

**Site sensitivity verification
and Agricultural Compliance Statement
for the development of
Erf 998 and Portion 5 of the Farm Zandhoogte number 139,
Tergniet, Mossel Bay Municipality**

Environmental authorisation is being sought for the above development (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 sensitivity of the site, the level of agricultural assessment required is an Agricultural Compliance Statement.

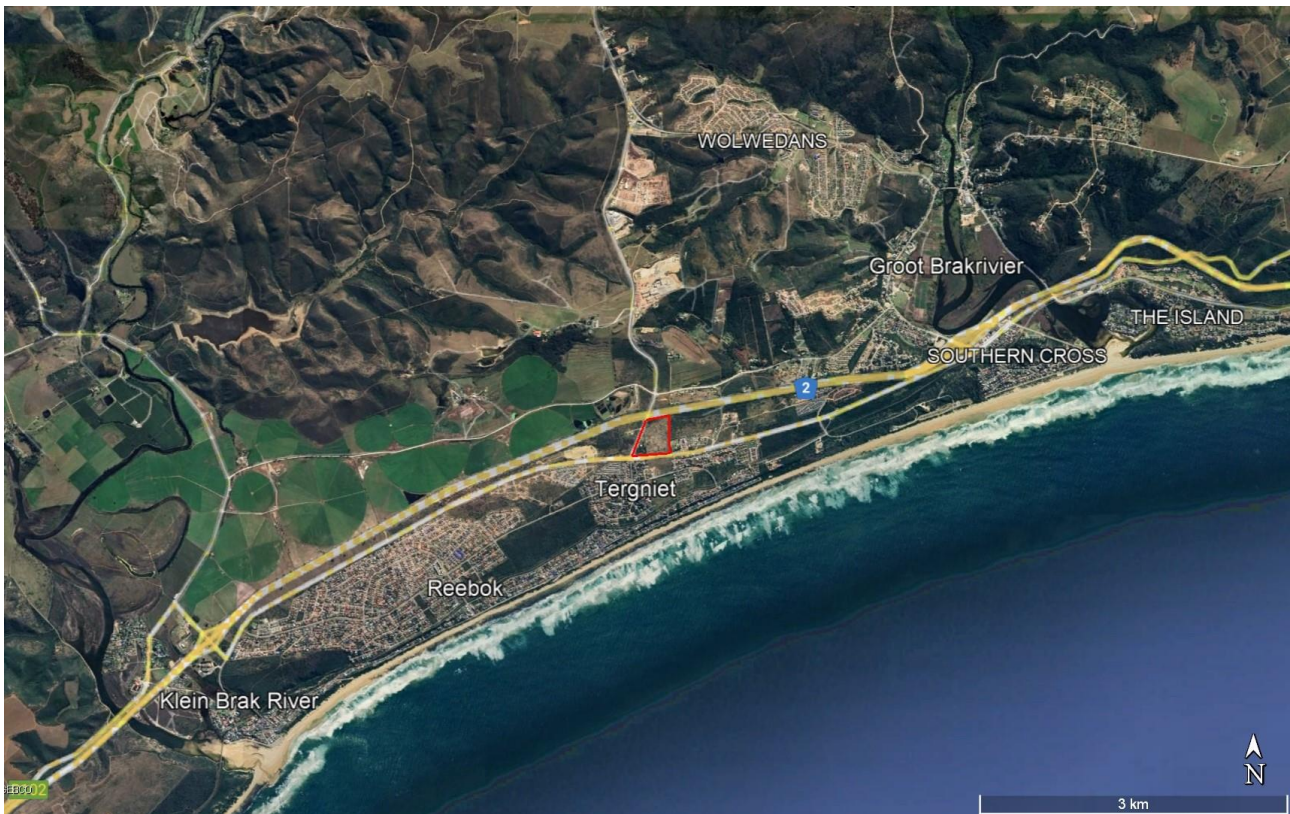


Figure 1. The locality of the property (red outline) in Tergniet.

Johann Lanz was appointed as an independent agricultural specialist to conduct the agricultural assessment. The objective and focus of an agricultural assessment are to assess whether or not the agricultural impact of the proposed development will be acceptable, 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 assessment process is to preserve agricultural production potential by ensuring that development does not unnecessarily exclude existing or potential agricultural production from land, or unnecessarily impact agricultural land to the extent that its production potential is reduced. The primary focus is on preservation of the agricultural production potential of scarce, arable land. This site however has no real crop production potential and is therefore not considered a priority for preserving as agricultural production land.

The Protocol for the specialist assessment and minimum report content requirements of environmental impacts on agricultural resources, gazetted on 20 March 2020, states that:

prior to commencing with a specialist assessment, the current use of the land and the environmental sensitivity of the site under consideration, identified by the screening tool, must be confirmed by undertaking a site sensitivity verification that confirms or disputes the current use of the land and the environmental sensitivity as identified by the screening tool.

1 Site sensitivity verification

In terms of the gazetted agricultural protocol, a site sensitivity verification must be submitted that:

1. confirms or disputes the current use of the land and the environmental sensitivity as identified by the screening tool, such as new developments or infrastructure, the change in vegetation cover or status etc.;
2. contains a motivation and evidence (e.g. photographs) of either the verified or different use of the land and environmental sensitivity.

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. This is because a negative impact, or exclusion of agriculture, on land of higher agricultural capability is more detrimental to agriculture than the same impact on land of low agricultural capability. The general assessment of agricultural sensitivity that is employed in the national web-based environmental screening tool, identifies all arable land that can support viable production of cultivated crops, as high (or very high) sensitivity. This is because there is a scarcity of arable production land in South Africa and its conservation for agricultural use is therefore a priority. Land which cannot support viable production of cultivated crops is much less of a priority to conserve for agricultural use, and is rated as medium or low agricultural sensitivity.

The screening tool classifies agricultural sensitivity according to only two independent criteria – the land capability rating and whether the land is cultivated or not. All cultivated land is classified as at least high sensitivity, based on the logic that if it is under cultivation, it is indeed suitable for cultivation, irrespective of its land capability rating.

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. 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. The higher land capability values (≥ 8 to 15) are likely to be suitable as arable land for the production of cultivated crops, while lower values are only likely to be suitable as non-arable, grazing land, or at the lowest extreme, not even suitable for grazing.

A map of the proposed development area overlaid on the screening tool sensitivity is given in Figure 2. Because none of the land is classified a cultivated land, agricultural sensitivity is purely a function of land capability. The land capability of the investigated site varies from 6 to 8, which translates to a medium agricultural sensitivity.

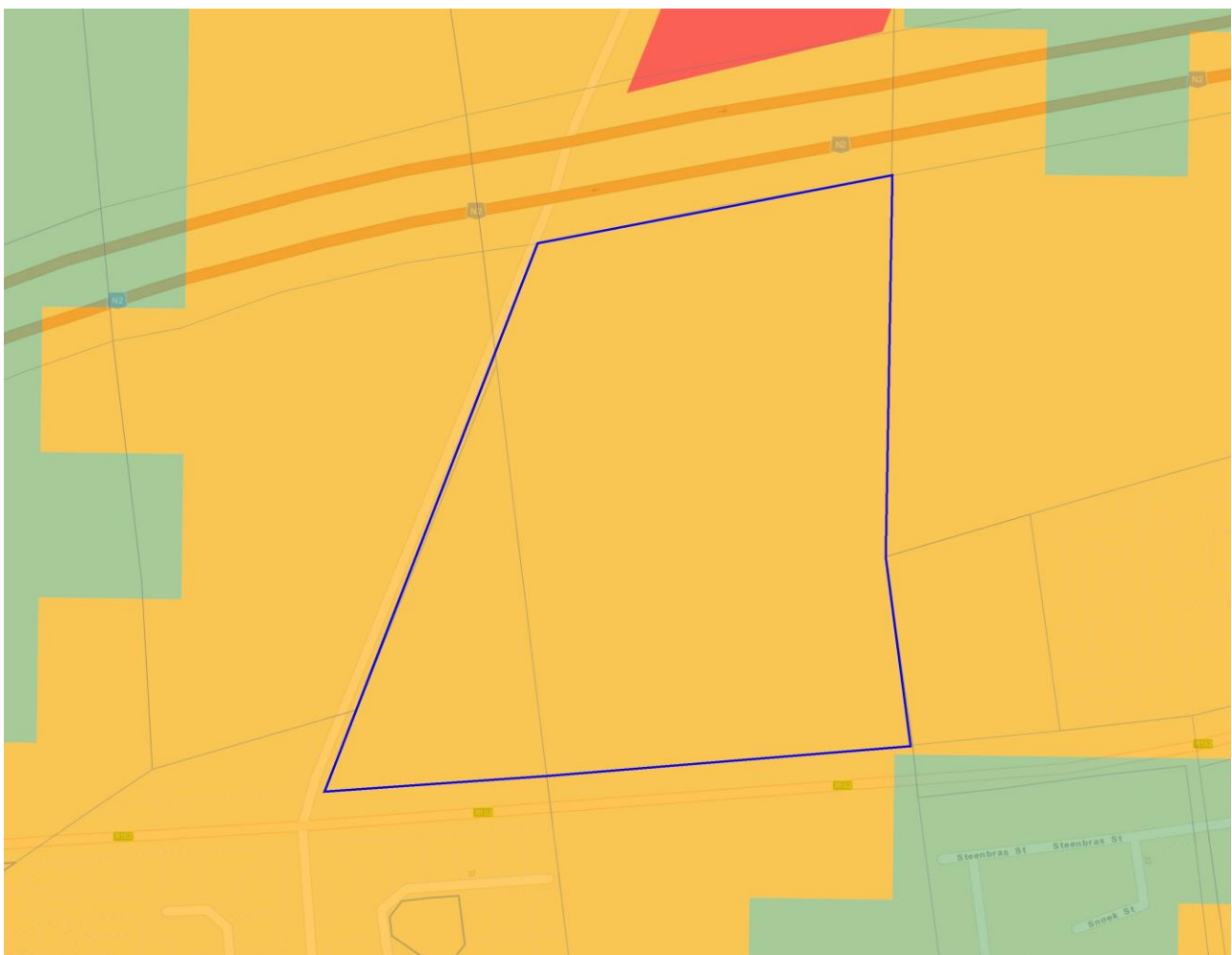


Figure 2. The proposed development footprint (blue outline) overlaid on agricultural sensitivity as identified by the screening tool (green = low; yellow = medium; red = high; dark red = very high).

The medium agricultural sensitivity, as identified by the screening tool, is confirmed by this assessment. The motivation for confirming the sensitivity is that the site is not currently utilised for agricultural production, and has very limited future production potential because of the very sandy soils, the small size of the land parcel, which makes agriculture non economically viable, and its

location amongst small parcels of land with non-agricultural land use and cut off from nearby agriculture by the N2 highway. It is befitting for land that is not suitable for crop production to be rated as medium agricultural sensitivity.

This site sensitivity verification verifies the entire site as being of medium high agricultural sensitivity. The required level of agricultural assessment is therefore confirmed as an Agricultural Compliance Statement.

2 Agricultural Compliance Statement

The agricultural impact of the proposed development will be the permanent exclusion of potential agricultural production from the land parcel. As has been discussed above the site is not currently utilised for agricultural production, and has very limited future production potential because of the very sandy soils, the small size of the land parcel, which makes agriculture non economically viable, and its location among small parcels of land with non-agricultural land use and cut off from nearby agriculture by the N2 highway.

Because the site is not suitable for agricultural production, the proposed development cannot have an unacceptable negative impact on the agricultural production capability of the site. Therefore, from an agricultural impact point of view, it is recommended that the development be approved.

The entire site will be excluded from agricultural use. Therefore, 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. For the same reason, and because there are no off-site agricultural impacts, there are no Environmental Management Programme inputs required for the protection of agricultural potential on the site.

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.

A handwritten signature in black ink, appearing to read 'J. Lanz', with a stylized flourish extending to the left.

J. Lanz (Pr. Sci.Nat.)
16 May 2023

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: **16 May 2023**

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

herewith certifies that

Johan Lanz

Registration Number: 400268/12

is a registered scientist

in terms of section 20(3) of the Natural Scientific Professions Act, 2003
(Act 27 of 2003)
in the following field(s) of practice (Schedule 1 of the Act)

Soil Science (Professional Natural Scientist)

Effective **15 August 2012**

Expires **31 March 2024**



Chairperson

Chief Executive Officer

