

EIA REFERENCE NUMBER: 16/3/3/1/F5/17/2003/21
NEAS REFERENCE NUMBER: WCP/EIA/0000862/2021
ENQUIRIES: Mr. R. Chambeau
DATE OF ISSUE: 29 JULY 2021

The Municipal Manager
Swartland Municipality
Corner Rainier Street and Church Street
MALMESBURY
7299

For Attention: Ms. C. Fortuin

Tel: (022) 433 3346
E-mail: dirksec@swartland.org.za

Dear Madam

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) AND ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014 (AS AMENDED): THE PROPOSED UPGRADE OF THE LOW WATER STREAM CROSSING TO THE MOORREESBURG WASTEWATER TREATMENT WORKS ("WWTW") ON ERF 2878, MOORREESBURG.

1. With reference to the above application, this Department hereby notifies you of its decision to **grant** Environmental Authorisation, together with the reasons for the decision.
2. In terms of Regulation 4 of the Environmental Impact Assessment Regulations, 2014 (as amended), you are instructed to ensure, within 14 days of the date of the decision on the application, that all registered Interested and Affected Parties ("I&APs") are provided with access to the decision and reasons for the decision, and that all registered I&APs are notified of their right to appeal.
3. Your attention is drawn to Chapter 2 of the National Appeal Regulations, 2014 (as amended), which prescribes the appeal procedure to be followed. This procedure is summarised in the Environmental Authorisation below.

Yours faithfully

MR. ZAAHIR TOEFY
DIRECTOR: DEVELOPMENT MANAGEMENT (REGION 1)

Copies to: (1) Ms. A. Siebritz (Zutari (Pty) Ltd)
(2) Mr. J. Scholtz (Swartland Municipality)

E-mail: Andrea.Siebritz@zutari.co.za
E-mail: joggies@swartland.org.za

ENVIRONMENTAL AUTHORISATION

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) AND ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014 (AS AMENDED): THE PROPOSED UPGRADE OF THE LOW WATER STREAM CROSSING TO THE MOORREESBURG WASTEWATER TREATMENT WORKS ("WWTW") ON ERF 2878, MOORREESBURG.

With reference to your application for the abovementioned, find below the outcome with respect to this application.

DECISION

By virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA") and the Environmental Impact Assessment ("EIA") Regulations, 2014 (as amended), the Competent Authority herewith **grants Environmental Authorisation** to the applicant to undertake the listed activities specified in section B below with respect to Design Alternative 1 (i.e. the Preferred Alternative), described in the Basic Assessment Report ("BAR") dated 12 April 2021.

The applicant for this Environmental Authorisation is required to comply with the conditions set out in section F below.

A. DETAILS OF THE APPLICANT FOR THIS ENVIRONMENTAL AUTHORISATION

The Municipal Manager
 Swartland Municipality
 Corner Rainier Street and Church Street
MALMESBURY
 7299

Tel: (022) 433 3346
 Email: dirksec@swartland.org.za

The abovementioned applicant is the holder of this Environmental Authorisation and is hereinafter referred to as "**the holder**".

B. ACTIVITY AUTHORISED

Listed Activity	Activity/Project Description
Listing Notice 1 of the EIA Regulations, 2014, (as amended): Activity Number: 12 Activity Description:	

<p><i>"The development of-</i></p> <ul style="list-style-type: none"> <i>(i) dams or weirs, where the dam or weir, including infrastructure and water surface area, exceeds 100 square metres; or</i> <i>(ii) infrastructure or structures with a physical footprint of 100 square metres or more;</i> <p><i>where such development occurs-</i></p> <ul style="list-style-type: none"> <i>(a) within a watercourse;</i> <i>(b) in front of a development setback; or</i> <i>(c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse; -</i> <p><i>excluding-</i></p> <ul style="list-style-type: none"> <i>(aa) the development of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour;</i> <i>(bb) where such development activities are related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies;</i> <i>(cc) activities listed in activity 14 in Listing Notice 2 of 2014 or activity 14 in Listing Notice 3 of 2014, in which case that activity applies;</i> <i>(dd) where such development occurs within an urban area;</i> <i>(ee) where such development occurs within existing roads, road reserve or railway line reserves; or</i> <i>(ff) the development of temporary infrastructure or structures where such infrastructure or structures will be removed within 6 weeks of the commencement of development and where indigenous vegetation will not be cleared."</i> 	<p>The upgrade of the low-level crossing will be developed within the Moorreesburgspruit River. The infrastructure includes the upgrading of the current bridge, the culverts and the development of a temporary bridge. This infrastructure will have a footprint larger than 100 square meters.</p>
<p>Listing Notice 1 of the EIA Regulations, 2014, (as amended):</p> <p>Activity Number: 19 Activity Description:</p> <p><i>"The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse;</i></p> <p><i>but excluding where such infilling, depositing, dredging, excavation, removal or moving—</i></p>	<p>More than 10 cubic metres of material (pebbles, rock and sand) will be used and moved within a watercourse during the development phase.</p>

<p>(a) will occur behind a development setback;</p> <p>(b) is for maintenance purposes undertaken in accordance with a maintenance management plan;</p> <p>(c) falls within the ambit of activity 21 in this Notice, in which case that activity applies;</p> <p>(d) occurs within existing ports or harbours that will not increase the development footprint of the port or harbour; or</p> <p>(e) where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies."</p>	
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The abovementioned list is hereinafter referred to as "the listed activities".

The holder is herein authorised to undertake the following alternative that includes the listed activities relating to the authorised development.

The authorised development entails the upgrade of an existing low water bridge crossing and associated infrastructure on Erf 2878, Moorreesburg.

The existing low water bridge crossing consists of four 600mm diameter concrete stormwater pipes, which is insufficient to allow for the free flow of water during high rainfall events. The existing low water bridge crossing therefore floods during high rainfall events, which prevents access to the Moorreesburg Wastewater Treatment Works ("WWTW"). The existing low water bridge is the only exit and entry point to the Moorreesburg WWTW and therefore service delivery is delayed when the low water bridge floods.

The existing concrete stormwater pipes will be therefore be replaced with four precast rectangular culverts with scour protection along the riverbed and embankment. The culverts will be placed in the same location as the existing concrete stormwater pipes. The culverts will be installed perpendicular to the access road, parallel with the river flow and on the same riverbed level as currently is, maintaining the current flow of the Moorreesburgspruit River.

Gabions (for erosion protection) and wingwalls will be situated upstream and downstream of the proposed culverts. Gabion boxes and reno-mattresses will be installed to prevent scour and soil erosion downstream of the culvert. The wing walls (to channel the stormwater through the culverts) will be cast on site and will extend 3m on the upstream and downstream side of the culverts. The existing embankment, stream bed and flow path of the Moorreesburgspruit River will be maintained.

A concrete cut-off berm will be installed upstream and downstream of the wing walls to prevent undermining and erosion of the riverbed. The areas around the wing-walls will be backfilled and shaped.

In order to maintain access to the Moorreesburg WWTW during the upgrade of the low water bridge crossing, a Temporary bypass will be developed and used.

The temporary bypass will comprise of two 450mm diameter concrete stormwater pipes to create a single lane (3m wide) track on the upstream of the proposed culverts. The stormwater pipes will be installed on the existing riverbed to maintain the existing water flow of the Moorreesburgspruit River.

Construction will only take place in the dry season to avoid work in wet conditions. When the new bridge is sufficiently constructed, the temporary bypass will be removed, and the inlet area reshaped to resemble a natural look and promote revegetation of the area.

The total development footprint will be approximately 100m² in extent.

C. SITE DESCRIPTION AND LOCATION

The authorised listed activities will be undertaken Erf 2878, Moorreesburg.

The 21-digit Surveyor General code for the proposed site is:

Erf 2878, Moorreesburg	C04600100000287800000
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Site co-ordinates for the proposed sites are:

Start point	33° 07' 57.18" South	18° 39' 15.23" East
End Point	33° 07' 57.20" South	18° 39' 15.59" East

Refer to Annexure 1: Locality Plan and Annexure 2: Site Development Plan.

The said section of land is hereinafter referred to as "**the site**".

D. DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

Zutari (Pty) Ltd.
c/o Ms. Andrea Siebritz
1 Century City Drive
Century City
CAPE TOWN
7446

Tel.: (021) 526 9595
Email: Andrea.Siebritz@zutari.co.za

E. CONDITIONS OF AUTHORISATION

Scope of authorisation

1. The holder is authorised to undertake the listed activities specified in Section B above in accordance with and restricted to the Design Alternative 1 (i.e. the Preferred Alternative) described in the BAR dated 12 April 2021 on the site described in Section C above.
2. The holder must commence with the listed activities on the site within a period of **five (5) years** from the date of issue of this Environmental Authorisation.
3. The development/construction activities must be **concluded** within **ten (10) years** from the date of commencement of the listed activities.
4. The holder shall be responsible for ensuring compliance with the conditions by any person acting on his/her behalf, including an agent, sub-contractor, employee or any person rendering a service to the holder.
5. Any changes to, or deviations from the scope of the alternatives described in section B above must be approved in writing by the Competent Authority, before such changes or deviations may be implemented. In assessing whether to grant such acceptance/approval or not, the Competent Authority may request information in order to evaluate the significance and impacts of such changes or deviations, and it may be necessary for the holder to apply for further authorisation in terms of the applicable legislation.

Written notice to the Competent Authority

6. A minimum of 7 (seven) calendar days' notice, in writing must be given to the Competent Authority before commencement of development activities.
 - 6.1. The notice must make clear reference to the site details and EIA Reference number given above.
 - 6.2. The notice must also include proof of compliance with the following conditions described herein:

Conditions: 7, 8 and 11.

Notification and administration of appeal

7. The holder must in writing, within 14 (fourteen) calendar days of the date of this decision–
 - 7.1. Notify all registered Interested and Affected Parties ("I&APs") of –
 - 7.1.1. the outcome of the application;
 - 7.1.2. the reasons for the decision as included in Annexure 3;
 - 7.1.3. the date of the decision; and
 - 7.1.4. the date when the decision was issued.
 - 7.2. Draw the attention of all registered I&APs to the fact that an appeal may be lodged against the decision in terms of the National Appeal Regulations, 2014 (as amended) detailed in Section G below;
 - 7.3. Draw the attention of all registered I&APs to the manner in which they may access the decision;
 - 7.4. Provide the registered I&APs with:
 - 7.4.1. name of the holder (entity) of this Environmental Authorisation,
 - 7.4.2. name of the responsible person for this Environmental Authorisation,
 - 7.4.3. postal address of the holder,
 - 7.4.4. telephonic and fax details of the holder,
 - 7.4.5. e-mail address, if any, of the holder,
 - 7.4.6. the contact details (postal and/or physical address, contact number, facsimile and e-mail address) of the decision-maker and all registered I&APs in the event that an appeal is lodged in terms of the National Appeal Regulations, 2014 (as amended).
8. The listed activities, including site preparation, must not be commenced with within 20 (twenty) calendar days from the date the holder notifies the registered I&APs of this decision. In the event that an appeal is lodged with the Appeal Authority, the effect of this Environmental Authorisation is suspended until the appeal is decided, i.e., the listed activities, including site preparation, must not be commenced with until the appeal is decided.

Management of activity

9. The Environmental Management Programme ("EMPr") (compiled by Zutari (Pty) Ltd and dated 09 April 2021) and Maintenance Management Plan ("MMP") (compiled by Zutari (Pty) Ltd and dated 09 April 2021) submitted as part of the application for Environmental Authorisation is hereby approved and must be implemented.
10. The EMPr and MMP must be included in all contract documentation for all phases of implementation.

Monitoring

11. The holder must appoint a suitably experienced Environmental Control Officer ("ECO") before commencing with development activities to ensure compliance with the provisions of the EMPr and the conditions contained in this Environmental Authorisation.
12. A copy of the Environmental Authorisation, EMPr, Environmental Audit Reports and compliance monitoring reports must be kept on the site of the authorised listed activities and must be made available to any authorised person on request.
13. Access to the site referred to in Section C above must be granted and the environmental reports mentioned above must be produced, to any authorised official representing the Competent Authority who requests to see these for the purpose of assessing and/or monitoring compliance with the conditions contained herein.

Auditing

14. In terms of Regulation 34 of the EIA Regulations, 2014 (as amended), the holder must conduct environmental audits to determine compliance with the conditions of the Environmental Authorisation and the EMPr and submit Environmental Audit Reports to the Competent Authority. The Environmental Audit Reports must be prepared by an independent person and must contain all the information required in Appendix 7 of the EIA Regulations, 2014 (as amended).
 - 14.1. The holder must undertake an environmental audit within 3 (three) months of the commencement of the listed activities and submit an Environmental Audit Report to the Competent Authority upon completion of the environmental audit.
 - 14.2. A second Environmental Audit Report must be submitted to the Competent Authority within 1 (one) month after the completion of the development/construction activities.
 - 14.3. An Environmental Audit Report must be submitted to the Competent Authority every 5 (five) years after the commencement of the operational phase while the EA remains valid.
 - 14.4. The holder must, within 7 (seven) days of the submission of the Environmental Audit Report to the Competent Authority, notify all potential and registered I&APs of the submission and make the report available to a authorised person on request.

Specific conditions

15. Should any heritage remains be exposed during excavations or any other actions on the site, these must immediately be reported to the Provincial Heritage Resources Authority of the Western Cape, Heritage Western Cape. Heritage remains uncovered or disturbed during earthworks must not be further disturbed until the necessary approval has been obtained from Heritage Western Cape.
 - 15.1. Heritage remains include: meteorites, archaeological and/or palaeontological remains (including fossil shells and trace fossils); coins; indigenous and/or colonial ceramics; any articles of value or antiquity; stone artifacts and bone remains; structures and other built features with heritage significance; rock art and rock engravings; and/or graves or unmarked human burials including grave goods and/or associated burial material.
16. The mitigation measures described in the Aquatic Biodiversity Specialist Assessment (compiled by BlueScience and dated December 2020) and as included in the EMPr and MMP must be implemented.
17. Employment opportunities must be afforded to the local community (as far as possible) during all phases of the proposed development.

F. GENERAL MATTERS

1. Notwithstanding this Environmental Authorisation, the holder must comply with any other statutory requirements that may be applicable when undertaking the listed activities.
2. Non-compliance with a condition of this Environmental Authorisation or EMPr may render the holder liable to criminal prosecution.
3. If the holder does not commence with the listed activities within the period specified in Condition 2, this Environmental Authorisation shall lapse for that activity, and a new application for Environmental Authorisation must be submitted to the Competent Authority. If the holder wishes to extend the validity period of the Environmental Authorisation, an application for amendment in this regard must be made to the Competent Authority prior to the expiry date of the Environmental Authorisation.
4. An application for amendment of the Environmental Authorisation must be submitted to the Competent Authority where any detail with respect to the Environmental Authorisation must be amended, added, substituted, corrected, removed or updated. If a new holder is proposed, an application for Amendment in terms of Part 1 of the EIA Regulations, 2014 (as amended) must be submitted.

Please note that an amendment is not required if there is a change in the contact details of the holder. In this case, the Competent Authority must only be notified of such changes.

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

Amendments to the EMPr, must be made in accordance with Regulations 35 to 37 of the EIA Regulations, 2014 (as amended) or any relevant legislation that may be applicable at the time.

G. APPEALS

Appeals must comply with the provisions contained in the National Appeal Regulations, 2014 (as amended).

1. An appellant must –
 - 1.1. Submit an appeal in accordance with Regulation 4 of the National Appeal Regulations, 2014 (as amended) to the Appeal Administrator; and
 - 1.2. Submit a copy of the appeal to any registered I&APs, any Organ of State with interest in the matter and the decision-maker i.e. the Competent Authority that issued the decision.
2. An appellant (if NOT the holder of the decision) must, within 20 (twenty) calendar days from the date the holder of the decision sent notification of the decision to the registered I&APs–
 - 2.1. Submit an appeal in accordance with Regulation 4 of the National Appeal Regulations, 2014 (as amended) to the Appeal Administrator; and
 - 2.2. Submit a copy of the appeal to the holder of the decision, any registered I&AP, any Organ of State with interest in the matter and the decision-maker i.e. the Competent Authority that issued the decision.
3. The holder of the decision (if not the appellant), the decision-maker that issued the decision, the registered I&AP and the Organ of State must submit their responding statements, if any, to the

appeal authority and the appellant within 20 (twenty) calendar days from the date of receipt of the appeal submission.

4. The appeal form/s must be submitted by means of one of the following methods:

By post: Attention: Mr. M. Venter
Western Cape Ministry of Local Government, Environmental Affairs and
Development Planning
Private Bag X9186
CAPE TOWN
8000

By facsimile: (021) 483 4174; or

By hand: Attention: Mr. M. Venter (Tel: 021 483 3721)
Room 809
8th Floor Utilitas Building, 1 Dorp Street, Cape Town, 8001

5. The prescribed appeal form, as well as assistance regarding the appeal processes is obtainable from the office of the appeal authority/ at: Tel. (021) 483 3721, E-mail DEADP.Appeals@westerncape.gov.za or URL <http://www.westerncape.gov.za/eadp>.

H. DISCLAIMER

The Western Cape Government, the holder, committees or any other public authority or organisation appointed in terms of the conditions of this Environmental Authorisation shall not be responsible for any damages or losses suffered by the holder, developer or his/her successor in any instance where construction or operation subsequent to construction is temporarily or permanently stopped for reasons of non-compliance with the conditions as set out herein or any other subsequent document or legal action emanating from this decision.

Your interest in the future of our environment is greatly appreciated.

Yours faithfully

MR. ZAAHIR TOEFY
DIRECTOR: DEVELOPMENT MANAGEMENT (REGION 1)

DATE OF DECISION: 29 JULY 2021

Copies to: (1) Ms. A. Siebritz (Zutari (Pty) Ltd.)
(2) Mr. J. Scholtz (Swartland Municipality)

E-mail: Andrea.Siebritz@zutari.co.za
E-mail: joggies@swartland.org.za

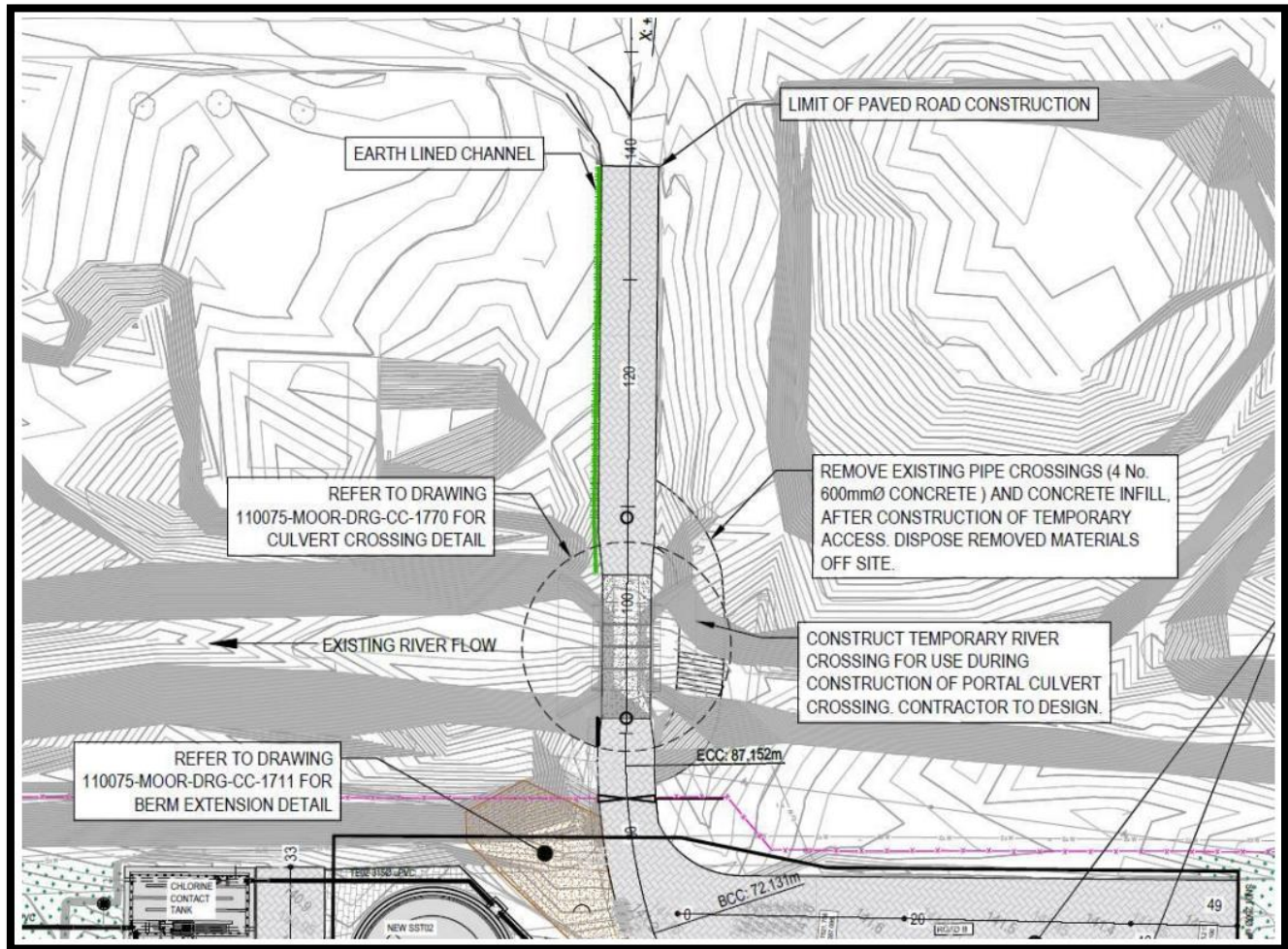
ANNEXURE 1: LOCALITY MAP

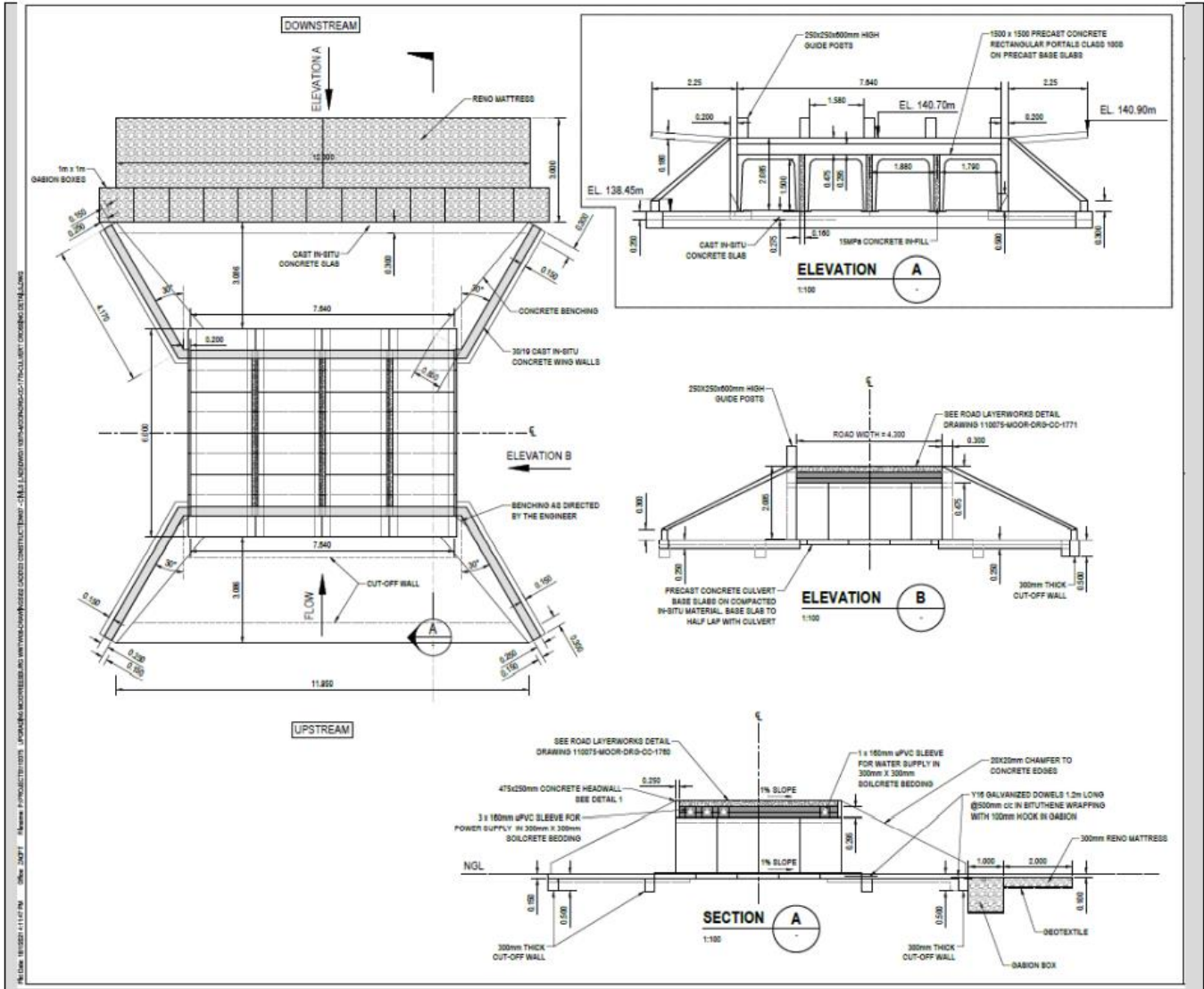
The proposed site (stream crossing) is located on Erf 2878, Moorreesburg.



ANNEXURE 2: SITE PLANS

Site plans for the proposed culvert crossing and the temporary bypass.





ANNEXURE 3: REASONS FOR THE DECISION

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

- a) The information contained in the application form dated and received by the competent authority on 21 January 2021, the BAR and EMPr dated and received by the competent authority on 12 April 2021;
- b) Relevant information contained in the Departmental information base, including, the Guidelines on Public Participation, Alternatives and Exemptions (dated March 2013);
- c) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the NEMA;
- d) The comments received from I&APs and responses to these, included in the BAR dated 12 April 2021;
- e) The balancing of negative and positive impacts and proposed mitigation measures; and
- f) No site visits were conducted. The competent authority had sufficient information before it to make an informed decision without conducting a site visit.

All information presented to the competent authority was taken into account in the consideration of the application for environmental authorisation. A summary of the issues which, according to the competent authority, were the most significant reasons for the decision, is set out below.

1. Public Participation

The public participation process ("PPP") was undertaken in accordance with an approved Public Participation Plan (dated 11 January 2021) and entailed the following:

- Identification of and engagement with Interested and Affected Parties ("I&APs");
- Fixing a notice board on the site where the listed activities is to be undertaken on 19 February 2021;
- Giving written notice to the owners and occupiers of land adjacent to the site where the listed activities are to be undertaken, the municipality and ward councilor, and the various organs of state having jurisdiction in respect of any aspect of the listed activities on 16 February 2021;
- The placing of a newspaper advertisement in the "Swartland Gazette" on 16 February 2021;
- Making the draft BAR available to I&APs for comment from 22 February 2021 to 25 March 2021;
- The draft BAR was made available electronically (via Dropbox and Google Drive links) and a hard copy was made available at the Municipal office in Moorreesburg.

This Department is satisfied that the PPP that was followed met the minimum legal requirements and all the comments and responses report thereto were included in the comments and responses report. Specific management and mitigation measures have been considered in this Environmental Authorisation and in the EMPr to adequately address the concerns raised.

2. Alternatives

Two design alternatives and the "no-go" alternative were identified and assessed.

Design Alternative 1 (the Preferred Alternative – herewith authorised)

Design Alternative 1 entails the upgrade of an existing low water bridge crossing and associated infrastructure on Erf 2878, Moorreesburg.

The existing low water bridge crossing consists of four 600mm diameter concrete stormwater pipes, which is insufficient to allow for the free flow of water during high rainfall events. The existing low water bridge crossing therefore floods during high rainfall events, which prevents access to the

Moorreesburg Wastewater Treatment Works ("WWTW"). The existing low water bridge is the only exit and entry point to the Moorreesburg WWTW and therefore service delivery is delayed when the low water bridge floods.

The existing concrete stormwater pipes will be therefore be replaced with four precast rectangular culverts with scour protection along the riverbed and embankment. The culverts will be placed in the same location as the existing concrete stormwater pipes. The culverts will be installed perpendicular to the access road, parallel with the river flow and on the same riverbed level as currently is, maintaining the current flow of the Moorreesburgspruit River.

Gabions (for erosion protection) and wingwalls will be situated upstream and downstream of the proposed culverts. Gabion boxes and reno-mattresses will be installed to prevent scour and soil erosion downstream of the culvert. The wing walls (to channel the stormwater through the culverts) will be cast on site and will extend 3m on the upstream and downstream side of the culverts. The existing embankment, stream bed and flow path of the Moorreesburgspruit River will be maintained.

A concrete cut-off berm will be installed upstream and downstream of the wing walls to prevent undermining and erosion of the riverbed. The areas around the wing-walls will be backfilled and shaped.

In order to maintain access to the Moorreesburg WWTW during the upgrade of the low water bridge crossing, a Temporary bypass will be developed and used.

The temporary bypass will comprise of two 450mm diameter concrete stormwater pipes to create a single lane (3m wide) track on the upstream of the proposed culverts. The stormwater pipes will be installed on the existing riverbed to maintain the existing water flow of the Moorreesburgspruit River.

Construction will only take place in the dry season to avoid work in wet conditions. When the new bridge is sufficiently constructed, the temporary bypass will be removed, and the inlet area reshaped to resemble a natural look and promote revegetation of the area.

The total development footprint will be approximately 100m² in extent.

Although the potential freshwater impacts associated with Design Alternative 1 is similar to Design Alternative 2, Design Alternative 1 is deemed the preferred alternative since the duration of disturbance during the construction period associated with Design Alternative 1 is shorter than Design Alternative 2.

Design Alternative 2

Design Alternative 2 entails the construction of the bridge in two halves to provide uninterrupted access to the Moorreesburg WWTW. The first half of the bridge will be constructed in another location while access is gained via the old bridge. When the first half is completed, the old bridge will be demolished and the second half of the new bridge will be constructed. The final upgraded bridge will consist of a wider stream crossing than the existing stream crossing. With this alternative, no temporary bridge will be constructed.

Design Alternative 2 was not deemed the preferred alternative since the duration of the construction period is longer than Design Alternative 2 and may result in higher financial costs for the applicant.

"No-Go" Alternative

The "no-go" alternative entails maintaining the "status quo". The "no-go" alternative was not deemed to be a reasonable or feasible alternative given that ongoing flooding of the low water crossing will continue. Access to the Moorreesburg WWTW will therefore be disrupted and the maintenance of the Moorreesburg WWTW will be affected. Since the proposed development will not result in unwarranted impact, the "no-go" alternative is not warranted.

3. Impact Assessment and Mitigation measures

3.1. Activity Need and Desirability

The existing low water crossing to the Moorreesburg WWTW currently floods during high rainfall events, which results in access to the Moorreesburg WWTW being blocked. This places strain on service delivery in providing adequate sewerage disposal services by the Municipality. The existing low water crossing is the only entry and exit point to the Moorreesburg WWTW and the upgrade to the existing low water crossing is required in order to provide safe and uninterrupted access to the Moorreesburg WWTW.

The proposed upgrade is in line with the planning documents applicable to the area. The nature of the development will not yield a significant impact on the socio-economic context of the municipality. However, the proposed development may provide a limited number of employment opportunities.

3.2. Agricultural Impacts

According to the Screening Report (generated from the Screening Tool developed by the National Department of Environmental Affairs and dated 25 January 2021) the proposed site was mapped to be located in a high and medium sensitivity area from an agricultural perspective. Based on the site sensitivity verification undertaken by the Environmental Assessment Practitioner, the sensitivity was disputed and deemed to be of low sensitivity.

An Agricultural Compliance Statement (compiled by Johann Lanz and dated 02 October 2020) was therefore compiled in accordance with the Protocols (Government Gazette No. 43110 of 20 March 2020). The specialist indicated that the proposed development will have no potential impact on agricultural land or on agricultural production given that the proposed site is not cultivated. The specialist therefore concluded that proposed development cannot have an unacceptable negative impact on the agricultural production capability of the site and recommended that the development be approved.

In addition, the Department of Agriculture, Land Reform and Rural Development indicated (in their correspondence dated 26 March 2021) that they do not object to the proposed upgrade.

3.3. Botanical Impacts

According to the Screening Report (generated from the Screening Tool developed by the National Department of Environmental Affairs and dated 25 January 2021) the proposed site was mapped to be located in a very high sensitivity area from a terrestrial biodiversity perspective. Based on the site sensitivity verification undertaken by the Environmental Assessment Practitioner, the sensitivity was disputed and deemed to be of low sensitivity.

A Terrestrial Biodiversity Compliance Statement (compiled by Nick Helme of Nick Helme Botanical Surveys and dated 14 September 2020) was therefore compiled in accordance with the Protocols (Government Gazette No. 43110 of 20 March 2020). The specialist indicated that historically, the Swartland Shale Renosterveld vegetation would have been present on site. However, based on the current conditions of the proposed site, very little indigenous vegetation is present and it is not possible to confirm or dispute the presence of this said vegetation type. No plant species of conservation concern has been recorded by the specialist and it was estimated that approximately 100m² of indigenous vegetation will be removed as a result of the proposed development.

The specialist deems the botanical sensitivity of the proposed site as very low on a regional scale, in contrast to the National Screening Tool, which classifies all remnants in the Cape region as Very High sensitivity, irrespective of ecological condition or diversity.

The specialist concluded that there are no ecological constraints present and no specific ecological mitigations are necessary.

In addition, CapeNature indicated (in their correspondence dated 17 March 2021) that they concur with the findings of the aquatic, terrestrial and terrestrial invertebrate specialists and do not object to the proposed upgrade.

3.4. Terrestrial animal impacts

According to the Screening Report (generated from the Screening Tool developed by the National Department of Environmental Affairs and dated 25 January 2021) the proposed site was mapped to be located in a very high sensitivity area from a terrestrial animal species perspective. Based on the site sensitivity verification undertaken by the Environmental Assessment Practitioner, the sensitivity was disputed and deemed to be of low sensitivity.

A Terrestrial Animal Species Compliance Statement (compiled by Jonathan Colville (PhD) Terrestrial Ecologist and Invertebrate Surveys and dated 14 February 2021) was therefore compiled in accordance with the Protocols (Government Gazette No. 43855 of 30 October 2020). The specialist concluded that based on the vegetation type, soil type, associated habitats and current condition of the site, the three animal species of conservation concern (i.e. *Aneuryphymus montanus* (Yellow-winged Agile Grasshopper), *Brinckiella aptera* (Mute Winter Katydid) and *Pachysoma aesculapius* (Dung Beetle) (as highlighted by the Screening Report)), are unlikely to be present and a very low possibility exists that the proposed site could support viable populations of any of the three species identified. No specific mitigation measures were proposed.

3.5. Freshwater impacts

According to the Screening Report (generated from the Screening Tool developed by the National Department of Environmental Affairs and dated 25 January 2021) the proposed site was mapped to be located in a very high sensitivity area from an aquatic biodiversity perspective. Based on the site sensitivity verification undertaken by the Environmental Assessment Practitioner, the sensitivity was disputed and deemed to be of medium sensitivity.

An Aquatic Biodiversity Assessment (compiled by Ms Toni Belcher of Bluescience dated December 2020) was therefore conducted to assess the aquatic features within the study area, discuss the potential impacts of the proposed development and provide any recommendations.

The proposed site is located on the Moorreesburgspruit River, a tributary within the middle reaches of the Berg River System. The river at the Moorreesburg WWTW is mapped as an aquatic Ecological Support Area with a small patch of aquatic Critical Biodiversity Area associated with wetland habitat downstream of the existing crossing. This wetland habitat is only within the river channel and dominated by bulrush. The proposed site is not located within a Strategic Water Resource Area and is not mapped as a national Freshwater Ecosystem Priority Area.

At the existing crossing, the habitat integrity of the Moorreesburgspruit River is in a largely modified state with most of the impacts being as a result of activities upstream of and at the site. Downstream of the site, the ecological condition of the river becomes more degraded. The ecological importance and sensitivity of the river is moderate to low.

The overall ecological status of the Moorreesburgspruit River is classified as a D category, which is largely modified.

The potential impacts of the proposed activity from a freshwater ecology perspective are the disturbance of aquatic habitat and potential for modification to flow in the river. Some water quality impacts may also result from construction activities. The proposed structure is likely to improve on the hydraulic capacity of the existing road crossing and thus will have an impact of

low significance in the construction and operation phases. Similarly, the risk of the proposed road crossing impacting on ecological integrity is considered to be low. There is, therefore, no reason, from an aquatic ecological perspective why the activity should not be approved, provided that the mitigation measures are effectively implemented. The specialists' recommendations have been included in the EMPr and MMP.

The requirements of the National Water Act, 1998 (Act No. 36 of 1998) will be met. An application for a General Authorisation in terms of the National Water Act, 1998 (Act No. 36 of 1998) has been submitted to the Department of Water and Sanitation for consideration. In addition, the Department of Water and Sanitation have indicated (in their correspondence dated 25 March 2021) no objection to the proposed upgrade.

3.6. Heritage

A Notice of Intent to Develop was submitted to Heritage Western Cape ("HWC") on 16 September 2020. HWC indicated (in their correspondence dated 07 October 2020) that there is no reason to believe that the proposed development on the site, will impact on heritage resources and therefore no further action under Section 38 of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) is required.

3.7. Dust, Noise and Visual Impacts

No significant dust, noise and visual impacts are anticipated. Potential dust, noise and visual impacts associated with the proposed development will be mitigated by the implementation of the mitigation measures included in the EMPr.

The development will result in both negative and positive impacts.

Negative Impacts include:

- Potential visual, dust and noise impacts during the construction phase;
- Potential soil and groundwater contamination during the construction phase; and
- Potential disturbance to the aquatic habit during the construction phase.

Positive impacts include:

- The proposed upgrade will provide some employment opportunities during the construction phase;
- Improved and safe access to the Moorreesburg WWTW; and
- Reduced flood risk during heavy rainfall events.

4. National Environmental Management Act Principles

The National Environmental Management Principles (set out in section 2 of the NEMA, which apply to the actions of all organs of state, serve as guidelines by reference to which any organ of state must exercise any function when taking any decision, and which must guide the interpretation, administration and implementation of any other law concerned with the protection or management of the environment), inter alia, provides for:

- the effects of decisions on all aspects of the environment to be taken into account;
- the consideration, assessment and evaluation of the social, economic and environmental impacts of activities (disadvantages and benefits), and for decisions to be appropriate in the light of such consideration and assessment;
- the co-ordination and harmonisation of policies, legislation and actions relating to the environment;
- the resolving of actual or potential conflicts of interest between organs of state through conflict resolution procedures; and

- the selection of the best practicable environmental option.

5. Conclusion

In view of the above, the NEMA principles, compliance with the conditions stipulated in this Environmental Authorisation, and compliance with the EMPr, the Competent Authority is satisfied that the proposed listed activities will not conflict with the general objectives of integrated environmental management stipulated in Chapter 5 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) and that any potentially detrimental environmental impacts resulting from the listed activities can be mitigated to acceptable levels.

You are reminded of your general duty of care towards the environment in terms of Section 28(1) of the NEMA which states: *"Every person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm to the environment is authorised by law or cannot reasonably be avoided or stopped, to minimise and rectify such pollution or degradation of the environment."*

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