



EIA REFERENCE: 16/3/3/2/B5/2/1029/23
NEAS REFERENCE: WCP/EIA/0001266/2023
DATE OF ISSUE: 21 SEPTEMBER 2023

The Board of Directors
TSR Boerdery (Pty) Ltd.
P. O. Box 86
CERES
6836

Attention: Mr. Theo van Rooyen

Cell: (083) 275 7298
E-mail: tsr@howbill.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 REGULATIONS, 2014, (AS AMENDED): THE PROPOSED DEVELOPMENT OF AN IN-STREAM DAM ON PORTION 1 OF THE FARM KLEINVLEI NO. 209, CERES.

1. With reference to the above application, the Department hereby notifies you of its decision to **grant** Environmental Authorisation and adopts the Maintenance Management Plan, attached herewith, 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 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 National Appeal Regulations, 2014 (as amended), which prescribes the appeal procedure to be followed. This procedure is summarized in the attached Environmental Authorisation.

Yours faithfully

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

CC: Mr. C. Geyser (EnviroAfrica cc)
Mr. J. Barnard (Witzenberg Municipality)

E-mail: clinton@enviroafrica.co.za
E-mail: joseph@witzenberg.gov.za

EIA REFERENCE: 16/3/3/2/B5/2/1029/23
NEAS REFERENCE: WCP/EIA/0001266/2023
DATE OF ISSUE: 21 SEPTEMBER 2023

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, (AS AMENDED): THE PROPOSED DEVELOPMENT OF AN IN-STREAM DAM ON PORTION 1 OF THE FARM KLEINVLEI NO. 209, CERES.

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 the Preferred alternative as described in the Environmental Impact Assessment Report ("EIAR"), received on 28 July 2023.

In terms of the NEMA, viz, the EIA Regulations, 2014 (Listing Notices 1 and 3 of 2014 in Government Gazette No. 40772 of 7 April 2017) the Competent Authority hereby adopts the Maintenance Management Plan ("MMP") for the proposed maintenance activities on Portion 1 of Farm Kleinvlei No 209, Ceres.

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

The Board of Directors
TSR Boerdery (Pty) Ltd.
P. O. Box 86
CERES
6836

Cell: (083) 275 7298
E-mail: tsr@howbill.co.za

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

B. LISTED ACTIVITIES AUTHORISED

Listed Activities	Project Description
<p>EIA Regulations Listing Notice 1 of 2014: Activity Number: 12 <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 reserves 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 proposed development will have a development footprint of more than 100m² within, and within 32m of a watercourse.</p>
<p>EIA Regulations Listing Notice 1 of 2014: Activity Number: 19 <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>The proposed development will result in the removal/excavation or moving of soil, sand, pebbles or rock of more than 10 cubic metres within a watercourse.</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>	
<p>Listing Notice 1 Activity Number: 27 <i>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—</i> <i>(i) the undertaking of a linear activity; or</i> <i>(ii) maintenance purposes undertaken in accordance with a maintenance management plan.</i></p>	<p>More than 1ha of indigenous vegetation will be cleared.</p>
<p>EIA Regulations Listing Notice 2 of 2014: Activity Number: 16 <i>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.</i></p>	<p>A proposed in-stream dam will have a wall height of approximately 7.8m covering an area of more than 10ha.</p>

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

The holder is herein authorised to undertake the following alternative as it relates to the listed activities:

The proposed development on Portion 1 of the Farm Kleinvei No. 209, Ceres will include the following:

- The development of a dam with a total storage capacity of approximately 176 840m³ that will be filled with existing water use rights. The dam wall will have a maximum wall height of approximately 7.8m and a full supply level area of 10.47ha with a total footprint of approximately 10. 8ha.
- The development of a pipeline with a diameter of 250mm and length of approximately 45m.
- The development of an open side channel spillway with a concrete sill.

Most of the material for the construction of the dam will be obtained from the excavated dam basin. Additional clay material will be required for the construction of the dam wall and will be sourced from an extraction pit located approximately 200m east of the dam site. The extraction area will be approximately 3 200m² in extent. Additional sand will be obtained from a licenced commercial source.

C. SITE DESCRIPTION AND LOCATION

The authorised listed activities will be undertaken on Portion 1 of the Farm Kleinvlei No. 209, Ceres and has the following co-ordinates:

Latitude (S)	33°	04'	02.50"
Longitude (E)	19°	19'	57.50"

The SG digit code: C01900000000020900001

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

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

D. DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

Mr. C. Geysler
EnviroAfrica CC
P.O. Box 5367
HELDERBERG
7135

Tel.: 021 851 1616

Email: clinton@enviroafrica.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 preferred Alternative described in the Environmental Impact Assessment Report ("EIAR"), received on 28 July 2023 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 for, 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 (5) 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. 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

5. Seven calendar days' notice, in writing, must be given to the Competent Authority before commencement of construction activities.
 - 5.1. The notice must make clear reference to the site details and EIA Reference number given above.
 - 5.2. The notice must also include proof of compliance with the following conditions described herein:
Conditions: 6, 7 and 11.

Notification and administration of appeal

6. The holder must in writing, within 14 (fourteen) calendar days of the date of this decision—
 - 6.1. notify all registered Interested and Affected Parties ("I&APs") of –
 - 6.1.1. the outcome of the application;
 - 6.1.2. the reasons for the decision as included in Annexure 3;
 - 6.1.3. the date of the decision; and
 - 6.1.4. the date when the decision was issued.
 - 6.2. 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;
 - 6.3. draw the attention of all registered I&APs to the manner in which they may access the decision;
 - 6.4. provide the registered I&APs with:
 - 6.4.1. the name of the holder (entity) of this Environmental Authorisation,
 - 6.4.2. name of the responsible person for this Environmental Authorisation,
 - 6.4.3. postal address of the holder,
 - 6.4.4. telephonic and fax details of the holder,
 - 6.4.5. e-mail address, if any, of the holder,
 - 6.4.6. 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.
7. The listed activities, including site preparation, may not commence within **20 (twenty)** calendar days from the date the applicant 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 commence until the appeal is decided.

Management of activity

8. The draft or Environmental Management Programme ("EMPr") submitted as part of the application for Environmental Authorisation is hereby approved and must be implemented.
9. The Maintenance Management Plan ("MMP") adopted as part of this Environmental Authorisation 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 the proposed development to ensure compliance with the provisions of the EMPr, and the conditions contained herein. The ECO must conduct site visits and must submit ECO reports on a monthly basis to the competent authority for the duration of the construction phase.
12. A copy of the Environmental Authorisation, MMP, EMPr, audit reports and compliance monitoring 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. The ECO must submit ECO reports on a quarterly basis for the duration of the proposed activities.
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 it for the purposes of assessing and/or monitoring compliance with the conditions contained herein.

Auditing

14. 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, the EMPr and submit Environmental Audit Reports to the Competent Authority. The Environmental Audit Report must be prepared by an independent person, that is not the ECO referred to in Condition 11 above and must contain all the information required in Appendix 7 of the NEMA EIA Regulations, 2014.

The Environmental Audit Reports must be compiled and subsequently submitted to the Department in the following manner:

- 14.1. An Environmental Audit Report must be submitted to the Competent Authority within three (3) months of the commencement of the proposed development; and
- 14.2. A final Environmental Audit Report must be submitted within three (3) months of the completion of the proposed development.

The holder must, within 7 days of the submission of the above-mentioned report 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

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.

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.

16. 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 activity.
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 activity within the period referred to in Condition 2, this Environmental Authorisation shall lapse for the activities, 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 3721)
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: 21 SEPTEMBER 2023

CC: Mr. C. Geyser (EnviroAfrica cc)
Mr. J. Barnard (Witzenberg Municipality)

E-mail: clinton@enviroafrica.co.za
E-mail: joseph@witzenberg.gov.za

ANNEXURE 1: LOCALITY MAP

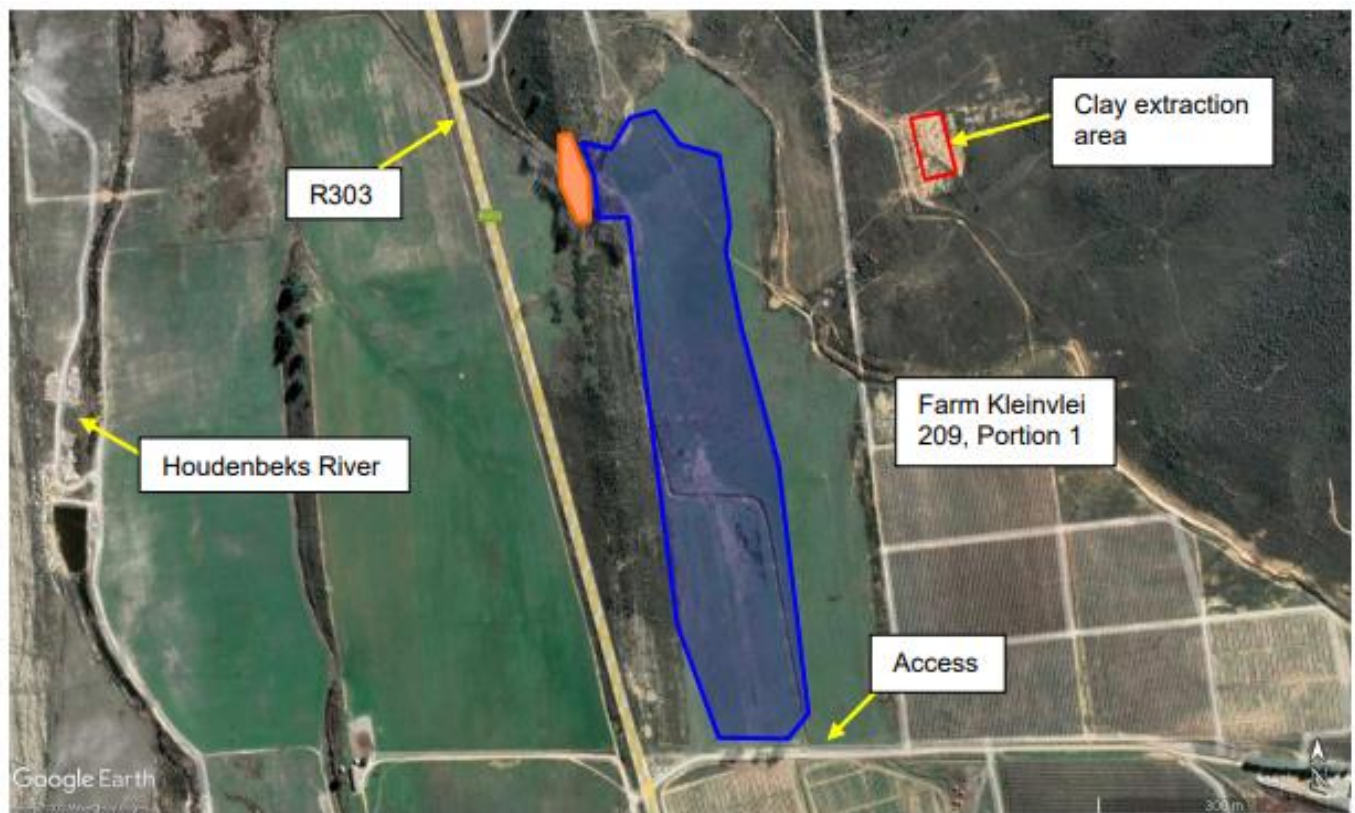
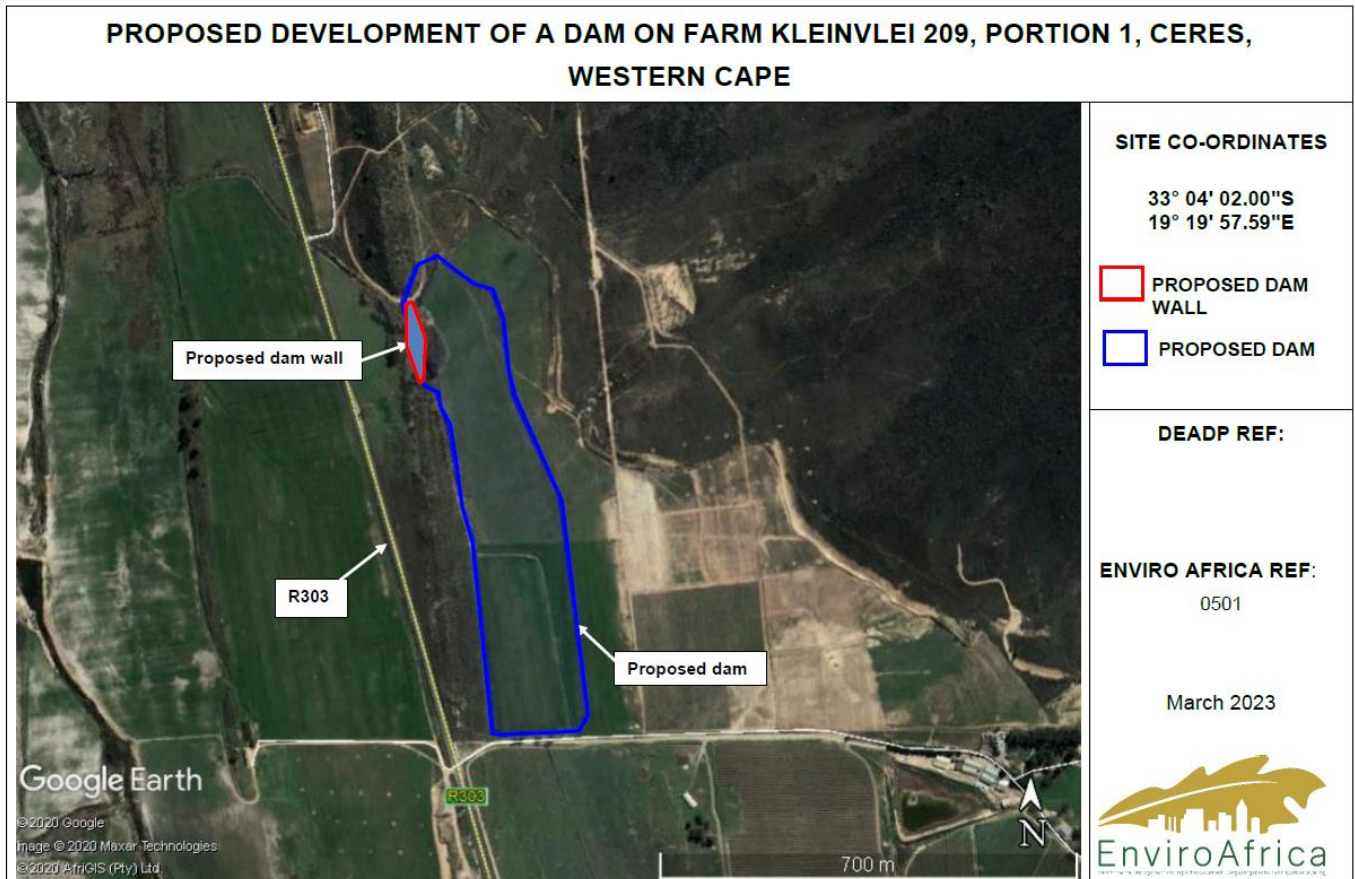
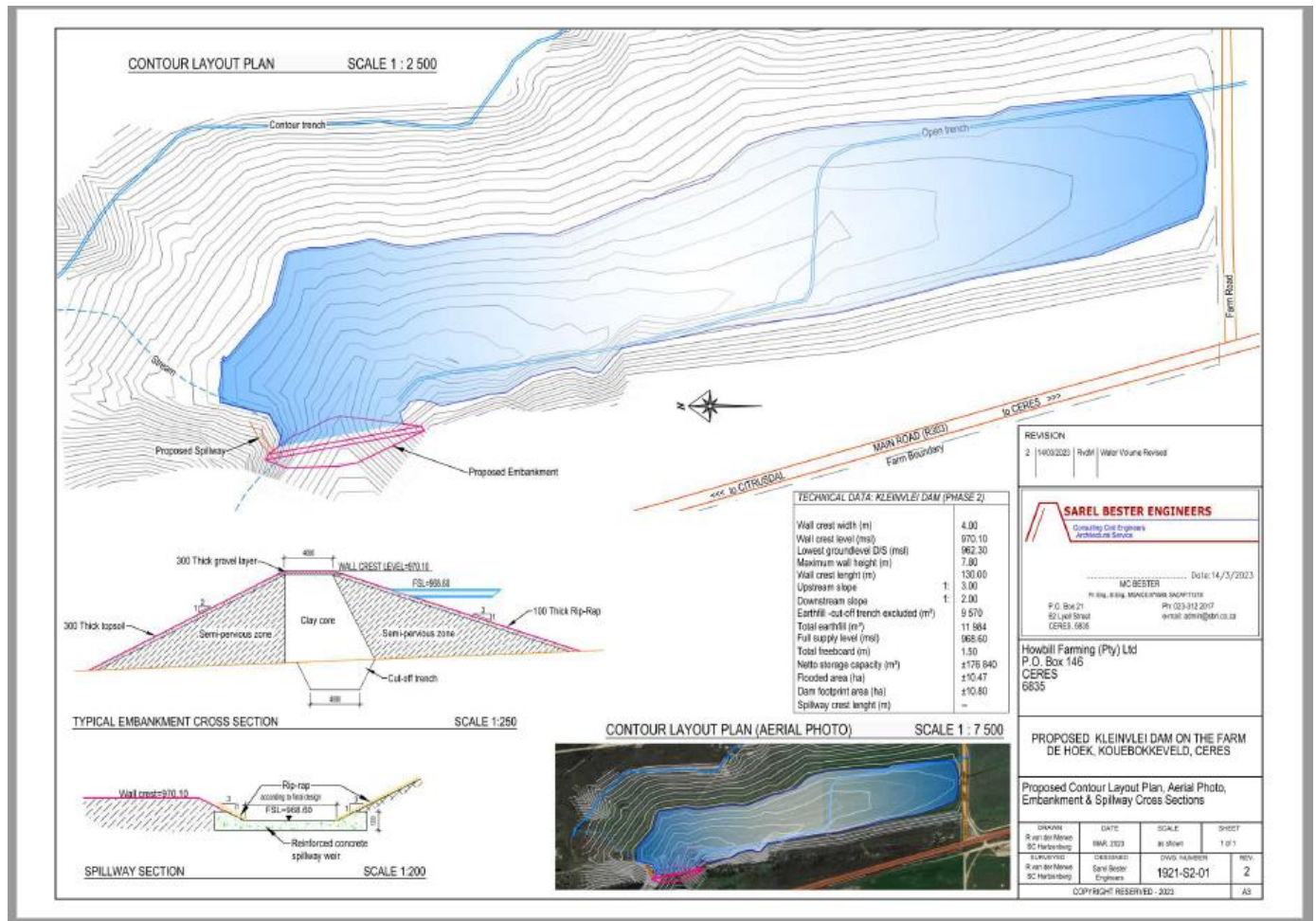


Figure 1: Location of the Portion 1 of Farm Kleinvelei No 209, Ceres.

ANNEXURE 2: SITE PLAN



ANNEXURE 3: REASONS FOR THE DECISION

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

- The information contained in the Application Form received by the Department on 18 April 2023 and the EMPr submitted together with the final EIAR on 28 July 2023. The final Scoping Report was accepted by the Department on 25 August 2021 for a previous application (Reference number: 16/3/3/2/B5/2/1029/21) for which Environmental authorisation was refused. The findings of the final Scoping Report are still valid, since the scope of the development and the environmental context has not changed;
- Relevant information contained in the Departmental information base, including the Guidelines on Public Participation and Alternatives (dated March 2013);
- 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);
- The comments received from I&APs and responses to these, included in the final EIAR received on 28 July 2023; and
- 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 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;
- fixing a notice board at the site where the listed activities are to be undertaken on 18 November 2019;
- the placing of a newspaper advertisement in the "*Witzenberg Herald*" on 15 November 2019;
- 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; and
- making the draft EIAR available to I&APs for public review from June 2023 to July 2023.

Although Environmental authorisation was refused for the previous application (Reference number: 16/3/3/2/B5/2/1029/21), the Scoping Report was accepted on 25 August 2021. Regulation 21(2)(a) makes provision for not having to submit a Scoping Report during subsequent re-application for the same project, if the findings of such report are still valid and the environmental context has not changed. The above is applicable to this application and a new Scoping Report was therefore not submitted for this application.

The Department is satisfied that the Public Participation Process that was followed met the minimum legal requirements and that 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 EMPr to adequately address the concerns raised.

2. Alternatives

Alternatives

Various alternative storage capacities for the dam were investigated, which included storage capacities of 1 68 000 m³, 235 000m³, 212 000m³ and 176 840m³.

The dam with a storage capacity of 235 000m³, a wall height of 8,4m and a full supply level of 12ha and a footprint of 13ha was previously the preferred alternative. This alternative is no longer the preferred alternative as the existing lawful water use rights were confirmed to be less than 235 000m³.

Preferred alternative (herewith authorised)

This alternative is the preferred option, as it can accommodate the available water rights, and also has a smaller development footprint.

This alternative will entail the following:

- The development of a dam with a total storage capacity of approximately 176 840m³ that will be filled with existing water use rights. The dam wall will have a maximum wall height of approximately 7.8m and a full supply level area of 10.47ha with a total footprint of approximately 10.8ha.
- The development of a pipeline with a diameter of 250mm and length of approximately 45m.
- The development of an open side channel spillway with a concrete sill.

Most of the material for the construction of the dam will be obtained from the excavated dam basin. Additional clay material will be required for the construction of the dam wall and will be sourced from an extraction pit located approximately 200m east of the dam site. The extraction area will be approximately 3 200m² in extent. Additional sand will be obtained from a licenced commercial source.

The “No-Go” Alternative

The “No-Go” option of not proceeding with the proposed development is not preferred, as the opportunity to increase the economic viability of the farm and to ensure that sufficient water storage and supply is available for irrigation purposes during the summer months, will be lost.

3. Impact Assessment and Mitigation measures

3.1. Activity need and desirability

The property is zoned Agricultural and the proposed activity is therefore in keeping with the land use rights of the property. The proposed dam will allow the applicant to increase the financial viability of the farm, ensure employment security and to have adequate water supply available for irrigation especially during the summer months. By storing the water and increasing water supply for irrigation, the full agricultural potential of the farm can be achieved, which benefits the farmer and farm workers.

3.2. Biophysical impacts

According to Botanical Assessment Report (dated March 2021, compiled by Bergwind Botanical Survey & Tours), the construction of the dam would not result in a significant loss of indigenous vegetation. All the alternatives considered would be in areas that have been historically disturbed, with no Kouebokkeveld Shale Fynbos, which is classified as a critically endangered ecosystem in terms of the National Environmental Management: Biodiversity Act, (Act 10 of 2004) (“NEM:BA”) revised list of Threatened Ecosystems in Need of Protection dated 18 November 2022. The dam alternatives considered would have a limited (small) effect on isolated patches of Winterhoek Sandstone Fynbos, which is not classified as a critical endangered or endangered ecosystem (in terms of the NEM:BA threatened ecosystem list) and has low sensitivity. Furthermore, the Botanical and Terrestrial Biodiversity Compliance Statement (dated 3 June 2023, compiled by Bergwind Botanical Survey & Tours) confirmed that no critically endangered Kouebokkeveld Shale Fynbos is found within the clay quarry site and that the sensitivity of the habitat is regarded as very low with very low conservation value. The specialist regards the impacts on vegetation to be of very low negative significance after mitigation.

According to the Freshwater Ecological Assessment (February 2020, compiled by FEN Consulting (Pty) Ltd), several ephemeral drainage lines were identified in the eastern portion of the investigation area (conveying surface water into excavated channels located in the study area, which ultimately flows into the Houdenberg River (located approximately 510m west of the study area). Historically (prior to any land use transformation) these excavated channels were potentially functioning watercourses (as part of the upgradient drainage lines, in the eastern portion of the investigation area) which have become severely degraded as a result of removal of all indigenous vegetation and straightening of the channels to optimise the study area for cultivation, to the point that they only function as waterways. The specialist regards the impacts on watercourses as a result of the proposed development as being of low negative significance after mitigation.

3.3. Impact on Heritage Resources

Heritage Western Cape confirmed in their correspondence dated 30 January 2020, that no further action under Section 38 of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) is required. Additionally, the applicant will comply with Conditions 15 and 16 of this Environmental Authorisation. This will help to ensure the protection of any heritage resources that may be encountered on the site.

The development will result in both negative and positive impacts.

Negative Impacts:

- Impacts on watercourses.

Positive impacts:

- The creation of temporary employment opportunities during the construction phase and permanent employment during the operational phase;
- The proposed dam will ensure that water is secured for irrigation purposes during summer; and
- The proposed development will increase the economic viability of the farm and secure continued income.

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 activity 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.

-----END-----