



**IMPORTANT:** Kindly ensure that this checklist is completed and attached to the NEMA SECTION 24G Application.

Please indicate by ticking the following below to serve as confirmation that the required information has been included in the application.

No.	Application Requirements	Please tick for confirmation
1.	Requirements of Preliminary Advertisement (pre-application public participation requirements including register of all I&APs), in accordance with Annexure A, Section D of the Section 24G Fine Regulations. <b>(Note: Failure to meet the Regulation 8 will result in rejection of the application)</b>	X
2.	Application form has been completed and attached, which includes among others:	X
	2.1. A list of all listed activities and/or waste management activities that was triggered when the development activity was commenced with.	X
	2.2. A list of all <b>similarly listed</b> activities in terms of the current EIA regulations (if applicable).	X
	2.3. A description of the receiving environment <b>before</b> commences of the activity(ies).	X
	2.4. A description of the receiving environment <b>after</b> commences of the activity(ies).	X
	2.5. All appendices and annexures:	X
	2.5.1. Locality map	X
	2.5.2. Site plans or/and Layout plan	X
	2.5.3. Building plans (if applicable)	NA
	2.5.4. Colour photographs	X
	2.5.5. Biodiversity overlay map	X
	2.5.6. Permit(s) / license(s) from any other organ of state including service letters from the municipality	NO
	2.5.7. Public participation information: including a copy of the register of interested and affected parties, the comments and responses report, proof of notices, advertisements, Land owner consent and any other public participation information	X
	2.5.8. Environmental Management Programme	X
	2.5.9. Certified copy of Identity Document of Applicant	NA
	2.5.10. Certified copy of the title deed (or title deeds in the case of linear activities)	X
	2.6. Signed declaration forms.	X
3.	Are any specialist assessments required: e.g. Botanical, Hydro-geological, soil, socio-economic?	X - YES
	3.1. If yes, has the specialist assessment report been attached to the application?	X - YES
4.	An assessment of the impacts of the activity or activities in terms of the following categories:	X
	• Socio-economic	X
	• Biodiversity	X
	• Sense of place &/or Heritage/ Cultural	X
	• Any pollution or environmental degradation which has been, is being, is being or may be caused	X
5.	A methodology of how the investigation into the impacts associated with the unlawful activity was undertaken.	X
6.	Completed and attached representations of Annexure A, Section A (Directives) in terms of the S24G Fine Regulations: Information/ Representation submitted in terms of any Directives the Minister/ decision maker may issue in terms of the National Environmental Management Act (Act 107 of 1998) (NEMA) s24G(1)(b)(i)-(viii).	X
7.	Completed and attached representations in terms of Annexure A, Section B (Deferral) of the S24G Fine Regulations.	X

**NEMA SECTION 24G APPLICATION  
COMPLETENESS CHECKLIST**

8.	Completed and attached representations in terms of Annexure A, Section C, Part 1 (Fine Quantum based on the assessment as specified above (4).	X
	Confirmation that Annexure A, Section C, Part 1 has been completed by an environmental assessment practitioner (EAP)	X
9.	Compliance history of the applicant:	X
	9.1. Completed Annexure A, Section C, Part 2 and 3; namely:	X
	9.1.1. Whether or not administrative enforcement notices, including pre -notices where appropriate, have previously been issued to the applicant in respect of a contravention of section 24F(1) of the NEMA and/or section 20(b) of the National Environmental Management: Waste Act (Act 59 of 2008) (NEM: WA).	X
	9.1.2. Whether or not the applicant has previously been convicted in respect of a contravention of section 24F(1) of the Act and /or section 20(b) of the NEM: WA;	X
	9.1.3. Whether or not the applicant has previously submitted a section 24G application in respect of an activity or activities which commenced prior to the activity or activities that are the subject of the current application; and	X
	9.1.4. Whether the applicant is a firm or a natural person. (see Section 24G Fine Regulations for definition of "firm")	X
	9.2. Provided information or whether or not any of the directors of the applicant firm are, or were, at the relevant time, directors of a firm to whom the above (9.1.1. - 9.1.3.) applies;	X
	9.3. Advise on whether an applicant who is a natural person is, or was, at the relevant time a director of a firm to whom the above (9.1.1.- 9.1.3.) may apply.	X
10.	Consultation with relevant State departments in terms of section 24O(2) & 24O(3) of the NEMA.	NO
	10.1 Proof of Consultation with relevant State departments, including, <i>inter alia</i> , notices, adverts etc.	NO
	10.2 Copies of comments and responses included in the application.	NO
	10.2 Comments and Response report attached to the application.	NO
11.	Public Participation Process undertaken in terms of Chapter 6 of the Environmental Impact Assessment Regulations, 2014 ("EIA Regulations, 2014") (GN No. R.326 of 7 April 2017) <b>(if conducted/undertaken)</b>	X - Partly



## Section 24G Application Form for the consequences of unlawful commencement of listed activity/ies in terms of the:

- **National Environmental Management Act, 1998 (Act No. 107 of 1998), ("NEMA");**
- **National Environmental Management: Waste Act, 2008 (Act 59 of 2008) ("NEM: WA")**

April 2018

Form Number S24GAF/04/2018

### Kindly note that:

1. This application must be submitted where a person has commenced with a listed or specified activity without an environmental authorisation in contravention of section 24F(1) of NEMA (i.e. where the person commenced with an activity listed or specified in terms of section 24(2) (a) or (b) of NEMA - the activities contained in the EA Listing Notices) or has commenced, undertaken or conducted a waste management activity without a waste management licence in terms of section 20 (b) of the NEM:WA.
2. This **Application Form** must be completed for all section 24G applications, by an independent Environmental Assessment Practitioner ("EAP").
3. This Application Form is current as of 01 April 2018. It is the responsibility of the Applicant/EAP to ascertain whether subsequent versions of the Application Form have been published or produced by the competent authority. Note that this Application Form replaces all the previous versions. This updated Application Form must be used for all new applications submitted from 01 April 2018.

4. **The contents of this Application Form includes the following:**

**PART 1 -**

**Section A: Background Information**

**Section B: Activity Information**

**Section C: Description of Receiving Environment**

**Section D: Need and Desirability**

**Section E: Alternatives**

**Section F: Impact Assessment, Management, Mitigation and Monitoring Measures**

**Section G: Assessment Methodologies and Criteria, Gaps in Knowledge, underlying Assumptions and Uncertainties**

**Section H: Recommendations of the EAP**

**Section I: Representations - Response to an Incident or Emergency Situation**

**Section J: Public Participation Process**

**PART 2 –**

**ANNEXURE A of Fine Regulations**

**Section A: Directives**

**Section B: Deferral of the Application**

**Section C: Quantum of the section 24G fine**

**Section D: Preliminary advertisement**

**PART 3 –**

**Appendices and Declarations**

**PART 4 –**

**ANNEXURE B: Waste Management Activity Supporting Information (if relevant)**

5. An independent EAP must be appointed to complete the required sections (in terms of NEMA and its Regulations) of the Application Form on behalf of the applicant; the declaration of independence must be completed by the independent EAP and submitted with this Application Form. If a specialist report is required, the specialist will also be required to complete the declaration of independence.
6. Two hard copies (including the original) and one electronic copy (CD/DVD/Flash drive) of this application form must be submitted.

7. The required information must be typed within the spaces provided. The sizes of the spaces provided are not necessarily indicative of the amount of information to be provided. The space provided extend as each space is filled with typing. **A legible font type and size must be used when completing the form.** A digital copy of the Application Form is available on the Department's website <https://www.westerncape.gov.za/eadp/>
8. The use of "not applicable" in the Application Form must be done with circumspection.
- 9. No faxed or e-mailed application forms will be accepted.**
10. Unless protected by law, all information contained in and attached to this application will become public information on receipt by the competent authority. Please note that, unless exemption has been granted in terms of the National Exemption Regulations published under GN R994 in GG 38303 of 8 December 2014, any Interested and Affected Party should be provided with the information contained in and attached to this Application Form as well as any subsequent information submitted.
11. This Application Form must be submitted to the Department at the postal address given below or by delivery thereof to the Registry Office of the Department.

#### PROCESS TO BE FOLLOWED:

- a) **Prior to submission of an Application Form**, the applicant is required to undertake a pre-application public participation process in terms of Regulation 8 of the Regulations relating to the procedure to be followed and criteria to be considered when determining an appropriate fine in terms of section 24G published in the Government Gazette on 20 July 2017, Gazette No 40994, No. R. 698 ("Section 24G Fine Regulations").
- b) Together with the submission of a section 24G Application Form, the form **must include Proof of compliance with Regulation 8** of the Section 24G Fine Regulations, including, but not limited to, proof of the pre-application advertisement in a local newspaper and register of I&APs.
- c) The Department will acknowledge receipt of the application (within 14 days) and provide the Applicant / EAP with the relevant application reference number to be used in all future correspondence and the application public participation processes.
- d) Upon receipt of the application, the MEC/Competent Authority may direct the applicant in terms of section 24G(1)(i-viii) of the NEMA.
- e) In terms of the provisions of section 24G of NEMA, the applicant must pay an administrative fine up to a maximum of R5 million before the MEC/Competent Authority decides on the application.
- f) The applicant **must within 14 days** of receipt of the determination of the quantum of the fine, ensure that all registered interested and affected parties are notified of the determination of the quantum of the fine, including the reasons and provided with access to the determination.
- g) The administrative fine **must be paid within the time period stipulated** in the determination. Failure to pay the fine within the specified period, will result in the lapse of the application and any partial amounts paid in will not be refunded.
- h) **Proof of payment of the fine must be submitted to the Department.** Upon payment of the administrative fine, the MEC/Competent Authority may-
  - refuse to issue an environmental authorisation; or
  - issue an environmental authorisation to such person to continue, conduct or undertake the activity subject to such conditions as may be deemed necessary, which environmental authorisation shall only take effect from the date on which it has been issued; or
  - direct the applicant to provide further information or take further steps prior to making a decision provided for above;
  - together with the above decision the MEC/Competent Authority may direct a person to rehabilitate the environment within such time and subject to such conditions as may deem necessary or take any other steps necessary under the circumstances.

#### PLEASE NOTE THE FOLLOWING:

1. Failure to comply with a directive may result in the institution of appropriate legal action as is deemed necessary and as provided for in the legislation.
2. The submission of an application or the granting of an environmental authorisation shall in no way derogate from—

- (a) the environmental management inspector's or the South African Police Services' authority to investigate any transgression in terms of NEMA or any specific environmental management Act;
- (b) the National Prosecuting Authority's legal authority to institute any criminal prosecution.
3. If, at any stage after the submission of an application it comes to the attention of the Minister, Minister for mineral resources or MEC that the applicant is under criminal investigation for the contravention of or failure to comply with section 24F(1) or section 20(b) of the *National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008)*, the Minister, Minister for mineral resources or MEC may defer a decision to issue an environmental authorisation until such time that the investigation is concluded and—
- (a) the National Prosecuting Authority has decided not to institute prosecution in respect of such contravention or failure;
- (b) the applicant concerned is acquitted or found not guilty after prosecution in respect of such contravention or failure has been instituted; or
- (c) the applicant concerned has been convicted by a court of law of an offence in respect of such contravention or failure and the applicant has in respect of the conviction exhausted all the recognised legal proceedings pertaining to appeal or review.
4. A person is guilty of an offence if that person:
- Prior to submission of a section 24G application:
    - o fails, in terms of Regulation 8(1), to place a preliminary advertisement in a local newspaper in circulation in the area in which the activity was, or activities were, commenced and on the applicant's website, if any or
    - o fails, in terms of Regulation 8(2), to comply with the advertisement requirements set out in Annexure A, section D or
    - o fails, in terms of Regulation 8(3), to open and maintain a register of interested and affected parties)); or
    - o fails, in terms of Regulation 8(4), to attach to the application form the register of interested and affected parties, which must be included in the report, or form part of the information submitted in terms of section 24G(1) of NEMA.
  - Provides incorrect, false or misleading information in any form, including in any document submitted to a competent authority in terms of the Section 24G Fine Regulations or omits information that may have an influence on the outcome of a recommendation of the fine committee or determination of the competent authority.
5. A person convicted of an offence in terms of these Regulations is liable to a fine not exceeding R5 million or to imprisonment for a period not exceeding 5 years, and in the case of a second or subsequent conviction to a fine not exceeding R10 million or to imprisonment for a period not exceeding 10 years, and in both instances to both such fine and such imprisonment.
-

**DEPARTMENTAL DETAILS**

Department of Environmental Affairs  
and Development Planning,  
**Directorate:** Environmental Governance  
**Attention:** Sub-directorate: Rectification  
Private Bag X9086  
Cape Town, 8000

Registry Office  
1<sup>st</sup> Floor Utilitas Building  
1 Dorp Street, Cape Town

Queries should be directed to the Sub-  
director: Rectification at:  
Tel: (021) 483-5827 Fax: (021) 483-4033

**DEPARTMENTAL REFERENCE NUMBER(S)** (for official use)

File Reference number (S24G)	
Administrative Fine Reference	

**DEPARTMENTAL REFERENCE NUMBER(S)** (to be completed by the EAP)

File Reference number (Enforcement), if applicable	14/1/1/E2/5/2/3/0268/16
File reference number (EIA), if applicable:	14/2/4/2/2/B5/14/0014/19
File reference number (Waste), if applicable:	
File reference number (Other (specify)):	

View the Department's website on <http://www.westerncape.gov.za/eadp> for the latest version of the documents

**PART 1****PROJECT TITLE**

**S24G APPLICATION – DRAFT REPORT DATED 6 AUGUST 2019  
FOR THE CONSTRUCTION OF A ROAD AND ASSOCIATED BRIDGE INFRASTRUCTURE ON PORTION 1 OF FARM  
BLOUBANK NO. 52, TULBAGH**

**RELEVANT REGION IN WHICH THE ACTIVITY COMMENCED**

Cross out the appropriate box "X" in which region the unlawful activity/ies has commenced.

REGION 1 City of Cape Town and West Coast District	REGION 2 Cape Winelands District and Overberg District	REGION 3 Central Karoo District and Eden District
	X	

## SECTION A: BACKGROUND INFORMATION

## 1. APPLICANT PROFILE INDEX

Cross out the appropriate box "X".

1.1	The applicant is a Natural Person (individual)					
1.2	The applicant is a Firm (i.e. any body incorporated by, or established in terms of, any law as well as any partnership, trust, parastatal or organ of state)					X
1.2.1	If a firm, please tick the relevant box below:					
	Body Corporate	Partnership	Trust <b>X</b>	Parastatal	Organ of State	
	Directors of a Company	Members of a Board	Other, please specify			
1.3	The applicant is a state-owned enterprise or municipality or State Department					

<b>Applicant's details</b> (duplicate this section where there is more than one applicant)					
Applicant Name:		Bloubank Boerdery Trust			
RSA Identity Number/ Passport Number of Applicant, if natural person:		NA			
Name of Firm (if applicable):		Bloubank Boerdery Trust			
Firm Registration Number:		IT 1050/2009			
Contact Person at the Firm:		Mr. Chris Orffer			
List of all (as applicable at the relevant time):		Please insert the names and RSA ID numbers of the relevant persons below – <b>(In the list below, delete the firms that are not applicable to this application)</b>			
• Trustees of a trust		Name: <b>Christiaan Johannes Orffer</b> RSA ID No. <b>821208 5083 080</b> Name: <b>Elmien Orffer</b> RSA ID No. <b>8310220077080</b> Name: <b>Arnoldus Jacobus Stofberg (representative of Boshoff Visser Trustdienste (EDMS) BPK</b> RSA ID No. <b>7205175013083</b>			
Postal address:		Die Orffer Landgoed, Bloubank Plaas 1			
		Tulbagh	Postal code:	6820	
Telephone:		023 230 0753	Cell:	0825951263	
E-mail:		dol@bloubank.co.za	Fax:	086 574 5901	
<b>Project Consultant</b>		na			
Contact person:					
Postal address:					
			Postal code:		
Telephone:			Cell:		
E-mail:			Fax:		
<b>Name of the Environmental Assessment Practitioner ("EAP") responsible for the application:</b>		Johmandie Pienaar			
Company name (if any):		Eco Impact Legal Consulting			
Postal address:		P.O. Box 45070			
		Claremont	Postal code:	7735	
Telephone:		021 671 1660	Cell:	072 240 3092	
E-mail:		admin@ecoimpact.co.za	Fax:	021 671 9976	
EAP Qualifications		EAP for Eco Impact Legal Consulting since March 2009  Johmandie Pienaar (Giliomee) holds a Baccalaureus Technologiae Degree (Cum Laude) in Nature Conservation from the Cape Peninsula University of Technology and has also completed the following short courses at the Centre for Environmental Management: • Implementing Environmental Management Systems (ISO 14001)(2009); • Occupational Health and Safety Law for Managers (2010);			

	<ul style="list-style-type: none"> <li>Implementing an OHS Management System based on OHSAS 18001 (2010) and;</li> <li>Occupational Health and Safety Management System OHSAS 18001 Audit: A Lead Auditor Course Based on ISO 19011 and ISO 17021 (2011). Short course presented by Executive Coaching &amp; Facilitation;</li> <li>Conduct Outcome Based Assessments (May 2015).</li> </ul>		
EAP Registrations/Associations	-		
<b>Name of the Landowner:</b> Same as applicant			
Name of the contact person for the land owner (if other): NA			
Postal address:			
		Postal code:	
Telephone:		Cell:	
E-mail:		Fax:	
<b>Person in control of land:</b> Same as applicant			
Contact person:			
Postal address:			
		Postal code:	
Telephone:		Cell:	
E-mail:		Fax:	

**Please note:**

In instances where there is more than one landowner, please attach a list of landowners with their contact details to the back of this form.

A certified copy of the applicant's (if natural person), alternatively a director's (as defined), Identity Document must be attached to the application.

A certified copy of the title deed of the property/s on which the unlawful listed activity/ies has commenced must be attached to the application.

Municipality in whose area of jurisdiction the activity falls:	Witzenberg Municipality		
Contact person, if known:	Municipal Manager		
Postal address:	PO Box 44, Ceres		
	Ceres	Postal code:	6835
Telephone	023 316 1854	Cell:	NA
E-mail:	admin@witzenberg.gov.za	Fax:	NA

**Please note:**

In instances where there is more than one Municipality involved, please attach a list of Municipalities with their respective contact details to the form.

Property location(s):	The study area lies within the Tulbagh Valley in the Witzenberg Municipal Area and is surrounded by the Groot Winterhoek Mountains. The farm is approximately nine kilometres due north of the village of Tulbagh and is accessed via the Winterhoek Road and the DR1474 Divisional Road.		
Farm/Erf name(s) & number(s) including portion(s)	Portion 1 of Farm Bloubank no. 52, Tulbagh		
Property size(s) (m <sup>2</sup> )	49.78 ha		
Development footprint size(s) (m <sup>2</sup> )	9.6m <sup>2</sup>		
SG21 Digit code(s)	C07500000000005200001		

**The co-ordinates for the site boundary are:**

Point	Latitude (S)	Longitude (E)
1	33°12'34.32"South	19°09'32.83"East

**Please note: Where numerous properties/sites are involved (e.g. linear activities), attach a list of property descriptions and street addresses to the consultation form.**

Street address:	The study area lies within the Tulbagh Valley in the Witzenberg Municipal Area and is surrounded by the Groot Winterhoek Mountains. The farm is approximately nine kilometres due north of the village of Tulbagh and is accessed via the Winterhoek Road and the DR1474 Divisional Road		
Magisterial District or Town:	Ceres		
Closest City/Town:	Tulbagh	Distance	9 (km)
Zoning of Property:	Agriculture 1		



**Please note:**

In instances where there is more than one zoning applicable, please attach a list or map of the properties indicating their respective zoning to the Application Form.

Was the property rezoned after commencement of activities?		<del>YES</del>	NO
If yes, what was the previous zoning?			
NA			
Is a rezoning application required?		YES	<del>NO</del>
Is a consent use application required?		<del>YES</del>	NO
Locality map:	<p>A locality map must be attached to the Application Form as an appendix. The scale of the locality map must be at least 1:50 000. For linear activities of more than 25 kilometres, a smaller scale e.g. 1:250 000 can be used. The scale must be indicated on the map. The map must indicate the following:</p> <ul style="list-style-type: none"> <li>• an accurate indication of the project site position as well as the positions of the alternative sites, if any;</li> <li>• road names or numbers of all the major roads as well as the roads that provide access to the site(s)</li> <li>• a north arrow;</li> <li>• a legend;</li> <li>• the prevailing wind direction; and</li> <li>• GPS co-ordinates (Indicate the position of the proposed activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in degrees and decimal minutes. The minutes should have at least three decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS-84 spheroid in a national or local projection)</li> </ul>		
Landowner(s) Consent:	<p>If the applicant is not the owner or person in control of the land on which the activity has been undertaken, he/she must obtain written consent from all landowners or persons in control of the land (of the site and all alternative sites). This must be attached to this document as Appendix G. Such consent must indicate whether or not the owner or person in control of the land would support approval of the application and that the land need not be rehabilitated.</p> <p><b>Note:</b> The consent of the landowner or person in control of the land is not required for: a) linear activities; b) an activity directly related to prospecting or exploration of a mineral and petroleum resource or extraction and primary processing of a mineral resource; or c) strategic integrated projects ("SIPs") as contemplated in the <i>Infrastructure Development Act, 2014 (Act No. 23 of 2014)</i>.</p>		

**2. APPLICATION HISTORY**

(Cross out the appropriate box "☒" and provide a description where required).

Has any national, provincial or local authority considered any development applications on the property previously?	<del>YES</del>	NO
If so, please give a brief description of the type and/or nature of the application/s as well as a reference number, if applicable: (In instances where there was more than one application, please attach a list of these applications)		
NA		
Which authority considered the application:		
NA		
Has <u>any</u> one of the previous application/s on the property been approved <b>or</b> refused? If so provide a list of the successful and unsuccessful application/s and the reasons for decision(s).	<del>YES</del>	NO
NA		
Provide detail on the period of validity of decision and expiry dates of the above applications/ permits etc.		
NA		

**SECTION B: ACTIVITY INFORMATION****1. ACTIVITIES APPLIED FOR**

I hereby apply in terms of section 24G of the National Environmental Management Act (Act 107 of 1998) for the regularisation of the unlawful commencement or continuation of the listed or waste management activities as specified in Section B:1 below.

Applicant (Full names): \_\_\_\_\_

Signature: \_\_\_\_\_

Place: \_\_\_\_\_

Date: \_\_\_\_\_

EAP (Full names): \_\_\_\_\_

Signature: \_\_\_\_\_

Place: \_\_\_\_\_

Date: \_\_\_\_\_

All listed activities associated with the development must be indicated below.

## 1.1 Applicable EIA listed activities

<b>ECA EIA Contraventions: between 08 September 1997 and end of 09 May 2002</b>			
<b>Activities commenced with on or after 08 September 1997 and before end 09 May 2002: EIA regulations promulgated in terms of the ECA, Act 73 of 1989</b>			
Government Notice No. ("GN") R1182 Activity No(s):	Describe the relevant listed activity/ies in writing as per GN No. 1182 of 1997	Describe the portion of the development as per the project description that relates to the applicable listed activity.	State the date of commencement of each activity
NA			
<b>ECA EIA Contraventions: between 10 May 2002 and end of 02 July 2006</b>			
<b>Activities unlawfully commenced with on or after 10 May 2002 and before end 02 July 2006: EIA regulations promulgated in terms of the ECA, Act 73 of 1989,</b>			
NA			
<b>NEMA EIA Contraventions: between 03 July 2006 and end of 01 August 2010</b>			
<b>Activities unlawfully commenced with on or after 03 July 2006 and before end 01 August 2010: EIA regulations promulgated in terms of the NEMA</b>			
GN R386 Activity No(s): <b>(Listing Notice 1 of 2006)</b>	Describe the relevant listed activity/ies in writing as per GN No. R. 386 of 2006 ("NEMA 2006 Basic Assessment listed activity/ies")	Describe the portion of the development as per the project description that relates to the applicable listed activity.	State the date of commencement of each activity
NA			
Government Notice No. R387 Activity No(s): <b>(Listing Notice 2 of 2006)</b>	Describe the relevant listed activity/ies in writing as per GN No. R. 387 of 2006 ("NEMA 2006 Scoping/EIA listed activity/ies")	Describe the portion of the development as per the project description that relates to the applicable listed activity.	State the date of commencement of each activity
NA			
<b>NEMA EIA Contraventions: between 02 August 2010 and end of 07 December 2014</b>			
<b>Activities unlawfully commenced with on or after 02 August 2010 and before end 07 December 2014: EIA regulations promulgated in terms of the NEMA, Act 107 of 1998,</b>			
GN No. R. 544 Activity No(s): <b>(Listing Notice 1 of 2010)</b>	Describe the relevant listed activity(ies) in writing as per GN No. R. 544 of 2010 ("NEMA 2010 Basic Assessment listed activity/ies")	Describe the portion of the development as per the project description that relates to the applicable listed activity.	State the date of commencement of each activity
NA			
GN No. R. 545 Activity No(s): <b>(Listing Notice 2 of 2010)</b>	Describe the relevant listed activity/ies in writing as per GN No. R. 545 of 2010. (NEMA 2010 Scoping/EIA listed activity/ies")	Describe the portion of the development as per the project description that relates to the applicable listed activity.	State the date of commencement of each activity
NA			
GN No. R. 546 Activity No(s): <b>(Listing Notice 3 of 2010)</b>	Describe the relevant listed Activity(ies) in writing as per GN No. R. 546 of 2010	Describe the portion of the development as per the project description that relates to the applicable listed activity.	State the date of commencement of each activity
NA			
<b>NEMA EIA Contraventions: on or after 08 December 2014</b>			
<b>Activities unlawfully commenced with on or after 08 December 2014: EIA regulations promulgated in terms of the NEMA, Act 107 of 1998,</b>			
GN No. R. 327 Activity	Describe the relevant listed activity(ies) in writing as per GN No. R.327 of 2014	Describe the portion of the development as per the project description that relates to	State the date of commencement

No(s): <b>(Listing Notice 1 of 2014)</b>	("NEMA 2014 Basic Assessment listed activity/ies")	the applicable listed activity.	of each activity
19	The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from- (i) a watercourse	The excavation and construction of culvert bridge over the drainage line resulted in the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres.	June 2017
GN No. R. 325 Activity No(s): <b>(Listing Notice 2 of 2014)</b>	Describe the relevant listed activity(ies) in writing as per GN No. R.325 of 2014 ("NEMA 2014 Scoping/EIA listed activity/ies")	Describe the portion of the development as per the project description that relates to the applicable listed activity.	State the date of commencement of each activity
NOT APPLICABLE			
GN No. R. 324 Activity No(s): <b>(Listing Notice 3 of 2014)</b>	Describe the relevant listed activity(ies) in writing as per GN No. R.324 of 2014	Describe the portion of the development as per the project description that relates to the applicable listed activity.	State the date of commencement of each activity
NA			

Please ensure that you have provided the similarly listed activities if the listed activities were commenced before the period the EIA Regulations came into effect, i.e. before 08 December 2014.

## 1.2 Applicable Waste Management Activities

List the relevant waste management activity/ies applied for:

<b>Waste Management Activity Contraventions: On or after 03 July 2007 up to end of 28 November 2013</b>			
<b>Activities unlawfully commenced with in terms of GNR 718 of 03 July 2009 under the National Environmental Management Waste Act, Act 59 of 2008</b>			
GN No. 718 – Category A Activity No(s):	Describe the relevant <u>Category A</u> waste management activity/ies in writing.	Describe the portion of the development as per the project description that relates to the applicable waste activity.	State the date of commencement of each activity
NOT APPLICABLE			
GN No. 718 – Category B Activity No(s):	Describe the relevant <u>Category B</u> waste management activity/ies in writing.	Describe the portion of the development as per the project description that relates to the applicable waste activity.	State the date of commencement of each activity
NOT APPLICABLE			

<b>Waste Management Activity Contraventions: On or after 29 November 2013</b>			
<b>Activities unlawfully commenced with in terms of GNR 921 of 29 November 2013 under the National Environmental Management Waste Act, Act 59 of 2008,</b>			
GN No. 921 - Category A Activity No(s):	Describe the relevant <u>Category A</u> waste management activity/ies in writing.	Describe the portion of the development as per the project description that relates to the applicable waste activity.	State the date of commencement of each activity
NOT APPLICABLE			
GN No. 921 – Category B Activity No(s):	Describe the relevant <u>Category B</u> waste management activity/ies in writing.	Describe the portion of the development as per the project description that relates to the applicable waste activity.	State the date of commencement of each activity
NOT APPLICABLE			

### Please note:

The National Department of Environmental Affairs is the competent authority for activities regarded as hazardous waste. Such activities must be indicated as hazardous waste in the abovementioned lists.

Only those activities listed above shall be considered for authorisation. The onus is on the applicant to ensure that all applicable listed activities are included in the application. If a specific listed activity is not included in an Environmental Authorisation, an application for amendment or a new application for Environmental Authorisation will have to be submitted.

## 1.3 Activities listed similarly in terms of the EIA Regulations

Kindly indicate the listed activities in terms of the EIA Regulations that is listed similar to the unlawfully commenced activities. The descriptions provided below must clearly state why the activity/development is still similarly listed in terms of the EIA Regulations, 2014.

The similarly listed activities in terms of the EIA Regulations promulgated in terms of the NEMA, Act 107 of 1998,		
GN No. R. 327 Activity No(s): <b>(Listing Notice 1 of 2014)</b>	Describe the relevant listed activity(ies) in writing as per GN No. R.327 of 2014 ("NEMA 2014 Basic Assessment listed activity/ies")	Describe the portion of the development as per the project description that relates to the applicable listed activity.
19	The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from- (i) a watercourse	The excavation and construction of culvert bridge over the drainage line resulted in the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres.
GN No. R. 325 Activity No(s): <b>(Listing Notice 2 of 2014)</b>	Describe the relevant listed activity(ies) in writing as per GN No. R.325 of 2014 ("NEMA 2014 Scoping/EIA listed activity/ies")	Describe the portion of the development as per the project description that relates to the applicable listed activity.
NA		
GN No. R. 324 Activity No(s): <b>(Listing Notice 3 of 2014)</b>	Describe the relevant listed activity(ies) in writing as per GN No. R.324 of 2014	Describe the portion of the development as per the project description that relates to the applicable listed activity.
NA		

**Please note: Where approvals for the activity have been obtained in terms of any other legislation (e.g. National Water Act, Act 36 of 1998), certified copies of such approvals must be attached to this form.**

## 2. ACTIVITY DESCRIPTION

(Cross out the appropriate box "☒" and provide a description where required).

Is/are the activity(ies) complete or is/are the activity(ies) still to be completed?	Completed	<del>Incomplete</del>
(a) Is/was the project a new development or an upgrade of an existing development? Also indicate the date (e.g. 2 August 2010) when the activity commenced <u>as well as</u> the original date of commencement if the application is an upgrade.	New	<del>Upgrade</del>
To facilitate the movement of larger vehicles within this servitude, the owners of Portions 1 of Farm Bloubank No. 52 in the Tulbagh Valley upgraded the road crossing over a small unnamed stream on the property in 2017. The crossing was constructed in a tributary of Klein Berg River (G10E quaternary catchment) in the Berg River System. Note- Historically the crossing was an informal gravel stream crossing before the culvert bridge crossing was constructed in June 2017.		

(b) Clearly describe the activity and associated infrastructure commenced with, indicating what has been completed and what still has to be completed.
The informal stream crossing along the road servitude that were upgraded during June 2017 consists of a box culvert and has a surface area of 9.6m <sup>2</sup> .
The following recommendations are provided for the rehabilitation of the site: <ul style="list-style-type: none"> <li>Rubble and debris from construction activities that have been undertaken at the crossing should be removed.</li> <li>The stream banks should be cleared of exotic and in particular invasive alien plants. The invasive alien kikuyu grass in particular should be kept out of the riparian zone as it destabilises the river banks. It should be replaced by indigenous grasses such as kweek (<i>Cynodon dactylon</i>). This should be undertaken during the dry season but following rainfall events when the soil is moist. Weedy shrubs and small invasive alien saplings occurring along the stream banks within the disturbed area at the crossing should be hand pulled. Should this not be possible for some of the large plants, the plants should be sprayed with a foliar herbicide. Regular follow-up uprooting of</li> </ul>

new seedlings or follow-up herbicide spraying of coppicing stumps should be undertaken.

- Immediately following the clearing of exotic and invasive alien plants, the banks should be revegetated with local indigenous riparian vegetation such as wild olive trees (*Olea europaea* subsp. *africana*), Cape willows (*Salix mucronata*), wild almond (*Brabejum stellatifolium*), waterwitsels (*Brachylaena neriifolia*), willow karee (*Searsia augustifolia*), lance-leaved myrtle (*Metrosideros angustifolia*), kruidjie-roer-my-nie (*Melianthus major*), fountain bush (*Cliffortia strobilifera*), water sedge (*Isolepis prolifera*), spiny rush (*Juncus acutus*), cobra lilies (*Chasmanthes aethiopica*), arum lilies and palmiet (*Prionium serratum*).
- Storm water discharge from along the road should not be discharged into the stream at the structures as it is likely to result in erosion at the bridge. The road should be shaped to ensure that the concentration/intensity of runoff along the road is reduced to dissipate the energy and erosion potential of the flow from the road into the stream at the crossing.
- Clean topsoil (not containing invasive alien plant seed or rubble/waste) should be placed over the dumped bricks at the crossing and vegetated to cover the stabilised area adjacent to the crossing. A ground cover such as hottentot-fig (*Carpobrotus edulis*) or indigenous grass such as kweek could be planted in this area.

Below are guidelines for the longer term maintenance and management of the site:

- Ongoing monitoring and management of the disturbed areas within the stream channel and riparian zone should be undertaken to ensure that the area stays clear of eroded areas and invasive alien plant growth.
- The stream channel upstream of the crossing should be kept clear of sediment, cobbles and woody debris that could impede flow through the structure during low and higher flow events.
- The longer term rehabilitation and management of the stream channel at the crossing should be managed by means of the approved Management Maintenance Plan (MMP) for the site. The MMP should include method statements for the removal of sediment and debris upstream of the crossing, revegetation of indigenous plants and control of alien invasive plants as well as erosion control measures should they be required.
- Control of alien invasive plant species should be undertaken with a specific focus on the invasive plants such as *Acacia mearnsii*, *Sesbania punicea* and *Pennisetum clandestinum*. These species are known to do well in riparian and wet habitats. They should be controlled by manual removal or the application of appropriate herbicides. Manual removal should not be carried out by any machinery larger than a chainsaw. For additional information on alien vegetation clearing management visit the Working for Water website (<http://www.dwaf.gov.za/wfw/Control/>)
- Areas of soil that are disturbed by the maintenance activity should be revegetated with appropriate indigenous vegetation such as the species listed in this report. Re-vegetation should take place immediately after construction. As mentioned in the previous mitigation measures, method statements for alien vegetation clearing and revegetation with indigenous plants should be addressed in an MMP for the site.

(c) Please provide details of all components of the activity and attach diagrams (e.g. architectural drawings or perspectives, engineering drawings, process flow charts etc.).

Buildings	YES	NO
Provide brief description:		
NA		
Infrastructure (e.g. roads, power and water supply/ storage)	YES	NO
Provide brief description:		
The road crosses a small stream along its route. The crossing consists of box culverts and the bridge has a surface area of 9.6m <sup>2</sup> .		
Processing activities (e.g. manufacturing, storage, distribution)	YES	NO
Provide brief description:		
NA		
Storage facilities for raw materials and products (e.g. volume and substances to be stored)		
Provide brief description	YES	NO
NA		
Storage and treatment facilities for solid waste and effluent generated by the project	Yes	No
Provide brief description		
NA		

(d) Other activities (e.g. water abstraction activities, crop planting activities)	Yes	No
Provide brief description		
NA		

**3. PHYSICAL SIZE OF THE ACTIVITY**

Indicate the physical spatial size of the activity as well as associated infrastructure (footprints):	9.6	m <sup>2</sup>
Indicate the area that <u>has been</u> transformed / cleared to allow for the activity as well as associated infrastructure	9.6	m <sup>2</sup>
Total area:	9.6	m <sup>2</sup>

**4. SITE ACCESS**

Was there an existing access road?	YES	NO
If NO, what was the distance over which the new access road was built? Please indicate the length and width of the new road.	(Length)	NA m
	(width)	NA m
Describe the type of access road constructed:		
NA		

**Please Note:** Indicate the position of the access road on the site plan (See Section 5 below)

**5. SITE PHOTOGRAPHS**

Colour photographs of the site and its surroundings (taken of the site and from the site), both before (if available) and after the activity commenced, with a description of each photograph, must be attached to this application. The vantage points from which the photographs were taken must be indicated on the site plan, or locality plan as applicable. If available, please also provide past and recent aerial photographs. It should be supplemented with additional photographs of relevant features on the site. Date and source of photographs must be included. Photographs must be attached as an **appendix** to this form.

**Please note:**

**Should the relevant photographs not be included in the application, the application may be deemed insufficient and further information in this regard will be requested.**

Refer to Appendix D for site photographs.

**6. APPLICABLE LEGISLATION, POLICIES AND/OR GUIDELINES**

Please list all legislation, policies and/or guidelines that were or are relevant to this activity.

LEGISLATION	ADMINISTERING AUTHORITY	TYPE Permit/ license/ authorization/comment	DATE (if already obtained):
National Environmental Management Act, 1998 (Act No. 107 of 1998) [NEMA] and relevant regulations	Western Cape Department of Environmental Affairs and Development Planning	S24G Application	In progress
National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) [NEMWA] and relevant regulations	Western Cape Department of Environmental Affairs and Development Planning	N/A	N/A
National Environmental Management: Biodiversity Act 10 of 2004 [NEMBA] and relevant regulations	Western Cape Department of Environmental Affairs and Development Planning	N/A	N/A
National Environmental Management: Air Quality Act, 39 Of 2004 [NEMAQA] and Relevant Regulations	Western Cape Department of Environmental Affairs and Development Planning	N/A	N/A
National Water Act, 1998 (Act No. 36 of 1998) [NWA] and relevant regulations	Department of Water Affairs	Water Use Application	Still to be submitted
Conservation Of Agricultural Resources Act, 43 Of 1983 [CARA]	National Department of Agriculture, forestry and Fisheries Western Cape Department of Agriculture	Weeds and the tolerance thereof	N/A
National Health Act, 61 Of 2003		Littering and a nuisance	N/A



Constitution of the Republic of South Africa, 1996		General application to individual rights of all on and adjacent to the Sites	N/A
Fencing Act, 31 of 1963		The erection and maintenance of fences.	N/A
National Building Regulations and Building Standards Act 103 of 1977 [NBRBSA] and relevant regulations		N/A	N/A
National Heritage Resources Act 25 of 1999 [NHRA]	Heritage Western Cape South African Heritage Resource Agency	N/A	N/A
National Veld and Forest Fire Act 101 of 1998 [NVFFA]		N/A	N/A
Fertilizers, Farm Feeds, Agricultural Remedies And Stock Remedies Act, 36 Of 1947 [FFFARSRA] and Relevant Regulations	National Department of Agriculture, forestry and Fisheries Western Cape Department of Agriculture	N/A	N/A
Environment Conservation Act, 73 Of 1989, Western Cape Noise Control Regulations	Western Cape Department of Environmental Affairs and Development Planning	N/A	N/A
National Forests Act, 84 Of 1998	National Department of Agriculture, forestry and Fisheries Western Cape Department of Agriculture	N/A	N/A
Hazardous Substances Act, 15 Of 1973	Department of Labour	N/A	N/A
National Environmental Management: Protected Areas Act 57 Of 2003		N/A	N/A
Occupational Health And Safety Act 85 Of 1993	Department of Labour	N/A	N/A
Compensation For Occupational Injuries And Diseases Act 130 Of 1993	Department of Labour	N/A	N/A
Basic Conditions Of Employment Act 75 Of 1997	Department of Labour	N/A	N/A
Labour Relations Act 66 Of 1995	Department of Labour	N/A	N/A
Tobacco Products Control Act 83 Of 1993		N/A	N/A

POLICY/ GUIDELINES	ADMINISTERING AUTHORITY
Guideline on Public Participation	Western Cape Department of Environmental Affairs and Development Planning
Guidelines on Alternatives	Western Cape Department of Environmental Affairs and Development Planning
Guideline on Need and desirability	Western Cape Department of Environmental Affairs and Development Planning
Guideline for Environmental Management Plans (EMP's)	Western Cape Department of Environmental Affairs and Development Planning

## 7. APPLICATIONS IN TERMS OF NEMA AND SPECIFIC ENVIRONMENTAL MANAGEMENT ACTS ("SEMAS")

If not specifically applied for in terms of this application, does the development require an application for a waste management license in terms of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008)?	<del>YES</del>	NO
If yes, has an application been submitted to the licensing authority?	<del>YES</del>	NO
Does the proposed project require an application for a water use license in terms of the National Water Act, 1998 (Act No. 36 of 1998)?	YES	<del>NO</del>
If yes, has an application been submitted to the licensing authority?	<del>YES</del>	NO
If no, please provide evidence of existing water use rights (if applicable) with this application form.	-	-
Does the proposed project require an application for an atmospheric emissions license in terms of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004)?	<del>YES</del>	NO
If yes, has an application been submitted to the licensing authority?	<del>YES</del>	NO
Does the proposed project require an application in terms of the National Environmental Management: Integrated Coastal Management Act ("NEM: ICMA")?	<del>YES</del>	NO
If yes, has an application been submitted to the relevant competent authority?	<del>YES</del>	NO
If yes, provide more details of the application submitted/to be submitted in terms of the NEM: ICMA		
NA		

## 8. APPLICATIONS IN TERMS OF OTHER LEGISLATION

Is any permission, licence or other approval required in terms of any other legislation? (Please tick)	YES	<del>NO</del>
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If yes, please complete the table below:

Type of approval required (List the applicable legislation & approval required):	Name of the authority responsible for administering the applicable legislation	Application submitted (Yes / No)	Status of application (e.g. pending/ granted/ refused)
National Water Act section 21 C and I	Department of Water and Sanitation	No	Pending - Water Use Application still to be submitted

## SECTION C: DESCRIPTION OF RECEIVING ENVIRONMENT

### Site/Area Description

For linear activities (pipelines, etc.) as well as activities that cover very large sites, it may be necessary to complete copies of this section for each part of the site that has a significantly different environment. In such cases please complete copies of Section C and indicate the area which is covered by each copy No. on the site plan.

Section C Copy No. (e.g. 1, 2, or 3):

### 1. THE GEOLOGICAL FORMATIONS UNDERLYING THE SITE (Tick the appropriate box)

GRANITE		QUARTZITE	
SHALE	X	DOLOMITE	
SANDSTONE		DOLERITE	
OTHER (specify)	The underlying geology of the area is dominated by phyllite shale, schist and greywacke of the Porterville Formation, Malmesbury Group with a partial covering of talus gravel		

### 2. GRADIENT OF THE SITE



Indicate the general gradient of the site(s) (cross out the appropriate box).

Flat	<del>Flatter than 1:10</del>	<del>1:10 – 1:5</del>	Steeper than 1:5
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### 3. LOCATION IN LANDSCAPE

Indicate the landform(s) that best describes the site (cross out ("X") the appropriate boxes).

Ridgeline	Plateau	Side slope of hill/mountain	Closed valley	Open valley	Plain	Undulating plain/low hills	Dune	Sea-front	Other
If other, please describe									

### 4. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

#### 4.1 GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE (PRE-COMMENCEMENT)

Is the site(s) located on or near any of the following (cross out ("X") the appropriate boxes)?

Shallow water table (less than 1.5m deep)	YES	<del>NO</del>	UNSURE
Seasonally wet soils (often close to water bodies)	YES	<del>NO</del>	UNSURE
Unstable rocky slopes or steep slopes with loose soil	<del>YES</del>	NO	UNSURE
Dispersive soils (soils that dissolve in water)	<del>YES</del>	NO	UNSURE
Soils with high clay content	<del>YES</del>	NO	UNSURE
Any other unstable soil or geological feature	<del>YES</del>	NO	UNSURE
An area sensitive to erosion	<del>YES</del>	NO	UNSURE

#### 4.2 GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE (POST-COMMENCEMENT)

Shallow water table (less than 1.5m deep)	YES	<del>NO</del>	UNSURE
Seasonally wet soils (often close to water bodies)	YES	<del>NO</del>	UNSURE
Unstable rocky slopes or steep slopes with loose soil	<del>YES</del>	NO	UNSURE
Dispersive soils (soils that dissolve in water)	<del>YES</del>	NO	UNSURE
Soils with high clay content	<del>YES</del>	NO	UNSURE
Any other unstable soil or geological feature	<del>YES</del>	NO	UNSURE
An area sensitive to erosion	YES	<del>NO</del>	UNSURE

If any of the answers to the above are "YES" or "unsure", specialist input may be requested by the Department.  
(Information in respect of the above will often be available at the planning sections of local authorities. Where it does not exist, the 1:50 000 scale Regional Geotechnical Maps prepared by Geological Survey may also be used).

### 5. SURFACE WATER

#### 5.1 SURFACE WATER (PRE-COMMENCEMENT)

Indicate the surface water present on and or adjacent to the site and alternative sites (cross out ("X") the appropriate boxes)?

Perennial River	<del>YES</del>	<del>NO</del>	UNSURE
Non-Perennial River	YES	<del>NO</del>	UNSURE
Permanent Wetland	<del>YES</del>	NO	UNSURE
Seasonal Wetland	<del>YES</del>	NO	UNSURE
Artificial Wetland	<del>YES</del>	NO	UNSURE
Estuarine / Lagoonal wetland	<del>YES</del>	NO	UNSURE

## 5.2 SURFACE WATER (POST-COMMENCEMENT)

Indicate the surface water present on and or adjacent to the site and alternative sites (cross out ("X") the appropriate boxes)?

Perennial River	<del>YES</del>	<del>NO</del>	UNSURE
Non-Perennial River	YES	<del>NO</del>	UNSURE
Permanent Wetland	<del>YES</del>	NO	UNSURE
Seasonal Wetland	<del>YES</del>	NO	UNSURE
Artificial Wetland	<del>YES</del>	NO	UNSURE
Estuarine / Lagoonal wetland	<del>YES</del>	NO	UNSURE

## 6. VEGETATION AND/OR GROUNDCOVER

**Please note:** The Department may request specialist input/studies depending on the nature of the biodiversity occurring on the site and potential impact(s) of the activity/ies. To assist with the identification of the biodiversity occurring on site and the ecosystem status consult <http://bgis.sanbi.org.za> or BGIShelp@sanbi.org.za. Information is also available on compact disc ("cd") from the Biodiversity-GIS Unit, Ph (021) 799 8738. This information may be updated from time to time and it is the applicant/ EAP's responsibility to ensure that the latest version is used. A map of the relevant biodiversity information (including an indication of the habitat conditions as per (b) below) and must be provided as an overlay map to the property/site plan as an **appendix** to this form.

### 6.1 VEGETATION AND/OR GROUNDCOVER (PRE-COMMENCEMENT)

Cross out ("X") the block **and** describe (where applicable) the vegetation types / groundcover present on the site before commencement of the activity.

<del>Indigenous Vegetation – good condition</del>	<del>Indigenous Vegetation with scattered aliens</del>	Indigenous Vegetation with heavy alien infestation	x
<del>Describe the vegetation type above:</del>	<del>Describe the vegetation type above:</del>	Describe the vegetation type above: Breede Shale Fynbos	
<del>Provide ecosystem status for above:</del>	<del>Provide ecosystem status for above:</del>	<p>Provide Ecosystem status for above:</p> <p>The naturally occurring vegetation type at the site is mapped as Breede Shale Fynbos. The vegetation is typically moderately tall and dense shrubland. It occurs on the upper slopes down to the valley plains. Approximately 30% of its original extent has been transformed, mostly by agricultural development. It is considered to be a vulnerable vegetation type.</p> <p>The natural vegetation adjacent to and within the stream has largely been removed with open areas and exotic grasses occurring within the area currently. Within the stream channel upstream of the road crossing alien nasturtiums (<i>Tropaeolum majus</i>) occur together with weedy shrubs and exotic grasses and some arum lilies (<i>Zantedeschia aethiopica</i>). Downstream of the crossing, a mix of indigenous and exotic vegetation occurs. Indigenous vegetation consists of wild olive trees (<i>Olea europaea</i> subsp <i>africana</i>), arum lilies, kruidjie-roer-my-nie (<i>Melanthus major</i>), fountain bush (<i>Cliffortia strobilifera</i>), water sedge (<i>Isolepis prolifera</i>), cut grass (<i>Bolboschoenus glaucus</i>), spiny rush (<i>Juncus acutus</i>), cobra lilies (<i>Chasmanthes aethiopica</i>) and bulrushes (<i>Typha capensis</i>). Exotic plants include English oak trees (<i>Quercus robur</i>), black wattle (<i>Acacia mearnsii</i>), red sesbania (<i>Sesbania punicea</i>), weeping willows (<i>Salix babylonica</i>), swamp cypress (<i>Taxodium distichum</i>), cocklebur (<i>Xanthium strumarium</i>), Zimbabwe creeper (<i>Podranea brycei</i>) and dock (<i>Rumex crispus</i>).</p>	

Indigenous Vegetation in an ecological corridor or along a soil boundary/ interface	Veld dominated by alien species	Distinctive soil conditions (e.g. Sand over shale, quartz patches, limestone, alluvial deposits, termitaria etc.) — describe
Bare soil	Building or other structure	Sport field
Other (describe below)	Cultivated land	Paved surface

- (a) Highlight the applicable pre-commencement biodiversity planning categories of all areas on site and indicate the reason(s) provided in the biodiversity plan for the selection of the specific area as part of the specific category.

Systematic Biodiversity Planning Category				If CBA or ESA, indicate the reason(s) for its selection in biodiversity plan
<del>Critical Biodiversity Area (CBA)</del>	Ecological Support Area (ESA)	<del>Other Natural Area (ONA)</del>	<del>No Natural Area Remaining (NNR)</del>	The site is classified as an ESA (RESTORE) due to the presence of the watercourse.

- (b) Highlight and describe the habitat condition on site.

Habitat Condition	Percentage of habitat condition class (adding up to 100%)	Description and additional Comments and Observations (including additional insight into condition, e.g. poor land management practises, presence of quarries, grazing/harvesting regimes etc).
Natural	0%	
Near Natural (includes areas with low to moderate level of alien invasive plants)	%	
Degraded (includes areas heavily invaded by alien plants)	100%	The naturally occurring vegetation type at the site is mapped as Breede Shale Fynbos. The vegetation is typically moderately tall and dense shrubland. It occurs on the upper slopes down to the valley plains. Approximately 30% of its original extent has been transformed, mostly by agricultural development. It is considered to be a vulnerable vegetation type. The natural vegetation adjacent to and within the stream has largely been removed with open areas and exotic grasses occurring within the area currently. Within the stream channel upstream of the road crossing alien nasturtiums ( <i>Tropaeolum majus</i> ) occur together with weedy shrubs and exotic grasses and some arum lilies ( <i>Zantedeschia aethiopica</i> ). Downstream of the crossing, a mix of indigenous and exotic vegetation occurs. Indigenous vegetation consists of wild olive trees ( <i>Olea europaea</i> subsp <i>africana</i> ), arum lilies, kruidjie-roer-my-nie ( <i>Melanthus major</i> ), fountain bush ( <i>Cliffortia strobilifera</i> ), water sedge ( <i>Isolepis prolifera</i> ), cut grass ( <i>Bolboschoenus glaucus</i> ), spiny rush ( <i>Juncus acutus</i> ), cobra lilies ( <i>Chasmanthes aethiopica</i> ) and bulrushes ( <i>Typha capensis</i> ). Exotic plants include English oak trees ( <i>Quercus robur</i> ), black wattle ( <i>Acacia mearnsii</i> ), red sesbania ( <i>Sesbania punicea</i> ), weeping willows ( <i>Salix babylonica</i> ), swamp cypress ( <i>Taxodium distichum</i> ), cocklebur ( <i>Xanthium strumarium</i> ), Zimbabwe creeper ( <i>Podranea brycei</i> ) and dock ( <i>Rumex crispus</i> ).
Transformed (includes cultivation, dams, urban, plantation, roads, etc)	0%	

- (c) Complete the table to indicate:

- (i) the type of vegetation, including its ecosystem status, that was previously present on the site; and  
(ii) whether an aquatic ecosystem was previously present on site.

Terrestrial Ecosystems	Aquatic Ecosystems
------------------------	--------------------

Ecosystem threat status as per the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)	Critical	Wetland (including rivers, depressions, channelled and un-channelled wetlands, flats, seeps pans, and artificial wetlands)			Estuary		Coastline	
	Endangered							
	Vulnerable							
	Least Threatened							
		YES	NO	UNSURE	YES	NO	YES	NO

- (d) Please provide a description of the vegetation type and/or aquatic ecosystem present on site, including any important biodiversity features/information identified on site (e.g. threatened species and special habitats)

### Vegetation

The naturally occurring vegetation type at the site is mapped as Breede Shale Fynbos. The vegetation is typically moderately tall and dense shrubland. It occurs on the upper slopes down to the valley plains. Approximately 30% of its original extent has been transformed, mostly by agricultural development. It is considered to be a vulnerable vegetation type.

The natural vegetation adjacent to and within the stream has largely been removed with open areas and exotic grasses occurring within the area currently. Within the stream channel upstream of the road crossing alien nasturtiums (*Tropaeolum majus*) occur together with weedy shrubs and exotic grasses and some arum lilies (*Zantedeschia aethiopica*). Downstream of the crossing, a mix of indigenous and exotic vegetation occurs. Indigenous vegetation consists of wild olive trees (*Olea europaea* subsp. *africana*), arum lilies, kruidjie-roer-my-nie (*Melanthus major*), fountain bush (*Cliffortia strobilifera*), water sedge (*Isolepis prolifera*), cut grass (*Bolboschoenus glaucus*), spiny rush (*Juncus acutus*), cobra lilies (*Chasmanthes aethiopica*) and bulrushes (*Typha capensis*). Exotic plants include English oak trees (*Quercus robur*), black wattle (*Acacia mearnsii*), red sesbania (*Sesbania punicea*), weeping willows (*Salix babylonica*), swamp cypress (*Taxodium distichum*), cocklebur (*Xanthium strumarium*), Zimbabwe creeper (*Podranea brycei*) and dock (*Rumex crispus*).

### River

The new road has been constructed in G10E quaternary catchment, which is drained by the Klein Berg River, a tributary of the Berg River. The road crosses a small stream which is an unnamed tributary of the Klein Berg River. The tributary has been mapped as a South West Shale Fynbos Channelled Valley Bottom wetland in the Freshwater Ecosystem Priority Areas wetland mapping. The wetland area mapped occurs upstream of the site and incorporates the farm dam on the northern bank of the stream. No wetland area was evident within the immediate area of the stream crossing. The area mapped as valley bottom wetland area comprises largely of a relatively steep stream bank. The stream is in a highly modified condition as a result of the surrounding agricultural activities.

Refer to Appendix H: Specialist Reports - Blue Science FRESHWATER OPINION REPORT FOR THE CONSTRUCTION OF A ROAD AND ASSOCIATED INFRASTRUCTURE ON PORTION 1 OF FARM BLOUBANK NO. 52, TULBAGH, MARCH 2017 attached as specialist study for more detail.

## **6.2 VEGETATION AND/OR GROUND COVER (POST-COMMENCEMENT)**

Cross out ("X") the block **and** describe (where required) the vegetation types / groundcover present on the site after commencement of the activity.

Indigenous Vegetation – good condition	Indigenous Vegetation with scattered aliens	Indigenous Vegetation with heavy alien infestation	x
Describe the vegetation type above:	Describe the vegetation type above:	Describe the vegetation type above: Breede Shale Fynbos	
Provide ecosystem status for above:	Provide ecosystem status for above:	Provide Ecosystem status for above: The naturally occurring vegetation type at the site is mapped as Breede Shale Fynbos. The vegetation is typically moderately tall and dense shrubland. It occurs on the upper slopes down to the valley plains. Approximately 30% of its original extent has been	

		transformed, mostly by agricultural development. It is considered to be a vulnerable vegetation type. The natural vegetation adjacent to and within the stream has largely been removed with open areas and exotic grasses occurring within the area currently. Within the stream channel upstream of the road crossing alien nasturtiums ( <i>Tropaeolum majus</i> ) occur together with weedy shrubs and exotic grasses and some arum lilies ( <i>Zantedeschia aethiopica</i> ). Downstream of the crossing, a mix of indigenous and exotic vegetation occurs. Indigenous vegetation consists of wild olive trees ( <i>Olea europaea</i> subsp <i>africana</i> ), arum lilies, kruidjie-roer-my-nie ( <i>Melianthus major</i> ), fountain bush ( <i>Cliffortia strobilifera</i> ), water sedge ( <i>Isolepis prolifera</i> ), cut grass ( <i>Bolboschoenus glaucus</i> ), spiny rush ( <i>Juncus acutus</i> ), cobra lilies ( <i>Chasmanthes aethiopica</i> ) and bulrushes ( <i>Typha capensis</i> ). Exotic plants include English oak trees ( <i>Quercus robur</i> ), black wattle ( <i>Acacia mearnsii</i> ), red sesbania ( <i>Sesbania punicea</i> ), weeping willows ( <i>Salix babylonica</i> ), swamp cypress ( <i>Taxodium distichum</i> ), cocklebur ( <i>Xanthium strumarium</i> ), Zimbabwe creeper ( <i>Podranea brycei</i> ) and dock ( <i>Rumex crispus</i> ).
Indigenous Vegetation in an ecological corridor or along a soil boundary / interface	Veld dominated by alien species	Distinctive soil conditions (e.g. Sand over shale, quartz patches, limestone, alluvial deposits, termitaria etc.)—describe
Bare soil	Building or other structure	Sport field
Other (describe below)	Cultivated land	Paved surface

- (b) Highlight the applicable pre-commencement biodiversity planning categories of all areas on site and indicate the reason(s) provided in the biodiversity plan for the selection of the specific area as part of the specific category.

Systematic Biodiversity Planning Category				If CBA or ESA, indicate the reason(s) for its selection in biodiversity plan
Critical Biodiversity Area (CBA)	Ecological Support Area (ESA)	Other Natural Area (ONA)	No Natural Area Remaining (NNR)	The site is classified as an ESA (RESTORE) due to the presence of the watercourse and wetland.

- (c) Highlight and describe the habitat condition on site.

Habitat Condition	Percentage of habitat condition class (adding up to 100%)	Description and additional Comments and Observations (including additional insight into condition, e.g. poor land management practises, presence of quarries, grazing/harvesting regimes etc).
Natural	0%	
Near Natural (includes areas with low to moderate level of alien invasive plants)	%	
Degraded (includes areas heavily invaded by alien plants)	100%	The naturally occurring vegetation type at the site is mapped as Breede Shale Fynbos. The vegetation is typically moderately tall and dense shrubland. It occurs on the upper slopes down to the valley plains. Approximately 30% of its original extent has been transformed, mostly by agricultural development. It is considered to be a vulnerable vegetation type. The natural vegetation adjacent to and within the stream has largely been removed with open areas and exotic grasses occurring within the area currently. Within the stream channel

		upstream of the road crossing alien nasturtiums ( <i>Tropaeolum majus</i> ) occur together with weedy shrubs and exotic grasses and some arum lilies ( <i>Zantedeschia aethiopica</i> ). Downstream of the crossing, a mix of indigenous and exotic vegetation occurs. Indigenous vegetation consists of wild olive trees ( <i>Olea europaea</i> subsp <i>africana</i> ), arum lilies, kruidjie-roer-my-nie ( <i>Melianthus major</i> ), fountain bush ( <i>Cliffortia strobilifera</i> ), water sedge ( <i>Isolepis prolifera</i> ), cut grass ( <i>Bolboschoenus glaucus</i> ), spiny rush ( <i>Juncus acutus</i> ), cobra lilies ( <i>Chasmanthes aethiopica</i> ) and bulrushes ( <i>Typha capensis</i> ). Exotic plants include English oak trees ( <i>Quercus robur</i> ), black wattle ( <i>Acacia mearnsii</i> ), red sesbania ( <i>Sesbania punicea</i> ), weeping willows ( <i>Salix babylonica</i> ), swamp cypress ( <i>Taxodium distichum</i> ), cocklebur ( <i>Xanthium strumarium</i> ), Zimbabwe creeper ( <i>Podranea brycei</i> ) and dock ( <i>Rumex crispus</i> ).
Transformed (includes cultivation, dams, urban, plantation, roads, etc)	0%	

(c) Complete the table to indicate:

- (i) the type of vegetation, including its ecosystem status, that was previously present on the site; and  
(ii) whether an aquatic ecosystem was previously present on site.

Terrestrial Ecosystems		Aquatic Ecosystems						
Ecosystem threat status as per the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)	Critical	Wetland (including rivers, depressions, channelled and un-channelled wetlands, flats, seeps pans, and artificial wetlands)			Estuary		Coastline	
	Endangered							
	Vulnerable							
	Least Threatened							
		YES	NO	UNSURE	YES	NO	YES	NO

(e) Please provide a description of the vegetation type and/or aquatic ecosystem present on site, including any important biodiversity features/information identified on site (e.g. threatened species and special habitats)

### Vegetation

The naturally occurring vegetation type at the site is mapped as Breede Shale Fynbos. The vegetation is typically moderately tall and dense shrubland. It occurs on the upper slopes down to the valley plains. Approximately 30% of its original extent has been transformed, mostly by agricultural development. It is considered to be a vulnerable vegetation type.

The natural vegetation adjacent to and within the stream has largely been removed with open areas and exotic grasses occurring within the area currently. Within the stream channel upstream of the road crossing alien nasturtiums (*Tropaeolum majus*) occur together with weedy shrubs and exotic grasses and some arum lilies (*Zantedeschia aethiopica*). Downstream of the crossing, a mix of indigenous and exotic vegetation occurs. Indigenous vegetation consists of wild olive trees (*Olea europaea* subsp *africana*), arum lilies, kruidjie-roer-my-nie (*Melianthus major*), fountain bush (*Cliffortia strobilifera*), water sedge (*Isolepis prolifera*), cut grass (*Bolboschoenus glaucus*), spiny rush (*Juncus acutus*), cobra lilies (*Chasmanthes aethiopica*) and bulrushes (*Typha capensis*). Exotic plants include English oak trees (*Quercus robur*), black wattle (*Acacia mearnsii*), red sesbania (*Sesbania punicea*), weeping willows (*Salix babylonica*), swamp cypress (*Taxodium distichum*), cocklebur (*Xanthium strumarium*), Zimbabwe creeper (*Podranea brycei*) and dock (*Rumex crispus*).

### River

The crossing was constructed in a tributary of Klein Berg River (G10E quaternary catchment) in the Berg River System. The tributary has been mapped as a South West Shale Fynbos Channelled Valley Bottom wetland in the Freshwater Ecosystem Priority Areas wetland mapping. The wetland area mapped occurs upstream of the site and incorporates the farm dam on the northern bank of the stream. No wetland area was evident within the immediate area of the stream crossing. The area mapped as valley bottom wetland area comprises largely of a relatively steep stream bank. The small wider stream corridor upstream of the site is also mapped as an aquatic Critical Biodiversity Area buffer due to the largely natural vegetation that still occurs along the steep river bank a short distance upstream of the site.



The ecological condition of the stream at the site is considered to be in a moderately modified within the channel and seriously modified along the riparian areas due largely to the surrounding agricultural activities. The ecological importance and sensitivity of the stream is moderate. Aerial images taken within the past 50 years show that there has been very little alteration to the channel course or the surrounding land cover for this period. The small farm dam on the northern bank of the stream was constructed after 1966 but before 1980. An informal crossing has been used from time to time through the stream at the site.

The works associated with the culvert structure that has been constructed at the road crossing has largely only resulted in limited change to the bed and banks of the unnamed stream at the site. Considering the history of modification of the river channel as a result of the surrounding agricultural activities and the existing ecological state of the stream, this impact is of a low significance. The structure has sufficient capacity that it is unlikely that it will result in any impedance or diversion of flow in the stream.

The main impacts of the works undertaken are thus a modification/loss of aquatic habitat. With some rehabilitation of the site, this impact could be reduced to being of a very low significance with the potential for a positive impact on the existing ecological condition of the watercourse at the site. Recommendations are provided in the report for the rehabilitation as well as the longer term maintenance and management measures for the site.

The Department of Water and Sanitation risk rating was also determined to be low. It is thus recommended that, if DWS requires that the activity be authorised as a water use, it be authorised under the General Authorisations for Section 21 (c) and (i) of the National Water Act.

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### 6.3 VEGETATION / GROUNDCOVER MANAGEMENT

(a) Describe any mitigation/management measures that were adopted and the adequacy of these:

No mitigation or management measures were adopted during the construction of the bridge culvert that the EAP is aware of, however the following rehabilitation and maintenance measures are proposed to improve the state of the current watercourse crossing area and a 300m section along the affected watercourse.

The following recommendations are provided for the rehabilitation of the site:

- Rubble and debris from construction activities that have been undertaken at the crossing should be removed.
- The stream banks should be cleared of exotic and in particular invasive alien plants. The invasive alien kikuyu grass in particular should be kept out of the riparian zone as it destabilises the river banks. It should be replaced by indigenous grasses such as kweek (*Cynodon dactylon*). This should be undertaken during the dry season but following rainfall events when the soil is moist. Weedy shrubs and small invasive alien saplings occurring along the stream banks within the disturbed area at the crossing should be hand pulled. Should this not be possible for some of the large plants, the plants should be sprayed with a foliar herbicide. Regular follow-up uprooting of new seedlings or follow-up herbicide spraying of coppicing stumps should be undertaken.
- Immediately following the clearing of exotic and invasive alien plants, the banks should be revegetated with local indigenous riparian vegetation such as wild olive trees (*Olea europaea* subsp *africana*), Cape willows (*Salix mucronata*), wild almond (*Brabejum stellatifolium*), waterwitsels (*Brachylaena neriifolia*), willow karee (*Searsia augustifolia*), lance-leaved myrtle (*Metrosideros angustifolia*), kruidjie-roer-my-nie (*Melianthus major*), fountain bush (*Cliffortia strobilifera*), water sedge (*Isolepis prolifera*), spiny rush (*Juncus acutus*), cobra lilies (*Chasmanthes aethiopica*), arum lilies and palmiet (*Prionium serratum*).
- Storm water discharge from along the road should not be discharged into the stream at the structures as it is likely to result in erosion at the bridge. The road should shaped ensure that the concentration/intensity of runoff along the road is reduced to dissipate the energy and erosion potential of the flow from the road into the stream at the crossing.
- Clean topsoil (not containing invasive alien plant seed or rubble/waste) should be placed over the dumped bricks at the crossing and vegetated to cover the stabilised area adjacent to the

crossing. A ground cover such as hottentot-fig (*Carpobrotus edulis*) or indigenous grass such as kweek could be planted in this area.

Below are guidelines for the longer term maintenance and management of the site:

- Ongoing monitoring and management of the disturbed areas within the stream channel and riparian zone should be undertaken to ensure that the area stays clear of eroded areas and invasive alien plant growth.
- The stream channel upstream of the crossing should be kept clear of sediment, cobbles and woody debris that could impede flow through the structure during low and higher flow events.
- The longer term rehabilitation and management of the stream channel at the crossing should be managed by means of the approved Management Maintenance Plan (MMP) for the site. The MMP should include method statements for the removal of sediment and debris upstream of the crossing, revegetation of indigenous plants and control of alien invasive plants as well as erosion control measures should they be required.
- Control of alien invasive plant species should be undertaken with a specific focus on the invasive plants such *Acacia mearnsii*, *Sesbania punicea* and *Pennisetum clandestinum*. These species are known to do well in riparian and wet habitats. They should be controlled by manual removal or the application of appropriate herbicides. Manual removal should not be carried out by any machinery larger than a chainsaw. For additional information on alien vegetation clearing management visit the Working for Water website (<http://www.dwaf.gov.za/wfw/Control/>)
- Areas of soil that are disturbed by the maintenance activity should be revegetated with appropriate indigenous vegetation such as the species listed in this report. Re-vegetation should take place immediately after construction. As mentioned in the previous mitigation measures, method statements for alien vegetation clearing and revegetation with indigenous plants should be addressed in an MMP for the site.

## 7. LAND USE OF THE SITE (PRE-COMMENCEMENT)

**Please note:** The Department may request specialist input/studies depending on the nature of the land use character of the area and potential impact(s) of the activity/ies.

Untransformed area	Low density residential	Medium density residential	High density residential	Informal residential
Retail	Commercial & warehousing	Light industrial	Medium industrial	Heavy industrial
Power station	Office/consulting room	Military or police base/station/compound	Casino/entertainment complex	Tourism & Hospitality facility
Open cast mine	Underground mine	Spoil heap or slimes dam	Quarry, sand or borrow pit	Dam or reservoir
Hospital/medical centre	School	Tertiary education facility	Church	Old age home
Sewage treatment plant	Train station or shunting yard	Railway line	Major road (4 lanes or more)	Airport
Harbour	Sport facilities	Golf course	Pole fields	Filling station
Landfill or waste treatment site	Plantation	Agriculture	River, stream or wetland	Nature conservation area
Mountain, koppie or ridge	Museum	Historical building	Graveyard	Archaeological site
Other land uses (describe):	Informal gravel road crossing through the stream			

(a) Please provide a description.



The natural vegetation adjacent to and within the stream has largely been removed due to previous and ongoing agricultural activities with open areas and exotic grasses occurring within the area currently. Within the stream channel upstream of the road crossing alien nasturtiums (*Tropaeolum majus*) occur together with weedy shrubs and exotic grasses and some arum lilies (*Zantedeschia aethiopica*). Downstream of the crossing, a mix of indigenous and exotic vegetation occurs. Indigenous vegetation consists of wild olive trees (*Olea europaea* subsp *africana*), arum lilies, kruidjie-roer-my-nie (*Melanthus major*), fountain bush (*Cliffortia strobilifera*), water sedge (*Isolepis prolifera*), cut grass (*Bolboschoenus glaucus*), spiny rush (*Juncus acutus*), cobra lilies (*Chasmanthes aethiopica*) and bulrushes (*Typha capensis*). Exotic plants include English oak trees (*Quercus robur*), black wattle (*Acacia mearnsii*), red sesbania (*Sesbania punicea*), weeping willows (*Salix babylonica*), swamp cypress (*Taxodium distichum*), cocklebur (*Xanthium strumarium*), Zimbabwe creeper (*Podranea brycei*) and dock (*Rumex crispus*).

Historal aerial photographs also shows that this area was previously used as an informal gravel stream crossing.

## 8. LAND USE CHARACTER OF SURROUNDING AREA (PRE-COMMENCEMENT)

Cross out ("X") the block that reflects the past land uses and/or prominent features that occur/red within +/- 500m radius of the site and neighbouring properties if these are located beyond 500m of the site. **Please note:** The Department may request specialist input/studies depending on the nature of the land use character of the area and impact(s) of the activity/ies.

Untransformed area	Low-density residential	Medium-density residential	High-density residential	Informal residential
Retail	Commercial & warehousing	Light industrial	Medium industrial	Heavy industrial
Power station	Office/consulting room	Military or police base/station/compound	Casino/entertainment complex	Tourism & Hospitality facility
Open-cast mine	Underground mine	Spoil heap or slimes dam	Quarry, sand or borrow pit	Dam or reservoir
Hospital/medical centre	School	Tertiary education facility	Church	Old age home
Sewage treatment plant	Train station or shunting yard	Railway line	Major road (4 lanes or more)	Airport
Harbour	Sport facilities	Golf course	Pole fields	Filling station
Landfill or waste treatment site	Plantation	Agriculture	River, stream or wetland	Nature conservation area
Mountain, koppie or ridge	Museum	Historical building	Graveyard	Archaeological site
Other land uses (describe):				

## 9. LAND USE CHARACTER OF SURROUNDING AREA (POST-COMMENCEMENT)

Cross out ("X") the block that reflects the current land uses and/or prominent features that occur(s) within +/- 500m radius of the site and neighbouring properties if these are located beyond 500m of the site. **Please note:** The Department may request specialist input/studies depending on the nature of the land use character of the area and impact(s) of the activity/ies.

Untransformed area	Low-density residential	Medium-density residential	High-density residential	Informal residential
Retail	Commercial & warehousing	Light industrial	Medium industrial	Heavy industrial
Power station	Office/consulting room	Military or police base/station/compound	Casino/entertainment complex	Tourism & Hospitality facility
Open-cast mine	Underground mine	Spoil heap or slimes dam	Quarry, sand or borrow pit	Dam or reservoir
Hospital/medical centre	School	Tertiary education facility	Church	Old age home
Sewage treatment plant	Train station or shunting yard	Railway line	Major road (4 lanes or more)	Airport
Harbour	Sport facilities	Golf course	Pole fields	Filling station
Landfill or waste treatment site	Plantation	Agriculture	River, stream or wetland	Nature conservation area
Mountain, koppie or ridge	Museum	Historical building	Graveyard	Archaeological site

Other land uses (describe):

Formal stream crossing

## 10. SOCIO-ECONOMIC CONTEXT

### 10.1 SOCIO-ECONOMIC CONTEXT (PRE-COMMENCEMENT)

Describe the pre-commencement social and economic characteristics of the community in order to provide baseline information.

Witzenberg Municipality (WC022) is a Category B (Local) Municipality. It borders on the Northern Cape Province to the north and north-east, while the Laingsburg Municipality forms the eastern boundary. To the west it is bounded by the West Coast District Municipality and to the south-east by the Drakenstein Municipality and Breede Valley Municipality, respectively. The Municipality was established in terms of Provincial Notice 487 of the Provincial Gazette 5590 dated 22 September 2000 and originally consisted of the disestablished municipality of Ceres, Matroosberg Transitional Representative Council, Municipality of Prince Alfred's Hamlet, Tulbagh Municipality, Witzenberg Transitional Representative Council and the Municipality for the area of Wolseley. In 2011, the Witzenberg Municipality was extensively enlarged by incorporating most of the previous District Management Area (DMA) of the Cape Winelands District Municipality into its jurisdiction. The Witzenberg Municipality includes the following main settlements:

- a) Bella Vista (next to Ceres).
- b) Ceres.
- c) Nduli (near to Ceres).
- d) Op-die-Berg.
- e) Prince Alfred Hamlet.
- f) Steinthal (close to Tulbagh).
- g) Tulbagh.
- h) Wolseley

The Witzenberg Municipality covers 50% of the Cape Winelands District Municipality and is by far the largest local municipality. The largest contributors to the Municipality's economy are agriculture and manufacturing followed by the wholesale, retail trade, catering and accommodation sector. Although Witzenberg's economy is the smallest in the district, the importance of the agriculture sector's contribution to the Western Cape's economy is reflected by the fact that over 6% of all agricultural production occurs in this area (Witzenberg IDP, 2007-2011).

Witzenberg is characterised by a unique diversity of landscapes and areas that have historically been identified (intuitively, in terms of bioregional principles) such as the Warm Bokkeveld, Koue Bokkeveld, Tankwa and Ceres Karoo and the Land of Waveren.

Ceres (after the mythical Goddess of Agriculture and Fertility) is the main town of the Witzenberg Municipality and is the hub of administrative activities in the region.

#### Population

The 2001 Census data puts the population of the Witzenberg Municipality at approximately 83 568 people, with a fairly even distribution according to age and gender. The average density ratio is 31.98 persons per square kilometre with 7.67 black people per km<sup>2</sup>, 2.91 white people per km<sup>2</sup>, 21.35 coloured people per km<sup>2</sup>, and 0.05 Asians per km<sup>2</sup>.

The population of the amended Witzenberg Municipality is estimated to be 90 066 people with the major ethnic group being the Coloured population, representing approximately 70% of the entire population (refer to Table B13). The sex structure is almost equal with 50.1% (45 114) of the total population being female. The male population constitutes the remaining 49.9% (44 952).

ETHNIC GROUP									
BLACK		COLOURED		WHITE		INDIAN/ASIAN		TOTAL POPULATION	
Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
9 869	8 076	30 999	32 904	4 013	4 173	71	52	44 952	45 114
17 945		63 812		8 186		123		90 066	

(Adapted 2001 Census, as amended in 2005).

The compound population growth rate between 1996 and 2008 was 1.7%, characterised by the

following breakdown per racial group (Global Insight in Witzenberg IDP 2007-2011):

- Blacks at 6.2%
- Coloureds at 0.9%
- Asians at 5.3%
- Whites at -0.7%

In stark contrast to the above, the 2012-2017 Witzenberg IDP estimated the population of the Municipality to be 75 152 people in 2007 with a negative growth rate of 1.8% between 2001 and 2007. According to the IDP, the Coloured population group represented 68.5% of the population in 2007, followed by Africans at 18.9%, Whites at 12.7% and Asians at 0.02%. Discrepancies such as these present a major challenge to ensure proper forward planning for any municipality.

As mentioned in the note above, for the purpose of strategic planning, the adapted data from the 2001 Census, as amended in 2005, therefore remains the baseline data for the purpose of the SDF.

### **Education**

Education is a strong lever for change and normally has a direct bearing on better prospects of employment as it increases chances of securing employment in the presence of job-creating economic growth.

A good education also escalates the likelihood of better health prospects and is a key influence on those with a higher socio-economic standing (Witzenberg IDP 2007-2011). Only 7% of the population of Witzenberg is illiterate and approximately 24% is functional illiterate. The high rate of literacy contributes to the Municipality's above national average HDI, which is indicative of relatively highly developed society.

	LITERACY LEVELS	
	TOTAL	%
% Totally Illiterate	6 615	7.34%
% Functional Illiterate	21 190	23.52%
Some secondary	17 006	18.88%
Complete Grade 12	6 934	7.69%
Higher Education	3 211	3.56%

(Adapted 2001 Census, as amended in 2005).

More recent data from Global Insight Southern Africa (2008) pertaining to the level of education in the Witzenberg Municipality is summarised in the table below.

	No schooling	Grade 0 - 6	Grade 7-11	Grade 12	Grade 12 & Certificate/Degree
Black	1697	3856	9132	1718	269
White	44	86	1619	2512	2426
Coloured	2373	8473	23184	6279	1506
Asian	5	34	34	36	-
<b>TOTAL</b>	<b>4 119</b>	<b>12 449</b>	<b>33 969</b>	<b>10 545</b>	<b>4 201</b>

(Source: Global Insight Southern Africa, 2008 in Witzenberg IDP 2007-2011).

### **Health**

Effective health systems and primary health care services are vital for the sustainability and overall quality of life of communities. A strong health care system not only promotes the population's longevity, but can also contribute towards the region's economic development. The population relies on government to administer and deliver affordable and quality health care services that encompass critical health care treatment, diagnosis, rehabilitation and disease prevention.

In the prevalence of a weak social fiber—and consequently, low human and social capital—the healthcare sector bears the brunt of negative consequences arising from risky behaviour, skew distribution of resources, and social and economic exclusion.

Settlement patterns (influenced by inner city gentrification, destitution, informal settlements, etc.), high levels of substance abuse and high tuberculosis (TB) prevalence are a few examples which demonstrate the extent that societal values have been eroded.

The Witzenberg IDP (2007-2011) identified tuberculosis and HIV/AIDS as the leading causes of premature death at 16,3%, and 15,4% respectively. It is suggested that the high TB death rate can be contributed to a low cure rate. The increase in HIV infections is very disconcerting. Recent figures of the Witzenberg Department of Socio-Economic Development indicates an alarming increase in the HIV/AIDS figures of more than 13 times year on year from 1996 to 2010. The municipality has 1 anti-retroviral treatment (ART) service sites and 15 TB clinics (Witzenberg IDP, 2012-2017).

The Infant Mortality Rate (IMR) is an important measure of the well-being of infants, children and pregnant women and is indicative of a number of factors such as maternal health, quality and access to medical care, socio-economic conditions, and public health practices.

The Witzenberg Municipality IMR of 42 per 1000 live births, with an under-five mortality rate of 51 per 1000 live births was the highest in the Boland/Overberg region when measured in 2005.

It has been suggested that the leading causes of infant and child deaths were pre-maturity, congenital abnormalities, HIV, diarrhoea, protein energy malnutrition, and ill-defined natural causes (Witzenberg IDP 2007-2011).

Clearly the provision of primary health care and access thereto could be improved in the Municipality. The current circumstances warrant a paradigm shift in the approach to population health and resource allocation. The facts stated above should form the basis of the parameters for health investment decisions. Investments should be directed to those areas that have the greatest potential to positively influence health.

#### **Employment Income Status**

It is recognized that poverty remains the core obstacle to a stable and prosperous future in South Africa. Despite commendable efforts of government and state-supported efforts, poverty continues to be chronic problem for much of South Africa's population, including Witzenberg Municipality.

The Poverty Index indicates that unemployment and the poverty levels of the Cape Winelands District have gradually increased over the past few years. The Witzenberg Municipality, at 21.42 points on the index, ranks as the highest in the district. Comparative figures show a disconcerting trend in Witzenberg, e.g. the 1996 Census showed a figure of 18.2, climbing marginally to 18.6 in 2001, and the most recent available estimate according to Stats SA's Community Survey 2007 shows that the poverty index for Witzenberg increased to 21.42.

Global Insight's published figures indicate that 30.1% of the Witzenberg residents live in poverty while the number of people accessing social grants are estimated at 10 173 (Witzenberg IDP 2012-2017).

## **10.2 SOCIO-ECONOMIC CONTEXT (POST-COMMENCEMENT)**

Describe the post commencement social and economic characteristics of the community in order to determine any change. Where differences between pre- and post-commencement exist, state which are as a result of the activity(ies) for which rectification is being applied for.

Witzenberg Municipality (WC022) is a Category B (Local) Municipality. It borders on the Northern Cape Province to the north and north-east, while the Laingsburg Municipality forms the eastern boundary. To the west it is bounded by the West Coast District Municipality and to the south-east by the Drakenstein Municipality and Breede Valley Municipality, respectively. The Municipality was established in terms of Provincial Notice 487 of the Provincial Gazette 5590 dated 22 September 2000 and originally consisted of the disestablished municipality of Ceres, Matroosberg Transitional Representative Council, Municipality of Prince Alfred's Hamlet, Tulbagh Municipality, Witzenberg Transitional Representative Council and the Municipality for the area of Wolseley. In 2011, the Witzenberg Municipality was extensively enlarged by incorporating most of the previous District Management Area (DMA) of the Cape Winelands District Municipality into its jurisdiction. The Witzenberg Municipality includes the following main settlements:

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- b) Ceres.
- c) Nduli (near to Ceres).
- d) Op-die-Berg.

- e) Prince Alfred Hamlet.
- f) Steinthal (close to Tulbagh).
- g) Tulbagh.
- h) Wolseley

The Witzenberg Municipality covers 50% of the Cape Winelands District Municipality and is by far the largest local municipality. The largest contributors to the Municipality's economy are agriculture and manufacturing followed by the wholesale, retail trade, catering and accommodation sector. Although Witzenberg's economy is the smallest in the district, the importance of the agriculture sector's contribution to the Western Cape's economy is reflected by the fact that over 6% of all agricultural production occurs in this area (Witzenberg IDP, 2007-2011).

Witzenberg is characterised by a unique diversity of landscapes and areas that have historically been identified (intuitively, in terms of bioregional principles) such as the Warm Bokkeveld, Koue Bokkeveld, Tankwa and Ceres Karoo and the Land of Waveren.

Ceres (after the mythical Goddess of Agriculture and Fertility) is the main town of the Witzenberg Municipality and is the hub of administrative activities in the region.

#### Population

The 2001 Census data puts the population of the Witzenberg Municipality at approximately 83 568 people, with a fairly even distribution according to age and gender. The average density ratio is 31.98 persons per square kilometre with 7.67 black people per km<sup>2</sup>, 2.91 white people per km<sup>2</sup>, 21.35 coloured people per km<sup>2</sup>, and 0.05 Asians per km<sup>2</sup>.

The population of the amended Witzenberg Municipality is estimated to be 90 066 people with the major ethnic group being the Coloured population, representing approximately 70% of the entire population (refer to Table B13). The sex structure is almost equal with 50.1% (45 114) of the total population being female. The male population constitutes the remaining 49.9% (44 952).

The compound population growth rate between 1996 and 2008 was 1.7%, characterised by the following breakdown per racial group (Global Insight in Witzenberg IDP 2007-2011):

- Blacks at 6.2%
- Coloureds at 0.9%
- Asians at 5.3%
- Whites at -0.7%

In stark contrast to the above, the 2012-2017 Witzenberg IDP estimated the population of the Municipality to be 75 152 people in 2007 with a negative growth rate of 1.8% between 2001 and 2007. According to the IDP, the Coloured population group represented 68.5% of the population in 2007, followed by Africans at 18.9%, Whites at 12.7% and Asians at 0.02%. Discrepancies such as these present a major challenge to ensure proper forward planning for any municipality.

As mentioned in the note above, for the purpose of strategic planning, the adapted data from the 2001 Census, as amended in 2005, therefore remains the baseline data for the purpose of the SDF.

#### Education

Education is a strong lever for change and normally has a direct bearing on better prospects of employment as it increases chances of securing employment in the presence of job-creating economic growth.

A good education also escalates the likelihood of better health prospects and is a key influence on those with a higher socio-economic standing (Witzenberg IDP 2007-2011). Only 7% of the population of Witzenberg is illiterate and approximately 24% is functional illiterate. The high rate of literacy contributes to the Municipality's above national average HDI, which is indicative of relatively highly developed society.

More recent data from Global Insight Southern Africa (2008) pertaining to the level of education in the Witzenberg Municipality is summarised in the table below.

#### Health



Effective health systems and primary health care services are vital for the sustainability and overall quality of life of communities. A strong health care system not only promotes the population's longevity, but can also contribute towards the region's economic development. The population relies on government to administer and deliver affordable and quality health care services that encompass critical health care treatment, diagnosis, rehabilitation and disease prevention.

In the prevalence of a weak social fiber—and consequently, low human and social capital—the healthcare sector bears the brunt of negative consequences arising from risky behaviour, skew distribution of resources, and social and economic exclusion.

Settlement patterns (influenced by inner city gentrification, destitution, informal settlements, etc.), high levels of substance abuse and high tuberculosis (TB) prevalence are a few examples which demonstrate the extent that societal values have been eroded.

The Witzenberg IDP (2007-2011) identified tuberculosis and HIV/AIDS as the leading causes of premature death at 16,3%, and 15,4% respectively. It is suggested that the high TB death rate can be contributed to a low cure rate. The increase in HIV infections is very disconcerting. Recent figures of the Witzenberg Department of Socio-Economic Development indicates an alarming increase in the HIV/AIDS figures of more than 13 times year on year from 1996 to 2010. The municipality has 1 anti-retroviral treatment (ART) service sites and 15 TB clinics (Witzenberg IDP, 2012-2017).

The Infant Mortality Rate (IMR) is an important measure of the well-being of infants, children and pregnant women and is indicative of a number of factors such as maternal health, quality and access to medical care, socio-economic conditions, and public health practices.

The Witzenberg Municipality IMR of 42 per 1000 live births, with an under-five mortality rate of 51 per 1000 live births was the highest in the Boland/Overberg region when measured in 2005.

It has been suggested that the leading causes of infant and child deaths were pre-maturity, congenital abnormalities, HIV, diarrhoea, protein energy malnutrition, and ill-defined natural causes (Witzenberg IDP 2007-2011).

Clearly the provision of primary health care and access thereto could be improved in the Municipality. The current circumstances warrant a paradigm shift in the approach to population health and resource allocation. The facts stated above should form the basis of the parameters for health investment decisions. Investments should be directed to those areas that have the greatest potential to positively influence health.

#### Employment Income Status

It is recognized that poverty remains the core obstacle to a stable and prosperous future in South Africa. Despite commendable efforts of government and state-supported efforts, poverty continues to be chronic problem for much of South Africa's population, including Witzenberg Municipality.

The Poverty Index indicates that unemployment and the poverty levels of the Cape Winelands District have gradually increased over the past few years. The Witzenberg Municipality, at 21.42 points on the index, ranks as the highest in the district. Comparative figures show a disconcerting trend in Witzenberg, e.g. the 1996 Census showed a figure of 18.2, climbing marginally to 18.6 in 2001, and the most recent available estimate according to Stats SA's Community Survey 2007 shows that the poverty index for Witzenberg increased to 21.42.

Global Insight's published figures indicate that 30.1% of the Witzenberg residents live in poverty while the number of people accessing social grants are estimated at 10 173 (Witzenberg IDP 2012-2017).

## 11. HISTORICAL AND CULTURAL ASPECTS

- (a) Please be advised that every application for Environmental Authorisation including an application for a Waste Management Licence, must include, where applicable the investigation, assessment and evaluation of the impact of any

proposed listed or specified activity on any national estate referred to in section 3(2) of the National Heritage Resources Act, 1999 (Act No. 25 of 1999), excluding the national estate contemplated in section 3(2)(i)(vi) and (vii) of that Act.

Please be further advised that if section 38 of the National Heritage Resources Act, 1999 (Act No. 25 of 1999), is applicable to your application, then you are requested to furnish this Department with written comment from Heritage Western Cape as part of your public participation process. Section 38 of the Act states as follows: "38. (1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorised as-

- (a) the construction of a road, wall, power line, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;
- (b) the construction of a bridge or similar structure exceeding 50m in length;
- (c) any development or other activity which will change the character of a site-
  - (i) exceeding 5 000 m<sup>2</sup> in extent; or
  - (ii) involving three or more existing erven or subdivisions thereof; or
  - (iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or
  - (iv) the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;
- (d) the re-zoning of a site exceeding 10 000 m<sup>2</sup> in extent; or
- (e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority, must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development."

- (b) The impact on any national estate referred to in section 3(2), excluding the national estate contemplated in section 3(2)(i)(vi) and (vii), of the National Heritage Resources Act, 1999 (Act No. 25 of 1999), must also be investigated, assessed and evaluated. Section 3(2) states as follows: "3(2) Without limiting the generality of subsection (1), the national estate may include—

- (a) places, buildings, structures and equipment of cultural significance;
- (b) places to which oral traditions are attached or which are associated with living heritage;
- (c) historical settlements and townscapes;
- (d) landscapes and natural features of cultural significance;
- (e) geological sites of scientific or cultural importance;
- (f) archaeological and palaeontological sites;
- (g) graves and burial grounds, including—
  - (i) ancestral graves;
  - (ii) royal graves and graves of traditional leaders;
  - (iii) graves of victims of conflict;
  - (iv) graves of individuals designated by the Minister by notice in the Gazette;
  - (v) historical graves and cemeteries; and
  - (vi) other human remains which are not covered in terms of the Human Tissue Act, 1983 (Act No. 65 of 1983);
- (h) sites of significance relating to the history of slavery in South Africa;
- (i) movable objects, including—
  - (i) objects recovered from the soil or waters of South Africa, including archaeological and palaeontological objects and material, meteorites and rare geological specimens;
  - (ii) objects to which oral traditions are attached or which are associated with living heritage;
  - (iii) ethnographic art and objects;
  - (iv) military objects;
  - (v) objects of decorative or fine art;
  - (vi) objects of scientific or technological interest; and
  - (vii) books, records, documents, photographic positives and negatives, graphic, film or video material or sound recordings, excluding those that are public records as defined in section 1(xiv) of the National Archives of South Africa Act, 1996 (Act No. 43 of 1996)."

Is section 38 of the National Heritage Resources Act, 1999, applicable to the development?		YES	NO
		UNCERTAIN	
If YES, explain:	A heritage western cape notice of intent to develop has been submitted to the HWC for comments with a copy of the S24G impact assessment report. We await HWC comments.		
Did/does the development impact on any national estate referred to in section 3(2) of the National Heritage Resources Act, 1999?		YES	NO
		UNCERTAIN	
If YES, explain:			
Was any building or structure older than 60 years affected in any way?			
	YES	NO	UNCERTAIN
If YES, explain:			

**Please Note:**

If uncertain, the Department may request that specialist input be provided. If, yes, a copy of the Notice of Intent submitted to Heritage Western Cape must be submitted with this form.

**12. COASTAL ASPECTS (SEAFRONT/SEA ENVIRONMENT)**

(a) Is the site(s) located within any of the following areas? (highlight the appropriate boxes).

If the site or alternative site is closer than 100m to such an area, please provide the approximate distance in (m).

AREA	YES	NO	UNSURE	If "YES": Distance to nearest area (m)
An area within 100m of the high water mark of the sea	YES	NO	UNSURE	
An area within 100m of the high water mark of an estuary/lagoon	YES	NO	UNSURE	
An area within the littoral active zone	YES	NO	UNSURE	
An area in the coastal public property	YES	NO	UNSURE	
Major anthropogenic structures	YES	NO	UNSURE	
An area within a Coastal Protection Zone	YES	NO	UNSURE	
An area seaward of the coastal management line	YES	NO	UNSURE	
An area within the high risk zone (20 years)	YES	NO	UNSURE	
An area within the medium risk zone (50 years)	YES	NO	UNSURE	
An area within the low risk zone (100 years)	YES	NO	UNSURE	
An area below the 5m contour	YES	NO	UNSURE	
An area within 1km from the high water mark of the sea	YES	NO	UNSURE	
A rocky beach	YES	NO	UNSURE	
A sandy beach	YES	NO	UNSURE	

(b) If any of the answers to the above is "YES" or "UNSURE", specialist input may be requested by the Department. (The 1:50 000 scale Regional Geotechnical Maps prepared by Geological Survey may also be used).

**13. REGIONAL PLANNING CONTEXT**

Is the activity permitted in terms of the property's existing land use rights?	YES	NO	Please explain
The bridge does not affect landuse rights but improves access and is located along an existing road servitude.			
Will the activity be in line with the following?			
Provincial Spatial Development Framework (PSDF)	YES	NO	Please explain
Agricultural land and bridge does not affect landuse rights but improves access.			
Urban edge / Edge of Built environment for the area	YES	NO	Please explain
The area is outside urban edge.			
Integrated Development Plan of the Local Municipality	YES	NO	Please explain
Agricultural land and bridge does not affect landuse rights but improves access.			
Spatial Development Framework of the Local Municipality	YES	NO	Please explain
Agricultural land and bridge does not affect landuse rights but improves access.			
Approved Structure Plan of the Municipality	YES	NO	Please explain
As above.			
An Environmental Management Framework (EMF) adopted by the Department	YES	NO	Please explain
No EMF adopted for area.			
Any other Plans	YES	NO	Please explain
NA			

**SECTION D: NEED AND DESIRABILITY**

**Please Note:** Before completing this section, first consult this Department's *Guideline on Need and Desirability* (March 2013) available on the Department's website (<http://www.capegateway.gov.za/eadp>).

1. Was the activity permitted in terms of the property's land use rights at the time of commencement?	YES	NO	Please explain
The owners have agreed to register a servitude over Portion 1 of Farm No.52 Tulbagh at the location of an existing road. To facilitate the movement of larger vehicles within this servitude, the road crossing over a small unnamed stream was upgraded.			



2. Was the activity in line with the following?			
(a) Provincial Spatial Development Framework (PSDF)	YES	<del>NO</del>	Please explain
Consistent with the PSDF and outside the urban edge.			
(b) Urban edge / Edge of Built environment for the area	YES	<del>NO</del>	Please explain
The area is outside the approved urban edge.			
(c) Integrated Development Plan and Spatial Development Framework of the Local Municipality (e.g. would the approval of this application have compromised the integrity of the existing approved and credible municipal IDP and SDF?).	YES	<del>NO</del>	Please explain
The owners have agreed to register a servitude over Portion 1 of Farm No.52 Tulbagh at the location of an existing road. To facilitate the movement of larger vehicles within this servitude, the road crossing over a small unnamed stream was upgraded.			
(d) Approved Structure Plan of the Municipality	YES	<del>NO</del>	Please explain
As above.			

(e) An Environmental Management Framework (EMF) adopted by the Department (e.g. Would the approval of this application have compromised the integrity of the existing environmental management priorities for the area and if so, can it be justified in terms of sustainability considerations?)	YES	<del>NO</del>	Please explain
No EMF adopted for area.			
(f) Any other Plans (e.g. Guide Plan)	YES	<del>NO</del>	Please explain
NA			

3. Was the land use (associated with the activity for which rectification is sought) considered within the timeframe intended by the existing approved Spatial Development Framework (SDF) agreed to by the relevant environmental authority (i.e. was the development in line with the projects and programmes identified as priorities within the relevant IDP)?	YES	<del>NO</del>	Please explain
The owners have agreed to register a servitude over Portion 1 of Farm No.52 Tulbagh at the location of an existing road. To facilitate the movement of larger vehicles within this servitude, the road crossing over a small unnamed stream was upgraded.			

4. Should development, or if applicable, expansion of the town/area concerned in terms of this land use (associated with the activity being applied for) have occurred here when activities commenced?	YES	<del>NO</del>	Please explain
The owners have agreed to register a servitude over Portion 1 of Farm No.52 Tulbagh at the location of an existing road. To facilitate the movement of larger vehicles within this servitude, the road crossing over a small unnamed stream was upgraded.			

5. Did the community/area need the activity and the associated land use concerned (was it a societal priority)? (This refers to the strategic as well as local level (e.g. development is a national priority, but within a specific local context it could be inappropriate.)	YES	<del>NO</del>	Please explain
The owners have agreed to register a servitude over Portion 1 of Farm No.52 Tulbagh at the location of an existing road. To facilitate the movement of larger vehicles within this servitude, the road crossing over a small unnamed stream was upgraded.			

6. Were the necessary services with adequate capacity available (at the time of commencement), or was additional capacity created to cater for the development? (Confirmation by the relevant Municipality in this regard must be attached to the Application Form / additional information as an <b>appendix</b> , where applicable.)	YES	<del>NO</del>	Please explain
NA			

7. Is/was this development provided for in the infrastructure planning of the municipality, and if not what was/will the implication be on the infrastructure planning of the municipality (priority and placement of services and opportunity costs)? (Comment by the relevant Municipality in this regard must be attached to the Application Form / additional information as an <b>appendix</b> , where applicable.)	YES	<del>NO</del>	Please explain
The owners have agreed to register a servitude over Portion 1 of Farm No.52 Tulbagh at the location of an existing road. To facilitate the movement of larger vehicles within this servitude, the road crossing over a small unnamed stream was upgraded.			

8. Was this project part of a national programme to address an issue of national concern or importance?	<del>YES</del>	NO	Please explain
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NA

9. Did location factors favour this land use (associated with the activity applied for) at this place? (This relates to the contextualisation of the land use on this site within its broader context.)	YES	<del>NO</del>	Please explain
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The owners have agreed to register a servitude over Portion 1 of Farm No.52 Tulbagh at the location of an existing road. To facilitate the movement of larger vehicles within this servitude, the road crossing over a small unnamed stream was upgraded.

10. How did/does the activity or the land use associated with the activity applied for, impact on sensitive natural and cultural areas (built and rural/natural environment)?	YES	<del>NO</del>	Please explain
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The works associated with the culvert structure that has been constructed at the road crossing has largely only resulted in limited change to the bed and banks of the unnamed stream at the site. Considering the history of modification of the river channel as a result of the surrounding agricultural activities and the existing ecological state of the stream, this impact is of a low significance. The structure has sufficient capacity that it is unlikely that it will result in any impedance or diversion of flow in the stream.

The main impacts of the works undertaken are thus a modification/loss of aquatic habitat. With some rehabilitation of the site, this impact could be reduced to being of a very low significance with the potential for a positive impact on the existing ecological condition of the watercourse at the site. Recommendations are provided for the rehabilitation as well as the longer term maintenance and management measures for the site.

11. How did/does the development impact on people's health and wellbeing (e.g. in terms of noise, odours, visual character and sense of place, etc.)?	YES	<del>NO</del>	Please explain
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The owners have agreed to register a servitude over Portion 1 of Farm No.52 Tulbagh at the location of an existing road. To facilitate the movement of larger vehicles within this servitude, the road crossing over a small unnamed stream was upgraded.

12. Did/does the proposed activity or the land use associated with the activity applied for, result in unacceptable opportunity costs?	<del>YES</del>	NO	Please explain
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The owners have agreed to register a servitude over Portion 1 of Farm No.52 Tulbagh at the location of an existing road. To facilitate the movement of larger vehicles within this servitude, the road crossing over a small unnamed stream was upgraded.

13. What were the cumulative impacts (positive and negative) of the land use associated with the activity applied for?	YES	<del>NO</del>	Please explain
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The works associated with the culvert structure that has been constructed at the road crossing has largely only resulted in limited change to the bed and banks of the unnamed stream at the site. Considering the history of modification of the river channel as a result of the surrounding agricultural activities and the existing ecological state of the stream, this impact is of a low significance. The structure has sufficient capacity that it is unlikely that it will result in any impedance or diversion of flow in the stream.

The main impacts of the works undertaken are thus a modification/loss of aquatic habitat. With some rehabilitation of the site, this impact could be reduced to being of a very low significance with the potential for a positive impact on the existing ecological condition of the watercourse at the site. Recommendations are provided for the rehabilitation as well as the longer term maintenance and management measures for the site.

14. Is/was the development the best practicable environmental option for this land/site?	YES	<del>NO</del>	Please explain
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The works associated with the culvert structure that has been constructed at the road crossing has largely only resulted in limited change to the bed and banks of the unnamed stream at the site. Considering the history of modification of the river channel as a result of the surrounding agricultural activities and the existing ecological state of the stream, this impact is of a low significance. The structure has sufficient capacity that it is unlikely that it will result in any impedance or diversion of flow in the stream.

The main impacts of the works undertaken are thus a modification/loss of aquatic habitat. With some rehabilitation of the site, this impact could be reduced to being of a very low significance with the potential for a positive impact on the existing ecological condition of the watercourse at the site.

Recommendations are provided for the rehabilitation as well as the longer term maintenance and management measures for the site.

15. What are/were the benefits to society in general and to the local communities?

Please explain

The owners have agreed to register a servitude over Portion 1 of Farm No.52 Tulbagh at the location of an existing road. To facilitate the movement of larger vehicles within this servitude, the road crossing over a small unnamed stream was upgraded.

16. Any other need and desirability considerations related to the activity?

Please explain

No

17. Please describe how the general objectives of Integrated Environmental Management as set out in section 23 of NEMA were taken into account:

All decisions during the planning and assessment by all involved for the activity promote the integration of the principles of environmental management set out in section 2 to minimize and mitigate any significant effect on the environment. All these mitigations and management measures must be included as EA conditions and into the EMP.

All involved in the planning and design identified and evaluate the actual and potential impact on the environment, socio-economic conditions and cultural heritage. The risks and consequences and alternatives and options for mitigation of activities, with a view to minimising negative impacts, maximising benefits, and promoting compliance with the principles of environmental management set out in section 2 were taken in consideration.

All specialists involved in the planning and design of the activity are independent and ensured that the effects of the activities on the environment receive adequate consideration before recommendations and actions.

18. Please describe how the **principles of environmental management** as set out in section 2 of NEMA were taken into account:

A public participation process as described in the legislation and guidelines has and will be followed.

The development did not have an impact on an endangered vegetation type, and the impact on the watercourse can be mitigated to a very low significance.

The development did not disturb the sites that constitute the nation's cultural heritage. The development did not exceed or exploit renewable resources to an extent that they reach a level beyond which their integrity is jeopardised. A risk-averse and caution first approach is being applied.

All alternatives were assessed against the no go or no development option. All impacts and aspects were assessed and identified.

An Environmental Management Plan and Maintenance Management Plan are included. This will guide the responsibilities in execution as stipulated above. The social, economic and environmental impacts of activities, including disadvantages and benefits, were considered, assessed and evaluated, and decisions are appropriate in the light of such consideration and assessment.

The proposed development gives attention to sensitive, vulnerable, highly dynamic or stressed ecosystems, such as the natural veld and wetland.

## SECTION E: ALTERNATIVES

**Please Note:** Before completing this section, first consult this Department's *Guideline on Alternatives* (March 2013) available on the Department's website (<http://www.capegateway.gov.za/eadp>).

"Alternatives", in relation to an activity, means different means of meeting the general purposes and requirements of the activity, which may include alternatives to –

- (a) the property on which, or location where, it is to undertake the activity/the activity was undertaken;
- (b) the type of activity to be undertaken;
- (c) the design or layout of the activity;
- (d) the technology to be used in the activity;

- (e) the operational aspects of the activity; and
- (f) the option of not implementing the activity.

The NEMA prescribes that the procedures for the investigation, assessment and communication of the (potential) consequences or impacts of activities on the environment must, *inter alia*, with respect to every application for environmental authorisation –

- ensure that the general objectives of integrated environmental management laid down in NEMA and the National Environmental Management Principles set out in NEMA are taken into account; and (where applicable)
- include an investigation of the potential consequences or impacts of the alternatives to the activity on the environment and assessment of the significance of those potential consequences or impacts, including the option of not implementing the activity.

The general objective of integrated environmental management is, *inter alia*, to "identify, predict and evaluate the actual and potential impact on the environment, socio-economic conditions and cultural heritage, the risks and consequences and alternatives and options for mitigation of activities, with a view to minimising negative impacts, maximising benefits, and promoting compliance with the principles of environmental management" set out in NEMA.

1. In the sections below, please provide a description of any considered alternatives and alternatives that were found to be feasible and reasonable.

**Please note:**

- Detailed written proof of the investigation of alternatives must be provided. If no reasonable or feasible alternative exists, a motivation must be provided.
- Alternatives considered for a Section 24G application are used to determine if the development was the best practicable alternative (environmentally, socially and economically) for the site or property.
- In respect of a section 24 application, the option of not implementing the activity ("no-go"), includes the option of ceasing the activity, not implementing continuation of the activity, refusal of the commenced activity and complete rehabilitation of the affected site.

(a) Property and location/site alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist:

No other property alternatives were assessed as no feasible or reasonable property alternative exists. The owners have agreed to register a servitude over Portion 1 of Farm No.52 Tulbagh at the location of an existing road. To facilitate the movement of larger vehicles within this servitude, the road crossing over a small unnamed stream was upgraded.

(b) Activity alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist:

No other activity alternatives were assessed as no feasible or reasonable activity alternative exists. The owners have agreed to register a servitude over Portion 1 of Farm No.52 Tulbagh at the location of an existing road. To facilitate the movement of larger vehicles within this servitude, the road crossing over a small unnamed stream was upgraded.

(c) Design or layout alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist:

The design and layout of the bridge was done by an engineer and took in consideration the flow of the river to prevent flooding and erosion and to not obstruct or divert the flow of the river.

(d) Technology alternatives (e.g. to reduce resource demand and resource use efficiency) to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts or detailed motivation if no reasonable or feasible alternatives exist:

Non-structural measures where considered.

(e) Operational alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist:

None. Operation in terms of EMP and MMP.

(f) The option of ceasing the activity (the refusal of the activity(ies) and/or rehabilitation of the site):

Removal of the bridge and road crossing and rehabilitation of the area, leading to an informal road crossing being used again through the stream which may lead to additional stream degradation.

(g) Any other alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist:

None identified.

(h) Please provide a summary of the alternatives investigated and the outcomes of such investigation:

**Please note:** If no feasible and reasonable alternatives exist, the description and proof of the investigation of alternatives, together with motivation of why no feasible or reasonable alternatives exist, must be provided.

### **SUMMARY OF THE ALTERNATIVES**

#### Property and location/site alternatives

No other property alternatives were assessed as no feasible or reasonable property alternative exists. The owners have agreed to register a servitude over Portion 1 of Farm No.52 Tulbagh at the location of an existing road. To facilitate the movement of larger vehicles within this servitude, the road crossing over a small unnamed stream was upgraded.

#### Activity alternatives

No other activity alternatives were assessed as no feasible or reasonable activity alternative exists. The owners have agreed to register a servitude over Portion 1 of Farm No.52 Tulbagh at the location of an existing road. To facilitate the movement of larger vehicles within this servitude, the road crossing over a small unnamed stream was upgraded.

#### Design or layout alternatives

The design and layout of the bridge was done by an engineer and took in consideration the flow of the river to prevent flooding and erosion and to not obstruct or divert the flow of the river.

#### Technology alternatives

Non-structural measures were considered, but was found not to be reasonable or feasible as it would not provide an adequate and safe crossing for heavy vehicles.

#### Operational alternatives

None. Operation in terms of MMP and EMP.

#### Ceasing the activity

Removal of the bridge and road crossing and rehabilitation of the area. The option of removing the bridge and rehabilitating the impact area was found not to be reasonable or feasible as an informal gravel crossing through the stream will not be an adequate or safe crossing for heavy vehicles and will lead to negative ecological impacts on the watercourse.

## **SECTION F: IMPACT ASSESSMENT, MANAGEMENT, MITIGATION AND MONITORING MEASURES**

**Please note, the impacts identified below refer to general impacts commonly associated with development activities. The list below is not exhaustive and may need to be supplemented. Where required, please append the information on any additional impacts to this application.**

**Please note: The information in this section must be duplicated for all the feasible and reasonable alternatives (where relevant).**

### **1. PLEASE DESCRIBE THE MANNER IN WHICH THE DEVELOPMENT HAS IMPACTED ON THE FOLLOWING ASPECTS:**

(a) Geographical and physical aspects:

The bridge as was constructed did not have a significant adverse cumulative effect on topography, slopes, soils and groundwater resources. Once proposed rehabilitation and maintenance activities are implemented the state of the affected watercourse and surrounds will in fact be improved to a better condition than even before the bridge was constructed.

The non-perennial river has been impacted on but the development has not modified its natural flow or meandering.

(b) Biological aspects:

Has the development impacted on critical biodiversity areas (CBAs) or ecological support areas (ESAs)?	YES	<del>NO</del>
If yes, please describe:		
<p>The site and non-perennial river are classified as an ESA (restore). The removal of vegetation has not significantly affected the functioning of the ecological support area. The works associated with the culvert structure that has been constructed at the road crossing has largely only resulted in limited change to the bed and banks of the unnamed stream at the site. Considering the history of modification of the river channel as a result of the surrounding agricultural activities and the existing ecological state of the stream, this impact is of a low significance. The structure has sufficient capacity that it is unlikely that it will result in any impedance or diversion of flow in the stream. The main impacts of the works undertaken are thus a modification/loss of aquatic habitat. With some rehabilitation of the site, this impact could be reduced to being of a very low significance with the potential for a positive impact on the existing ecological condition of the watercourse at the site. Recommendations are provided in the freshwater impact assessment report for the rehabilitation as well as the longer term maintenance and management measures for the site.</p>		
Has the development impacted on terrestrial vegetation, or aquatic ecosystems (wetlands, estuaries or the coastline)?	YES	<del>NO</del>



### Vegetation

The naturally occurring vegetation type at the site is mapped as Breede Shale Fynbos. The vegetation is typically moderately tall and dense shrubland. It occurs on the upper slopes down to the valley plains. Approximately 30% of its original extent has been transformed, mostly by agricultural development. It is considered to be a vulnerable vegetation type.

The natural vegetation adjacent to and within the stream has largely been removed with open areas and exotic grasses occurring within the area currently. Within the stream channel upstream of the road crossing alien nasturtiums (*Tropaeolum majus*) occur together with weedy shrubs and exotic grasses and some arum lilies (*Zantedeschia aethiopica*). Downstream of the crossing, a mix of indigenous and exotic vegetation occurs. Indigenous vegetation consists of wild olive trees (*Olea europaea* subsp *africana*), arum lilies, kruidjie-roer-my-nie (*Melianthus major*), fountain bush (*Cliffortia strobilifera*), water sedge (*Isolepis prolifera*), cut grass (*Bolboschoenus glaucus*), spiny rush (*Juncus acutus*), cobra lilies (*Chasmanthes aethiopica*) and bulrushes (*Typha capensis*). Exotic plants include English oak trees (*Quercus robur*), black wattle (*Acacia mearnsii*), red sesbania (*Sesbania punicea*), weeping willows (*Salix babylonica*), swamp cypress (*Taxodium distichum*), cocklebur (*Xanthium strumarium*), Zimbabwe creeper (*Podranea brycei*) and dock (*Rumex crispus*).

### River

The new road crossing has been constructed in an unnamed tributary of Klein Berg River (G10E quaternary catchment) in the Berg River System. The tributary has been mapped as a South West Shale Fynbos Channelled Valley Bottom wetland in the Freshwater Ecosystem Priority Areas wetland mapping. The wetland area mapped occurs upstream of the site and incorporates the farm dam on the northern bank of the stream. No wetland area was evident within the immediate area of the stream crossing. The area mapped as valley bottom wetland area comprises largely of a relatively steep stream bank. The small wider stream corridor upstream of the site is also mapped as an aquatic Critical Biodiversity Area buffer due to the largely natural vegetation that still occurs along the steep river bank a short distance upstream of the site.

The ecological condition of the stream at the site is considered to be in a moderately modified within the channel and seriously modified along the riparian areas due largely to the surrounding agricultural activities. The ecological importance and sensitivity of the stream is moderate. Aerial images taken within the past 50 years show that there has been very little alteration to the channel course or the surrounding land cover for this period. The small farm dam on the northern bank of the stream was constructed after 1966 but before 1980. An informal crossing has been used from time to time through the stream at the site.

The works associated with the culvert structure that has been constructed at the road crossing has largely only resulted in limited change to the bed and banks of the unnamed stream at the site. Considering the history of modification of the river channel as a result of the surrounding agricultural activities and the existing ecological state of the stream, this impact is of a low significance. The structure has sufficient capacity that it is unlikely that it will result in any impedance or diversion of flow in the stream.

The main impacts of the works undertaken are thus a modification/loss of aquatic habitat. With some rehabilitation of the site, this impact could be reduced to being of a very low significance with the potential for a positive impact on the existing ecological condition of the watercourse at the site. Recommendations are provided in the report for the rehabilitation as well as the longer term maintenance and management measures for the site.

The DWS risk rating was also determined to be low. It is thus recommended that, if DWS requires that the activity be authorised as a water use, it be authorised under the General Authorisations for Section 21 (c) and (i) of the National Water Act.

Refer to Freshwater Impact Assessment Report under Appendix G.

Has the development impacted on any populations of threatened plant or animal species, and/or on any habitat that may contain a unique signature of plant or animal species?	YES	NO
If yes, please describe:		
According to specialist studies no threatened species has been nor will be impacted on.		
Please describe the manner in which any other biological aspects were impacted:		
As above.		

(c) Socio-Economic aspects:

What was the capital value of the activity on completion?	Unknown	
What is the (expected) yearly income or contribution to the economy that is/will be generated by or as a result of the activity?	NA	
Has/will the activity have contributed to service infrastructure?	<del>YES</del>	NO
How many new employment opportunities were/will be created in the construction phase of the activity?	NA	
What was the value of the employment opportunities during the construction phase?	Unknown	
What percentage of this accrued to previously disadvantaged individuals?	Unknown %	
How was this ensured and monitored (please explain):		
How many permanent new employment opportunities were/will be created during the operational phase of the activity?	None	
What is the current/expected value of the employment opportunities during the first 10 years?	NA	
What percentage of this accrued/will accrue to previously disadvantaged individuals?	NA%	
How was/will this be ensured and monitored (please explain):		
NA		
Any other information related to the manner in which the socio-economic aspects was/will be impacted:		
NONE		

(d) Cultural and historic aspects:

It was found that no heritage resources has been nor will be impacted by the development.
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## 2. WASTE AND EMISSIONS

(a) Waste (including effluent) management

Did the activity produce waste (including rubble) during the construction phase?	YES	<del>NO</del>
If yes, indicate the types of waste (actual type of waste, e.g. oil, and whether hazardous or not) and estimated quantity per type?	NA m <sup>3</sup>	
Building rubble and debris were produced during the construction of the bridge which is recommended to be removed from the watercourse bed and banks.		

Does the activity produce waste during its operational phase?	<del>YES</del>	NO
If yes, indicate the types of waste (actual type of waste, e.g. oil, and whether hazardous or not) and estimated quantity per type?	NA	

Where and how was/will the waste be treated / disposed of (describe)?		
Building rubble and debris to be removed from the stream bed and banks must be disposed of at the municipal landfill site, it is not expected that this will be a significant amount of waste to be disposed of and should therefore be accepted by the municipality as part of general farm waste disposed of at the municipal landfill site.		
Has the municipality or relevant authority confirmed that sufficient capacity exists for treating / disposing of the waste (to be) generated by this activity(ies)? If yes, provide written confirmation from Municipality or relevant authority	<del>YES</del>	<del>NO</del>
Does/will the activity produce waste that is/will be treated and/or disposed of at another facility other than into a municipal waste stream?	<del>YES</del>	<del>NO</del>
If yes, has this facility confirmed that sufficient capacity exists for treating / disposing of the waste (to be) generated by this activity(ies)? Provide written confirmation from the facility and provide the following particulars of the facility:	<del>YES</del>	<del>NO</del>
Does the facility have an operating license? (If yes, please attach a copy of the license.)	<del>YES</del>	<del>NO</del>
Facility name:		
Contact person:		
Postal address:		
	Postal code:	
Telephone:	Cell:	
E-mail:	Fax:	

Describe the measures that were/will be taken to reduce, reuse or recycle waste:
--



NA

(b) Emissions into the atmosphere

Does/will the activity produce emissions that will be disposed of into the atmosphere?	<del>YES</del>	NO
If yes, does it require approval in terms of relevant legislation?	<del>YES</del>	<del>NO</del>
Describe the emissions in terms of type and concentration and how it is/will be treated/mitigated:		
NA		

### 3. WATER USE

Please indicate the source(s) of water for the activity by ticking the appropriate boxes)

<input type="checkbox"/> Municipal	<input type="checkbox"/> Water board	<input type="checkbox"/> Groundwater	<input type="checkbox"/> River, Stream, Dam or Lake	<input type="checkbox"/> Other	The activity did/does/will not use water
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If water was extracted from a groundwater source, river, stream, dam, lake or any other natural feature, please indicate the volume that was extracted per month:	NA	m <sup>3</sup>
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Please provide proof of assurance of water supply (e.g. Letter of confirmation from municipality / water user associations, yield of borehole)		
NA		
Did/does the activity require a water use permit / license from DWA?	YES	<del>NO</del>
If yes, please submit a certified copy of the water use permit/license or submit the necessary application to Department of Water Affairs and attach proof thereof to this application, whichever is applicable.		
Describe the measures that were/ will be taken to reduce water demand, and measures to reuse or recycle water:		
NA		

### 4. POWER SUPPLY

Please indicate the source of power supply e.g. Municipality / Eskom / Renewable energy source

NA
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If power supply is not available, where will power be sourced from?
NA

### 5. ENERGY EFFICIENCY

Describe the design measures, if any, that have been taken to ensure that the activity is energy efficient:
NA

Describe how alternative energy sources have been taken into account or been built into the design of the activity, if any:

NA
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### 6. DESCRIPTION AND ASSESSMENT OF THE SIGNIFICANCE OF IMPACTS prior to and after MITIGATION

Please note:

- While sections are provided for impacts on certain aspects of the environment and certain impacts, the sections should also be copied and completed for all other impacts.
- Mitigation measures that were implemented and mitigation measures that are to be implemented should be clearly distinguished.

- (a) **Impacts that resulted from the planning, design and construction phases (briefly describe and compare the impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that occurred as a result of the planning, design and construction phases.**

Impacts on geographical and physical aspects:			
	Alternative 1 (Preferred)		No-go Alternative
Nature of impact:	Physical Impact on the rivers and wetlands.		
Extent and duration of impact:	Site (2) Permanent (5)		
Probability of occurrence:	Definite (D) 5		Highly probable (HP) 4
Degree to which the impact can be reversed:	Partly reversible (PR)		Partly reversible (PR)

Degree to which the impact may cause irreplaceable loss of resources:	Resource may be partly destroyed (PR)		
Cumulative impact prior to mitigation:	<p>9.6 m<sup>2</sup> of the watercourse habitat was lost. Flow modification is limited to absent. Road crossings will impede flow. No wetland area was evident within the immediate area of the stream crossing. The area mapped as valley bottom wetland area comprises largely of a relatively steep stream bank. The small wider stream corridor upstream of the site is also mapped as an aquatic Critical Biodiversity Area buffer due to the largely natural vegetation that still occurs along the steep river bank a short distance upstream of the site.</p> <p>The ecological condition of the stream at the site is considered to be moderately modified within the channel and seriously modified along the riparian areas due largely to the surrounding agricultural activities. The ecological importance and sensitivity of the stream is moderate. Aerial images taken within the past 50 years show that there has been very little alteration to the channel course or the surrounding land cover for this period. The small farm dam on the northern bank of the stream was constructed after 1966 but before 1980. An informal crossing has been used from time to time through the stream at the site. Freshwater Opinion report: Road crossing on Portion 1 of Farm Bloubank No. 52, Tulbagh March 2017</p>		Should the authorities decide not to allow any development, it seems probable that the current river functioning will be more or less similar to the post construction phase.
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium		Medium-High
Degree to which the impact can be mitigated:	Partly- mitigatable (PM)		Un-mitigatable (UM)
Proposed mitigation:	Rehabilitate river and wetland in accordance with FRESHWATER RESOURCE REHABILITATION AND IMPLEMENTATION PLAN FOR THE PROPOSED IDAS VALLEY RESIDENTIAL DEVELOPMENT ON ERF 9445, STELLENBOSCH, WESTERN CAPE PROVINCE dated September 2018		NA
Cumulative impact post mitigation:	<ul style="list-style-type: none"> <li>Ongoing monitoring and management of the disturbed areas within the stream channel and riparian zone should be undertaken to ensure that the area stays clear of eroded areas and invasive alien plant growth.</li> <li>The stream channel upstream of the crossing should be kept clear of sediment, cobbles and woody debris that could impede flow through the structure during low and higher flow events.</li> <li>The longer term rehabilitation and management of the stream channel at the crossing should be managed by means of the approved Management Maintenance Plan (MMP) for the site. The MMP should include method statements for the removal of sediment and debris upstream of the crossing, revegetation of indigenous plants and control of alien invasive plants as well as erosion control measures should they be required.</li> <li>Control of alien invasive plant</li> </ul>		Loss of wetland habitat and functioning of river system.

	<p>species should be undertaken with a specific focus on the invasive plants such <i>Acacia meurnsii</i>, <i>Sesbania punicea</i> and <i>Pennisetum clandestinum</i>. These species are known to do well in riparian and wet habitats. They should be controlled by manual removal or the application of appropriate herbicides. Manual removal should not be carried out by any machinery larger than a chainsaw. For additional information on alien vegetation clearing management visit the Working for Water website (<a href="http://www.dwaf.gov.za/wfw/Control/">http://www.dwaf.gov.za/wfw/Control/</a>)</p> <ul style="list-style-type: none"> <li>Areas of soil that are disturbed by the maintenance activity should be revegetated with appropriate indigenous vegetation such as the species listed in this report. Revegetation should take place immediately after construction. As mentioned in the previous mitigation measures, method statements for alien vegetation clearing and revegetation with indigenous plants should be addressed in an MMP for the site.</li> </ul>		
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low		Medium

Impact on biological aspects:			
	Alternative 1 (Preferred)		No-go Alternative
Nature of impact:	<b>Physical Impact on the rivers and wetlands.</b>		
Extent and duration of impact:	Site (2) Permanent (5)		
Probability of occurrence:	Definite (D) 5		Highly probable (HP) 4
Degree to which the impact can be reversed:	Partly reversible (PR)		Partly reversible (PR)
Degree to which the impact may cause irreplaceable loss of resources:	Resource may be partly destroyed (PR)		
Cumulative impact prior to mitigation:	<p>9.6 m<sup>2</sup> of riparian habitat was lost. Flow modification is limited to absent. Road crossings will impede flow. No wetland area was evident within the immediate area of the stream crossing. The area mapped as valley bottom wetland area comprises largely of a relatively steep stream bank. The small wider stream corridor upstream of the site is also mapped as an aquatic Critical Biodiversity Area buffer due to the largely natural vegetation that still occurs along the steep river bank a short distance upstream of the site.</p> <p>The ecological condition of the stream at the site is considered to be in a moderately modified within the channel and seriously modified along the riparian areas due largely to the surrounding agricultural activities. The ecological importance and sensitivity of the stream is moderate. Aerial images taken within the past 50 years show that there has been very little alteration to the channel course or the surrounding land cover for this period. The small farm dam on the northern bank of the stream was constructed after 1966 but before 1980. An informal crossing has been</p>		Should the authorities decide not to allow any development, it seems probable that the current river functioning will be more or less similar to the post construction phase.

	used from time to time through the stream at the site. Freshwater Opinion report: Road crossing on Portion 1 of Farm Bloubank No. 52, Tulbagh March 2017		
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium		Medium-High
Degree to which the impact can be mitigated:	Partly- mitigatable (PM)		Un-mitigatable (UM)
Proposed mitigation:	Rehabilitate river and wetland in accordance with FRESHWATER RESOURCE REHABILITATION AND IMPLEMENTATION PLAN FOR THE PROPOSED IDAS VALLEY RESIDENTIAL DEVELOPMENT ON ERF 9445, STELLENBOSCH, WESTERN CAPE PROVINCE dated September 2018		NA
Cumulative impact post mitigation:	<ul style="list-style-type: none"> <li>Ongoing monitoring and management of the disturbed areas within the stream channel and riparian zone should be undertaken to ensure that the area stays clear of eroded areas and invasive alien plant growth.</li> <li>The stream channel upstream of the crossing should be kept clear of sediment, cobbles and woody debris that could impede flow through the structure during low and higher flow events.</li> <li>The longer term rehabilitation and management of the stream channel at the crossing should be managed by means of the approved Management Maintenance Plan (MMP) for the site. The MMP should include method statements for the removal of sediment and debris upstream of the crossing, revegetation of indigenous plants and control of alien invasive plants as well as erosion control measures should they be required.</li> <li>Control of alien invasive plant species should be undertaken with a specific focus on the invasive plants such as <i>Acacia meurnsii</i>, <i>Sesbania punicea</i> and <i>Pennisetum clandestinum</i>. These species are known to do well in riparian and wet habitats. They should be controlled by manual removal or the application of appropriate herbicides. Manual removal should not be carried out by any machinery larger than a chainsaw. For additional information on alien vegetation clearing management visit the Working for Water website (<a href="http://www.dwaf.gov.za/wfw/Control/">http://www.dwaf.gov.za/wfw/Control/</a>)</li> <li>Areas of soil that are disturbed by the maintenance activity should be revegetated with appropriate indigenous vegetation such as the species listed in this report. Revegetation should take place immediately after construction. As mentioned in the previous mitigation measures, method statements for alien vegetation clearing and revegetation with indigenous plants should be addressed in an MMP for the site.</li> </ul>		Loss of wetland habitat and functioning of river system.
Significance rating of impact after mitigation (Low, Medium, Medium-High, High,	Low		Medium

or Very-High)			
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Impacts on socio-economic aspects:			
	Alternative 1 (Preferred)		No-go Alternative
Nature of impact:	<b>Temporary construction jobs created.</b>		
Extent and duration of impact:	Extent 2 (On site or within 100 m of the site) & Duration 1 (0 – 1 years)	Not applicable to no-go alternative.	
Probability of occurrence:	4 (most likely)		
Degree to which the impact can be reversed:	NA – Positive		
Degree to which the impact may cause irreplaceable loss of resources:	NA – Positive		
Cumulative impact prior to mitigation:	NA – Positive		
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	8 – Low (positive)		
Degree to which the impact can be mitigated:	NA – Positive		
Proposed mitigation:	Local contractors, employing or seeking to employ local (historically disadvantaged individuals (HDI)s) from the region who are suitably qualified, should get preference.		
Cumulative impact post mitigation:	NA – Positive		
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	8 – Low (positive)		

Impacts on cultural-historical aspects:			
	Alternative 1 (Preferred)		No-go Alternative
Nature of impact:	<b>The potential impact of the proposed development on archaeological, paleontological and heritage remains.</b>		
Extent and duration of impact:	Extent 2 (On site or within 100 m of the site) & Duration 1 (0 – 1 years)	Not applicable to no-go alternative.	
Probability of occurrence:	2 (some possibility, but low likelihood)		
Degree to which the impact can be reversed:	2-Resource may be partly destroyed (PR)		
Degree to which the impact may cause irreplaceable loss of resources:	Partly reversible (PR)		
Cumulative impact prior to mitigation:	The excavation to have potential impact on archaeological, paleontological or heritage remains.		
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Low		
Degree to which the impact can be mitigated:	Partly mitigatable (PM)		
Proposed mitigation:	Should any burials, fossils or other historical material be encountered during construction, work must cease immediately and HWC must be contacted.		
Cumulative impact post mitigation:	The excavation to have potential impact on archaeological, paleontological or heritage remains.		
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low		

Noise impacts:			
	Alternative 1 (Preferred)		No-go Alternative
Nature of impact:	<b>Noise due to construction machinery.</b>		
Extent and duration of impact:	Extent 2 (On site or within 100 m of the site) & Duration 1 (0 – 1 years)	Not applicable to the no go alternative.	
Probability of occurrence:	1 (Very improbable (VP))		
Degree to which the impact can be reversed:	Completely reversible (R) - This will not be a long-term impact nor will it have an impact on the natural processes. It is thus 100% reversible.		
Degree to which the impact may cause irreplaceable loss of resources:	1-Resource will not be lost (R)		
Cumulative impact prior to mitigation:	Nuisance. Noise due to construction machinery during the construction phase. Construction machinery may cause noise disturbance to the directly adjacent land users/ owners. The noise was not considered to be considerable and will only be temporary.		
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Low		
Degree to which the impact can be mitigated:	Partly mitigatable (PM)		
Proposed mitigation:	Machinery and vehicles should be regularly maintained to prevent excessive noise. All machinery and work activities must adhere to the requirements of the noise regulations.		

Cumulative impact post mitigation:	Nuisance.	
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low	

(b) **Impacts that result from the operational phase (briefly describe and compare impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the operational phase.**

Impacts on geographical and physical aspects:			
	Alternative 1 (Preferred)		No-go Alternative
Nature of impact:	<b>Physical Impact on the rivers and wetlands.</b>		
Extent and duration of impact:	Local (L)-3-Within a 20 km radius of the centre of the site Permanent (5)		
Probability of occurrence:	Definite (D) 5		Highly probable (HP) 4
Degree to which the impact can be reversed:	Partly reversible (PR)		Partly reversible (PR)
Degree to which the impact may cause irreplaceable loss of resources:	Resource may be partly destroyed (PR)		
Cumulative impact prior to mitigation:	9.6 m <sup>2</sup> of wetland was lost. Flow modification is limited to absent. Road crossings will impede flow. No wetland area was evident within the immediate area of the stream crossing. The area mapped as valley bottom wetland area comprises largely of a relatively steep stream bank. The small wider stream corridor upstream of the site is also mapped as an aquatic Critical Biodiversity Area buffer due to the largely natural vegetation that still occurs along the steep river bank a short distance upstream of the site. The ecological condition of the stream at the site is considered to be in a moderately modified within the channel and seriously modified along the riparian areas due largely to the surrounding agricultural activities. The ecological importance and sensitivity of the stream is moderate. Aerial images taken within the past 50 years show that there has been very little alteration to the channel course or the surrounding land cover for this period. The small farm dam on the northern bank of the stream was constructed after 1966 but before 1980. An informal crossing has been used from time to time through the stream at the site. Freshwater Opinion report: Road crossing on Portion 1 of Farm Bloubank No. 52, Tulbagh March 2017		Should the authorities decide not to allow any development, it seems probable that the current river functioning will be more or less similar to the post construction phase.
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium		Medium-High
Degree to which the impact can be mitigated:	Partly- mitigatable (PM)		Un-mitigatable (UM)
Proposed mitigation:	Rehabilitate river and wetland in accordance with FRESHWATER RESOURCE REHABILITATION AND IMPLEMENTATION PLAN FOR THE PROPOSED IDAS VALLEY RESIDENTIAL DEVELOPMENT ON ERF 9445, STELLENBOSCH, WESTERN CAPE PROVINCE dated September 2018		NA
Cumulative impact post mitigation:	<ul style="list-style-type: none"> <li>Ongoing monitoring and management of the disturbed areas within the stream channel and riparian zone should be undertaken to ensure that the area stays clear of eroded areas and invasive alien plant growth.</li> <li>The stream channel upstream of the crossing should be kept clear of sediment, cobbles and woody debris that could impede flow through the structure during low</li> </ul>		Loss of wetland habitat and functioning of river system.



	<p>and higher flow events.</p> <ul style="list-style-type: none"> <li>The longer term rehabilitation and management of the stream channel at the crossing should be managed by means of the approved Management Maintenance Plan (MMP) for the site. The MMP should include method statements for the removal of sediment and debris upstream of the crossing, revegetation of indigenous plants and control of alien invasive plants as well as erosion control measures should they be required.</li> <li>Control of alien invasive plant species should be undertaken with a specific focus on the invasive plants such <i>Acacia mearnsii</i>, <i>Sesbania punicea</i> and <i>Pennisetum clandestinum</i>. These species are known to do well in riparian and wet habitats. They should be controlled by manual removal or the application of appropriate herbicides. Manual removal should not be carried out by any machinery larger than a chainsaw. For additional information on alien vegetation clearing management visit the Working for Water website (<a href="http://www.dwaf.gov.za/wfw/Control/">http://www.dwaf.gov.za/wfw/Control/</a>)</li> <li>Areas of soil that are disturbed by the maintenance activity should be revegetated with appropriate indigenous vegetation such as the species listed in this report. Revegetation should take place immediately after construction. As mentioned in the previous mitigation measures, method statements for alien vegetation clearing and revegetation with indigenous plants should be addressed in an MMP for the site.</li> </ul>		
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low	Medium	Medium

Impact on biological aspects:			
	Alternative 1 (Preferred)		No-go Alternative
Nature of impact:	<b>Physical Impact on the rivers and wetlands.</b>		
Extent and duration of impact:	Local (L)-3-Within a 20 km radius of the centre of the site Permanent (5)		
Probability of occurrence:	Definite (D) 5		Highly probable (HP) 4
Degree to which the impact can be reversed:	Partly reversible (PR)		Partly reversible (PR)
Degree to which the impact may cause irreplaceable loss of resources:	Resource may be partly destroyed (PR)		
Cumulative impact prior to mitigation:	9.6 m <sup>2</sup> of wetland was lost. Flow modification is limited to absent. Road crossings will impede flow. No wetland area was evident within the immediate area of the stream crossing. The area mapped as valley bottom wetland area comprises largely of a relatively steep stream bank. The small wider stream corridor upstream of the site is also mapped as an aquatic Critical Biodiversity Area buffer due to the largely natural vegetation that still occurs along the steep river bank a		Should the authorities decide not to allow any development, it seems probable that the current river functioning will be more or less similar to the post construction phase.

	<p>short distance upstream of the site.</p> <p>The ecological condition of the stream at the site is considered to be in a moderately modified within the channel and seriously modified along the riparian areas due largely to the surrounding agricultural activities. The ecological importance and sensitivity of the stream is moderate. Aerial images taken within the past 50 years show that there has been very little alteration to the channel course or the surrounding land cover for this period. The small farm dam on the northern bank of the stream was constructed after 1966 but before 1980. An informal crossing has been used from time to time through the stream at the site. Freshwater Opinion report: Road crossing on Portion 1 of Farm Bloubank No. 52, Tulbagh March 2017</p>		
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium		Medium-High
Degree to which the impact can be mitigated:	Partly- mitigatable (PM)		Un-mitigatable (UM)
Proposed mitigation:	Rehabilitate river and wetland in accordance with FRESHWATER RESOURCE REHABILITATION AND IMPLEMENTATION PLAN FOR THE PROPOSED IDAS VALLEY RESIDENTIAL DEVELOPMENT ON ERF 9445, STELLENBOSCH, WESTERN CAPE PROVINCE dated September 2018		NA
Cumulative impact post mitigation:	<ul style="list-style-type: none"> <li>Ongoing monitoring and management of the disturbed areas within the stream channel and riparian zone should be undertaken to ensure that the area stays clear of eroded areas and invasive alien plant growth.</li> <li>The stream channel upstream of the crossing should be kept clear of sediment, cobbles and woody debris that could impede flow through the structure during low and higher flow events.</li> <li>The longer term rehabilitation and management of the stream channel at the crossing should be managed by means of the approved Management Maintenance Plan (MMP) for the site. The MMP should include method statements for the removal of sediment and debris upstream of the crossing, revegetation of indigenous plants and control of alien invasive plants as well as erosion control measures should they be required.</li> <li>Control of alien invasive plant species should be undertaken with a specific focus on the invasive plants such <i>Acacia mearnsii</i>, <i>Sesbania punicea</i> and <i>Pennisetum clandestinum</i>. These species are known to do well in riparian and wet habitats. They should be controlled by manual removal or the application of appropriate herbicides. Manual removal should not be carried out by any machinery larger than a chainsaw. For additional information on alien vegetation clearing management visit the Working for Water website (<a href="http://www.dwaf.gov.za/wfw/Control/">http://www.dwaf.gov.za/wfw/Control/</a>)</li> </ul>		Loss of wetland habitat and functioning of river system.

	<ul style="list-style-type: none"> <li>Areas of soil that are disturbed by the maintenance activity should be revegetated with appropriate indigenous vegetation such as the species listed in this report. Revegetation should take place immediately after construction. As mentioned in the previous mitigation measures, method statements for alien vegetation clearing and revegetation with indigenous plants should be addressed in an MMP for the site.</li> </ul>		
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low	Medium	Medium

Impacts on socio-economic aspects:	
Nature of impact:	Positive - formal stream crossing for heavy vehicles. Minimising watercourse impacts and improving access to the property.
Impacts on the cultural-historical aspects:	
Nature of impact:	None.

**(c) Impacts that may result from the decommissioning and closure phase (briefly describe and compare the potential impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the decommissioning and closure phase.**

It is not anticipated that decommissioning of bridge will occur in the near future. Should decommissioning occur, the expected impacts are similar to those listed in the construction phase above with the additional positive impact of rehabilitating the decommissioned area to a near natural/indigenous state and negative impact. And negative impact of not providing a formal crossing over the watercourse, which will lead to additional negative impacts as the site will continually be used as watercourse crossing. Impacts must be mitigated and managed according to the best practise techniques/management measures available for that time.

**(d) Any other impacts:**

None identified to date.

**Please note:** If any of the above information is not available, specialist input may be requested.

## 7. SPECIALIST INPUTS/STUDIES AND RECOMMENDATIONS

**Please note:** Specialist inputs/studies that will be undertaken as part of this application. These specialist inputs/studies must take into account the Department's relevant Guidelines on the Involvement of Specialists in EIA Processes available on the Department's website (<http://www.capegateway.gov.za/eadp>). A summary of all the specialist inputs/studies must be provided with the additional information.

Specialist inputs/studies and recommendations:

### Freshwater Opinion Report for the Construction of a Road and Associated Infrastructure on Portion 1 of Farm Bloubank No.52, Tulbagh. March 2017. BlueSience

The new road crossing has been constructed in an unnamed tributary of Klein Berg River (G10E quaternary catchment) in the Berg River System. The tributary has been mapped as a South West Shale Fynbos Channelled Valley Bottom wetland in the Freshwater Ecosystem Priority Areas wetland mapping. The wetland area mapped occurs upstream of the site and incorporates the farm dam on the northern bank of the stream. No wetland area was evident within the immediate area of the stream crossing. The area mapped as valley bottom wetland area comprises largely of a relatively steep stream bank. The small wider stream corridor upstream of the site is also mapped as an aquatic Critical Biodiversity Area buffer due to the largely natural vegetation that still occurs along the steep river bank a short distance upstream of the site.

The ecological condition of the stream at the site is considered to be in a moderately modified within the channel and seriously modified along the riparian areas due largely to the surrounding

agricultural activities. The ecological importance and sensitivity of the stream is moderate. Aerial images taken within the past 50 years show that there has been very little alteration to the channel course or the surrounding land cover for this period. The small farm dam on the northern bank of the stream was constructed after 1966 but before 1980. An informal crossing has been used from time to time through the stream at the site.

The works associated with the culvert structure that has been constructed at the road crossing has largely only resulted in limited change to the bed and banks of the unnamed stream at the site. Considering the history of modification of the river channel as a result of the surrounding agricultural activities and the existing ecological state of the stream, this impact is of a low significance. The structure has sufficient capacity that it is unlikely that it will result in any impedence or diversion of flow in the stream.

The main impacts of the works undertaken are thus a modification/loss of aquatic habitat. With some rehabilitation of the site, this impact could be reduced to being of a very low significance with the potential for a positive impact on the existing ecological condition of the watercourse at the site. Recommendations are provided in the report for the rehabilitation as well as the longer term maintenance and management measures for the site.

The DWS risk rating was also determined to be low. It is thus recommended that, if DWS requires that the activity be authorised as a water use, it be authorised under the General Authorisations for Section 21 (c) and (i) of the National Water Act.

## 8. IMPACT ASSESSMENT SUMMARY

Briefly describe the impacts (as appropriate), significance rating of impacts, mitigation and significance rating of impacts of the activity. This must include an assessment of the significance of all impacts.

Bridge (work completed to date)	
Impacts	Significance rating of impacts after mitigation (Low, Medium, Medium-High, High, Very High):
<b>CONSTRUCTION PHASES</b>	
Physical Impact on the non-perennial river	Low Negative
Temporary construction jobs created	Positive
The impact of the development on archaeological, paleontological and heritage remains	Low Negative
Noise due to construction machinery	Low Negative
<b>OPERATIONAL PHASE</b>	
Physical Impact on the non-perennial river.	Low Negative
The excavation within the watercourse / ESA the removal of aquatic vegetation and disturbance of habitat.	Low Negative
<b>DECOMMISSIONING AND CLOSURE PHASE</b>	
Physical Impact on the non-perennial river by removing bridge.	Low Negative
Temporary jobs created.	Positive
Temporary noise due to decommissioning machinery.	Low Negative
Loss of formal watercourse crossing	High Negative

## 9. SUMMARY OF THE CONSEQUENCES OF/ IMPACTS OF THE UNLAWFULLY COMMENCED ACTIVITY/IES

Please provide a detailed summary of the consequences/impacts of commencement of the activity/ies on the environment.

The ecological condition of the stream at the site is considered to be moderately modified within the channel and seriously modified along the riparian areas due largely to the surrounding agricultural activities. The ecological importance and sensitivity of the stream is moderate. Aerial images taken within the past 50 years show that there has been very little alteration to the channel course or the surrounding land cover for this period. The small farm dam on the northern bank of the stream was constructed after 1966 but before 1980. An informal crossing has been used from time to time through the stream at the site. The works associated with the culvert structure that has been constructed at the road crossing has largely only resulted in limited change to the bed and banks of the unnamed stream at the site. Considering the history of modification of the river channel as a result of the surrounding agricultural activities and the existing ecological state of the stream, this impact is of a

low significance. The structure has sufficient capacity that it is unlikely that it will result in any impedance or diversion of flow in the stream. The main impacts of the works undertaken are thus a modification/loss of aquatic habitat. With some rehabilitation of the site, this impact could be reduced to being of a very low significance with the potential for a positive impact on the existing ecological condition of the watercourse at the site. Recommendations are provided in the freshwater impact assessment report for the rehabilitation as well as the longer term maintenance and management measures for the site.

## 10. OTHER MANAGEMENT, MITIGATION AND MONITORING MEASURES

(a) Over and above the mitigation measures described above, please indicate any additional management, mitigation and monitoring measures.

Refer to all measures proposed within the EMP and MMP.

(b) Describe the ability of the applicant to implement the management, mitigation and monitoring measures.

Owner will ensure measures are implemented as agreed by signing the application.

**Please note:** A draft **ENVIRONMENTAL MANAGEMENT PROGRAMME** must be attached to this application as **Appendix I**.

## SECTION G: ASSESSMENT METHODOLOGIES AND CRITERIA, GAPS IN KNOWLEDGE, UNDERLYING ASSUMPTIONS AND UNCERTAINTIES

(a) Please describe adequacy of the assessment methods used.

Based on the EAP's assessment information was provided to address the concerns and assess the impacts of the proposed development on the environment.

Information as provided by the applicant and specialists and as collected by the EAP during site surveys etc. has been used by the to inform this report. .

(b) Please describe the assessment criteria used.

Criteria	Description		
<b>Nature</b>	a description of what causes the effect, what will be affected, and how it will be affected.		
	<b>Type</b>	<b>Score</b>	<b>Description</b>
<b>Extent (E)</b>	None (No)	1	Footprint
	Site (S)	2	On site or within 100 m of the site
	Local (L)	3	Within a 20 km radius of the centre of the site
	Regional (R)	4	Beyond a 20 km radius of the site
	National (Na)	5	Crossing provincial boundaries or on a national / land wide scale
<b>Duration (D)</b>	Short term (S)	1	0 – 1 years
	Short to medium (S-M)	2	2 – 5 years
	Medium term (M)	3	5 – 15 years
	Long term (L)	4	> 15 years
	Permanent (P)	5	Will not cease
<b>Magnitude (M)</b>	Small (S)	0	will have no effect on the environment
	Minor (Mi)	2	will not result in an impact on processes
	Low (L)	4	will cause a slight impact on processes
	Moderate (Mo)	6	processes continuing but in a modified way
	High (H)	8	processes are altered to the extent that they temporarily cease
<b>Probability (P)</b> the likelihood of the impact actually occurring. Probability is estimated on a scale, and a score assigned	Very improbable (VP)	1	probably will not happen
	Improbable (I)	2	some possibility, but low likelihood
	Probable (P)	3	distinct possibility
	Highly probable (HP)	4	most likely
	Definite (D)	5	impact will occur regardless of any prevention measures
<b>Significance (S)</b>	Determined through a synthesis of the characteristics described above: <b>S = (E+D+M) x P</b> Significance can be assessed as low, medium or high		
<b>Low: &lt; 30 points:</b>	The impact would not have a direct influence on the decision to develop in the area		
<b>Medium: 30 – 60 points:</b>	The impact could influence the decision to develop in the area unless it is effectively mitigated		
<b>High: &gt; 60 points:</b>	The impact must have an influence on the decision process to develop in the area		
<b>No significance</b>	When no impact will occur or the impact will not affect the environment		
<b>Status</b>	Positive (+)		Negative (-)
<b>The degree to which the impact can be reversed</b>	Completely reversible (R)	90-100%	The impact can be mostly to completely reversed with the implementation of the correct mitigation and rehabilitation

	Partly reversible (PR)	6-89%	measures. The impact can be partly reversed providing that mitigation measures as stipulated in the EMP are implemented and rehabilitation measures are undertaken
	Irreversible (IR)	0-5%	The impact cannot be reversed, regardless of the mitigation or rehabilitation measures taking place
<b>The degree to which the impact may cause irreplaceable loss of resources</b>	Resource will not be lost (R)	1	The resource will not be lost or destroyed provided that mitigation and rehabilitation measures as stipulated in the EMP are implemented
	Resource may be partly destroyed (PR)	2	Partial loss or destruction of the resources will occur even though all management and mitigation measures as stipulated in the EMP are implemented
	Resource cannot be replaced (IR)	3	The resource cannot be replaced no matter which management or mitigation measures are implemented.
<b>The degree to which the impact can be mitigated</b>	Completely mitigatable (CM)	1	The impact can be completely mitigated providing that all management and mitigation measures as stipulated in the EMP are implemented
	Partly mitigatable (PM)	2	The impact cannot be completely mitigated even though all management and mitigation measures as stipulated in the EMP are implemented. Implementation of these measures will provide a measure of mitigatability
	Un-mitigatable (UM)	3	The impact cannot be mitigated no matter which management or mitigation measures are implemented.

(c) Please describe the gaps in knowledge.

EAP is only knowledgeable with regards to the biodiversity and ecosystem aspects.

(d) Please describe the underlying assumptions.

In undertaking the investigation and compiling this report, the following has been assumed:

- The information provided by the client and all specialists is accurate and unbiased;
- The scope of this investigation is to assess the direct and cumulative environmental impacts associated with the development.

(e) Please describe the uncertainties.

None at this stage.

## SECTION H: RECOMMENDATIONS OF THE EAP

In my view (EAP), the information contained in the Application and the documentation attached hereto is sufficient to make a decision in respect of the activity applied for.	YES	NO
If "NO", list the aspects that should be further assessed through additional specialist input/assessment:		
If "YES", please indicate below whether in your opinion the applicant should be directed to cease the activity or if it should be authorised:		
Applicant should be directed to cease the activity:	YES	NO
Please provide reasons for your opinion		
<p>The ecological condition of the stream at the site is considered to be moderately modified within the channel and seriously modified along the riparian areas due largely to the surrounding agricultural activities. The ecological importance and sensitivity of the stream is moderate. Aerial images taken within the past 50 years show that there has been very little alteration to the channel course or the surrounding land cover for this period. The small farm dam on the northern bank of the stream was constructed after 1966 but before 1980. An informal crossing has been used from time to time through the stream at the site.</p> <p>The works associated with the culvert structure that has been constructed at the road crossing has largely only resulted in limited change to the bed and banks of the unnamed stream at the site. Considering the history of modification of the river channel as a result of the surrounding agricultural activities and the existing ecological state of the stream, this impact is of a low significance. The structure has sufficient capacity that it is unlikely that it will result in any impedance or diversion of flow in the stream.</p> <p>The main impacts of the works undertaken are thus a modification/loss of aquatic habitat. With some rehabilitation of the site, this impact could be reduced to being of a very low significance with the potential for a positive impact on the existing ecological condition of the watercourse at the site. Recommendations are provided in the report for the rehabilitation as well as the longer term</p>		



maintenance and management measures for the site.

If you are of the opinion that the activity should be authorised, then please provide any conditions, including mitigation measures that should in your view be considered for inclusion in an authorisation.

- Ongoing monitoring and management of the disturbed areas within the stream channel and riparian zone should be undertaken to ensure that the area stays clear of eroded areas and invasive alien plant growth.
- The stream channel upstream of the crossing should be kept clear of sediment, cobbles and woody debris that could impede flow through the structure during low and higher flow events.
- The longer term rehabilitation and management of the stream channel at the crossing should be managed by means of the approved Management Maintenance Plan (MMP) for the site. The MMP should include method statements for the removal of sediment and debris upstream of the crossing, revegetation of indigenous plants and control of alien invasive plants as well as erosion control measures should they be required.
- Control of alien invasive plant species should be undertaken with a specific focus on the invasive plants such as *Acacia mearnsii*, *Sesbania punicea* and *Pennisetum clandestinum*. These species are known to do well in riparian and wet habitats. They should be controlled by manual removal or the application of appropriate herbicides. Manual removal should not be carried out by any machinery larger than a chainsaw. For additional information on alien vegetation clearing management visit the Working for Water website (<http://www.dwaf.gov.za/wfw/Control/>)
- Areas of soil that are disturbed by the maintenance activity should be revegetated with appropriate indigenous vegetation such as the species listed in this report. Re-vegetation should take place immediately. As mentioned in the previous mitigation measures, method statements for alien vegetation clearing and revegetation with indigenous plants should be addressed in an MMP for the site.
- Implementation of EMP and MMP.

## SECTION I: REPRESENTATIONS – RESPONSE TO AN INCIDENT OR EMERGENCY SITUATION

This section is only applicable to instances where Section 49A (2) of NEMA applies. Please list all steps that were taken in response to the incident or emergency situation.

NA

**Please note:**

Section 30 of NEMA deals with the procedures to be followed for the control of emergency incidents and Section 30A deals with procedures to be followed in the case of emergency situations.

## SECTION J: PUBLIC PARTICIPATION

### 1. PUBLIC PARTICIPATION PROCESS TO BE FOLLOWED

#### 1.1 THE PUBLIC PARTICIPATION PROCESS IN TERMS OF THE SECTION 24G FINE REGULATIONS, 2017

Regulation 8 of the Section 24G Fine Regulations require that all applicants must conduct public participation **prior to submission** of a section 24G application (as outlined in Annexure A of the Section 24G Fine Regulations - Section D: Preliminary Advertisement).

**"The applicant must place a preliminary advertisement in-**

(1) A local newspaper in circulation in the area in which the activity was, or activities were, commenced; and on the applicant's website, if any.

(2) This advertisement must comply with the requirements set out in Annexure A, Section D of the Section 24G Fine Regulations, 2017.

(3) The applicant must open and maintain a register of interested and affected parties.

(4) The **register must be attached to the application form and included in the report**, or form part of the information submitted in terms of section 24G(1) of the Act, which the register must, as a minimum, contain the names, contact details and addresses of-

(a) all persons who, as a consequence of the public participation process conducted in respect of the application, have submitted written comments or attended meetings with the applicant or any environmental assessment practitioner or other specialist appointed by the applicant to assist with the application;

(b) all persons who have requested the applicant, in writing, to place their names on the register; and

(c) all organs of state that have jurisdiction in respect of the activity to which application relates."

Please provide a summary of the steps followed where public participation was undertaken in accordance with Regulation 8 prior to submission of this Application Form. Ensure that proof of compliance with Regulation 8 is submitted with this Application Form, including, *inter alia*, proof of preliminary advertisement in a local newspaper.

See appendix G.

Please indicate whether the applicant has a website (please tick relevant box):

YES

NO

If yes, please note that the application information as specified above must have been advertised on such website and proof thereof must accompany this application.

Please note: Annexure A: Section D attached to this Application form must be strictly adhered to.

## 1.2 THE PUBLIC PARTICIPATION PROCESS IN TERMS OF NEMA EIA REGULATIONS, 2014

As the applicant, you may be directed to conduct the public participation process that fulfils the requirements outlined in Chapter 6 of the EIA Regulations, 2014. In doing so, you must take into account any applicable guidelines published in terms of Section 24J of NEMA, the Department's Circular EADP 0028/2014 on the "One Environmental Management System" and the EIA Regulations, 2014 as well as any other guidance provided by the Department. Note that the public participation requirements are applicable to all proposed sites.

Please highlight the appropriate box below to indicate the public participation process that has been or will be undertaken to give notice of the application to all potential interested and affected parties, including deviations that may be agreed to by the competent authority:

1. In terms of regulation 41 of the EIA Regulations, 2014 -			
(a) fixing a notice board at a place conspicuous to and accessible by the public at the boundary, on the fence or along the corridor of -			
(i) the site where the activity to which the application relates is or is to be undertaken; and	YES	DEVIATION	
(ii) any alternative site	YES	DEVIATION	
(b) giving written notice, in any manner provided for in section 47D of the NEMA, to -			
(i) the occupiers of the site and, if the applicant is not the owner or person in control of the site on which the activity is to be undertaken, the owner or person in control of the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;	YES	DEVIATION	N/A
(ii) owners, persons in control of, and occupiers of land adjacent to the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;	YES	DEVIATION	
(iii) the municipal councillor of the ward in which the site or alternative site is situated and any organisation of ratepayers that represent the community in the area;	YES	DEVIATION	
(iv) the municipality (Local and District Municipality) which has jurisdiction in the area;	YES	DEVIATION	
(v) any organ of state having jurisdiction in respect of any aspect of the activity; and	YES	DEVIATION	
(vi) any other party as required by the Department;	YES	DEVIATION	N/A
(c) placing an advertisement in -			
(i) one local newspaper; or	YES	DEVIATION	
(ii) any official Gazette that is published specifically for the purpose of providing public notice of applications or other submissions made in terms of these Regulations;	YES	DEVIATION	N/A
(d) placing an advertisement in at least one provincial newspaper or national newspaper, if the activity has or may have an impact that extends beyond the boundaries of the metropolitan or district municipality in which it is or will be undertaken	YES	DEVIATION	N/A
(e) using reasonable alternative methods, as agreed to by the Department, in those instances where a person is desirous of but unable to participate in the process due to— (i) illiteracy; (ii) disability; or (iii) any other disadvantage.	YES	DEVIATION	N/A
If you have indicated that "DEVIATION" applies to any of the above, then Section 2. below must be completed.			
NOTE: 2. The NEM: WA requires that a notice must be placed in at least two newspapers.			
If applicable, have/will an advertisement be placed in at least two newspapers?	YES	NO	
If "NO", then an application for exemption from the requirement must be applied for.			
NOTE: Thus far the only public participation that has been conducted is placement of the newspaper notice in a local newspaper. Additional public participation as described above will be conducted upon instruction of the competent authority if deemed necessary.			

1. Provide a list of all the state departments that will be consulted:		
List of State Depts.	Comment obtained (YES/NO)	If not, provide reasons
DEA&DP Pollution Management	No	Reports to be sent for comment
DEA&DP Waste Management	No	Reports to be sent for comment
DEA&DP Development Management	No	Reports to be sent for comment
Cape Winelands District Municipality	No	Reports to be sent for comment
CapeNature	No	Reports to be sent for comment

Department of Agriculture	No	Reports to be sent for comment
Breede Gouritz Catchment Management Agency	No	Reports to be sent for comment
Heritage Western Cape	No	Reports to be sent for comment
Witzenberg Municipality	No	Reports to be sent for comment

**2. Provide a summary of the issues raised by I&APs and an indication of the manner in which the issues raised were incorporated, or the reasons for not being incorporated or addressed.  
(The details of the outcomes of this process, including supporting information must be included in the Comments and Report to be attached to this application as Appendix G.)**

Thus far no issues has been raised by any registered I&APs, only FC Orffer Trust requested to be registered and a I&AP in response to the advertisement that was placed in the Witzenberg Herald.

**3. Provide a summary of any conditional aspects identified / highlighted by any Organs of State, which have jurisdiction in respect of any aspect of the relevant activity.**

None as of yet.

**Please note:**

- A list of all the potential interested and affected parties, including the organs of State must be opened, maintained and made available to any person requesting access, in writing, to the register.
- All comments of interested and affected parties on the Application Form and Additional Information must be recorded, responded to and included in the Comments and Responses Report attached as Appendix G to the Application. The Comments and Responses Report must also include a description of the Public Participation Process followed.
- The minutes of any meetings held by the EAP with interested and affected parties and other role players which record the views of the participants must also be submitted as part of the public participation information to be attached to the additional information/Environmental Impact Report as Appendix G.
- Proof of all the notices given as indicated, as well as of notice to the interested and affected parties of the availability of the Application Form/Additional Information must be submitted as part of the public participation information to be attached to the application as Appendix G.

**2. REPRESENTATIONS REGARDING DEVIATION FROM PUBLIC PARTICIPATION REQUIREMENTS IN TERMS OF THE EIA REGULATIONS, 2014**

Please provide detailed reasons (representations) as to why it would be appropriate not direct you to comply with all of the requirements and to deviate from the requirements of regulation 41 as indicated above.

NA

**3. LIST OF STATE DEPARTMENTS**

Section 24(O)(2) obliges the relevant authority to consult with every State department that administers a law relating to a matter affecting the environment when such authority considers an application for an environmental authorisation.

Provide a list of all the State departments that will be/have been consulted, including the name and contact details of the relevant official.

State Department	Name of person	Contact details
DEA&DP Pollution and Chemicals Management	The Director: Wilna Klopers	Tel 021 483 2752
		Fax 021 483 3254
		E-mail Wilna.klopers@westerncape.gov.za
DEA&DP Waste Management	The Director: Mr E Hanekom	Tel 021 483 2728
		Fax 021 483 4425
		E-mail ehanekom@westerncape.gov.za
Cape Winelands District Municipality	Municipal Manager, Mayor & W.C.	Tel 021 888 5272
		Fax 021 887 3451
		E-mail mm@capewinelands.gov.za
CapeNature	Mr Rhett Smart	Tel 021 866 8000
		Fax 021 866 1523
		E-mail rsmart@capenature.co.za
Western Cape Department of	Mr Cor van der Walt	Tel 021 808 5099

Agriculture		Fax	021 808 5092
		E-mail	landuse.elsenburg@elsenburg.com
Breede Gouritz Catchment Management Agency	Elkerine Ressouw	Tel	023 346 8000
		E-mail	erossouw@bgcma.co.za
Heritage Western Cape	Mr Calvin van Wijk	Tel	021 483 9842
		Fax	021 183 9842
		E-mail	Calvin.vanwijk@westerncape.gov.za
Witzenberg Municipality	The Municipal Manager/ Mayor and Municipal Ward Councillors	Tel	023 316 1854
		Fax	023 316 1877
		E-mail	admin@witzenberg.gov.za
DEA&DP:Development Management (Region 2)	The Director: Henri Fortuin	Tel	021 483 3679
		Fax	021 48 3633
		E-mail	Henri.Fortuin@westerncape.gov.za

**Please note:**

A State department consulted in terms of Section 24O(2) of NEMA and Regulations 3(4) and 43(2) must within 30 days from the date of the Department/EAP's request for comment, submit such comment in writing to the Department. The applicant/EAP is therefore required to inform this Department in writing when the application/relevant information is submitted to the relevant State Departments. Upon receipt of this confirmation, this Department will in accordance with Section 24O (2) & (3) of the NEMA inform the relevant State Departments of the commencement date of the 30-day commenting period.

## PART 2 – ANNEXURE A TO THE SECTION 24G APPLICATION FORM

### SECTION A: DIRECTIVES

Section 24G(1) of NEMA provides that on application by a person who has commenced with a listed or specified activity without an environmental authorisation in contravention of section 24F(1); or a person who has commenced, undertaken or conducted a waste management activity without a waste management licence in terms of section 20(b) of the National Environment Management: Waste Act, 2008 (Act 59 of 2008) ("NEM:WA") the Minister, the Minister responsible for mineral resources or the MEC concerned (or the official to which this power has been delegated), as the case may be, may direct the applicant to-

i	immediately cease the activity pending a decision on the application submitted in terms of this subsection	
ii	investigate, evaluate and assess the impact of the activity on the environment	
iii	remedy any adverse effects of the activity on the environment	
iv	cease, modify or control any act, activity, process or omission causing pollution or environmental degradation	
v	contain or prevent the movement of pollution or degradation of the environment	
vi	eliminate any source of pollution or degradation	
vii	compile a report containing-	
	aa	a description of the need and desirability of the activity
	bb	an assessment of the nature, extent, duration and significance of the consequences for or impacts on the environment of the activity, including the cumulative effects and the manner in which the geographical, physical, biological, social, economic and cultural aspects of the environment may be affected by the proposed activity
	cc	a description of mitigation measures undertaken or to be undertaken in respect of the consequences for or impacts on the environment of the activity
	dd	a description of the public participation process followed during the course of compiling the report, including all comments received from interested and affected parties and an indication of how the issues raised have been addressed
	ee	an environmental management programme
viii	provide such other information or undertake such further studies as the Minister, Minister responsible for mineral resources or MEC, as the case may be, may deem necessary.	

You are hereby provided with an opportunity to make representations on any or all of the abovementioned instructions including where you are of the opinion that any of these instructions are not relevant for the purposes of your application setting out the reasons for your assertion. Kindly note further that after taking your representation into account a final directive may be issued.

**Please Note:**

**Notwithstanding the above, subsequent to submission of the application form to the Department, you may be issued with a specific directive in terms of section 24G(1)(i) to (viii), and you will therefore be provided with an opportunity to make further representations as to the specific directive.**

**The appointed Environmental Assessment Practitioner, on behalf of the applicant, may be directed to compile and submit a report that meets the requirements of section 24G(vii)(aa)-(ee) as specified above.**

## SECTION B: DEFERRAL OF THE APPLICATION

Section 24G(7) of the NEMA provides that if at any stage after the submission of an application it comes to the attention of the Minister, the Minister responsible for mineral resources or the MEC, that the applicant is under criminal investigation for the contravention of, or failure to comply with, section 24F(1) of the NEMA or section 20(b) of the NEM:WA, the Minister, Minister responsible for mineral resources or MEC may defer a decision to issue an environmental authorisation until such time as the investigation is concluded and-

- (a) the National Prosecuting Authority has decided not to institute prosecution in respect of such contravention or failure;
- (b) the applicant concerned is acquitted or found not guilty after prosecution in respect of which such contravention or failure has been instituted; or
- (c) the applicant concerned has been convicted by a court of law of an offence in respect of such contravention or failure and the applicant has in respect of the conviction exhausted all the recognised legal proceedings pertaining to appeal or review.

Kindly answer the following questions:

Are you, the applicant, being investigated for a contravention of section 24F(1) of the NEMA in respect of a matter that <u>is not subject to this application</u> and in any province in the Republic?	YES _____	NO _____	UNCERTAIN _____
If yes provide details of the offence being investigated and authority conducting the investigation. If uncertain provide details of the activity or activities in relation to which you suspect you may be under investigation.			
Are you, the applicant, being investigated for the contravention of section 20(b) of the NEMWA in respect of a matter that <u>is not subject to this application</u> and in any province in the Republic?	YES _____	NO _____	UNCERTAIN _____
If yes provide details of the offence being investigated and authority conducting the investigation. If uncertain provide details of the activity or activities in relation to which you suspect you may be under investigation.			
Are you, the applicant, being investigated for an offence in terms of section 24F(1) of the NEMA or section 20(b) of the NEMWA <u>in terms of which this application directly relates</u> ?	YES _____	NO _____	UNCERTAIN _____
If yes provide details of the offence being investigated and authority conducting the investigation. If uncertain provide details of the activity or activities in relation to which you suspect you may be under			

investigation.

If you have answered yes or uncertain to any of the above questions, you are hereby provided with an opportunity to make representations as to why the Minister, Minister responsible for mineral resources or MEC, as the case may be, should not defer the application as he or she is entitled to do under section 24G(7).

## SECTION C: QUANTUM OF THE SECTION 24G FINE

In terms of section 24G(4) of the NEMA, it is mandatory for an applicant to pay an administrative fine as determined by the competent authority before the Minister, Minister responsible for mineral resource or MEC may take a decision on whether or not to grant an *ex post facto* environmental authorisation or a waste management licence as the case may be. The quantum of this fine may not exceed R5 million.

Having regard to the factors listed below, you are hereby afforded with an opportunity to make representations in respect of the quantum of the fine and as to why the competent authority should not issue a maximum fine of R5 million.

Please note that Part 1 of this section must be completed by an independent environmental assessment practitioner after conducting the necessary specialist studies, copies of which must be submitted with this completed application form.

Please also include in your representations whether or not the activities applied for in this application (if more than 1) are in your view interrelated and provide reasons therefor.

### PART 1: THE IMPACTS OR POTENTIAL IMPACTS OF THE ACTIVITY/ACTIVITIES

Index	Socio Economic Impact	Place an "x" in the appropriate box
	Description of variable	
	The activity is not giving, has not given and will not give rise to any negative socio-economic impacts	X
	The activity is giving, has given, or could give rise to negative socio-economic impacts, but highly localised	
	The activity is giving, has given, or could give rise to significant negative socio-economic and regionalized impacts	
	The activity is resulting, has resulted or could result in wide-scale negative socio-economic impacts.	
	Motivation: <i>Work completed to date including the construction of the bridge culverts has not given rise to any negative socio-economic impacts.</i>	

Index	Biodiversity Impact	Place an "x" in the appropriate box
	Description of variable	
	The activity is not giving, has not given and will not give rise to any impacts on biodiversity	
	The activity is giving, has given or could give rise to localised biodiversity impacts	X
	The activity is giving, has given or could give rise to significant biodiversity impacts	
	The activity is, has or is likely to permanently / irreversibly transform/ destroy a recognised biodiversity 'hot-spot' or threaten the existence of a species or sub-species.	
	Motivation: <i>The ecological condition of the stream at the site is considered to be in a moderately modified within the channel and seriously modified along the riparian areas due largely to the surrounding agricultural activities. The ecological importance and sensitivity of the stream is moderate. Aerial images taken within the past 50 years show that there has been very little alteration to the channel course or the surrounding land cover for this period. The small farm dam on the northern bank of the stream was constructed after 1966 but before 1980. An informal crossing has been used from time to time through the stream at the site. The works associated with the culvert structure that has been constructed at the road crossing has largely</i>	



only resulted in limited change to the bed and banks of the unnamed stream at the site. Considering the history of modification of the river channel as a result of the surrounding agricultural activities and the existing ecological state of the stream, this impact is of a low significance. The structure has sufficient capacity that it is unlikely that it will result in any impedance or diversion of flow in the stream.

The main impacts of the works undertaken are thus a modification/loss of aquatic habitat. With some rehabilitation of the site, this impact could be reduced to being of a very low significance with the potential for a positive impact on the existing ecological condition of the watercourse at the site. Recommendations are provided in the report for the rehabilitation as well as the longer term maintenance and management measures for the site.

Index	Sense of Place Impact and / or Heritage Impact	Place an "x" in the appropriate box
	Description of variable	
	The activity is in keeping with the surrounding environment and / or does not negatively impact on the affected area's sense of place and /or heritage	
	The activity is not in keeping with the surrounding environment and will have a localised impact on the affected area's sense of place and/or heritage	X
	The activity is not in keeping with the surrounding environment and will have a significant impact on the affected area's sense of place and/ or heritage	
	The activity is completely out of keeping with the surrounding environment and will have a significant impact on the affected area's sense of place and/ or heritage	
<p>Motivation:</p> <p>The ecological condition of the stream at the site is considered to be in a moderately modified condition within the channel and seriously modified along the riparian areas due largely to the surrounding agricultural activities. The ecological importance and sensitivity of the stream is moderate. Aerial images taken within the past 50 years show that there has been very little alteration to the channel course or the surrounding land cover for this period. The small farm dam on the northern bank of the stream was constructed after 1966 but before 1980. An informal crossing has been used from time to time through the stream at the site.</p> <p>The works associated with the culvert structure that has been constructed at the road crossing has largely only resulted in limited change to the bed and banks of the unnamed stream at the site. Considering the history of modification of the river channel as a result of the surrounding agricultural activities and the existing ecological state of the stream, this impact is of a low significance. The structure has sufficient capacity that it is unlikely that it will result in any impedance or diversion of flow in the stream.</p> <p>The main impacts of the works undertaken are thus a modification/loss of aquatic habitat. With some rehabilitation of the site, this impact could be reduced to being of a very low significance with the potential for a positive impact on the existing ecological condition of the watercourse at the site. Recommendations are provided in the report for the rehabilitation as well as the longer term maintenance and management measures for the site.</p>		

Index	Pollution Impact	Place an "x" in the appropriate box
	Description of variable	
	The activity is not giving, has not given and will not give rise to any pollution	X
	The activity is giving, has given or could give rise to pollution with low impacts.	
	The activity is giving, has given or could give rise to pollution with moderate impacts.	
	The activity is giving, has given or could give rise to pollution with high impacts.	
	The activity is giving, has given or could give rise to pollution with major impacts.	
<p>Motivation:</p> <p>There is no physical evidence visible on site that the activity caused any environmental pollution nor is it expected to cause any future pollution.</p>		

## PART 2: COMPLIANCE HISTORY AND KNOWLEDGE OF THE APPLICANT

Index	Previous administrative action (i.e. administrative enforcement notices) issued to the applicant in respect of a contravention of section 24F(1) of the National Environmental Management Act and/or section 20(b) of the National Environmental Management Waste Act	Place an "x" in the appropriate box
	Description of variable	
	Administrative action was previously taken against the applicant in respect of the abovementioned provisions.	

No previous administrative action was taken against the applicant but previous administrative action was taken against a firm(s) on whose board one or more of the applicant's directors sit or sat at the relevant time when the administrative action was taken.	
Administrative action was <b>not</b> previously taken against the applicant in respect of the abovementioned provisions.	X
Explanation of all previous administrative action taken in respect of the above:	

Index	Previous Convictions in terms of section 24F(1) of the National Environmental Management Act and/or section 20(b) of the National Environmental Management Waste Act	Place an "x" in the appropriate box
	Description of variable	
	The applicant was previously convicted in terms of either or both of the abovementioned provisions.	
	No previous convictions have been secured against the applicant but a conviction has been secured against a firm(s) on whose board one or more of the applicant's directors sit or sat at the relevant time; or a conviction was secured against a director of the applicant in his or her personal capacity.	
	The applicant has not previously been convicted in terms of either or both of the abovementioned provisions.	X
Explanation of all previous convictions in respect of the above:		

Index	Number of section 24G applications previously submitted by the applicant	Place an "x" in the appropriate box
	Description of variable	
	Previous applications in terms of section 24G of NEMA were submitted by the applicant.	NA
	No previous applications have been submitted by the applicant but a previous application(s) have been submitted by a firm(s) on whose board one or more of the applicant's directors sit or sat at the relevant time.	
	No previous applications have been submitted by the applicant but the applicant sat on the board of a firm that previously submitted an application.	
Explanation in respect of all previous applications submitted in terms of section 24G:		
No section 24G applications previously submitted by the applicant		

### PART 3: APPLICANT'S PERSONAL CIRCUMSTANCES

Index	Applicant's legal persona	Place an "x" in the appropriate box
	Description of variable	
	The applicant is a natural person.	
	The applicant is a firm.	X
Describe the firm:		
Bloubank Boerdery Trust		

Index	Any other relevant information that the applicant would like to be considered.
	<p>Motivate and explain fully:</p> <p>A full S24G process was initially initiated, but the previous appointed environmental assessment practitioner failed to complete the application process. A new environmental assessment practitioner was appointed in June 2019 to continue with the process.</p> <p>This is noted as it was not the intention of the applicant to commence with a listed activity without the required EA, the applicant was unaware of the requirement for an EA at the time of commencement.</p>

**NOTE: An explanation as to why the applicant did not obtain an environmental authorisation and/or waste management licence must be attached to this application.**

## SECTION D: PRELIMINARY ADVERTISEMENT

When submitting this application form, the applicant must attach proof that the application has been advertised in at least one local newspaper in circulation in the area in which the activity was commenced, and on the applicant's website, if any.

The advertisement must state that the applicant commenced a listed or specified activity or activities or waste management activity or activities without the necessary environmental authorisation and/or waste management licence and is now applying for *ex post facto* approval. It must include the following:

- the date;
- the location;
- the applicable legislative provision contravened; and
- the activity or activities commenced with without the required authorisation.

Interested and affected parties must be provided with the details of where they can register as an interested and affected party and / or submit their comment. At least 20 days must be provided in which to do so.

This advertisement shall be considered as a preliminary notification and the competent authority may direct the applicant to undertake further public participation and advertising after receipt of this application form.

**NOTE:** Unless protected by law, all information contained in and attached to this application form may become public information on receipt by the competent authority. This application must be attached to any documentation or information submitted by an applicant further to section 24G(1).

**PART 3 -****APPENDICES**

The following appendices must, where applicable, be attached to this form:

<b>Appendix</b>		<b>Tick the box if Appendix is attached</b>
<b>Appendix A:</b>	<b>Locality map</b>	X
<b>Appendix B:</b>	<b>Site plan(s)</b>	X
<b>Appendix C:</b>	<b>Building plans (if applicable)</b>	NA
<b>Appendix D:</b>	<b>Colour photographs</b>	X
<b>Appendix E:</b>	<b>Biodiversity overlay map</b>	X
<b>Appendix F:</b>	<b>Permit(s) / license(s) from any other organ of state including service letters from the municipality</b>	NA
<b>Appendix G:</b>	<b>Public participation information: including a copy of the register of interested and affected parties, the comments and responses report, proof of notices, advertisements, Land owner consent and any other public participation information as required in Section J above.</b>	X
<b>Appendix H:</b>	<b>Specialist Report(s), if any</b>	X
	<b>Freshwater Impact Assessment Report</b>	X
<b>Appendix I:</b>	<b>Maintenance Management Plan</b>	X
	<b>Environmental Management Plan</b>	X
<b>Appendix J:</b>	<b>Supporting documents relating to compliance/enforcement history of the applicant, including but not limited to, Pre-compliance/compliance notices, Pre-directives/directives etc.</b>	X
<b>Appendix K:</b>	<b>Trust Registration Document</b>	X
<b>Appendix L:</b>	<b>Copy of the title deed</b>	X
<b>Appendix M:</b>	<b>Any Other (if applicable) (describe)</b>	X
	<b>Heritage Western Cape Notice of Intent to Develop</b>	X

Where an application has been made in terms of the waste management activities, please complete and annex Annexure 1 as in the following:

<b>Annexures for waste listed activity/ies supporting information</b>		<b>Tick the box if Annexure is attached</b>
<b>Annexure 1</b>	<b>Waste listed activities supporting information (as in prescribed attached form)</b>	NA
<b>Other</b>	<b>(please list accordingly)</b>	NA

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## DECLARATIONS

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(Originally signed declarations to be submitted to the Department with the Final Report)