers of the lane as specified
- Construction of a 20 mm single seal with two slurry layers on the LHS
- Application of temporary road markings and road studs
- Final road markings and road studs over the entire length of the road (Phase 5D only)
- Installation of final road signs and other ancillary works as specified and required (Phase 5D only).

For Phase 6 of the construction of the DR 1797, the following will be conducted:

- The culvert is to be constructed in two phases for traffic accommodation purposes so that all traffic will be on the existing road or on the new culvert
- The final road fill on top of the culvert will be 5 m high and traffic will be required to be switched over multiple times as the layer works are constructed. The traffic is to be accommodated on the opposite side to where construction is taking place. No traffic or fill will be allowed on the structure prior to the concrete having achieved its design strength.

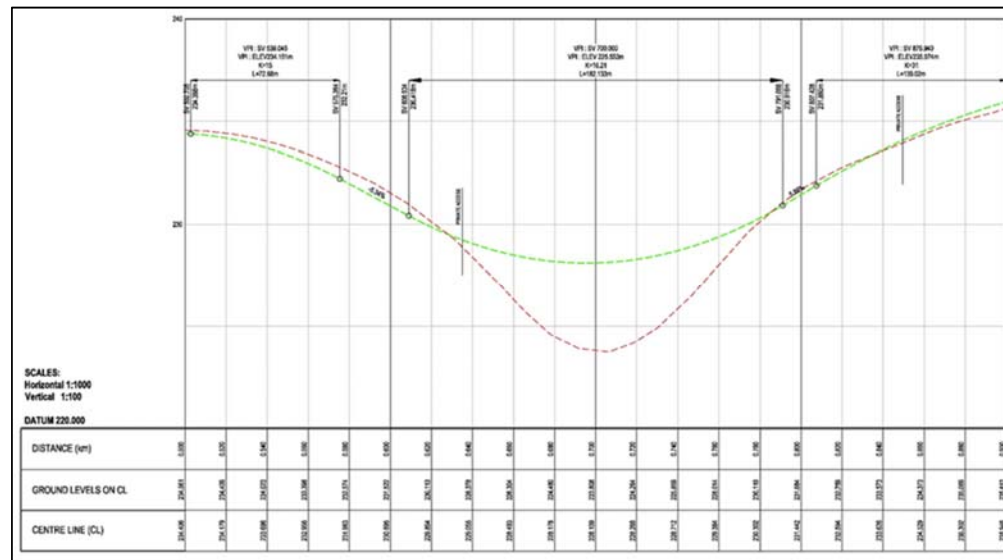


Figure 3-1: Geometric design of the major culvert proposed

#### 4. Description of Surrounding Environment

The existing DR 1797 road has been assessed in terms of the surrounding receiving environment and its sensitivities (refer to Figure 4-1). The following has been assessed and discussed; however, more detail will be given in the Draft Basic Assessment Report:

- Agriculture / soils
- Landscape and visual
- Archaeology and cultural heritage
- Palaeontology
- Vegetation / land cover
- Terrestrial biodiversity including plant and animal species
- Aquatic biodiversity
- Noise
- Traffic
- Socio-economic
- Air quality
- Topography and climate.



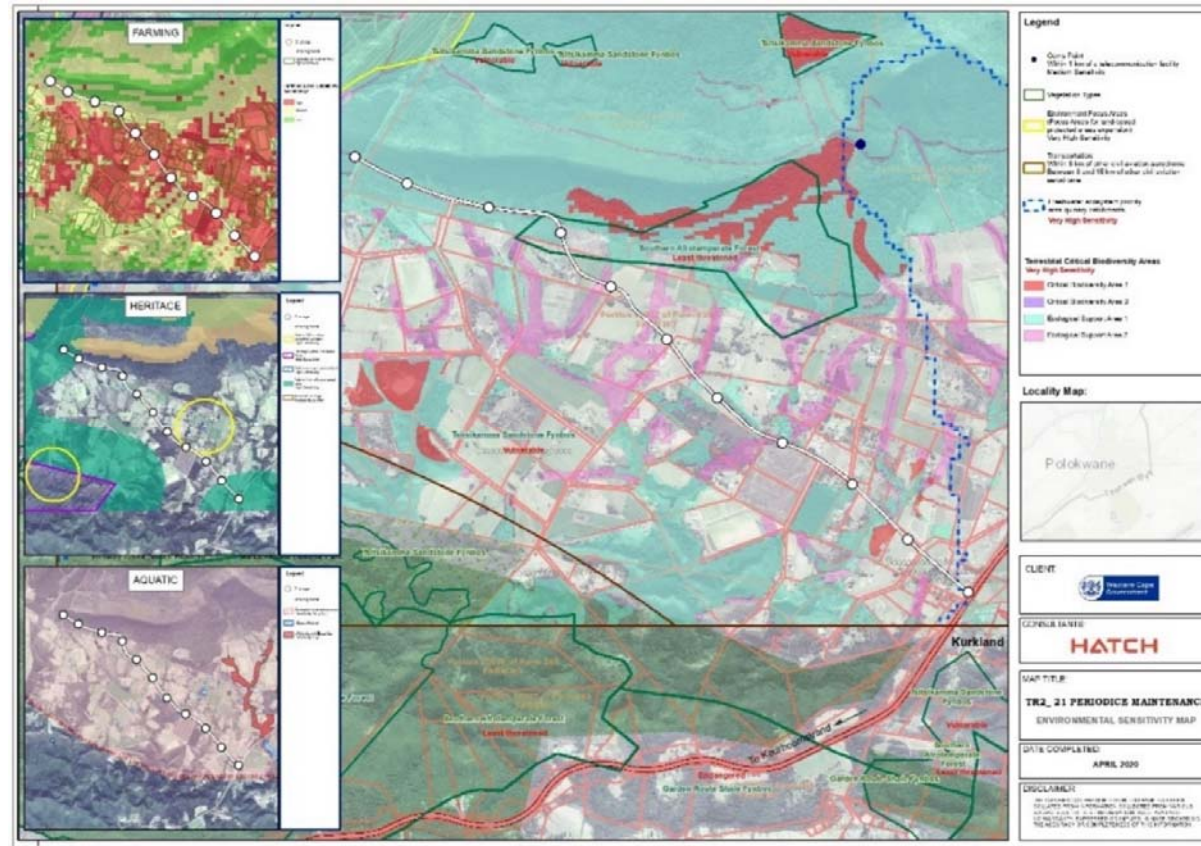


Figure 4-1: The receiving environment in terms of aquatic ecology, terrestrial ecology, heritage and agricultural sensitivities

#### **4.1 Agriculture / Soils**

Numerous farming activities occur along the DR 1797. These activities range from cattle farming to viticulture and crop cultivation, as well as some small holdings. These areas have been classified as high to very high sensitivity in terms of agriculture. A small portion of these areas will require expropriation as part of the road upgrade activities. Only the farm property verges will be impacted upon by the expropriation, with little to no impact to the main agricultural activity.

#### **4.2 Landscape and Visual**

The aesthetics of the area is not anticipated to be negatively impacted upon by the upgrade of the DR 1797, as the road is an existing road. However, the area which will be expropriated will be permanently altered to accommodate the realignment of the road. The areas which will be disturbed due to the construction activities, such as the clearing of vegetation, will be rehabilitated to allow natural vegetation growth and to reduce soil erosion surrounding the road.

#### **4.3 Archaeology and Cultural Heritage**

The majority of the DR 1797 road upgrade project is within the existing road reserve, which is already disturbed. For the expropriation areas, a desktop assessment was undertaken to identify any potential archaeological and cultural heritage impacts due to the upgrade of the DR 1797. Based on this assessment, there are no anticipated negative impacts in terms of archaeology and cultural heritage. To confirm this, a Notification of Intent to Develop (NID) was submitted to Heritage Western Cape (HWC), outlining the project, as well as the history of the area. HWC confirmed that no Heritage Impact Assessment (HIA) is required.

However, as part of the construction activities, a "Chance Find Procedure" will be compiled and issued to the contractors for implementation during the upgrade works, in the event of an archaeological or cultural heritage find.

#### **4.4 Palaeontology**

The DR 1797 road occurs within a medium palaeontological sensitive area in terms of the identified rock units. It is not anticipated that the upgrade of the DR 1797 will have any negative impacts on palaeontological aspects. However, should any palaeontological finds occur during construction, a "Chance Find Procedure" will be implemented.

#### **4.5 Vegetation / Land cover**

The predominant land use within the surrounding area is classified as Agriculture. The following landcover activities have been observed along the DR 1797:

- Cultivated fields / orchards / vines: Several farming activities occur along the existing DR 1797 road – these activities range from cattle farming to viticulture and crop cultivation
- Natural vegetation: The existing DR 1797 road runs through a CBA and several ESAs, as well as an indigenous forest at km 3.5

- Accommodation: Accommodation facilities observed, appear to be accessed via the existing DR 1797 road
- Residential: Small holdings were observed along the existing DR 1797 road, these appear to be accessed via the existing DR 1797 road
- Forestry: The existing DR 1797 road ends at a forestry plantation. Timber trucks access the plantation via the exiting DR 1797 road.

The upgrade of the DR 1797 is anticipated to have a negative impact on the landcover of the expropriation areas.

#### **4.6 Terrestrial Biodiversity**

According to the South African National Biodiversity Institute (SANBI) data, the DR 1797 route falls within close proximity to a few CBAs (terrestrial, forest, river, estuary & wetland). The road also passes through an aquatic and terrestrial ESA, i.e. areas that are not essential for meeting biodiversity targets, but play an important role in supporting the functioning of Protected Areas or CBAs and are often vital for delivering ecosystem services.

Based on a desktop assessment of the area, the surrounding environment has been historically developed and transformed by farming and other development activities. Due to this, the impact of the DR 1797 road upgrade will be very small, with all of the negative impacts confined to the expropriation areas.

A specialist study was conducted for the areas which will be expropriated. Based on this study, it was observed that the expropriation areas have two protected trees. Due to this, a permit will need to be applied, through the Department of Forestry, Fisheries and Environment (DEFF), for the removal, cutting or trimming of the protected trees.

#### **4.7 Aquatic Biodiversity**

The DR 1797 crosses over tributaries of the Whiskey Creek River, as well as a tributary of the Keurbooms River with their instream dams and associated artificial wetland habitat. The watercourses along this section of road are significantly modified, often with the instream dams immediately upstream or downstream of the road. As a result of the agricultural activities and disturbance of the aquatic habitats immediately adjacent to the road, as well as the flatter topography of this road, the culverts along the road are subject to high sediment deposition and are likely to require regular maintenance to keep these culverts clear of sediment and debris.

#### **4.8 Noise**

The DR 1797 is an existing road which is used by surrounding landowners, as well as the plantation at the end of the road. The objective of the upgrade activities is to convert the road from a gravel to tarred road, which should decrease the every day noise from the road.

During the DR 1797 upgrade works, increased ambient noise levels are anticipated; however, this will only be during daylight hours with no construction occurring at night.



#### **4.9 Traffic**

The DR 1797 is an existing road which is used by surrounding landowners, farmers and vehicles connected to the plantation at the end of the road, as well as tourists who visit the vineyards and accommodation.

While this is not a major road within the area, there is still frequent use of the road. The existing DR 1797 road is currently gravel (Class 4), and in times of rainfall can be difficult and slow to drive. The upgrade activities are to construct a tarred road (Special Class 4) which will make the road easier and safer to drive. The cumulative impact of these upgrade activities is anticipated to be positive.

#### **4.10 Socio-Economic**

According to the socio-economic profile of the Bitou Local Municipality compiled by the Western Cape Government<sup>1</sup>, the municipality has a population of 56,422 people with a 27.9% unemployment rate.

It is anticipated that the upgrade of the DR 1797 will increase the tourism within the area. As result of this, the area is anticipated to grow which could possibly lead to increased job opportunities for those within the local municipality.

#### **4.11 Air Quality**

The existing DR 1797 is a gravel road which causes large amounts of dust when used by vehicles. Once the road is converted from a gravel to a tarred road, there will be a drastic reduction in dust within the area.

During construction, there is a possibility of increased dust levels; however, mitigation measures will be implemented such as dust suppression, which will reduce dust within the area.

#### **4.12 Topography and Climate**

The area within which the DR 1797 falls, has been classified as having a Maritime climate with cool, moist winters and mild, moist summers as well as being humid.

The area has a mean annual precipitation of about 870 mm, with higher rainfall in March and October (75 to 85 mm) and lower rainfall in July (46 mm). Temperatures are higher in January / February (22°C) and lower in July and August (14°C).

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<sup>1</sup> Western Cape Government Provincial Treasury. 2017. Socio-Economic Profile of Bitou Local Municipality (Working paper). (Online). Retrieved from:  
[https://www.westerncape.gov.za/assets/departments/treasury/Documents/Socio-economicprofiles/2017/wc047\\_bitou\\_2017\\_socio-economic\\_profile\\_sep-lg\\_-\\_19\\_january\\_2018.pdf](https://www.westerncape.gov.za/assets/departments/treasury/Documents/Socio-economicprofiles/2017/wc047_bitou_2017_socio-economic_profile_sep-lg_-_19_january_2018.pdf)

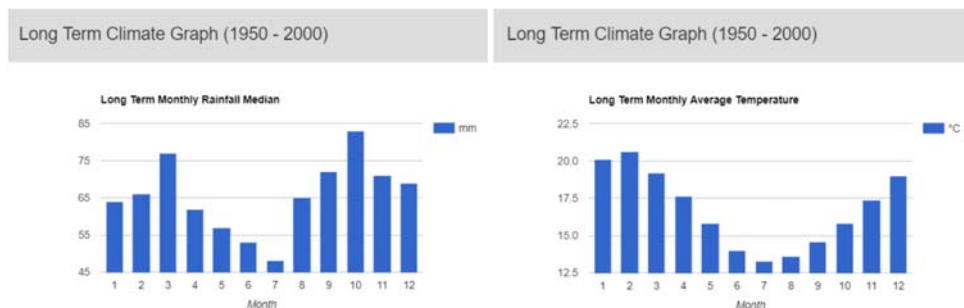


figure 4-2: Average monthly rainfall (left), temperature (right) (CapeFarmMapper, 2019) for the area

## 5. Environmental Authorisation Process

In terms of section 24F of the National Environmental Management Act, 1998 (No. 107 of 1998) (NEMA), no person may commence an activity listed in terms of sections 24(2)(a) or (b) of the NEMA (listed activity) without an Environmental Authorisation (EA) issued in terms of the NEMA. Government Notice Regulation (GNR) 983, 984 and 985 (as amended) published in terms of the NEMA, set out the listed activities that cannot be undertaken without an EA.

The objective of the Environmental Impact Assessment (EIA) Regulations<sup>2</sup> is to establish the procedures that must be followed in the consideration, investigation, assessment and reporting of the activities that have been identified. The purpose of these procedures is to provide the Competent Authority (CA) with adequate information to make decisions which ensure that activities which may impact negatively on the environment are not authorised, and that activities which are authorised are undertaken in such a manner that the environmental impacts are managed to acceptable levels.

GNR 983 identifies those activities for which a Basic Assessment (BA) must be undertaken in accordance with the procedure set out in the EIA Regulations; GNR 984 identifies those activities for which a full scoping and environmental impact report process must be undertaken in accordance with the procedure set out in the EIA Regulations; and GNR 985 identifies geographical areas in respect of which an environmental authorisation must be applied for by undertaking the BA process. It must be noted that GNR 983 and GNR 985 pertains to those activities which are deemed to have a lesser environmental impact whilst those listed in GNR 984 have a more significant impact on the environment and accordingly, a more detailed and extensive level of assessment is required.

Several listed activities in terms of GNR 983 of the EIA Regulations will be triggered by the upgrade of the DR 1797. It is the opinion of the EAP that the project will thus trigger the need for EA to be obtained, through a BA process. The CA for this project will be the Department of Environmental Affairs & Development Planning (DEA&DP).

<sup>2</sup> EIA Regulations, 2014 (as amended 7 April 2017), published under Government Notice No. 982 in Gazette No. 3822 of 4 December 2014, in terms of sections 24(5) and 44 of the NEMA.

## 5.1 Triggered Listed Activities

The following activities will be triggered under GNR 983:

### GNR 983: Listing Notice 1

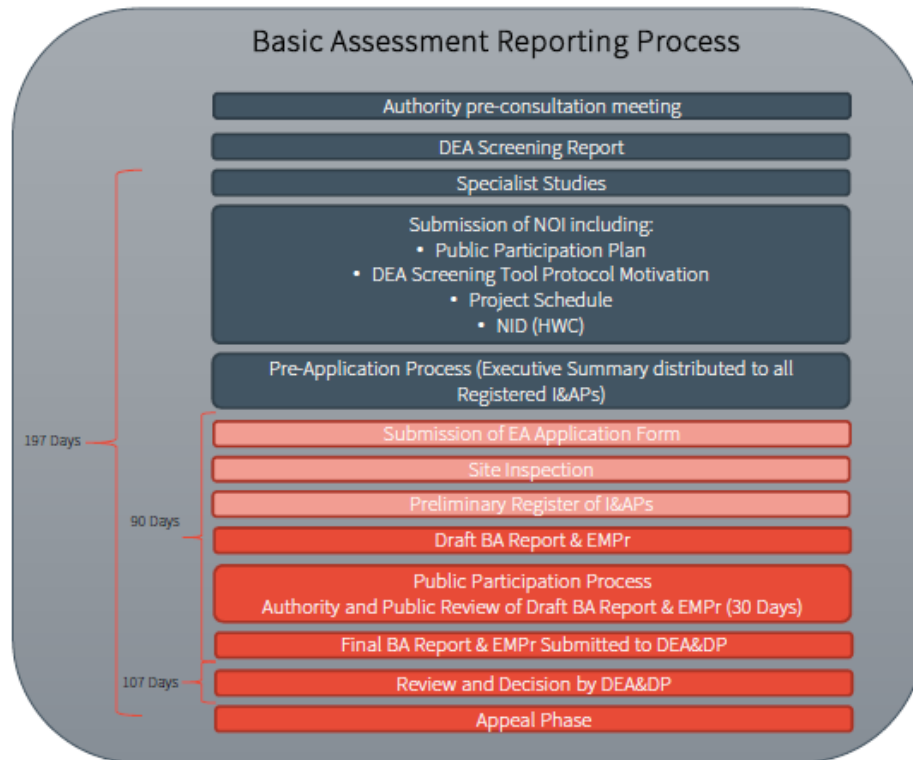
Activity No.	Relevant BA Listed Activity(ies) as set out in GNR 983
12	The development of (ii) infrastructure or structures with a physical footprint of 100 square metres or more; where such development occurs (a) within a watercourse.
19	The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse.

## 5.2 Basic Assessment Process

The BA process (Figure 5-1), as detailed in Regulation 19 and Appendix 1 of the EIA Regulations, encompasses the following activities:

- Pre-application process
- Environmental authorisation application process
- Public participation process (PPP)
- Compilation of a Basic Assessment Report (BAR) and Environmental Management Programme (EMPr)
- Undertaking of required specialist studies
- Review and decision taken by the DEA&DP.





**Figure 5-1: Basic Assessment Process to be followed**

### 5.2.1 **Pre-Application Process**

Hatch propose the following be undertaken as part of the pre-application process:

- Screening Assessment
  - The EIA Regulations require that a screening report be generated by the National Web Based Environmental Screening Tool in terms of section 24(5)(h) of the NEMA, which is to be submitted along with the environmental application. The report generated by the screening tool provides a list of specialist studies to be undertaken during the environmental assessment process.
- Specialist Studies
  - There are currently two specialist studies required and both specialist have been appointed; a Botanical Specialist and a Freshwater Specialist. The specialists visited the site, prior to the COVID-19 pandemic, to assess the environment.
- Submission of the Notice of Intent to submit an Application for Environmental Authorisation (NOI) to the DEA&DP, which included:
  - Public participation plan
  - Screening assessment and protocol motivation

- Project schedule
- NID (as required by HWC).
- An Executive Summary of the Draft BAR and EMPr (this document)
  - Hatch propose that an Executive Summary of the Draft BAR and EMPr be provided to the DEA&DP and registered interested and affected parties (I&APs). The purpose of the Executive Summary is to provide registered I&APs with introductory information on the project, the BA process and the PPP. The Executive Summary also provides registered I&APs who are interested in the project, with an opportunity to provide the EAP with comments and concerns.

### **5.2.2      *Application Process***

Once the pre-application process has been concluded, the application for EA will be submitted to the DEA&DP. The DEA&DP will have 10 calendar days to acknowledge receipt of the application.

### **5.2.3      *Draft Basic Assessment Report and Environmental Management Programme***

The Draft BAR and EMPr will be made available for public comment for a period of 30 calendar days. This will provide the DEA&DP, public and registered I&APs an opportunity to comment on the draft reports and raise their issues and concerns. Comments raised during the review period will be considered, responded to and documented in the Final BAR and EMPr.

### **5.2.4      *Final Basic Assessment Report and Environmental Management Programme***

Based on the EIA Regulations, the EAP must within 90 calendar days compile and submit the Final BAR and EMPr to the DEA&DP, that has been subject to a PPP of 30 calendar days. The Final BAR and EMPr will be made available for registered I&AP's review and be submitted to the DEA&DP, who will consider the findings in consultation with various other authorities, and issue a decision on whether an EA will be granted or refused.

### **5.2.5      *Department of Environmental Affairs and Development Planning Review and Decision***

The DEA&DP must, within 107 calendar days of receipt of the BAR and EMPr, in writing grant an EA in respect of all or part of the activity applied for; or refuse an EA. On having reached a decision, the DEA&DP must, in writing and within 5 calendar days:

- Provide the applicant with the decision
- Give reasons for the decision to the applicant
- Where applicable, draw the attention of the applicant to the fact that an appeal may be lodged against the decision in terms of the National Appeals Regulations, if such appeal is available in the circumstances of the decision.

### **5.2.6 Appeal Process**

The EAP will, in writing, within 14 calendar days of the date of the decision on the application, ensure that:

- All registered I&APs are provided with access to the decision and the reasons for such decision
- The attention of all registered I&APs is drawn to the fact that an appeal may be lodged against the decision in terms of the National Appeals Regulations, if such appeal is available in the circumstances of the decision.

### **5.3 Public Participation**

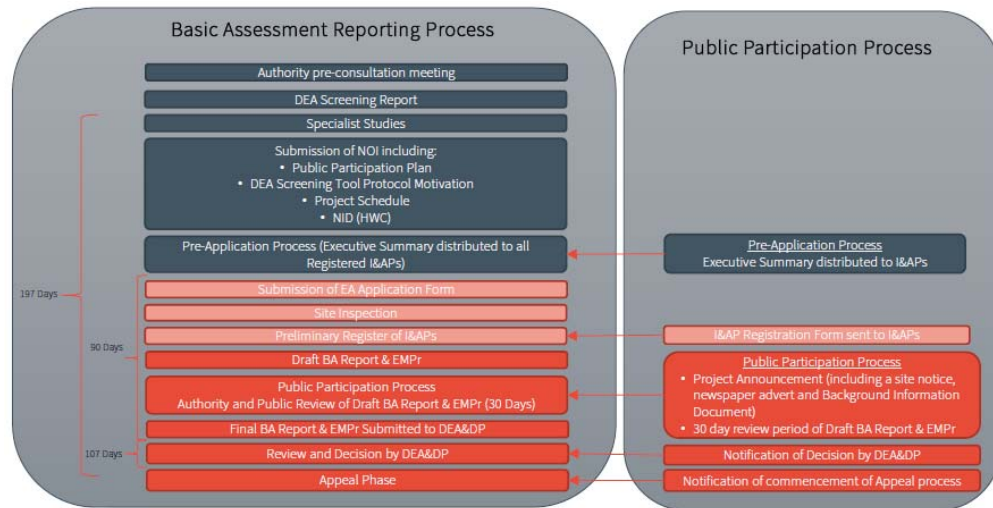
Public participation is an integral aspect of any environmental assessment process and should aim to meaningfully engage stakeholders at all levels throughout the project, to ensure that the public's views on the project are taken into consideration by decision-makers. Public participation therefore involves consultation with, amongst others, the general public, nearby communities, relevant authorities and community-based and non-governmental organisations.

According to Section (2)(4)(f) and (o) of the NEMA:

- The participation of all I&APs in environmental governance must be promoted and all people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equitable and effective participation, and participation by vulnerable and disadvantaged persons must be ensured
- The environment is held in public trust for the people, the beneficial use of environmental resources must serve the public interest and the environment must be protected as the people's common heritage.

In order to give effect to the above sections, it is essential to ensure that there is adequate and appropriate opportunity for public participation in decisions that may affect the environment.

Figure 5-2 outlines the PPP in relation to the BA Process:



**Figure 5-2: The public participation process**

### 5.3.1 **Approach to Public Participation**

Hatch's approach to the PPP will be based on the following principals:

- Undertake meaningful and timely participation with I&APs
- Focus on important issues during the BA process
- Undertake due consideration of alternatives
- Take accountability for information used
- Encourage co-regulation, shared responsibility and a sense of ownership over the project lifecycle
- Apply "due process" particularly with regard to public participation as provided for in the EIA Regulations
- Consider the needs, interests and values of I&APs.

#### 5.3.1.1 **Creating Awareness**

To ensure the above approach is carried out correctly, the following will be done to create awareness of the project:

- Site notices will be erected along the DR 1797 road, notifying all those who use the road, of the project
- An advertisement will be placed in the Knysnas-Plett Herald requesting any I&AP's to contact the EAP to register on the project's database.

#### 5.3.1.2 **Roles and Responsibilities of the I&APs**

Registered I&APs have the right to bring to the attention of the CA any issues that they believe may be of significance to the consideration of the application.



The rights of registered I&APs are qualified by certain obligations, namely:

- Registered I&APs must ensure that their comments are submitted within the timeframes that have been approved by the DEA&DP, or within any extension of a timeframe agreed by the proponent, EAP or the DEA&DP
- Serve a copy of the comments submitted directly to the competent authorities, the proponent or the EAP
- Disclose to the EAP any direct business, financial, personal or other interest that they might have in the approval or refusal of the application.

The roles of registered I&APs in a PPP usually include one or more of the following:

- Assisting in the identification and prioritisation of issues that need to be investigated
- Making suggestions on alternatives and means of preventing, minimising and managing negative impacts and enhancing project benefits
- Assisting in or commenting on the development of mutually acceptable criteria for the evaluation of decision options
- Contributing information on public needs, values and expectations
- Contributing local and traditional knowledge
- Verifying that their issues have been considered.

In order to participate effectively, I&APs should:

- Become involved in the process as early as possible
- Register as an I&AP
- Advise the EAP of other I&APs who should be consulted
- Contribute towards the design of the PPP (including timeframes) to ensure that it is acceptable to all I&APs
- Follow the process once it has been accepted
- Read the material provided and actively seek to understand the issues involved
- Give timeous responses to correspondence
- Be respectful and courteous towards other I&APs
- Refrain from making subjective, unfounded or ill-informed statements
- Recognize that the process is confined to issues that are directly relevant to the application.

### **5.3.2     *Draft Basic Assessment and Environmental Management Programme***

As mentioned in Section 5.2.3, the DEA&DP, public and registered I&APs, will have 30 calendar days to comment on the draft reports and raise their issues and concerns.

Comments raised during the review period will be considered, responded to and documented in the Final BAR and EMP.

## 6. Environmental Impacts

Table 6-1 summarises anticipated impacts as a result of the DR 1797 upgrade project. These impacts will be assessed as part of the BA process, and measures to prevent, minimise and manage negative impacts, and enhance project benefits, will be identified.

**Table 6-1: Anticipated impacts as a result of the DR 1797 road upgrade**

Aspect	Potential Impact
<b>Construction Phase</b>	
Agriculture / Soils	<ul style="list-style-type: none"> <li>• Portion of small holding to be expropriated for the upgrade of the DR 1797 road</li> <li>• Area with high land capability to be expropriated for the upgrade of the DR 1797 road</li> <li>• Clearance of vegetation which may lead to soil erosion</li> <li>• Soil compaction due to heavy machinery during construction</li> <li>• Soil pollution due to hazardous substances spills</li> <li>• Loss of topsoil due to incorrect stockpiling (including re-vegetation)</li> <li>• Incorrect disposal of waste aggregate</li> <li>• Loss of agricultural land due to poorly demarcate expropriation areas</li> </ul>
Landscape / Visual	<ul style="list-style-type: none"> <li>• Litter and bad housekeeping from construction staff</li> <li>• Clearance of vegetation in expropriation areas</li> <li>• Inadequate rehabilitation of the construction footprint</li> </ul>
Archaeological and Cultural Heritage	<ul style="list-style-type: none"> <li>• Archaeological and cultural heritage chance finds during the excavation within the expropriation areas</li> </ul>
Palaeontology	<ul style="list-style-type: none"> <li>• Palaeontological chance finds during the excavation within the expropriation areas</li> </ul>
Terrestrial Biodiversity Including Plant and Animal Species	<ul style="list-style-type: none"> <li>• Loss of Tsitsikamma Sandstone Fynbos</li> <li>• Potential loss of species of concern, namely <i>Afrocarpus falcatus</i> (Outeniqua Yellowwood) and <i>Pittosporum viridiflorum</i> (Cheesewood)</li> <li>• Potential of sedimentation and erosion due to construction activities</li> <li>• Infestation of alien invasive species within areas where construction activities have occurred</li> </ul>
Aquatic Biodiversity	<ul style="list-style-type: none"> <li>• Potential impact of the aquatic habitats adjacent to the proposed work</li> <li>• Impairment of the surface water quality could potentially occur during the construction phase</li> </ul>

Aspect	Potential Impact
	<ul style="list-style-type: none"> <li>Potential of longer-term modification of the flow characteristics to downstream watercourse habitats as a result of the proposed activities due to the modification of the stormwater drains and the culvert structures</li> </ul>
Noise	<ul style="list-style-type: none"> <li>Noise from construction vehicles and excavation activities</li> </ul>
Traffic	<ul style="list-style-type: none"> <li>Interrupted traffic due to construction activities</li> <li>Increased construction vehicles on the road</li> </ul>
Socio-Economic Environment	<ul style="list-style-type: none"> <li>Job opportunities</li> <li>Influx of people to the area seeking employment</li> <li>Safety and security problems due to construction</li> </ul>
Air Quality	<ul style="list-style-type: none"> <li>Increased nuisance dust fall rates associated with construction activities</li> </ul>
Topography and Climate	<ul style="list-style-type: none"> <li>Alteration to topography due to the infilling and raising of the DR 1797 road at km 0.705</li> </ul>
<b>Operational Phase</b>	
Agriculture / Soils	<ul style="list-style-type: none"> <li>Portion of small holding to be expropriated for the upgrade of the DR 1797 road</li> <li>Area with high land capability to be expropriated for the upgrade of the DR 1797 road</li> <li>Soil pollution due to hazardous substances spills from any vehicle that uses the road</li> </ul>
Landscape/ Visual	<ul style="list-style-type: none"> <li>Clearance of vegetation in expropriation areas</li> <li>Inadequate rehabilitation of the construction footprint</li> </ul>
Terrestrial Biodiversity including Plant and Animal Species	<ul style="list-style-type: none"> <li>Sedimentation and erosion</li> <li>Infestation of alien invasive species</li> </ul>
Aquatic Biodiversity	<ul style="list-style-type: none"> <li>Potential impact of the aquatic habitats adjacent to the proposed work</li> <li>Potential of longer-term modification of the flow characteristics to downstream watercourse habitats as a result of the proposed activities due to the modification of the stormwater drains and the culvert structures</li> </ul>
Noise	<ul style="list-style-type: none"> <li>High noise levels due to increased use of the road</li> </ul>
Traffic	<ul style="list-style-type: none"> <li>Improved road conditions</li> <li>Increase vehicles on the road</li> </ul>
Socio-Economic Environment	<ul style="list-style-type: none"> <li>Potential job opportunities in surrounding businesses due to better access to the area as a result of the improved road conditions</li> <li>Potential increase in tourism of the surrounding areas due to better access to the area as a result of the improved road conditions</li> </ul>

Aspect	Potential Impact
	<ul style="list-style-type: none"> <li>Improved road safety due to the road upgrade (example no blind rises)</li> </ul>
Air Quality	<ul style="list-style-type: none"> <li>Increased car emissions as result of increased vehicles using the road</li> <li>Reduction in PM<sub>10</sub> and PM<sub>2.5</sub> (dust) due to the upgrade of the road</li> </ul>
Topography and Climate	<ul style="list-style-type: none"> <li>Improved road alignment and gradient due to the road upgrade (example no blind rises)</li> </ul>

## 7. Invitation to Participate

Contact details are as follows:

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To register as an I&AP, please click [here](#) to access the online registration form. This will notify the EAP that you would like to receive all information related to the project's environmental process.