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**SITE SENSITIVITY VERIFICATION
AND
AGRICULTURAL COMPLIANCE STATEMENT
FOR THE KHOISAN BAY RESIDENTIAL DEVELOPMENT NEAR GANSBAAI,
WESTERN CAPE**

**Report by
Johann Lanz**

14 November 2024

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EXECUTIVE SUMMARY

The overall conclusion of this assessment is that the proposed development is acceptable because it leads to negligible loss of future agricultural production potential.

The screening tool classifies the assessed property as ranging from low to high agricultural sensitivity. This assessment disputes the high sensitivity classification of the assessed area by the screening tool and rates the entire assessed area as being of low to medium agricultural sensitivity with a maximum land capability of 6 because of its assessed agricultural production potential and current agricultural land use.

The cropping potential of the site is limited soil constraints, predominantly that soils are very sandy with low water and nutrient holding capacity. Because of these constraints, the site is completely unsuitable for viable rainfed crop production. It is in an area that is not utilised for agricultural production at all.

An agricultural impact is a change to the future agricultural production potential of land. This is primarily caused by the exclusion of agriculture from the footprint of the development. In this case, the entire development footprint is considered to be below the threshold for needing to be conserved as agricultural production land because of the limitations that make it unsuitable as viable cropland. The proposed development on this land will result in negligible loss of future agricultural production potential in terms of national food security. The overall negative agricultural impact of the development (loss of future agricultural production potential) is assessed here as being of low significance and as acceptable.

From an agricultural impact point of view, it is recommended that the proposed development be approved.

1 INTRODUCTION

Environmental and change of land use authorisation is being sought for the proposed Khoisan residential development located on portion 2 of farm 712 Strandfontein near Gansbaai, Western Cape (see location 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 low to medium agricultural sensitivity of the assessed area (see Section 7), the level of agricultural assessment required by the protocol is an Agricultural Compliance Statement.

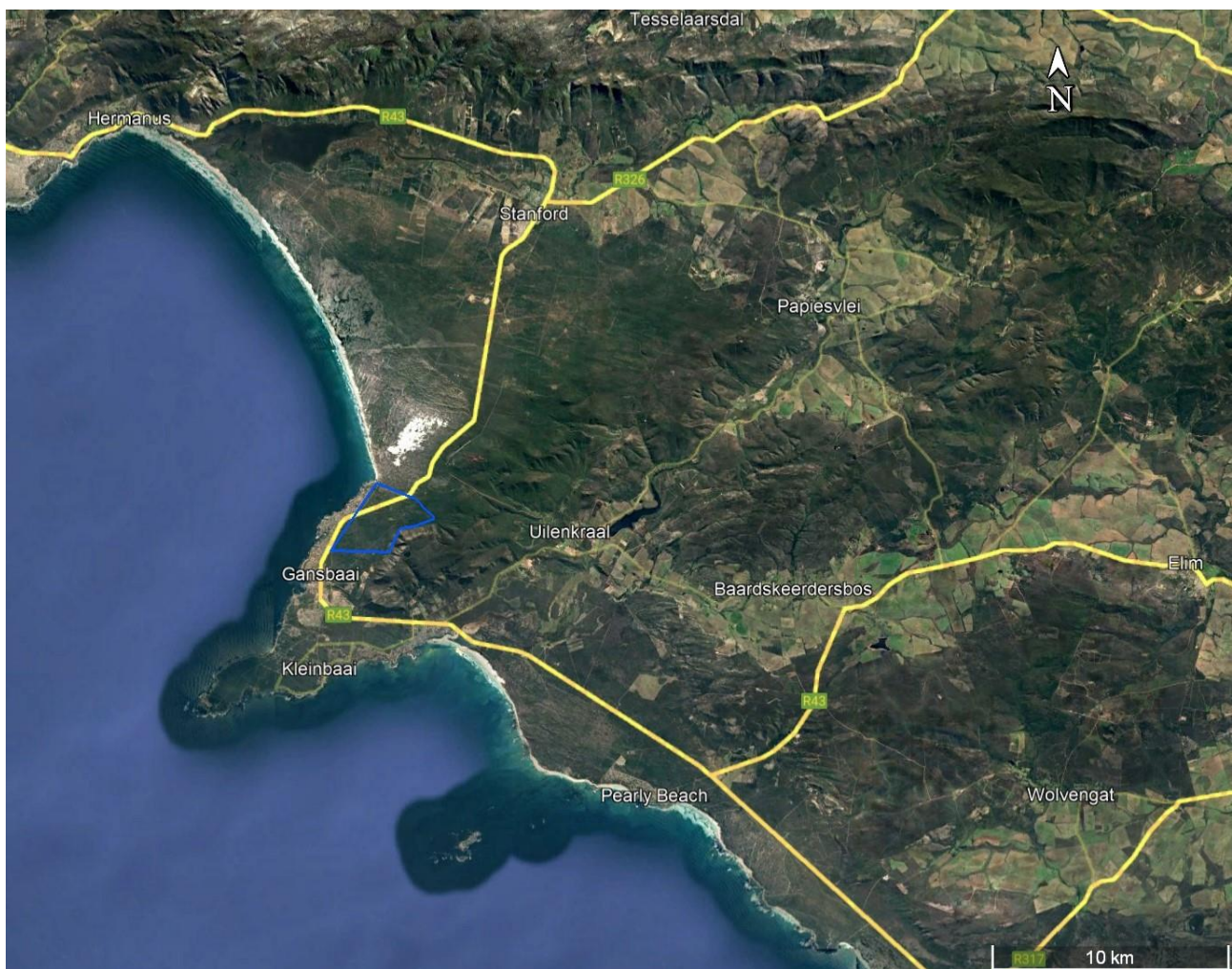


Figure 1. Locality map of the property boundary (blue outline), north east of Gansbaai.

The purpose of an agricultural assessment is to answer the question:

Will the proposed development cause a significant reduction in agricultural production potential, and most importantly, will it result in a loss of arable land?

Section 9 of this report unpacks this question, particularly with respect to what constitutes a significant reduction. To answer the above question, it is necessary to determine the existing agricultural production potential of the land that will be impacted, and specifically whether it is viable arable land or not. This is done in Section 8 of this report. Sections 8 and 9 of this report directly address the above question and therefore contain the essence and most important part of the agricultural impact assessment.

2 PROJECT DESCRIPTION

The proposed project is for Khoisan Bay residential development located on portion 2 of farm 712 Strandfontein. The development will be located on the portion that is North of the R43 and is adjacent to the existing urban area of Gansbaai.

The project will cause the permanent exclusion of any potential future agricultural production from the entire site (as shown in Figures 2 and 3). 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 site to potential future agricultural production.

3 TERMS OF REFERENCE

The terms of reference for this study are to fulfill the requirements of the *Protocol for the specialist assessment and minimum report content requirements of environmental impacts on agricultural resources*, gazetted on 20 March 2020 in GN 320 (in terms of Sections 24(5)(A) and (H) and 44 of NEMA, 1998).

The terms of reference for an Agricultural Compliance Statement, as stipulated in the agricultural protocol, are listed below, and the section number of this report which fulfils each stipulation is given after it in brackets.

1. The Agricultural Compliance Statement must be prepared by a soil scientist or agricultural specialist registered with the South African Council for Natural Scientific Professions (SACNASP) (**Appendix 3**).
2. The compliance statement must:

1. be applicable to the preferred site and proposed development footprint **(Figures 2 and 3)**;
 2. confirm that the site is of “low” or “medium” sensitivity for agriculture **(Section 7)**; and
 3. indicate whether or not the proposed development will have an unacceptable impact on the agricultural production capability of the site **(Section 12)**.
3. The Agricultural Compliance Statement must contain, as a minimum, the following information:
1. details and relevant experience as well as the SACNASP registration number of the soil scientist or agricultural specialist preparing the statement including a curriculum vitae **(Appendix 1)**;
 2. a signed statement of independence by the specialist **(Appendix 2)**;
 3. a map showing the proposed development footprint (including supporting infrastructure) with a 50 m buffered development envelope, overlaid on the agricultural sensitivity map generated by the screening tool **(Figure 2)**;
 4. confirmation from the specialist that all reasonable measures have been taken through micro-siting to avoid or minimize fragmentation and disturbance of agricultural activities **(Section 11.1)**;
 5. a substantiated statement from the soil scientist or agricultural specialist on the acceptability, or not, of the proposed development and a recommendation on the approval, or not of the proposed development **(Section 12)**;
 6. any conditions to which this statement is subjected **(Section 12)**;
 7. in the case of a linear activity, confirmation from the agricultural specialist or soil scientist, that in their opinion, based on the mitigation and remedial measures proposed, the land can be returned to the current state within two years of completion of the construction phase **(Section 11.2)**;
 8. where required, proposed impact management outcomes or any monitoring requirements for inclusion in the EMP **(Section 10)**; and
 9. a description of the assumptions made and any uncertainties or gaps in knowledge or data **(Section 5)**.

4 METHODOLOGY OF STUDY

The assessment was based on an on-site investigation conducted on 23 August 2024. It was also informed by existing climate, soil, and agricultural potential data for the site (see references). The aim of the on-site assessment was to:

- Verify current cropping status and agricultural land use across the site;
- Assess agricultural conditions across the site.

An assessment of soils and long-term agricultural potential is in no way affected by the season in which the assessment is made, and therefore the date on which this assessment was done has no bearing on its results. The level of agricultural assessment is considered entirely adequate for an understanding of on-site agricultural production potential for the purposes of this assessment.

5 ASSUMPTIONS, UNCERTAINTIES OR GAPS IN KNOWLEDGE OR DATA

There are no specific assumptions, uncertainties or gaps in knowledge or data that affect the findings of this study.

6 APPLICABLE LEGISLATION AND PERMIT REQUIREMENTS

This section identifies all applicable agricultural legislation and permit requirements over and above what is required in terms of NEMA.

The project may require agricultural approval (or at least comment from Department of Agriculture) as part of the required approval in terms of applicable municipal land use legislation, as well as in terms of the Subdivision of Agricultural Land Act (Act 70 of 1970 - SALA), if the property is currently zoned for agriculture.

7 SITE SENSITIVITY VERIFICATION

A specialist agricultural assessment is required to include a verification of the agricultural sensitivity of the development site as per the sensitivity categories used by the web-based environmental screening tool of the Department of Forestry, Fisheries and the Environment (DFFE). Agricultural sensitivity is an indication of the capability of the land for agricultural production, based only on its climate, terrain, and soil capabilities and its agricultural land use. The different categories of agricultural sensitivity indicate the priority by which land should be conserved as agricultural production land. However, the screening tool's agricultural sensitivity is often of very limited value for assessing agricultural impact. What is of importance to an agricultural assessment, rather than the site sensitivity verification, is its assessment of the cropping potential and its assessment of the impact significance, both of which are not necessarily correlated with sensitivity.

The screening tool classifies agricultural sensitivity according to two independent criteria, from two independent data sets, both of which may be indicators of the land's agricultural production potential but are limited in that the first is outdated and the second relies on fairly coarse modelled data. The two criteria are:

1. whether the land is classified as cropland or not on the field crop boundary data set (Crop Estimates Consortium, 2019), and

2. its land capability rating on the land capability data set (DAFF, 2017)

These two inputs operate independently, and agricultural sensitivity is simply determined by whichever of these two gives the highest sensitivity rating. All classified cropland is, by definition, either high or very high sensitivity. Land capability is defined as the combination of soil, climate, and terrain suitability factors for supporting rain-fed agricultural production. It is rated by the Department of Agriculture's updated and refined, country-wide land capability mapping (DAFF, 2017). The higher land capability values (≥ 8 to 15) are likely to indicate suitability as arable land for crop production, while lower values (< 8) are likely to only be suitable as non-arable grazing land, although application to the winter rainfall areas differs. The direct relationship between land capability rating, agricultural sensitivity, and rain-fed cropping suitability is shown in Table 1, including differences between the summer and winter rainfall areas.

The agricultural sensitivity of the site, as given by the screening tool, is shown in Figure 2. The screening tool sensitivity requires specialist verification because of the limitations of the data sets on which it is based.

Table 1: Relationship between land capability, agricultural sensitivity, and rain-fed cropping suitability.

Land capability value	Agricultural sensitivity	Rain-fed cropping suitability	
		Summer rainfall areas	Winter rainfall areas
1 - 5	Low	Unsuitable	Unsuitable
6	Medium		
7			
8	High	Suitable	Suitable
9 - 10			
11 - 15	Very High		

Note: There is an error in the screening tool whereby a land capability of 8 is classified as medium sensitivity, but according to NEMA's agricultural protocol, should in fact be classified as high sensitivity. This assessment follows the agricultural protocol definition and classifies a value of 8 as high sensitivity.

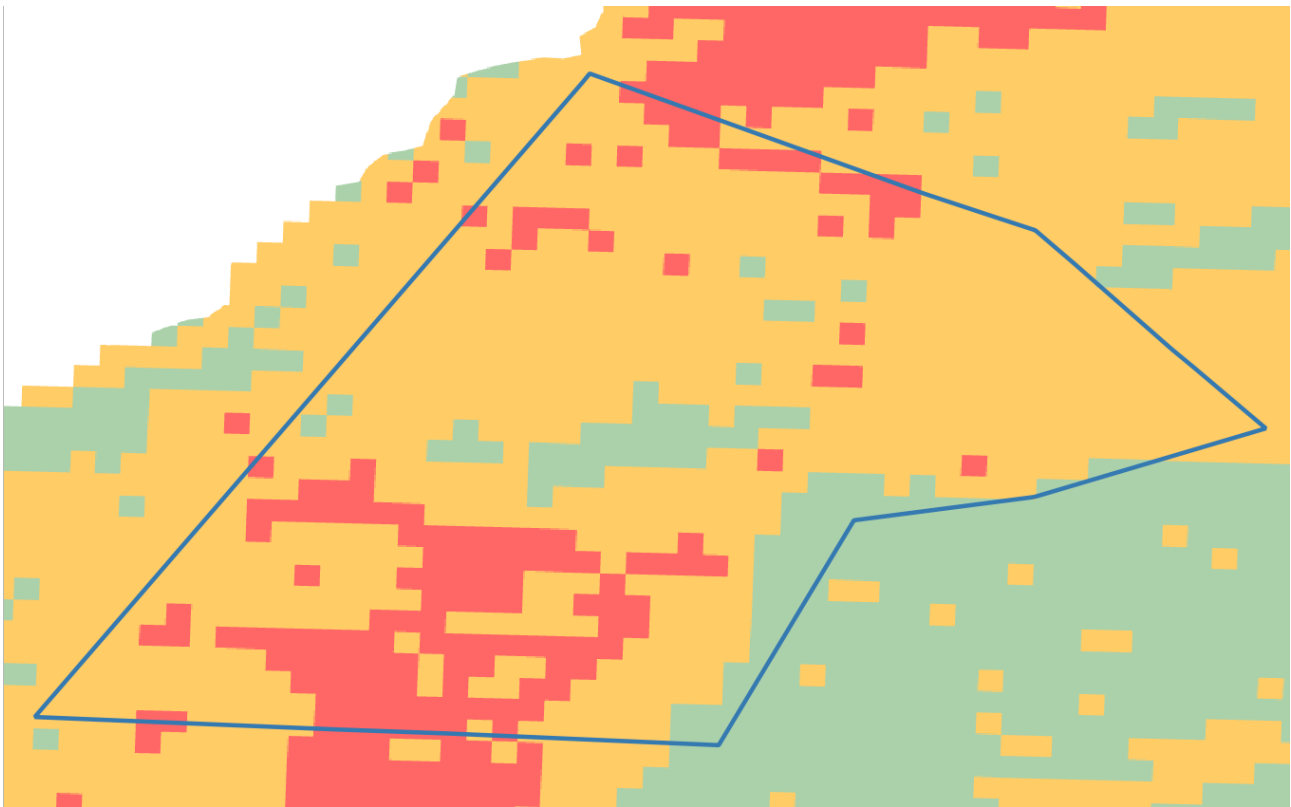


Figure 2. The assessed property (blue outline) overlaid on agricultural sensitivity, as given by the screening tool (green = low; yellow = medium; red = high; dark red = very high).

This verification of sensitivity addresses both components that determine it, namely cropping status (that is whether the land is currently or has recently been used for crop production) and land capability. The screening tool classifies the assessed property as ranging from low to high agricultural sensitivity. None of the land is classified as cropland and the rating of agricultural sensitivity is therefore purely a function of classified land capability as per Table 1 above. This assessment verifies that the site is not within crop boundaries and therefore confirms the less than high sensitivity rating by the screening tool that is based on the cropping status component of sensitivity.

The classified land capability of the site ranges from 3 to 9. This assessment disputes a classified land capability of >6 because the classified land capability is due to an H land types. The H land types comprise grey, regic sands originating from dunes and coastal sands. 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 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 6. Evidence of the lack of cropping potential of these land types is that almost no crop production takes place on them. Crop production in the area is confined to land types that have higher water and nutrient holding capacity. This assessment therefore rates the assessed area as having a maximum land capability of 6 and therefore as being of medium agricultural sensitivity in terms of the land capability component of

sensitivity.

In conclusion, this assessment disputes the high sensitivity classification of the assessed area by the screening tool and rates the entire assessed area as being of low to medium agricultural sensitivity with a maximum land capability of 6 because of its assessed agricultural production potential and current agricultural land use.

8 BASELINE DESCRIPTION OF THE AGRO-ECOSYSTEM

The purpose of this section is firstly to present the baseline information that controls the agricultural production potential of the site and then to assess that potential. Agricultural production potential, and particularly cropping potential, is one of three factors that determines the significance of an agricultural impact, together with size of footprint and duration of impact (see Section 9).

All the important parameters that control the agricultural production potential of the site are given in Table 2. Soil data are given in Appendix 4. A layout of the development site is given in Figure 3 and photographs of site conditions are shown in Figures 4 to 6.

The site is not within a Protected Agricultural Area (PAA) (DALRRD, 2020). A PAA is a demarcated area in which the climate, terrain, and soil are generally conducive for agricultural production and which, historically, or in a regional context, has made important contributions to the production of the various crops that are grown across South Africa. Within PAAs, the protection of viable, arable land is considered a priority for the protection of food security in South Africa.

Table 2: Parameters that control and/or describe the agricultural production potential of the site.

	Parameter	Value
Climate	Köppen-Geiger climate description (Beck <i>et al</i> , 2018)	Temperate, dry summer, warm summer
	Mean Annual Rainfall (mm) (Schulze, 2009)	512
	Reference Crop Evaporation Annual Total (mm) (Schulze, 2009)	1007
	Climate capability classification (out of 9) (DAFF, 2017)	5 (moderate) to 6 (moderate-high)
Terrain	Terrain type	Coastal dunes
	Terrain morphological unit	Various
	Slope gradients (%)	0 to 48
	Altitude (m)	95

	Parameter	Value
	Terrain capability classification (out of 9) (DAFF, 2017)	3 (low) to 7 (high)
Soil	Geology (DAFF, 2002)	<p>Hb36: Calcareous aeolianite of the Waenhuiskrans Formation, partially covered by sand and coastal dunes of the Strandveld Formation, Bredasdorp Group.</p> <p>Hb35: Mainly aeolianite (partly calcareous) of the Waenhuiskrans Formation, Bredasdorp Group.</p> <p>Fa666: Quartzitic sandstone and shale of the Peninsula Formation along the southwestern side and of the Nardouw Subgroup, along the north-western side, separated by a thin shale band of the Cedarberg Formation, Table Mountain Group.</p>
	Land type (DAFF, 2002)	Hb36, Hb35, Fa666
	Description of the soils	Very shallow to deep, extremely light textured (sandy), light-grey coloured, soils on underlying hardpan carbonate
	Dominant soil forms	Gamoep; Fernwood
	Soil capability classification (out of 9) (DAFF, 2017)	2 (low-very low) to 6 (moderate-high)
	Soil limitations	Limited depth in places, very low water & nutrient holding capacity
Land use	Agricultural land use in the surrounding area	None
	Agricultural land use on the site	None
General	Long-term grazing capacity (ha/LSU) (DAFF, 2018)	30
	Land capability classification (out of 15) (DAFF, 2017)	3 (low-very low) to 9 (moderate-high)
	Within Protected Agricultural Area (DALRRD, 2020)	No



Figure 4. *Typical site conditions.*



Figure 5. *Typical site conditions.*



Figure 6. *Typical site conditions.*

8.1 Assessment of the agricultural production potential

This assessment of the agricultural production potential of the site is based on an integration of the different parameters in Table 2 above.

The cropping potential of the site is limited soil constraints, predominantly that soils are very sandy with low water and nutrient holding capacity. Because of these constraints, the site is completely unsuitable for viable rainfed crop production. It is in an area that is not utilised for agricultural production at all.

9 ASSESSMENT OF THE AGRICULTURAL IMPACT

9.1 Impact identification and assessment

It should be noted that an Agricultural Compliance Statement is not required to formally rate agricultural impacts by way of impact assessment tables.

An agricultural impact is a change to the future agricultural production potential of land. In most developments, including the one being assessed here, this is primarily caused by the exclusion of agriculture from the footprint of the development. The significance of an agricultural impact is a direct function of the following three factors:

1. the size of the footprint of land from which agriculture will be excluded (or the footprint that will have its potential decreased)
2. the baseline production potential (particularly cropping potential) of that land
3. the length of time for which agriculture will be excluded (or for which potential will be decreased).

The most significant loss of agricultural land possible, for any development anywhere in the country, is of high yielding cropland, and the least significant possible, is of low carrying capacity grazing land.

Cropping potential is highlighted in factor 2, above, because the threshold, above which it is a priority to conserve land for agricultural production, is determined by the scarcity of arable crop production land in South Africa (approximately only 13% of the country's surface area) and the relative abundance of the rest of agricultural land across the country that is only good enough to be used for grazing. If land can support viable and sustainable crop production, then it is considered to be above the threshold and is a priority for being conserved as agricultural production land. If land is unable to support viable and sustainable crop production, then it is considered to be below the threshold and of much lower priority for being conserved.

In this case, the entire development footprint is considered to be below the threshold for needing to be conserved as agricultural production land because of the limitations that make it unsuitable as viable cropland. The proposed development on this land will result in negligible loss of future agricultural production potential in terms of national food security. The overall negative agricultural impact of the development (loss of future agricultural production potential) is assessed here as being of low significance and as acceptable.

9.2 Cumulative impact assessment

Specialist assessments for environmental authorisation are required to include an assessment of cumulative impacts. The cumulative impact of a development is the impact that development will have when its impact is added to the incremental impacts of other past, present, or reasonably foreseeable future activities that will affect the same environment. The potential cumulative agricultural impact of importance is a regional loss of future agricultural production potential.

Agricultural land throughout South Africa is under inevitable pressure from various non-agricultural

land uses, including urban expansion. The cumulative impact of agricultural land loss 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 extremely limited current agricultural production and extremely limited capacity for future agricultural production. Therefore, it is a site which can be used for non-agricultural purposes with negligible loss of agricultural production potential. The cumulative agricultural impact of the proposed development is therefore assessed as being of low significance and therefore as acceptable. The development will not have an unacceptable negative impact on the agricultural production capability of the area, and it is therefore recommended, from a cumulative agricultural impact perspective, that the development be approved.

9.3 Assessment of alternatives

Specialist assessments for environmental authorisation are required to include a comparative assessment of alternatives, including the no-go alternative. Because there is no viable cropland within the assessed site, the exact positions of all proposed infrastructure within it will make absolutely no difference to agricultural impacts. Any alternative layouts within the same assessed site will have equal agricultural impact and are assessed as equally acceptable.

The no-go alternative considers impacts that will occur to the agricultural environment in the absence of the proposed development. There are no agricultural impacts of the no-go alternative, but this is not significantly different from the negligible impact of the development, and so from an agricultural impact perspective, there is no preferred alternative between the no-go and the development.

10 MITIGATION

The most important and effective mitigation of agricultural impacts for any development is avoidance of viable croplands. This development has already applied this mitigation by selecting a site on which there are not viable croplands. No mitigation measures are required for the protection of agricultural production potential on the site because the development poses negligible degradation risk to agricultural resources.

11 ADDITIONAL ASPECTS REQUIRED IN AN AGRICULTURAL ASSESSMENT

11.1 Micro-siting

The agricultural protocol requires confirmation that all reasonable measures have been taken through micro-siting to minimize fragmentation and disturbance of agricultural activities. Because of the uniformly low agricultural potential of the environment, with no cropping, micro-siting will

make no material difference to agricultural impacts and disturbance.

11.2 Confirmation of linear activity exclusion

If linear infrastructure has been given exclusion from complying with certain requirements of the agricultural protocol because of its linear nature, the protocol requires confirmation that the land impacted by that linear infrastructure can be returned to the current state within two years of completion of the construction phase. No such exclusion applies to this project.

12 CONCLUSION: AGRICULTURAL COMPLIANCE STATEMENT

The overall conclusion of this assessment is that the proposed development is acceptable because it leads to negligible loss of future agricultural production potential.

The screening tool classifies the assessed property as ranging from low to high agricultural sensitivity. This assessment disputes the high sensitivity classification of the assessed area by the screening tool and rates the entire assessed area as being of low to medium agricultural sensitivity with a maximum land capability of 6 because of its assessed agricultural production potential and current agricultural land use.

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An agricultural impact is a change to the future agricultural production potential of land. This is primarily caused by the exclusion of agriculture from the footprint of the development. In this case, the entire development footprint is considered to be below the threshold for needing to be conserved as agricultural production land because of the limitations that make it unsuitable as viable cropland. The proposed development on this land will result in negligible loss of future agricultural production potential in terms of national food security. The overall negative agricultural impact of the development (loss of future agricultural production potential) is assessed here as being of low significance and as acceptable.

From an agricultural impact point of view, it is recommended that the proposed development be approved. The conclusion of this assessment on the acceptability of the proposed development and the recommendation for its approval is not subject to any conditions.

13 REFERENCES

Beck, H.E., N.E. Zimmermann, T.R. McVicar, N. Vergopolan, A. Berg, E.F. Wood. 2018. Present and future Köppen-Geiger climate classification maps at 1-km resolution, Nature Scientific Data. Available at: <https://gis.elsenburg.com/apps/cfm/>.

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Schulze, R.E. 2009. South African Atlas of Agrohydrology and Climatology, available on Cape Farm Mapper. Available at: <https://gis.elsenburg.com/apps/cfm/>

Soil Classification Working Group. 2018. Soil Classification: A Natural and Anthropogenic System for South Africa. ARC-Institute for Soil, Climate and Water, Pretoria.

APPENDIX 1: SPECIALIST CURRICULUM VITAE

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*.



forestry, fisheries & the environment

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APPENDIX 2: SPECIALIST DECLARATION FORM AUGUST 2023

Specialist Declaration form for assessments undertaken for application for authorisation in terms of the National Environmental Management Act, Act No. 107 of 1998, as amended and the Environmental Impact Assessment (EIA) Regulations, 2014, as amended (the Regulations)

REPORT TITLE: THE KHOISAN BAY RESIDENTIAL DEVELOPMENT NEAR GANSBAAI, WESTERN CAPE

Kindly note the following:

1. This form must always be used for assessment that are in support of applications that must be subjected to Basic Assessment or Scoping & Environmental Impact Reporting, where this Department is the Competent Authority.
2. This form is current as of August 2023. It is the responsibility of the Applicant / Environmental Assessment Practitioner (EAP) to ascertain whether subsequent versions of the form have been published or produced by the Competent Authority. The latest available Departmental templates are available at <https://www.dffe.gov.za/documents/forms>.
3. An electronic copy of the signed declaration form must be appended to all Draft and Final Reports submitted to the department for consideration.
4. The specialist must be aware of and comply with '*the Procedures for the assessment and minimum criteria for reporting on identified environmental themes in terms of sections 24(5)(a) and (h) and 44 of the act, when applying for environmental authorisation - GN 320/2020*', where applicable.

1. SPECIALIST INFORMATION

Title of Specialist Assessment	Agricultural Assessment
Specialist Company Name	SoilZA – sole proprietor
Specialist Name	Johann Lanz
Specialist Identity Number	6607045174089
Specialist Qualifications:	M.Sc. (Environmental Geochemistry)
Professional affiliation/registration:	Registered Professional Natural Scientist (Pr.Sci.Nat.) Reg. no. 400268/12 Member of the Soil Science Society of South Africa
Physical address:	1a Wolfe Street, Wynberg, Cape Town, 7800
Postal address:	1a Wolfe Street, Wynberg, Cape Town, 7800
Telephone	Not applicable
Cell phone	+27 82 927 9018
E-mail	johann@soilza.co.za

2. DECLARATION BY THE SPECIALIST

I, **Johann Lanz** declare that –

- I act as the independent specialist in this application;
- I am aware of the procedures and requirements for the assessment and minimum criteria for reporting on identified environmental themes in terms of sections 24(5)(a) and (h) and 44 of the National Environmental Management Act (NEMA), 1998, as amended, when applying for environmental authorisation which were promulgated in Government Notice No. 320 of 20 March 2020 (i.e. “the Protocols”) and in Government Notice No. 1150 of 30 October 2020.
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting the specialist report relevant to this application, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, Regulations and all other applicable legislation;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing –
 - any decision to be taken with respect to the application by the competent authority; and;
 - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
- All the particulars furnished by me in this form are true and correct; and
- I realise that a false declaration is an offence in terms of Regulation 48 and is punishable in terms of section 24F of the NEMA Act.



Signature of the Specialist

SoilZA (sole proprietor)

Name of Company:

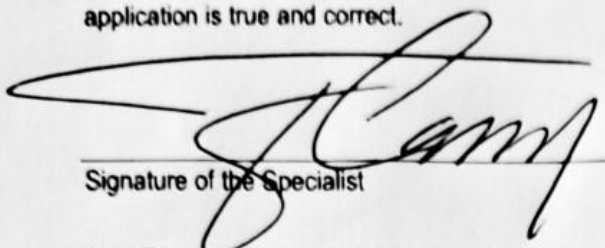
18 September 2024

Date

SPECIALIST DECLARATION FORM – AUGUST 2023

3. UNDERTAKING UNDER OATH/ AFFIRMATION

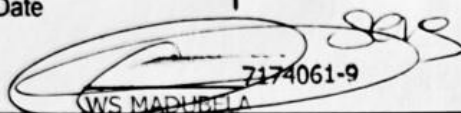
I, **Johann Lanz**, swear under oath that all the information submitted or to be submitted for the purposes of this application is true and correct.


Signature of the Specialist

SoilZA – sole proprietor

Name of Company

18 September
Date


7174061-9
WS MADUBELA
Signature of the Commissioner of Oaths

2024-09-18
Date



APPENDIX 3: SACNASP REGISTRATION CERTIFICATE



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)

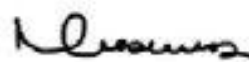
Soil Science (Professional Natural Scientist)

Effective 15 August 2012

Expires 31 March 2025



Chairperson



Chief Executive Officer



To verify this certificate scan this code

APPENDIX 4: LAND TYPE DATA

Table 4: Land type soil data

Land type	Soil series (forms)	Depth (mm)	Clay % A horizon	Clay % B horizon	Depth limiting layer	% of land type
Hb36	Fw	800 > 1200	0 - 2		ka,U	45,3
Hb36	Ms	150 - 300	0 - 2		ka	24,5
Hb36	Fw	> 1200	0 - 2		U	9,8
Hb36	Fw	> 1200	0 - 2		ka,U	8,8
Hb36	R					6,0
Hb36	Cv	> 1200	0 - 2	0 - 2	U,ka	5,8
Hb35	Fw	650 > 1200	0 - 2		U,ka	44,5
Hb35	Ms	300 - 450	0 - 2		ka	24,0
Hb35	Ms	100 - 250	0 - 2		ka	14,8
Hb35	R					8,8
Hb35	Fw	> 1200	0 - 2		U	8,0
Fa666	R					52,0
Fa666	Cf	50 - 250	2 - 8		so	28,0
Fa666	Hh	250 - 450	0 - 4	0 - 6	so	8,5
Fa666	Cv	650 > 1200	0 - 4	0 - 6	U,R	3,8
Fa666	Ct	> 1000	0 - 4	0 - 6	U,R	3,8
Fa666	Fw	> 1000	0 - 4	0 - 6	U	1,8
Fa666	Du	> 1000	0 - 4		U	1,0
Fa666	Kd, Es	200 - 500	0 - 4	10 - 30	gc,pr	0,8
Fa666	Lt	350 - 550	0 - 4	0 - 10	R,U,ms	0,5