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Agricultural Compliance Statement for the proposed development of Farm number 31/250, Buffelsfontein at Boggomsbaai near Mossel Bay, Western Cape

17 November 2022

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1. Introduction

Environmental authorisation is being sought for the above project (see locality in Figure 1). In terms of the National Environmental Management Act (Act No 107 of 1998 - NEMA), an application for environmental authorisation requires an agricultural assessment. In this case, based on the verified, less than high agricultural sensitivity of the site, the level of agricultural assessment required is an Agricultural Compliance Statement.

Johann Lanz was appointed as an independent agricultural specialist to conduct the agricultural assessment. The objective and focus of an agricultural assessment is to assess whether or not the proposed development will have an unacceptable agricultural impact, and based on this, to make a recommendation on whether or not it should be approved.

The purpose of the agricultural component in the Environmental Authorisation process is to preserve the agricultural production potential of, particularly scarce arable land, by ensuring that development does not exclude existing or potential agricultural production from the land or impact the land to the extent that its production potential is reduced. However, this project poses insignificant threat to agricultural production potential.

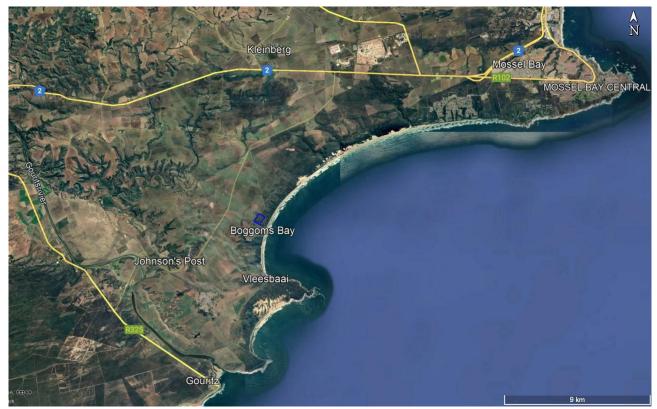


Figure 1. The locality of the property (blue outline) at Boggoms Bay.

2. Project description

The project will cause the permanent exclusion of potential agricultural production from the entire development footprint. Once agriculture is excluded from the site, there can be no further on-site agricultural impact. There is also no off-site agricultural impact. The design and layout of the development within the footprint is therefore of no relevance to agricultural impacts and it is unnecessary to consider it any further in this assessment. All that is of relevance is the loss of the total footprint to potential agricultural production. Note that there are two alternative footprints of different sizes. The preferred alternative is the smaller of the two and is shown in the satellite image map of the site in Figure 2

3. Site sensitivity verification

Agricultural sensitivity, in terms of environmental impact, and as used in the national web-based environmental screening tool, is a direct function of the capability of the land for agricultural production. The screening tool classifies agricultural sensitivity according to only two independent criteria – the land capability rating and whether the land is used for cropland or not. All cropland is classified as at least high sensitivity, based on the logic that if it is under crop production, it is indeed suitable for it, irrespective of its land capability rating.



Figure 2. Detailed satellite image map of the property and preferred footprint, and showing the different land types (Ae133 in the north-western part of the site and Ha1 in the south-eastern part).

It is important to note that agricultural sensitivity only takes biophysical factors (soil, climate, terrain) into account. The existence of any infrastructure on the land as well as land use zoning, road reserves, servitudes, surrounding land use, and limitations imposed by social factors are completely ignored in the mapping of agricultural sensitivity.

The screening tool sensitivity categories in terms of land capability are based upon the Department of Agriculture's updated and refined, country-wide land capability mapping, released in 2016. The data is generated by GIS modelling. Land capability is defined as the combination of

soil, climate and terrain suitability factors for supporting rain fed agricultural production. It is an indication of what level and type of agricultural production can sustainably be achieved on any land, based on its soil, climate and terrain.

A map of the proposed property overlaid on the screening tool sensitivity is given in Figure 3. Because none of the land is classified as cropland, agricultural sensitivity is purely a function of land capability. The classified land capability of the site varies from 5 to 7. Values of 5 translate to a low agricultural sensitivity and values of 6 to 7 translate to a medium agricultural sensitivity.

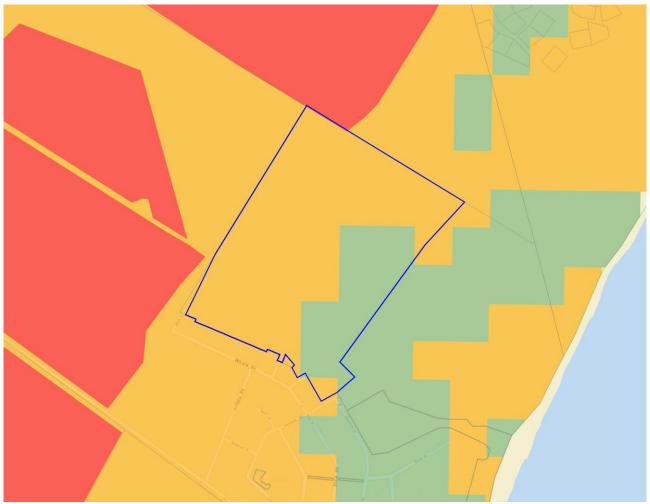


Figure 3. The property (blue outline) overlaid on agricultural sensitivity as identified by the screening tool (green = low; yellow = medium; red = high).

The medium and low agricultural sensitivity of the site, as identified by the screening tool, is confirmed by this assessment. The motivation for confirming the sensitivity is that the site is not under crop production and has never been used for it; the southern part of the site is constrained by steeper slopes; the land type data (see Appendix 1) indicates that the soils are highly likely to be either shallow soils (north-western part of site on land type Ae133) or very sandy soils with low water holding capacity derived from dunes (south-eastern part of site on land type Ha1). In addition the site borders on a residential area, which can impose constraints on agricultural use of the land. A medium and low agricultural sensitivity is entirely appropriate for this land which

would almost definitely never be used for crop production, even in the absence of the proposed development, and is highly likely to be unsuitable for crop production due to soil, terrain and other constraints.

4. Assessment of agricultural impact

An agricultural impact is a change to the future agricultural production potential of land. In this case that will be caused by the permanent exclusion of potential agricultural production from the site. However, the site has very limited agricultural production potential (see following section) and the agricultural impact is therefore assessed as being of low significance.

5. Agricultural Compliance Statement

An Agricultural Compliance Statement is required to indicate whether or not the proposed development will have an unacceptable impact on the agricultural production capability of the site. It must provide a substantiated statement on the acceptability, or not, of the proposed development and a recommendation on the approval, or not of the proposed development.

The impact of the proposed development on the agricultural production capability of the site is assessed as being acceptable because:

- The site has never been used for crop production and is likely to be suitable only as grazing land. There is not a scarcity of such agricultural land in South Africa and its conservation for agricultural production is not therefore a priority.
- The agricultural production potential of the land is limited by slope; shallow soils or very sandy soils with low water holding capacity; and the constraints of bordering on a residential area.

Because of the above factors, the impact of the proposed development on the agricultural production capability of the site is assessed as being low and therefore acceptable and, from an agricultural impact point of view, it is recommended that the development be approved. There is no material difference between the agricultural impacts of either of the proposed footprint alternatives, because both have such low agricultural impact. Both alternatives are considered acceptable.

The protocol requirement of confirmation that all reasonable measures have been taken through micro-siting to avoid or minimise fragmentation and disturbance of agricultural activities, is not relevant in this case.

The conclusion of this assessment on the acceptability of the proposed development and the recommendation for its approval is not subject to any conditions. In completing this statement, no assumptions have been made and there are no uncertainties or gaps in knowledge or data that are relevant to it. No further agricultural assessment of any kind is required for this application.

The required relevant experience, proving the specialist's fitness for completing this assessment, is given in the curriculum vitae overleaf.

J. Lanz (Pr. Sci.Nat.)17 November 2022

Johann Lanz Curriculum Vitae

Education

M.Sc. (Environmental Geochemistry)	University of Cape Town	1996 - 1997
B.Sc. Agriculture (Soil Science, Chemistry)	University of Stellenbosch	1992 - 1995
BA (English, Environmental & Geographical Science)	University of Cape Town	1989 - 1991
Matric Exemption	Wynberg Boy's High School	1983

Professional work experience

I have been registered as a Professional Natural Scientist (Pri.Sci.Nat.) in the field of soil science since 2012 (registration number 400268/12) and am a member of the Soil Science Society of South Africa.

Soil & Agricultural Consulting Self employed

2002 - present

Within the past 5 years of running my soil and agricultural consulting business, I have completed more than 170 agricultural assessments (EIAs, SEAs, EMPRs) in all 9 provinces for renewable energy, mining, electrical grid infrastructure, urban, and agricultural developments. I was the appointed agricultural specialist for the nation-wide SEAs for wind and solar PV developments, electrical grid infrastructure, and gas pipelines. My regular clients include: Zutari; CSIR; SiVEST; SLR; WSP; Arcus; SRK; Environamics; Royal Haskoning DHV; ABO; Enertrag; WKN-Windcurrent; JG Afrika; Mainstream; Redcap; G7; Mulilo; and Tiptrans. Recent agricultural clients for soil resource evaluations and mapping include Cederberg Wines; Western Cape Department of Agriculture; Vogelfontein Citrus; De Grendel Estate; Zewenwacht Wine Estate; and Goedgedacht Olives.

In 2018 I completed a ground-breaking case study that measured the agricultural impact of existing wind farms in the Eastern Cape.

Soil Science Consultant Agricultural Consultors International (Tinie du Preez) 1998 - 2001

Responsible for providing all aspects of a soil science technical consulting service directly to clients in the wine, fruit and environmental industries all over South Africa, and in Chile, South America.

Contracting Soil Scientist De Beers Namaqualand Mines July 1997 - Jan 1998

Completed a contract to advise soil rehabilitation and re-vegetation of mined areas.

Publications

- Lanz, J. 2012. Soil health: sustaining Stellenbosch's roots. In: M Swilling, B Sebitosi & R Loots (eds). Sustainable Stellenbosch: opening dialogues. Stellenbosch: SunMedia.
- Lanz, J. 2010. Soil health indicators: physical and chemical. *South African Fruit Journal*, April / May 2010 issue.
- Lanz, J. 2009. Soil health constraints. South African Fruit Journal, August / September 2009 issue.
- Lanz, J. 2009. Soil carbon research. AgriProbe, Department of Agriculture.
- Lanz, J. 2005. Special Report: Soils and wine quality. Wineland Magazine.

I am a reviewing scientist for the South African Journal of Plant and Soil.

DECLARATION OF THE SPECIALIST

Note: Duplicate this section where there is more than one specialist.

I, **Johann Lanz**, as the appointed Specialist hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that I:

- in terms of the general requirement to be independent:
 - other than fair remuneration for work performed/to be performed in terms of this application, have no business, financial, personal or other interest in the activity or application and that there are no circumstances that may compromise my objectivity; or
 - am not independent, but another specialist that meets the general requirements set out in Regulation 13 have been appointed to review my work (Note: a declaration by the review specialist must be submitted);
- in terms of the remainder of the general requirements for a specialist, am fully aware of and meet all of the requirements and that failure to comply with any the requirements may result in disqualification;
- have disclosed/will disclose, to the applicant, the Department and interested and affected
 parties, all material information that have or may have the potential to influence the
 decision of the Department or the objectivity of any report, plan or document prepared or
 to be prepared as part of the application; and
- am aware that a false declaration is an offence in terms of regulation 48 of the 2014 NEMA
 EIA Regulations.

Signature of the specialist:

Date: 17 November 2022

Name of company: Johann Lanz – soil scientist (sole proprietor)

Appendix 1: Soil data

Table of land type soil data

Land type	Soil series (forms)	Depth (mm)		Clay % A horizon		Clay % B horizon			Depth limiting layer	% of land type		
Ae133	Hutton	600	-	900	8	-	15	10	-	30	R	43.2
Ae133	Swartland	300	-	400	10	-	20	35	-	55	vr	26.4
Ae133	Glenrosa	200	-	300	8	-	20	15	-	30	so	12.0
Ae133	Mispah	100	-	200	6	-	12	0	0	0	ka	8.9
Ae133	Valsrivier	200	-	300	10	-	20	35	-	55	vr	6.2
Ae133	Oakleaf	0	>	1200	8	-	15	10	-	30	0	1.7
Ae133	Westleigh	200	-	600	6	-	15	6	-	15	sp,pr	0.9
Ae133	Pans	0	0	0	0	0	0	0	0	0	0	0.6
Ae133	Dundee	0	>	1200	8	-	12	0	0	0	0	0.3
Ha1	Fernwood	0	>	1200	1	-	4	1	-	4	0	80.3
Ha1	Mispah	200	-	400	2	-	4	0	0	0	ka	9.9
Ha1	Fernwood	0	>	1200	1	-	4	1	-	4	0	4.9
Ha1	Clovelly	0	>	1200	3	-	6	3	-	6	0	3.6
Ha1	Vilafontes	0	>	1200	2	-	6	4	-	10	0	1.3