



REFERENCE: 16/3/3/2/B1/14/1022/22
ENQUIRIES: Samornay Smidt
DATE OF ISSUE: 16 February 2023

The Board of Directors
Goree Boerdery (Pty)Ltd
PO Box 345
ROBERTSON
6705

Attention: Mr. Wouter J de Wet

Cell: 083 231 2236
Email: welvanpas@barvallei.co.za

Dear Sir

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT 107 OF 1998) AND THE ENVIRONMENTAL IMPACT ASSESSMENT ("EIA") REGULATIONS, 2014: THE PROPOSED DEVELOPMENT OF A NEW STORAGE DAM ON FARM NO. 262, ROBERTSON

1. With reference to the above application, the Department hereby notifies you of its decision to **grant** Environmental Authorisation ("EA"), together with the reasons for the decision.
2. In terms of Regulation 4 of the EIA Regulations, 2014, you are instructed to ensure, within 14 days of the date of the Environmental Authorisation, that all registered interested and affected parties ("I&APs") are provided with access to 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 Appeal Regulations, 2014, which prescribes the appeal procedure to be followed. This procedure is summarised in the attached EA.

Yours faithfully

**DIRECTOR: DEVELOPMENT MANAGEMENT (REGION 1)
DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND DEVELOPMENT PLANNING**

Cc: (1) M McGregor (McGregor Environmental Services)
(2) T Brunings (Langeberg Municipality)
(3) Mr Rhett Smart (CapeNature)
(4) Mr Rudolph Röscher (Department of Agriculture)
(5) Ms Elkerine Rossouw (BGCMA)

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REFERENCE: 16/3/3/2/B1/14/1022/22
NEAS REFERENCE: WCP/EIA/0001080/2022
ENQUIRIES: Samornay Smidt
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ENVIRONMENTAL AUTHORISATION

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT 107 OF 1998) AND THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014: THE PROPOSED DEVELOPMENT OF A NEW STORAGE DAM ON FARM NO. 262, ROBERTSON

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, the Competent Authority herewith **grants Environmental Authorisation** to the applicant to undertake the listed activities specified in section B below with respect to Site Alternative 1 and the Preferred Layout Alternative for Dam Option 5, as described in the Environmental Impact Assessment ("EIA") Report, dated October 2022.

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

A. DETAILS OF THE APPLICANT FOR THIS ENVIRONMENTAL AUTHORISATION

Goree Boerdery (Pty) Ltd
c/o Mr Wouter J de Wet
PO Box 345
ROBERTSON
6705
Tel: (023) 626 2125
E-mail: welvanpas@barvallei.co.za

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

B. ACTIVITY AUTHORISED

Listed Activity	Project Description
<p>Listing Notice 1 - Activity Number: 27</p> <p>The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for—</p> <p>(i) the undertaking of a linear activity; or</p> <p>(ii) maintenance purposes undertaken in accordance with a maintenance management plan.</p>	<p>Approximately 1.7 ha of indigenous vegetation will be cleared for the development of the dam.</p>
<p>Listing Notice 2 – Activity Number: 16</p> <p>The development of a dam where the highest part of the dam wall, as measured from the outside toe of the wall to the highest part of the wall, is 5 metres or higher or where the high-water mark of the dam covers an area of 10 hectares or more.</p>	<p>The proposed Goree Dam would consist of a main embankment with a maximum wall height of about 11.8 m and an upstream berm on the eastern side with a maximum wall height of 7.3 m.</p>

The abovementioned activities are hereinafter referred to as “**the listed activities**”.

The holder is herein authorised to undertake the following alternative that includes the listed activities:

- The construction of a new off-channel storage dam (Goree Dam) with a 500 000 m³ gross storage capacity, a main embankment with a 11.8 m wall height and an upstream berm on the eastern side with a 7.3 m wall height.
- The total development footprint is approximately 9.7 ha.
- A pump station (6m X 4m) will be constructed downstream of the main embankment and a 315mm diameter outlet pipe is proposed between the dam wall and the new pump station, downstream of the dam.
- The existing 200mm pipeline from the existing pump station at the Kanaal Dam to the proposed Goree Dam will remain unchanged.

C. SITE DESCRIPTION AND LOCATION

The listed activities will be undertaken on Farm No. 262, Robertson and has the following co-ordinates:

	Latitude (S)	Longitude (E)
Co-ordinates:	33° 52' 50" South	19° 42' 17.45" East

The SG digit code is: C065 0000 0000262 00000

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

The above is hereinafter referred to as "**the site**".

D. DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

McGregor Environmental Services
c/o Ms Marizanne McGregor
PO Box 559
WORCESTER
6849
Cell: 082 554 2910
Email: marizannemcgregor@gmail.com

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 Site Alternative 1 and the Preferred Layout Alternative for Dam Option 5, described in the EIA Report dated October 2022 on the site as described in Section C above.
2. The holder must commence with, and conclude, the listed activities within the stipulated validity period which this Environmental Authorisation is granted, or this Environmental Authorisation shall lapse and a new application for Environmental Authorisation must be submitted to the competent authority

This Environmental Authorisation is granted for-

- (a) A period of **five years** from the date of issue, during which period the holder must commence with the authorised listed activities.
 - (b) A period of **ten (10) years**, from the date the holder commenced with the authorised listed activities, during which period the authorised listed activities must be concluded.
3. 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.
 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 alternative described in section B above must be accepted or 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. Seven calendar days' notice, in writing, must be given to the Competent Authority before commencement of construction 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 Appeals Regulations, 2014 detailed in Section F 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 the 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 2014 National Appeals Regulations.
8. The listed activities, including site preparation, may not commence within 20 (twenty) calendar days from the date of issue of this Environmental Authorisation. 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.

Management of activity

9. The draft or Environmental Management Programme ("EMPr") submitted as part of the application for Environmental Authorisation is hereby approved and must be implemented.
10. The EMPr 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"), or site agent where appropriate, before commencement of any land clearing or construction activities to ensure compliance with the provisions of the EMPr and the conditions contained herein.
12. The ECO must report on compliance in writing to this Department and the relevant authorities monthly during the construction phase.
13. A copy of the Environmental Authorisation, EMPr, audit reports and ECO reports must be kept at the site of the authorised activities, and must be made available to anyone on request, including a publicly accessible website.
14. 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 it for the purposes of assessing and/or monitoring compliance with the conditions contained herein.

Auditing

15. In terms of Regulation 34 of the NEMA EIA Regulations, 2014, the holder must conduct environmental audits to determine compliance with the conditions of the Environmental Authorisation and the EMPr. The Environmental Audit Report must be prepared by an independent person (other than the appointed Environmental Assessment Practitioner or Environmental Control Officer) and must contain all the information required in Appendix 7 of the NEMA EIA Regulations, 2014.

The holder must undertake an environmental audit and submit Environmental Audit Reports to the Competent Authority once every four months during the active construction phase. The final Environmental Audit Report must be submitted to the Competent Authority within one year after all the development and rehabilitation activities have been completed.

The holder must, within 7 days of the submission of each of the above-mentioned reports to the Competent Authority, notify all potential and registered I&APs of the submission and make the report available to anyone on request and on a publicly accessible website (if applicable).

Specific Conditions

16. 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.

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; marine shell heaps; 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.

17. A qualified archaeologist and/or palaeontologist must be contracted where necessary (at the expense of the holder) to remove any heritage remains. Heritage remains can only be disturbed by a suitably qualified heritage specialist working under a directive from the relevant heritage resources authority.

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 a listed activity within the period referred to 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. The holder must submit an application for amendment of the Environmental Authorisation 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 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 done in accordance with Regulations 35 to 37 of the EIA Regulations 2014 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.

1. An appellant (if the holder of the decision) must, within 20 (twenty) calendar days from the date the notification of the decision was sent to the holder by the Competent Authority –

- 1.1. Submit an appeal in accordance with Regulation 4 of the National Appeal Regulations 2014 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 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 and the responding statement must be submitted to the address listed below:

By post: 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 Marius Venter (Tel: 021 483 2659)
Room 809
8th Floor Utilitas Building, 1 Dorp Street, Cape Town, 8001

Note: For purposes of electronic database management, you are also requested to submit electronic copies (Microsoft Word format) of the appeal, responding statement and any supporting documents to the Appeal Authority to the address listed above and/ or via e-mail to DEADP.Appeals@westerncape.gov.za.

5. A prescribed appeal form as well as assistance regarding the appeal processes is obtainable from 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 Local Authority, 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 appreciated.

Yours faithfully

MR. ZAAHIR TOEFY

DIRECTOR: DEVELOPMENT MANAGEMENT (REGION 1)

DATE OF DECISION: 16 FEBRUARY 2023

Cc: (1) Ms M McGregor (McGregor Environmental Services)
(2) Ms T Brunings (Langeberg Municipality)
(3) Mr Rhett Smart (CapeNature)
(4) Mr Rudolph Röscher (Department of Agriculture)
(5) Ms Elkerine Rossouw (BGCMA)

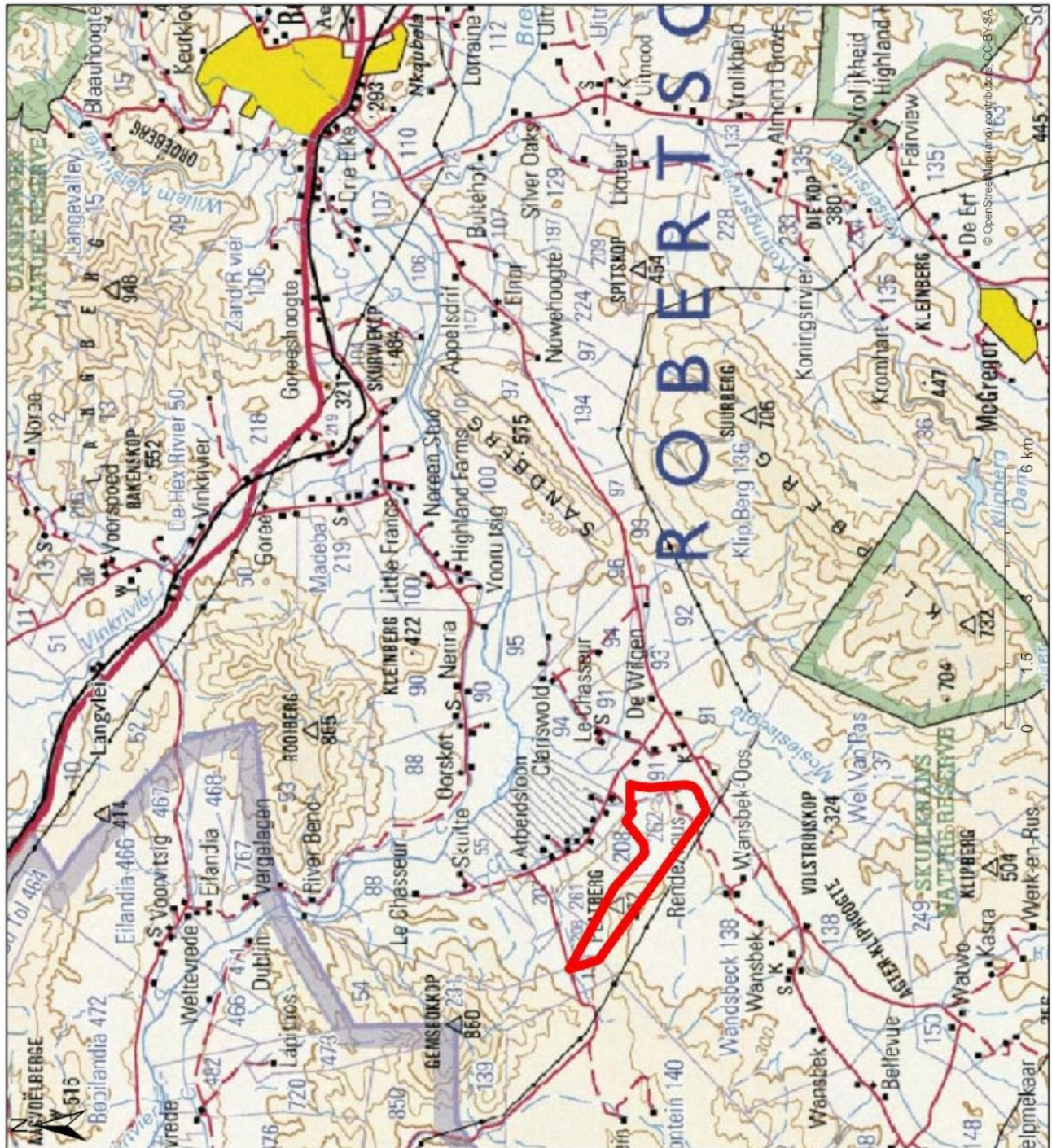
Email: marizannemcgregor@gmail.com
Email: tbrunings@langeberg.gov.za
E-mail: rsmart@capenature.co.za
E-mail: RudolphR@elsenburg.com
E-mail: erossouw@bgcma.co.za

ANNEXURE 1: LOCALITY MAP

Goree Dam Locality Map

Legend

Farm 262, Robertson



Scale: 1:144 448

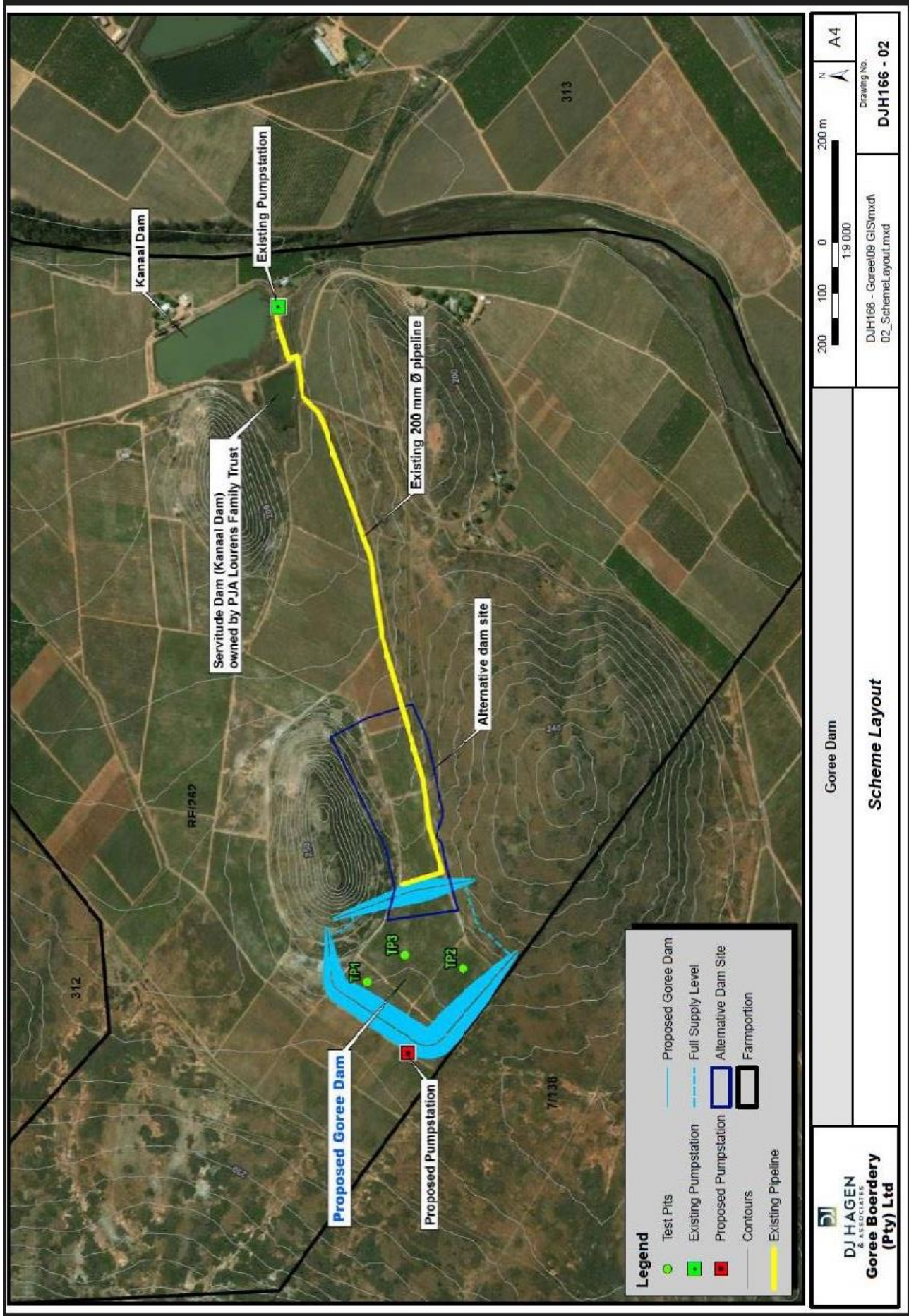
Date created: November 16, 2021

Compiled with CapeFarmMapper

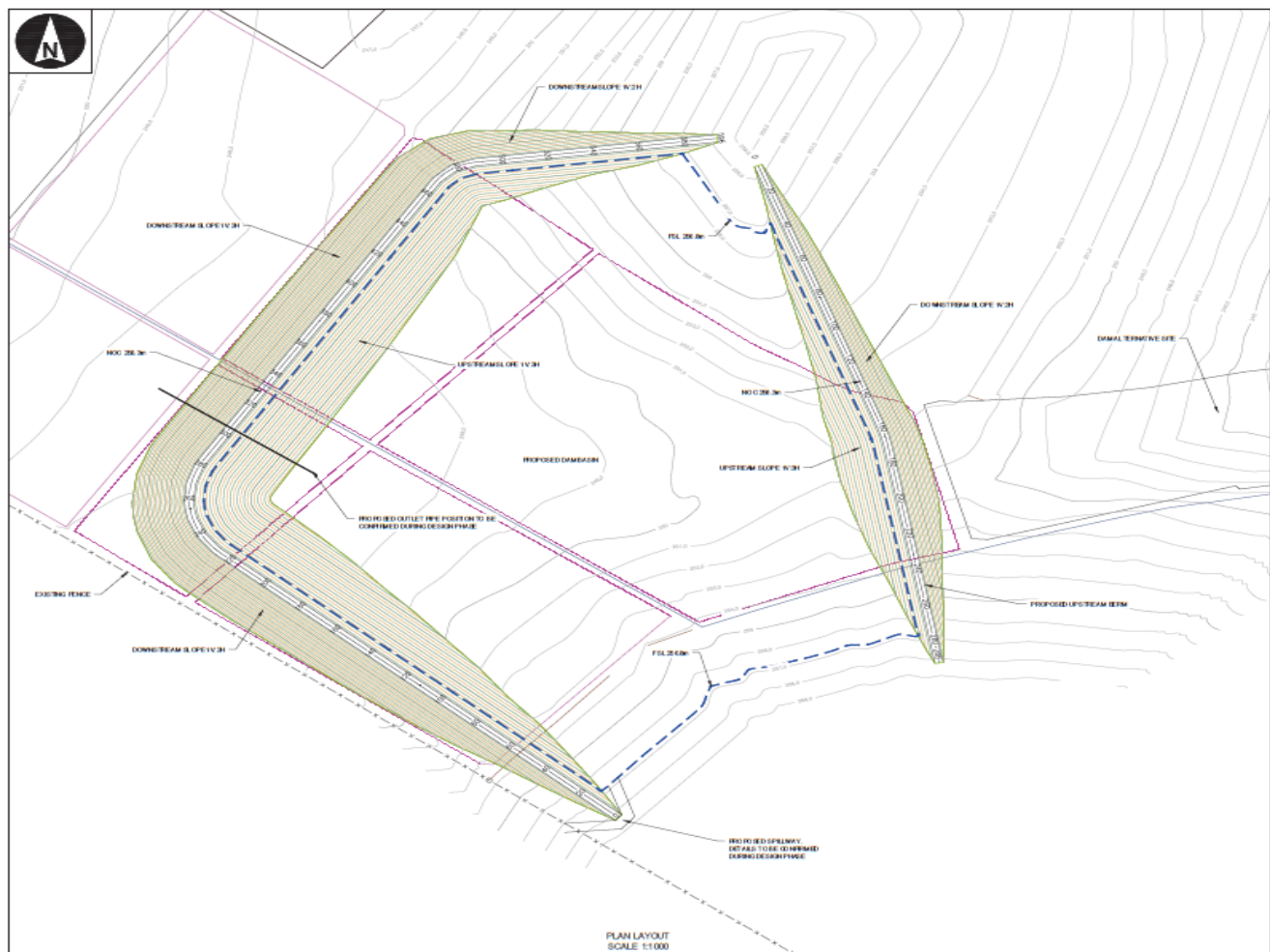
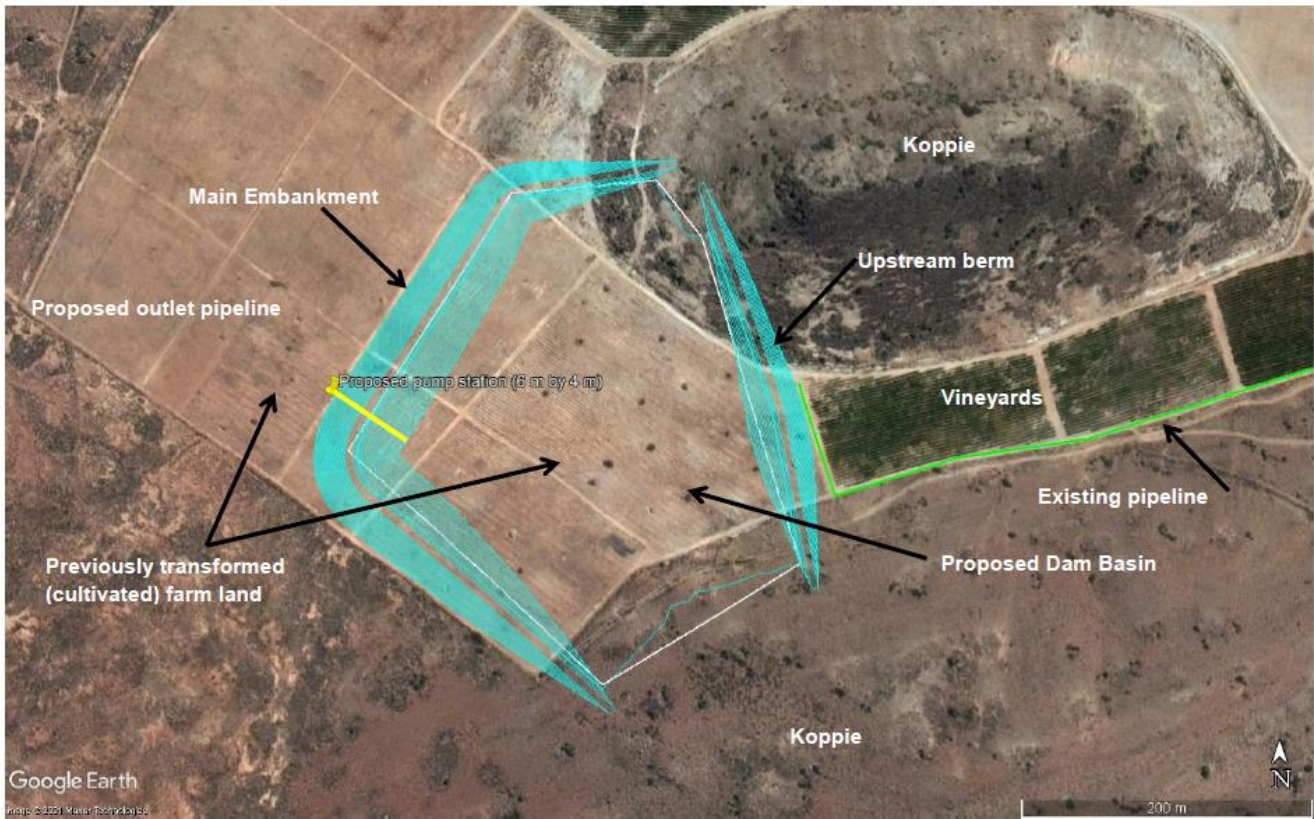


FOR YOU

ANNEXURE 2: SITE PLAN



Goree Dam		A4
Scheme Layout		Drawing No. DJH166 - 02
 DJ HAGEN & ASSOCIATES Goree Boerdery (Pty) Ltd		200 100 0 200 m 1:3,000 DJH166 - Goree08 GIS(mxd) 02_SchemeLayout.mxd



NOTES		FOR INFORMATION		GENERAL NOTES		GOREE BOERDERY (PTY) LTD		DJ HAGEN & ASSOCIATES	
1. ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED ARE IN METERS.		ORIGINAL SCALE		1. ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED ARE IN METERS.		GOREE BOERDERY (PTY) LTD		DJ HAGEN & ASSOCIATES	
2. THE PROPOSED DAM BASIN IS TO BE CONFINED BY AN EMBANKMENT AND AN UPSTREAM BERM.		SCALE 1:1000		2. THE PROPOSED DAM BASIN IS TO BE CONFINED BY AN EMBANKMENT AND AN UPSTREAM BERM.		GOREE BOERDERY (PTY) LTD		DJ HAGEN & ASSOCIATES	
3. THE PROPOSED OUTLET PIPE POSITION IS TO BE CONFIRMED DURING DESIGN PHASE.		SCALE 1:1000		3. THE PROPOSED OUTLET PIPE POSITION IS TO BE CONFIRMED DURING DESIGN PHASE.		GOREE BOERDERY (PTY) LTD		DJ HAGEN & ASSOCIATES	
4. THE PROPOSED SPILLWAY IS TO BE CONFINED BY AN EMBANKMENT AND AN UPSTREAM BERM.		SCALE 1:1000		4. THE PROPOSED SPILLWAY IS TO BE CONFINED BY AN EMBANKMENT AND AN UPSTREAM BERM.		GOREE BOERDERY (PTY) LTD		DJ HAGEN & ASSOCIATES	
5. THE PROPOSED UPSTREAM BERM IS TO BE CONFINED BY AN EMBANKMENT AND AN UPSTREAM BERM.		SCALE 1:1000		5. THE PROPOSED UPSTREAM BERM IS TO BE CONFINED BY AN EMBANKMENT AND AN UPSTREAM BERM.		GOREE BOERDERY (PTY) LTD		DJ HAGEN & ASSOCIATES	
6. THE PROPOSED DAM BASIN IS TO BE CONFINED BY AN EMBANKMENT AND AN UPSTREAM BERM.		SCALE 1:1000		6. THE PROPOSED DAM BASIN IS TO BE CONFINED BY AN EMBANKMENT AND AN UPSTREAM BERM.		GOREE BOERDERY (PTY) LTD		DJ HAGEN & ASSOCIATES	
7. THE PROPOSED OUTLET PIPE POSITION IS TO BE CONFIRMED DURING DESIGN PHASE.		SCALE 1:1000		7. THE PROPOSED OUTLET PIPE POSITION IS TO BE CONFIRMED DURING DESIGN PHASE.		GOREE BOERDERY (PTY) LTD		DJ HAGEN & ASSOCIATES	
8. THE PROPOSED SPILLWAY IS TO BE CONFINED BY AN EMBANKMENT AND AN UPSTREAM BERM.		SCALE 1:1000		8. THE PROPOSED SPILLWAY IS TO BE CONFINED BY AN EMBANKMENT AND AN UPSTREAM BERM.		GOREE BOERDERY (PTY) LTD		DJ HAGEN & ASSOCIATES	
9. THE PROPOSED UPSTREAM BERM IS TO BE CONFINED BY AN EMBANKMENT AND AN UPSTREAM BERM.		SCALE 1:1000		9. THE PROPOSED UPSTREAM BERM IS TO BE CONFINED BY AN EMBANKMENT AND AN UPSTREAM BERM.		GOREE BOERDERY (PTY) LTD		DJ HAGEN & ASSOCIATES	
10. THE PROPOSED DAM BASIN IS TO BE CONFINED BY AN EMBANKMENT AND AN UPSTREAM BERM.		SCALE 1:1000		10. THE PROPOSED DAM BASIN IS TO BE CONFINED BY AN EMBANKMENT AND AN UPSTREAM BERM.		GOREE BOERDERY (PTY) LTD		DJ HAGEN & ASSOCIATES	

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 19 April 2022, the final Scoping Report received by the Department on 31 May 2022, the EMP submitted together with the final EIA Report dated October 2022;
- b) Relevant information contained in the Departmental information base, including the Guidelines on Public Participation and Alternatives (dated March 2013);
- c) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the National Environmental Management Act, 1998 (Act No. 107 of 1998);
- d) The comments received from I&APs and responses to these, included in the EIA Report dated October 2022; and
- e) The balancing of negative and positive impacts and proposed mitigation measures.

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 that were considered to be the most significant for the decision is set out below.

1. Public Participation

The public participation process included:

- identification of and engagement with I&APs;
- placing of a newspaper advertisement in the '*Breederiver Gazette*' on 8 February 2022;
- two notices were placed, one at the farm entrance to the study area and another at a local business in Robertson on 14 February 2022;
- 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 councillor, and the various organs of state having jurisdiction in respect of any aspect of the listed activities on 14 February 2022;
- making the pre-application Draft Scoping Report available for comment from 14 February 2022;
- making the in-process Draft Scoping Report available for comment from 19 April 2022; and
- making the Draft EIA Report available for comment from 7 September 2022.

The Department is satisfied that the Public Participation Process that was followed met the minimum legal requirements and the comments raised and responses thereto were included in the comments and response report.

Specific alternatives, management and mitigation measures have been considered in this Environmental Authorisation and EMP to adequately address the concerns raised.

2. Alternatives

Site Alternative 1 (preferred and herewith authorised)

Farm No. 262 was selected for the proposed development since the applicant owns the land and wishes to construct a new dam as the farming operation currently does not have sufficient water storage capacity to securely store the property's existing water use rights. The aim of the additional storage on the farm is to increase the assurance of the water supply to the farm, as well as the efficient and beneficial use of the existing enlistment water. Therefore, this site was deemed as the only suitable dam site on the property which would be able to store an additional 500 000 m³ of enlistment water in terms of the applicant's requirements.

Site Alternative 2

An alternative dam site was considered downstream of the preferred dam site and was investigated by the engineer. It was discarded because it could not accommodate the targeted storage volume and construction of a dam on the site would also result in loss of established vineyards.

Dam Layout Alternatives

The following six layout alternatives were analysed by the engineers for the proposed new dam, with storage capacities ranging from 150 00 m³ to 500 000 m³:

Dam Options	Total Storage capacity (m ³)	Freeboard (m)	Wall height	Embankment crest length (m)	Surface area at FSL (ha)	Enlarged wall volume + core trench (m ³)	Water/wall ratio	R/m ³ storage
Option 1	130 000	1.5	6.2	521	4.4	68 700	1.89	32.45
Option 2	250 000	1.5	8.3	946	5.0	133 300	1.88	30.05
Option 3	500 000	1.5	12.8	847	4.3	266 600	1.88	28.62
Option 4	250 000	1.5	8.3	522	5.6	101 900	2.45	23.65
Option 5	500 000	1.5	11.8	596	6.8	194 400	2.57	21.26
Option 6	500 000	1.5	12.4	819	5.6	235 000	2.13	25.40

Preferred Layout Alternative for Dam Option 5 (preferred and herewith authorised)

The proposed development entails:

- Construction of a new off-channel storage dam (Goree Dam) with a 500 000 m³ gross storage capacity, a main embankment with a 11.8 m wall height and an upstream berm on the eastern side with a 7.3 m wall height.
- The total development footprint is approximately 9.7 ha.
- A pump station (6m X 4m) will be constructed downstream of the main embankment and a 315mm diameter outlet pipe is proposed between the dam wall and the new pump station, downstream of the dam.
- The existing 200mm pipeline from the existing pump station at the Kanaal Dam to the proposed Goree Dam will remain unchanged storage demand.

Option 5 with a storage capacity of 500 000 m³ was selected as the preferred layout alternative for the proposed dam, as it had the best water/wall ratio and was therefore considered the most economically viable option able to meet the overall storage requirements.

The No-go alternative

This alternative represents the *status quo*. This alternative was not preferred since the socio-economic benefits associated with the proposed development will be lost. Furthermore, the proposed development will not result in significant ecological and cultural impacts, provided the recommended mitigation measures are implemented.

3. Impact Assessment and Mitigation measures

3.1 Activity need and desirability

The site is zoned as for agricultural purposes and thus the development is accommodated within the property's existing land use rights. The development is in line with the Provincial Spatial Development Framework. It will augment the existing water storage capacity on the farm, thereby safeguarding the water supply for the irrigation of crops on the property and improve agricultural production. This will aid in securing existing jobs for workers already employed on the farm and assist in the creation of additional temporary, permanent and seasonal employment opportunities. The dam will provide a buffer on the water availability during drought and water restriction periods and alleviate abstraction pressure on the river during the summer months when irrigation is required.

3.2 Biophysical Impacts

According to the available mapping resources, Robertson Karoo vegetation is present on the site. The field survey confirmed that the proposed dam site is primarily located within a cultivated area with low sensitivity from a terrestrial biodiversity perspective. This area was cultivated with vineyards less than 5 years ago (based on previous Google Earth Imagery) and currently consists of weeds and grasses. Only a small portion of the total development footprint will impact on natural vegetation consisting of a 0.9 ha portion in the north-east and 0.8 ha in the south-eastern portion of the development site (total of 1.7 ha). The vegetation within the natural portions is confirmed as least threatened Robertson Karoo and no species of conservation concern was found on the site. Based on the specialist findings (Terrestrial Biodiversity Compliance Statement dated 26 October 2021, compiled by Johlene Krige) the overall terrestrial biodiversity impact will be very low, and the development was deemed to be acceptable from a botanical perspective.

According to the Aquatic Ecosystem Opinion Report compiled by BlueScience dated November 2021, a small tributary of the Poesjesnels River is located to the southwest of the proposed dam. The affected tributary is currently in a largely natural to moderately modified ecological state in terms of riparian and instream habitat and is considered to be of low ecological importance and sensitivity. The dam will be located within the existing cultivated areas and the watercourse only becomes visible as a defined channel approximately 50m from the proposed dam embankment. This distance is deemed to be sufficient to ensure that these aquatic features are not impacted by the proposed activities. Since no additional activities associated with the proposed dam would take place in, or near the watercourse, it is unlikely that the proposed activities will directly impact this minor tributary.

A Water Use Licence Authorisation ("WULA") for the storage of water in terms of the National Water Act, 1998 (Act 38 of 1998) that also considered the watercourse related impacts was issued by the Department of Water and Sanitation on 8 September 2022.

Negative Impacts:

- The development will have a negative biophysical impact due to the loss of indigenous vegetation. These impacts will however be mitigated to a satisfactory level with the implementation of the preferred alternative, recommended mitigation measures and adherence to the EMPr.

Positive impacts:

- The development will allow more efficient storage of water by augmenting the existing water storage capacity on the farm, thereby safeguarding the water supply for the irrigation of crops on the property, especially during summer months, water restrictions and drought.
- It will alleviate abstraction pressure on the river during low flow periods.
- The development will provide job security to existing employees and create additional employment opportunities during the construction and operational phase.

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.

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