

Appendix G1 Agricultural Compliance Statement



 **LEGACY** | ENVIRONMENTAL
MANAGEMENT
CONSULTING



**Site sensitivity verification
and Agricultural Compliance Statement
for an industrial development
on Erf 1991 and Portion 5 and 26 of Farm 724 in Fisantekraal**

Table of Contents

1	Introduction.....	1
2	Project description	2
3	Site sensitivity verification	3
4	Baseline agricultural environment	5
5	Assessment of agricultural impact	5
6	Agricultural Compliance Statement	5

1 Introduction

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.

Johann Lanz was appointed as an independent agricultural specialist to provide 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 or not, and based on this, to make a recommendation on whether it should be approved or not.

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



Figure 1. The locality of the proposed development (red outline) in Fisantekraal.

2 Project description

The proposed project is an industrial development. The project will cause the exclusion of potential agricultural production from the entire site. 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 property 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 site to potential agricultural production.

A more detailed satellite image map of the development site is shown in Figure 2.



Figure 2. Satellite image map of the site.

3 Site sensitivity verification

A map of the proposed development site, overlaid on the screening tool sensitivity, is given in Figure 3. The screening tool classifies agricultural sensitivity according to only two independent criteria – the land capability rating and whether the land is cropland or not. None of the land is classified as cropland and agricultural sensitivity is therefore purely a function of land capability. The classified land capability of the site is predominantly 8, but varies from 6 to 9. The small scale differences in the modelled land capability across the project area are not very accurate or significant at this scale and are more a function of how the data is generated by modelling, than actual meaningful differences in agricultural potential on the ground. Values of 6 to 8 translate to a medium agricultural sensitivity and values of 9 to 10 translate to a high agricultural sensitivity.

The soils on the site are all sandy soils of an Hb land type. These land types, because of their unlimited soil depth, are attributed a land capability on the modelled land capability data set,

wherever they occur, that is too high (≥ 8) in relation to their actual cropping potential. In reality such soils have a very low cropping potential due to their very low water and nutrient holding capacity and therefore do not deserve a land capability rating of any higher than 7.

Furthermore, the screening tool sensitivity of the site has limited relevance for agricultural impact. Agricultural sensitivity is an indication of the production potential of land. Classified agricultural sensitivity only takes biophysical factors (soil, climate, terrain) into account. However, agricultural production potential is not only a function of these things. There are a number of other factors that influence whether a piece of land can practically deliver agricultural produce or not and which therefore influence its agricultural production potential, but are completely ignored in the mapping of agricultural sensitivity. In this case the existence of infrastructure on the land, land use planning, surrounding land use, excavations, and disturbances to soil further reduce the agricultural production potential of the site.

As a result of its low agricultural production potential, this site sensitivity verification verifies the entire site as being of low agricultural sensitivity.

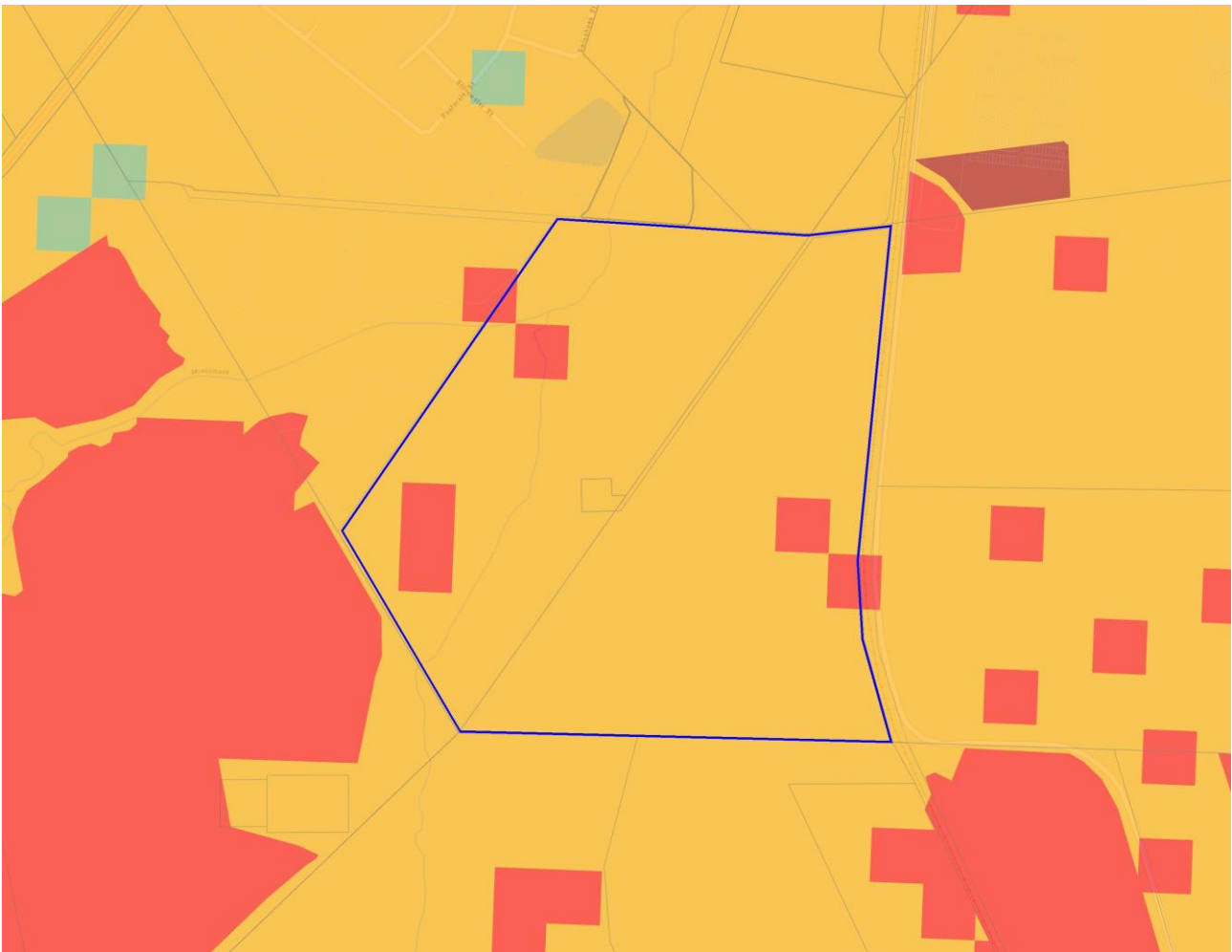


Figure 3. The proposed development site overlaid on agricultural sensitivity, as given by the screening tool (green = low; yellow = medium; red = high; dark red = very high)

4 Baseline agricultural environment

As noted above, the limitations on the agricultural production potential of the site are due both to soil limitations and other factors. The soils on the site are all deep, sandy soils predominantly of the Kroonstad, Constantia, Fernwood, and Lamotte soil forms. They have a low cropping potential due to their very low water and nutrient holding capacity.

5 Assessment of agricultural impact

The agricultural impact of the proposed development is the loss of the property to potential future agricultural use. As noted above, the site under consideration has very limited future agricultural production potential. Therefore, although the proposed development will occupy the land, it will not significantly reduce the production potential simply because it is already very limited. The proposed development will therefore not significantly change the agricultural production potential of the site and the agricultural impact of the proposed project is therefore assessed as being low.

It should be noted that the conservation of agricultural land that is in proximity to urban areas is under inevitable pressure from various non-agricultural land uses including urban expansion. The cumulative impact of agricultural land loss close to urban centres in the Western Cape is significant. However, the agricultural priority should be to conserve future agricultural production, not simply agriculturally zoned land. As has been shown above, the site has no current agricultural production and very limited capacity for future agricultural production. Therefore, it is a property to which inevitable non-agricultural land use can be steered without a high loss of agricultural production potential.

6 Agricultural Compliance Statement

An Agricultural Compliance Statement is required to indicate whether 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, as discussed above, the site has very limited future production potential. Production potential is limited, not only by the soil conditions, but by infrastructure on the land, its location surrounded largely by non-agricultural land uses, the fact that land use planning in the spatial development framework designates the site as being part of a new development area, and by existing excavations and disturbances to the soil.

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. There are also 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 below.

A handwritten signature in black ink, appearing to read 'J. Lanz', with a long horizontal stroke extending to the left.

J. Lanz (Pr. Sci.Nat.)

18 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 Consultants 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: **18 November 2022**

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