

**Site sensitivity verification
and Agricultural Compliance Statement
for the proposed development of
the farm Kraaibosch RE/400/195, George**

Environmental authorisation is being sought for a mixed use development on the above land parcel (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.



Figure 1. The locality of the proposed development (blue outline) on the N2 south east of George.

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.

Uncultivated land is classified by the screening tool in terms of its land capability rating, as per the 2017 DAFF updated and refined land capability mapping for South Africa. 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 screening tool sensitivity categories for uncultivated land are based upon the Department of Agriculture's updated and refined, country-wide land capability mapping, released in 2016. 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 as cultivated land, agricultural sensitivity is purely a function of land capability. The land capability of the investigated site varies from 7 to 8, which translates to a medium agricultural sensitivity.

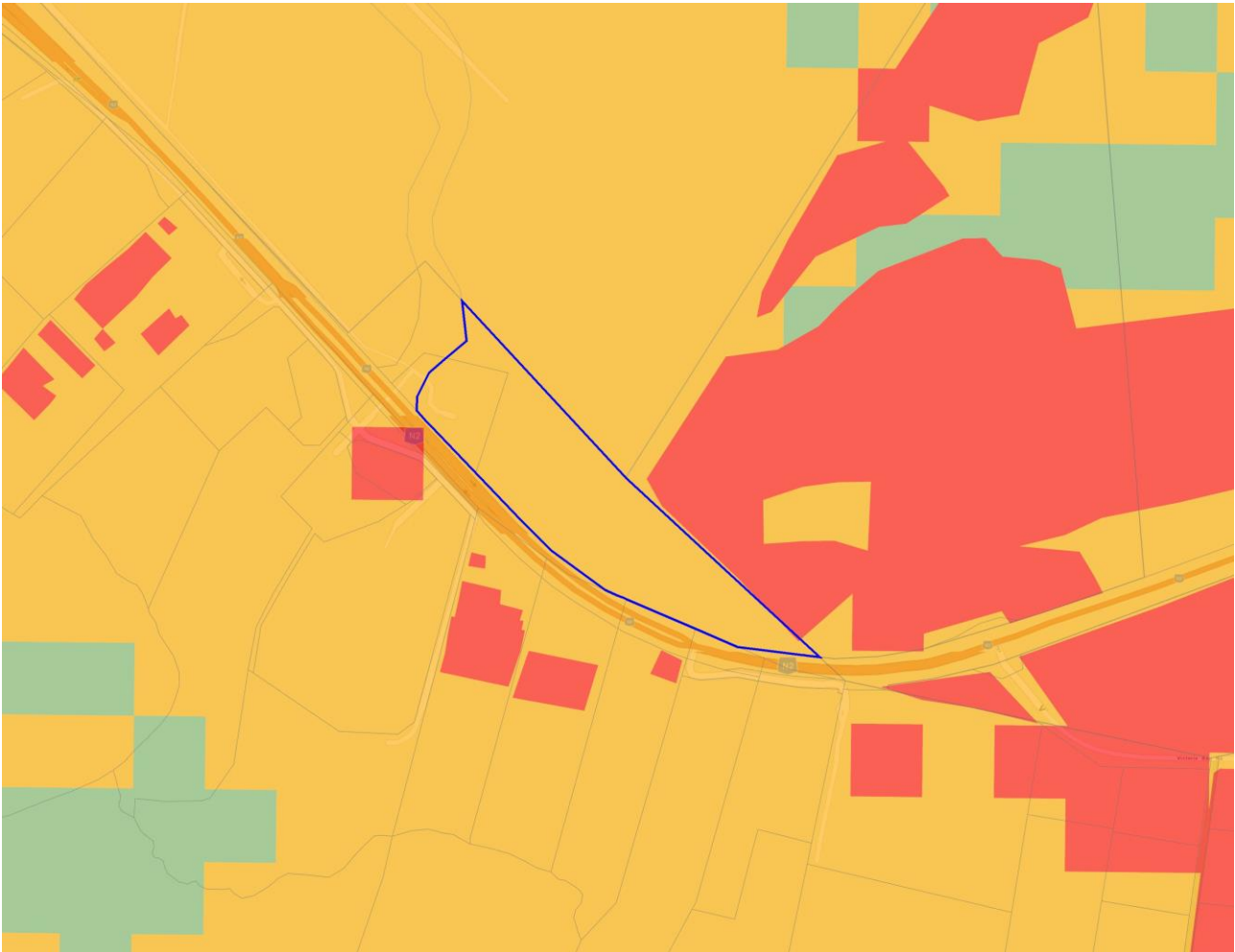


Figure 2. The proposed development area (blue outline) overlaid on agricultural sensitivity as identified by the screening tool (green = low; yellow = medium; red = high).

The agricultural sensitivity, as identified by the screening tool, is confirmed by this assessment. The motivation for confirming the sensitivity is that the climate, soils and terrain correspond to the ratings of land capability and consequent definitions of the different screening tool sensitivity categories. The climate is suitable for a range of crops. The land type data shows that a fairly high proportion of the soils are fairly shallow on underlying clay. The land is likely to be suitable for the production of cultivated crops, but is limited to some extent by the soils.

Although the land itself is suitable for agricultural production, it is not currently utilised for any agricultural production, and has limitations on future production potential. The limitations are due to 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.

The agricultural protocol further states:

An applicant intending to undertake an activity identified in the scope of this protocol on a site identified on the screening tool as being of medium or low sensitivity for agricultural resources must submit an Agricultural Compliance Statement

The level of agricultural assessment is therefore an Agricultural compliance Statement.

2 Agricultural Compliance Statement

It is hereby confirmed that the site is of medium sensitivity for impacts on agricultural resources because of its land capability. The site is not used for productive agriculture and its location limits its potential future agricultural use.

The agricultural impact of the proposed development will be to permanently exclude agriculture from the land parcel. The conclusion of this assessment is that the proposed development will not have an unacceptable negative impact on the agricultural production capability of the site. This is substantiated by the fact that the proposed development will occupy land that is not currently utilised for any agricultural production, and has limitations on future production potential. The limitations are due to 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.

The proposed development is therefore acceptable, and 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, 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 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.)

6 July 2021

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

In the past 5 years of running my soil and agricultural consulting business, I have completed more than 120 agricultural assessments (EIAs, SEAs, EMPRs) in all 9 provinces for renewable energy, mining, urban, and agricultural developments. My regular clients include: Aurecon; CSIR; SiVEST; Arcus; SRK; Environamics; Royal Haskoning DHV; Jeffares & Green; JG Afrika; Juwi; 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:

A handwritten signature in black ink, appearing to read 'J Lanz', written over a light blue horizontal line.

Date: **6 July 2021**

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