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**SITE SENSITIVITY VERIFICATION  
AND  
AGRICULTURAL COMPLIANCE STATEMENT  
FOR THE PROPOSED CONSTRUCTION OF THE N7 VISSERSHOK WEIGHBRIDGE  
ON FARM 77 BAAS RIESFONTEIN OUTSPAN, RE/141 MORNING STAR  
AND RE/32/141 MORNING STAR,  
CITY OF CAPE TOWN**

**Report by  
Johann Lanz & David Lakey**

**20 January 2026**

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## **EXECUTIVE SUMMARY**

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

This assessment disputes the high and very high sensitivity classification of the site by the screening tool and verifies the entire site as being of medium agricultural sensitivity because of its assessed cropping potential.

The cropping potential of the site is limited particularly by soil conditions. The soils on site are predominantly limited by a very low water and nutrient holding capacity. The site is not viable for rain-fed crop production, or at best extremely marginal. The limited agricultural potential of the site limits its agricultural use to grazing only.

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 total footprint of land that will be permanently lost is approximately between 47 and 130 hectares (depending on which alternative is approved). The production potential of that land is limited to only being suitable as grazing land. The loss of between 47 and 130 hectares of grazing land, of which there is no particular scarcity in the country, represents minimal loss of agricultural production potential in terms of national food security and for the affected farm.

Although the development will occupy land that is currently zoned for agriculture, it will lead to minimal loss of both current production and of future agricultural production potential. The agricultural impact of the proposed development is assessed as being of very 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.



## 1 INTRODUCTION

Environmental and change of land use authorisation is being sought for the proposed construction of the N7 Viessershok weighbridge on Farms 77 Baas Ariesfontein Outspan, Re/141 morning star and Re/32/141 Morning star, City of Cape Town (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 verified medium agricultural sensitivity of the site (see Section 7), the level of agricultural assessment required is an Agricultural Compliance Statement.

Johann Lanz was appointed as an independent agricultural specialist to conduct this agricultural assessment. The objective of an agricultural assessment is to assess whether the agricultural impact of the proposed development will be acceptable, and based on this, to make a recommendation on whether it should be approved.

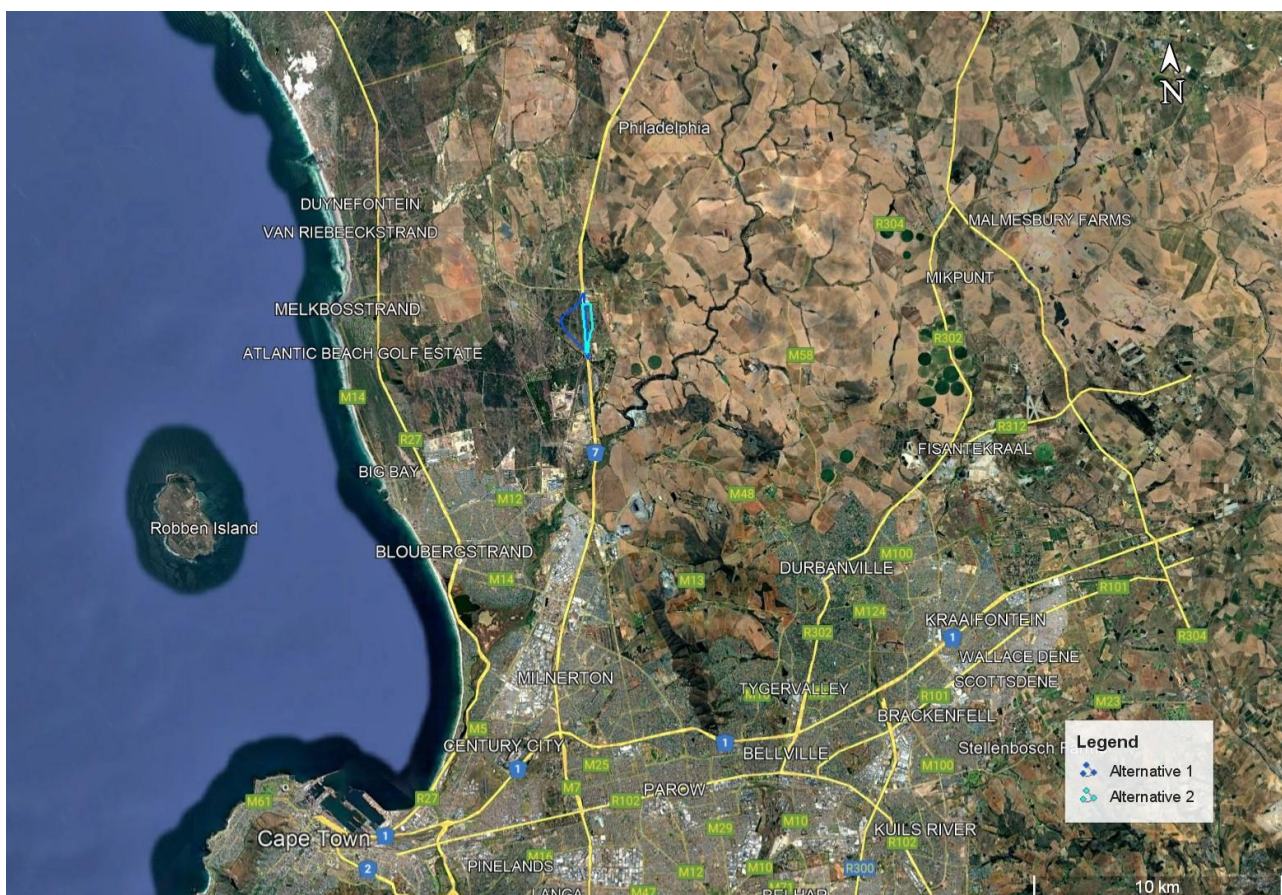


Figure 1. Locality map of the development along the N7.

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

Will the proposed development cause a significant reduction in future 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 7 of this report. Sections 7 and 9 of this report directly address the above question and therefore contain the essence and most important part of the agricultural assessment.

## 2 PROJECT DESCRIPTION

The proposed development is a weighbridge on the edge of the N7 highway that will impinge onto the edge of agricultural land with a footprint of approximately 3 hectares beyond the road reserve.

## 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).

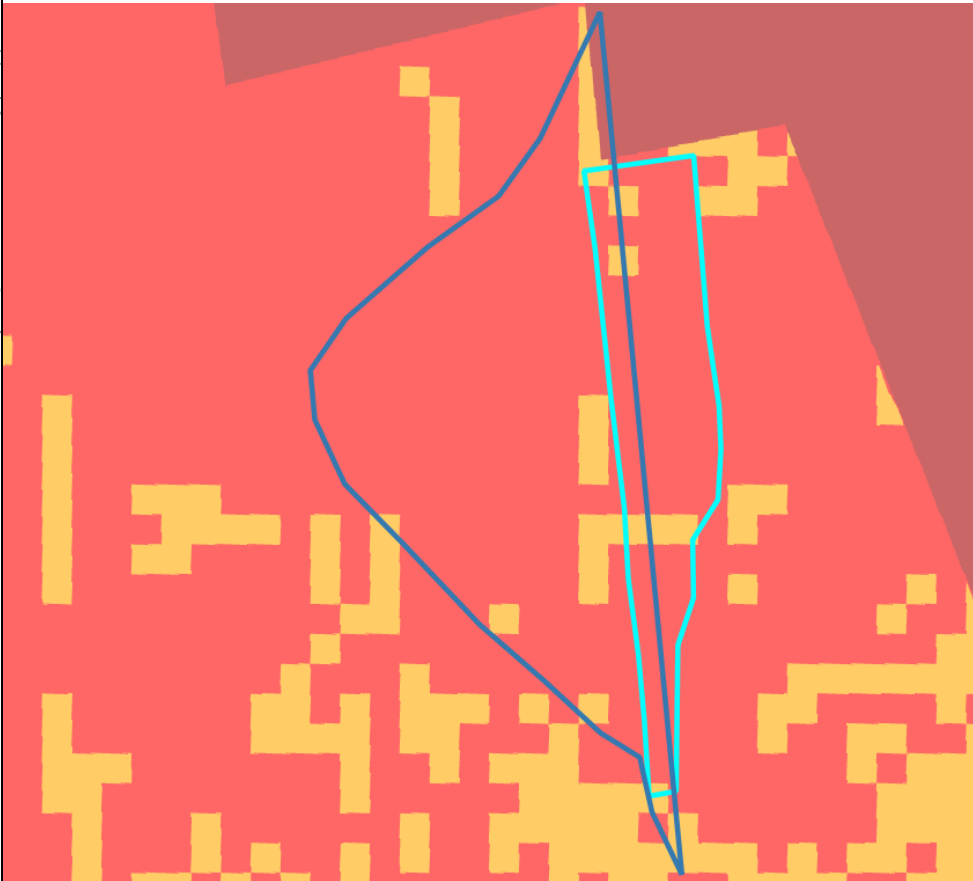
The terms of reference for an Agricultural Compliance Statement, as copied exactly from the protocol, are listed in the table below, and included, is the place in this report where each is addressed.

*Table 1: Reporting requirements as per NEMA's Agricultural Protocol.*

| Number | Requirement   | Where it is addressed |
|--------|---|-----------------------|
| 3.     | Agricultural Compliance Statement   |                       |
| 3.1.   | The compliance statement must be prepared by a soil scientist or agricultural specialist registered with the SACNASP. | Appendix 3            |
| 3.2.   | The compliance statement must:  |                       |



|        |  |   |
|--------|--|---|
| 3.2.1. | be applicable to the preferred site and proposed development footprint;  |  <p>Figure 4</p> |
| 3.2.2. | confirm that the site is of “low” or “medium” sensitivity for agriculture; and   | Section 7   |
| 3.2.3. | indicate whether or not the proposed development will have an unacceptable impact on the agricultural production capability of the site. | Section 9   |
| 3.3.   | The compliance statement must contain, as a minimum, the following information:  |   |
| 3.3.1. | contact details and relevant experience as well as the SACNASP   | Appendix 1  |

|        |  |   |
|--------|--|---|
|        | registration number of the soil scientist or agricultural specialist preparing the assessment including a curriculum vitae;  |   |
| 3.3.2. | a signed statement of independence;  | Appendix 2  |
| 3.3.3. | a map showing the proposed development footprint (including supporting infrastructure) with a 50m buffered development envelope, overlaid on the agricultural sensitivity map generated by the screening tool; |  <p>Figure 2</p> |
| 3.3.4. | confirmation from the specialist that all reasonable measures have been taken through micro-siting to avoid or minimise fragmentation and disturbance of agricultural activities;                              | Section 9   |
| 3.3.5. | a substantiated statement from the soil scientist or agricultural specialist on  | Section 10  |



|        |   |            |
|--------|---|------------|
|        | the acceptability, or not, of the proposed development and a recommendation on the approval, or not, of the proposed development;   |            |
| 3.3.6. | any conditions to which the statement is subjected;   | Section 10 |
| 3.3.7. | 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 9  |
| 3.3.8. | where required, proposed impact management outcomes or any monitoring requirements for inclusion in the EMPr; and   | Section 9  |
| 3.3.9. | a description of the assumptions made as well as any uncertainties or gaps in knowledge or data.  | Section 5  |
| 3.4.   | A signed copy of the compliance statement must be appended to the Basic Assessment Report or Environmental Impact Assessment Report.  |            |

#### **4 METHODOLOGY OF STUDY**

The assessment was based on a verification of current agricultural land use on the site and was informed by existing soil and agricultural potential data for the site. The following sources of existing data were used:

- Soil data was sourced from the land type data set, of the Department of Agriculture, Forestry and Fisheries (DAFF). This data set originates from the land type survey that was conducted from the 1970's until 2002. It is the most reliable and comprehensive national database of soil information in South Africa and although the data was collected some time ago, it is still entirely relevant as the soil characteristics included in the land type data do not change within time scales of hundreds of years.
- Land capability data was sourced from the 2017 National land capability evaluation raster data layer produced by the DAFF, Pretoria.
- The spatial demarcation of Protected Agricultural Areas was obtained from the National Department of Agriculture, Land Reform and Rural Development (DALRRD).
- Field crop boundaries were sourced from Crop Estimates Consortium, 2019. Field Crop Boundary data layer, 2019. Pretoria. Department of Agriculture, Forestry and Fisheries.
- Rainfall and evaporation data was sourced from the SA Atlas of Climatology and Agrohydrology (2009, R.E. Schulze) available on Cape Farm Mapper. Note that Cape Farm Mapper includes national coverage of climate, grazing and certain other data.
- Grazing capacity data was sourced from the 2018 DAFF long-term grazing capacity map for South Africa, available on Cape Farm Mapper.
- Current and historical satellite imagery of the site and surrounds was sourced from Google Earth.

This 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 requires agricultural approval for rezoning in terms of the Subdivision of Agricultural Land Act (Act 70 of 1970) (SALA) because it is on agriculturally zoned land.

## **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). The screening tool's classification of sensitivity is merely an initial indication of what the sensitivity of a piece of land might be, as indicated by the only data that is available. What the screening tool attempts to indicate is whether the land is suitable for crop production (high and very high sensitivity) or unsuitable for crop production (low and medium sensitivity). To do this, the screening tool uses three independent criteria, from three independent data sets, which are all indicators of suitability for crop production but are limited and were not designed for this purpose. The three criteria are:

1. Whether the land is classified as cropland or not on the field crop boundary data set (Crop Estimates Consortium, 2019). All classified cropland is, by definition, either high or very high sensitivity.
2. Its land capability rating as per the Department of Agriculture's updated and refined, country-wide land capability mapping (DAFF, 2017). Land capability is defined as the combination of soil, climate, and terrain suitability factors for supporting rain-fed agricultural production. The direct relationship between land capability rating, agricultural sensitivity, and rain-fed cropping suitability is summarised by this author in Table XX.
3. Whether the land is classified as a protected agricultural area (PAA) or not (DALRRD, 2020). All classified PAAs are, by definition, either high or very high sensitivity.

The limitations for determining cropping suitability based on these data are as follows:

1. The field crop boundary data set used by the screening tool is very outdated
2. Land capability mapping is fairly coarse, modelled data which is not accurate at site scale.
3. PAAs are demarcated broadly, not at a fine scale, and there is therefore much variation of cropping suitability within a PAA. All land within these demarcated areas is not necessarily of sufficient agricultural potential to be suitable for crop production, due to finer scale terrain, soil, and other constraints, and therefore not all land within a PAA necessarily deserves to be classified as more than medium agricultural sensitivity.

*These three inputs operate independently, and the screening tool's agricultural sensitivity is simply determined by whichever of these gives the highest sensitivity rating. The agricultural*

sensitivity of the site, as classified by the screening tool, is shown in

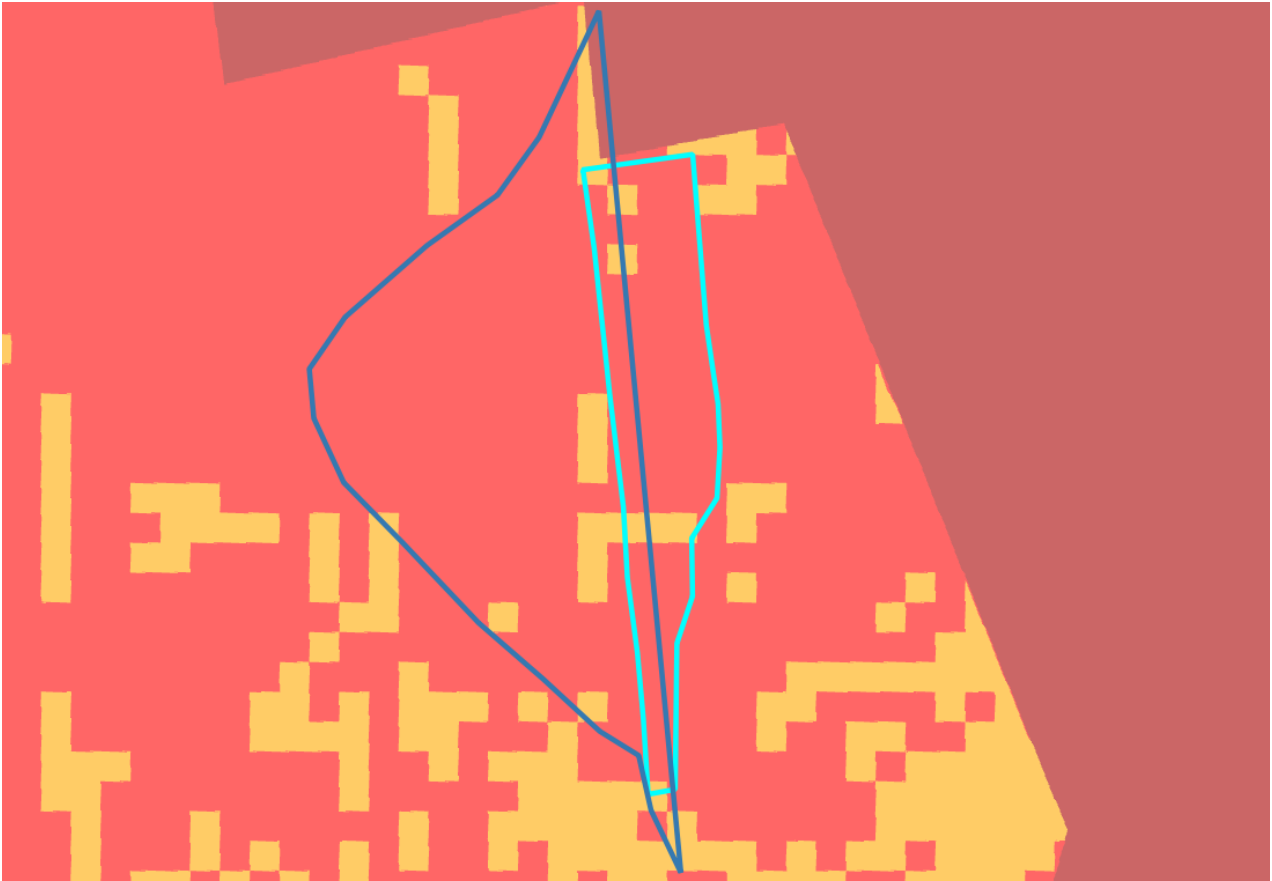


Figure 2.

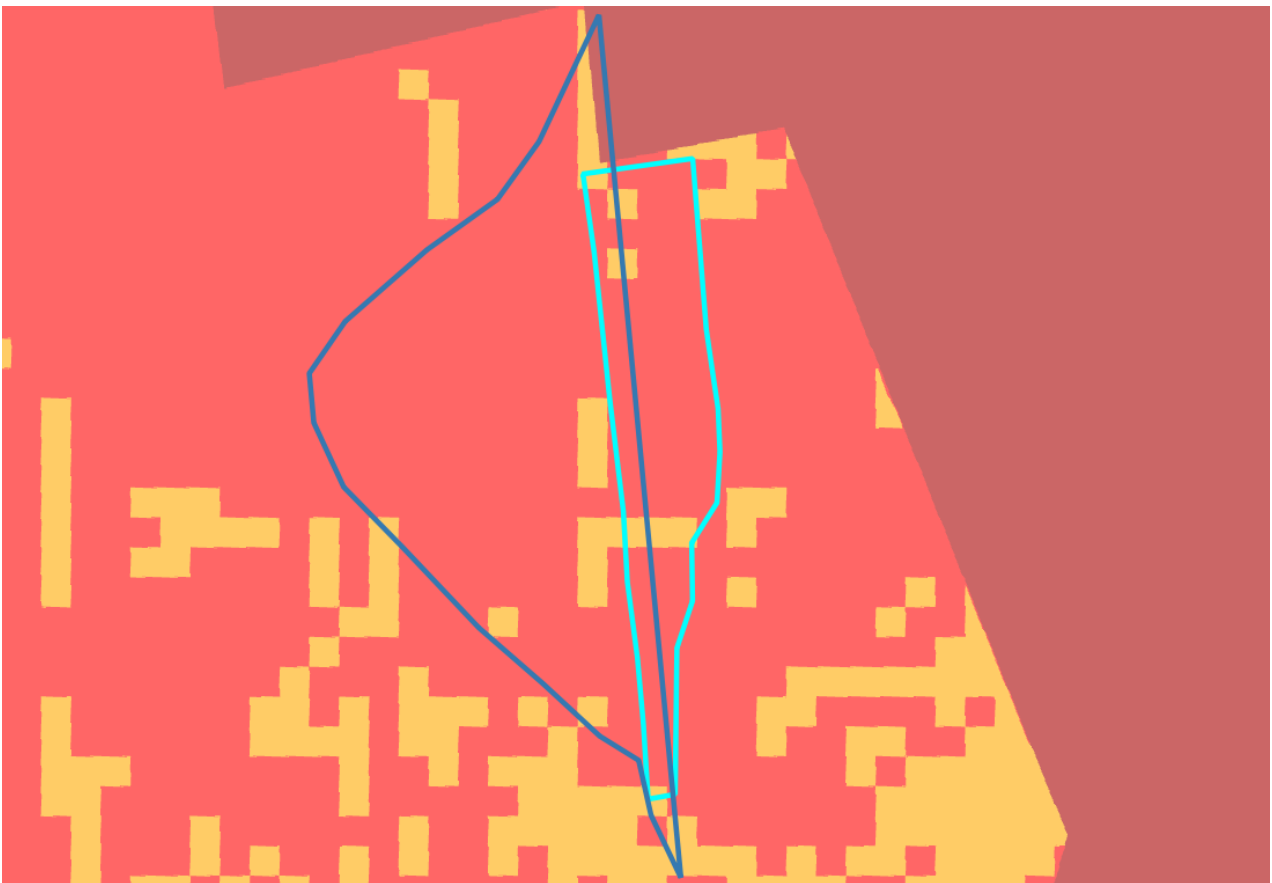
Table 2: Relationship between land capability, agricultural sensitivity, and rain-fed cropping suitability.

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

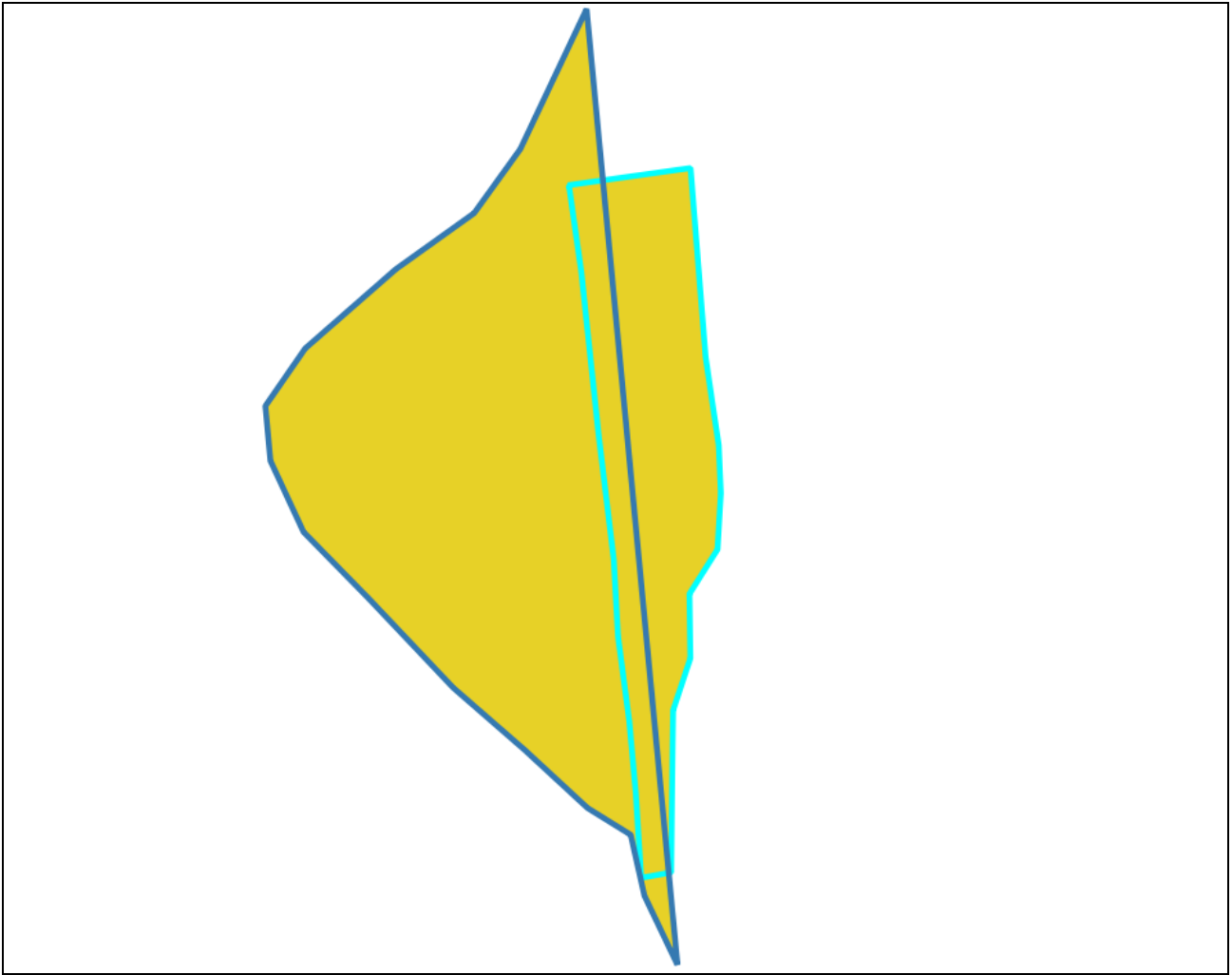
The true agricultural sensitivity of any land is equivalent to its actual suitability for crop production on the ground, rather than being determined by a parameter that serves as a proxy for crop suitability in a dataset, which is how the screening tool determines sensitivity. The land's suitability

for cropping directly determines how important it is to conserve that land as agricultural production land. To determine suitability for crop production, and hence sensitivity, requires a site-specific assessment, as has been conducted in this assessment, rather than a reliance on data sets that have significant limitations.

Despite the detail in this section above, the determinants of agricultural sensitivity are actually very straightforward and may be summed up as follows. If land is suitable for viable crop production - that is if it has the capability to deliver an above break-even crop yield on a sustainable basis - then it is of high or very high agricultural sensitivity. If it has limitations that prevent it from being able to deliver an above break-even crop yield on a sustainable basis, then it is of medium or low agricultural sensitivity.



*Figure 2. The proposed development overlaid on agricultural sensitivity, as given by the screening tool (green = low; yellow = medium; red = high; dark red = very high). The screening tool's high sensitivity is disputed by this assessment, which rates the entire assessed area as being of medium agricultural sensitivity.*



*Figure 3. Agricultural sensitivity of the proposed development, as verified by this assessment as medium sensitivity.*

The screening tool classifies the assessed site as ranging from medium to very high agricultural sensitivity and therefore classifies the overall site sensitivity, which is the highest sensitivity encountered across the site, as very high. The very high sensitivity classification by the screening tool is due to the PAA status of part of the site. The high sensitivity classification by the screening tool that underlies the PAA layer is due to a combination of some land being classified as cropland (high sensitivity) and some land being classified as high sensitivity because of a classified land capability rating of 8 to 9 as per Table 2 above. However, as shown in the section 8, the site is not suitable for viable crop production and its true sensitivity, as assessed on the ground, is therefore medium. This assessment therefore disputes the high and very high sensitivity classification of the site by the screening tool and verifies the entire site as being of medium agricultural sensitivity because of its assessed cropping potential.



## 8 BASELINE DESCRIPTION OF THE AGRO-ECOSYSTEM

The purpose of this section of an agricultural impact assessment report is to present the baseline information that controls the agricultural production potential of the site so that an assessment of that potential can be made. Agricultural production potential is one of the three factors that determines the significance of the agricultural impact (see Section 9).

All important parameters that control the agricultural production potential of the site are given in Table 3. The land type soil data is given in Appendix 4. A satellite image map of the development site is given in Figure 4.

*Table 3. 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)                    | 422  |
|         | Reference Crop Evaporation Annual Total (mm) (Schulze, 2009) | 1130   |
|         | Climate capability classification (out of 9) (DAFF, 2017)    | 5 (moderate)   |
| Terrain | Terrain type   | Foot slopes onto coastal plain   |
|         | Terrain morphological unit                                   | Varied   |
|         | Slope gradients (%)  | 0 to 3   |
|         | Altitude (m)   | 70   |
|         | Terrain capability classification (out of 9) (DAFF, 2017)    | 5 (moderate) to 7 (high)   |
| Soil    | Geology (DAFF, 2002)   | SANDVELD GROUP: Quartzose sand, pelletal phosphorite, gravel, sandy silt, grey-black carbonaceous kaolinitic clay, peat, shelly limestone and sandstone, shelly sand and (aeolian) calcarenite, coquinite, light grey to reddish sandy soil, loamy |
|         | Land type (DAFF, 2002)                                       | Bb42, Hb16   |
|         | Description of the soils                                     | Deep, very light textured (sandy) soils  |
|         | Dominant soil forms  | Longlands, Kroonstad, Wasbank, Fernwood  |

|          | Parameter   | Value  |
|----------|---|--|
|          | Soil capability classification (out of 9) (DAFF, 2017)  | 4 (low-moderate) to 7 (high)                       |
|          | Soil limitations  | Low water & nutrient holding capacity              |
| Land use | Agricultural land use in the surrounding area           | Mainly non-agricultural land use and grazing       |
|          | Agricultural land use on the site                       | None   |
| General  | Long-term grazing capacity (ha/LSU) (DAFF, 2018)        | 36   |
|          | Land capability classification (out of 15) (DAFF, 2017) | 7 (low-moderate) to 9 (moderate-high)              |
|          | Within Protected Agricultural Area (DALRRD, 2020)       | Partially, Swartland PAA, Rating: B, Type: Rainfed |

### 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 3 above.

The cropping potential of the site is limited particularly by soil conditions. The soils on site are predominantly limited by a very low water and nutrient holding capacity. The site is not viable for rain-fed crop production, or at best extremely marginal. The limited agricultural potential of the site limits its agricultural use to grazing only.



Figure 4. Satellite image map of the development site.

## 9 ASSESSMENT OF THE AGRICULTURAL IMPACT

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. Soil erosion and degradation may also contribute to loss of agricultural production potential. 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 agricultural impact possible, ignoring the length of time component, is therefore a loss of a large area of high yielding cropland and the least significant impact is a loss of a small area 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 and the relative abundance of land 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 total footprint of land that will be permanently lost is approximately between 47 and 130 hectares (depending on which alternative is approved). The production potential of that land is limited to only being suitable as grazing land. The loss of between 47 and 130 hectares of grazing land, of which there is no particular scarcity in the country, represents minimal loss of agricultural production potential in terms of national food security and for the affected farm. Due to the limited loss of agricultural production potential, the agricultural impact of the development is assessed here as being of very low significance.

Specialist assessments for environmental authorisation are required to assess 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 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 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 limited current agricultural production and limited capacity for future agricultural production. Therefore it is a site to which non-agricultural land uses can be steered without a high loss of agricultural production potential. The cumulative agricultural impact of the proposed development is therefore assessed here as being of low significance and therefore as acceptable.

Specialist assessments for environmental authorisation are also required to assess the impact of the no-go alternative. 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 very low impact of the development, and so from an agricultural impact perspective, there is no preferred alternative between the no-go and the development.

This assessment is also required to comparatively assess different proposed alternative layouts. However, due to the low agricultural sensitivity of the site, and the effectively uniform agricultural conditions across the site, there will be absolutely no material difference between the agricultural impacts of any of the proposed layout alternatives. All alternatives are considered acceptable.

No mitigation measures are required for the protection of agricultural production potential on the site because the site will be excluded from agricultural land use.

The agricultural protocol requires confirmation that all reasonable measures have been taken through micro-siting to minimize fragmentation and disturbance of agricultural activities. Because agriculture will be permanently excluded from the entire site, micro-siting will make no material difference to agricultural impacts and disturbance.

If linear infrastructure that is located on land of high agricultural sensitivity has been given exclusion from requiring an Agricultural Agro-Ecosystem Specialist Assessment because of its linear nature, and therefore only requires an Agricultural Compliance Statement, 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 because this project proposes no linear infrastructure on land that has high agricultural sensitivity.

## **10 CONCLUSION: AGRICULTURAL COMPLIANCE STATEMENT**

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

This assessment disputes the high and very high sensitivity classification of the site by the screening tool and verifies the entire site as being of medium agricultural sensitivity because of its assessed cropping potential.

The cropping potential of the site is limited particularly by soil conditions. The soils on site are predominantly limited by a very low water and nutrient holding capacity. The site is not viable for rain-fed crop production, or at best extremely marginal. The limited agricultural potential of the site limits its agricultural use to grazing only.

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 total footprint of land that will be permanently lost is approximately between 47 and 130 hectares (depending on which alternative is approved). The production potential of that land is

limited to only being suitable as grazing land. The loss of 47 to 130 hectares of grazing land, of which there is no particular scarcity in the country, represents minimal loss of agricultural production potential in terms of national food security and for the affected farm.

Although the development will occupy land that is currently zoned for agriculture, it will lead to minimal loss of both current production and of future agricultural production potential. The agricultural impact of the proposed development is assessed as being of very 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.

## **11 REFERENCES**

Department of Agriculture Forestry and Fisheries, 2018. Long-term grazing capacity map for South Africa developed in line with the provisions of Regulation 10 of the Conservation of Agricultural Resources Act, Act no 43 of 1983 (CARA), available on Cape Farm Mapper. Available at: <https://gis.elsenburg.com/apps/cfm/>

Department of Agriculture, Forestry and Fisheries, 2017. National land capability evaluation raster data layer, 2017. Pretoria.

Department of Agriculture, Forestry and Fisheries, 2002. National land type inventories data set. Pretoria.

Department of Agriculture, Land Reform and Rural Development. 2020. Protected agricultural areas – Spatial data layer. 2020. Pretoria.

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

Soil Classification Working Group. 1991. Soil classification: a taxonomic system for South Africa. Soil and Irrigation Research Institute, Department of Agricultural Development, 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*.

## 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: AGRICULTURAL COMPLIANCE STATEMENT FOR THE PROPOSED CONSTRUCTION OF THE N7 VISSERSHOK WEIGHBRIDGE ON FARM 77 BAAS RIESFONTEIN OUTSPAN, RE/141 MORNING STAR AND RE/32/141 MORNING STAR, CITY OF CAPE TOWN**

### 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<br>Member of the Soil Science Society of South Africa |
| Physical address:                      | 2 Roeland Terrace, CAPE TOWN, 8001   |
| Postal address:                        | Postnet Suite #500, Private Bag X16<br>Constantia, 7848  |
| Telephone                              | Not applicable   |
| Cell phone                             | +27 82 927 9018  |
| E-mail                                 | johann@soilza.co.za  |

## DECLARATION OF 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.



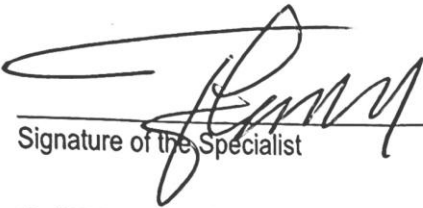
Signature of the Specialist

Name of Company: SoilZA (sole proprietor)

Date: 3 December 2025

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.

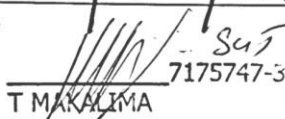
  
Signature of the Specialist

**SoilZA – sole proprietor**

Name of Company

03/12/2025

Date

  
7175747-3  
T MAKALIMA

Signature of the Commissioner of Oaths

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 2026**



Chairperson

Chief Executive Officer



## APPENDIX 4: SOIL DATA

Table 4: Table of land type soil data

| Land type | Soil series (forms) | Depth<br>(mm) | Clay %<br>A horizon | Clay %<br>B horizon | Depth<br>limiting<br>layer | % of land<br>type |
|-----------|---------------------|---------------|---------------------|---------------------|----------------------------|-------------------|
| Bb42      | Lo                  | 900 - 1200    | 0 - 6               | 2 - 6               | sp                         | 27.4              |
| Bb42      | Kd                  | 900 - 1200    | 0 - 6               | 25 - 35             | gc                         | 20.6              |
| Bb42      | Wa                  | 900 - 1200    | 0 - 6               |                     | hp                         | 19.6              |
| Bb42      | Fw                  | > 1200        | 0 - 6               |                     |                            | 18.8              |
| Bb42      | Cv                  | > 1200        | 0 - 6               | 0 - 6               |                            | 4.4               |
| Bb42      | Ct                  | 900 - 1200    | 0 - 6               | 0 - 6               | vp                         | 3.1               |
| Bb42      | Pn                  | 900 - 1200    | 0 - 6               | 0 - 6               | gc                         | 3.0               |
| Bb42      | Sw                  | 300 - 400     | 15 - 25             | 35 - 45             | vp                         | 1.8               |
| Bb42      | Av                  | 900 - 1200    | 0 - 6               | 0 - 6               | sp                         | 1.3               |
| Hb16      | Fw                  | > 1200        | 0 - 6               |                     |                            | 38.4              |
| Hb16      | Kd                  | 700 - 900     | 0 - 6               | 25 - 35             | gc                         | 18.6              |
| Hb16      | Ct                  | 900 > 1200    | 0 - 6               | 0 - 6               | U                          | 10.4              |
| Hb16      | Ss                  | 300 - 500     | 0 - 6               | 25 - 45             | pr                         | 9.2               |
| Hb16      | Lt                  | 900 > 1200    | 0 - 6               | 2 - 6               | rh                         | 4.8               |
| Hb16      | Es                  | 300 - 600     | 0 - 6               | 25 - 45             | pr                         | 4.8               |
| Hb16      | Wa                  | 200 - 500     | 0 - 6               |                     | hp                         | 4.6               |
| Hb16      | Lo                  | 300 - 600     | 0 - 6               | 2 - 6               | sp                         | 4.6               |
| Hb16      | Ms                  | 300 - 500     | 0 - 6               |                     | ka                         | 2.8               |
| Hb16      | Ms                  | 0 < 300       | 0 - 6               |                     | ka                         | 1.8               |