Johann Lanz
Soil Scientist (Pr.Sci.Nat.)
Reg. no. 400268/12

Cell: 082 927 9018
e-mail: johann@johannlanz.co.za

1A Wolfe Street
Wynberg
7800
Cape Town
South Africa

Site sensitivity verification and Agricultural Compliance Statement for Erven 91191, 90475 and 90470, Wynberg, Cape Town

Environmental authorisation is being sought for a bus depot for the City's Integrated Rapid Transit (IRT)/ "MyCiti" system.

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. The screening tool classifies agricultural sensitivity according to two criteria - the cultivation status and the land capability. All cultivated land is classified as, at least, high sensitivity, as a result of its cultivation status.

Uncultivated land is classified by the screening tools in terms of the land capability. 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 proposed site is identified on the national web based environmental screening tool as being of high sensitivity for agricultural resources. This is because the site's land capability evaluation values classify it within the high sensitivity class. A map of the proposed development area overlaid on the screening tool sensitivity is given in Figure 1.

The agricultural sensitivity, as identified by the screening tool, is disputed by this assessment. The motivation for disputing the sensitivity is that the screening tool does not take zoning or any urban land use or designation into account when classifying agricultural sensitivity. Even land occupied by buildings, in the middle of a city, can still be classified as high agricultural sensitivity by the screening tool, which obviously makes no sense. In reality, such land has zero potential for agricultural production and therefore for being high agricultural sensitivity.

Likewise, the classification of high agricultural sensitivity in this case does not take account of the fact that the different erven on the site are zoned for a combination of Public Open Space (OS2), Public Road and Public Parking (T2), and Community 1: Utility and Public Open Space. This zoning negates any agricultural production potential on the site. The site cannot, therefore, be considered to be of anything but low agricultural sensitivity, in terms of the available sensitivity categories, which are: low; medium; high; and very high. The designation of high agricultural sensitivity by the screening tool is therefore invalid, because the screening tool does not take any urban land use or designation into account when classifying agricultural sensitivity.

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 very high or high sensitivity for agricultural resources must submit an Agricultural Agro-Ecosystem Specialist Assessment unless:*
>
> *information gathered from the site sensitivity verification differs from the designation of very high or high agricultural sensitivity, and it is found to be of a medium or low sensitivity.*
>
> *If the above applies, an Agricultural Compliance Statement must be submitted.*

In this case, the above exception does apply, as has been argued above, and the required level of agricultural assessment is therefore an Agricultural Compliance Statement.

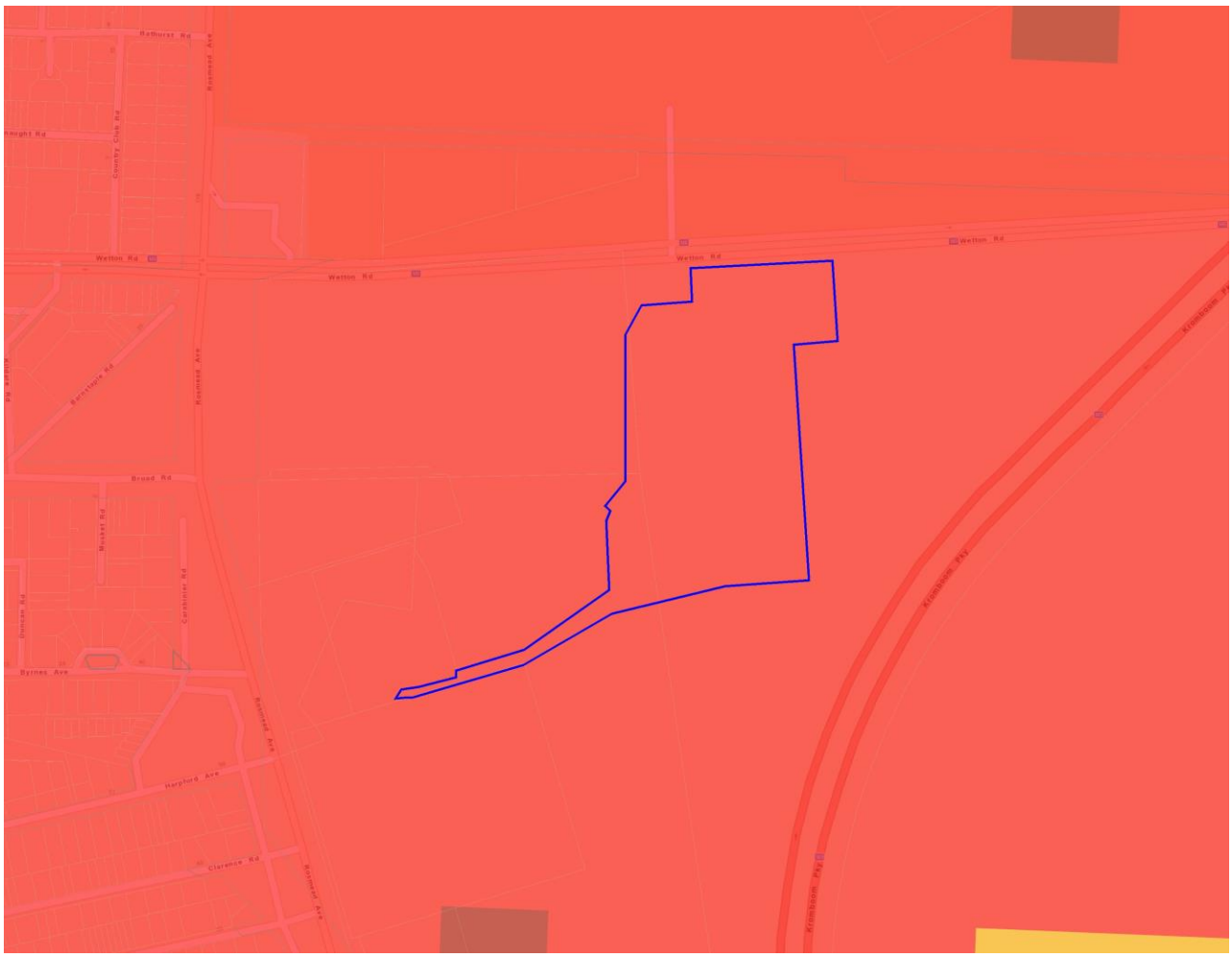

Figure 1. *The proposed development area (blue outline) overlaid on agricultural sensitivity as identified by the screening tool (green = low; yellow = medium; red = high; dark red = very high).The entire area is rated as high.*

2 Agricultural Compliance Statement

It is hereby confirmed that the entire site is of low sensitivity for agriculture, because of its non-agricultural zoning. Furthermore, it is confirmed that, because the designation will effectively prevent future agricultural use of the land anyway, 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, 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.

J. Lanz (Pr. Sci.Nat.)
27 February 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 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.*