

NOTICE OF LAND DEVELOPMENT APPLICATION TO INTERESTED AND AFFECTED PARTIES FOR COMMENT

Affected person's Name

Affected persons Physical Address

Affected person's Title:

The following land use application in terms of the Stellenbosch Land Use Planning Bylaw, 2015, refers:

Application Property Address: **off Bottelary Rd / Welgelegen, Stellenbosch**

Application Property Number: **211/10**

Applicant: **Nico van Zyl/ BvZPlan - 021 981 1406**

Owner: **Wynland trust – 087 941 3884**

Application Reference: **LU/ 13382**

Application Type: **APPLICATION FOR REZONING, DEPARTURE AND FOR PERMISSION REQUIRED IN TERMS OF THE ZONING SCHEME TO PERMIT AN ADDITIONAL USE (TECHNICAL APPROVAL): FARM 211/10 STELLENBOSCH DIVISION.**

Detailed description of land use or development proposal, including its intent and purpose:

1. Application is made in terms of Section 15(2)(a) of the Stellenbosch Municipality Land Use Planning By-law (2015) for the rezoning of $\pm 149\,245\text{m}^2$ of Farm No. 211/10, Stellenbosch Division from Agriculture and Rural Zone to Industrial Zone in order to establish a compost manufacturing facility of $\pm 7950\text{m}^2$ (including a warehouse of $\pm 7\,500\text{m}^2$ and a shed of $\pm 450\text{m}^2$).
2. Application is made in terms of section 15(2)(b) of the Stellenbosch Municipality Land Use Planning By-Law (2015) for a permanent departure to allow for more than one employee housing (10 units), within the proposed industrial spot zone on Farm No. 211/10, Stellenbosch Division.
3. Application is made in terms of Section 15(2)(g) of the Stellenbosch Municipality Land Use Planning By-law (2015) for a permission required in terms of the Zoning Scheme to permit an additional use for employee housing (10 units) in the Agriculture and Rural zone on Farm No. 211/10, Stellenbosch Division.

Notice is hereby given in terms of the provisions of Section 46 of the said Bylaw that the above-mentioned application has been submitted to the Stellenbosch Municipality for consideration. The application is available for inspection on the Planning Portal of the Stellenbosch Municipal Website for the duration of the public participation process at the following address: <https://www.stellenbosch.gov.za/planning/documents/planning-notices/land-use-applications-advertisements>. If the website or documents cannot be accessed, an electronic copy of the application can be requested from the Applicant.

You are hereby invited to submit comments and / or objections on the application in terms of Section 50 of the said bylaw with the following requirements and particulars:

- The comments must be made in writing;
- The comments must refer to the Application Reference Number and Address,
- The name of the person that submits the comments;
- The physical address and contact details of the person submitting the comments;
- The interest that the person has in the subject application;
- The reasons for the comments, which must be set out in sufficient detail in order to:
 - Indicate the facts and circumstances that explain the comments;
 - Where relevant demonstrate the undesirable effect that the application will have if approved;
 - Where relevant demonstrate any aspect of the application that is not considered consistent with applicable policy; and
 - Enable the applicant to respond to the comments.

The comments must be addressed to the applicant by electronic mail as follows: **Nico van Zyl for BvZPlan e-mail: nico@bvzplan.co.za** By lodging an objection, comment or representation, the person doing so acknowledges that information may be made available to the public and to the applicant.

The comments must be submitted within **30 days (or 60 days if it is an state entity)** from the date of this notice to be received on or before the closing date of **28 March 2022**

It should be noted that the Municipality, in terms of Section 50(5) of the said Bylaw, may refuse to accept any comments/ objection received after the closing date.

For any enquiries on the Application or the above requirements, or if you are unable to write and /or submit your comments as provided for, you may contact the Applicant for assistance at the e-mail address provided or telephonically at **(082 821 9271/ 021- 9811406)** during normal office hours.

Yours faithfully

Nico van Zyl for **BvZPlan**

**KENNISGEWING VAN GROND ONTWIKKELINGS AANSOEK AAN GEÏNTERESSEERDE EN GEAFFEKTEERDE
PARTYE VIR KOMMENTAAR.**

Naam van geaffekteerde persoon

Fisiese adres van geaffekteerde persoon

Titel van geaffekteerde persoon:

Die volgende grondgebruiksaansoek in terme van Stellenbosch se Verordeninge op Grondgebruikbeplanning, 2015, verwys:

Adres van aansoek eiendom: Langs Bottelary Pad / Welgelegen, Stellenbosch

Aansoek eiendom beskrywing: 211/10

Aansoeker: Nico van Zyl/ BvZPlan - 021 981 1406

Eienaar: Wynland trust – 087 941 3884

Aansoek Verwysing: LU/ 13382

**Tipe Aansoek: AANSOEK VIR HERSONERING, AFWYKING EN TOESTEMMING BENODIG KRAGTENS
DIE SONERING SKEMA VIR TOELATING VAN 'N BYKOMENDE GEBRUIK (TEGNIËSE GOEDKEURING):
PLAAS 211/10, AFDELING STELLENBOSCH.**

Besonderhede van die grondgebruiksaansoek, insluitende die doel en uitkoms:

1. Aansoek word gedoen kragtens Artikel 15(2)(a) van die Stellenbosch Verordeninge op Grondgebruikbeplanning (2015) vir die hersonering van $\pm 149\,245\text{m}^2$ van Plaas No. 211/10, Afdeling Stellenbosch, van Landbou en Landelike sone na Nywerheidsone ten einde voorsiening te maak vir 'n komposvervaardigingsfasiliteit van $\pm 7950\text{m}^2$ (sluit in 'n pakhuis van $\pm 7\,500\text{m}^2$ en 'n stoor van $\pm 450\text{m}^2$).
2. Aansoek word gedoen kragtens Artikel 15(2)(b) van die Stellenbosch Verordeninge op Grondgebruikbeplanning (2015) vir 'n permanente afwyking vir Plaas No. 211/10, Afdeling Stellenbosch, om toelating te verleen vir meer as een werkers huis (10 huise) binne die voorgestelde Nywerheid splitsonerings.
3. Aansoek word gedoen kragtens Artikel 15(2)(g) van die Stellenbosch Verordeninge op Grondgebruikbeplanning (2015) kragtens die soneringskema om toestemming te verleen vir 'n addisionele gebruik vir meer as een werkershuis (10 huise) binne die voorgestelde Landbou en Landelike sone op Plaas No. 211/10, Afdeling Stellenbosch.

Kennis word hiermee gegee in terme van die voorskrifte van die Artikel 46 van die genoemde Verordeninge dat bovermelde aansoek by die Stellenbosch Munisipaliteit ingedien is vir oorweging. Die aansoek is beskikbaar vir insae op die Beplannings Portaal van die Stellenbosch Munisipaliteit se Webtuiste vir die tydskedule van die publieke deelname proses by die volgende adres:

<https://www.stellenbosch.gov.za/planning/documents/planning-notices/land-use-applications-advertisements>. Indien die webtuiste of tersaaklike dokumente nie toeganklik is nie, kan die Aansoeker versoek word om 'n elektroniese kopie van die aansoek beskikbaar te stel.

Kommentaar en/ of besware kan vervolgens gedien word op die aansoek in terms van Artikel 50 van die tersaaklike Verordening wat die volgende vereistes en besonderhede moet bevat:

- Die kommentaar moet skriftelik wees;
- Die kommentaar moet die aansoek se verwysings nommer en adres insluit;
- Die naam van die persoon wat die kommentaar lewer;
- Die fisiese adres en kontak besonderhede van die persoon wat die kommentaar lewer.
- Die belang wat die persoon wat die kommentaar lewer, in die aansoek het.
- Die redes vir die kommentaar wat gelewer word, welke redes genoegsame besonderhede moet bevat ten opsigte van die volgende aspekte:
 - Die feite en omstandighede aantoon wat die die kommentaar toelig;
 - Indien toepaslik, aantoon wat die onwenslike resultaat sal wees indien die aansoek goedgekeur word;
 - Waar toepaslik moet aangetoon word indien enige aspek van die aansoek strydig geag word met enige relevante beleid;
 - Dat die insette voldoende inligting sal gee wat die aansoeker in staat sal stel om kommentaar daarop te lewer.

Die kommentaar moet by wyse van elektroniese pos aan die Aansoeker gestuur word as volg: **Nico van Zyl – BvZPlan – nico@bvzplan.co.za** Deur 'n beswaar, kommentaar of versoë te rig, erken die persoon wat dit doen dat inligting aan die publiek en aan die aansoeker beskikbaar gestel kan word.

Die kommentaar moet binne **30 dae (60 dae indien dit 'n staatsentiteit sal wees)** vanaf die datum van hierdie kennisgewing gestuur word en moet ontvang word voor of op die laaste dag van die sluitingsdatum van **28 Maart 2022**.

Daar moet kennis geneem word dat die Munisipaliteit, in terme van Artikel 50(5) van die vermelde Verordeninge, mag weier om enige kommentaar / beswaar te aanvaar wat na die sluitingsdatum ontvang word.

Indien daar enige navrae op die aansoek of bovermelde vereistes vir die lewer van kommentaar is, of indien dit nie moontlik is om geskrewe kommentaar te lewer of die kommentaar op die wyse te lewer soos voorsiening gemaak is nie, kan die Aansoeker geskakel word vir bystand by die vermelde elektroniese pos adres of telefonies by **082 8219271 / 021 981 1406** gedurende normale kantoor ure.

Die uwe

Nico van Zyl vir BvZPlan



MOTIVATION

Application for the spot rezoning of parts of portion 10 (Portion of Portion 3) of the Farm Welgelegen No 211 from Agriculture to Industrial Zone in order to establish a compost manufacturing facility; and for a departure to allow for employee housing within the Industrial spot zone; as well as for an additional use to provide for employee housing related to agricultural activities.



**Application submitted to
The Stellenbosch Municipality**

By



Professional Planners

On behalf of

Wynland Trust

October 2021

CONTENT

1. EXECUTIVE SUMMARY

2. PURPOSE OF THE MOTIVATION

3. PROPERTY INFORMATION

3.1 Ownership and title description

3.2 Location

3.3 Existing land uses

3.4 Description of application property

3.5 Overview of proposed development

3.6 Existing zoning

3.7 Pre-application consultations / Pre-Application Scrutiny

4. PROPOSED SPOT REZONING, DEPARTURE AND ADDITIONAL USE

4.1 Building development parameters in Agriculture and Rural Zone

4.2 Building development parameters in Industrial Zone

4.3 Parking Calculation

5. PROPOSED LAND USES

5.1 Warehouse

5.2 Blending area

5.3 Accommodation

5.4 Agriculture

5.5 Roads

6. ASSESSMENT OF PROPOSALS

6.1 (c) The Desirability of the Proposed Utilisation of Land

6.2 (f) Investigations Carried out in terms of Other relevant Laws

6.2.1 Heritage

6.2.2 Environmental impact

6.2.3 Agriculture

6.2.4 Aquatic

6.2.5 Botanical

6.3 (h) The Impact of the Proposal on Municipal Engineering Services;

6.3.1 Engineering Services Report

6.3.2 Traffic Impact Assessment

6.4 (i) The Integrated Development Plan, including the MSDF, November 2019

6.5 (m) Applicable Policies of the Municipality that Guide Decision-making

6.6 (n) The Provincial Spatial Development Framework

6.7 (p) National and Provincial Policies, Principles, Norms and Criteria

6.8 (q) & (r) Matters Contained in Section 42 of SPLUMA and Chapter VI of LUPA

6.9 (s) Applicable Provisions Contained in the Stellenbosch Municipal Zoning Scheme By-law, 2019

6.9.1 Definitions

6.9.2 Development parameters

6.9.3 Parking Requirements as per Table A in the Municipal Zoning Scheme By-Law

7. CONCLUSIONS AND RECOMMENDATIONS

ENCLOSED AS SEPARATE DOCUMENTS

- Attachment 1 - Application form
- Attachment 2 - Powers of Attorney & Resolution
- Attachment 3 – Title Deed
- Attachment 4 – SG Diagram
- Attachment 5 – Conveyancer’s Certificate
- Attachment 6 – Location plan
- Attachment 7 – Land use plan
- Attachment 8 – Pre-Application Scrutiny Form
- Attachment 9 – Rezoning Plan
- Attachment 10 – Site Development Plan (SDP)
- Attachment 11 – Landscaping Plan
- Attachment 12 – Agricultural Compliance Statement
- Attachment 13 – Aquatic Report
- Attachment 14 – Botanical Report
- Attachment 15 – Services Report
- Attachment 16 – Traffic Impact Assessment (TIA)

1. EXECUTIVE SUMMARY

Property description	Portion 10 (Portion of Portion 3) of Farm Nr 211, Welgelegen, Stellenbosch (Further referred to as Farm 211/10 in this document and attachments)
Property address	Off Bottelary Rd
The Application	1. For spot rezonings of parts of portion 10 of the Farm Welgelegen No 211 from Agriculture to Industrial Zone; 2. For a departure to allow for 10 employee housing within the Industrial spot zone; 3. For an additional use to allow for 10 employee housing related to agricultural activities; and 4. For the approval of a Site Development Plan (SDP).
Site extent	34,6068ha
Current zoning	Agriculture
Current land use	Mostly vacant – with one living unit
Overlay zone applicable	N/A
PHRA or SAHRA heritage	N/A

2. PURPOSE OF THE MOTIVATION

The purpose of this motivation is to supplement the information contained in the enclosed **Application form** in order to enable the Stellenbosch Municipality to objectively evaluate this application. The applicant is available to supply any further information that may be required.

Refer Attachment 1 - Application form.

3. PROPERTY INFORMATION

3.1 Ownership and title description

Ownership	Bond	Title description
Wynland Trust	No Bond	T35977/2013

Powers of Attorney

The power of attorney that indicate that BvZPlan is appointed as the registered owner's legal representative/agent, is attached. It should be noted that, in terms of the Resolution, also attached, Mr Gerhard Conradie is empowered to represent the registered owner.

Copies of the **Title Deed, Conveyancer's Certificate and the Surveyor General Diagram** are enclosed. There are no restrictive conditions that limit the use of the property for the industrial activities applied for and indicated in the SDP.

Refer to Attachment 2 - Powers of Attorney & Resolution

Attachment 3 - Title Deed

Attachment 4 - SG Diagram

Attachment 5 - Conveyancer's Certificate

3.2 Location

The location of the site is shown on the attached **Location Plan**. It is located off Bottelary Rd, from which it takes access. See image below:



LOCATION PORTION 10 OF FARM 211 STELLENBOSCH

Figure 1 (Screenshot from CapeFarmMapper)

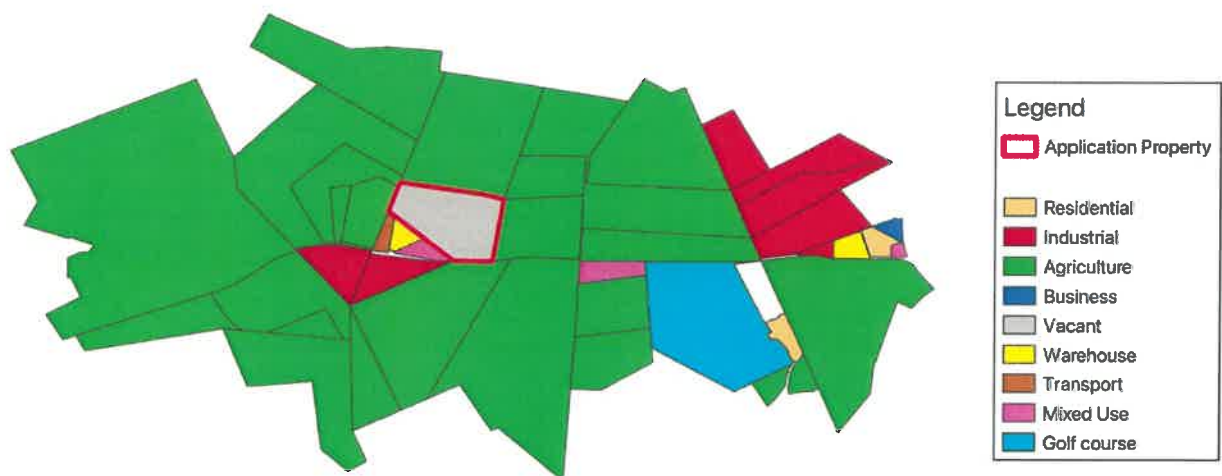
Refer Attachment 6 – Location

3.3 Existing Land Uses

The property is currently largely vacant with a few building ruins with no heritage value.

Refer Attachment 7 – Land Use Plan

The property is situated in a primarily agricultural area but there are other non-agricultural uses present, e.g. on the opposite side of the Bottelary road a concrete ready-mix business is operational with trucks doing deliveries; neighbouring properties to the South West accommodate warehousing that does not fit within the definition of agricultural industry; and on another portion a large number of trucks are parked and seems to be used as a transport business. A couple of kms down the road towards Stellenbosch, a brick manufacturing plant is operational. Other uses worth mentioning include mixed uses that are not agricultural in nature and a golf course with a residential component. The below image is an extract from the provided Land Use plan.



Land use along the Bottelary rd

Figure 2

3.4 Description of Application Property

The applicant (Red Tractor Compost) proposes to develop a commercial composting facility and associated infrastructure on Portion 10 of the Farm Welgelegen 211, Stellenbosch (the "Site"). The site is currently zoned as Agriculture. It is, however, not fully utilised for agricultural purposes. The access is off Bottelary Road and this access road bisects the property from south to north, also providing access to the northern farm portion (Portion 3

of Farm 211). Two existing dams are located on the southern part of the site, to the east of the access road and a non-perennial tributary of the Bottelary River intersects the site along the south. Most of the site has been transformed, with scattered indigenous vegetation along the western portion of the site.

3.5 Overview of Proposed Development

The proposed development requires a spot rezoning on the site, from Agriculture to Industrial zoning, as the facility will obtain organic waste in excess of 50% from outside Farm 211/10. Additional infrastructure is proposed as part of the development, including a warehouse, packaging facility (for packaging the compost prior to distribution), a workshop, offices, a main residential dwelling, a second residential dwelling, 20 duplex workers' residential units, as well as internal roads.

The table below summarises the proposed land-uses on the site. Also see paragraphs 4 and 5 below.

Table 1: Proposed Rezoning and Land Uses

	m ²	% of total
Total Area of the Application Property	346 068	100
Zoning:		
Area (of Farm 211/10) to remain Agricultural Zone	196 823	56.87
Total Proposed Industrial Zone as per Zoning Map	149 245	43.13
Land Use:		
Decomposing Field (including collection ponds, screening platforms and shed) as per SDP	126 470	36.54
Warehouse, packaging and yard as per SDP	21 000	6.07
Transport (estimated)	13 715	3.97
Residential Areas (estimated)	5 925	1.71
Agriculture (estimated)	178 958	51.71

Earthworks will be required in order to create a compost pad on which the equipment can safely traverse. It is expected that the existing material (clayey soil) on site, cleared and compacted, will provide a suitable composting pad.

A covered screening shed (approximately 500m² in size) and four uncovered concrete screening platforms are proposed to be located within the composting area. Stormwater collection ponds are planned within each composting area, each ± 750m² in size. These ponds will allow for the capture and re-use of water used in the composting process. It is anticipated that approximately 160 kilolitres of water will be required per day for compost manufacturing, with half of this volume expected to be available from the collection ponds. The additional water necessary for keeping the compost moist will be obtained from the existing ponds on site (to be re-used).

A 650m² workshop and a 7100m² warehouse and packaging facility are proposed, with associated parking - paving and carports covering approximately 10 085m². Storage of fuel will be necessary at the workshop and it is proposed that 2 x 23 000 litres (i.e. approximately 46 000 litres) of diesel will be stored for use on-site.

The main dwelling is proposed to have a building coverage of less than 600m², with a private garden of 1500m² in size. The “second” proposed dwelling is 350m² in extent, with a 187m² private garden. The 20 duplex units allocated for workers' accommodation cover a total area of 3150m², with each unit having a building footprint of approximately 55m² and private gardens covering 1600m² (80m² per unit).

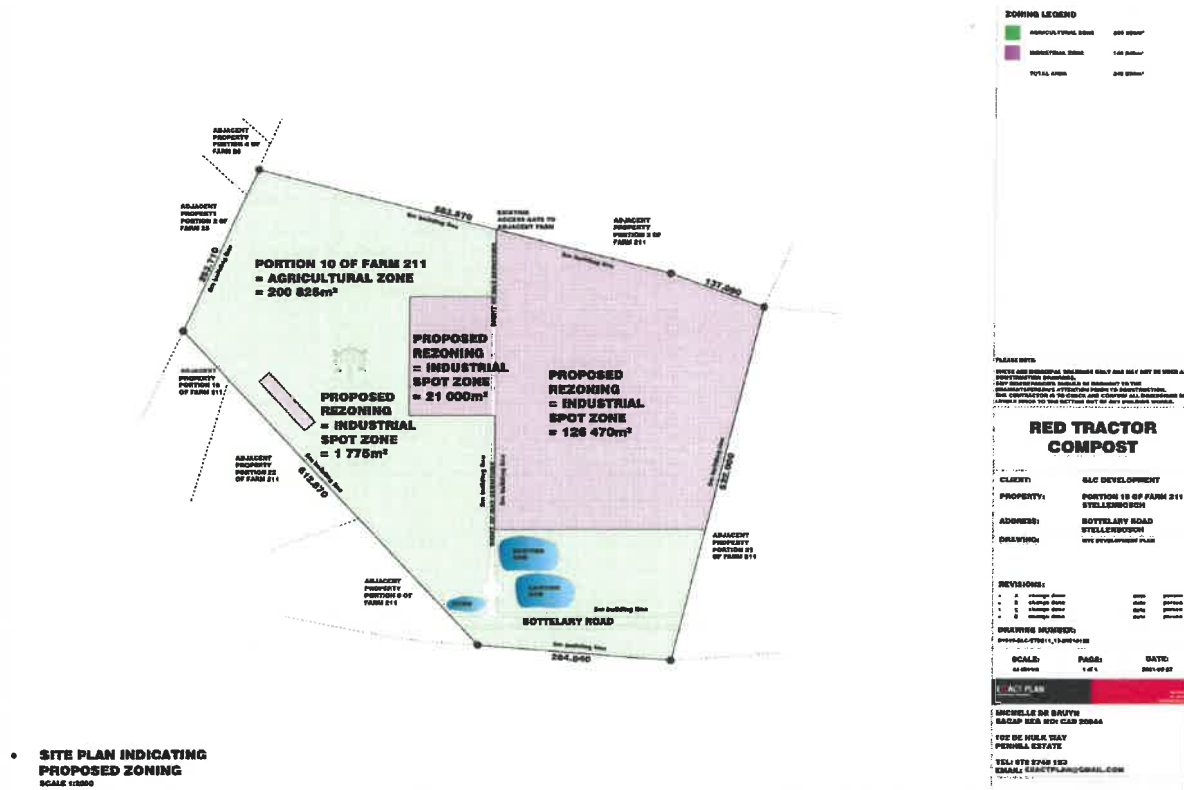


Figure 3: Proposed Layout

A windrow composting technique is proposed with greens (chipped vegetation) and manure (kraal manure) feedstock. This primary proposed method of composting involves the formation of this organic waste into rows of long piles (windrows) and aerating them by periodically mechanically turning the piles. It is envisioned that the windrows and curing heaps will range between 2.5m and 3.5 meters in height. The proposed windrows and compost heaps will be irrigated in order to ensure adequate moisture levels in the heaps for the survival of micro-organisms in the compost. This proposed windrow size is large enough to generate adequate heat and maintain temperatures necessary for proper composting, but still small enough to allow oxygen flow to the windrows' cores.

The facility will utilise green/organic waste and kraal manure (which is added to the green waste at a ratio of 1:9 by weight). It is proposed that the facility will accept low hazard feedstocks, including agricultural residues, source-separated organics (manure) and source-separated yard trimmings, woody material, agricultural crop residues and other materials determined to pose a low level of risk to human health and the environment. Crop residues such as stalks, stems, leaves, seed pods, husks, bagasse and roots will make up a portion of

the feedstock. The operator will ensure that no hazardous feedstocks such as asbestos-containing wastes, biomedical wastes, toxic or radiological wastes, hazardous wastes and any other prohibited wastes are accepted.

The chipped greens will arrive at the site and be screened to remove any large vegetation or debris. Removed material will be separated into organic and inorganic heaps, before the organic material is chipped as required and the plastic and other inorganic material taken to a landfill site.

It is envisioned that the facility will have an operational output of approximately 14 000m³ of compost per month. The incoming material needed to produce this quantity of compost will be at least 30% more as the decomposition of material must be taken into consideration. Incoming material for compost making will therefore be approximately 18 200m³ per month.

3.6 Existing Zoning

The site is currently zoned Agriculture.

3.7 Pre-Application Scrutiny / Pre-application consultations

On 12 August 2021 a pre-application consultation took place. The following people were present at the meeting via conference call:

1. Stiaan Carstens
2. Chrizelle Kriel
3. Pedro April
4. Bernabe De La Bat
5. Katherine Robinson
6. Kaizer Makati
7. Kaylin Coetzee
8. Viola Anthony
9. Tanya de Villiers
10. Michelle de Bruyn
11. Monique Sham
12. Lize Malan
13. Renette Opperman
14. Nico van Zyl

The following meeting notes have been taken:

- Apply for Industrial zone - spot zone industrial activity on agricultural land.
- Employee housing:

Indicate which house will be used for what function: make sure it fits within the definition of Agriculture or Industry housing - departure to provide more than one house under Industry and additional use application to provide more than one house under Agriculture.

- In the motivation we need to indicate the full extent of the operation, for instance what functions will be fulfilled on-site like admin, ancillary uses, marketing etc. Make sure everything is indicated on the SDP, including sizes & indicate building lines (5m) and check if any building line departures will be needed.
- Make sure that the industry fits within the agricultural landscape with mitigating landscaping and building design.
- Contact Infrastructure Services for the development charges and ask what they would require to assess.
- Bernabe confirmed that Bottelary Rd adjacent to the application site is not classified as a scenic route.
- Illumination of road and buildings should fit in with agricultural use.

Refer Attachment 8 – Completed Pre-Application Scrutiny form

4. PROPOSED SPOT REZONING, DEPARTURE AND ADDITIONAL USE

In order to accommodate the proposed compost facility, a spot rezoning of the land areas that are required for the manufacturing activity, needs to be rezoned to Industry. Below is an extract from the proposed rezoning map:

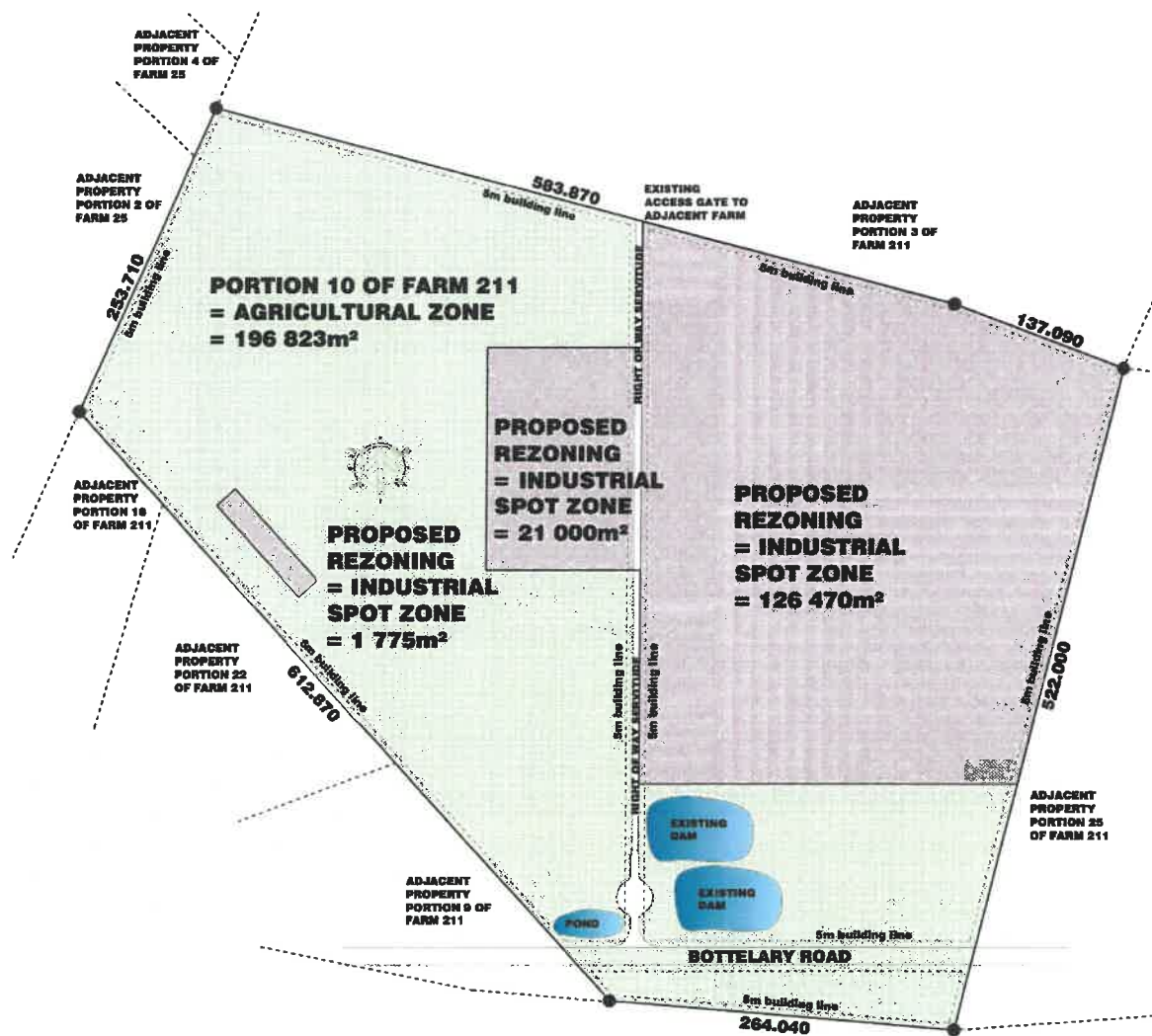


Figure 4 - Site plan indicating the proposed Zoning

The spot zone will be 149 245m² in size, covering 43.13% of the 346 068m² sized property. The owner of the land wishes to provide accommodation for the workers on-site as follows: 10 associated with the compost manufacturing activities (associated with the proposed Industrial spot zone) and 10 associated with the farming activities (associated with the agricultural and rural zone). In order to accomplish this, application is made for a departure from the one-dwelling-unit condition allowed for in the by-law within an industrial zoning, in order to provide for the proposed 10 units. Application is also made for an additional use in order to allow for 10 employee housing units for workers in the agricultural and rural portions.

The following development parameters apply:

4.1 Building Development Parameters in Agriculture and Rural Zone

	BUILDING LINES: Street & Common boundaries (incl. ROW servitudes)	HEIGHT	PRIMARY USE: Maximum Coverage Threshold	ADDITIONAL USE (SDP): Maximum Coverage Threshold	CONSENT USE: Maximum Coverage	Does the proposal comply?
Dwelling house and second dwelling house (excl. outbuildings, carport & garage)	5m	2 storeys	600m ² each	-	-	YES
Additional dwelling houses (excluding outbuildings, carport or garage): Max 4 dwelling units (1 unit/10ha for land units larger than 20ha)	5m	1 storey	-	-	120m ² each	N/A
Guest house, bed & breakfast & tourist dwelling units: in existing approved dwellings	-	-	N/A	-	-	N/A
Employee housing unit (excluding outbuildings, carport or garage)	5m	1 storey	120m ²	As approved by Municipality	-	YES

4.2 Building development parameters in Industrial Zone

Building type	Street boundary building lines (m)	Common boundary building lines (m)	Coverage/Floor area	Height
All buildings	3m	0m 3m if abutting another zone	75% coverage	4 storeys
Employee housing	3m	0m	75m ² floor area	

Ten of the employee housing units are proposed to slot in with the Industrial spot zone, with a building development parameter of 75m² floor area per unit maximum. The warehouse, workshop and all industrial related structures will be located outside the applicable 3m building lines. The warehouse will be a maximum of 10m in height not exceeding the allowed 16m allowed for 4 Storeys, it will have two storeys. The Coverage of the proposed warehouse and shed is: 2.23%.

Please refer to Attachment 10 for the Site Development Plan.

The proposed development does not require any departures in relation to the building development parameters. With regards to the parking requirements, the below calculation has been done on the requirement for industry and housing.

Please refer Attachment 9 – Rezoning Plan

4.3 Parking Calculation

Land use category	Off-street parking requirement i.t.o. the Stellenbosch Zoning Scheme	Number of Parking Bays required	Number of Parking Bays to be provided	Does the proposal comply?
Industry	1,5 bays/100m ² gross leasable area of 7950m ²	119	145	Yes
Housing	2 bays/dwelling unit with more than one room (22 units)	44	44	Yes

Please refer Attachment 10 – SDP, submitted for more detail on the proposed development.

5. PROPOSED LAND USES

The following activities are proposed as indicated on the Site Plan:

5.1 Warehouse

The intention is to use the warehouse for packaging, bulk storage, workshop and offices, all associated with the business of manufacturing compost and the distribution thereof.

5.2 Blending area

Within the blending area the manufacturing of compost will take place - specifically the blending of greens and manure using the windrow composting technique.

5.3 Accommodation

The following accommodation is proposed:

- Main Dwelling
- Second Dwelling

- 20 employee housing units - 10 units associated with agricultural activities and 10 units associated with the industrial activity of compost manufacturing.

5.4 Agriculture

It is proposed that the remainder of the farm not used for the compost manufacturing and accommodation will mainly consist of grazing due to the quality of the land. Please refer to the agricultural compliance statement (Attachment 12) and Figure 18 under Paragraph 6.4(l) below for more details on the potential of the farmland.

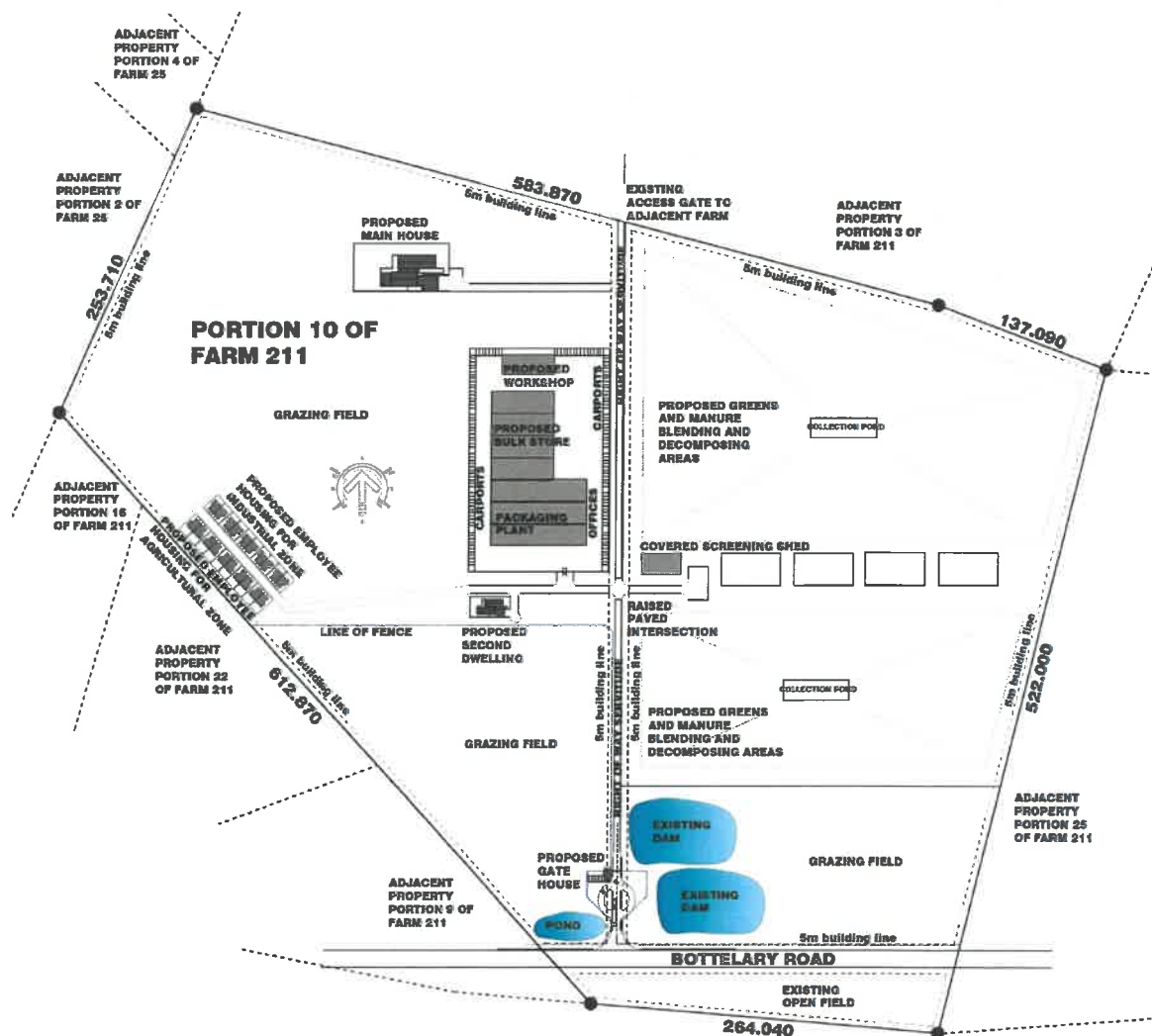


Figure 5 - Site Plan indicating Land Uses

Refer Attachment 10 – Site Development Plan

5.5 Roads

The property has a right of way running from the Bottelary road northwards more or less through the middle of the property. The title deed indicates an expropriation of land that is presumably associated with the Bottelary Road reserve by the then Divisional Council of Stellenbosch: Expropriation Notice 13/74 ($\pm 1,3265$ ha in size).

6. ASSESSMENT OF PROPOSALS (Refer to criteria contained in Item 65 of the By-Law)

Application is made in terms of Section 15 (2) of the STELLENBOSCH MUNICIPALITY LAND USE PLANNING BY-LAW 2015 for

- (a) the rezoning of land:** A proposed spot rezoning of certain portions from Agricultural Zone to Industrial Zone;
- (b) a permanent departure from the allowed land use in the Zoning Scheme:** The proposal is for the construction of 10 housing units in lieu of one employee housing unit within the industrial zone; and
- (c) an additional use (Technical Approval):** The proposal is for an additional use to be permitted, consisting of the construction of 10 housing units for the accommodation of agriculture related workers.

Only those criteria that have relevance to the above proposals are being addressed below:

6.1 (C) THE DESIRABILITY OF THE PROPOSED UTILISATION OF LAND

(Including any guidelines issued by the Provincial Minister in this regard)

The product proposed to be manufactured is compost. In order to assist in the marketing and a commitment to provide the best quality compost for soil improvement, the developer intends to use the farm as a showcase of the high quality of the products. To this end the developer plans large improvements to the farm in order to make it aesthetically pleasing, including as viewed from Bottelary Road. Everything possible will also be done to ensure the sustainability of the operation.

The following measures are proposed to accomplish this:

1. A Landscape Architect has been appointed to ensure that the visual impact of the proposed manufacturing activities is minimised by screening and other mitigating techniques such as the planting of indigenous vegetation and the creation of a berm to create a visually pleasing landscape. The landscape plan is attached and also shown below.

Refer attachment 11 – Landscaping Plan



Figure 7



Figure 8



Figure 9

Figures 7, 8 and 9 above show perspective views of the proposed development off Bottelary Road. The berm and trees will screen the composting area.



Figure 10 - Warehouse and Packaging area Elevation

Refer Attachment 10 - SDP

With regards to the question of desirability, a composting facility aligns well with the National Waste Management Strategy 2020 (NWMS 2020) under its Pillar no 1 - waste minimisation:

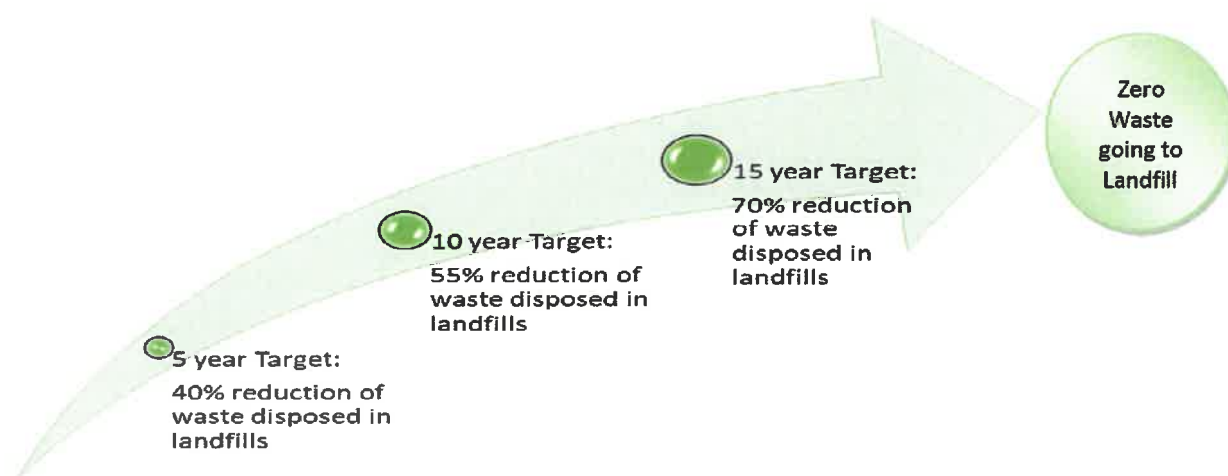


Figure 11 – Waste management targets

40% of waste diverted from landfill within 5 years; 55% within 10 years; and at least 70% within 15 years leading to Zero-Waste going to landfills, are the set targets. Implementing the compost facility will contribute positively towards these goals.

STRATEGIC PILLAR	OUTCOME	KEY INTERVENTIONS
Waste Minimisation	40% of waste from diverted from landfill within 5 years; 55% within 10 years; and at least 70% within 15 years leading to Zero-Waste going to landfill.	<ul style="list-style-type: none"> • Prevent waste generation through cleaner production, industrial symbiosis and extended producer responsibility; • Prevent Food Waste; • Increase re-use, recycling and recovery rates; • Divert organic waste from landfill through composting and the recovery of energy; • Divert construction and demolition waste from landfill through beneficiation; and • Increase technical capacity and innovation for beneficiation of waste.

Extract from the National Waste Management Strategy 2020, Pillar 1

Furthermore, the NWMS 2020 responds to the National Development Plan (NDP) directive of “implementing a waste-management system through the rapid expansion of recycling infrastructure and encouraging the composting of organic domestic waste to bolster economic activity in poor urban communities” and to the need to “cut down on solid waste disposal” (National Development Plan: Vision 2030, Our Future-Make it Work).

The following paragraphs are quoted from the NWMS 2020:

“

Having these entry points as part of South Africa’s strategy for waste minimisation and implementing the circular economy will result in the diversion of waste from landfill and the displacing of demand for virgin materials. The circular economy can significantly reduce the negative impacts of resource extraction and use on the environment and contribute to restoring biodiversity and natural capital.

“

The proposed compost facility will redirect organic material from the landfill to be composted and recycled. This in turn will create job opportunities in the region, beneficial to the local communities and contribute to minimising resource extraction.

“

Efficient and innovative approaches to the delivery of waste collection and disposal services are critical to leveraging the economic value of waste through increased rates of reuse and recycling. This also applies to the application of alternative waste treatment technologies such as composting and waste to energy. This requires municipalities to work more closely with private sector partners and the informal sector in separating and managing waste streams. (NWMS 2020)

“

It is clear from the above that municipalities need to consider composting as a means of recycling, minimizing waste and creating economic value in partnership with the private sector.

Reference to NWMS 2020:

https://www.environment.gov.za/sites/default/files/docs/2020nationalwaste_management_strategy1.pdf

Accommodation

It can be commended that the developer plans on providing accommodation to the employees on-site. The following are aspects that will be improved by implementing the employee housing. It will:

- improve the living conditions of employees;
- lower the employee travel costs;
- lower the carbon footprint of the development as a whole by enabling employees to walk to work rather than travel long distances;
- ensure that the development's expected trip generation will be lower, specifically with regards to passenger motor vehicles;
- improve safety aspects related to travel and on-site security;
- make a contribution towards improving historic imbalances that still exist, particularly those relating to marginalised workers having been forced to live far from job opportunities.

6.2 (F) INVESTIGATIONS CARRIED OUT IN TERMS OF OTHER RELEVANT LAWS

The following aspects have been investigated to determine the impact associated with the proposed development:

6.2.1 Heritage

The farm does not fall in an area that is sensitive from a heritage point of view. Investigations show that the site itself has no known heritage value. This has been confirmed by Bernabe De La Bat in the pre-application consultation meeting held on 12 August 2021 where it was confirmed that the application property falls within a 'low value cultural landscape' in terms of the Stellenbosch SDF. It was also established that the part of Bottelary Road passing the application site is not considered to be a scenic route. See below an extract from the SDP where the location on the application property is indicated with a red arrow:

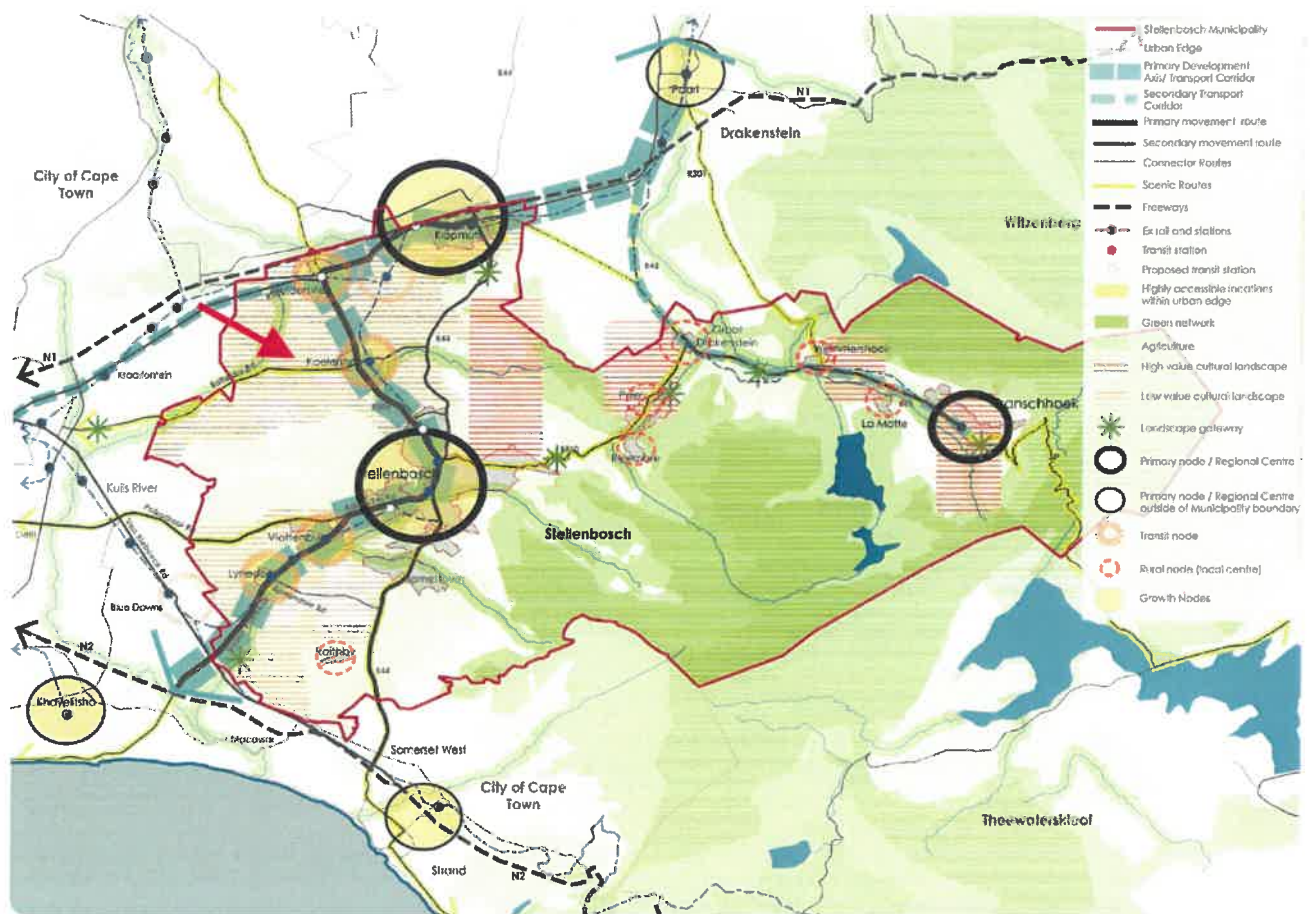


Figure 25 Consolidated Concept for the SM area

Figure 12 - Extract from the Stellenbosch SDF Nov 2019

6.2.2 Environmental impact

An EIA will be submitted shortly, evaluating the environmental impact of the proposed composting facility in detail.

The following supporting studies have been undertaken:

6.2.3 Agriculture

(Compiled in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998))

Only one small part of the site is rated by the national web-based environmental screening tool as highly sensitive for impacts on agricultural resources. However, the site inspection of soil conditions showed that the whole site, including this patch, is only of medium sensitivity. Therefore, the high sensitivity area has been disputed in the Site Sensitivity Verification (with

evidence of soil conditions). The finding of the Compliance Statement has been that the proposed development will not have an unacceptable negative impact on the agricultural production capability of the site. The medium sensitivity applies to the whole site, meaning that, from an agricultural point of view there are no “no-go” areas or other reasons that would necessitate restrictions on the proposed layout of the development. The agricultural productivity of the land is limited not only by the soils, but also by the small size of the property. The site has not been cultivated, nor has any significant agricultural production occurred on it for more than ten years. Only one agricultural impact was identified, namely loss of agricultural potential by occupation of land. This was assessed as not being of high significance. No mitigation measures for the protection of soil resources are considered necessary for this proposed development because it poses negligible risk. This is substantiated by the low agricultural potential of the site. It should be noted that the largest part of the development, the compost blending area, can be converted back to agriculture and the warehouse repurposed for an agriculture related activity, also contributing to the low impact of the development. The proposed development is therefore acceptable. The recommendation is that, from an agricultural impact point of view, the development can be approved.

Refer Attachment 12 - Agricultural Compliance Statement

6.2.4 Aquatic

(In terms of the national water act, 1998 (act no. 36 of 1998))

Below is a summary from the Aquatic specialist report:

Aquatic habitat within the proposed development site comprises a tributary of the Bottelary River and its associated wetland habitat in the Kuils/Eerste River System. The study site is not located within a FEPA River sub-catchment but contains several dams in and adjacent to the site that is mapped as artificial FEPA Wetlands. Much of the site has been mapped as an aquatic ESA (original channel of the Bottelary Tributary), while a few wetland patches have been mapped as aquatic CBAs.

The Bottelary Tributary is considered to be moderately to seriously modified and of moderate to low ecological importance and sensitivity. Similarly, the wetland habitat within the site is considered to be largely to seriously modified and of moderate to low ecological importance of sensitivity.

The proposal for the development of the site will result in the loss of most of the hillslope seep but will retain the valley bottom wetlands and channel associated with the Bottelary Tributary. The watercourse and valley bottom areas will be retained in the open space portions of the property that will not be developed. The hillslope seeps are within a section of the property that is proposed to be developed as the composting field. There are no aquatic features within the portion of the site where the residential, warehouse and packing areas are proposed.

The hillslope seep has long been subjected to modification and is in a highly modified and degraded condition. While there may not be any ecological value still associated with the remnant seep area, it does comprise a wet area that drains into the two dams on the site as well as the valley bottom wetland upstream of the instream dam on the Bottelary River. Retaining the seepage of the water from the hillslope seep as well as preventing contamination of this water and the water of the downslope Bottelary Tributary and wetland areas is thus an important consideration in the proposed development of this area.

The potential impacts on the aquatic ecosystems within the site that could be expected to be associated with the proposed development are:

1. Short and longer-term disturbance and loss of aquatic habitat;
2. Modified stormwater surface water runoff from the developed site; and
3. Potential for localised impairment of water quality during the construction and operational phases of the development.

The following mitigation measures are recommended to reduce the potential impact of the proposed layout on the aquatic ecosystems on the site:

- The stormwater management plan for the site should ensure that any impacts of stormwater from the composting area within the site are mitigated such that there would be no water quality impacts on the watercourse and wetland areas;
- No contaminated stormwater generated within the site should be discharged directly into the aquatic features;
- The water quality impacts during the construction phase should be addressed through a Construction Environmental Management Plan for the project, and implemented by an on-site Environmental Officer;

- To mitigate the loss of the hillslope seep area, the watercourse corridor should be rehabilitated, with the removal of invasive and alien vegetation in accordance with an approved Maintenance Management Plan. Monitoring and management of eroded areas within the watercourse corridor and re-vegetation with suitable local indigenous vegetation should also take place. Grazing of livestock should be restricted within the delineated wetland areas;
- Ongoing monitoring and removal of invasive alien plants within the wetland offset area is likely to be required, particularly to control invasive kikuyu grass; and
- Monitoring (particularly of nitrogen and phosphates) and management of runoff from the composting area should be undertaken.

If the recommended mitigation measures are implemented, there would be a medium to low significance impact on the aquatic ecosystems. Considering the potential water quality risks and the associated loss of hillslope seep loss, it is recommended that the proposed development layout be altered to avoid loss of wetland habitat as far as possible and to ensure that there would be a very low risk of contamination of the aquatic habitats on the site. The proposed development of the site would pose a moderate to low risk of impacting on the ecological condition of the Bottelary Tributary and associated wetland areas and as such would require a water use licence application to be submitted to the DWS for Section 21(c) and (i) water use activities associated with the development activities adjacent to the aquatic features.



Figure 15. Google Earth image (March 2021) with the watercourses and wetland areas within the site

Figure 13 : Image extracted from the aquatic study indicating the dams, wetlands and hillslope seep

Refer Attachment 13 – Aquatic report

6.2.5 Botanical

Compiled in terms of National Environmental Management Act, 1998 (Act No. 107 of 1998). Please refer to the Botanical Assessment Report (Attachment 14) for more detail. Below is an extract from this report, indicating the high level findings:

“The initial constraints analysis identified potentially developable versus No-Go areas within the study area. These align fairly well with the 2017 WCBSP. The constraints map also included other specialist studies and informed the applicant’s Spatial Development Plan (SDP). The constraints map was informed by sensitive remnant vegetation and species. The most significant features are (1) the presence of a small sub-population of the critically endangered renoster capesweetpea (*podalyria microphylla*), and (2) a remnant patch of restorable critically endangered Swartland Shale Renosterveld.

The SDP, if approved, will avoid these sensitive features. The proposed development is supported provided that the essential mitigation measures are adhered to. These include (1) avoidance of the
 aforementioned species and vegetation and (2) restoration of the remnant vegetation. Crucially, the renoster Capesweetpea must be reintroduced to the remnant vegetation patch. Below are two maps from the Botanical Report indicating the sensitive areas identified.

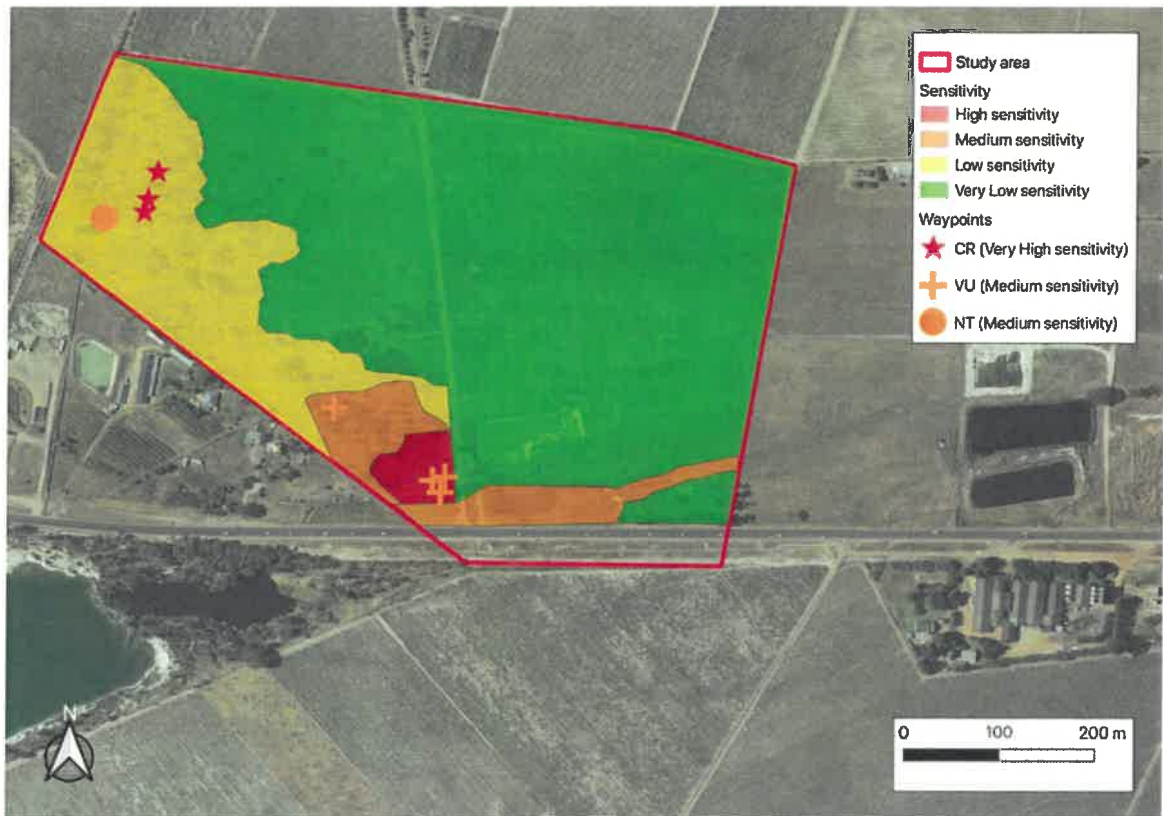


Figure 14: Botanical Sensitivity

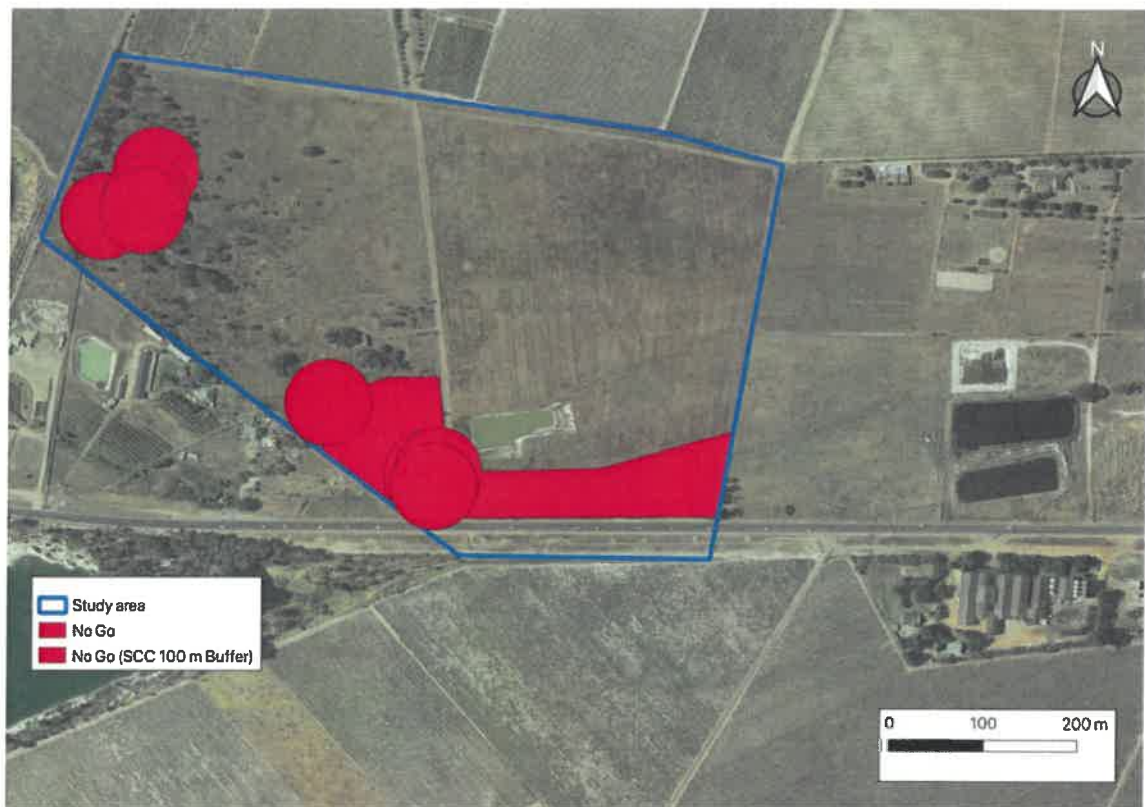


Figure 19. **CONSTRAINTS MAP:** The study area survey with potentially developable versus no go areas of habitats and species overlaid on a CDNGI 50 cm mosaic aerial image.

Figure 15: Extract from Botanical report

Refer Attachment 14 - Botanical Report

6.3 (H) THE IMPACT OF THE PROPOSAL ON MUNICIPAL ENGINEERING SERVICES

6.3.1 Engineering Services report

The following are extracts from the conclusions in the Engineering Services Report:

- The proposed internal water reticulation system will consist of an uPVC water reticulation system;
- The site will be self-sufficient and potable water will be sourced from a borehole;
- The proposed internal sewerage reticulation system will consist of an uPVC piped system, which will be connected to on-site treatment facilities / package plant;
- Three on-site treatment facilities are proposed; one for the main dwelling, one for the employee housing and one for the second dwelling and warehousing and distribution;

- The majority of the stormwater runoff from the site will be captured in a proposed stormwater collection pond to be re-used in the composting manufacturing;
- No further stormwater quantity - (attenuation) or quality control measures are proposed.

The application site is self-reliant and the proposal will have no impact on the engineering services from the municipality.

Refer Attachment 15 – Services Report

6.3.2 Traffic Impact Assessment

Below are the conclusions and recommendations extracted from the Traffic Impact Assessment report (TIA):

The main conclusion is that the proposed agricultural and industrial development (Red Tractor Compost Facility) in Kraaifontein will have a moderate transport impact only. Other conclusions drawn from the transport impact assessment may be summarised as follows:

- The proposed development is situated between Stellenbosch and Kraaifontein, approximately 3.1 kilometers west of the MR00174 (R304) / MR00187 (Bottelary Road) intersection;
- The proposed development entails the relocation of the Red Tractor Compost Facility from its existing location to Portion 10 of Farm 211, Kraaifontein and to ultimately increase the volume of compost produced. The development will have a warehousing and distribution component on site, as well as residential units;
- The development will gain access off Bottelary Road via Swartrivier Road, which is an existing access;
- The intersection expected to be affected most by the proposed development is the Bottelary Road / Swartrivier Road (access road) intersection;
- The intersection currently operates at acceptable levels of service and will continue to operate at acceptable levels of service with the background 2024 traffic volumes;
- The proposed development has the potential to generate 85 trips (41 in, 44 out) during the morning peak hour and 85 trips (44 in, 40 out) during the afternoon peak hour;

- The total 2024 traffic volumes warrants an exclusive right-turn lane on the Bottelary Road eastern approach;
- The Bottelary Road / Swartrivier Road intersection will operate at acceptable levels of service with total 2024 traffic volumes and the proposed intersection layout as shown in the figure below:

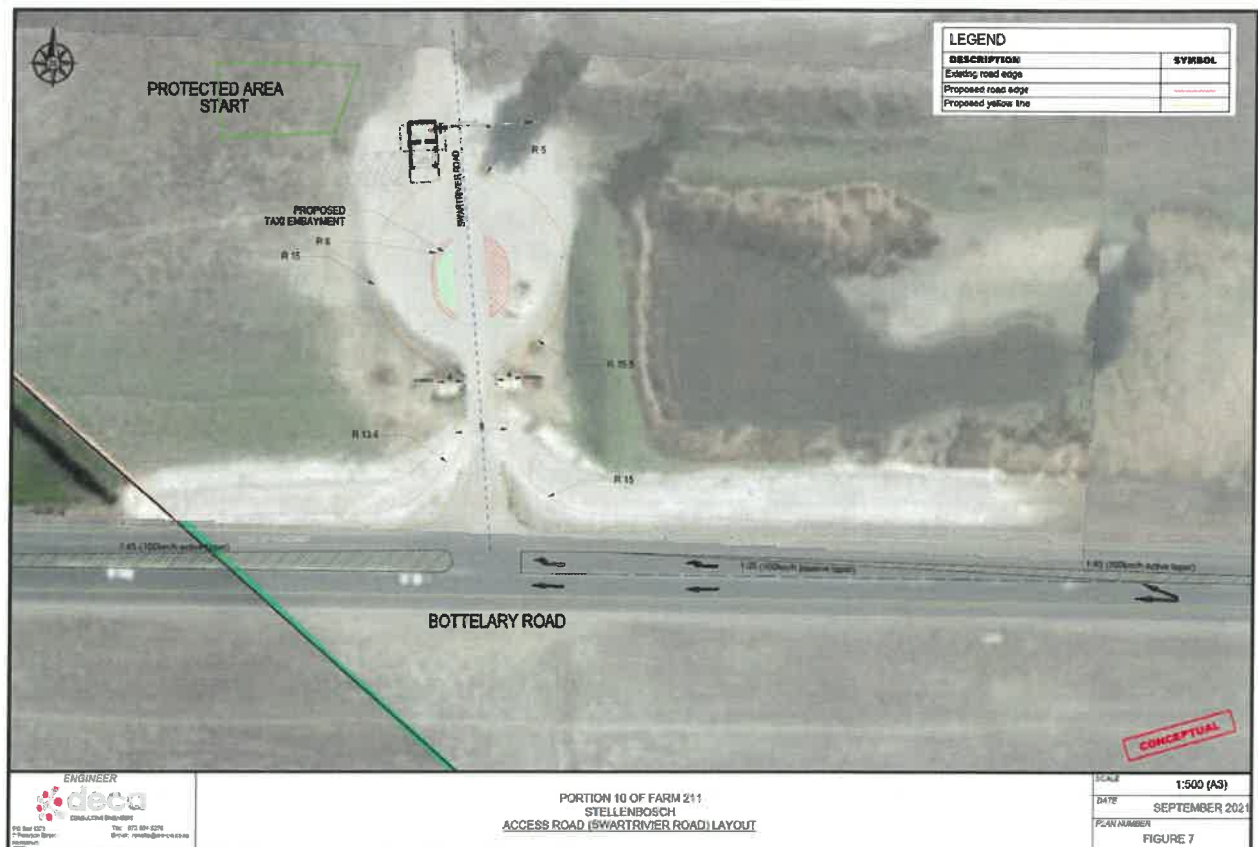


Figure 16 – Access Plan

- The proposed 145 off-street parking bays at the warehouse and distribution zone is deemed sufficient;
- A small number of public motorised transport trips is anticipated to be generated by the proposed development and non-motorised transport trips will be intra-development.

Recommendations

The recommendations made in the Transport Impact Assessment (TIA) that should be implemented by the Developer may be summarised as follows:

- An exclusive right turning lane should be implemented at the proposed access on the eastern Bottelary Road approach as per figures contained in the TIA;
- A taxi embayment should be provided at the access as shown in the relevant figure in the TIA;
- A side walk should be provided on at least one side of Swarttrivier Road from the access up to the warehouse and distribution area.

Refer Attachment 16 – Traffic Impact Assessment (TIA)

Only relevant criteria are considered below:

6.4 (I) THE INTEGRATED DEVELOPMENT PLAN, INCLUDING THE MUNICIPAL SDF, NOVEMBER 2019

In terms of the SDF the site falls outside any settlement described in the Stellenbosch District. This is a positive attribute in favour of the proposed compost manufacturing business. The application site accommodates some critical biodiversity areas and water resources, as can be seen from the extract from the SDF (Figure 17) below. The biodiversity has been identified and evaluated by a botanical specialist by way of a site survey on foot. The results have been mapped as per the attached Figure 15 and in the Botanical Study, enclosed as Attachment 14. The placement of the proposed development has taken the critical biodiversity areas into account to ensure its preservation. The water resources have been studied by an aquatic specialist, the results of which are contained in Figure 13 and in the attached aquatic study (Attachment 13). The only aspect that will potentially be impacted upon is the hillslope seep. The aquatic study proposes mitigating factors in this regard (refer to section 6.2.4) to ensure that no pollution of the water resources takes place. The proposed solutions will be incorporated in the development of the composting facility. Furthermore the use of stormwater in the composting process and the recycling of used water will contribute to the preservation of the aquatic resources.

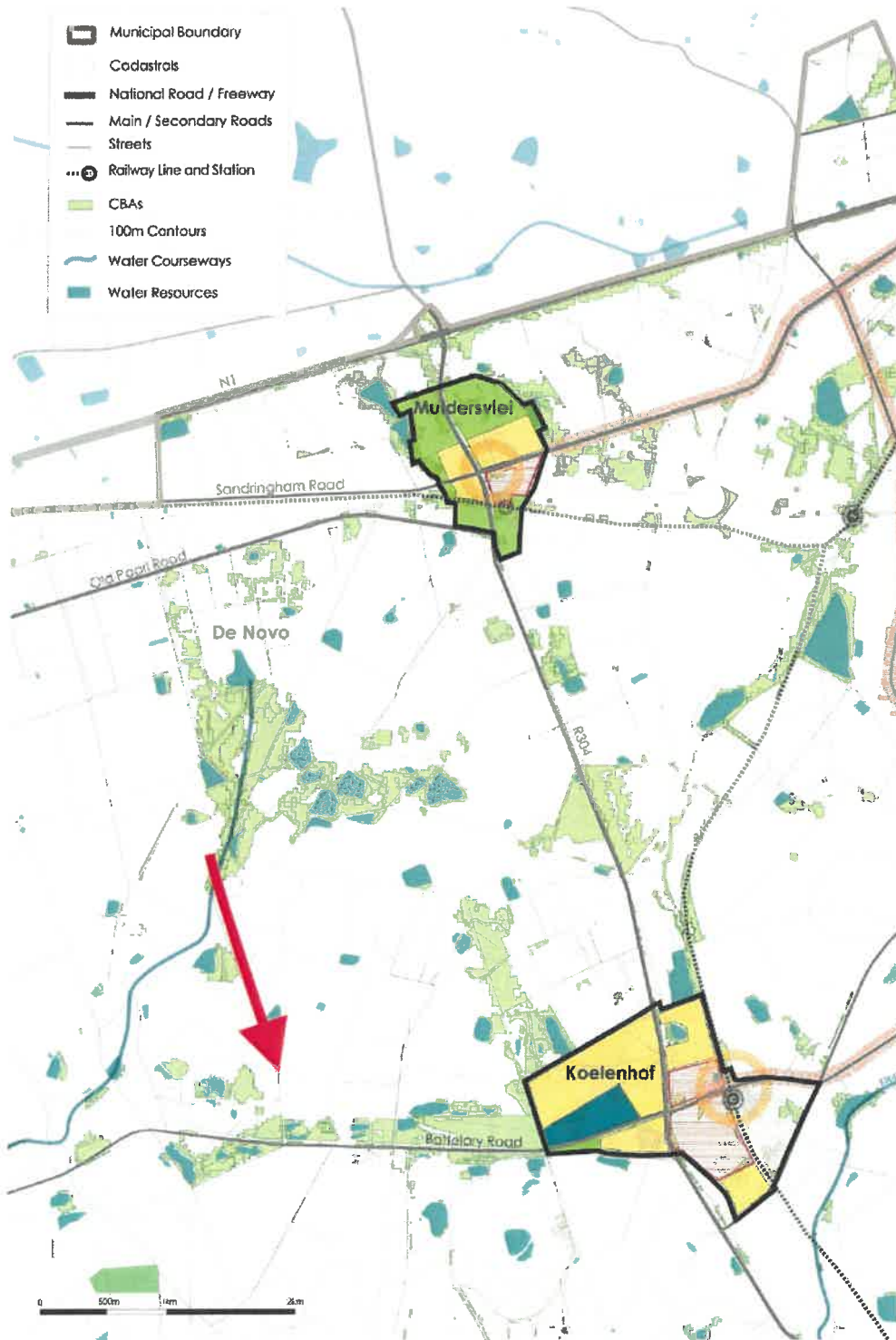


Figure 43. Koelenhof Muldersvlei Plan

Figure 17 - Extract from the Stellenbosch SDF indicating Critical Biodiversity Areas and water resources

It was further determined that the site is located within a low value cultural landscape, as is referred to in paragraph 6.2.1 above.

The SDF also indicates that the site falls within a 'marginal potential arable land' area.

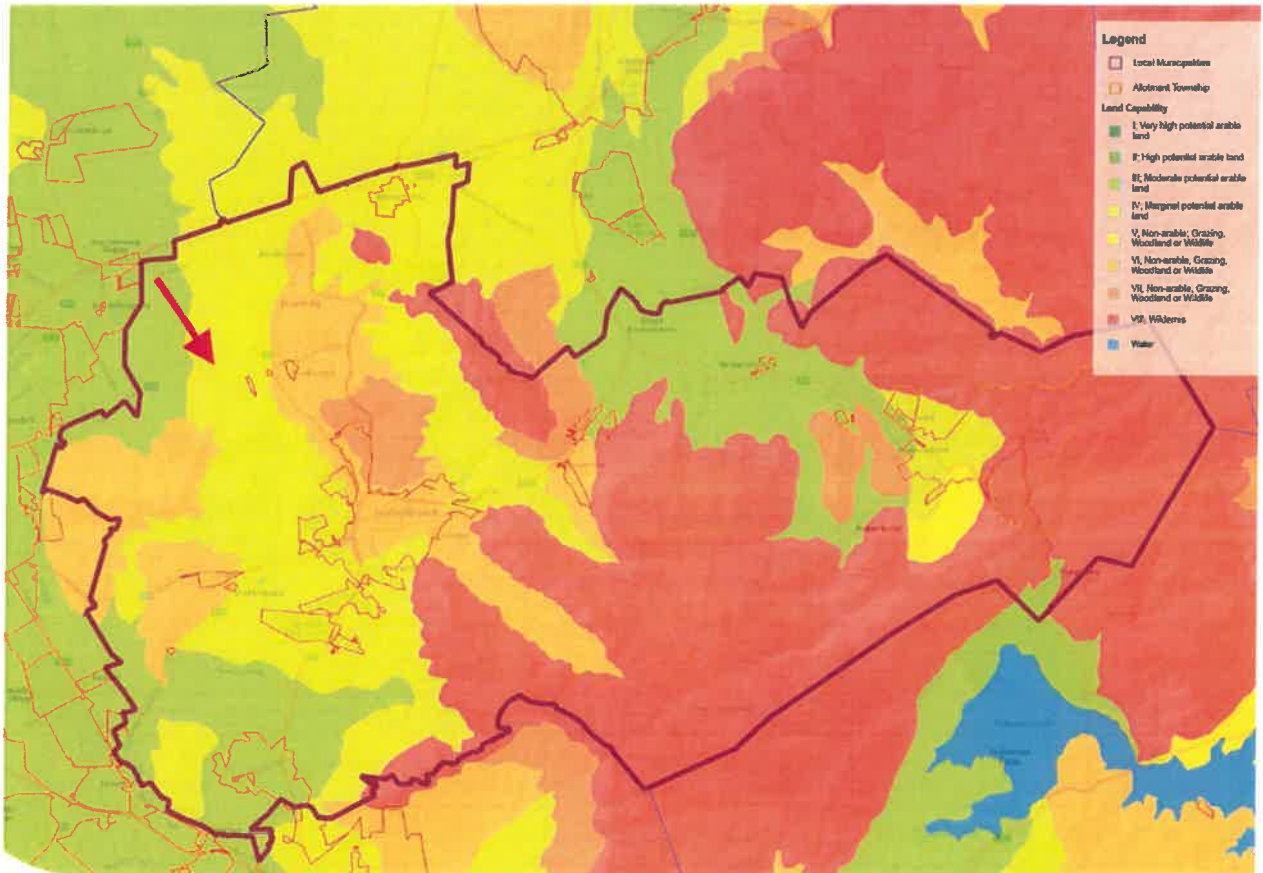


Figure 8. Land capability (Cape Farm Mapper)

Figure 18 - Extract from SDP showing (red arrow) the location of the site relative to land capability

Please refer to paragraph 6.2.3 above, as well as the Agricultural Compliance Statement, enclosed as Attachment 12, for more detail on the potential of the farm land. The conclusion is that there is no no-go areas on the farm.

The conclusion is that the application is compatible with the SDF and that further studies proved that any concerns related to loss of agricultural land, aquatic resources and critical biodiversity can be addressed.

6.5 (M) THE APPLICABLE POLICIES OF THE MUNICIPALITY THAT GUIDE DECISION-MAKING

Details of these are being dealt with in various sections of this motivation report and in the application in general.

6.6 (N) THE PROVINCIAL SPATIAL DEVELOPMENT FRAMEWORK

The Western Cape Government (WCG) Provincial Spatial Development Framework sets the following principles:

- Address spatial inequalities;
- Provide a shared spatial development vision; and
- Direct the location and form of public investment so as to influence other investment decisions.

The Provincial SDF focusses the work of government holistically and, amongst others, informs the Stellenbosch Municipality SDF. It has already been concluded in paragraph 6.4 that the proposal complies with the Stellenbosch SDF.

6.7 (P) NATIONAL AND PROVINCIAL POLICIES, PRINCIPLES, NORMS AND CRITERIA

Item 35 of the Municipal Systems Act, Act 32 of 2000 (MSA) states that a Spatial Development Framework, an integral component of the Council-approved IDP, serves as the principal strategic planning instrument to guide and inform long term planning and development in the Municipality.

Additionally, the provisions of the Stellenbosch Municipality Planning By-law and the nationally enacted Spatial Planning and Land Use Management Act (SPLUMA) and the provincial Land Use Planning Act (LUPA), have created a regulatory environment within which land development decisions are administered and advice is rendered. These provisions have strengthened the role of the Stellenbosch Municipality's SDF in land development decision-making.

It is considered that the proposal complies with national and provincial legislation – SPLUMA and LUPA in particular and that the proposal represents a positive response to the basic needs of the local community.

6.8 (Q) & (R) MATTERS CONTAINED IN SECTION 42 OF SPLUMA AND CHAPTER VI OF LUPA

- Principle of spatial justice

The proposal will make a contribution towards redressing imbalances through improved access to economic opportunities, employment as well as providing housing to workers on-site.

- Principle of spatial sustainability

The proposal will result in currently mostly vacant farm land being used for the sustainable recycling of organic waste. See several sections above for more detail on the positive impacts of such recycling. Recycling will result in the diversion of organic waste from landfill sites and the reduction of demand for virgin materials, that can significantly reduce the negative impacts of resource extraction, use on the environment and contribute to restoring biodiversity and natural capital.

- Principle of efficiency

Contextually appropriate intensification of land use, as is the case in this instance, results in more efficient use of land that would have otherwise at best be used for grazing on a land portion that is, on its own, not economically viable for this purpose. The composting/recycling process will have a positive impact on natural resource use and will divert organic waste away from landfills, producing a product that will boost efficiency within many agricultural related activities. This development will optimise the use of existing resources.

- Principle of good administration

The application will be processed in accordance with relevant legal provisions and future activities will be operated under existing policies and administrative structures.

- Principle of spatial resilience

Contextually appropriate intensification of land use, as in this instance, facilitates resilience, thus contributing to sustainable development. Providing increased recycling capability through composting not only has environmental benefits but provide a more economically resilient environment that will create sustainable jobs. The fact that the farmland used for the proposed composting activity can revert back to agriculture, should the compost manufacturing cease to continue, contributes to the resilience of this proposed development.

6.9 (S) APPLICABLE PROVISIONS OF THE MUNICIPAL ZONING SCHEME BY-LAW, 2019

6.9.1 Definitions

The applicable definitions in the context of this application are:

Employee housing (*werknemersbehuising*) means a dwelling unit provided for employees by an employer which is ancillary to the primary activity on the land unit, and may be accommodation for labourers, caretakers and/or supervisory staff, provided that the employee housing unit is for the accommodation of one family only, is located on the same land unit on which the employment activity takes place, is occupied by at least one bona fide employee and may not be sold separately;

Industry (*nywerheid*) means a place, which in the Municipality's opinion, is used for a factory and in which a product and/or article, or part thereof is made, manufactured, produced, built, assembled, compiled, printed, ornamented, processed, treated, adapted, repaired, renovated, rebuilt, altered, painted, spray-painted, polished, finished, cleaned, dyed, washed, broken up, disassembled, sorted, packed, bottled, chilled, brewed, distilled, fermented, frozen and/or stored, and includes any activity which is ancillary and subservient to the aforementioned activities mentioned, for example an office, employee housing, point of sale, but does not include a noxious industry;

Agriculture (*landbou*) means the cultivation of land for crops and/or plants, the keeping and/or breeding of animals, livestock, game, bees, birds, whether or not in the open or in enclosures, and/or the breeding of water fauna and/or flora in artificially constructed dams or natural waterways, and includes a riding school, generating compost for own use on the land unit or farm, but excludes intensive feed farming or any other additional or consent uses in the Agriculture and Rural zone.

6.9.2 Development Parameters

Please refer to section 4.1 & 4.2 above.

6.9.3 Parking Requirements as per Table A in the Stellenbosch Municipality Zoning Scheme By-Law

Please refer to section 4.3 above.

It is considered that the general criteria for consideration of the approval of this application are being complied with.

7. CONCLUSIONS AND RECOMMENDATIONS

From this report and other available documentation, it is concluded that:

- Although the compost manufacturing activity does not fit the definition of agricultural industry in its entirety, the activity still has an acceptable overlap with the surrounding land uses. There are already presidents in the area with regards to industrial activities in the form of concrete manufacturing, warehousing, transport related activities and brick manufacturing (clay mining). Please refer to Figure 2 above.
- There are aquatic resources as well as other biodiversity characteristics on the site that needs to be considered. These characteristics have been used as opportunities and constraints in drawing up the proposed SDP. The preservation of the wetland areas, including the lower watercourses and the critical biodiversity areas identified by the specialists, therefore form part of the design of the SDP.
- The Agricultural Compliance Statement (enclosed as an attachment) indicates that the proposed development is acceptable in that it does not identify any no-go areas on the farm.
- In the context of sustainable development and the need to improve on waste management activities within the Stellenbosch Municipality area, the proposed development contributes to the solution for a shortage in landfill sites in the region through the recycling of organic material that would otherwise end up in landfills.
- The proposed compost manufacturing contributes to the circular economy that is created by the recycling of waste. This in turn:
 - creates jobs,
 - lessens stress on natural resources and
 - increases production and revenue in the area that it serves, through the fact that the use of compost improves soil quality.
- The proposal will improve the farm aesthetically by creating a berm and planting of indigenous vegetation.
- The development will implement sustainable practices such as the recycling of water and rooftop solar PV.

- Providing on-site employee housing will be a benefit to the development, the environment, traffic generation, as well as to the employees.
- The proposed warehouse will be designed to blend into the agricultural landscape.
- All the development parameters contained in the Stellenbosch Zoning Scheme regulations will be adhered to.
- It is concluded that all the evaluation criteria contained in Item 65 of the By-Law are being satisfied.

In light of the facts and motivation contained in this report and in the attachments thereto, the approval of the following is therefore recommended:

- The spot rezoning of portions of Farm 211/10 from Agriculture to Industrial zone;
- A departure from the provision of allowing one employee housing unit only to allow for ten housing units within the industrial zone;
- To allow for an additional use for ten employee housing units for agricultural purposes; and
- The proposed SDP, enclosed as Attachment 10.



Location Information

Lat: -33.878033 | Lon: 18.783844

SG Farm Portion Info

[Select](#) | [Focus](#) | [Add Graphic Feature](#)

Name: n/a

Farm Nr: 10/211

Area (Ha): 34.52

SG Code: C0670000000021100010

SG Region: STELLENBOSCH

Legal Status: Registered

Working Status: Current

SG Diagrams: [Click to download](#)

LOCATION PORTION 10 OF FARM 211 STELLENBOSCH

ZONING LEGEND

<div></div>	AGRICULTURAL ZONE	196 823m ²
<div></div>	INDUSTRIAL ZONE	409 248m ²
	TOTAL AREA	34 6082m ²

PLEASE NOTE

THESE ARE MUNICIPAL DRAWINGS ONLY AND MAY NOT BE USED AS CONSTRUCTION DRAWINGS.
THESE DRAWINGS ARE FOR INFORMATIONAL PURPOSES ONLY.
THE CONTRACTOR IS TO CHECK AND CONFIRM ALL DIMENSIONS AND LEVELS PRIOR TO THE SETTING OUT OF ANY BUILDING WORK.

RED TRACTOR
COMPOST

CLIENT:	WYNLAND TRUST
PROPERTY:	PORTRION 10 OF FARM 211 STELLENBOSCH
ADDRESS:	BOTTELARY ROAD STELLENBOSCH
DRAWING:	SITE DEVELOPMENT PLAN

REVISIONS:

A	change done	date	person
B	change done	date	person
C	change done	date	person
D	change done	date	person

DRAWING NUMBER:

01016-ULC-STEP1_10-20210128

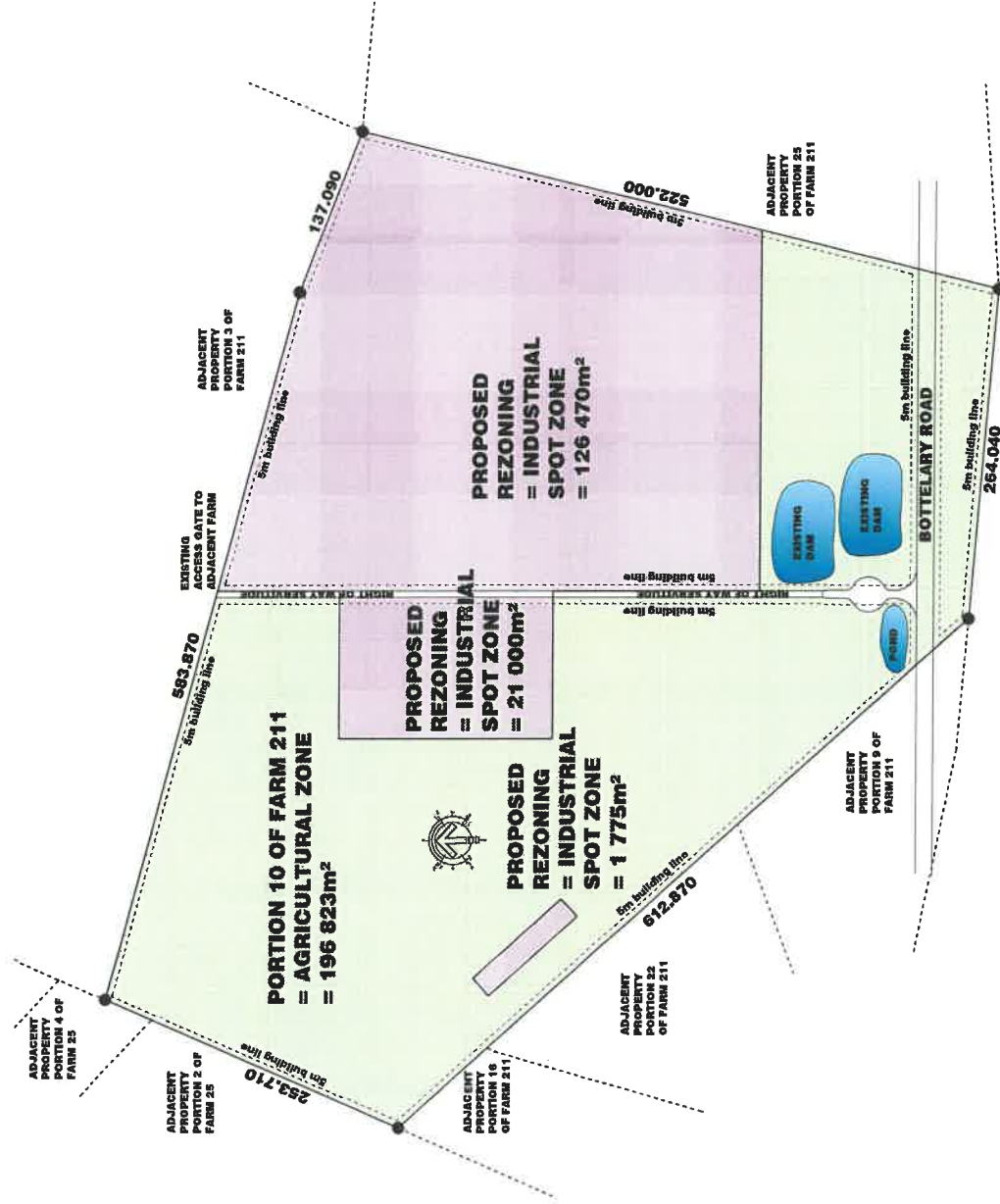
SCALE:	PAGE:	DATE:
as shown	1 of 2	2021-06-27

E-ACCT PLAN

MICHELLE DE BRUYN
SACAP REG NO: CAD 20644
102 DE HULK WAY
PENHILL ESTATE

TEL: 072 2748 123
EMAIL: EXACTPLAN@GMAIL.COM

COPYRIGHT SUBSISTS OVER THE DRAWING AND REMAINS THE PROPERTY OF THE DESIGNERS



• SITE PLAN INDICATING
PROPOSED ZONING
SCALE 1:2000

LEGEND

- CADASTRAL BOUNDARY LINE
- MUNICIPAL BUILDING LINE
- LINE OF FENCING
- PROPOSED BUILDINGS
- RIGHT OF WAY SERVITUDE
- INTERNAL ACCESS ROAD

COVERAGE OF WAREHOUSE AND SHED CALCULATION:

Land area: 34,000ha
Total Footprint: 755m²
Coverage: 2.23%

BULK CALCULATIONS (MAXIMUM FOR WHICH SHALL BE APPLIED FOR)

AGRICULTURAL ZONE - MAIN HOUSE	600m ²
AGRICULTURAL ZONE - SECOND DWELLING	800m ²
AGRICULTURAL ZONE - STAFF HOUSING (10 UNITS)	840m ²
INDUSTRIAL ZONE - WAREHOUSE	7,800m ²
INDUSTRIAL ZONE - SHED	450m ²
INDUSTRIAL ZONE - STAFF HOUSING (10 UNITS)	860m ²
TOTAL AREA	16,170m ²

PARKING CALCULATIONS

LAND USE CATEGORY	NO OF OFF-STREET PARKING REQUIRED	NO OF PARKING PROVIDED	DOES THE PROPOSAL COMPLY?
INDUSTRIAL	1.5 BAYS PER 100m ² OF GLA	119 BAYS	145 BAYS YES
RESIDENTIAL	2 BAY PER DWELLING	44 BAYS	44 BAYS YES

PLEASE NOTE:

THESE ARE MINIMUM REQUIREMENTS ONLY AND MAY NOT BE USED AS CONSTRUCTION DETAILS. ANY DISCREPANCIES SHOULD BE BROUGHT TO THE ATTENTION OF THE DESIGNER PRIOR TO CONSTRUCTION. THIS DOCUMENT IS FOR INFORMATION ONLY AND DOES NOT GUARANTEE THE ACCURACY OF THE INFORMATION PROVIDED.

RED TRACTOR COMPOST

CLIENT:	WYNLAND TRUST
PROPERTY:	PORTION 10 OF FARM 211 STELLENBOSCH
ADDRESS:	BOTTELARY ROAD STELLENBOSCH
DRAWING:	SITE DEVELOPMENT PLAN

REVISIONS:

NO.	DESCRIPTION	DATE
A	change done	date
B	change done	date
C	change done	date
D	change done	date

DRAWING NUMBER:

01019-GLD-EST11_0-00010128

SCALE:	PAGE:	DATE:
as shown	2 of 4	2021-08-27

E-PLAN

NICHIELLE DE BRUYN

SACAP REG NO: CAD 20844

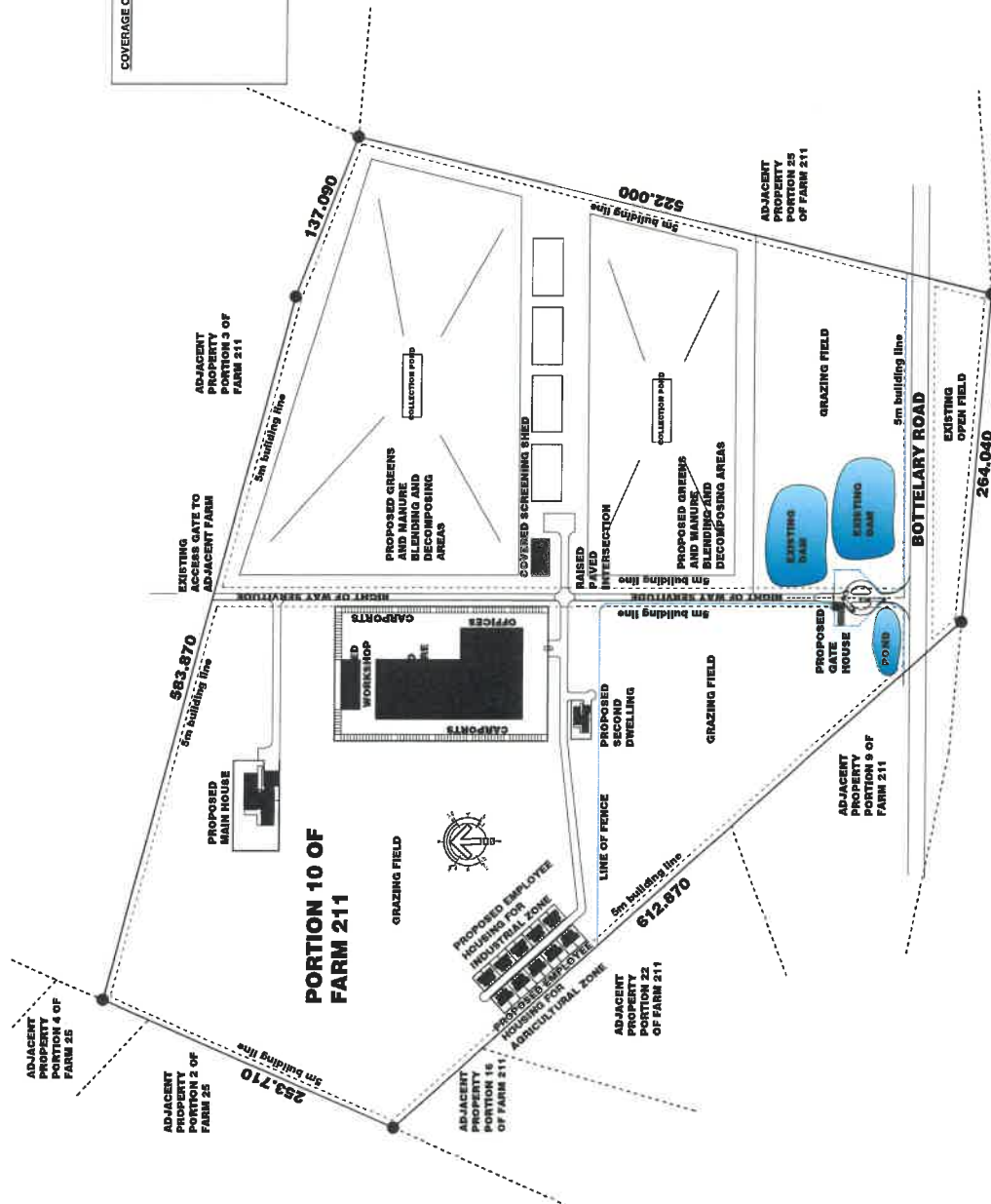
102 DE HULK WAY

PENHILL ESTATE

TEL: 072 2748 123

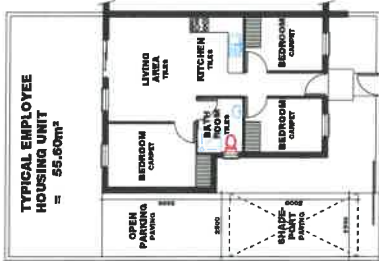
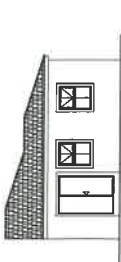
EMAIL: EXACTPLAN@GMAIL.COM

COPYRIGHT SUGGESTS OVER THIS DRAWING AND REMAINS THE PROPERTY OF THE DESIGNERS

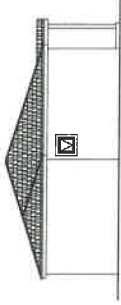


• SITE PLAN INDICATING USE OF LAND
SCALE 1:2000

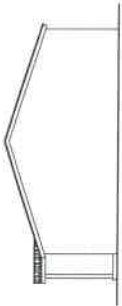
TYPICAL STAFF ACCOMMODATION UNIT FOR BOTH
AGRICULTURAL AND INDUSTRIAL ZONES



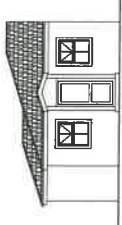
• ELEVATION
SCALE 1:100



• ELEVATION
SCALE 1:100



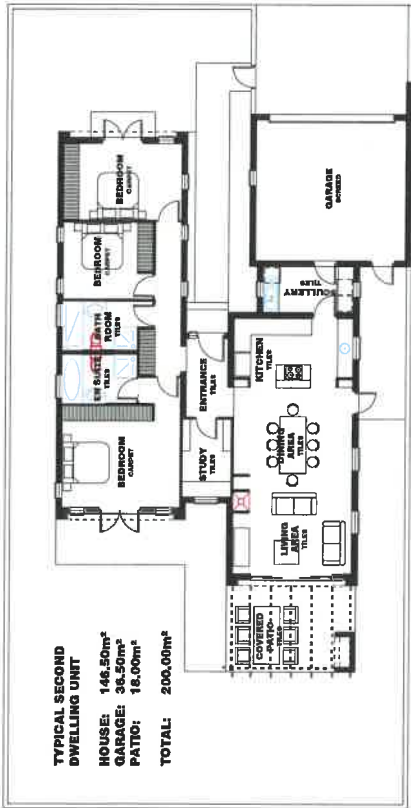
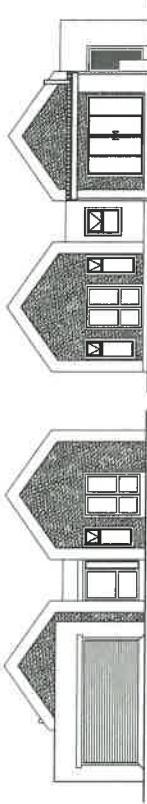
• ELEVATION
SCALE 1:100



• ELEVATION
SCALE 1:100

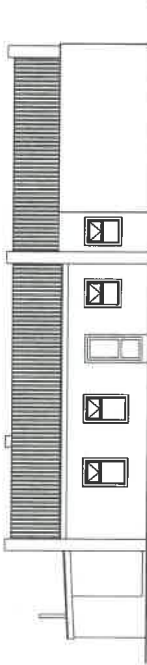
• TYPICAL FLOOR PLAN
SCALE 1:100

TYPICAL SECOND DWELLING / MANAGER'S HOUSE
UNIT FOR AGRICULTURAL ZONE

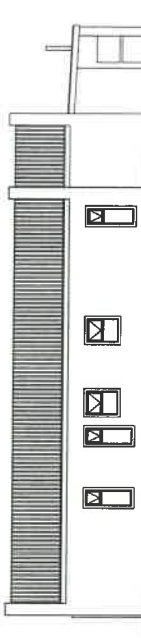


• ELEVATION
SCALE 1:100

• ELEVATION
SCALE 1:100



• ELEVATION
SCALE 1:100



• ELEVATION
SCALE 1:100

• TYPICAL FLOOR PLAN
SCALE 1:100

PLEASE NOTE:
THESE ARE PRELIMINARY DRAWINGS ONLY AND MAY NOT BE USED AS
CONSTRUCTION DOCUMENTS.
ANY DISCREPANCIES SHOULD BE BROUGHT TO THE
ATTENTION OF THE ARCHITECT PRIOR TO CONSTRUCTION.
THESE DRAWINGS ARE NOT TO BE USED FOR ANY OTHER PURPOSES AND
LEVELS PRIOR TO THE SETTING OUT OF ANY BUILDING WORKS.

RED TRACTOR
COMPOST

CLIENT:	WYNLAND TRUST
PROPERTY:	PORTION 10 OF FARM 211 STELLENBOSCH
ADDRESS:	BOTTELARY ROAD STELLENBOSCH
DRAWING:	SITE DEVELOPMENT PLAN

REVISIONS:			
• A	change done	date	person
• B	change done	date	person
• C	change done	date	person
• D	change done	date	person

DRAWING NUMBER:
01016-GLC-RTS211_16-02-2018

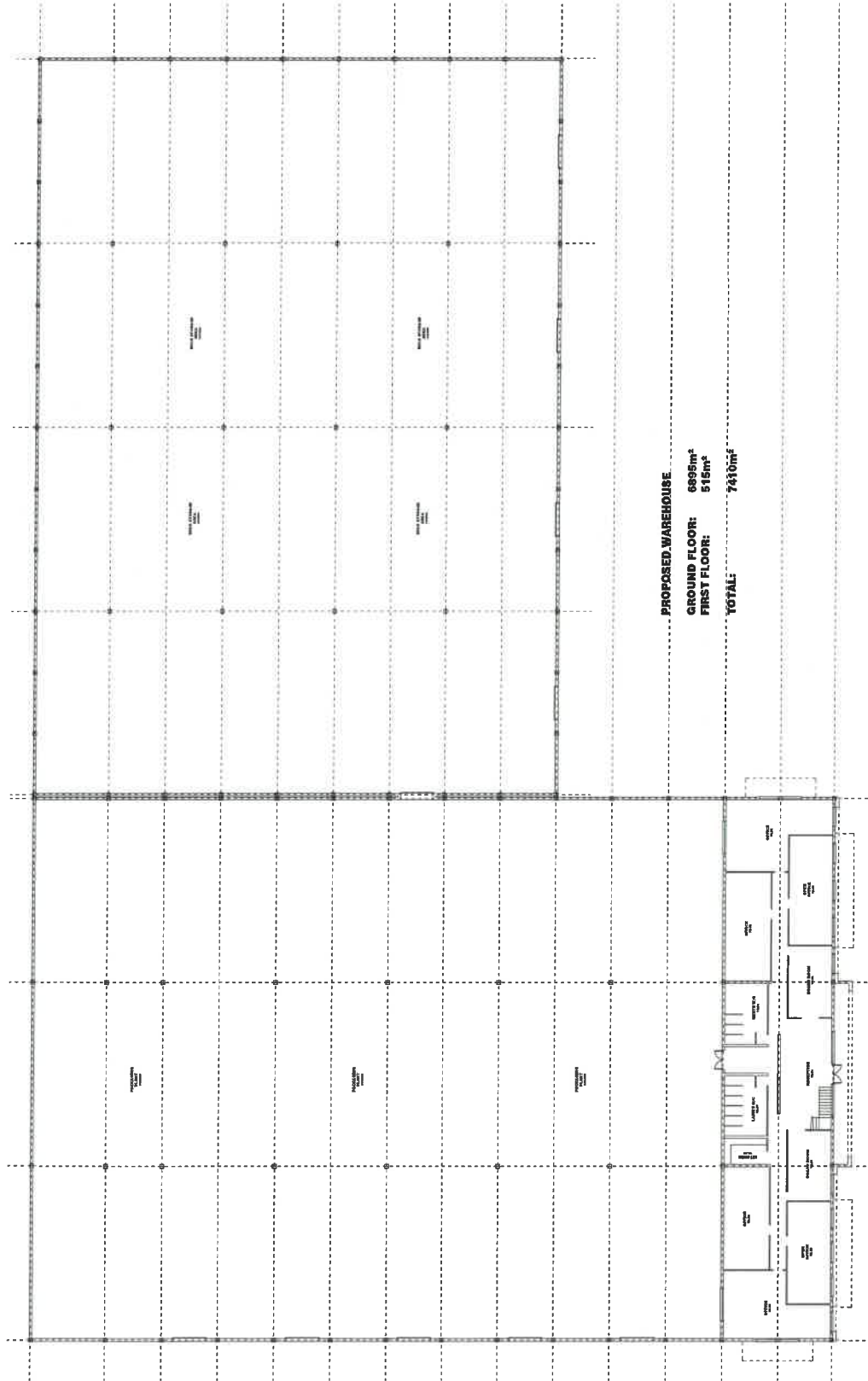
SCALE:	PAGE:	DATE:
as shown	3 of 4	2021-08-27

EXACT PLAN

NICHIELLE DE BRUYN
SACAP REG NO: CAD 20844
102 DE HULK WAY
PENHILL ESTATE

TEL: 072 2746 123
EMAIL: EXACTPLAN@GMAIL.COM

COPYRIGHT SUBSISTS OVER THIS DRAWING AND REMAINS THE PROPERTY OF THE DESIGNERS



PROPOSED WAREHOUSE

GROUND FLOOR: 6895m²
FIRST FLOOR: 515m²
TOTAL: 7410m²

FLOOR PLAN FOR WAREHOUSE
AND PACKAGING AREA

SCALE 1:200

Maximum Height: 10m



ELEVATION FOR WAREHOUSE
AND PACKAGING AREA

SCALE 1:200

PLEASE NOTE:

THESE ARE MUNICIPAL DRAWINGS ONLY AND MAY NOT BE USED AS
CONSTRUCTION DRAWINGS.
ANY DISCREPANCIES SHOULD BE BROUGHT TO THE
ATTENTION OF THE DESIGNER.
THE CONTRACTOR IS TO CHECK AND CONFIRM ALL DIMENSIONS AND
LEVELS PRIOR TO THE SETTING OUT OF ANY BUILDING WORKS.

RED TRACTOR
COMPOST

CLIENT: WYNLAND TRUST
PROPERTY: PORTION 10 OF FARM 211
STELLENBOSCH
ADDRESS: BOTTELARY ROAD
STELLENBOSCH
DRAWING: SITE DEVELOPMENT PLAN

REVISIONS:

	A	B	C	D
change done				
date				
person				

DRAWING NUMBER:

01016-ALC-ETP051_10-20210128

SCALE:

as shown

PAGE:

4 of 4

DATE:

2021-08-27

E-FACT PLAN

MICHELLE DE BRUYN
SACAP REG NO: CAD 20844

102 DE HULK WAY
PENHILL ESTATE

TEL: 072 2749 123
EMAIL: EXACTPLAN@GMAIL.COM

COPYRIGHT SUGGESTS OVER THIS DRAWING AND REMAINS THE PROPERTY
OF THE DESIGNERS.



TAX INVOICE

STELLENBOSCH
STELLENBOSCH • PNIEL • FRANSCHHOEK

MUNICIPALITY • UMASIPALA • MUNISIPALITEIT

PO BOX 17, STELLENBOSCH, 7599

PLANNING & ECONOMIC DEVELOPMENT: PLANNING

DATE:	2021-11-03	DOCUMENT NO:	716484
ERF / FARM NO:	211/10	CREATED BY:	Bulelwa Mdoda
LOCALITY:	Bottelary Road, STELLENBOSCH FARMS	APPLICATION NO:	LU/13382
OWNER'S NAME:	Wynland Trust	APPLICATION VAT NO:	4360238283
ADDRESS:	PO Box 192, Kuilsriver, 7579	VAT NO:	4700102181
		APPLICANT:	Wynland Trust
		TEL NO:	0219811406

FEE DESCRIPTION	AMOUNT PER UNIT (R)	NUMBER OF UNITS	VOTE NUMBER	AMOUNT (R)
REZONING & DETERMINATION OF A ZONING - Submitted in Urban and Rural Areas, Per application per property	10000.00	1	20180711011484	10000.00
PERMANENT DEPARTURE - Departure applications including but not limited to building lines, coverage, height, bulk, parking, Per applications per property	2500.00	1	20180711011484	2500.00
TEMPORARY DEPARTURE/OCCASIONAL USE OF LAND/CONSENT USE IN TERMS OF THE ZONING SCHEME/TECHNICAL APPROVAL/PERMISSION IN TERMS OF ZONING SCHEME/PERMISSION REQUIRED IN TERMS OF THE TITLE DEED: Submitted in urban and rural areas - Submitted in urban and rural areas, Per application per property	2500.00	1	20180711011476	2500.00
	0.00	0		0.00

TOTAL AMOUNT PAYABLE 15000.00

ALL TARIFFS INCLUDE 15% VAT FROM 1 JULY 2021 TO 30 JUNE 2022

VAT INCLUDED @ 15% 1956.52

CALCULATED BY

NAME:

SIGNATURE

VERIFIED BY

NAME:

SIGNATURE

DATE: 3/11/2021

DATE:

PAYMENTS MUST BE MADE AT THE APPLICABLE DISTRICT OFFICE
CHEQUES TO BE MADE PAYABLE TO STELLENBOSCH
MUNICIPALITYAPPLICANT TO RETURN THIS FORM TO THE ADVICE CENTRE FOR
DIRECTOR: PLANNING & ECONOMIC DEVELOPMENT

BANKING DETAILS FOR EFT PAYMENT:

ACCOUNT HOLDER: Stellenbosch Municipality
BANK: First National Bank (FNB)
ACCOUNT NUMBER: 62869253684
BRANCH CODE: 210554
REFERENCE: LU/_____ and ERF/FARM _____

STELLENBOSCH MUNICIPALITY
PLANNING AND DEVELOPMENT SERVICES

15 NOV 2021

RECEIVED



STELLENBOSCH

STELLENBOSCH • PNIEL • FRANSCHHOEK

MUNISIPALITEIT • UMASIPALA • MUNICIPALITY

MEMORANDUM

To : Sharise De Klerk
From : Bulelwa Mdoda
Contact No : 021 808 8690
Our Ref : Farm 211/10, Stellenbosch
Re : Refund of application fees

Dear Sherise;

The application fee of R15000.00 was paid by the applicant and the applicant also incorrectly paid the VAT amount of R1956.52.

Attached for your information, please find proof of payment of the application fees, the completed and stamped credit control form.

Please proceed with the refunding the amount of R1956.52 to the applicant and issue Land Use with a receipt of R15000.00.

Yours faithfully

MANAGER: LAND USE MANAGEMENT

05/11/2021

DATE



Absa Online: Notice of Payment

03 November 2021

Dear G L CONRADIE PLANT HIRE (PTY) LTD

Subject: Notice Of Payment: Stellenbosch Mun

Please be advised that you made a payment to Stellenbosch Mun as indicated below.

Transaction number:	806E864CE4-3
Payment date:	2021-11-03
Payment made from:	WYNLAND TRUST
Payment made to:	Stellenbosch Mun
Beneficiary bank name:	FIRSTRAND
Beneficiary account number:	62869253684
Bank branch code:	250655
For the amount of:	16,956.52
Immediate interbank payment :	N
Reference on beneficiary statement:	LU/13382
Additional comments by payer:	-

Please remember that the following apply to Absa Online payments to non-ABSA bank accounts.

- Payments made on weekdays before 15:30 will be credited to the receiving bank account by midnight of the same day but may not be credited to the beneficiary's bank account at the same time.
- Payments made on weekdays after 15:30 will be credited by midnight of the following day.
- Payments made on a Saturday, Sunday or Public holiday will be credited to the account by midnight of the 1st following weekday.

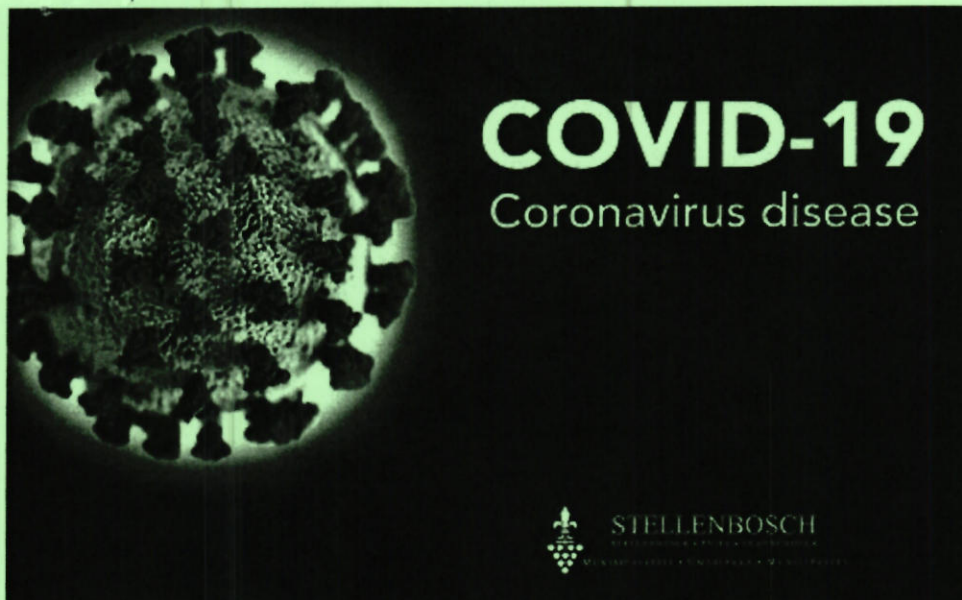
If you need more information or assistance, please call us on 08600 08600 or +27 11 501 5110 (International calls).

If you have made an incorrect internet banking payment, please send an email to digital@absa.co.za

Yours sincerely

General Manager: Digital Channels

This document is intended for use by the addressee and is privileged and confidential. If the transmission has been misdirected to you, please contact us immediately. Thank you.



For official COVID-19 advice, updates and queries:

- National Hotline 0800 029 999
- Provincial Hotline 021 9284102
- WhatsApp 0600 123 456

Stay alert, stay updated and stay safe.



About Stellenbosch Municipality
Our mission is to deliver cost-effective services that will provide the most enabling environment for civil and corporate citizens.
Our head office is at Town House Complex, Plein Street, Stellenbosch, 7600, South Africa.
For more information about Stellenbosch Municipality, please call +2721-808-8111, or visit www.stellenbosch.gov.za

Disclaimer:

The information contained in this communication from bulelwa.mdoda@stellenbosch.gov.za sent at 2021-11-04 07:19:03 is confidential and may be legally privileged. It is intended solely for use by nico@bvzplan.co.za and others authorized to receive it. If you are not nico@bvzplan.co.za you are hereby notified that any disclosure, copying, distribution or taking action in reliance of the contents of this information is strictly prohibited and may be unlawful. Powered by [IOCO](#)

From: Nico van Zyl [<mailto:nico@bvzplan.co.za>]
Sent: 03 November 2021 04:32 PM
To: Bulelwa Mdoda
Subject: [EX] Re: Farm 211/10 Welgelegen LUA submission

Bulelwa hi

Find attached proof of payment. The payments department unfortunately paid too much. Is it possible to process a refund of the excess amount of R 1956.52?

Regards

Nico

From: Bulelwa Mdoda <Bulelwa.Mdoda@stellenbosch.gov.za>
Date: Wednesday, 03 November 2021 at 14:07
To: 'nico@bvzplan.co.za' <nico@bvzplan.co.za>
Subject: RE: Farm 211/10 Welgelegen LUA submission

Good day Nico;



STELLENBOSCH

STELLENBOSCH • PNIEL • FRANSCHHOEK

MUNISIPALITEIT • UMASIPALA • MUNICIPALITY

CREDITOR CONTROL FORM / KREDITEUR KONTROLE VORM

COMPANY DETAILS	CREDITOR CONTACT DETAIL / KREDITEUR KONTAK BESONDERHEDE (Supplier / Verskaffer, Organization / Organisasie)		
	REGISTERED NAME / GEREISTREERDE NAAM: <i>Wynland Trust</i>		
	PHYSICAL STREET ADDRESS / FISIIESE STRAAT ADRES:		POSTAL ADDRESS / POS ADRES: (If different to physical address)
	STREET NAME: SUBURB: TOWN:		PO BOX <i>192</i> TOWN <i>Kuilsrivier</i>
	POSTAL CODE:		POSTAL CODE: <i>7579</i>
TEL: <i>021 987 1650</i>		FAX / FAKS:	
PERSON	CREDITOR CONTACT PERSON DETAIL / KREDITEUR KONTAK PERSOON BESONDERHEDE		
	NAME AND SURNAME / NAAM EN VAN		<i>Madalain Lounrens</i>
	TEL: <i>021 987 1650</i>	FAX / FAKS:	CELL / SEL: <i>N/A</i>
	EMAIL / EPOS: <i>madalain@cg100up.co.za</i>		
BANK DETAILS	CREDITOR BANKING DETAIL / KREDITEUR BANK BESONDERHEDE:		
	NAME OF BANK / NAAM VAN BANK		<i>WYNLAND TRUST - ABISA</i>
	BANK ACCOUNT NAME / BANK REKENING NAAM		<i>WYNLAND TRUST</i>
	BANK ACCOUNT NUMBER / BANK REKENING NOMMER		<i>406 7678 480</i>
	BRANCH NUMBER / TAKKODE:		<i>6 32005</i>
	ACCOUNT TYPE / TIPE REKENING	CHEQUE / TJEK	☒
		SAVING / SPAAR	☐
		TRANSM	☐
	VAT REGISTERED / BTW GEREISTREER	YES / JA	☒
		NO / NEE	☐
VAT / BTW NO: <i>436 0238283</i>			

SIGNATURE / HANDTEKENING: _____

OFFICE USE / KANTOOR GEBRUIK		
CREDITOR NO / KREDITEUR NO: _____		
Create a new creditor / Skep van nuwe Krediteur Changing of creditors details / Verandering op Krediteur inligting Deleting of creditor / Uitwis van Krediteur		
REQUESTED BY: AANGEVRA DEUR:	DATE: DATUM:	DEPARTMENT: DEPARTEMENT
MOTIVATION: MOTIVERING:		
ENTERED BY: INGEVOER DEUR:	DATE: DATUM:	



PLANNING & ECONOMIC DEVELOPMENT

LAND USE APPLICATION COMPLIANCE CHECKLIST ITO S38 OF THE LAND USE PLANNING BYLAW, 2015				Date of Submission of Application	28-10-2021
Erf / Erven/ Farm no	211	Portion(s) if farm	10	Allotment Area	STELLENBOSCH
Owner / Applicant	Nico Van Zyl		Contact number	0828219271	
Email address	Nico@bvzplan.co.za				
INDICATE WHICH OF THE FOLLOWING FORM PART OF THE DOCUMENTATION			ADMIN TO VERIFY ¹		PLANNER TO EVALUATE ²
			YES	NO	
1. Completed application form that is signed			✓		
2. Power of Attorney / Owners' Consent if the applicant is an agent and Company Resolution			✓		
3. Bondholders' consent					
4. Proof that applicant is authorized to act on behalf of an entity					
5. Proof of ownership or rights held in land					
6. Motivation based on criteria in s65			✓		
7. SG diagram or General Plan			✓		
8. Locality plan			✓		
9. Site development plan or plan showing the land development			✓		
10. Subdivision plan					
11. Permission for required servitude					
12. Title Deed			✓		
13. Conveyancer's certificate			✓		
14. Feedback on Pre-application scrutiny			✓		
15. Minutes of Pre-consultation Meeting			✓		
16. Consolidation plan					
17. Street name and numbering plan					

¹ Verification by Admin only of the documentation attached and completeness of application and not the correctness thereof.

² Technical evaluation by Planner of the documentation attached for completeness and correctness thereof.

Bulelwa Mdoda

From: Pedro April
Sent: 28 October 2021 02:56 PM
To: Bulelwa Mdoda
Subject: FW: Feedback: Pre-Application Scrutiny: Farm No. 211/10, Stellenbosch



Yours faithfully

Pedro April
Senior Town Planner
Department:
Land Use Management
Directorate:
Planning & Economic Development
Stellenbosch Municipality
Departmental Email Addresses:
Landuse.enquiries@stellenbosch.gov.za
Landuse.applications@stellenbosch.gov.za
Landuse.appeals@stellenbosch.gov.za

T: +27 21 808 8683 | Fax: +27 21 886 6899
43 Andringa Str, Eikestad Mall, 3rd Floor,
Stellenbosch, 7600
www.stellenbosch.gov.za



Disclaimer and confidentiality note: The legal status of this communication is governed by the terms and conditions published at the following link:
http://www.stellenbosch.gov.za/main_pages/disclaimerpage.htm

From: Pedro April
Sent: Wednesday, 12 May 2021 09:07
To: 'nico@bvzplan.co.za' <nico@bvzplan.co.za>
Subject: Feedback: Pre-Application Scrutiny: Farm No. 211/10, Stellenbosch

Dear Mr Nico van Zyl

Feedback: Pre-Application Scrutiny

1. Your pre-application scrutiny submission on the above property, refers.
2. Your submission has been duly scrutinized for your intended land use and / or land development application.

3. Your intended land use and/ or land development application needs to address the following requirements to satisfy the prevailing provisions in the Stellenbosch Land Use Planning Bylaw (2015) [SLUPB] and Stellenbosch Zoning Scheme Bylaw (2019) [SZSB]:
- a) **The proposed zoning of Utility Services does not make provision for the intended composting site motivated. An appropriate zoning category needs to be investigated.**
 - b) **The construction of more than one employee housing require and application for an additional use.**
 - c) **Should the Manager dwelling be bigger than 120m² excluding outbuildings, it will be regarded as the second dwelling which is as of right.**
 - d) **The entire are to be used for the intended use, which could not be regarded as bona-fide agricultural use as per the subject definition must be included in the rezoning application area.**
 - e) **The area to be rezoned must be clearly indicated on the site development plan.**
 - f) **Proposals to mitigate the visual impact from the close by Bottelary Road which is a classified scenic route.**
 - g) **A blue broken line is drawn on the "Site and Zoning Plan", but the purpose of the line or area is not properly reference or motivated in the documentation.**
 - h) **The zoning legend must make specific reference to the zoning categories in the Stellenbosch Zoning Scheme By-law.**
 - i) **The intended establishment of primary agricultural activities on the property must be indicated on the site development and zoning plans.**
4. The intended land use and/ or land development application also needs to fulfil the requirements as stipulated in Section 38 of the SLUPB. The required application documents and related information on any applicable Bylaws, Policies and Spatial Plans are available on the Planning Portal of the Municipal Website. (<https://stellenbosch.gov.za/planning-portal/>)
5. Please note that the sole purpose of this pre-application scrutiny feedback is to facilitate an accurate approach for the intended land use and/ or land development application. The feedback should consequently not be interpreted to represent any position on the merit nor desirability of such intended land use and/ or land development application, which can only be determined once a complete application has been received and duly processed and decided on by the authorized decision maker.
6. It should also be noted that the complete application should first be submitted without the payment of any applicable application fees. Only when satisfied that a complete and accurate application has been submitted, will a proforma invoice be submitted to the applicant with payment instructions. Once proof of payment is received, the application will be regarded as duly submitted in accordance with a notice as contemplated in terms of Section 41(1)(c)(i) of the SLUPB.

For any enquiries on this correspondence please respond by e-mail to the writer hereof or to the email; landuse.enquiries@stellenbosch.gov.za.



Yours faithfully

Pedro April
Senior Town Planner
Department:
Land Use Management
Directorate:

Bulelwa Mdoda

From: Nico van Zyl <nico@bvzplan.co.za>
Sent: 28 October 2021 10:59 AM
To: Landuse Applications
Cc: Bertie van Zyl; Stiaan Carstens; Pedro April
Subject: [EX] Farm 211/10 Welgelegen LUA submission

Good day

Please find below the link to the documentation that serves as the formal application related to Farm 211/10 Welgelegen Stellenbosch.

<https://www.dropbox.com/sh/64c8zm3suslz1ia/AADl9o8ZLkLXKa1PWq00AM0la?dl=0>

Below is a list of the documents included in the submission:

- Motivation
- Attachment 1 - Application form
- Attachment 2 - Powers of Attorney & Resolution
- Attachment 3 – Title Deed
- Attachment 4 – SG Diagram
- Attachment 5 – Conveyancer's Certificate
- Attachment 6 – Location plan
- Attachment 7 – Land use plan
- Attachment 8 – Pre-Application Scrutiny Form
- Attachment 9 – Rezoning Plan
- Attachment 10 – Site Development Plan (SDP)
- Attachment 11 – Landscaping Plan
- Attachment 12 – Agricultural Compliance Statement
- Attachment 13 – Aquatic Report
- Attachment 14 – Botanical Report
- Attachment 15 – Services Report
- Attachment 16 – Traffic Impact Assessment (TIA)

Please reply with an acceptance acknowledgment.

Regards

Nico van Zyl

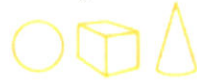
Director

Professional GISc Practitioner (PGP 1397)



Professionele beplanningskonsultante
Professional planning consultants

Ninastraat 4 Nina Street Brackenfell 7560 | Posbus / P O Box 765 Brackenfell 7561



T 021 9811406 | F 021 9823672 | www.bvzplan.co.za



STELLENBOSCH

STELLENBOSCH • PNIEL • FRANSCHHOEK

MUNISIPALITEIT • UMASIPALA • MUNICIPALITY

DIRECTORATE: PLANNING & ECONOMIC DEVELOPMENT

www.stellenbosch.gov.za/planning-portal/
SUBMIT COMPLETED FORM TO landuse.applications@stellenbosch.gov.za

LAND USE PLANNING APPLICATION FORM

(Section 15 of the Stellenbosch Municipal Land Use Planning By-Law (2015) and other relevant legislation)

KINDLY NOTE: Please complete this form using BLOCK letters and ticking the appropriate boxes.

PART A: APPLICANT DETAILS

First name(s)	Nico				
Surname	van Zyl				
Company name (if applicable)	BvZPlan				
Postal Address	PO Box 765			Postal Code	7561
	Brackenfell				
Email	Nico@bvzplan.co.za				
Tel	021 9811406	Fax		Cell	0828219271

PART B: REGISTERED OWNER(S) DETAILS (if different from applicant)

Registered owner(s)	Wynland Trust (IT 2857/1997(C))				
Physical address	Da Nada Farm,			Postal code	7570
	Botfontein rd, Stellenbosch Farms, Kraaifontain				
E-mail					
Tel	087 941 3884	Fax		Cell	082 372 5194

PART C: PROPERTY DETAILS (in accordance with title deed)

Erf / Erven / Farm No.	211	Portion(s) if Farm	10	Allotment area	Stellenbosch
Physical Address	CO Swartvriër rd & Bottelary rd				
	Stellenbosch				
Current Zoning	Agriculture & Rural Zone	Extent	m ² / ha	Are there existing buildings?	☒ Y ☐ N
			34,6068ha		
Applicable Zoning Scheme	Stellenbosch Municipality Zoning Scheme				

Current Land Use	Mostly Vacant									
Title Deed number and date	T	22333/2021								
Attached Conveyance's Certificate	☒ Y	☐ N	Any Restrictions into the Attached Conveyance's Certificate? If yes, please list condition(s) as per certificate							
Are the restrictive conditions in favour of a third party(ies)?	☐ Y	☒ N	If Yes, list the party(ies):							
Is the property encumbered by a bond?	☐ Y	☒ N	If Yes, list the bondholder(s):							
Is the property owned by Council?	☐ Y	☒ N	If Yes, kindly <u>attach a power of attorney</u> from the Manager Property Management							
Is the building located within the historical core?	☐ Y	☒ N	Is the building older than 60 years?	☐ Y	☒ N	Is the application triggered by the National Heritage Resources Act, 1999 (Act 25 of 1999) ¹	☐ Y	☒ N	If Yes, kindly indicate which section are triggered and attached the relevant permit if applicable.	
Any existing unauthorized buildings and/or land use on the subject property(ies)?				☐ Y	☒ N	If yes, is this application to legalize the building / land use? ²			☐ Y	☐ N
Are there any pending court case(s) / order(s) relating to the subject property(ies)?				☐ Y	☒ N	Are there any land claim(s) registered on the subject property(ies)?			☐ Y	☐ N
PART D: PRE-APPLICATION CONSULTATION										
Has there been any pre-application consultation?		☒ Y	☐ N	If Yes, please attach the minutes of the pre-application consultation. Please refer to Attachment 8						
Has the pre-application scrutiny form been submitted?		☒ Y	☐ N	If yes, please attach the written feedback received. Please refer to Attachment 8						
PART E: LAND USE PLANNING APPLICATIONS AND APPLICATION FEES PAYABLE										
APPLICATIONS IN TERMS OF SECTION 15 OF THE STELLENBOSCH MUNICIPAL LAND USE PLANNING BY-LAW (2015)										
Tick	Type of application: <i>Cost are obtainable from the Council Approved tariffs</i>									
☒ X	15(2)(a) rezoning of Land									
☒ X	15(2)(b) a permanent departure from the development parameters of the zoning scheme									
	15(2)(c) a departure granted on a temporary basis to utilise land for a purpose not permitted in terms of the primary rights of the zoning applicable to the land									
	15(2)(d) a subdivision of land that is not exempted in terms of section 24, including the registration of a servitude or lease agreement									
	15(2)(e) a consolidation of land that is not exempted in terms of section 24									
	15(2)(f) a removal, suspension or amendment of restrictive conditions in respect of a land unit									
	15(2)(g) a permission required in terms of the zoning scheme									

¹ All applications triggered by section 38(1)(a) - (e) in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999) may not be processed without a permit issued by the relevant department

² No application may be submitted to legalize unauthorised building work and/or land use on the property if a notice has been served in terms of Section 87(2)(a), and until such time a Section 91 Compliance Certificate have been issued in terms of the Stellenbosch Land Use Planning By-law (2015)

	15(2)(h) an amendment, deletion or imposition of conditions in respect of an existing approval		
	15(2)(i) an extension of the validity period of an approval		
	15(2)(j) an approval of an overlay zone as contemplated in the zoning scheme		
	15(2)(k) an amendment or cancellation of an approved subdivision plan or part thereof, including a general plan or diagram		
	15(2)(l) a permission required in terms of a condition of approval		
	15(2)(m) a determination of a zoning		
	15(2)(n) a closure of a public place or part thereof		
	15(2)(o) a consent use contemplated in the zoning scheme		
	15(2)(p) an occasional use of land		
	15(2)(q) to disestablish a home owner's association		
	15(2)(r) to rectify a failure by a home owner's association to meet its obligations in respect of the control over or maintenance of services		
	15(2)(s) a permission required for the reconstruction of an existing building that constitutes a non-conforming use that is destroyed or damaged to the extent that it is necessary to demolish a substantial part of the building		
	15(2)(6) when the Municipality on its own initiative intends to conduct land development or an activity		
	15(2)(l) amendment of Site Development Plan		
	15(2)(l) Compilation / Establishment of a Home Owners Association Constitution / Design Guidelines		
OTHER APPLICATIONS			
	Deviation from Council Policies/By-laws	R	
	Consent / Permission required in terms of a title deed	R	
X	Technical approval in terms of the Zoning Scheme Bylaw, 2019	R	
	Other (specify): <u>Approval of SDP</u>	R	
TOTAL A:		R	
PRESCRIBED NOTICE AND FEES** (for completion and use by official)			
Tick	Notification of application in media	Type of application	Cost
	SERVING OF NOTICES	Delivering by hand; registered post; electronic communication methods	R
	PUBLICATION OF NOTICES	Local Newspaper(s); Provincial Gazette; site notice; Municipality's website	R
	ADDITIONAL PUBLICATION OF NOTICES	Site notice, public meeting, local radio station, Municipality's website, letters of consent or objection	R
	NOTICE OF DECISION	Provincial Gazette	R
	INTEGRATED PROCEDURES	T.B.C	R
TOTAL B:		R	
TOTAL APPLICATION FEES* (TOTAL A + B)		R	
<p>* The complete application should first be submitted without the payment of any applicable application fees. Only when satisfied that a complete and accurate application has been submitted, will a proforma invoice be submitted to the applicant with payment instructions. Application fees that are paid to the Municipality are non-refundable and once proof of payment is received, the application will be regarded as duly submitted.</p> <p>**All indigent residents who are registered as such with the Municipality and <u>with proof submitted together</u> with application will be exempted from applicable fees for Permanent Departure applications including but not limited to building lines, coverage, height, bulk, parking. Contact: indigent.office@ Stellenbosch.gov.za or 021 808 8501 or 021 808 8579</p> <p>*** The applicant is liable for the cost of publishing and serving notice of an application. Additional fees may become applicable and the applicant will be informed accordingly.</p>			

BANKING DETAILS	
Account Holder Name:	Stellenbosch Municipality
Bank:	FIRST NATIONAL BANK (FNB)
Branch no.:	210554
Account no.:	62869253684
Payment reference:	LU/ _____ and ERF/FARM _____
Please use both the Land Use Application number and the Erf/Farm number indicated on the invoice as a reference when making EFT payment	
DETAILS FOR INVOICE	
Name & Surname/Company name (details of party responsible for payment)	Wynland Trust
Postal Address	Posbus 192 KUILSRIVIER 7579
Vat Number (where applicable)	436 023 8283

PART F: DETAILS OF PROPOSAL							
Building line encroachment	Street		From	m	To	m	
	Street		From	m	To	m	
	Side		From	m	To	m	
	Side		From	m	To	m	
	Aggregate side		From	m	To	m	
	Rear		From	m	To	m	
Exceeding permissible site coverage		From	%	To	%		
Exceeding maximum permitted bulk / floor factor / no of habitable rooms		From		To			
Exceeding height restriction		From	m	To	m		
Exceeding maximum storey height		From	m	To	m		
Consent/Conditional Use/Special Development							
To permit.....							
in terms of Section.....of the.....Zoning Scheme Regulations							
Other (please specify)	<hr/> <hr/> <hr/>						
Brief description of proposed development / Intent of application:							
Application for the spot rezoning of parts of portion 10 (Portion of Portion 3) of the Farm Welgelegen No 211 from Agriculture to Industrial Zone in order to establish a compost manufacturing facility; and for a departure to allow for employee housing within the Industrial spot zone; as well as for an additional use to provide for employee housing related to agricultural activities.							

PART G: ATTACHMENTS AND SUPPORTING INFORMATION AND DOCUMENTATION FOR LAND USE PLANNING APPLICATION

Complete the following checklist and attach all the information and documentation relevant to the proposal. Failure to submit all information and documentation required will result in the application being deemed incomplete.

Information and documentation required

☒	N	Power of attorney / Owner's consent if applicant is not owner		☐	N	Bondholder's consent (if applicable)	
☒	N	Resolution or other proof that applicant is authorised to act on behalf of a juristic person		☐	N	Proof of any other relevant right held in the land concerned	
☒	N	Written motivation pertaining to the need and desirability of the proposal		☒	N	S.G. diagram / General plan extract (A4 or A3 only)	
☒	N	Locality plan (A4 or A3 only) to scale		☒	N	Site development plan or conceptual layout plan (A4 or A3 only) to scale	
☐	N	Proposed subdivision plan (A4 or A3 only) to scale		☐	N	Proof of agreement or permission for required servitude	
☐	N	Proof of payment of application fees		☒	N	Proof of registered ownership (Full copy of the title deed)	
☒	N	Conveyancer's certificate		☒	N	Written feedback of pre-application scrutiny and Minutes of pre-application consultation meeting (if applicable)	
☐	N	N/A	Consolidation plan (A4 or A3 only) to scale	☒	N	N/A	Land use plan / Zoning plan (A4 or A3 only) to scale
☐	N	N/A	Street name and numbering plan (A4 or A3 only) to scale	☐	N	N/A	1 : 50 / 1:100 Flood line determination (plan / report) (A4 or A3 only) to scale
☒	N	N/A	Landscaping / Tree plan (A4 or A3 only) to scale	☐	N	N/A	Home Owners' Association consent
☐	N	N/A	Abutting owner's consent	☒	N	N/A	Services Report or indication of all municipal services / registered servitudes
☒	N	N/A	Copy of Environmental Impact Assessment (EIA) / Heritage Impact Assessment (HIA) / Traffic Impact Assessment (TIA) / Traffic Impact Statement (TIS) / Major Hazard Impact Assessment (MHIA) / Environmental Authorisation (EA) / Record of Decision (ROD)	☐	N	N/A	Proof of failure of Home owner's association
☐	N	N/A	Copy of original approval and conditions of approval	☐	N	N/A	

Y	N	N/A	Proof of lawful use right	Y	N	N/A	Any additional documents or information required as listed in the pre-application consultation form / minutes
Y	N	N/A	Required number of documentation copies	Y	N	N/A	Other (specify)

PART H: AUTHORISATION(S) SUBJECT TO OR BEING CONSIDERED IN TERMS OF OTHER LEGISLATION

☒	N	If required, has application for EIA / HIA / TIA / TIS / MHIA approval been made? If yes, attach documents / plans / proof of submission etc.	Specific Environmental Management Act(s) (SEMA) (e.g. Environmental Conservation Act, 1989 (Act 73 of 1989))
Y	☒	Subdivision of Agricultural Land Act, 1970 (Act 70 of 1970)	Y ☒ National Environmental Management: Air Quality Act, 2004 (Act 39 of 2004)
Y	☒	Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013) (SPLUMA)	Y ☒ National Environmental Management: Waste Act, 2008 (Act 59 of 2008)
Y	☒	Occupational Health and Safety Act, 1993 (Act 85 of 1993): Major Hazard Installations Regulations	Y ☒ National Water Act, 1998 (Act 36 of 1998)
Y	☒	Land Use Planning Act, 2014 (Act 3 of 2014) (LUPA)	Y ☒ Other (specify)
Y	N	Do you want to follow an integrated application procedure in terms of section 44(1) of the Stellenbosch Municipality Land Use Planning By-Law? If yes, please attach motivation.	

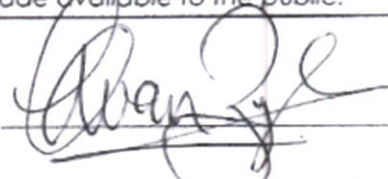
SECTION I: DECLARATION

I hereby wish to confirm the following :

1. That the information contained in this application form and accompanying documentation is complete and correct.
2. I'm aware that it is an offense in terms of section 86(1)(e) to supply particulars, information or answers knowing the particulars, information or answers to be false, incorrect or misleading or not believing them to be correct.
3. I am properly authorized to make this application on behalf of the owner and that a copy of the relevant power of attorney or consent is attached hereto.
4. Where an agent is appointed to submit this application on the owner's behalf, it is accepted that correspondence from and notifications by the Municipality in terms of the by-law will be sent only to the agent and that the owner will regularly consult with the agent in this regard.
5. I confirm that the relevant title deed(s) have been read and that there are no restrictive title deed restrictions, which impact on this application, or alternatively an application for removal/suspension or amendment forms part of this submission.
6. I confirm that I have made known all information relating to possible Land / Restitution Claims against the application property.
7. It is the owner's responsibility to ensure that approval is not sought for a building or land use which will be in conflict with any applicable law.
8. The Municipality assesses an application on the information submitted and declarations made by the owner or on his behalf on the basis that it accepts the information so submitted and declarations so made to be correct, true and accurate.

9. Approval granted by the Municipality on information or declarations that are incorrect, false or misleading may be liable to be declared invalid and set aside which may render any building or development pursuant thereto illegal.
10. The Municipality will not be liable to the owner for any economic loss suffered in consequence of approval granted on incorrect, false or misleading information or declarations being set aside.
11. Information and declarations include any information submitted or declarations made on behalf of the owner by a Competent Person/professional person including such information submitted or declarations made as to his or her qualification as a Competent person and/or registration as a professional.
12. A person who provides any information or certificate required in terms of Regulation A19 of the National Building Regulations and Building Standards Act No 103 of 1977 which he or she knows to be incomplete or false shall be guilty of an offence and shall be prosecuted accordingly.
13. A person who supplies particulars, information or answers in a land use application in terms of the Stellenbosch Municipality Land Use Planning By-law knowing it to be incorrect, false or misleading or not believing them to be correct shall be guilty of an offence and shall be prosecuted accordingly.
14. The Municipality will refer a complaint to the professional council or similar body with whom a Competent Person/professional person is registered in the event that it has reason to believe that information submitted or declaration/s made by such Competent Person/professional person is incorrect, false or misleading.
15. I am aware that by lodging an application, the information in the application and obtained during the process may be made available to the public.

Applicant's signature:



Date:

28/10/2021

Full name:

G.N. van Zyl

Professional capacity:

Town Planner

FOR OFFICE USE ONLY

Date received: _____

Received By: _____



**TO WHOM IT MAY CONCERN
POWER OF ATTORNEY**

LAND USE RIGHTS OF PROPERTY: Portion 10 of Farm 211, Welgelegen, Stellenbosch

We the Trustees of Wynland Trust (IT:2857/1997) the registered owner of Portion 10 of Farm 211, Welgelegen, Stellenbosch hereby certify that authority is granted to BvZPlan (reg No 1997/021475/210) to apply for any land use related matter to accommodate any proposed additional developments, as specified by the owner/s, on the property.

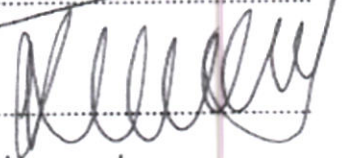
The undersigned therefore nominates constitutes and appoints BvZPlan, with the power of substitution*, to be the registered owners legal representative/agent and to act in the name, place and stead of the registered owners(s) in the above regard. Accordingly, power of attorney is hereby granted to BvZPlan to sign and receive all correspondence related to the envisaged application referred to above as well as to handle any other necessary matter(s) incidental thereto.

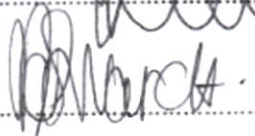
RESOLUTION

Gerhard Conradie (ID nr: 6112045061089) is hereby authorised to act on behalf of Wynland Trust in all matters incidental to the envisaged application, including the signage of correspondence and forms and the authorisation of payments related to the intended application.

Signed at Kroonfontein on this 22 day of October 2021

Name Gerhard Lotter Conradie Signature 

Name Karin Hane Kom Signature 

Name Maria Elizabeth de Swardt Signature 

Name Signature.....

Name Signature.....

* Any one of GN van Zyl (Director), NM van Zyl (Director) and NM van der Linde (Registered Planner and employee of BvZPlan) is authorized to act on behalf of BvZPlan in this application

A. VIR AKTEBESORGER SE GEBRUIK / FOR CONVEYANCER'S USE:

(a) Gelyktydiges met ander registrasiekantore/deelstate: Simult with other registries /sectional titles:

Kode	Firma/Firm	Eiendom/Property	Kantoor/Office
1			
2			
3			
4			

(b) Klant afskrif van aktes permanent in Aktekantoor gelasseer: Client copies of deed filed permanently in Deeds Office:

Aard en nommer van akte Nature and number of deed	Cover No. Omslag Nr.	Parasie van ondersoekers Initials of Examiners

(c) Notas/Notes:

BLACKBOOK
07-05-2021
JENNY VAN WYK

B. VIR AKTEKANTOOR GEBRUIK / FOR DEEDS OFFICE USE:

	Opmerkings Remarks	Parasie Initials
Intertakte nagesien deur Interdicts checked by	(1) Dorp (stad)gekeur (geproklameer) Township approved (proclaimed)	
	(2) Begintingsrewe Endowment erven	
	(3) Begintings Endowment	
	(4) Voorwaardes Conditions	
	(5) Mikro Micro	
Intertakte nagesien deur Interdicts checked by	(6) Algemene Plan General Plan	
	(7) Titeleks Title Deed	
	(8) Verbands teen dorps-tite Bonds against township title	
	(9) Datum nagesien Date checked	

Kantoor instruksies / Office instructions:
Seksie / Section:

104
20/1/2021

Tel: 021-4611227
Hempin Elmer & Elmer
ZM 11/01062
Datum van indiening/Date of lodgement
30/4/2021

UITVOERING / EXECUTION
LOGGED
30-04-2021
INGEDIEN

A. VIR AKTEKANTOOR GEBRUIK / FOR DEEDS OFFICE USE

Rec 7/6/21

Ondersoekers / Examiners	Kamers Rooms	Skakeling / Linking	Verwerp Reject	Passer/Pass
JABRAHAMS	1/28	1/1		
TH. B. C. M. E. B. E. H.				

B. VIR AKTEBESORGER SE GEBRUIK / FOR CONVEYANCER'S USE

Aard van Akte / Nature of Deed: **Transfer**
Aard van Akte / Nature of Deed: **The Philip Zuma Fam. Trust**
Wynland t.g. wijk
Verw. No./Ref. No.: **T 000022333 / 2021**

Skakeling / Linking	Titeleks, ens. binne/tile deeds, etc. within
1	T35977/2013

GELYKTYDIGES / SIMULS

No. in ste/batch	Kode/ Code	Name van Partye / Names of Parties	Naam van Firma / Name of Firm	Firma/ Firm No.
1	T	Philip Zuma Fam Trust / Wynland Trust	HANDELSREKORD	104
2				
3				
4				
5				
6				
7				
8				
9				
10				

NO

7 MAY 2021
CAPE TOWN
HANDED IN FOR EXECUTION

REGISTRASIE VERSOEK DEUR: **Blaise Ragnier**
REGISTRATION REQUESTED BY: **Blaise Ragnier**
DATUM: **10/5/2021**
DATE: **10/5/2021**

080007047861

(Not beskrywing van eiendom (slegs para 1 in Akte) / Brief description of property (mainly para 1 in Deed)

Portion 10 (P10 of P13) of the farm
Wynland No. 211

8

1. WHAT IS ^{2/6/11} ~~THE~~ SITUATION REGARDING
THE OMISSION OF PARAGRAPH AT X
ON PAGE 2 OF TITLE?
As appears, the omission was in
error.

104

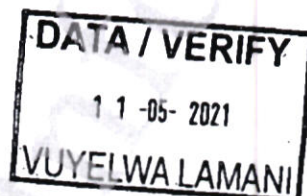
HAYDN ELMES & ELMES ATTORNEYS
"THE CORNER HOUSE"
26 Hope Street
Gardens
8001

Prepared by me



CONVEYANCER
MARK HAYDN ELMES
LPCM NUMBER 82133

Deeds Office Registration fees as per Act 47 of 1937		
	Amount	Office Fee
Purchase Price	R. 625 000.00	R. 3002.00
Reason for exemption	Category Exemption	Exemption i l o. Sec/Reg Act/Proc



T 000022333 / 2021

DEED OF TRANSFER

BE IT HEREBY MADE KNOWN THAT

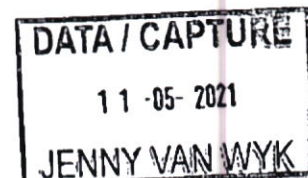
MARK HAYDN ELMES LPCM NUMBER 82133

appeared before me, REGISTRAR OF DEEDS at CAPE TOWN, the said appearer being duly authorised thereto by a Power of Attorney granted to him/her by

**The Trustees for the time being of
THE PHILIP ZURNAMER FAMILY TRUST
Registration Number IT1100/95(C)**



which said Power of Attorney was signed at CAPE TOWN on 11TH MARCH 2021



And the appearer declared that his/her said principal had, on 2 October 2020, truly and legally sold by Private Treaty, and that he/she, the said Appearer, in his/her capacity aforesaid, did, by virtue of these presents, cede and transfer to and on behalf of:

**The Trustees for the time being of the
WYNLAND TRUST
Registration Number IT2857/1997(C)**

its Successors in Office or assigns, in full and free property

**PORTION 10 (PORTION OF PORTION 3) OF THE FARM WELGELEGEN
NUMBER 211**

**IN THE STELLENBOSCH MUNICIPALITY
DIVISION STELLENBOSCH, PROVINCE OF THE WESTERN CAPE**

**IN EXTENT 34,6068 (THIRTY FOUR COMMA SIX ZERO SIX EIGHT)
Hectares**

**FIRST TRANSFERRED by Deed of Transfer Number T 11957/1942 with
Diagram relating thereto and held by Deed of Transfer Number T35977/2013**

**A. SUBJECT to such conditions as are referred to in the Deed of Transfer No.
4136 dated 10th June 1916 and**

B. AND SUBJECT ALSO to the following special condition namely:

That the transferor and/or her successors in title shall be entitled to use the existing right-of-way, referred to in the endorsement dated 18 October 1938 on the said Deed of Transfer No. 4136/1916, over the property hereby transferred, the Western edge of which right-of-way is marked h.k.e. on the annexed diagram No. 3023/42; subject to the conditions:

- (a) That the transferor and/or her successors in title shall at her and/or their expense maintain and keep the said road in proper order and repair and for that purpose shall have right of ingress to and egress from the land hereby conveyed.
- (b) That in the event of any portion of the said road being used by the said transferee and/or his successors in title, such portion shall be maintained and repaired jointly by him and/or them and the said transferor.

The land hereby transferred, by reason of its situation, is not affected by the condition referred to in the endorsement dated 21st April 1942 on the said deed of transfer No. 4136/1916.

C. **SUBJECT FURTHER** to the following condition contained in the Deed of Transfer No. T35329/1998 imposed in terms of Section 31(b) of Act 47 of 1937 (as amended):

"A portion of the herein mentioned property measuring $\pm 1,3267$ hectares has been expropriated by the Divisional Council of Stellenbosch in terms of Section 130 of Ordinance 15/1952 vide Expropriation Notice 13/74"

A handwritten signature in black ink, consisting of a stylized 'P' followed by a flourish.

WHEREFORE the said Appearer, renouncing all rights and title which the said

The Trustees for the time being of THE PHILIP ZURNAMER FAMILY TRUST
Registration Number IT1100/95(C)

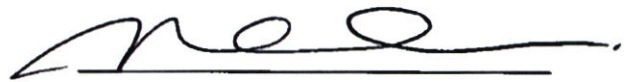
heretofore had to the premises, did in consequence also acknowledge them to be entirely dispossessed of, and disentitled to the same, and that by virtue of these presents, the said

The Trustees for the time being of WYNLAND TRUST
Registration Number IT2857/1997(C)

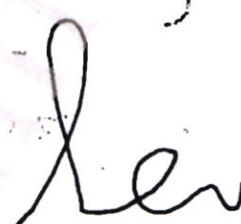
its Successors in Office or assigns, now is and henceforth shall be entitled thereto, conformably to local custom, the State, however reserving its rights, and finally acknowledging the purchase price to be the sum of R7 500 000,00 (SEVEN MILLION FIVE HUNDRED THOUSAND RAND) excluding VAT in the sum of R1 125 000,00 (ONE MILLION ONE HUNDRED AND TWENTY FIVE THOUSAND RAND), total consideration paid by the transferee to the transferor being the amount of R8 625 000,00 (EIGHT MILLION SIX HUNDRED AND TWENTY FIVE THOUSAND RAND).

IN WITNESS WHEREOF, I the said Registrar, together with the Appearer, have subscribed to these presents, and have caused the Seal of Office to be affixed thereto.

THUS DONE and EXECUTED at the Office of the REGISTRAR OF DEEDS at CAPE TOWN on *the 10th May* 2021


q.q.

In my presence


REGISTRAR OF DEEDS

104

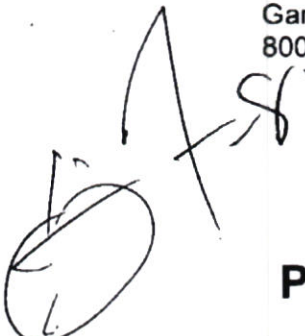
HAYDN ELMES & ELMES ATTORNEYS
"THE CORNER HOUSE"
26 Hope Street
Gardens
8001

Prepared by me


CONVEYANCER
MARK HAYDN ELMES
LPCM NUMBER 82133

POWER OF ATTORNEY TO PASS TRANSFER

I, the undersigned


ANDREW BARRY ZURNAMER
duly authorised hereto by a resolution of the Trustees for the time
being of
THE PHILIP ZURNAMER FAMILY TRUST
Registration Number IT1100/95(C)
acting in terms of Letters of Authority issued by the Master of the High
Court of South Africa Western Cape Division, Cape Town at Cape Town
on 25 May 2007

do hereby nominate and appoint MARK HAYDN ELMES LPCM NUMBER 82133 or
CAROL MAY BARRY LPCM NUMBER 78914 or ANNECKE LOUW LPCM
NUMBER 80989 or ARNO WATSON LPCM NUMBER 80234 or GRAHAM JOHN
SONNENBERG LPCM NUMBER 79408

with power of substitution to be my true and lawful Attorney and Agent in my name,
place and stead to appear at the Office of the REGISTRAR OF DEEDS at CAPE
TOWN or any other competent official in the Republic of South Africa and then and
there to act as my Attorney and Agent and to pass transfer to:

The Trustees for the time being of
WYNLAND TRUST
Registration Number IT2857/1997(C)

the property described as:

PORTION 10 (PORTION OF PORTION 3) OF THE FARM WELGELEGEN
NUMBER 211
IN THE STELLENBOSCH MUNICIPALITY
DIVISION STELLENBOSCH, PROVINCE OF THE WESTERN CAPE

IN EXTENT 34,6068 (THIRTY FOUR COMMA SIX ZERO SIX EIGHT)
Hectares

HELD BY Deed of Transfer Number T35977/2013

the said property having been sold by me on 2 October 2020, to the said transferee/s for the sum of R7 500 000,00 (Seven Million Five Hundred Thousand Rand) excluding VAT in the sum of R1 125 000,00 (ONE MILLION ONE HUNDRED AND TWENTY FIVE THOUSAND RAND), total consideration paid by the transferee to the transferor being the amount of R8 625 000,00 (EIGHT MILLION SIX HUNDRED AND TWENTY FIVE THOUSAND RAND);

and further cede and transfer the said property in full and free property to the said Transferee; to renounce all right, title and interest which the Transferor heretofore had in and to the said property, and generally, for effecting the purposes aforesaid, to do or cause to be done whatsoever shall be requisite, as fully and effectually, to all intents and purposes, as the Transferor might or could do if personally present and acting therein; hereby ratifying, allowing and confirming all and whatsoever the said Agent/s shall lawfully do or cause to be done in the premises by virtue of these presents.

Signed at CAPE TOWN ✓ on 11th MARCH 2021 ✓
in the presence of the undersigned witnesses.

AS WITNESSES :

1.



2.




ANDREW BARRY ZURNAMER on
behalf of THE PHILIP ZURNAMER
FAMILY TRUST



**Transfer Duty
Declaration**

TDREP

Reference Details

Transfer Duty Reference Number: TDE03F8A8D

Details

Details of Seller / Transferor / Time Share Company

Surname / Registered Name THE PHILIP ZURNAMER FAMILY TRUST
Company / CC / Trust Reg No. IT110095(C)

Full Name THE PHILIP ZURNAMER FAMILY TRUST
Marital Status

Details of Purchaser / Transferee

Full Name WYNLAND TRUST
Company / CC / Trust Reg No. IT28571997(C)

Surname / Registered Name WYNLAND TRUST
Marital Notes if applicable

Details of Estate Agent

Details of the Property

Date of Transaction/Acquisition (CCYYMMDD)

2020-10-02

Total Fair Value

R

8625000.00

Total Consideration

R

8625000.00

Calculation of Duty and Penalty / Interest

Transfer Duty Payable
on Natural Person

R

0.00

Property Description

1 PORTION 10 (PORTION OF PORTION 3) OF THE FARM WELGELEGEN NUMBER 211 IN THE STELLENBOSCH MUNICIPALITY, DIVISION STELLENBOSCH, PROVINCE OF THE WESTERN CAPE IN EXTENT 34,6068 (THIRTY FOUR COMMA SIX ZERO SIX EIGHT) Hectares

Exemption Certificate

Exemption Certificate Details

Transfer Duty Reference No. TDE03F8A8D

Exempt in terms of Section 9 of the
Transfer Duty Act Other

Exemptions allowed by another Act Section 9(15)

Declaration by Conveyancer / Attorney

MARK HAYDN ELMES
I certify that this is a true copy of the
transfer duty declaration / receipt /
exemption certificate drawn from the
SARS eFiling site, which will be
retained by me for 5 years from the
date of registration of transfer.

XXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXX

Please ensure you sign over
the 2 lines of 'X's above

Date
(CCYYMMDD)

20210430

For enquiries go to
www.sars.gov.za or call
0800 00 SARS (7277)



STELLENBOSCH
STELLENBOSCH • PHIL • FRANSCHHOEK
MUNISIPALITEIT • UMASIPALA • MUNICIPALITY

384

CERTIFICATE IN TERMS OF SECTION 118 OF THE LOCAL GOVERNMENT: MUNICIPAL SYSTEMS ACT, 2000 (ACT No. 32 OF 2000)
(AS PRESCRIBED IN TERMS OF SECTION 120 OF ACT No. 32 OF 2000)

ISSUED BY STELLENBOSCH LOCAL MUNICIPALITY

In terms of section 118 of the Local Government: Municipal Systems Act, 2000 (Act No. 32 of 2000), it is hereby certified that all amounts that became due to Stellenbosch Local Municipality in connection with the undermentioned property situated within that municipality for municipal service fees, surcharges on fees, property rates and other municipal taxes, levies and duties during the two years preceding the date of application for this certificate, have been fully paid.

DESCRIPTION OF PROPERTY (see definition of property in section 1 of Act 32 of 2000)

21 Digit Code (or Municipal Reference Number): C06700000000021100010

Erven: 211

Portion: 10 (PORTION OF PORTION 3)

Extension: WELGELEGEN

Zoning:

Registration division / Administrative District: IN THE STELLENBOSCH MUNICIPALITY DIVISION STELLENBOSCH,
PROVINCE OF THE WESTERN CAPE

Suburb:

Town:

Sectional Title unit number:

Exclusive use area and number as referred to on the registered plan:

Real right:

Scheme registration number:

Sectional Title Scheme Name:

Registered owner: THE PHILIP ZURNAMER FAMILY TRUST (IT1100/95(C))

Name and Identity/ Registration Number of all purchaser/s: WYNLAND TRUST (IT2857/1997(C))

This Certificate is valid until:

07/06/2021

Given under my hand at

STELLENBOSCH

on

08/04/2021

Digitally signed by Stellenbosch Municipality
Signee: Lazerick Anthony
Sign date: 09/04/2021 10:45:37.307 AM
Expiration date: 03/03/2022 09:55:58 AM

MUNICIPAL MANAGER
Stellenbosch Local Municipality

Date issued: 08/04/2021

Authorised Officer: Lazerick Anthony

Certificate By Conveyancer:

I MARK HAYDN ELMES (full name and surname) hereby certify that this is a print-out of a data message in respect of the original clearance certificate electronically issued by the Stellenbosch Local Municipality.

Conveyancer

Date

30/4/2021

21 Digit Code (or Municipal Reference Number): C06700000000021100010

Page 1 of 1

Certificate number: 11796202

49

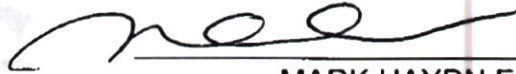
CONVEYANCER'S CERTIFICATE

I, Mark Haydn Elmes, LPCM Number 82133, a duly admitted and practicing conveyancer, hereby certify that this is a copy of a transfer duty receipt that was digitally applied for at the South African Revenue Services and digitally issued by the aforesaid government institution for the undermentioned property, namely:

PORTION 10 ✓ (PORTION OF PORTION 3) OF THE FARM WELGELEGEN
NUMBER 211 ✓
IN THE STELLENBOSCH MUNICIPALITY
DIVISION STELLENBOSCH, PROVINCE OF THE WESTERN CAPE

IN EXTENT 34,6068 ✓ (THIRTY FOUR COMMA SIX ZERO SIX EIGHT) Hectares

SIGNED AT CAPE TOWN ON *the 30th APRIL 2021*



MARK HAYDN ELMES
LPCM NUMBER 82133

1



CONVEYANCER'S CERTIFICATE

I, Mark Haydn Elmes, LPCM Number 82133, a duly admitted and practicing conveyancer, hereby certify that this is a copy of a rates clearance certificate that was digitally applied for at the Stellenbosch Municipality and digitally issued by the aforesaid municipality for the undermentioned property, namely:

PORTION 10 (PORTION OF PORTION 3) OF THE FARM WELGELEGEN
NUMBER 211

IN THE STELLENBOSCH MUNICIPALITY
DIVISION STELLENBOSCH, PROVINCE OF THE WESTERN CAPE

IN EXTENT 34,6068 (THIRTY FOUR COMMA SIX ZERO SIX EIGHT) Hectares

SIGNED AT CAPE TOWN ON 30th APRIL 2021



MARK HAYDN ELMES
LPCM NUMBER 82133

PROD DEEDS REGISTRATION SYSTEM - CAPE TOWN
PREPARED BY : DRS88834 - NCAPAI LINDA

DATE : 20210430 TIME : 12:17:05.0 PAGE : 1

TRACK NUMBER : 88887047861

BLACK-BOOKING ENQUIRY ON NAME - PHILIP ZURNHIER FAMILY TRUST
ID NUMBER - 1188/95
BIRTH DATE - 0
MARITAL STATUS -
MAIDEN NAME -
TYPE OF PERSON - TRUST

PERSON HAS NO CONTRACTS/INTERDICTIONS

** PLEASE NOTE : THE INFORMATION APPEARING ON THIS PRINTOUT IS FURNISHED FOR PURPOSES OF INFORMATION ONLY.
FOR MORE DETAILED INFORMATION, PLEASE REFER TO THE REGISTERED SOURCE DOCUMENTS.

*** END OF REPORT ***

PROD DEEDS REGISTRATION SYSTEM - CAPE TOWN
PREPARED BY : DRS08834 - NCAPAI LINDA

DATE : 20210430 TIME : 12:17:13.9 PAGE : 1

TRACK NUMBER : 88887847861

PROPERTY DETAILS PRINT FOR PORTION 18 ✓
FARM NO 211 ✓
REG DIV STELLENBOSCH RD

PROVINCE WESTERN CAPE
PREV DESCRIPTION PTN OF 3
DIAGRAM DEED NO T11957/1942
EXTENT 34.6868 ✓
CLEARANCE WINDLANDS DC
FARM NAME WELGELEGEN

INTERDICTION
EX13/1974-11957/1942
DOCUMENTS
FARM ST 211/18

HOLDER

CASE NUMBER

CASE DATE/TITLE NR

T

AMOUNT

O/P/A

SCAN/MICRO REF
1985 0871 0737

MMD

NOTED ON

8

OWNER DETAILS

FULL NAME & SHARE
PHILIP ZURNAMER FAMILY TRUST

PURCH DATE AMOUNT/REASON O/P/A IDENTITY
20130117 R6880886.00 1100/95

TITLE DEED
T35977/2013

MMD MICROFILM REF
0726 20130821182944

* O/P/A - O - MULTIPLE OWNER P - MULTIPLE PROPERTY A - MULTIPLE OWNER AND PROPERTY

** PLEASE NOTE : THE INFORMATION APPEARING ON THIS PRINTOUT IS FURNISHED FOR PURPOSES OF INFORMATION ONLY.
FOR MORE DETAILED INFORMATION, PLEASE REFER TO THE REGISTERED SOURCE DOCUMENTS.

*** END OF REPORT ***

SIDES	Cape	Feet	ANGLES OF DIRECTION	SYSTEM L ^o 19 ^o CO-ORDINATES	
				y	x
ab	1854.4	280. 6. 20	0	+ 40000	+ 11900000
bc	435.4	285. 43. 30	b	+ 25239.5	+ 7799.0
cd	1629.3	7. 33. 50	c	+ 23413.9	+ 8124.4
de	838.6	89. 20. 40	d	+ 22994.8	+ 8242.4
ef	1946.5	132. 2. 10	e	+ 23209.3	+ 9857.5
fa	805.8	198. 22. 30	f	+ 24047.8	+ 9867.1
ag	3020.7	198. 22. 30	g	+ 25493.5	+ 8563.7
				+ 24287.3	+ 4932.3

S. G. No. 3023142

Approved

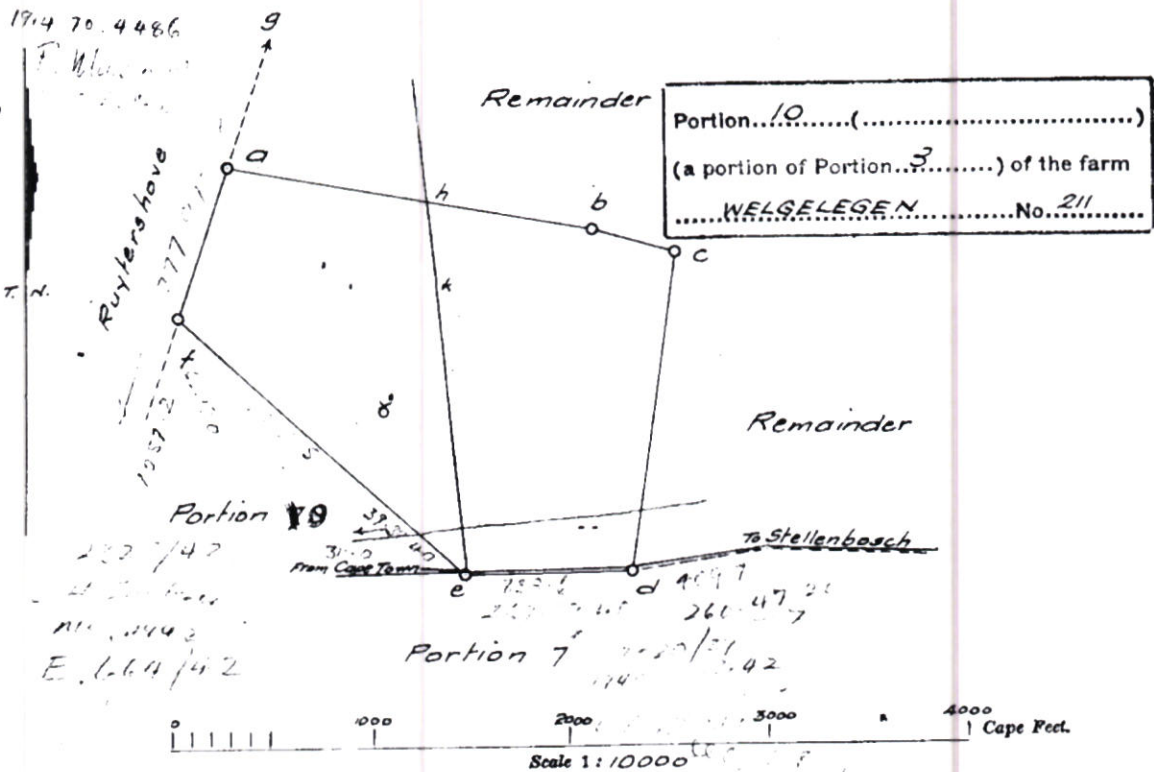
J. G. J. J. J.
Surveyor-General.
- 3 - 9 - 1942

The line hke represents the Western edge of an existing servitude Right-of-way 15' wide

Description of beacons:-

abcde + g - Iron fencing standards in corners of Stones ✓

f - 1/2" iron peg surrounded by stones at foot of heavy iron fence post ✓



The figure abcdef

represents 40.4034 Morgen

of land being

PORTION 10 (a portion of Portion B) of the farm WELGELEGEN A¹

situate in the Division of Stellenbosch

Province of Cape of Good Hope.

Surveyed in Dec. 1939 + June 1942 by me

H. K. J.

Land Surveyor.

This diagram is annexed to Deed of Transfer N^o 11957 dated 13.10. 1942 in favour of J. J. G. Waterman.

The original diagram is No. 3908/1903 annexed to D/T 1903.143.9982 Stel. Q 4-39

S. G. File No. S/13983

S.R. No. E.856/42

BH/8D/7

M 3122

Registrar of Deeds.

M 3121

C

VN. 211/10.

A. S.P.G.T.

CONVEYANCER'S CERTIFICATE

I, the undersigned, MARCELLE STRYDOM, a practicing attorney and conveyancer in Bellville, Cape Town, do hereby certify, after searches done at the Cape Town Deeds Office, that the following information is true and correct:

1. **WYNLAND TRUST**
Registration Number: IT2857/1997(C)

is the registered owner of:

**PORTION 10 (PORTION OF PORTION 3) OF THE FARM
WELGELEGEN NUMBER 211
IN THE STELLENBOSCH MUNICIPALITY
STELLENBOSCH DIVISION
WESTERN CAPE PROVINCE**

**IN EXTENT: 34,6068 (THIRTY FOUR COMMA SIX ZERO SIX
EIGHT) HECTARES**

("the property")

HELD BY DEED OF TRANSFER NUMBER T22333/2021

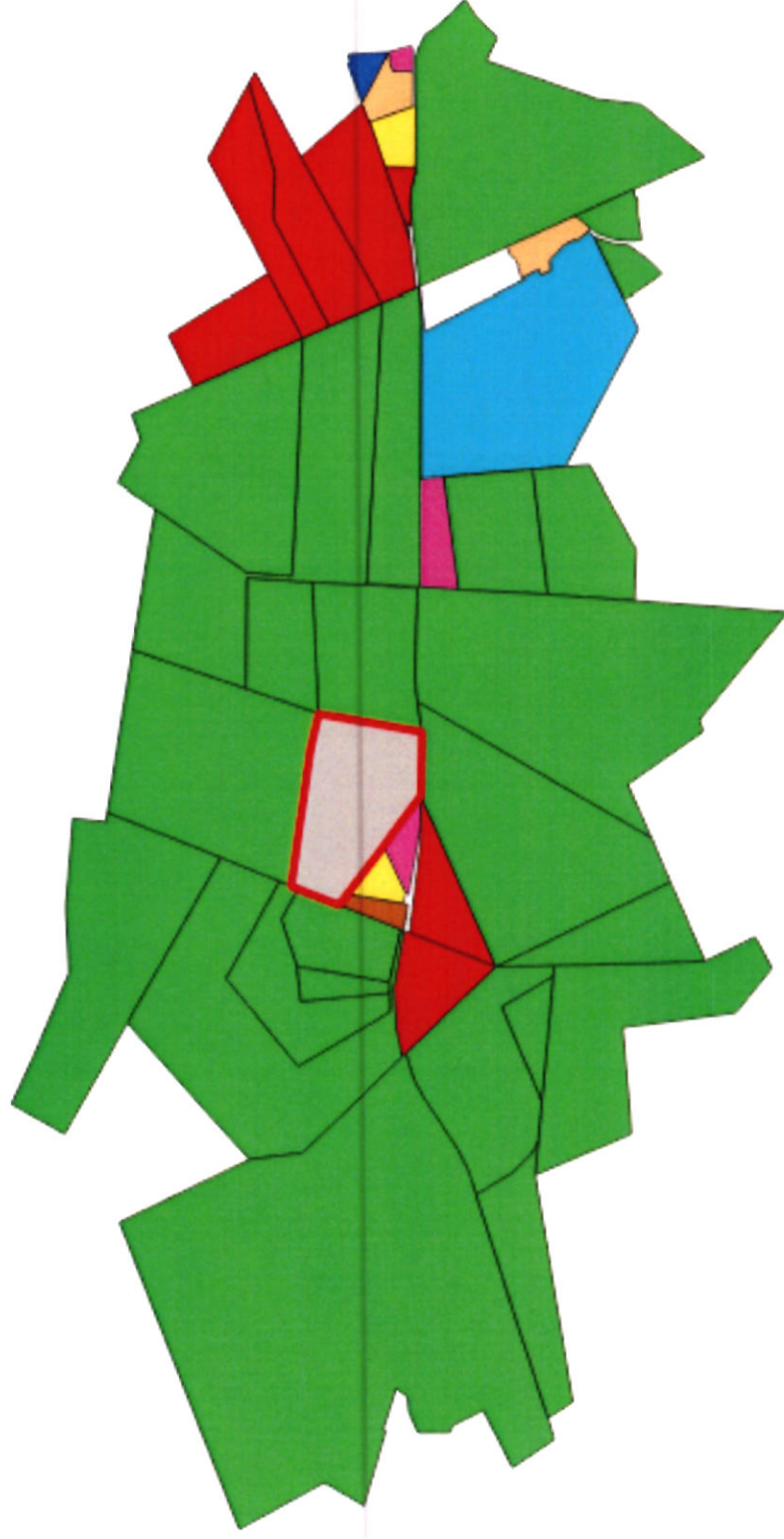
2. No evidence could be found in the current or previous title deeds indicating any restrictive conditions registered against the property which prevents it from being rezoned for purposes of operating a commercial enterprise thereon.

SIGNED at BELLVILLE on this 15th day of OCTOBER 2021.

CONVEYANCER
MARCELLE STRYDOM



LOCATION PORTION 10 OF FARM 211 STELLENBOSCH



Land use along the Bottelary rd



LAND USE PRE-APPLICATION SCRUTINY FORM

KINDLY NOTE:

1. This Pre-Application Scrutiny form must be submitted prior to the submission of any Land Use and Land Development application in terms of Section 15(2) of the Stellenbosch Municipal Land Use Planning Bylaw, 2015. (SLUPB)
2. Relevant documents can be accessed at:
<https://www.stellenbosch.gov.za/documents/planning-and-building-plans/planning-portal/legislation/3116-stellenbosch-municipality-land-use-planning-by-law-2015/file>
3. The applicant will receive feedback per e-mail following a weekly internal technical discussion on the pre-application scrutiny submission.
4. A pre-application consultation meeting may be required in terms of Section 37 of the said Bylaw on receipt and consideration of this Pre-Application Scrutiny.

PART A: APPLICANT, OWNERSHIP & PROPERTY PARTICULARS

Applicant Name	BvZplan
E-Mail	Nico@bvzplan.co.za.
Tel/ Cell	082 821 9271
Registered Owner:	The Philip Eurnamer Family Trust
Property Description	Portion 10 of the Farm Welgelegen No 211 Stellenbosch
Physical Address:	Botbelary Rd
Suburb & Town	
Current Zoning	Agriculture
Current land use	Vacant mostly with the exception of someone staying in the farm house.

Are there existing buildings on the subject property(ies)?	Yes ☒	No ☐
Are there any existing unauthorized buildings and/or land use on the subject property(ies)?	Yes ☐	No ☒
If yes, is this application to legalize the building/ land use?	Yes ☐	No ☒
Are there any pending court case(s)/ order(s) relating to the subject property(ies)?	Yes ☐	No ☒
Is the property located in a heritage area or contains any heritage significant buildings?	Yes ☐	No ☒
Does the property fall inside the urban edge ?	Yes ☐	No ☒

PART B: APPLICATION

1. WHAT LAND USE PLANNING APPLICATIONS ARE REQUIRED IN TERMS OF SECTION 15(2) OF THE SLUPB?

Rezoning	Subdivision	Removal/Suspension Amendment of restrictive conditions	Consent use
Permanent Departure	Consolidation	Closure of public place	Rectification/ disestablishment of HOA
Temporary Departure	Amendment of condition(s) of approval	Extension of validity period of approval	Amendment/cancel ation of approved subdivision plan
Determination of a zoning	Occasional use	Permission in terms of zoning scheme	Permission in terms of condition of approval

☐ OTHER
 ☐ Technical Approval
 ☐ Exemption
 ☒ **Spot Zone or Split Zone**

Zoning: Utility services

Details of the Proposal: (Brief description of proposal (not a full motivation))

The proposal is to establish a compost facility on part of the farm (portion 10 of farm 211 Welgelegen - 34,6 ha), probably around 14 ha of the farm will process organic material to produce compost, the material (e.g. pruned branches) will be processed and have the advantage for Solid Waste that organic waste substances will not end up in the dump. This is a current industry - Red Tractor Compost, (currently located on another site) that wants to expand so the scale will be large.

The owner wants to construct a 5200m² warehouse for the following: Packing plant for composting plant, Storage of packaged products on pallets, Storage of machines and trucks used for the manufacture and delivery of compost, Repair workshop for the above and Offices for Red Tractor Compost. It has been discussed with the Stellenbosch municipality that either a split zone or a spot Zoning of Utility Services would be required. Staff accommodation is also proposed, please refer to Site plan attached to the email.

2. RELEVANCE OF ANY PLANNING LEGISLATION/ POLICIES AND PLANS

RELEVANT PLANNING CONSIDERATIONS		
(a) Are any Municipal plans/policies/guidelines, or any restrictive title conditions, or other legislation / authorizations applicable to the application, and if yes, is the proposal consistent/ compliant with such?	Yes	No
		X
<p>Details with reference to applicable plans/ policies/ guidelines:</p> <p>SIDF → Part of the farm is seen as part of a scenic route & low value agricultural land.</p>		
(b) Does the proposal require the following additional infrastructure / services? e.g. electricity; water; sewerage; road network; other?	YES	NO
		X
<p>Details on required infrastructure:</p> <p>Eskom, probably an transformer needs to be upgraded the other services will be self reliant.</p>		
(c) Does the development proposal include the provision of residential units, and if so, what is the target market re: range in income bracket/ selling price or rental for the units ?	YES	NO
		X
<p>Details on target market:</p>		
(d) In addressing the SPLUMA principle of Spatial Justice and as it relates to prescripts on the provision of inclusionary housing, how will this development proposal target affordable market segments?	YES	NO
		X
<p>Details on inclusionary housing provision:</p>		

PART C: COPIES OF PLANS / DOCUMENTS TO BE SUBMITTED AS PART OF PRE-APPLICATION SCRUTINY

The following minimum documentation **must** be attached to this pre-application scrutiny form:

1. **Locality plan**
2. **Layout Plan of proposal** (e.g. copy of existing building plan, indicating proposal on site plan, etc.)
3. **Full copy of the title deed or Conveyance Certificate**

Please Note:

- The Municipality may request any other information deemed necessary for the purpose of this pre-application scrutiny.
- If an incomplete pre-application scrutiny form or the required minimum supporting documents are not submitted the pre-application scrutiny form will not be accepted by the Municipality.

DECLARATION: I hereby confirm that the information contained in this pre-application scrutiny form and accompanying documentation is complete and accurate.

Applicant's signature: _____



Date: 23 March 2021

FOR OFFICE USE:

Municipal Stamp

Received by: _____

Date: _____

DETERMINATION BY AUTHORISED OFFICIAL

Additional Information		Pre-Application Consultation		Application Ready	
Sign:				Date:	

APPLICANT INFORMED BY RESPONSIBLE OFFICIAL

Sign:	Date:
-------	-------

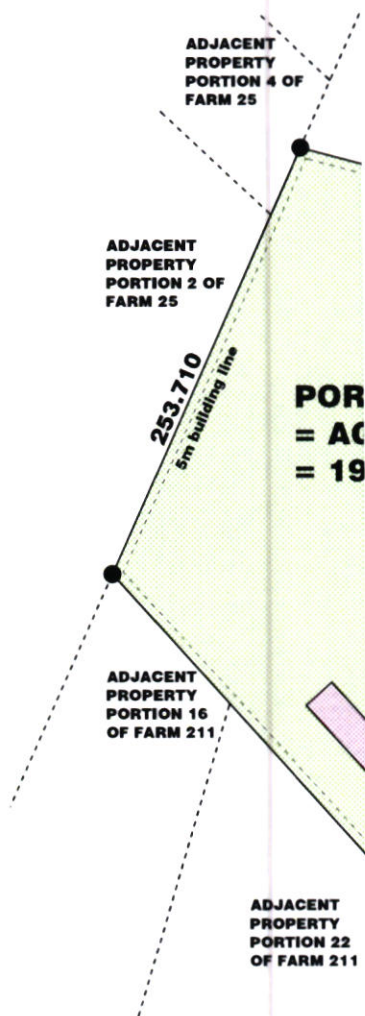
Meeting notes for pre-application scrutiny meeting on 12th August 2021 regarding Farm 221/10 Stellenbosch – Red Tractor Compost facility:

People present:

1. Stiaan Carstens <Stiaan.Carstens@stellenbosch.gov.za>;
2. Chrizelle Kriel <Chrizelle.Kriel@stellenbosch.gov.za>;
3. Pedro April <Pedro.April@stellenbosch.gov.za>;
4. Bernabe De La Bat <Bernabe.DeLaBat@stellenbosch.gov.za>;
5. Katherine Robinson <Katherine.Robinson@stellenbosch.gov.za>;
6. Kaizer Makati <Kaizer.Makati@stellenbosch.gov.za>;
7. Kaylin Coetzee <Kaylin.Coetzee@stellenbosch.gov.za>;
8. Viola Anthony <Viola.Anthony@stellenbosch.gov.za>;
9. Tanya de Villiers tanya@cndv.biz;
10. Michelle de Bruyn <exactplan@gmail.com>;
11. Monique Sham <monique@ms-ec.co.za>;
12. Lize Malan <lize@lizemalan.co.za>;
13. Renette Opperman renette@d-e-c-a.co.za>;
14. Nico van Zyl

Notes:

- Apply for Industrial zone – spot zone industrial activity on agricultural land
- Employee housing:
 - Indicate which house will be used for what function, make sure it fits within the definition of Agriculture or Industry housing - departure to provide more than one house under Industry and additional use application to provide more than one house under Agriculture
- In the motivation we need to indicate the full extent of the operation, for instance what functions will be fulfilled onsite like admin, Ancillary uses, marketing etc. Make sure everything is indicated on the SDP including sizes & Indicate building lines – 5m and check if any building line departures will be needed
- Make sure the industry fits within the agricultural landscape with mitigating landscaping and building design.
- Contact Infrastructure services for the development charges and ask what they would require to assess
- Bernabe indicated that Bottelary rd at the farm is not classified as a scenic route.
- Illumination of road and building should fit into agriculture



• **SITE PLAN INDICATING
PROPOSED ZONING**
SCALE 1:2000

ZONING LEGEND

	AGRICULTURAL ZONE	196 823m ²
	INDUSTRIAL ZONE	149 245m ²
	TOTAL AREA	34 6068m²

PLEASE NOTE:

THESE ARE MUNICIPAL DRAWINGS ONLY AND MAY NOT BE USED AS CONSTRUCTION DRAWINGS. ANY DISCREPANCIES SHOULD BE BROUGHT TO THE DRAUGHTSPERSON'S ATTENTION PRIOR TO CONSTRUCTION. THE CONTRACTOR IS TO CHECK AND CONFIRM ALL DIMENSIONS AND LEVELS PRIOR TO THE SETTING OUT OF ANY BUILDING WORKS.

RED TRACTOR COMPOST

CLIENT: WYNLAND TRUST
PROPERTY: PORTION 10 OF FARM 211
STELLENBOSCH
ADDRESS: BOTTELARY ROAD
STELLENBOSCH
DRAWING: SITE DEVELOPMENT PLAN

REVISIONS:

• A	change done	date	person
• B	change done	date	person
• C	change done	date	person
• D	change done	date	person

DRAWING NUMBER:

01019-GLC-STB211_10-20210128

SCALE:

as shown

PAGE:

1 of 4

DATE:

2021-08-27

EXACT PLAN

enrichment Engineering

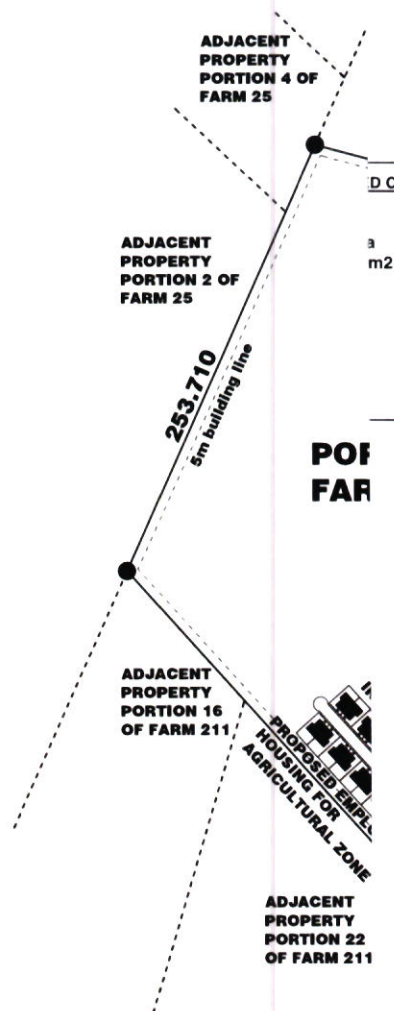
072 274 8123
021 922 8838
exactplan@exactplan.com

MICHELLE DE BRUYN
SACAP REG NO: CAD 20844

102 DE HULK WAY
PENHILL ESTATE

TEL: 072 2748 123
EMAIL: EXACTPLAN@GMAIL.COM

COPYRIGHT SUBSISTS OVER THIS DRAWING AND REMAINS THE PROPERTY OF THE DESIGNERS. ©



LEGEND

	CADASTRAL BOUNDARY LINE
	MUNICIPAL BUILDING LINE
	LINE OF FENCING
	PROPOSED BUILDINGS
	RIGHT OF WAY SERVITUDE
	INTERNAL ACCESS ROAD

D CALCULATION:

3
m²

BULK CALCULATIONS (MAXIMUM FOR WHICH SHALL BE APPLIED FOR)

AGRICULTURAL ZONE - MAIN HOUSE	600m ²
AGRICULTURAL ZONE - SECOND DWELLING	500m ²
AGRICULTURAL ZONE - STAFF HOUSING (10 UNITS)	560m ²
INDUSTRIAL ZONE - WAREHOUSE	7 500m ²
INDUSTRIAL ZONE - SHED	450m ²
INDUSTRIAL ZONE - STAFF HOUSING (10 UNITS)	560m ²
TOTAL AREA	10 170m²

PARKING CALCULATIONS

LAND USE CATEGORY	OFF-STREET PARKING REQUIRED	NO OF PARKING REQUIRED	NO OF PARKING PROVIDED	DOES THE PROPOSAL COMPLY?
INDUSTRIAL	1.5 BAYS PER 100m ² OF GLA	119 BAYS	145 BAYS	YES
RESIDENTIAL DWELLING HOUSES	2 BAY PER DWELLING	44 BAYS	44 BAYS	YES

PLEASE NOTE:

THESE ARE MUNICIPAL DRAWINGS ONLY AND MAY NOT BE USED AS CONSTRUCTION DRAWINGS. ANY DISCREPANCIES SHOULD BE BROUGHT TO THE DRAUGHTSPERSON'S ATTENTION PRIOR TO CONSTRUCTION. THE CONTRACTOR IS TO CHECK AND CONFIRM ALL DIMENSIONS AND LEVELS PRIOR TO THE SETTING OUT OF ANY BUILDING WORKS.

RED TRACTOR COMPOST

CLIENT:	WYNLAND TRUST
PROPERTY:	PORTION 10 OF FARM 211 STELLENBOSCH
ADDRESS:	BOTTELARY ROAD STELLENBOSCH
DRAWING:	SITE DEVELOPMENT PLAN

REVISIONS:

• A	change done	date	person
• B	change done	date	person
• C	change done	date	person
• D	change done	date	person

DRAWING NUMBER:

01019-GLC-STB211_10-20210128

SCALE:

as shown

PAGE:

2 of 4

DATE:

2021-08-27

EXACT PLAN

architectural draughting

072 274 8173
021 562 9646
exactplan@gmail.com

MICHELLE DE BRUYN
SACAP REG NO: CAD 20844

102 DE HULK WAY
PENHILL ESTATE

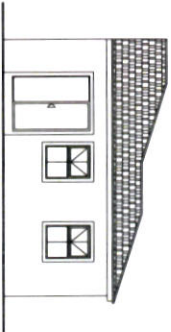
TEL: 072 2748 123

EMAIL: EXACTPLAN@GMAIL.COM

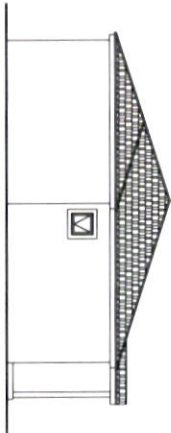
COPYRIGHT SUBSISTS OVER THIS DRAWING AND REMAINS THE PROPERTY OF THE DESIGNERS.

- **SITE PLAN INDICATING
USE OF LAND**
SCALE 1:2000

TYPICAL STAFF ACCOMMODATION UNIT FOR BOTH AGRICULTURAL AND INDUSTRIAL ZONES



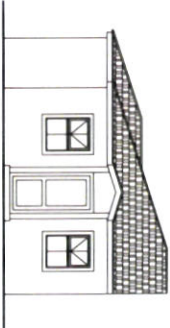
ELEVATION
SCALE 1:100



ELEVATION
SCALE 1:100



ELEVATION
SCALE 1:100



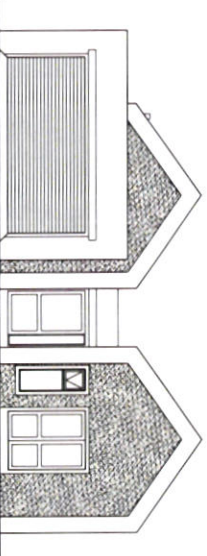
ELEVATION
SCALE 1:100

TYPICAL FLOOR PLAN
SCALE 1:100

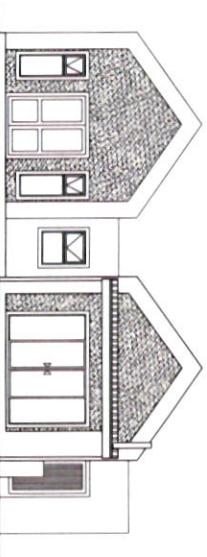
TYPICAL SECOND DWELLING / MANAGER'S HOUSE UNIT FOR AGRICULTURAL ZONE



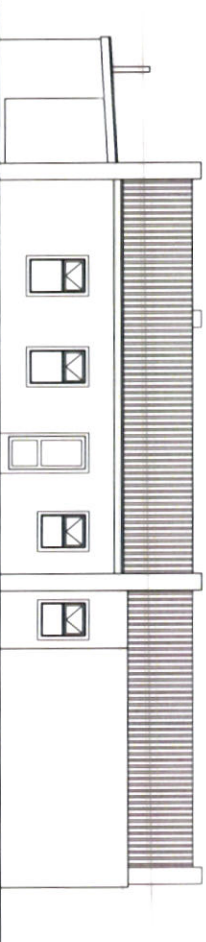
ELEVATION
SCALE 1:100



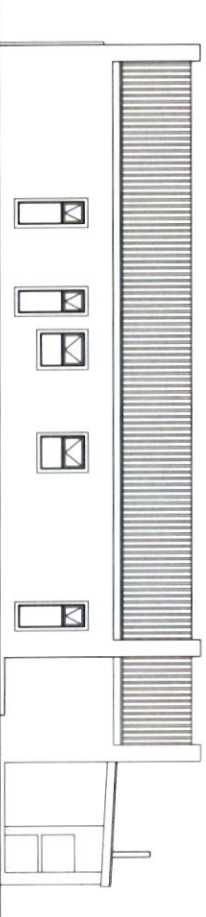
ELEVATION
SCALE 1:100



ELEVATION
SCALE 1:100



ELEVATION
SCALE 1:100



TYPICAL FLOOR PLAN
SCALE 1:100

RED TRACTOR COMPOST

CLIENT: WYNLAND TRUST
PROPERTY: PORTION 10 OF FARM 211 STELLENBOSCH
ADDRESS: BOTTELARY ROAD STELLENBOSCH
DRAWING: SITE DEVELOPMENT PLAN

REVISIONS:
A change done
B change done
C change done
D change done

DRAWING NUMBER: 01019-QLC-ST12211_10-20210128

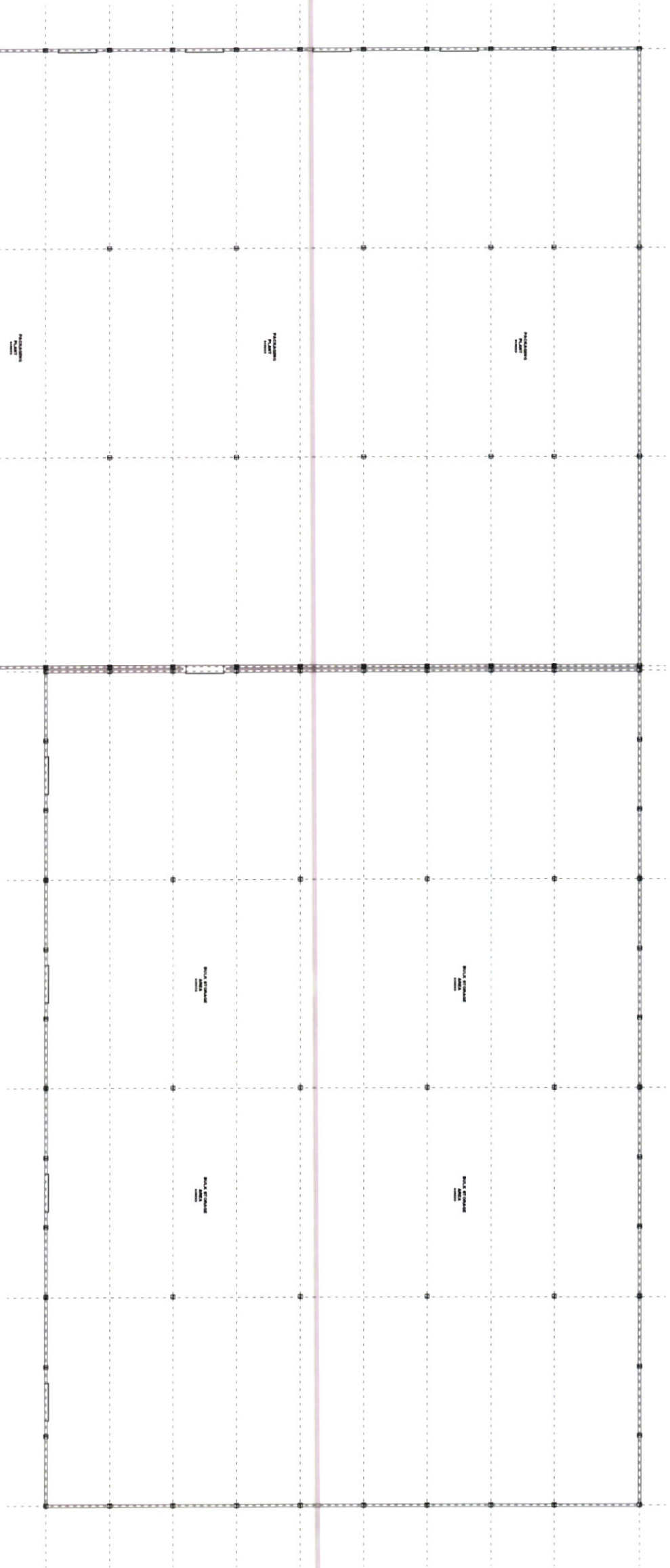
SCALE: as shown
PAGE: 3 of 4
DATE: 2021-08-27

E-FACT PLAN

MICHELLE DE BRUYN
SACAP REG NO: CAD 20844
102 DE HULK WAY
PENHILL ESTATE
TEL: 072 2748 123
EMAIL: EXACTPLAN@GMAIL.COM

COPYRIGHT SUBSISTS OVER THIS DRAWING AND REMAINS THE PROPERTY OF THE DESIGNERS

PLEASE NOTE:
THESE ARE MUNICIPAL DRAWINGS ONLY AND MAY NOT BE USED AS CONSTRUCTION DRAWINGS.
ANY CHANGES SHOULD BE BROUGHT TO THE ATTENTION OF THE DESIGNER PRIOR TO CONSTRUCTION.
THE CONTRACTOR IS TO CHECK AND CONFIRM ALL DIMENSIONS AND LEVELS PRIOR TO THE SETTING OUT OF ANY BUILDING WORKS.



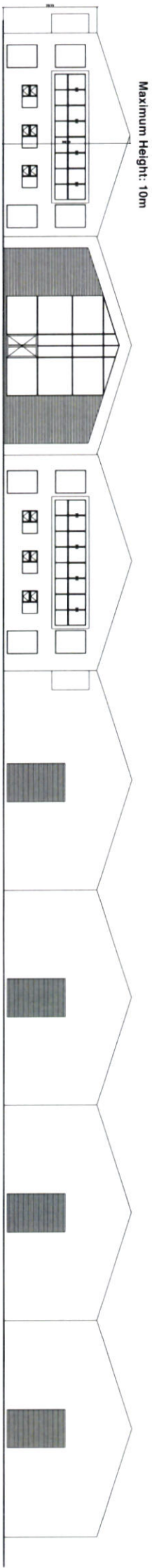
PROPOSED WAREHOUSE

GROUND FLOOR: 6895m²
FIRST FLOOR: 515m²

TOTAL: 7410m²



FLOOR PLAN FOR WAREHOUSE
AND PACKAGING AREA
SCALE 1:200



ELEVATION FOR WAREHOUSE
AND PACKAGING AREA
SCALE 1:200

PLEASE NOTE:

THESE ARE MUNICIPAL DRAWINGS ONLY AND MAY NOT BE USED AS
CONSTRUCTION DRAWINGS.
ANY PERSONS SHOULD BE BROUGHT TO THE
DRAWING PERSON'S ATTENTION PRIOR TO CONSTRUCTION.
THE CONTRACTOR IS TO CHECK AND CONFIRM ALL DIMENSIONS AND
LEVELS PRIOR TO THE SETTING OUT OF ANY BUILDING WORKS.

RED TRACTOR
COMPOST

CLIENT: WYNLAND TRUST

PROPERTY: PORTION 10 OF FARM 211
STELLENBOSCH

ADDRESS: BOTTELARY ROAD
STELLENBOSCH

DRAWING: SITE DEVELOPMENT PLAN

REVISIONS:

	A	B	C	D	change done	date	person
•	A	change done	date	person			
•	B	change done	date	person			
•	C	change done	date	person			
•	D	change done	date	person			

DRAWING NUMBER:

01019-DLC-STB211_10-20210128

SCALE:

as shown

PAGE:

4 of 4

DATE:

2021-08-27

EXACT PLAN

production company

01019-DLC-STB211_10-20210128

MICHELLE DE BRUYN
SACAP REG NO: CAD 20844

102 DE HULK WAY
PENHILL ESTATE

TEL: 072 2748 123
EMAIL: EXACTPLAN@GMAIL.COM

COPYRIGHT SUBSISTS OVER THIS DRAWING AND REMAINS THE PROPERTY
OF THE DESIGNERS

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
PROPOSED COMPOST FACILITY
ON PORTION 10 OF FARM NUMBER 211, BOTTELARY ROAD NEAR BRACKENFELL**

**Report by
Johann Lanz**

17 May 2021

Table of Contents

Executive Summary.....	1
1 Introduction.....	2
2 Project description	2
3 Terms of reference	3
4 Methodology of study.....	5
4.1 Methodology for assessing the agro-ecosystem	5
5 Assumptions, uncertainties or gaps in knowledge or data	6
6 Site sensitivity verification	6
7 Assessment of agricultural impact.....	9
7.1 General.....	9
7.2 Impact identification and discussion	10
7.3 Cumulative impacts	10
7.4 Comparative assessment of alternatives.....	10
7.5 Impacts of the no-go alternative	10
7.6 Micro-siting to minimize fragmentation and disturbance of agricultural activities ...	11
7.7 Confirmation of linear activity impact.....	11
7.8 Impact assessment and statement.....	11
8 Environmental Management Programme Inputs	12
9 Conclusions	12
10 References.....	12
Appendix 1: Specialist Curriculum Vitae	14
Appendix 2: Declaration of the specialist	15

EXECUTIVE SUMMARY

The key findings of this study are:

- The land capability of the investigated site varies from 7 to 9. A value of 9 gives high agricultural sensitivity. The land capability of 9 is however disputed by this assessment, because of the depth and drainage limitations of the soil. The entire site was found by this assessment to be of medium sensitivity for impacts on agricultural resources.
- The dominant soils of the site are shallow, duplex soils with limited drainage, of the Sterkspruit, Kroonstad and Estcourt soil forms.
- The agricultural productivity of the land is limited not only by the soils but also by the small size of the property.
- The site has not been cultivated or had any significant agricultural production on it for more than ten years.
- Only one agricultural impact was identified - loss of agricultural potential by occupation of land. This was assessed as not being of high significance.
- No mitigation measures for the protection of soil resources are considered necessary for this development because it poses negligible risk to soil resources.
- 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. The proposed development is therefore acceptable. This is substantiated by the facts that the proposed development will occupy land that is not currently utilised for agricultural production, and has very limited future production potential, the loss of agricultural potential by occupation of land is not permanent, and the proposed development poses negligible risk in terms of causing a future loss of agricultural potential by soil degradation.
- From an agricultural impact point of view, it is recommended that the proposed development be approved.

1 INTRODUCTION

Environmental authorisation is being sought for a proposed compost facility on Portion 10 of Farm number 211, Bottelary Road near Brackenfell (see location in Figure 1). In terms of the National Environmental Management Act (NEMA), an application for environmental authorisation requires an agricultural assessment, in this case an Agricultural Compliance Statement (see terms of reference, below).

Johann Lanz was appointed as an independent agricultural specialist to provide the Agricultural Compliance Statement. The objective and focus of an Agricultural Compliance Statement is to assess whether or not the proposed development will have an unacceptable agricultural impact or not, and based on this, to make a recommendation on whether it should be approved or not.



Figure 1. Locality map of the farm portion on which the compost facility is proposed.

2 PROJECT DESCRIPTION

The facility will receive and compost vegetation (green waste) and kraal manure (cow excrement and pen material) for the production of compost and related soil amendments. Other waste types such as pig and chicken manure which can be used for composting are not likely to be used due to

the odour impacts associated with these forms of manure. The operation will divert significant volumes of vegetation waste and manure from landfill.

The property is 34.52ha in extent and the facility will include the following:

- Decomposing field: 126 450m²
- Offices, warehouse and packaging area: 17 835m²
- Internal roads, parking and vehicular circulation: 13 715m²
- Workers cottages / houses: 5 925m²

Machinery and equipment that will be used in the process will include a front-end loader, portable screeners and windrow composting machine(s). The front-end loader will be used for a variety of operations including loading the screener, turning large heaps, and mixing input and output products.

Buildings associated with the composting facility will include the site offices (with ablution facilities), warehouse with covered storage and packaging area, workers accommodation and a main house for the manager.

The composting facility is likely to be situated around a central stormwater collection pond that will be lined with clay prior to any composting activities commencing. This will ensure that runoff from the composting area will not enter the surrounding watercourses.

For agricultural impacts, the exact nature of the different infrastructure within a development has very little bearing on the significance of impacts. What is of most relevance and addressed in this assessment, therefore, is simply the total footprint of the facility that excludes agricultural land use or impacts agricultural land.

3 TERMS OF REFERENCE

The terms of reference for this study is 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 site includes land that is classified by the national web-based environmental screening tool as high sensitivity for impacts on agricultural resources. The level of agricultural assessment required in terms of the protocol (and hence in terms of NEMA) for sites that include high sensitivity is an Agricultural Agro-Ecosystem Specialist Assessment. The protocol also requires that a Site Sensitivity

Verification be done.

The Site Sensitivity Verification has disputed the high sensitivity and found the entire site to be of medium sensitivity (see Section 6). The agricultural protocol also states:

Should the below apply, an Agricultural Compliance Statement must be submitted (rather than an Agricultural Agro-Ecosystem Specialist Assessment).

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.

The above does apply in this case and therefore this assessment is an Agricultural Compliance Statement.

The terms of reference for such an assessment, as stipulated in the 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).
2. The compliance statement must:
 1. be applicable to the preferred site and proposed development footprint;
 2. confirm that the site is of “low” or “medium” sensitivity for agriculture (Section 6); and
 3. indicate whether or not the proposed development will have an unacceptable impact on the agricultural production capability of the site (Section 7.8).
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 7.6);
 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 7.8);
6. any conditions to which this statement is subjected (Section 9);
 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 7.7);
 8. where required, proposed impact management outcomes or any monitoring requirements for inclusion in the EMPr (Section 8); and
 9. a description of the assumptions made and any uncertainties or gaps in knowledge or data (Section 5).

4 METHODOLOGY OF STUDY

4.1 Methodology for assessing the agro-ecosystem

The assessment was based on a field investigation of soils and agricultural conditions across the site, as well as a desktop analysis of existing soil and agricultural potential data for the site.

The following sources of existing information 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.
- Satellite imagery of the site and surrounds was sourced from Google Earth.

The aim of the on-site Site Sensitivity Verification was to:

1. ground truth cultivation status and consequent agricultural sensitivity;
2. ground truth the land type soil data and achieve an understanding of specific soil conditions, and the variation of these across the site;
3. assess on-site agricultural conditions;

This was achieved by a drive and walk-over investigation across the site. The site investigation was

conducted for several hours on 22 October 2020.

The soil investigation was based on auger samples as well as indications of the surface conditions and topography. Soils were classified according to the South African soil classification system (Soil Classification Working Group, 1991). This level of soil assessment is considered entirely adequate for an understanding of on-site soil potential.

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 fact that the assessment was done in summer has no bearing on its results.

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 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, 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 at least high sensitivity. This is because there is a scarcity of arable production land in South Africa.

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 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 a cultivated land, agricultural sensitivity is purely a function of land capability. The land capability of the investigated site varies from 7 to 9. Land capability values of 7 to 8 give medium agricultural sensitivity and a value of 9 gives high agricultural sensitivity. The small scale differences in land capability (pixels) across the project area are not very significant and are more a function of how the land capability data is generated by modelling, than actual meaningful differences in agricultural potential on the ground.

The dominant soils of the land type are shallow, duplex soils with limited drainage, of the Sterkspruit, Kroonstad and Estcourt soil forms. The field assessment confirmed the dominance of shallow, duplex soils of limited drainage across much of the site. The very limited drainage of soils in the centre of the eastern half of the site is clearly visible in the satellite image of the site dated 3 April 2021, shown in Figure 3. Because of the depth and drainage limitations of the soil, the land capability of 9 is disputed by this assessment. The entire site was found to be of medium sensitivity for impacts on agricultural resources.

The agricultural productivity of the land is limited not only by the soils but also by the small size of the property which makes many forms of agricultural production non-viable due to a lack of economy of scale. The site has not been cultivated or had any significant agricultural production on it for more than ten years.

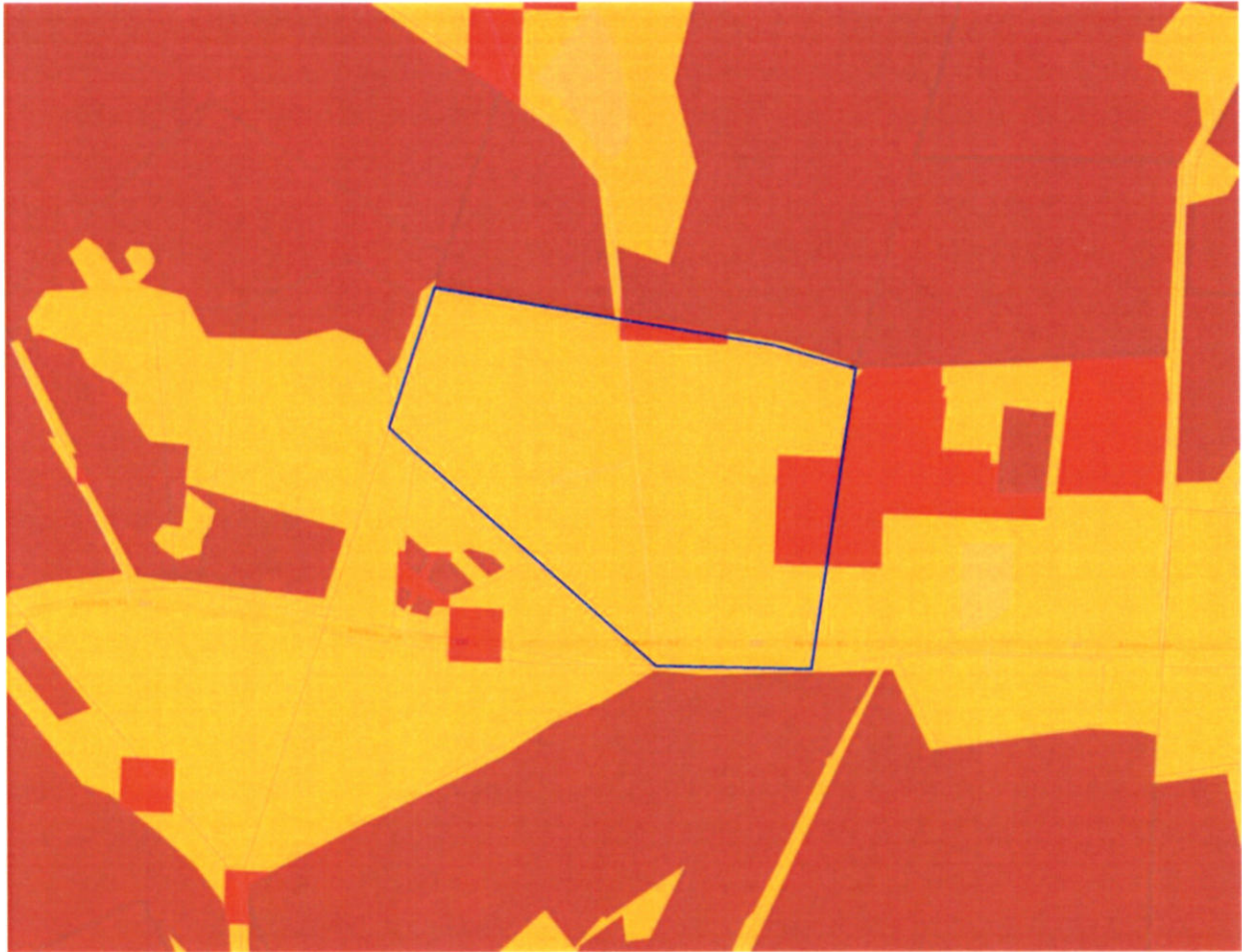


Figure 2. The proposed development site (blue outlines) overlaid on agricultural sensitivity, as given by the screening tool (green = low; yellow = medium; red = high; dark red = very high).



Figure 3. Satellite image of the site showing soil drainage limitations (green and dark colours) in the centre of the eastern half of the site (image date: 3 April 2021).

7 ASSESSMENT OF AGRICULTURAL IMPACT

7.1 General

The focus and defining question of an agricultural impact assessment is to determine to what extent a proposed development will compromise (negative impacts) or enhance (positive impacts) current and/or potential future agricultural production. The significance of an impact is therefore a direct function of the degree to which that impact will affect current or potential future agricultural production. If there will be no impact on production, then there is no agricultural impact. Impacts that degrade the agricultural resource base pose a threat to production and therefore are within the scope of an agricultural impact assessment.

7.2 Impact identification and discussion

Only one agricultural impact is relevant in this case:

1. **Loss of agricultural potential by occupation of land** - Agricultural land directly occupied by the development infrastructure will become unavailable for agricultural use.

The duration of this impact will be for the lifetime of the composting operation. When that ceases to operate, the land will again become available for agricultural activity. The significance of the impact is mitigated by the fact that the land is not currently being used for agricultural production and that its future production potential is very limited.

7.3 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 urban expansion. The cumulative impact of agricultural land loss on the urban edge of Western Cape towns is significant. However the agricultural priority should be to conserve future agricultural production and, as has been shown above, the property has fairly limited capacity for future agricultural production. Therefore it is a property to which inevitable urban expansion can be steered without a high loss of agricultural production potential.

Due to the considerations discussed above, the cumulative impact of loss of agricultural land use will not have an unacceptable negative impact on the agricultural production capability of the area. The proposed development is therefore acceptable in terms of cumulative impact, and it is therefore recommended that it be approved.

7.4 Comparative assessment of alternatives

Due to the nature of the impacts and the fairly uniform agricultural potential conditions across the site, there will be no material difference between the agricultural impacts of any alternative layouts within the site boundaries and any technology alternatives. All possible alternatives are considered acceptable.

7.5 Impacts 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 and because of the limited production potential of the site, there is very little difference between the agricultural impacts of the no-go alternative versus the development.

7.6 Micro-siting to minimize fragmentation and disturbance of agricultural activities

The agricultural protocol requires confirmation that all reasonable measures have been taken through micro-siting to minimize fragmentation and disturbance of agricultural activities. However, the agricultural uniformity, the fact that no agriculture is taking place on site, and the nature of the agricultural impact mean that the exact positions of all infrastructure will not make any material difference to agricultural impacts.

7.7 Confirmation of linear activity impact

Confirmation of the linear activity impact is not applicable in this case.

7.8 Impact assessment and statement

An Agricultural Compliance Statement is not required to formally rate agricultural impacts. It is only required to indicate whether or not the proposed development will have an unacceptable impact on the agricultural production capability of the site. It must provide a substantiated statement on the acceptability, or not, of the proposed development and a recommendation on the approval, or not of the proposed development.

The conclusion of this assessment is that the proposed development will not have an unacceptable negative impact on the agricultural production capability of the site. The proposed development is therefore acceptable. This is substantiated by the following points:

- The proposed development will occupy land that is not currently utilised for agricultural production, and has very limited future production potential.
- The loss of agricultural potential by occupation of land is not permanent. The land will become available again for agricultural use once the proposed activity ceases.
- The proposed development poses negligible risk in terms of causing a future loss of agricultural potential by soil degradation.

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

8 ENVIRONMENTAL MANAGEMENT PROGRAMME INPUTS

No mitigation measures for the protection of soil resources are considered necessary for this development because it poses negligible risk to soil resources.

9 CONCLUSIONS

The land capability of the investigated site varies from 7 to 9. A value of 9 gives high agricultural sensitivity. The land capability of 9 is however disputed by this assessment, because of the depth and drainage limitations of the soil. The entire site was found by this assessment to be of medium sensitivity for impacts on agricultural resources.

The agricultural productivity of the land is limited not only by the soils but also by the small size of the property. The site has not been cultivated or had any significant agricultural production for more than ten years.

Only one agricultural impact was identified - loss of agricultural potential by occupation of land. This was assessed as not being of high significance. No mitigation measures for the protection of soil resources are considered necessary for this development because it poses negligible risk.

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. The proposed development is therefore acceptable. This is substantiated by the facts that the proposed development will occupy land that is not currently utilised for agricultural production, and has very limited future production potential, the loss of agricultural potential by occupation of land is not permanent, and the proposed development poses negligible risk in terms of causing a future loss of agricultural potential by soil degradation.

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.

10 REFERENCES

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.

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

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*.

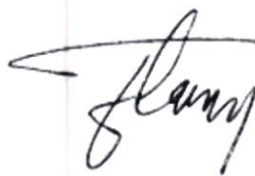
APPENDIX 2: DECLARATION OF THE SPECIALIST

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', with a stylized flourish above the name.

Date: **17 May 2021**

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

**AQUATIC SPECIALIST REPORT FOR THE PROPOSED RED TRACTOR COMPOST
FACILITY DEVELOPMENT OF PORTION 10 OF FARM 211 WELGELEGEN, IN
STELLENBOSCH**

MAY 2021



Prepared By:



Ms Toni Belcher

PO Box 455, Somerset Mall, 7137

Tel: (021) 851 0555

TABLE OF CONTENTS

1. BACKGROUND	4
2. TERMS OF REFERENCE.....	4
3. ASSUMPTIONS AND LIMITATIONS OF THE STUDY	4
4. USE OF THE REPORT.....	5
5. OVERVIEW OF THE STUDY AREA AND PROJECT PROPOSALS	7
5.1. REVIEW OF STUDY AREA.....	7
5.2. ACTIVITY DESCRIPTION.....	7
6. LEGISLATIVE AND CONSERVATION PLANNING REQUIREMENTS.....	9
6.1. NEMA AND ENVIRONMENTAL IMPACT ASSESSMENT (EIA) REGULATIONS.....	9
6.2. NATIONAL WATER ACT, 1998 (ACT NO. 36 OF 1998).....	9
7. PHYSICAL CHARACTERISTICS OF THE STUDY SITE	10
7.1. VISUAL CHARACTERISTICS	10
7.2. CLIMATE.....	11
7.3. GEOLOGY AND SOIL.....	12
7.4. FLORA.....	12
7.5. AQUATIC FEATURES.....	15
7.7. BIODIVERSITY CONSERVATION VALUE	15
7.6. LAND USE	15
8. ASSESSMENT OF FRESHWATER FEATURES AND THEIR SIGNIFICANCE	20
8.1. HISTORICAL MODIFICATION OF THE FRESHWATER FEATURES WITHIN THE SITE	20
8.2. DESCRIPTION OF FRESHWATER FEATURES.....	22
9. FRESHWATER IMPACT AND RISK ASSESSMENT	26
9.1. FRESHWATER IMPACT ASSESSMENT	27
9.2. RISK ASSESSMENT	29
10. CONCLUSION.....	29
11. REFERENCES.....	31
APPENDIX A: DECLARATION OF INDEPENDENCE	33
APPENDIX B: BACKGROUND AND QUALIFICATIONS OF SPECIALIST CONSULTANT	34
APPENDIX C: PRESENT ECOLOGICAL STATUS AND ECOLOGICAL IMPORTANCE AND SENSITIVITY FOR THE BOTTELARY RIVER	35
APPENDIX D: AQUATIC ECOLOGICAL ASSESSMENTS	36
PRESENT ECOLOGICAL STATUS OF THE BOTTELARY TRIBUTARY.....	36
PRESENT ECOLOGICAL STATUS OF THE WETLAND AREAS.....	38
ECOLOGICAL IMPORTANCE AND SENSITIVITY AND ECOSYSTEM SERVICES.....	40
APPENDIX E: CRITERIA FOR ASSESSMENT	43

APPENDIX F: RISK ASSESSMENT 46

LIST OF FIGURES

FIGURE 1. A TOPOGRAPHICAL MAP (3318DD) SHOWING THE LOCATION OF THE PROPOSED DEVELOPMENT SITE	6
FIGURE 2. ORTHOPHOTOGRAPH, TAKEN IN 2016, OF THE PROPERTY WITH THE 5M CONTOURS SHOWN	7
FIGURE 3. THE PROPOSED SPATIAL DEVELOPMENT PLAN FOR THE SITE	8
FIGURE 4. THE ELEVATION PROFILE FOR THE TRIBUTARY OF THE BOTTELARY RIVER, SHOWN IN GOOGLE EARTH. THE ARROW ON THE IMAGE AND THE CORRESPONDING LINE ON THE PROFILE INDICATES THE CONFLUENCE POINT OF THE TRIBUTARY WITH THE RIVER. THE RED RECTANGLE ON THE PROFILE INDICATES THE APPROXIMATE POSITION OF THE SITE ON THE RIVER. THE GRADIENT OF THE RIVER IS PARTICULARLY FLAT AT THIS POINT.	11
FIGURE 5. AVERAGE MONTHLY RAINFALL (FOR THE STUDY SITE (SCHULZE, 2009)).....	11
FIGURE 6. SOIL MAP FOR THE AREA (ENPAT DATA DOWNLOADED FROM CAPEFARMMAPPER, MAY 2021)	13
FIGURE 7. VEGETATION TYPES FOR THE STUDY AREA (SANBI. 2009 VEGETATION MAP, DOWNLOADED FROM CAPEFARMMAPPER MAY 2021).....	14
FIGURE 8. FEPA AND NWM WETLANDS FOR THE SITE AND ITS SURROUNDING AREA (RED POLYGON) (NFEPA RIVERS 2011 DOWNLOADED FROM CAPEFARMMAPPER MAY 2021).....	16
FIGURE 9. FEPA MAPPING FOR THE AREA SURROUNDING THE STUDY SITE (NFEPA RIVERS 2011 AVAILABLE FROM SANBI BIODIVERSITY GIS; DOWNLOADED MAY 2021)	17
FIGURE 10. WESTERN CAPE BIODIVERSITY SPATIAL PLAN FOR THE AREA SURROUNDING THE STUDY SITE (CAPENATURE. 2017 WCBSP DOWNLOADED FROM CAPEFARMMAPPER ON MAY 2021)	18
FIGURE 11. LAND COVER MAP FOR SURROUNDING AREA (CAPEFARMMAPPER, 2021)	19
FIGURE 12. AN AERIAL IMAGE TAKEN OF THE SITE IN 1938 OVERLAIN IN GOOGLE EARTH WITH THE SITE BOUNDARIES AND THE BOTTELARY TRIBUTARY SHOWN.....	20
FIGURE 13. AN AERIAL IMAGE TAKEN OF THE SITE IN 1953 (TOP) AND 1966 (BOTTOM) OVERLAIN IN GOOGLE EARTH WITH THE SITE BOUNDARIES AND THE BOTTELARY TRIBUTARY SHOWN	21
FIGURE 14. GOOGLE EARTH IMAGE, DATED SEPTEMBER 2010, SHOWING THE SITE AND SURROUNDING AREA, WITH THE BOTTELARY TRIBUTARY AND THE DAMS IN THE AREA SHOWN	22
FIGURE 15. GOOGLE EARTH IMAGE (MARCH 2021) WITH THE WATERCOURSES AND WETLAND AREAS WITHIN THE SITE	23
FIGURE 15. VIEW OF THE BOTTELARY TRIBUTARY AND VALLEY BOTTOM WETLAND DOWNSTREAM OF THE INSTREAM DAM	24
FIGURE 16. VIEW OF THE REMNANT HILLSLOPE SEEP WITHIN THE SITE	24
FIGURE 17. PHOTOGRAPHS OF VALLEY BOTTOM WETLAND UPSTREAM OF THE INSTREAM DAM (TOP TWO IMAGES) AND THE INSTREAM DAM WITH THE OFF-CHANNEL DAM BEHIND IT IN THE BOTTOM IMAGE. BLUE ARROWS INDICATE FLOW DIRECTION.	25
FIGURE 18. GOOGLE EARTH IMAGE WITH THE MAPPED AQUATIC FEATURES ON THE SITE, OVERLAID WITH THE SITE AND ZONING PLAN FOR THE SITE ...	26

LIST OF TABLES

TABLE 1: KEY WATER RESOURCES INFORMATION.....	4
TABLE 2. ASSESSMENTS OF HABITAT INTEGRITY AND ECOLOGICAL IMPORTANCE AND SENSITIVITY OF THE STREAM AND WETLAND AREAS.....	23
TABLE 3. IMPACT TABLE OF THE PROPOSED DEVELOPMENT OF THE SITE ON THE IDENTIFIED AQUATIC FEATURES (IMPACT ASSESSMENT METHODOLOGY INCLUDED IN APPENDIX E)	27
TABLE 4. A SUMMARY OF THE RISK ASSESSMENT FOR THE PROPOSED DEVELOPMENT.....	29

1. BACKGROUND

It is proposed to develop Portion 10 of Farm No. 211 Welgelegen in Stellenbosch. The site, approximately 35 hectares in extent, being considered for development of a composting site. The site is located on Bottelary Road between Brackenfell and Koelenhof. The surrounding area comprises primarily of agricultural use but it is becoming increasingly urbanised. The site is located north of Bottelary River, a tributary of the Kuils River in the Kuils/Eerste River System. Several wetland areas occur within the site and particularly along the Bottelary River. This aquatic specialist assessment report is intended to inform the decision-making process for the proposed development of the site.

Table 1: Key water resources information

Descriptor	Name / Details	Notes
Water Management Area	Berg Olifants WMA	
Catchment Area	Kuils / Eerste River	
Quaternary Catchment	G22E	
Present Ecological State	D (Largely modified)	Bottelary River (Dept Water Affairs, 2012)
Ecological Importance and Sensitivity	Ecological Importance: Moderate Ecological Sensitivity: High	
Water resource potentially impacted	Wetlands associated with the Bottelary River	
Latitude	33°52'39.95"S	Location of the site
Longitude	18°46'52.5"E	

2. TERMS OF REFERENCE

The suggested and agreed upon scope of works for this Aquatic specialist assessment is as follows:

Task 1: Freshwater Report

1. Literature survey and initialisation;
2. Site assessment and field work;
3. Freshwater assessment and report; and
4. Review and liaison.

3. ASSUMPTIONS AND LIMITATIONS OF THE STUDY

Input into this report was informed by a combination of desktop assessments of existing freshwater ecosystem information for the study area and catchment, as well as an assessment of the freshwater features at the site. The site was visited for a single day in October 2021, at the end of a wet winter season and was suitable for the assessment.

During the field visit, the characterisation and integrity assessments of the freshwater features were undertaken. Mapping of the freshwater features was undertaken using PlanetGIS and Google Earth Professional. The SANBI Biodiversity GIS and CapeFarmMapper websites were consulted to identify any constraints in terms of fine-scale

biodiversity conservation mapping as well as possible freshwater features mapped in the Freshwater Ecosystem Priority Areas maps. This information/data was used to inform the resource protection-related recommendations.

Limitations and uncertainties often exist within the various techniques adopted to assess the condition of ecosystems. The following techniques and methodologies were utilized to undertake this study:

- The guideline document, “A Practical Field Procedure for the Identification and Delineation of Wetlands and Riparian Areas” document, as published by DWAF (2005) was followed for the delineation of the riparian and wetland areas.
- The wetlands were subsequently classified according to their hydro-geomorphic determinants based on a classification system devised by Kotze *et al* (2004) and SANBI (2009). Notes were made on the levels of degradation in the wetlands based on field experience and a general understanding of the types of systems present.
- A Present Ecological State (PES) was conducted for the wetlands identified and delineated within the study area.
- The functional wetland assessment technique, WET-EcoServices, developed by Kotze *et al* (2009) was used to indicate the ecological benefits and services provided by delineated wetland habitat.
- The ecological importance and sensitivity assessment was conducted according to the guidelines as developed by DWAF (1999).
- Lists of plants, both alien and indigenous are to describe the general and dominant habitat conditions and not comprehensive. A comprehensive botanical survey was thus not conducted as part of this freshwater assessment.

The level of aquatic assessment undertaken was considered to be adequate for this study.

4. USE OF THE REPORT

This report reflects the professional judgment of its author. The full and unedited content of this should be presented to the client. Any summary of these findings should only be produced in consultation with the author.

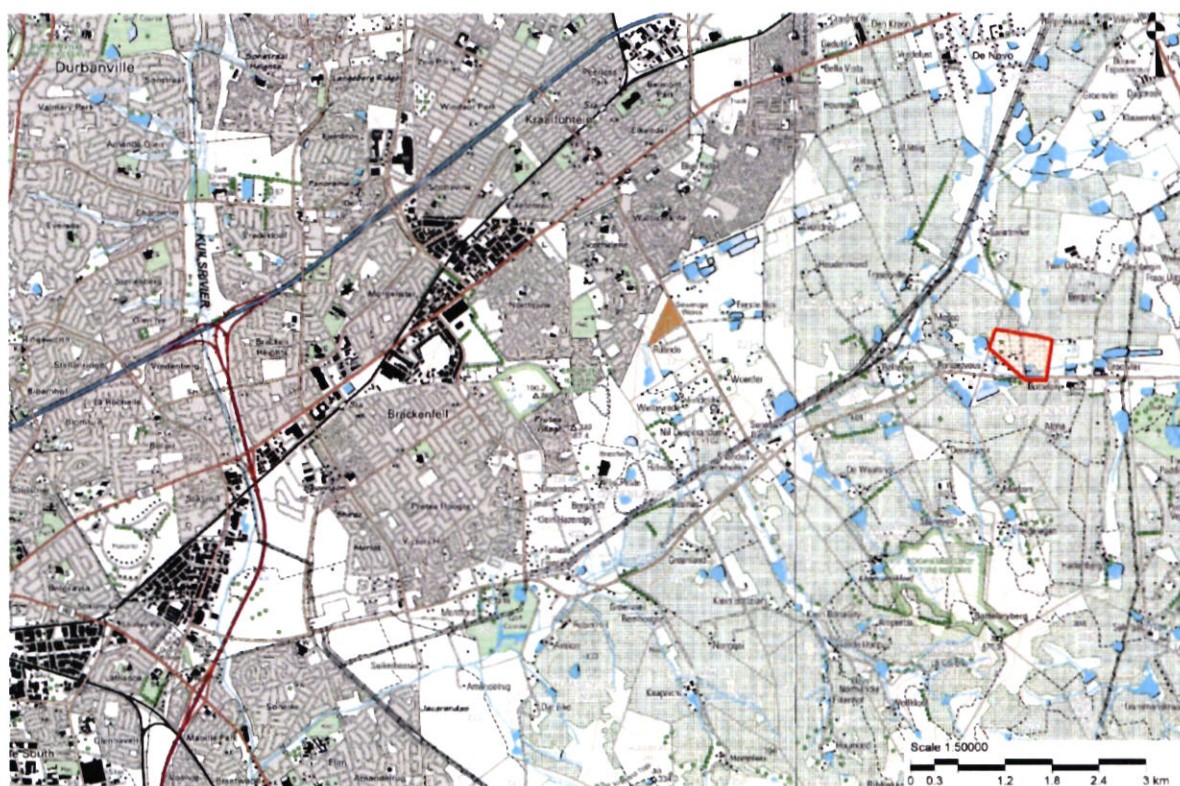


Figure 1. A topographical map (3318DD) showing the location of the proposed development site

5. OVERVIEW OF THE STUDY AREA AND PROJECT PROPOSALS

5.1. REVIEW OF STUDY AREA

The study site is located outside of the town of Stellenbosch, north of the Bottelary (M23) Road between Brackenfell and Koelenhof in the Stellenbosch Winelands. The area is characterised by predominantly rural and agricultural properties. The area slopes gently towards the south of the site, to the tributary of the Bottelary River, a tributary of the Kuils/Eerste River System. Two dams are located in the southern portion of the site, with one being an instream dam on the tributary (Figure 2). Vegetation within the site, although not completely transformed, is in a disturbed condition. Seasonal wetlands occur in the south and eastern portions of the site.

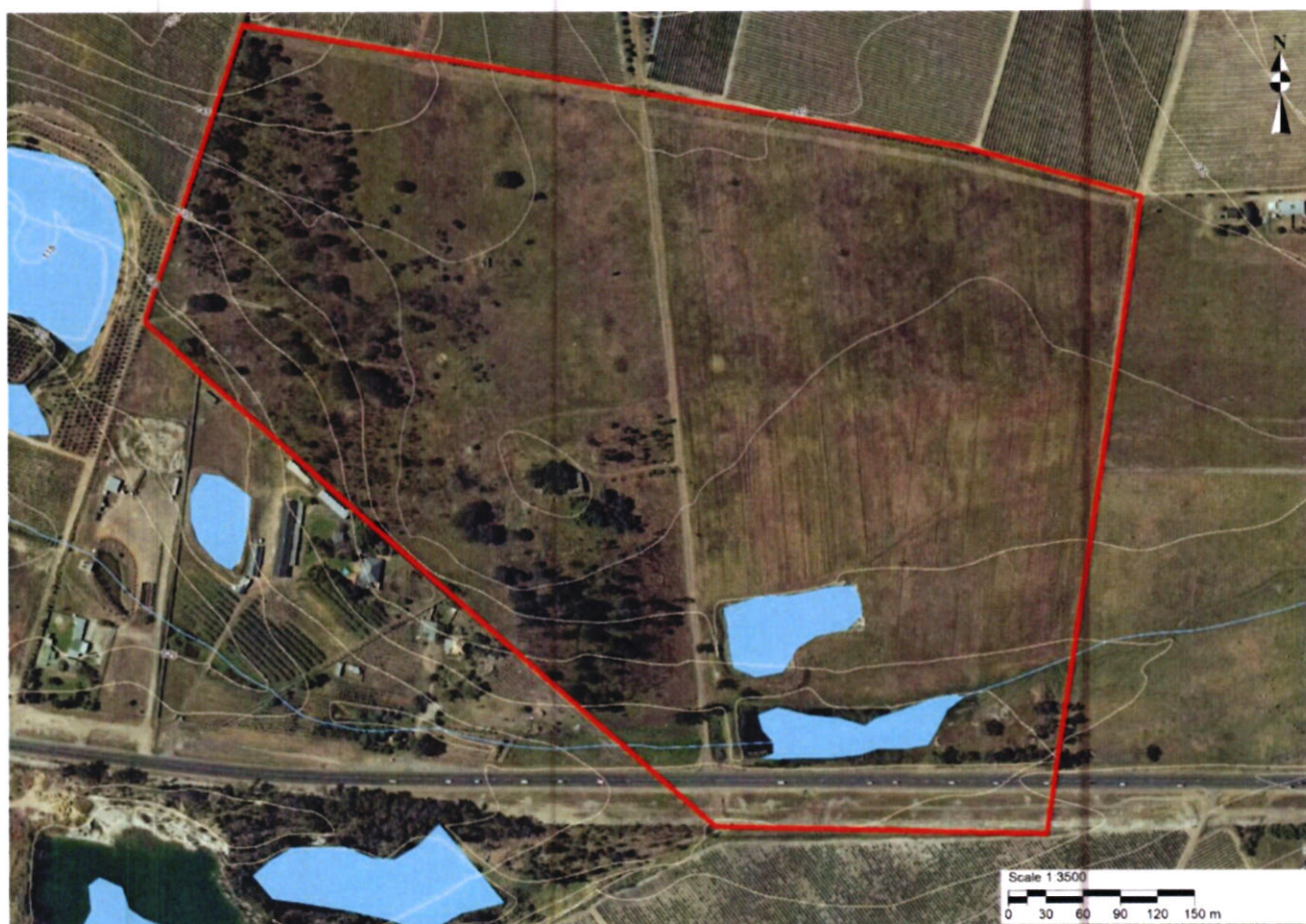


Figure 2. Orthophotograph, taken in 2016, of the property with the 5m contours shown

5.2. ACTIVITY DESCRIPTION

The development proposed for the site comprises of the following (Figure 3):

- approximately 12.5 ha of the north-eastern portion of the site being utilised for the composting activities;
- The north-western portion is proposed to contain the main house, workshop/packaging area and offices, manager's house and the staff accommodation; and
- the remaining portions of the site in the southern and western extents will remain as open fields.

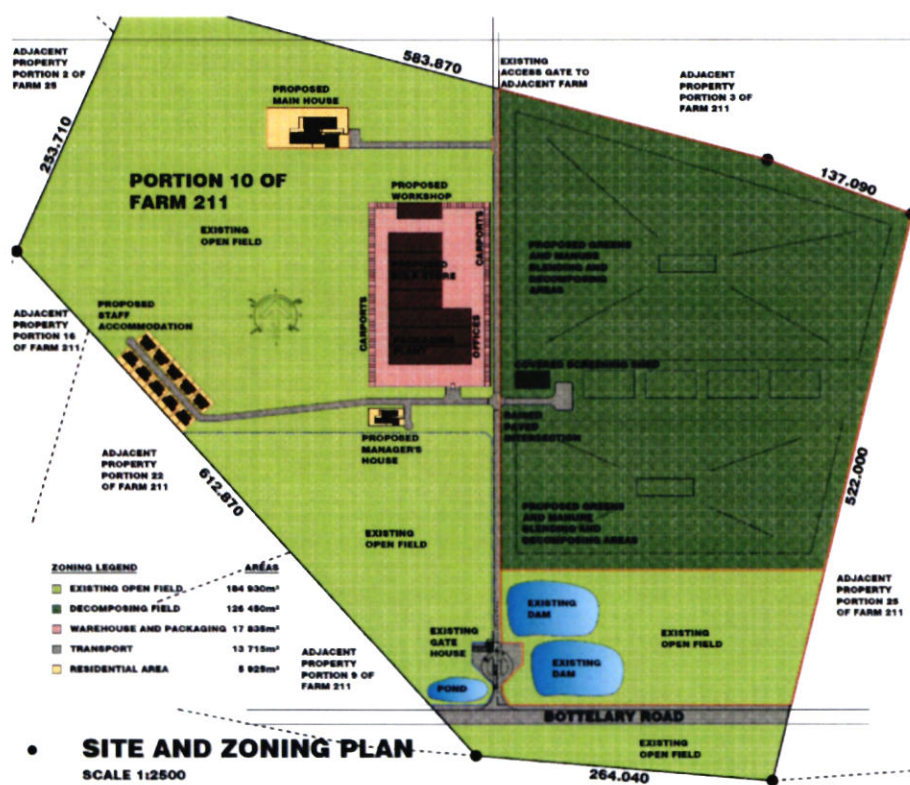


Figure 3. The proposed spatial development plan for the site

6. LEGISLATIVE AND CONSERVATION PLANNING REQUIREMENTS

The proposed activity needs to take cognizance of the legislative requirements, policies, strategies, guidelines and principles of the relevant regulatory documents of the Stellenbosch Municipality, such as the Biodiversity Network Framework, as well as the National Water Act (NWA) and the National Environmental Management Act (NEMA).

6.1. NEMA AND ENVIRONMENTAL IMPACT ASSESSMENT (EIA) REGULATIONS

NEMA is the overarching piece of legislation for environmental management in South Africa and includes provisions that must be considered to give effect to the general objectives of integrated environmental management. These provisions are contained in Section 24 (4)(a)(b) of the Act, and will be considered during the EIA process. Activities listed in terms of Chapter 5 of NEMA in Government Notice No. R. 983, 984 and 985, dated 4 December 2014, as amended, trigger a mandatory Basic Assessment, or even a full scoping EIA process, before development. Many of the listed activities relate to activities within or adjacent to aquatic ecosystems.

6.2. NATIONAL WATER ACT, 1998 (ACT NO. 36 OF 1998)

The purpose of the National Water Act, 1998 (NWA) is to provide a framework for the equitable allocation and sustainable management of water resources. Both surface and groundwater sources are redefined by the Act as national resources which cannot be owned by any individual, and rights to which are not automatically coupled to land rights, but for which prospective users must apply for authorisation and register as users. The NWA also provides for measures to prevent, control and remedy the pollution of surface and groundwater sources.

The Act aims to regulate the use of water and activities (as defined in Part 4, Section 21 of the NWA), which may impact water resources through the categorisation of 'listed water uses' encompassing water abstraction and flow attenuation within catchments as well as the potential contamination of water resources, where the Department of Water and Sanitation (DWS) is the administering body in this regard. Defined water use activities require the approval of DWS in the form of a General Authorisation or Water Use Licence authorisation. There are restrictions on the extent and scale of listed activities for which General Authorisations apply. Those water use activities that may apply for this assessment are as follows:

- Section 21 (c) – Impeding or diverting flow in a watercourse; and/or
- Section 21 (i) – Changing the bed, banks or characteristics of a watercourse.

Section 22(3) of the National Water Act allows for a responsible authority (DWS) to dispense with the requirement for a Water Use Licence if it is satisfied that the purpose of the Act will be met by the grant of a licence, permit or authorisation under any other law.

GENERAL AUTHORISATION IN TERMS OF SECTION. 39 OF THE NWA

According to the preamble to Part 6 of the NWA, *"This Part established a procedure to enable a responsible authority, after public consultation, to permit the use of water by publishing general authorisations in the Gazette..."* *"The use of water under a general authorisation does not require a licence until the general authorisation is revoked, in which case licensing will be necessary..."*

The General Authorisations for Section 21 (c) and (i) water uses (impeding or diverting flow or changing the bed, banks or characteristics of a watercourse) as defined under the NWA have recently been revised (Government Notice R509 of 2016). The proposed works within or adjacent to the wetland areas have the potential to change the characteristics of the associated freshwater ecosystems and may therefore require authorisation. Determining if a water use licence is required for these water uses is now associated with the risk of degrading the ecological status of a watercourse. A low risk of impact could be authorised in terms of a General Authorisations (GA). A risk assessment for the activity is included in this report.

REGULATIONS REQUIRING THAT A WATER USER BE REGISTERED, GN R.1352 (1999)

Regulations requiring the registration of water users were promulgated by the Minister of DWA in terms of provision made in section 26(1)(c), read together with section 69 of the National Water Act, 1998. Section 26(1)(c) of the Act allows for registration of all water uses including existing lawful water use in terms of section 34(2). Section 29(1)(b)(vi) also states that in the case of a general authorisation, the responsible authority may attach a condition requiring the registration of such water use. The Regulations (Art. 3) oblige any water user as defined under section 21 of the Act to register such use with the responsible authority and effectively to apply for a Registration Certificate as contemplated under Art.7(1) of the Regulations.

7. PHYSICAL CHARACTERISTICS OF THE STUDY SITE

7.1. VISUAL CHARACTERISTICS

The area is located on undulating plains northwest of the town of Stellenbosch. Much of the surrounding area is cultivated with vineyards or used for grazing. The Simonsberg Mountain lies to the east of the site. The site itself is relatively flat, dropping from its northern extent at a height of approximately 150m above mean sea level to the lowest point along the Bottelary River, at a height of 132m above mean sea level. The river within the site has a very flat gradient (0.5%).

Most of the eastern portion of the site has been cultivated with drainage channels excavated across this portion of the site to drain the wet areas in the north, southwards. The western portion of the site comprises a mix of indigenous and alien trees. A tributary of the Bottelary River follows the Bottelary Road, in the lowest southern portion of the site. There is an instream dam as the tributary enters the site and flows westwards. Upslope of the dam is a second, off-channel dam. There is also a small ponded area and wetland along the river, downstream of the instream dam.



Figure 4. The elevation profile for the tributary of the Bottelary River, shown in Google Earth. The arrow on the image and the corresponding line on the profile indicate the confluence point of the tributary with the river. The red rectangle on the profile indicates the approximate position of the site on the river. The gradient of the river is particularly flat at this point.

7.2 CLIMATE

The study area experiences a Mediterranean climate with winters (June – August) being typically colder with higher rainfall than in summer (December – February) (Figure a). The mean annual rainfall for the area is 733 mm with the highest rainfall on average occurring in June and July (104 mm each) and the lowest in February (10 mm). Warmer temperatures with higher evaporation rates occur in the summer months (Figure 5b). Run-off is therefore much higher in winter than summer, an important consideration for the scheduling of construction activities within the river.

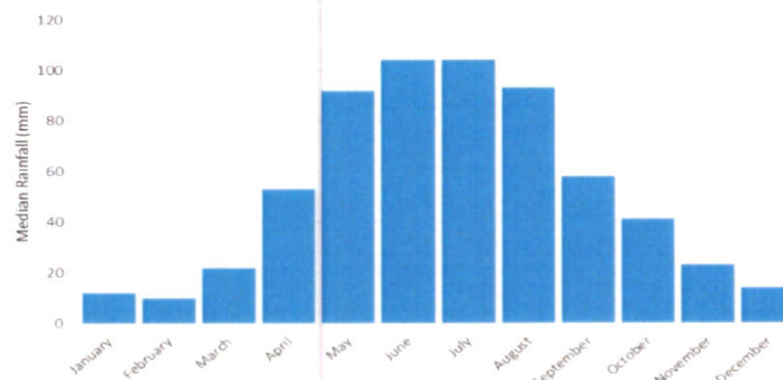


Figure 5a. Average monthly rainfall (for the study site (Schulze, 2009))

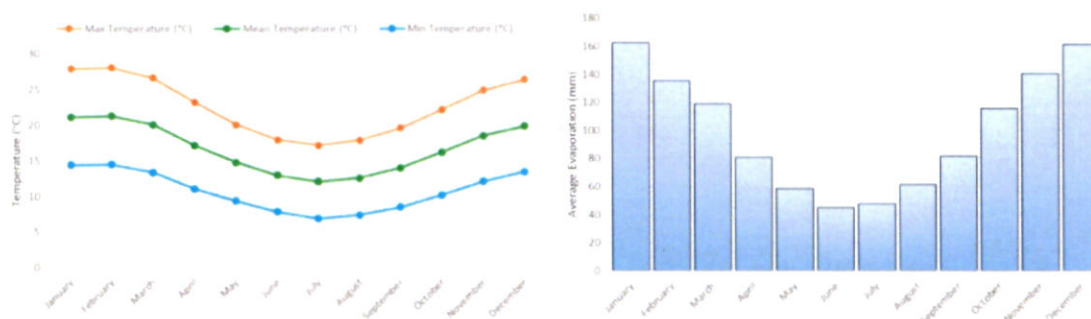


Figure 5b. Average monthly temperatures (right) and evaporation (bottom) for the study site (Schulze, 2009)

7.3 GEOLOGY AND SOIL

The underlying geology comprises of quaternary quartz sand of the Springfontein Formation with a surficial cover that has formed *in situ* on Malmesbury rocks, with occasional alluvium. The soils are typically well-structured with prismatic or pedocutanic horizons being dominant (Figure 6). These soils have a marked clay accumulation, are strongly structured and a non-reddish colour. The soils have a high erodibility potential. Where there is marked clay accumulation of the soils on the site, together with the flat topography and the shallow water table, particularly along the watercourse, the formation of wetland habitats tends to occur.

7.4. FLORA

Mucina and Rutherford (2006) mapped the natural vegetation of South Africa at a broad, national scale. The vegetation mapping was guided by variables such as soil type and geology due to the large-scale loss of natural vegetation cover, particularly in the lower-lying areas. The mapping has been updated by the South African National Biodiversity Institute (SANBI) in 2009, 2012 and 2018. Figure 7 shows the 2018 update of the 2006 mapping by Mucina and Rutherford.

The natural vegetation cover that is mapped for much of the site is Swartland Shale Renosterveld. This vegetation type naturally occurred across the undulating plains of the Swartland area, west of Stellenbosch. It is typically low to moderately tall shrubland. Due to its natural extent occurring across areas suitable for urban development as well as agriculture, 90% of this vegetation type is thought to have been transformed. It is therefore considered to be critically endangered. Patches of renosterbos *Elytropappus rhinocerotis* still occur within the wider terrestrial vegetation occurring on the western portion of the site; however, the cover vegetation has been significantly modified in the eastern portion. Invasive alien *Acacia saligna* occurs within the terrestrial areas.

The vegetation in the permanent and seasonal wetland areas comprises *Typha capensis*, *Zantedeschia aethiopica*, *Juncus effusus*, *Juncus capensis*, *Schoenoplectus scirpoides*, *Bolboschoenus maritimus*, *Eleocharis limosa* and *Pennisetum macrourum*. Invasive alien kikuyu grass *Pennisetum clandestinum* has invaded the wetland areas within the site.

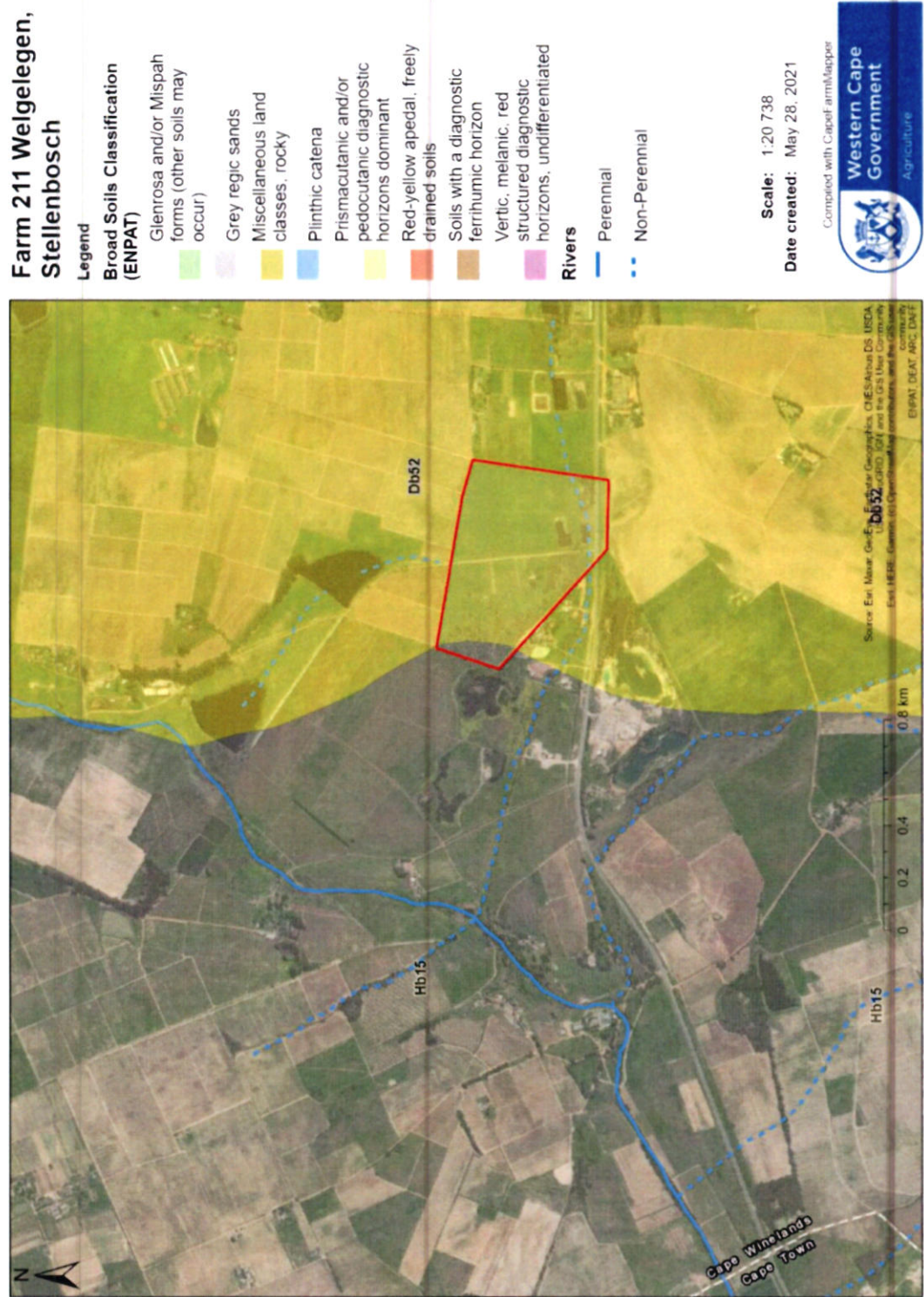


Figure 6. Soil map for the area (ENPAT data downloaded from CapeFarmMapper, May 2021)

Farm 211 Welgelegen, Stellenbosch

- Legend**
- VEGMAP 2018**
- FFd 5 Cape Flats Sand
 - Fynbos
 - FRc 1 Swartland Silcrete Renosterveld
 - FRg 2 Swartland Granite Renosterveld
 - FRs 9 Swartland Shale Renosterveld
- Rivers**
- Perennial
 - - Non-Perennial



Scale: 1:20 738
Date created: May 28, 2021



Figure 7. Vegetation types for the study area (SANBI. 2009 Vegetation Map, downloaded from CapeFarmMapper May 2021)

7.5. AQUATIC FEATURES

The site is located within the upper reaches of a tributary of the Bottelary River, a tributary of the Kuils River in the Eerste River System, in quaternary catchment G22E. The National Freshwater Ecosystem Priority Areas (FEPA) Wetland mapping initiative has mapped several dams in the area as artificial wetlands. (Figure 8). Any natural wetland habitat mapped in the area is also associated with the dams. The aquatic features at the site are discussed in more detail in Section 8.

7.6 BIODIVERSITY CONSERVATION VALUE

Two sets of conservation mapping results are of relevance to the national and provincial identification of the biodiversity conservation importance that has been attributed to the freshwater features in the study area. The national FEPA map and the 2017 Western Cape's Biodiversity Spatial Plan (WCBSP) contains Critical Biodiversity Areas (CBA) for the Stellenbosch Municipality.

FEPAs are intended to provide strategic spatial priorities for conserving South Africa's freshwater ecosystems and supporting sustainable use of water resources. These areas were determined through a process of systematic biodiversity planning and were identified using a range of criteria for serving ecosystems and associated biodiversity of rivers, wetlands and estuaries. The river and wetland FEPAs are required to be maintained in a largely natural ecological state while Fish Support Areas should not be allowed to degrade from their existing ecological condition. The study site is not located within a FEPA River sub-catchment (Figure 9). As mentioned previously, several dams in the area are mapped as artificial FEPA Wetlands.

The 2017 WCBSP map aims to guide sustainable development by providing a synthesis of biodiversity information to decision-makers to ensure appropriate land use and planning for the best possible long-term benefits and to promote integrated management of natural resources. The main map categories are CBAs (Terrestrial and Aquatic), Ecological Support Areas (ESA) (Critical and Other), Other Natural Remaining Areas and No Natural Remaining Areas. The first two mentioned categories represent the biodiversity priority areas that should be maintained in a natural to near-natural state. The last two mentioned categories are not considered as priority areas and a loss of biodiversity within these areas may be acceptable. Much of the southern and western portions of the site have been mapped as a mix of terrestrial and aquatic CBAs with an aquatic ESA occurring along the channel of the Bottelary Tributary (Figure 10). The southern portion of the site is an important corridor through the transformed landscape and should be retained.

7.7 LAND USE

The site is located outside of the urban area of Stellenbosch (Figure 11) in an area that comprises mostly of agriculture with the site being one of the few remaining areas with some natural landcover. Surrounding land-use includes the Killarney Brickfields and Koelenhof Village to the east, the Devon Valley Golf Course residential development to the south-east; and the Bottelary Road and Readymix quarry to the south of the site. Wine farms and the City suburbs of Brackenfell and Kuils River occur to the west of the site. There are no formally protected areas near the site.

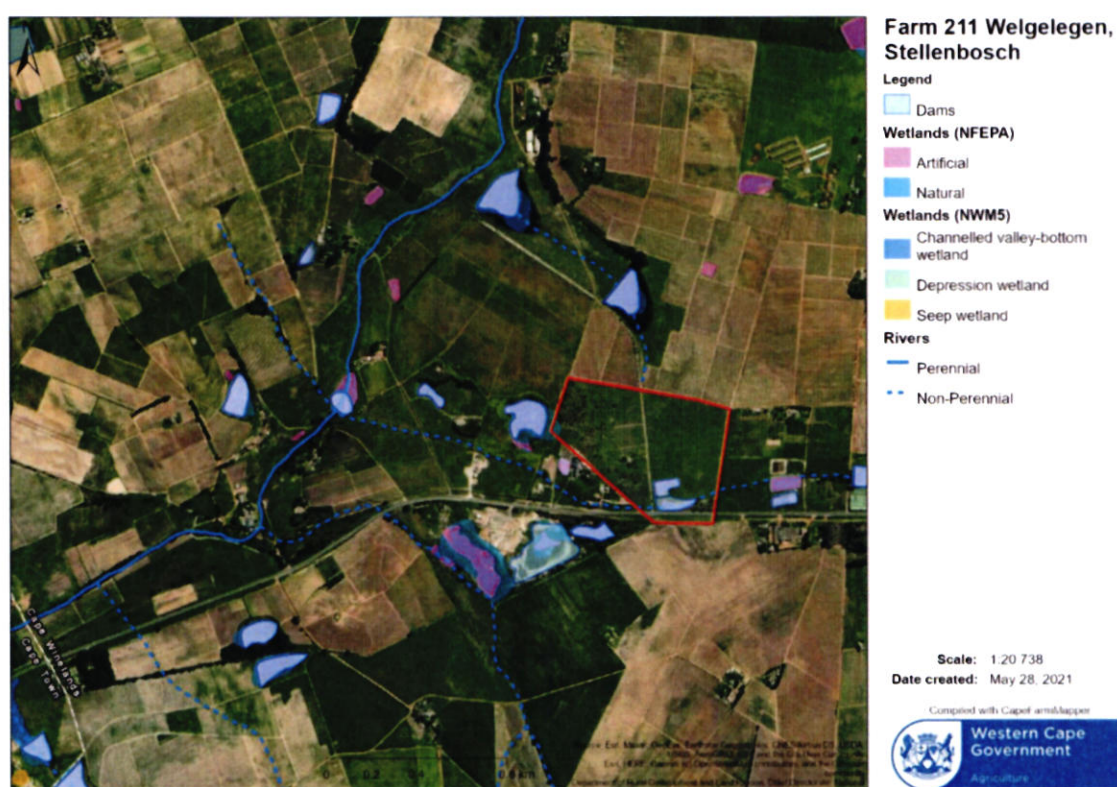


Figure 8. FEPA and NWM wetlands for the site and its surrounding area (red polygon) (NFEPA rivers 2011 downloaded from CapeFarmMapper May 2021)

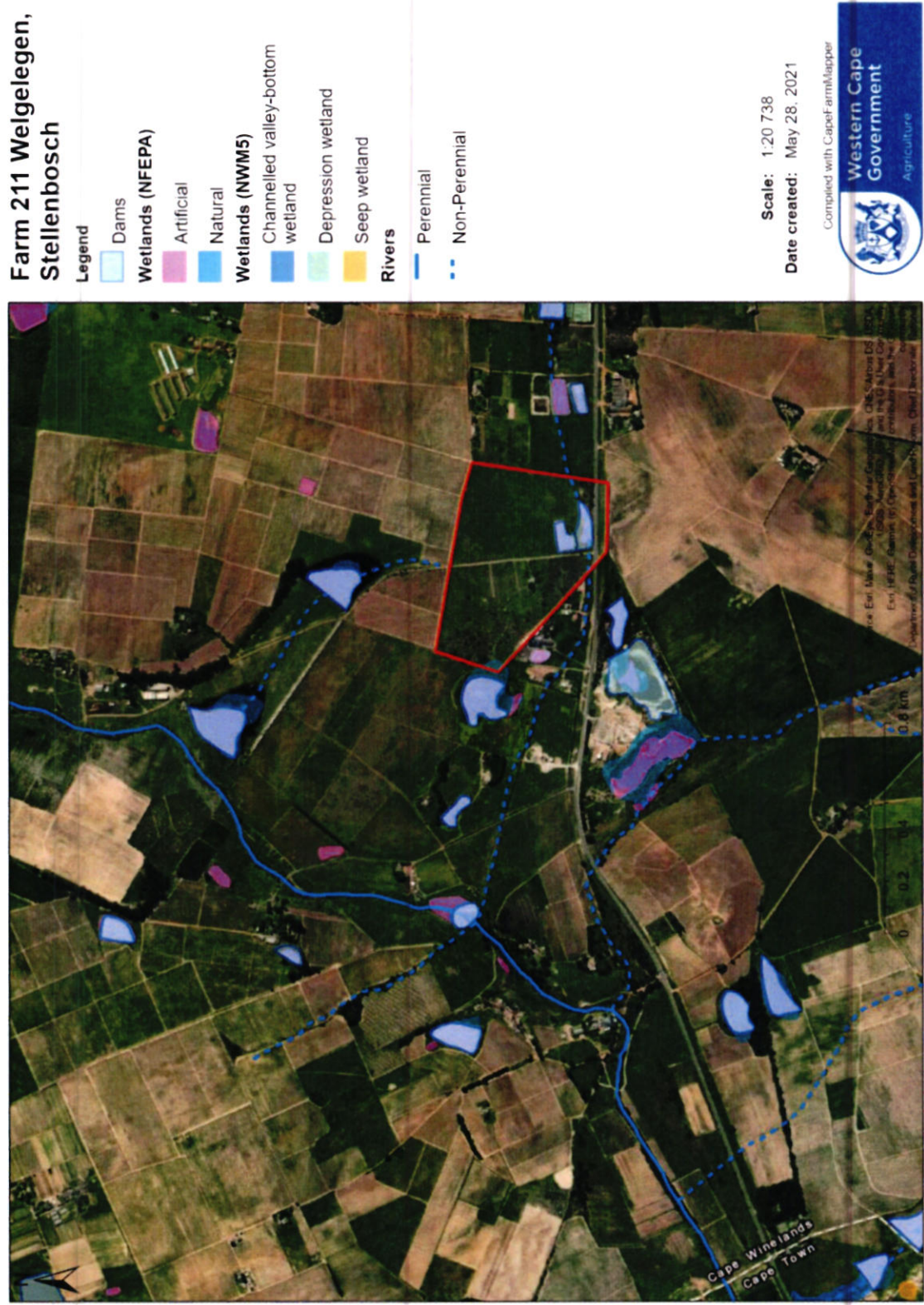


Figure 8. FEPA and NWM wetlands for the site and its surrounding area (red polygon) (NFEPA rivers 2011 downloaded from CapeFarmMapper May 2021)

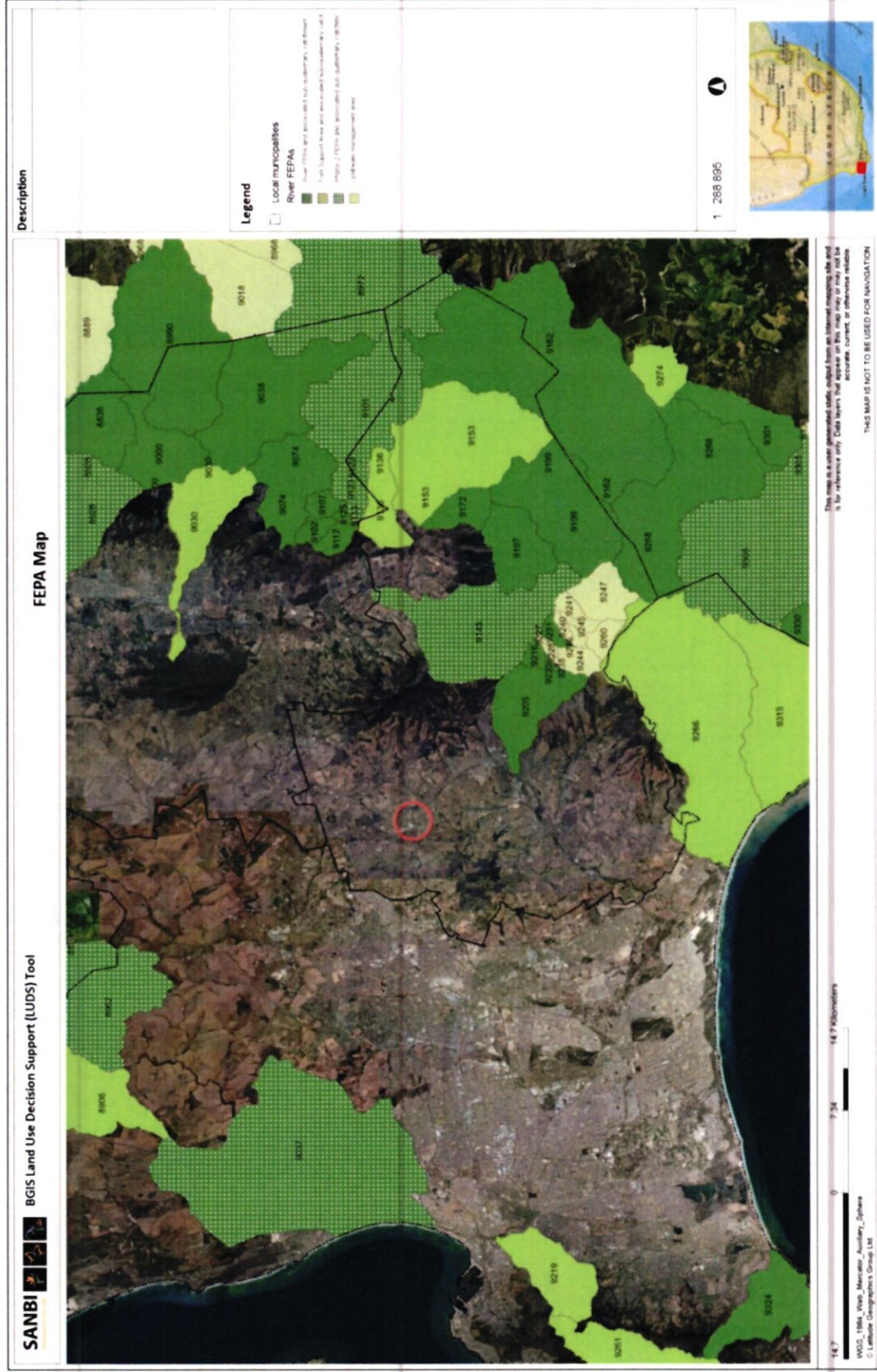


Figure 9. FEPA mapping for the area surrounding the study site (NFEPA rivers 2011 available from SANBI Biodiversity GIS; downloaded May 2021)

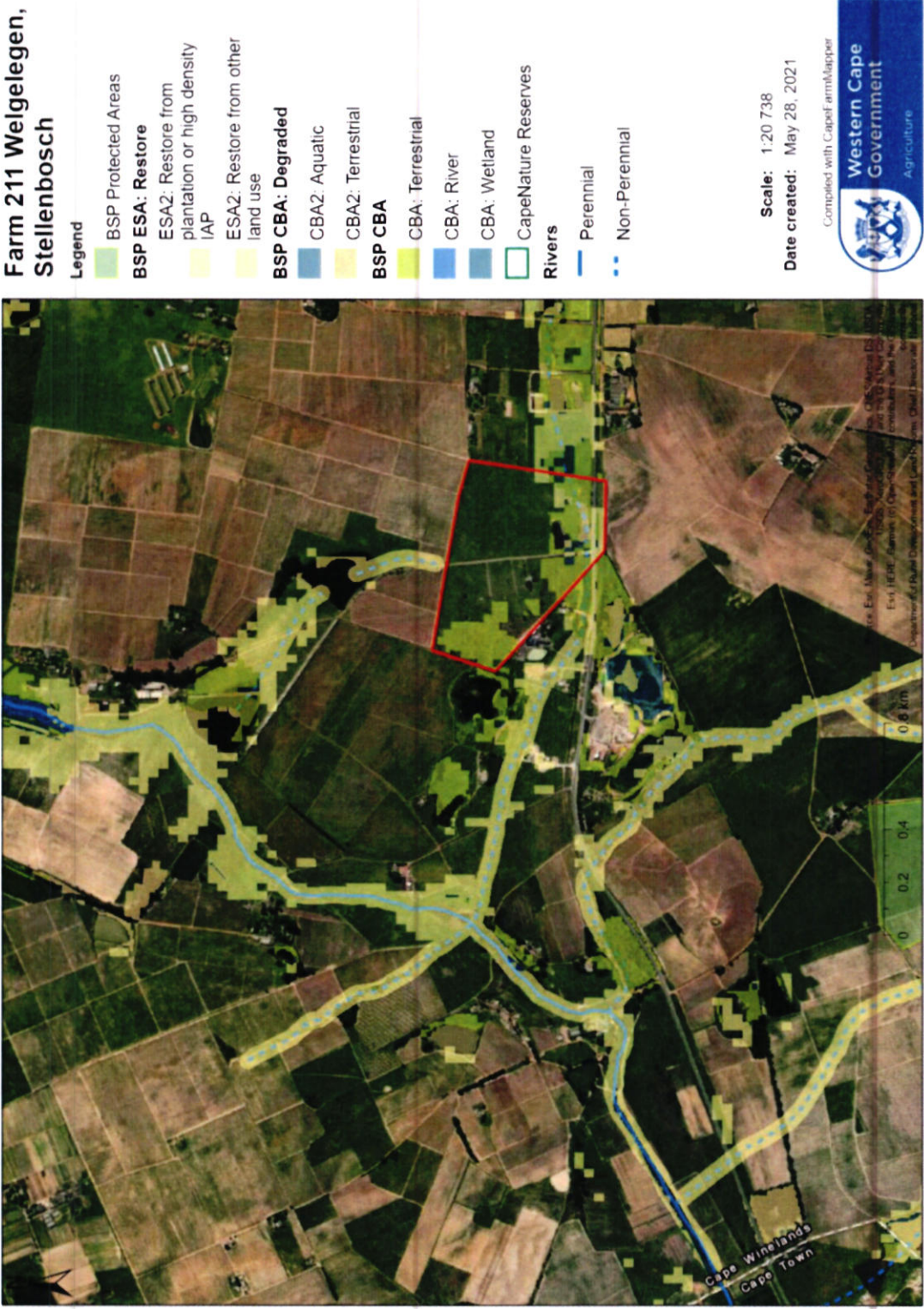
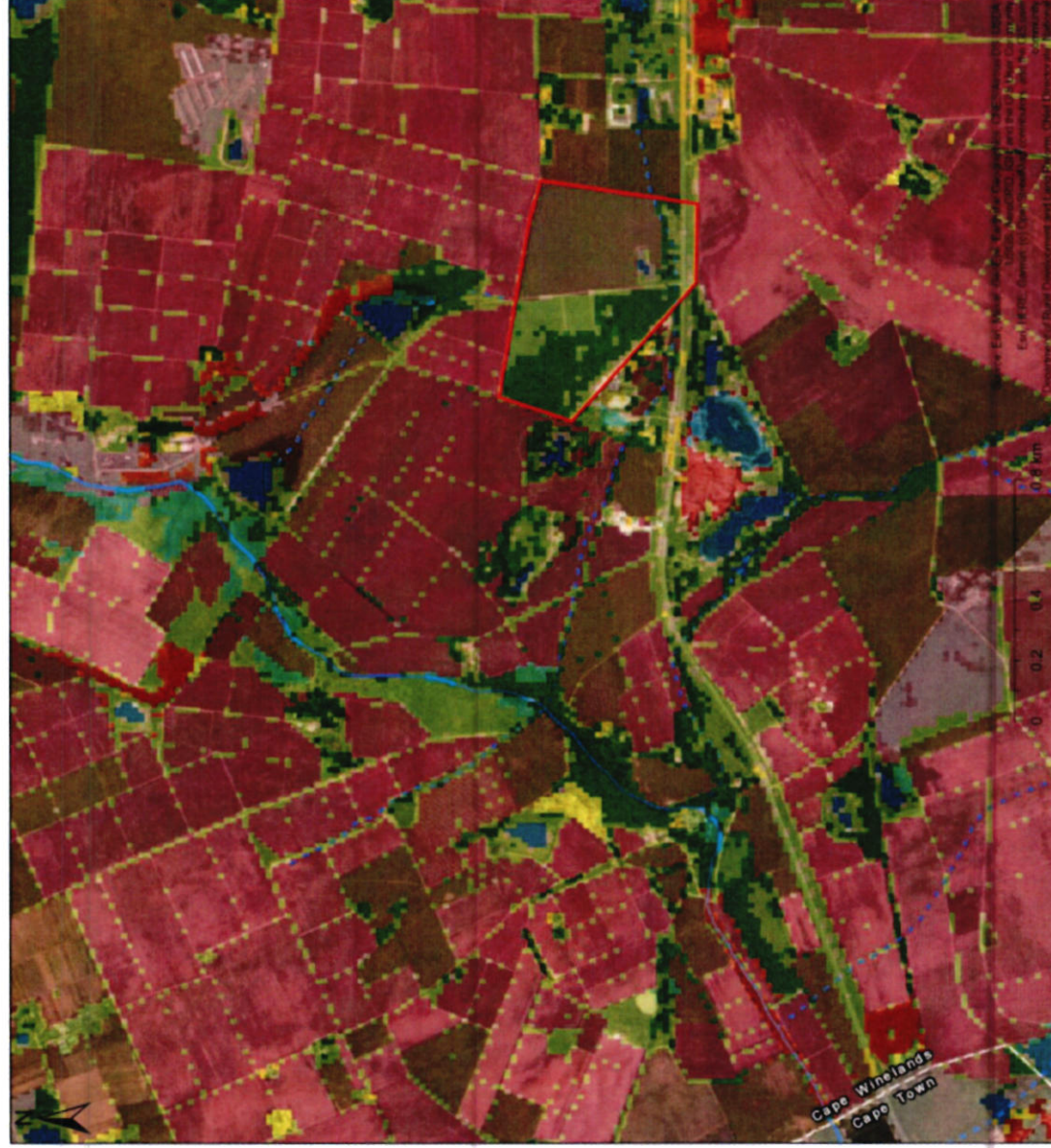


Figure 10. Western Cape Biodiversity Spatial Plan for the area surrounding the study site (CapeNature. 2017 WCBSP downloaded from CapesoftMapper on May 2021)

Farm 211 Welgelegen, Stellenbosch



Bare none vegetated	Urban residential (low veg / grass)
Cultivated corn fields (high)	Urban residential (open trees / bush)
Cultivated corn fields (low)	Urban school and sports ground
Cultivated corn fields (med)	Urban smallholding (bare)
Cultivated corn pivots (high)	Urban smallholding (dense trees / bush)
Cultivated corn pivots (low)	Urban smallholding (low veg / grass)
Cultivated corn pivots (med)	Urban smallholding (open trees / bush)
Cultivated orchards (high)	Urban sports and golf (bare)
Cultivated orchards (low)	Urban sports and golf (dense tree / bush)
Cultivated orchards (med)	Urban sports and golf (low veg / grass)
Cultivated subsistence (high)	Urban sports and golf (open tree / bush)
Cultivated subsistence (low)	Urban sports and golf (open tree / grass)
Cultivated subsistence (med)	Urban township (bare)
Cultivated vines (high)	Urban township (dense trees / bush)
Cultivated vines (low)	Urban township (low veg / grass)
Cultivated vines (med)	Urban township (open trees / bush)
Grassland	Urban village (bare)
Indigenous Forest	Urban village (dense trees / bush)
Low shrubland	Urban village (low veg / grass)
Mine buildings	Urban village (open trees / bush)
Mines 1 bare	Water permanent
Mines 2 semi-bare	Water seasonal
Mines water permanent	Wetlands
Mines water seasonal	Woodland/Open bush
Plantation / Woodlots clearfelled	
Plantation / Woodlots young	
Plantations / Woodlots mature	

Compiled with CapeFarmMapper

Western Cape Government
Agriculture

Figure 11. Land cover map for the surrounding area (CapeFarmMapper, 2021)

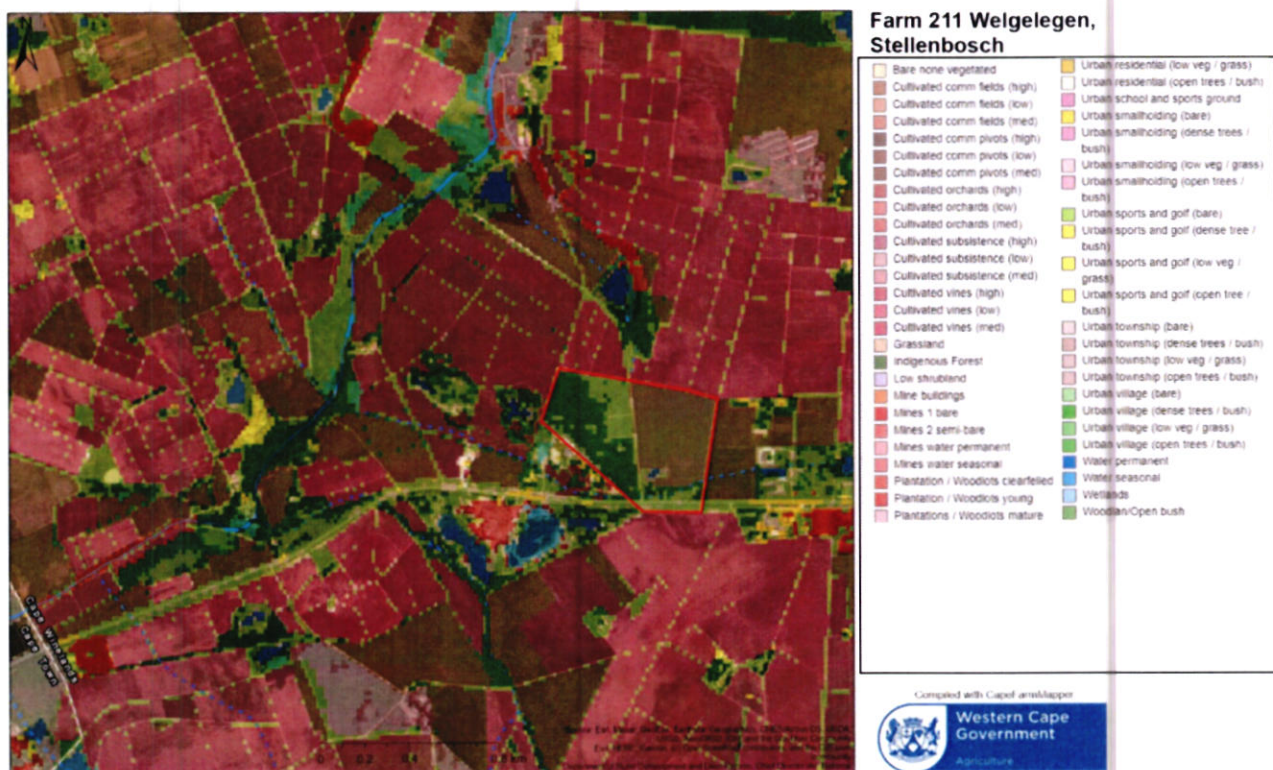


Figure 11. Land cover map for the surrounding area (CapeFarmMapper, 2021)

8. ASSESSMENT OF FRESHWATER FEATURES AND THEIR SIGNIFICANCE

8.1. HISTORICAL MODIFICATION OF THE FRESHWATER FEATURES WITHIN THE SITE

Below is an aerial image of the site taken in 1938 (Figure 12). The cultivation on the site as well as in the surrounding area was already significant. The road through the site was already in place at that time but the dams have yet been built. The watercourse corridor at that time was still relatively natural, however. Associated wetland areas are visible along the watercourse, particularly upstream of the road where the current instream dam has been built. The wetland areas extended up onto the hillslope immediately to the north of the watercourse. Alien trees dominate the western portion of the site.

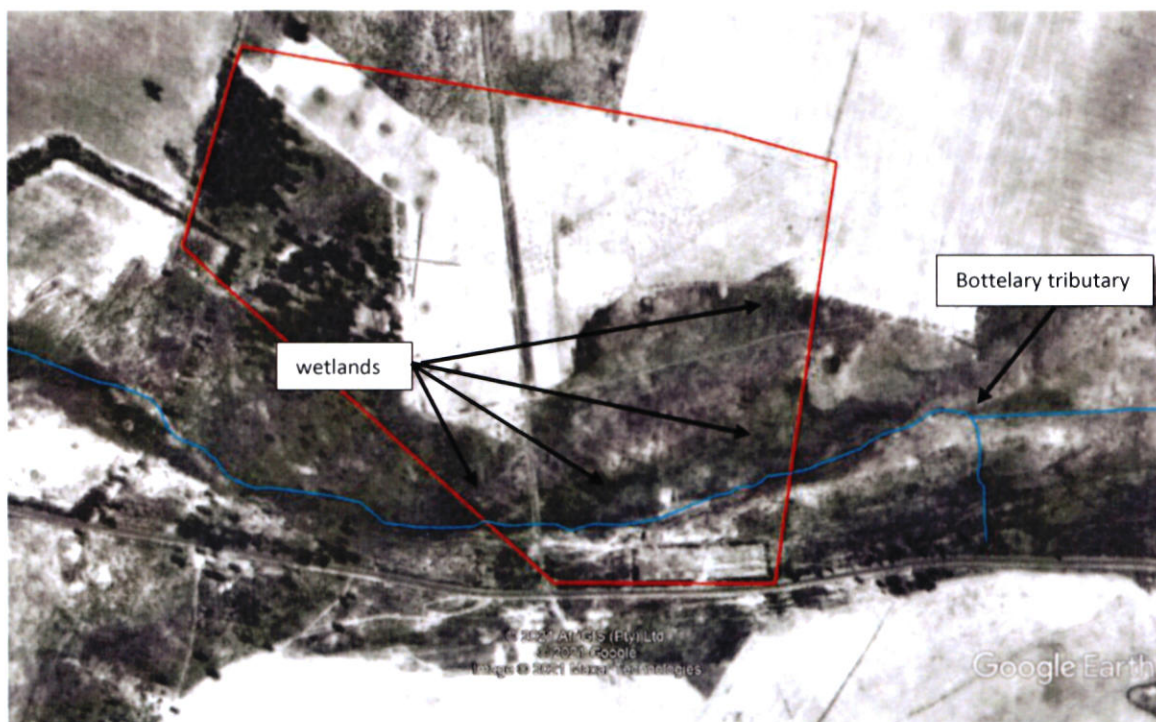


Figure 12. An aerial image taken of the site in 1938 overlain in Google Earth with the site boundaries and the Bottelary Tributary shown

The image taken in 1953 and 1966 show the site in a similar condition to the one for 1938, with the northern portion cultivated while the watercourse and corridor are still largely undisturbed. The dams on the site had not yet been constructed although the instream dam appears to be in the process of being built in the 1966 image. Wetter soils are evident in the south-eastern quarter of the site. Denser alien trees occur on the western side of the site.

The Google Earth image from 2010 shows the site to still be in a similar condition with the eastern portion cultivated, alien trees on the western portion and the watercourse corridor in the southern portion distinctly wetter. Both dams had been constructed in the southern portion.

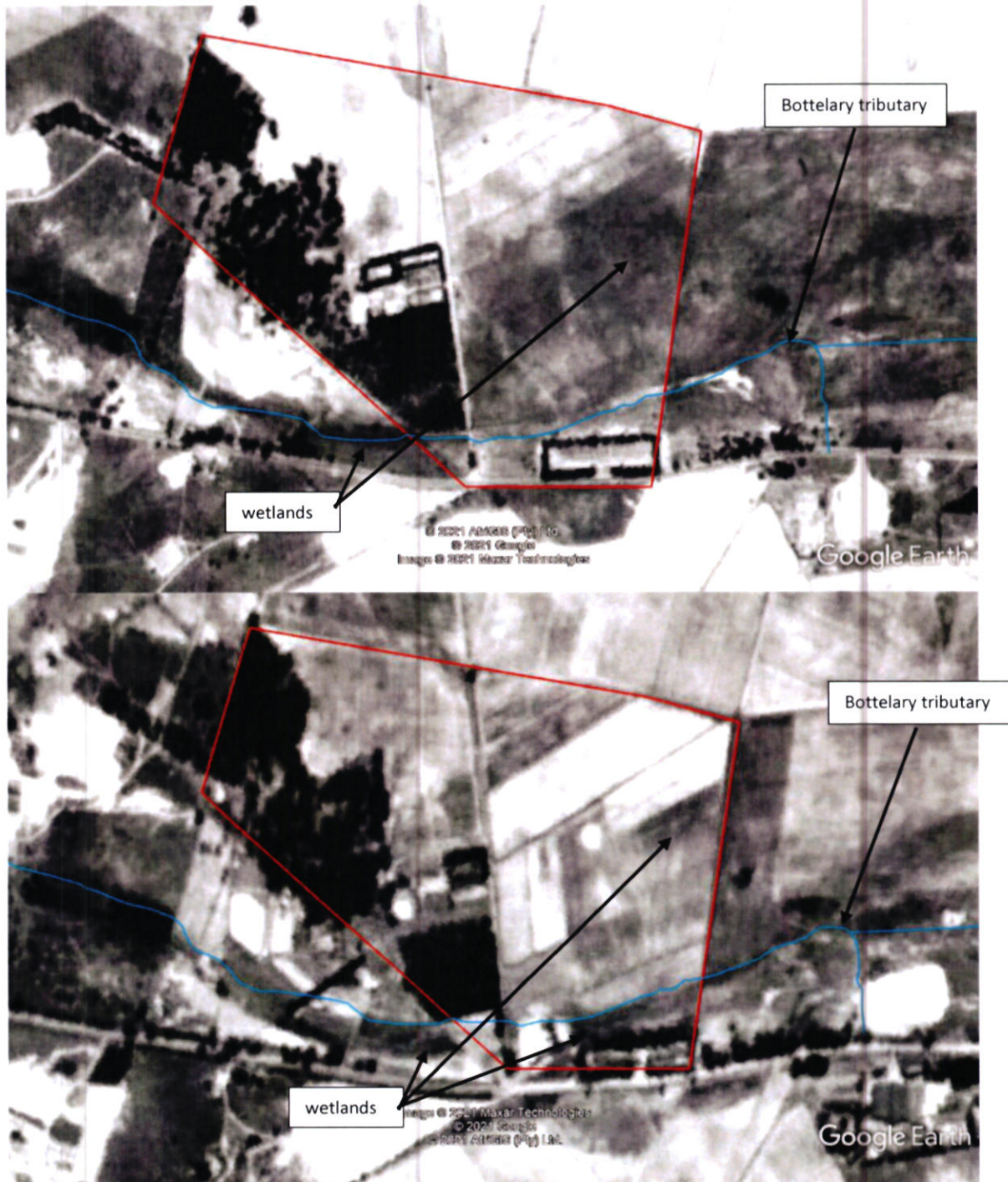


Figure 13. An aerial image taken of the site in 1953 (top) and 1966 (bottom) overlaid in Google Earth with the site boundaries and the Bottelary Tributary shown



Figure 14. Google Earth image, dated September 2010, showing the site and surrounding area, with the Bottelary Tributary and the dams in the area shown

8.2. DESCRIPTION OF FRESHWATER FEATURES

The aquatic features within the site are in a moderately to highly modified condition. The channel of the tributary of the Bottelary River that is located parallel to Bottelary Road comprises wetland patches upstream and downstream of the instream dam. The dam and immediately downstream of the dam is dominated by *Typha capensis*.

Due to the upstream impoundment of flow in the watercourse as well as the draining of the site via the excavated drainage channels, most of the wetland habitat on the site has been lost. Small wetland areas occur in depressions and along the drainage channels within the cultivated area. The wetland areas largely consist of *Pennisetum macrourum*, *Zantedeschia aethiopica*, *Eleocharis limosa*, *Ornithogalum thyrsoides*, *Juncus effusus*, *Juncus capensis*, *Schoenoplectus scirpoides* and *Bolboschoenus maritimus*. Invasive alien kikuyu grass *Pennisetum clandestinum* has invaded the wetland areas within the site.

A present ecological status (using an assessment of habitat integrity) and ecological importance and sensitivity assessment of the aquatic features was undertaken and is summarised in Table 2. The detail of the assessments is included in Appendix D. The instream and riparian habitat integrity of the Bottelary Tributary is considered to be seriously to critically modified. This has largely been due to the modification to the watercourse channels within and adjacent to the site, the loss/removal of indigenous vegetation and upstream flow modification activities. The tributary (including the southern and northern branches) is considered to be of low ecological importance and sensitivity. The severe modifications have resulted in the loss of sensitive species and habitats.

Similarly, the wetland habitat within the site is considered to be largely to seriously modified and of low ecological importance of sensitivity. Due to the fragmented and degraded condition of the wetland areas, they are not able to offer significant goods and services. The original wetland habitat has largely been lost by past vegetation clearing and draining of the area and the topography within the site has been altered to facilitate draining of the land. The current wetland areas are more recent development of wetland habitat in the areas where shallow depressions allow for seasonal inundation in winter. These areas do however support aquatic vegetation that is a remnant of the Swartland Shale Renosterveld wetlands that originally occurred on the site.

Table 2. Assessments of habitat integrity and ecological importance and sensitivity of the stream and wetland areas

Ecosystem	Description	Instream Habitat Integrity	Riparian Habitat Integrity	Ecological Sensitivity & Importance	Recommended Ecological Category
Bottelary Tributary	Foothill stream	C/D	D/E	Moderate/Low	C/D (moderately to largely modified)
Wetland areas	Valley bottom wetland	D/E		Moderate/Low	C/D (moderately to largely modified)
	Hillslope wetland	E		Low	D – wetland offset mitigation consideration



Figure 15. Google Earth image (March 2021) with the watercourses and wetland areas within the site



Figure 16. View of the Bottelary Tributary and valley bottom wetland downstream of the instream dam



Figure 17. View of the remnant hillslope seep within the site



Figure 18. Photographs of valley bottom wetland upstream of the instream dam (top two images) and the instream dam with the off-channel dam behind it in the bottom image. Blue arrows indicate flow direction.

9. FRESHWATER IMPACT AND RISK ASSESSMENT

The proposal for the development of the site will result in the loss of most of the hillslope seep but will retain the valley bottom wetlands and channel associated with the Bottelary Tributary. The watercourse and valley bottom areas will be retained in the open space portions of the property that will not be developed. The hillslope seeps are within a section of the property that is proposed to be developed as the composting field. There are no aquatic features within the portion of the site where the residential, warehouse and packing areas (Figure 19).

The hillslope seep has long been subjected to modification. Early 1938, 1953 and 1966 images as well as the later Google Earth images all show a portion of this area to be cultivated or disturbed. The wetland habitat associated with the hillslope seep is thus in a highly modified and degraded condition. Wetland vegetation does however establish within the drains that have been excavated within the cultivated area with both the drains and the vegetation bearing evidence of the wetter conditions within this area associated with the hillslope seep. While there may not be any ecological value still associated with the remnant seep area, it does comprise a wet area that drains into the two dams on the site as well as the valley bottom wetland upstream of the instream dam on the Bottelary River. Retaining the seepage of the water from the hillslope seep as well as preventing contamination of this water and the water of the downslope Bottelary Tributary and wetland areas is thus an important consideration in the proposed development of this area.



Figure 19. Google Earth image with the mapped aquatic features on the site, overlaid with the site and zoning plan for the site

9.1. FRESHWATER IMPACT ASSESSMENT

The potential impacts to the aquatic ecosystems within the site that could be expected to be associated with the proposed development are:

1. Short and longer-term disturbance and loss of aquatic habitat;
2. Modified stormwater surface water runoff from the developed site; and
3. Potential for localised impairment of water quality during the construction and operational phases of the development.

The following mitigation measures are recommended to reduce the potential impact of the proposed layout on the aquatic ecosystems on the site:

- The stormwater management plan for the site should ensure that any impacts of stormwater from the decomposting area within the site are mitigated such that there would be no water quality impacts on the watercourse and wetland areas;
- No contaminated stormwater generated within the site should be discharged directly into the aquatic features;
- The water quality impacts during the construction phase should be addressed through a Construction Environmental Management Plan for the project, and implemented by an on-site Environmental Officer;
- To mitigate the loss of the hillslope seep area, the watercourse corridor should be rehabilitated, with the removal of invasive and alien vegetation in accordance with an approved Maintenance Management Plan. Monitoring and management of eroded areas within the watercourse corridor and revegetation with suitable local indigenous vegetation should also take place. Grazing of livestock should be restricted within the delineated wetland areas;
- Ongoing monitoring and removal of invasive alien plants within the wetland offset area is likely to be required, particularly to control invasive kikuyu grass; and
- Monitoring (particularly of nitrogen and phosphates) and management of runoff from the decomposting area should be undertaken.

Table 3. Impact table of the proposed development of the site on the identified aquatic features (Impact Assessment Methodology included in Appendix E)

Potential impact and risk:	Proposed development	No-Go Alternative
CONSTRUCTION PHASE		
Nature of impact:	Aquatic Ecosystem impacts: Aquatic habitat modification and potential for some flow and water quality modification	-
Status	Negative	
Duration of impact:	Short and long term impacts	
Extent	Site	
Magnitude/Intensity	High/Medium	
Consequence of impact or risk:	The impact will result in loss of degraded wetland habitat during construction –wetland habitat will be rehabilitated to improve the	

	longer-term sustainability and condition of the wetland habitat	
Probability of occurrence:	High	
Degree impact may cause irreplaceable loss of resources:	Low/Marginal loss	
Degree impact can be reversed:	Partially reversible	
Indirect impacts:	Potential of modification to remaining aquatic habitat and condition within the site	-
Cumulative impact before mitigation:	Medium to low	
Significance rating of impact before mitigation	Medium	
Degree to which the impact can be avoided:	Moderate	
Degree to which the impact can be managed:	Moderate	
Degree to which the impact can be mitigated:	Low	
Proposed mitigation:	See above	-
Residual impacts:	Loss of degraded wetland	-
Cumulative impact post-mitigation:	Medium to Low	-
Significance rating of impact after mitigation	Medium to Low	-
Confidence	High	
OPERATION PHASE		
Nature of impact:	Aquatic Ecosystem impacts: Modification of aquatic habitat, flow and water quality	Aquatic Ecosystem impacts: Deterioration of aquatic habitat
Status	Negative	Negative
Duration of impact:	Long term	Short term
Extent	Site	Site
Magnitude/Intensity	Medium to Low	Low
Consequence of impact or risk:	Risk of contamination of adjacent aquatic features	Ongoing degradation and loss of the wetland areas within the site
Probability of occurrence:	Possible	Probable
Degree to which the impact may cause irreplaceable loss of resources:	Marginal loss	Marginal loss
Degree to which the impact can be reversed:	Partially reversible	Partially reversible
Indirect impacts:	Potential of increased disturbance of wetland areas due to increasing in development of the area	-
Cumulative impact prior to mitigation:	Medium to Low	Medium to Low
Significance rating of impact prior to mitigation	Medium to low negative	Medium to low negative
Degree to which the impact can be avoided:	Moderate	Moderate to high
Degree to which the impact can be managed:	Moderate	Moderate to high
Degree to which the impact can be mitigated:	Moderate	High
Proposed mitigation:	See above	Prevent ongoing disturbance of site; control the growth of alien vegetation
Residual impacts:	-	-
Cumulative impact post-mitigation:	Medium to Low	Low
Significance rating of impact after mitigation	Medium to Low	Low negative
Confidence	High	High

In terms of cumulative impacts, the proposed development, if mitigated as recommended, is may result in some incremental changes associated with other past, present or reasonably foreseeable actions acting in concert with this project.

The No-Go alternative would result in no changes to the aquatic ecosystems within the site from the current state. This would imply that there would be the current ongoing low-level disturbance of aquatic habitats with an associated growth of invasive alien plants. A slight negative trajectory of the ecological condition of the aquatic ecosystems could thus be expected.

Considering the potential water quality risks and the associated loss of hillslope seep loss, it is recommended that the proposed development layout be altered to avoid loss of wetland habitat as far as possible and to ensure that there would be a very low risk of contamination of the aquatic habitats on the site.

9.2. RISK ASSESSMENT

A risk assessment, summarised in Table 4, has been undertaken to inform the water use authorisation process and is included in this report in Appendix F. Considering the scope of works proposed and the condition of the features at the proposed site, the risk of altering the ecological status of the aquatic features within the site as a result of the proposed altered development layout for the site is considered to be moderate to low for the construction phase and operational phase.

Table 4. A summary of the risk assessment for the proposed development

Phases	Activity*	Aspect	Impact	Significance	Risk Rating
Construction	Infilling of existing wetland areas within the site and development of the area	Soil movement and construction activities within and adjacent to aquatic features	Loss of existing wetland areas and water quality impacts	154	M
Operation	Stormwater run-off generated on-site	Flow and quality of runoff from the developed site and ongoing disturbance of adjacent aquatic features	Modified flow and water quality of stormwater, disturbance of aquatic habitat	150	M

It is thus likely that the proposed development of the site would require a water use licence application to be submitted to the DWS for Section 21(c) and (i) water use activities associated with the development activities adjacent to the aquatic features.

10. CONCLUSION

Aquatic habitat within the proposed development site comprises a tributary of the Bottellary River and its associated wetland habitat in the Kuils/Eerste River System. The study site is not located within a FEPA River sub-catchment but contains several dams in and adjacent to the site that is mapped as artificial FEPA Wetlands. Much of the site has been mapped as an aquatic ESA (original channel of the Bottellary Tributary), while a few wetland patches have been mapped as aquatic CBAs.

The Bottelary Tributary is considered to be moderately to seriously modified and of moderate to low ecological importance and sensitivity. Similarly, the wetland habitat within the site is considered to be largely to seriously modified and of moderate to low ecological importance of sensitivity.

The proposal for the development of the site will result in the loss of most of the hillslope seep but will retain the valley bottom wetlands and channel associated with the Bottelary Tributary. The watercourse and valley bottom areas will be retained in the open space portions of the property that will not be developed. The hillslope seeps are within a section of the property that is proposed to be developed as the composting field. There are no aquatic features within the portion of the site where the residential, warehouse and packing areas.

The hillslope seep has long been subjected to modification and is in a highly modified and degraded condition. While there may not be any ecological value still associated with the remnant seep area, it does comprise a wet area that drains into the two dams on the site as well as the valley bottom wetland upstream of the instream dam on the Bottelary River. Retaining the seepage of the water from the hillslope seep as well as preventing contamination of this water and the water of the downslope Bottelary Tributary and wetland areas is thus an important consideration in the proposed development of this area.

The potential impacts to the aquatic ecosystems within the site that could be expected to be associated with the proposed development are:

1. Short and longer-term disturbance and loss of aquatic habitat;
2. Modified stormwater surface water runoff from the developed site; and
3. Potential for localised impairment of water quality during the construction and operational phases of the development.

The following mitigation measures are recommended to reduce the potential impact of the proposed layout on the aquatic ecosystems on the site:

- The stormwater management plan for the site should ensure that any impacts of stormwater from the composting area within the site are mitigated such that there would be no water quality impacts on the watercourse and wetland areas;
- No contaminated stormwater generated within the site should be discharged directly into the aquatic features;
- The water quality impacts during the construction phase should be addressed through a Construction Environmental Management Plan for the project, and implemented by an on-site Environmental Officer;
- To mitigate the loss of the hillslope seep area, the watercourse corridor should be rehabilitated, with the removal of invasive and alien vegetation in accordance with an approved Maintenance Management Plan. Monitoring and management of eroded areas within the watercourse corridor and revegetation with suitable local indigenous vegetation should also take place. Grazing of livestock should be restricted within the delineated wetland areas;

- Ongoing monitoring and removal of invasive alien plants within the wetland offset area is likely to be required, particularly to control invasive kikuyu grass; and
- Monitoring (particularly of nitrogen and phosphates) and management of runoff from the decomposing area should be undertaken.

If the recommended mitigation measures are implemented, there would be a medium to low significance impact on the aquatic ecosystems. Considering the potential water quality risks and the associated loss of hillslope seep loss, it is recommended that the proposed development layout be altered to avoid loss of wetland habitat as far as possible and to ensure that there would be a very low risk of contamination of the aquatic habitats on the site.

The proposed development of the site would pose a moderate to low risk of impacting on the ecological condition of the Bottelary Tributary and associated wetland areas and as such would require a water use licence application to be submitted to the DWS for Section 21(c) and (i) water use activities associated with the development activities adjacent to the aquatic features.

11. REFERENCES

Cape Farm Mapper. <http://gis.elsenburg.com/apps/cfm/>.

Department of Water Affairs and Forestry. (1998). *National Water Act*. Act 36. South Africa.

Department of Water Affairs and Forestry. (1999). *Resource Directed Measures for Protection of Water Resources. Volume 3: River Ecosystems Version 1.0*. Resource Directed Measures for Protection of Water Resources, Pretoria, South Africa.

Department of Water Affairs and Forestry. (2005a). *River Ecoclassification: Manual for Ecstatus Determination (Version 1)*. Water Research Commission Report Number KV 168/05. Pretoria.

Department of Water Affairs and Forestry. (2009). Government Gazette No. 32805. Impeding or Diverting the Flow of Water in a Watercourse [Section 21(c)] and Altering the Bed, Banks, Course or Characteristics of a Watercourse [Section 21(i)]. Pp66-71, Pretoria.

Driver, Nel, Snaddon, Murray, Roux, Hill. (2011). Implementation Manual for Freshwater Ecosystem Priority Areas. Draft Report for the Water Research Commission.

Kotze, D., Marneweck, G.C., Batchelor, A.L., Lindley, D.S. And Collins, N.B. 2005: *WET-EcoServices: A technique for rapidly assessing ecosystem services supplied by wetlands*. Dept. Tourism, Environmental and Economic Affairs, Free State.

Macfarlane, D. M., Kotze, D. C., Ellery, W. N., Walters, D., Koopman, V., Goodman, P., et al. (2008). *WETHHealth: A technique for rapidly assessing wetland health*. WRC report TT340/08. South Africa: WRC.

Mucina, L. & Rutherford, M. (eds). (2006) *The vegetation of South Africa, Lesotho and Swaziland. Strelitzia 19*. South African National Biodiversity Institute, Pretoria.

SANBI (2009). *Further Development of a Proposed National Wetland Classification System for South Africa*. Primary Project Report. Prepared by the Freshwater Consulting Group (FCG) for the South African National Biodiversity Institute (SANBI). SANBI Biodiversity GIS 2012. <http://bgis.sanbi.org/capetown/bionetwork.asp>

SANBI Biodiversity GIS. <http://bgis.sanbi.org>

Van Ginkel, C. E., Glen, R. P., Gordon-Gray, K. D., Cilliers, C. J., Muasya, M. and P. P. van Deventer (2011) *Easy identification of some South African wetland plants*. WRC Report No TT 479/10

WRC. 2011. *Atlas for Freshwater Ecosystem Priority Areas* – Maps to support sustainable development of water resources (WRC Report No. TT 500/11).



APPENDIX A: DECLARATION OF INDEPENDENCE

I, Antonia Belcher, as the appointed independent specialist hereby declare that I:

- act/ed as the independent specialist in this application;
- regard the information contained in this report as it relates to my specialist input/study to be true and correct, and
- do not have and will not have any financial interest in the undertaking of the activity, other than remuneration for work performed in terms of the NEMA, the Environmental Impact Assessment Regulations, as amended and any specific environmental management Act;
- have and will not have no vested interest in the proposed activity proceeding;
- have disclosed, to the applicant, EAP and competent authority, any material information that have or may have the potential to influence the decision of the competent authority or the objectivity of any report, plan or document required in terms of the NEMA, the Environmental Impact Assessment Regulations, as amended, and any specific environmental management Act;
- am fully aware of and meet the responsibilities in terms of NEMA, the Environmental Impact Assessment Regulations, as amended, and any specific environmental management Act, and that failure to comply with these requirements may constitute and result in disqualification;
- have ensured that information containing all relevant facts in respect of the specialist input/study was distributed or made available to interested and affected parties and the public and that participation by interested and affected parties was facilitated in such a manner that all interested and affected parties were provided with a reasonable opportunity to participate and to provide comments on the specialist input/study;
- have ensured that the comments of all interested and affected parties on the specialist input/study were considered, recorded and submitted to the competent authority in respect of the application;
- have ensured that the names of all interested and affected parties that participated in terms of the specialist input/study were recorded in the register of interested and affected parties who participated in the public participation process;
- have provided the competent authority with access to all information at my disposal regarding the application, whether such information is favorable to the applicant or not; and
- am aware that a false declaration is an offence in terms of regulation 71 of GN No. R. 543.

Signature of the specialist:



Date: 25 May 2021

APPENDIX B: BACKGROUND AND QUALIFICATIONS OF SPECIALIST CONSULTANT

Contact details: PO Box 455, Somerset Mall, 7137

Name: Antonia Belcher

Profession: Aquatic Scientist (Pr. Nat. Sc. 400040/10)

Fields of Expertise: Specialist in river and wetland monitoring and reporting

Relevant work experience:

Due to my involvement in the development and implementation of the River Health Programme as well as the Resource Directed Measures directorate of the Department of Water Affairs in the Western Cape, I have been a key part of the team that has undertaken six catchment or area wide 'state-of-river' assessments as well as routine monitoring and specialized assessments of rivers and wetlands in all the major catchments for the Western Cape. In the past eight years, I have undertaken numerous freshwater assessments as input into both the environmental authorization and water use authorization process throughout the Western Cape as well as greater Southern Africa.

Papers and Publications:

More than 300 publications, papers and posters relating mostly to water resource quality and river health assessments in South African rivers and their management.

Recent projects that she has been involved in are:

- Classification of Water Resources in the Olifants-Doorn Water Management Areas, Department of Water Affairs;
- Development and piloting of a National Strategy to Improve Gender Representation in Water Management Institutions, where the focus is on improving the capacity to participate in water related decision making, Department of Water Affairs and Forestry;
- Compilation of a background document as well as a framework management plan towards the development of an integrated water resources management plan for the Sandveld;
- Specialist on the City of Cape Town project: Determination of additional resources to manage pollution in storm water and river systems;
- River Health Programme monitoring for the Free State Region, Department of Water Affairs; and
- Framework for Education and Training in Water (FETWATER), Resource Directed Measures Network partner which has undertaken training initiatives on environmental water requirements in the SADC region.

APPENDIX C: PRESENT ECOLOGICAL STATUS AND ECOLOGICAL IMPORTANCE AND SENSITIVITY FOR THE BOTTELARY RIVER

SELECT SQ REACH	SQR NAME	LENGTH km	STREAM ORDER	PES ASSESSED BY EXPERTS? (IF TRUE="Y")	REASONS NOT ASSESSED	PES CATEGORY DESCRIPTION	PES CATEGORY BASED ON MEDIAN OF METRICS
G22E-09141	Bottelary	15.48	1	Y		LARGELY MODIFIED	D

MEAN EI CLASS	MEAN ES CLASS	DEFAULT ECOLOGICAL CATEGORY (DEC)	RECOMMENDED ECOLOGICAL CATEGORY (REC)
MODERATE	HIGH	B	0.00

PRESENT ECOLOGICAL STATE		ECOLOGICAL IMPORTANCE				ECOLOGICAL SENSITIVITY	
INSTREAM HABITAT CONTINUITY MOD	MODERATE	FISH SPP/SQ	1.00	INVERT TAXA/SQ	31.00	FISH PHYS-CHEM SENS DESCRIPTION	MODERATE
RIP/WETLAND ZONE CONTINUITY MOD	LARGE	FISH: AVERAGE CONFIDENCE	1.00	INVERT AVERAGE CONFIDENCE	2.16	FISH NO-FLOW SENSITIVITY DESCRIPTION	MODERATE
POTENTIAL INSTREAM HABITAT MOD ACT.	LARGE	FISH REPRESENTIVITY PER SECONDARY: CLASS	VERY LOW	INVERT REPRESENTIVITY PER SECONDARY: CLASS	MODERATE	INVERT PHYS-CHEM SENS DESCRIPTION	MODERATE
RIPARIAN-WETLAND ZONE MOD	SERIOUS	FISH REPRESENTIVITY PER SECONDARY: CLASS	VERY LOW	INVERT RARITY PER SECONDARY: CLASS	VERY HIGH	INVERTS VELOCITY SENSITIVITY	VERY HIGH
POTENTIAL FLOW MOD ACT.	SERIOUS	FISH RARITY PER SECONDARY: CLASS	FALSE	ECOLOGICAL IMPORTANCE: RIPARIAN-WETLAND-INSTREAM VERTEBRATES (EX FISH) RATING	VERY HIGH	RIPARIAN-WETLAND-INSTREAM VERTEBRATES (EX FISH) INTOLERANCE WATER LEVEL/FLOW CHANGES	VERY HIGH
POTENTIAL PHYSICO-CHEMICAL MOD ACTIVITIES	LARGE	ECOLOGICAL IMPORTANCE: RIPARIAN-WETLAND-INSTREAM VERTEBRATES (EX FISH) RATING	VERY HIGH	HABITAT DIVERSITY CLASS	MODERATE	STREAM SIZE SENSITIVITY TO MODIFIED FLOW/WATER LEVEL CHANGES DESCRIPTION	HIGH
		RIPARIAN-WETLAND NATURAL VEG RATING BASED ON % NATURAL VEG IN 500m (100%=5)	VERY LOW	HABITAT SIZE (LENGTH) CLASS	MODERATE	RIPARIAN-WETLAND VEG INTOLERANCE TO WATER LEVEL CHANGES DESCRIPTION	LOW
		RIPARIAN-WETLAND NATURAL VEG IMPORTANCE BASED ON EXPERT RATING	LOW	INSTREAM MIGRATION LINK CLASS	HIGH		
				RIPARIAN-WETLAND ZONE MIGRATION LINK	MODERATE		
				RIPARIAN-WETLAND ZONE HABITAT INTEGRITY CLASS	LOW		
				INSTREAM HABITAT INTEGRITY CLASS	MODERATE		

APPENDIX D: AQUATIC ECOLOGICAL ASSESSMENTS

PRESENT ECOLOGICAL STATUS OF THE BOTTELARY TRIBUTARY

RIVER CHARACTERISATION

In order to assess the condition and ecological importance and sensitivity of the Bottelary Tributary within the site, it is necessary to understand how the watercourse might have appeared under unimpacted conditions. This is achieved through a process of classifying rivers according to their ecological characteristics, in order that they can be compared to ecologically similar rivers.

River typing or classification involves the hierarchical grouping of rivers into ecologically similar units so that inter- and intra-river variation in factors that influence water chemistry, channel type, substratum composition and hydrology are best accounted for. Any comparative assessment of river condition should only be done between rivers that share similar physical and biological characteristics under natural conditions. Thus, the classification of rivers provides the basis for assessing river condition to allow comparison between similar river types. The primary classification of rivers is a division into Ecoregions. Rivers within an ecoregion are further divided into sub-regions.

Ecoregions: groups of rivers within South Africa, which share similar physiography, climate, geology, soils and potential natural vegetation. For the purposes of this study, the ecoregional classification presented in DWAF (1999), which divides the country's rivers into ecoregions, was used. The area assessed lies within the South Western Coastal Belt Ecoregion, the typical characteristics of which are described in Table C1.

Table C1. Characteristics of the South Western Coastal Belt Ecoregion

Main Attributes	Characteristics
Terrain Morphology	Plains; Low Relief; Plains Moderate Relief; E: Closed Hills; Mountains; Moderate and High Relief
Vegetation types	Sand Plain Fynbos; Mountain Renosterveld; West Coast Renosterveld; Dune Thicket; Strandveld Succulent Karoo
Altitude	0-300; 300-900 limited (m a.m.s.l)
MAP	100 to 1000 (mm)
Coefficient of Variation	20 to 39 (% of annual precipitation)
Rainfall concentration index	30 to 60
Rainfall seasonality	Winter
Mean annual temp. (°C)	14 to 20
Median annual simulated runoff	<5; 20 to >250 (mm) for quaternary catchment

Sub-regions: sub-regions (or geomorphological zones) are groups of rivers or segments of rivers, within an ecoregion, which share similar geomorphological features, of which gradient is the most important. The use of geomorphological features is based on the assumption that these are a major factor in the determination of the distribution of the biota. From the Site Characterisation assessment, the geomorphological and physical characteristics of the river at the site are provided in Table C2.

Table C2. Geomorphological and Physical features of the Bottelary Tributary within the site

Geomorphological Zone	Lower Foothill
Lateral mobility	Semi-confined
Channel form	Simple
Channel pattern	Single channel, low sinuosity
Channel substrate	Clay/sand
Channel modification	Channel has been largely modified by surrounding land use and upstream impoundments
Hydrological type	Seasonal
Ecoregion	South Western Coastal Belt
DWA catchment	G22E
Vegetation type	Swartland Shale Renosterveld
Rainfall region	Winter

INDEX OF HABITAT INTEGRITY

Evaluation of Index of Habitat Integrity (IHI) provides a measure of the degree to which a river has been modified from its natural state. This assessment was undertaken for the Bottelary Tributary within the site. The results are provided in Table C3.

The methodology (DWAF, 1999) involves a qualitative assessment of the number and severity of anthropogenic perturbations on a river and the damage they potentially inflict upon the system. These disturbances include both abiotic and biotic factors, which are regarded as the primary causes of degradation of a river. The severity of each impact is ranked using a scale from 0 (no impact) to 25 (critical impact). The IHI assessment is based on an evaluation of the impacts of two components of the river, the riparian zone and the in-stream habitat. The total scores for the in-stream and riparian zone components are then used to place the habitat integrity of both in a specific habitat category (Table C4).

Table C3. Index of Habitat Integrity Assessment results and criteria assessed for the Bottelary River within the site

Riparian Zone Habitat Integrity	Score	Instream Habitat Integrity	Score
Vegetation Removal	14	Water Abstraction	8
Exotic Vegetation	15	Flow Modification	7
Bank Erosion	3	Bed Modification	5
Channel Modification	9	Channel Modification	9
Water Abstraction	8	Water Quality	13
Inundation	7	Inundation	7
Flow Modification	7	Exotic Macrophytes	10
Water Quality	13	Exotic Fauna	4
		Rubbish Dumping	5
INTEGRITY CLASS	D/E	INTEGRITY CLASS	C/D

Table C4. Habitat Integrity categories (From DWAF, 1999)

Category	Description	Score (%)
A	Unmodified, natural.	90-100
B	Largely natural with few modifications. A small change in natural habitats and biota may have taken place but the ecosystem functions are essentially unchanged.	80-90
C	Moderately modified. A loss and change of natural habitat and biota have occurred but the basic ecosystem functions are still predominantly unchanged.	60-79
D	Largely modified. Large loss of natural habitat, biota and ecosystem function.	40-59
E	The loss of natural habitat, biota and basic ecosystem functions is extensive.	20-39
F	Modifications have reached a critical level and the lotic system has been modified completely with an almost complete loss of natural habitat and biota. In worst instances, basic ecosystem functions have been destroyed and changes are irreversible.	0

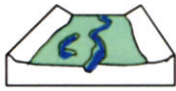
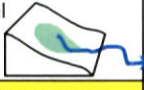
PRESENT ECOLOGICAL STATUS OF THE WETLAND AREAS

WETLAND CHARACTERISATION

In South Africa, wetlands are defined as “...land which is transitional between terrestrial and aquatic systems where the water table is usually at or near the surface, or the land is periodically covered with shallow water, and which land in normal circumstances supports or would support vegetation typically adapted to life in saturated soil” (National Water Act, Act No. 36 of 1998, (NWA) and Environmental Impact Assessment Regulations: Listing Notice 1 OF 2014 Government Notice R983 in Government Gazette 38282 dated 4 December 2014, as amended by Government Notice 327 in Government Gazette 40772 dated 7 April 2017). Wetlands are also included in the definition of a watercourse within the NWA, which implies that whatever legislation refers to watercourses will also be applicable to wetlands.

The wetland areas within the study area can be classified according to the wetland types described in Table C5. The classification is provided in Table C6.

Table C5: Wetland hydro-geomorphic types typically supporting inland wetlands in South Africa

Hydro-geomorphic types	Description	Source of water ¹	
		Surface	Sub-surface
Floodplain 	Valley bottom areas with a well-defined channel, gently sloped, characterized by floodplain features and alluvial transport or sediment deposition, usually lead to net sediment accumulation. Water input from channel and adjacent slopes.	***	*
Valley bottom with a channel 	Valley bottom areas with a well-defined channel but lacking characteristic floodplain features. May be gently sloped, characterized by net accumulation of alluvial deposits or may have steeper slopes, characterized by a net loss of sediment. Water inputs from main channel and from adjacent slopes.	***	*/ ***
Valley bottom without a channel 	Valley bottom areas with no clear channel, gently sloped and characterized by alluvial sediment deposition, generally leading to a net accumulation of sediment. Water inputs mainly from channel entering the wetland and also from adjacent slopes.	***	*/ ***
Hillslope seepage linked to a stream channel 	Slopes on hillsides, which are characterized by the colluvial movement of materials. Water inputs are mainly from sub-surface flow and outflow is usually via a well-defined stream channel connecting the area directly to a stream channel.	*	***
Isolated Hillslope seepage 	Slopes on hillsides, characterized by colluvial material movement. Water input mainly sub-surface flow and very limited outflow or through diffuse sub-surface / surface flow with no direct surface water connection to a stream channel.	*	***
Depression (includes Pans) 	A basin shaped area with a closed elevation contour that allows for the accumulation of surface water. It may also receive sub-surface water. An outlet is usually absent, and therefore this type is usually isolated from the stream channel network.	*/ ***	*/ ***

¹ Precipitation is an important water source and evapotranspiration an important

Water source: * Contribution usually small or *** Contribution usually large
 */ *** Contribution may be small or important depending on the local circumstances



Wetland

Table C6: Classification of wetland areas within study area

Name	Valley Bottom wetlands	Hillslope seeps
System	Inland	
Ecoregion	South Western Coastal Belt	
Landscape setting	Lower foothill valley floor	Hillslopes
Drainage	Wetlands fed from upstream channel	Surface runoff and groundwater
Seasonality	Perennial to seasonal	Seasonal
Anthropogenic influence	Modified by upstream agricultural activities as well as onsite disturbance	In cultivated areas, drainage channels excavated to drain area, dam constructed
Geology	Malmesbury shales	
Terrestrial Vegetation	Swartland Shale Renosterveld	
Dominant wetland vegetation	<i>Typha capensis</i> , <i>Pennisetum macrourum</i> , with some sedges and rushes (<i>Eleocharis limosa</i> and <i>Juncus</i> spp.)	<i>Juncus</i> spp. and <i>Ornithogalum thyrsoides</i>
Substrate	Sand and clay	
Salinity	Fresh	

WETLAND HABITAT INTEGRITY

The Present Ecological Status (PES) Method (DWAF 2005) was used to establish the integrity of the wetlands in the study area and was based on the modified Habitat Integrity approach developed by Kleynhans (DWAF, 1999; Dickens *et al*, 2003). Table C7 displays the criteria and C8 the results from the assessment of the habitat integrity of the wetlands. These criteria were selected based on the assumption that anthropogenic modification of the criteria and attributes listed under each selected criterion can generally be regarded as the primary causes of the ecological integrity of a wetland.

Table C7. Habitat integrity assessment criteria for palustrine wetlands (Dickens *et al*, 2003)

Criteria & Attributes	Relevance
Hydrologic	
Flow Modification	Changes in flow regime, volumes, velocity which affect inundation of habitats resulting in floristic changes or incorrect cues to biota. Abstraction of groundwater flows to wetland.
Inundation	Impoundment resulting in destruction of natural wetland habitat and cues for wetland biota.
Water Quality	
Water Quality Modification	From point or diffuse sources such as from upstream agricultural activities, human settlements and industrial activities. Aggravated by volumetric decrease in flow delivered to the wetland.
Sediment Load Modification	Reduction due to entrapment by impoundments or increase due to land use practices. Cause of unnatural rates of erosion, accretion, infilling of wetlands and habitat change.
Hydraulic/Geomorphic	
Canalisation	Desiccation / change to inundation of wetland and habitat change. River diversions or drainage.
Topographic Alteration	Consequence of infilling, ploughing, trampling, bridges, roads, railway lines and other substrate disruptive activities that reduce or change wetland habitat directly in inundation patterns.
Biota	
Terrestrial Encroachment	Desiccation of wetland and encroachment of terrestrial plants due to changes in hydrology or geomorphology. Change from wetland to terrestrial habitat and loss of wetland functions.
Indigenous Vegetation Removal	Direct destruction of habitat through farming or firewood collection affecting wildlife habitat and flow attenuation functions, organic matter inputs and increases potential for erosion.
Invasive Plants	Affects habitat through changes in community structure and water quality changes.
Alien Fauna	Presence of alien fauna affecting faunal community structure.
Over utilization	Overgrazing, over fishing, etc.

Table C8. Wetland habitat integrity assessment (score of 0=critically modified to 5=unmodified)

Criteria & Attributes	Valley Bottom wetlands	Hillslope seeps
Hydrological		
Flow Modification	1.5	1.0
Permanent Inundation	1.5	1.0
Water Quality		
Water Quality Modification	2.5	1.5
Sediment Load Modification	2.0	1.5
Hydraulic/Geomorphic		
Canalisation	1.5	1.0
Topographic Alteration	2.5	1.5
Biota		
Terrestrial Encroachment	2.5	1.0
Indigenous Vegetation Removal	1.5	1.0
Invasive Plant Encroachment	2.0	1.5
Alien Fauna	2.0	1.5
Over utilization of Biota	2.5	1.5
Category	D/E	E

Table C9. Relation between scores given and ecological categories

Scoring Guidelines	Interpretation of Scores for all Attributes: Rating of Present Ecological Status Category (PESC)
Natural, unmodified – score=5.	CATEGORY A >4; Unmodified, or approximates natural condition.
Largely natural – score=4.	CATEGORY B >3 and ≤4; Largely natural with few modifications, but with some loss of natural habitats.
Moderately modified – score=3.	CATEGORY C >2 and ≤3; moderately modified, but with some loss of natural habitats.
Largely modified – score=2.	CATEGORY D ≤2; largely modified. Large loss of natural habitat & basic ecosystem function has occurred. OUTSIDE GENERALLY ACCEPTABLE RANGE
Seriously modified – rating=1.	CATEGORY E >0 and <2; seriously modified. Extensive loss of natural habitat & basic ecosystem function.
Critically modified – rating=0.	CLASS F 0; critically modified. Modification reached critical levels with system completely modified.

ECOLOGICAL IMPORTANCE AND SENSITIVITY AND ECOSYSTEM SERVICES

RIVER ASSESSMENT

The EIS assessment considers a number of biotic and habitat determinants surmised to indicate either importance or sensitivity. The determinants are rated according to a four-point scale (Table C10). The median of the resultant score is calculated to derive the EIS category (EISC in Table C11).

Table C10. Definition of the scale used to assess determinants presumed to indicate importance or sensitivity

Scale	Definition
1	One species/taxon judged as rare or endangered at a local scale.
2	More than one species/taxon judged to be rare or endangered on a local scale.
3	One or more species/taxon judged to be rare or endangered on a Provincial/regional scale.
4	One or more species/taxon judged as rare or endangered on a National scale (i.e. SA Red Data Books)

Table C11. Ecological importance and sensitivity categories (DWAf, 1999)

EISC	General description	Median Range
Very high	Quaternaries/delineations considered unique on a national and international level based on unique biodiversity (habitat diversity, species diversity, unique species, rare and endangered species). These rivers (in terms of biota and habitat) are usually very sensitive to flow modifications and have no or only a small capacity for use.	>3-4
High	Quaternaries/delineations considered unique on a national scale based on their biodiversity. These rivers may be sensitive to flow modifications but in some cases may have substantial capacity for use.	>2-≤3
Moderate	Quaternaries/delineations considered unique on a provincial or local scale due to biodiversity. These rivers are not usually very sensitive to flow modifications and often have substantial capacity for use.	>1-≤2
Low/ marginal	Quaternaries/delineations not unique on any scale. These rivers are generally not very sensitive to flow modifications and usually have substantial capacity for use.	≤1

Table C12. Results of the EIS assessment for the Bottellary Tributary

Biotic Determinants	Score
Rare and endangered biota	1
Unique biota	1
Intolerant biota	1
Species/taxon richness	1
Aquatic Habitat Determinants	
Diversity of aquatic habitat types or features	1
Refuge value of habitat type	1
Sensitivity of habitat to flow changes	2
Sensitivity of flow related water quality changes	2
Migration route/corridor for in-stream and riparian biota	1
National parks, wilderness areas, Nature Reserves, Natural Heritage sites, Natural areas, PNEs	0
RATINGS	1.1
EIS CATEGORY	Moderate/Low

WETLAND ASSESSMENT

The assessment of the ecosystem services supplied by the wetland areas was conducted according to the guidelines as described by Kotze *et al* (2005). An assessment was undertaken that examines and rates the services listed in Table C13. The characteristics were scored according to the general levels of services provided.

Table C13: Goods and services assessment results for wetlands (low=0 and high=4)

Goods and services	Valley Bottom wetlands	Hillslope seep
Flood attenuation	2.0	1.0
Stream flow regulation	2.5	1.0
Sediment trapping	2.5	1.1
Phosphate trapping	2.0	1.0
Nitrate removal	2.0	0.8
Toxicant removal	1.5	0.5
Erosion control	2.5	0.2
Carbon storage	2.0	0.8
Biodiversity Maintenance	2.5	1.2
Water supply	2.0	0.8
Natural resources	0.5	0.4
Cultivated foods	0.0	0.5
Cultural significance	0.0	0.0
Tourism and recreation	1.5	1.0
Education and research	1.0	1.0

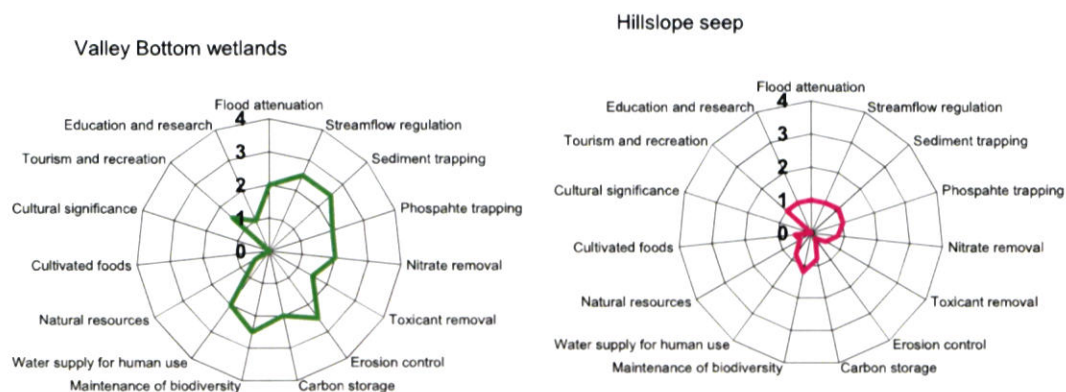


Figure C1: Ecosystem services provided by the wetland areas

The Ecological Importance and Sensitivity Assessment for the wetland areas considers the same biotic and habitat determinants as evaluated for the river assessment.

Table C14: Results of the EIS assessment for the wetland areas

Biotic Determinants	Valley Bottom wetlands	Hillslope seep
Rare and endangered biota	0.5	0.5
Unique biota	1.0	0.5
Intolerant biota	1.0	0.5
Species/taxon richness	1.0	0.5
Aquatic Habitat Determinants		
Diversity of aquatic habitat types or features	1.5	0.5
Refuge value of habitat type	2.0	0.5
Sensitivity of habitat to flow changes	1.5	1.0
Sensitivity of flow related water quality changes	1.5	1.0
Migration route for instream and riparian biota	2.0	0
National parks, wilderness areas, Nature Reserves, Natural Heritage sites, PNEs	0	0
EIS CATEGORY	Moderate/Low	Low

APPENDIX E: CRITERIA FOR ASSESSMENT

These criteria are drawn from the EIA Regulations published by the Department of Environmental Affairs and Tourism (April 1998) in terms of the Environmental Conservation Act, 1989 (Act No. 73 of 1989) and the latest basic assessment report template provided by the Department of Environmental Affairs and Development Planning (DEA&DP) and the DEA&DP Guidelines for involving Biodiversity Specialists in EIA Processes, 2005. These criteria include:

Nature of the impact

This is an appraisal of the type of effect (positive or negative) the construction, operation and maintenance of a development would have on the affected environment. This description should include what is to be affected.

Extent of the impact

Extent defines the physical extent or spatial scale of the impact. The impact could:

- **Site specific:** limited to the site.
- **Local:** limited to the site and the immediate surrounding area (1-10km)
- **Regional:** covers an area that includes an entire geographic region or extends beyond one region to another.
- **National:** across national boundaries and may have national implications.

Duration of the impact

The specialist should indicate whether the lifespan of the impact would be:

- **Short term:** 0-5 years.
- **Medium term:** 5-15 years.
- **Long term:** beyond the operational phase, but not permanently).
- **Permanent:** where mitigation either by natural processes or by human intervention will not occur in such a way or in such time span that the impact can be considered transient.

Consequence of Impact

Indicate how the activity will affect the environment.

Probability of occurrence

Probability describes the likelihood of the impact occurring. The likelihood can be described as:

- **Improbable/unlikely:** low likelihood of the impact occurring.
- **Probable:** distinct possibility the impact will occur.
- **Highly probable:** most likely that the impact will occur.
- **Definite:** impact will occur regardless of any prevention measures.

Irreplaceable loss of resources

Describes the degree to which resources will be irreplaceably lost due to the proposed activity. It can be **no loss of resources**, **marginal loss**, **significant loss** or **complete loss of resources**.

Reversibility

This refers to the degree to which an impact can be reversed.

- **Fully reversible:** where the impact can be completely reversed.
- **Partly reversible:** where the impact can be partially reversed.
- **Irreversible:** where the impact is permanent.

Indirect impacts

Indirect impacts are secondary impacts and usually occur at a different place or time. Specialists will need to elaborate on any indirect or secondary impacts of proposed activities. If there are no indirect impacts specialist will need to briefly explain so.

Cumulative impact

An effect which in itself may not be significant but may become significant if added to other existing or potential impacts that may result from activities associated with the proposed development. Cumulative impacts prior to and post mitigation must be assessed. The cumulative effect can be:

- **Negligible:** the impact would result in negligible to no cumulative effect.
- **Low:** the impact would result in insignificant cumulative effects.
- **Medium:** the impact would result in minor cumulative effects.
- **High:** the impact would result in significant cumulative effects.

Degree to which impact can be avoided

This indicates the degree to which an impact can be avoided. The degree of avoidance can either be **high** (impact is completely avoidable), **moderate** (impact is avoidable with moderate mitigation), **low** (the impact is difficult to avoid and will require significant mitigation measures) or **unavoidable** (the impact is cannot be avoided even with significant mitigation measures).

Degree to which impact can be managed

This indicates the degree to which an impact can be managed. The degree of management can either be **high** (impact is completely manageable), **moderate** (impact is manageable with moderate mitigation), **low** (the impact is difficult to manage and will require significant mitigation measures) or **unmanageable** (the impact is cannot be managed even with significant mitigation measures).

Residual impacts

Residual impacts are those impacts that remain following the implementation of mitigation measures. Residual impacts must be identified and discussed. If there are no residual impacts, the specialist will need to briefly explain that the activity will have no residual impacts.

Degree to which an impact can be mitigated

This indicates the degree to which an impact can be reduced. The degree of mitigation can either be **high** (the impact can be **fully** mitigated), **moderate** (the impact can be **partly mitigated**) or **not mitigated at all**.

Significance

Based on a synthesis of the information contained in the above-described procedure, the significance of the potential impacts can be assessed (prior and post mitigation) in terms of the following significance criteria:

- **No impact.**
- **Low negative:** where it would have negligible effects, and would require little or no mitigation.
- **Low positive:** the impact will have minor positive effects.
- **Medium negative:** the impact will have moderate negative effects and will require moderate mitigation.
- **Medium positive:** the impact will have moderate positive effects.
- **High negative:** the impact will have significant effects and will require significant mitigation measures to achieve an accepted level of impact.
- **High positive:** the impact will have significant positive effects.
- **Very high negative:** the impact will have highly significant effects and are unlikely to be able to be mitigated adequately.
- **High positive:** the impact will have highly significant positive effects.

APPENDIX F: RISK ASSESSMENT

ASPECTS AND IMPACT REGISTER/RISK ASSESSMENT FOR WATERCOURSES INCLUDING RIVERS, PANS, WETLANDS, SPRINGS, DRAINAGE LINES: Portion 10 of Farm 211, Weigelen Stellenbosch
 COMPILED BY: Toni Balcher (SACNASP no. 400040/10), BlueScience
 DATE: May 2021

Nr.	Phases	Activity	Aspect	Impact	Severity					Consequence	Frequency of activity	Frequency of impact	Legal Issues	Detection	Likelihood	Significance	Risk Rating	Control Measures	Confidence	Type Watercourse; PES and EIS
					Flow Regime	Physico Chemical (Water Quality)	Habitat (Geomorph+ Vegetation)	Biotic	Severity											
1	Construction	Infilling of existing wetland areas within construction site and development of the adjacent area	Soil movement and construction activities within and adjacent to aquatic features	Loss of existing wetland areas and water quality impacts	5	5	5	5	5	11	1	5	5	3	14	154	M	See freshwater report	High	Bottellary Tributary and wetlands PES C/D; EIS = moderate/low
1	Operation	Storm water run-off generated on site	Flow and quality of runoff from developed site and stormwater, ongoing disturbance of aquatic habitat	Modified flow and water quality of stormwater, disturbance of aquatic habitat	5	5	5	5	5	10	3	4	5	3	15	150	M		Medium/high	

**BOTANICAL ASSESSMENT FOR THE
PROPOSED RED TRACTOR COMPOST
FACILITY AT PORTION 211 OF FARM
10, STELLENBOSCH MUNICIPALITY**



CAPENSIS

PAUL EMMS

MAY 2021

REPORT PREPARED FOR
MS-EC (MONIQUE SHAM ENVIRONMENTAL CONSULTANTS)

THE SPECIALIST

I, Paul Ivor Emms, 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
- 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 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;
- have ensured/will ensure that information containing all relevant facts in respect of the application was/will be distributed or was/will be made available to interested and affected parties and the public and that participation by interested and affected parties was/will be facilitated in such a manner that all interested and affected parties were/will be provided with a reasonable opportunity to participate and to provide comments;
- have ensured/will ensure that the comments of all interested and affected parties were/will be considered, recorded and submitted to the Department in respect of the application;
- have ensured/will ensure the inclusion of inputs and recommendations from the specialist reports in respect of the application, where relevant;
- have kept/will keep a register of all interested and affected parties that participate/d in the public participation process; and
- am aware that a false declaration is an offence in terms of regulation 48 of the 2014 NEMA EIA Regulations.

Note: The terms of reference of the review specialist must be attached.

Signature of the specialist:



Date: 19 May 2021

NATIONAL LEGISLATION AND REGULATIONS GOVERNING THIS REPORT

This is a 'specialist report' and is compiled in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended, and the Environmental Impact Assessment Regulations, 2014, as amended.

APPOINTMENT OF SPECIALIST

Capensis Ecological Consulting (Pty) Ltd (Capensis) was appointed by MS-EC (Monique Sham Environmental Consultants) to provide specialist botanical consulting services for the the proposed Red Tractor Compost Facility at Portion 211 of Farm 10 Stellenbosch, Stellenbosch Municipality.

CONDITIONS RELATING TO THIS REPORT

The content of this report is based on the authors best scientific and professional knowledge as well as available information. Capensis Ecological Consulting (Pty) Ltd reserves the right to modify the report in any way deemed fit should new, relevant or previously unavailable or undisclosed information become known to the author from on-going research or further work in this field, or pertaining to this investigation.

This report must not be altered or added to without the prior written consent of the authors. This also refers to electronic copies of the report which are supplied for the purposes of inclusion as part of other reports, including main reports. Similarly, any recommendations, statements or conclusions drawn from or based on this report must make reference to this report. If these form part of a main report relating to this investigation or report, this report must be included in its entirety as an appendix or separate section to the main report.

DETAILS OF THE SPECIALIST

Mr Paul Emms Pr. Sci. Nat.
156 Main Road
Muizenberg
7950

Professional registration: South African Council for Natural Scientific Professions No. 400352/14

Mobile: 076-7377-468

e-mail: paul@capenis.co.za

Expertise

- Qualifications: ND Horticulture, BSc. (Biodiversity & Conservation Biology), Hons. (Botany), MSc (Botany).
- Botanist with 12 years' experience in the field of botanical surveys.
- Has conducted over 250 specialist botanical studies.

CONTENTS

1. INTRODUCTION.....	4
2. TERMS OF REFERENCE	4
2.1. GENERAL.....	4
2.2. SPECIFIC	5
3. PROTOCOL FOR DETERMINING LEVEL OF REPORTING	5
4. STUDY AREA	6
4.1. LOCALITY	6
4.2. LANDSCAPE AND GEOLOGY.....	9
5. METHODOLOGY, LIMITATIONS AND ASSUMPTIONS	9
6. VEGETATION DESCRIPTION.....	11
6.1. NATIONAL VEGETATION TYPE.....	11
6.2. ECOSYSTEM THREAT STATUS.....	14
6.3. CONSERVATION PLANS	16
6.4. THE VEGETATION OF THE STUDY AREA.....	18
7. SENSITIVITY AND CONSTRAINTS	27
8. IMPACT ASSESSMENT	31
8.1. 'NO GO' OR NO DEVELOPMENT SCENARIO	31
8.2. DIRECT IMPACTS.....	31
8.3. MITIGATION.....	34
8.4. INDIRECT IMPACTS	35
8.5. CUMULATIVE IMPACTS.....	35
9. CONCLUSIONS AND RECOMMENDATIONS	36
10. REFERENCES.....	36
APPENDIX 1: MINIMUM CONTENT REQUIREMENTS FOR TERRESTRIAL BIODIVERSITY SPECIALIST REPORTS AS PER PROTOCOL FOR THE SPECIALIST ASSESSMENT OF ENVIRONMENTAL IMPACTS ON TERRESTRIAL BIODIVERSITY (GN 320 OF 20 MARCH 2020).	38
APPENDIX 2: ASSESSMENT METHODOLOGY	39
(Source: SRK Consulting)	39
APPENDIX 3: TERRESTRIAL PLANTS SPECIES SPECIALIST ASSESSMENT ...	43
APPENDIX 4: CURRICULUM VITAE: PAUL EMMS.....	58

1. INTRODUCTION

An application is underway for a proposed compost facility (Red Tractor Compost Facility) at Portion 211 of Farm 10 Stellenbosch. A Botanical Constraints Map was compiled by the author in 2020 in order to identify botanical sensitivities and potentially developable versus No Go areas on the property. In addition to the preliminary botanical study several other specialist studies were undertaken to guide the developer, including freshwater ecology. Based on these studies the client has drafted a Spatial Development Plan (SDP). The impacts associated with client's preferred SDP in terms of loss of vegetation and species is assessed in this report along with the No Go option. This report forms part of the Terrestrial Ecology Assessment for an Environmental Authorization (EA) application. In addition, a Terrestrial Plants Species Specialist Assessment Report is provided (Appendix 3) in accordance with new procedures for reporting on identified environmental themes published in October 2020 (Government Gazette No. 43844, 2020). Capensis Ecological Consulting Pty (Ltd) (Capensis) was commissioned by MS-EC (Monique Sham Environmental Consultants) to carry out the study.

2. TERMS OF REFERENCE

2.1. GENERAL

Most of the requirements for botanical assessments were followed. These include guidelines set out in the following documents:

- Department of Environmental Affairs and Development Planning (DEA&DP) Guidelines for Involving Biodiversity Specialists in the EIA Process (Brownlie, 2005);
- Ecosystem Guidelines for Environmental Assessment in the Western Cape (Cadman *et al.*, 2016);
- The requirements of CapeNature for providing comments on agricultural, environmental, mine planning and water-use related applications (Turner, 2013); and
- Protocol for the Assessment and Reporting of Environmental Impacts on Terrestrial Biodiversity (Government Gazette 43110, 2020). Requirements for Terrestrial Biodiversity Assessment.

- Protocol for the Assessment and Reporting of Environmental Impacts on Terrestrial Biodiversity (Government Gazette 43855, 2020). Terrestrial Plants Species Specialist Assessment Report.

2.2. SPECIFIC

The specific terms of reference followed for this assessment are as follows:

- Identify and describe biodiversity patterns at community and ecosystem level (main vegetation type, plant communities in the vicinity and threatened/vulnerable ecosystems), at species level (threatened Red List species, presence of alien species) and in terms of significant landscape features.
- Assess the local and regional importance of the vegetation communities and plant species within the affected areas based on the relevant biodiversity plans, bioregional planning documents and Environmental Management Frameworks.
- Determine the implications that the proposed project has for the relevant fine-scale biodiversity plan (in this case the 2017 Western Cape Biodiversity Spatial Plan).
- Describe the sensitivity of the site and its environs and map these resources.
- Identify any areas not suitable for construction activities (No-Go Areas) and related buffers that should be observed.
- Describe the direct, indirect and cumulative botanical impacts (both before and after mitigation) and provide an assessment of the significance of the impacts.

3. PROTOCOL FOR DETERMINING LEVEL OF REPORTING

The sensitivity of the site was predetermined using the Department of Environmental Affairs (DEA) Screening Tool (<https://screening.environment.gov.za/screeningtool/>). The study area is rated as Very High for terrestrial biodiversity sensitivity (Figure 1). It should be noted that the Very High level of sensitivity, if confirmed during the study, requires a Terrestrial Biodiversity Impact Assessment to be submitted as part of the application for Environmental Authorisation (EA). This follows the protocol for the assessment and reporting of environmental impacts on terrestrial biodiversity (Government Gazette 43110, 2020). Note that the sensitivity rating for plant species themes is provided in Appendix 3.

4. STUDY AREA

Portion 211 of Farm 10 Stellenbosch is located along Bottelary Road in Stellenbosch in a rural farming area (Figure 2). The study area is located about midway between Brackenfell (west) and the R304 (east) at 33°52'32.79"S; 18°46'52.58"E. The study area, or site, is 34.4 ha in size and comprises mostly undeveloped farmland (Figure 3).

BOTANICAL ASSESSMENT: PORTION 211 OF FARM 10 STELLENBOSCH



Figure 2. Google Earth™ aerial image showing the study area located along Bottelary Road.

BOTANICAL ASSESSMENT: PORTION 211 OF FARM 10 STELLENBOSCH



Figure 3. Google Earth™ aerial image showing the study area (red outline).

4.2. LANDSCAPE AND GEOLOGY

Most of the study area is characterized by gently-sloping hills, with the flattest areas occurring on the eastern side. A watercourse runs along the southern boundary where the land slopes moderately downwards toward this feature (see Figure 3). The eastern side has more pronounced slopes than the eastern side (Figure 4 shows the 5 m contours). The soils comprise a mix of clay derived from Malmesbury Group shales and gritty granite derived from Cape Granite (Rebelo et al. 2006 in Mucina & Rutherford, 2006).

5. METHODOLOGY, LIMITATIONS AND ASSUMPTIONS

The study area was visited on 22 October 2020 and surveyed on foot. Sample waypoint positions were obtained using a Garmin GPSmap 62. Photographs were georeferenced. The following sources have been used to inform this study:

Vegetation map: A product of *The Vegetation of South Africa, Lesotho and Swaziland* (VEGMAP) (Mucina & Rutherford, 2006). The South African National Biodiversity Institute (SANBI) has updated the VEGMAP (2018). These shapefiles were used.

Ecosystem threat status: Informed by (1) The National List of Ecosystems that are Threatened and Need of Protection (Government Gazette, 2011), (2) The Western Cape State of Biodiversity 2017 Report (Turner, 2017), and (3) The National Biodiversity Assessment (2018)(SANBI, 2019).

Biodiversity planning: The 2017 Western Cape Biodiversity Spatial Plan (Pool-Stanvliet et al., 2017) with specific reference to the Drakenstein Municipality, is important for determining the conservation importance of the designated habitat. Ground-truthing is an essential component in terms of determining the habitat condition.

Important species: The presence or absence of threatened (i.e. species of conservation concern) and ecologically important species informs the ecological condition and sensitivity of the site. The latest conservation status of species is checked in the Red List of South African Plants (Raimondo et al. 2009) (www.redlist.sanbi.org).

Previous studies: Previous botanical studies at a local scale, if available, are consulted to provide additional information regarding the botanical attributes of the site.

Site boundary: these and other resource layers were used to define the site boundary and to compile several maps. This information is available on the CapeFarmMapper website (Department of Agriculture: gis.elsenberg.com).



Figure 4. The study area (red outline) with 5 m contours (Cape Farm Mapper: Western Cape Department of Agriculture).

The site visit was carried out in spring when most geophytes are in flower and identifiable. This is the most suitable time to conduct botanical surveys in the region. The habitat maps are considered to be a fair representation of the on-ground features. The dense cover of Invasive Alien Plants (IAPs) and exotic grasses suppresses the indigenous vegetation. The likelihood of finding Species of Conservation Concern (SCC) would have been higher if this were not the case, and thus presents a limitation.

6. VEGETATION DESCRIPTION

6.1. NATIONAL VEGETATION TYPE

The Vegetation of South Africa, Lesotho and Swaziland (VEGMAP) (SANBI 2018), assigns two vegetation types to the study area (Figure 5), namely Swartland Shale Renosterveld and Swartland Granite Renosterveld.

The landscape and vegetation of the vegetation types or ecosystems is described by Rebelo et al. (in Mucina and Rutherford, 2006) below:

Swartland Granite Renosterveld

“Moderate foot slopes and undulating plains supporting a mosaic of grasslands/herblands and medium dense, microphyllous shrublands dominated by renosterbos. Groups of small trees and tall shrubs are associated with heuweltjies and rock outcrops. The boundary with FFg 2 Boland Granite Fynbos is diffuse and patchy.”

Swartland Shale Renosterveld

“Moderately undulating plains and valleys supporting low to moderately tall leptophyllous shrubland of varying canopy cover as well as low, open shrubland dominated by renosterbos. Heuweltjies are a very prominent local feature of the environment, forming ‘hummockveld’ near Piketberg and giving the Tygerberg Hills their name. Stunted trees and thicket are often associated with the heuweltjies. Disturbed

areas are dominated by Athanasia trifurcata and Otholobium hirtum. Patches of Cynodon dactylon grazing lawns' also occur in abundance."

Ecological drivers

The key ecological drivers in **renosterveld** ecosystems according to Cadman *et al.* (2016) include (1) fire and grazing patterns, (2) variations in edaphic conditions and water availability, (3) edaphic boundaries, (4) underlying geology, (5) specialised plant-pollinator interactions, (6) plant-plant interactions and (7) living (biogenic) soil crust.

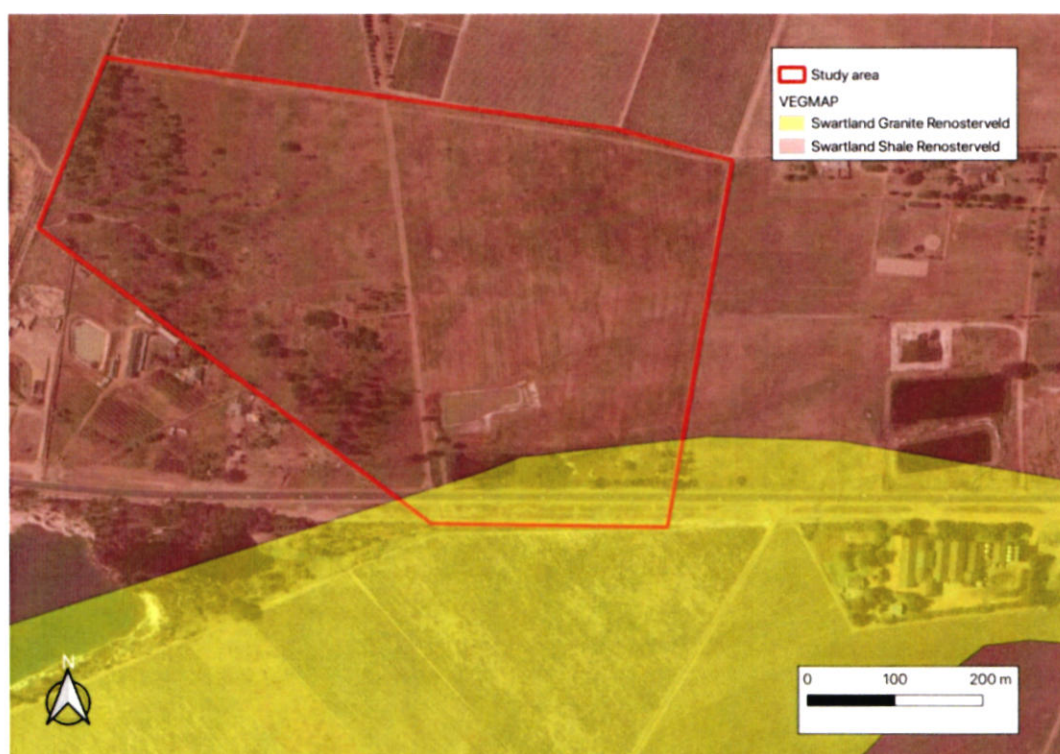


Figure 5. VEGETATION MAP: The study area superimposed on a portion of *The Vegetation Map of South Africa, Lesotho and Swaziland* (SANBI, 2019) overlaid on CDNGI 50 cm mosaic aerial image.

6.2. ECOSYSTEM THREAT STATUS

Ecosystem threat status is derived from three sources. These include the following:

1. The National List of Ecosystems that are Threatened and Need of Protection (Government Gazette, 2011);
2. The Western Cape State of Biodiversity (WCSB) Report (Turner, 2017); and
3. The National Biodiversity Assessment (NBA 2018)(SANBI 2019).

Swartland Shale Renosterveld is listed as Critically Endangered in the NLTTE, WCSB Report and NBA. The ecosystem has undergone extensive loss mainly due to agriculture. This is explained in the NBA: "*Swartland Shale Renosterveld has mainly been turned into agricultural land, having declined to 12 % (6235 ha)(2014) of its original extent, with 401 652 ha (80 %)(2014) consisting of croplands and a further 24 970 ha (5 %)(2014) consisting of old fields (HBMOD 2018). The ecosystem has further been transformed by urban development, with 8060 ha (2 %)(2014) covered by built areas, as well as 3444 ha (1 %)(2014) of artificial water bodies (HBMOD 2018). The remnants of Swartland Shale Renosterveld are found in isolated pockets, usually on steeper ground where alien annual grasses of the genera Avena, Briza, Bromus, Lolium, Phalaris and Vulpia are a primary concern (Rebelo et al. 2006). Other alien invasive species include Acacia saligna (very scattered), A. mearnsii (very scattered), several species of Prosopis and Eucalyptus, as well as herbs including Erodium cicutarium, E. moschatum, Echium plantagineum and Petrorhagia prolifera (Rebelo et al. 2006), resulting in 214 plant species being threatened mainly by alien species (189 species) and overgrazing (139 species), as well as altered fire regimes (110 species) and pollution (81 species)(Red List of Species 2018).*" (NSBA, 2018; metadata supplied by SANBI).

Swartland Granite Renosterveld is listed as Critically Endangered in the NLTTE and WCSB Report. It is listed as Endangered in the NBA. The NBA describes the conservation status: "*The ongoing decline in natural area in Swartland Granite Renosterveld, having declined to 21 % (19 800 ha)(2014) of its original extent, has been driven primarily by agriculture, with 62 367 ha (65 %)(2014) of the ecosystem consisting of croplands especially vineyards, olive orchards and pastures, and a further 9150 ha (10 %)(2014) consisting of old fields (HABMOD 2018). Artificial water bodies have also transformed 1081 ha (1 %)(2014) of Swartland Granite Renosterveld*

(HBMOD 2018). Additionally, the ecosystem is degraded by erosion and alien invasions by *Lolium multiflorum*, *Avena fatua*, *Bromus diandrus*, *Acacia saligna*, *Pinus pinaster* as well as various species of *Eucalyptus*, although alien grasses are particularly pervasive (Rebelo et al. 2006). Consequently, 177 plant species are threatened mainly as a result of alien species (166 species) and overgrazing (115 species), but also by altered fire regimes (88 species) and pollution (66 species) (Red List of Species 2018)."

Table 1 provides a breakdown of ecosystem conservation threat status for the two vegetation types.

Table 1. Ecosystem threat status according derived from available information sources

Ecosystem threat status	The National List of Threatened Terrestrial Ecosystems	The Western Cape State of Biodiversity	The National Biodiversity Assessment
Swartland Granite Renosterveld	CRITICALLY ENDANGERED (A1 & D1)	CRITICALLY ENDANGERED (A1 & D1)	ENDANGERED
Reason	Irreversible loss of natural habitat; Threatened plant species associations.	Irreversible loss of natural habitat; Threatened plant species associations.	*A3WC,B1,B1thrsp_inv,B1thrsp_ovgr
Remaining % of ecosystem	15%	11.4%	20.4%
Conservation target	Data deficient	26%	26% (shortfall = 5.6%)
Species of special concern	123 Threatened species and 27 endemic species.	Data deficient	Data deficient
Swartland Shale Renosterveld	CRITICALLY ENDANGERED (A1 & D1)	CRITICALLY ENDANGERED (A1 & D1)	CRITICALLY ENDANGERED
Reason	Irreversible loss of natural habitat; Threatened plant species associations.	Irreversible loss of natural habitat; Threatened plant species associations.	*A3WC
Remaining % of ecosystem	8%	6.33%	12.4%
Conservation target	Data deficient	26%	26% (shortfall = 13.6%)
Species of special concern	151 Threatened species and 35 endemic species.	Data deficient	Data deficient

***A3WC** - historical decline in area using the supplementary land-cover data for the Western Cape

***B1** – Extent of a minimum convex polygon (km²) enclosing all occurrences (EOO) & an observed or inferred continuing decline in spatial extent.

***B1thrsp_inv** – limited extent ecosystems at risk of collapse due to invasive species

***B1thrsp_ovgr** – limited extent ecosystems at risk of collapse due to overgrazing

***B1thrsp_inv** – limited extent ecosystems at risk of collapse due to invasive species

6.3. CONSERVATION PLANS

The 2017 WCBSP Handbook (Pool-Stanvliet et al., 2017) distinguishes between the various conservation planning categories. Critical Biodiversity Areas are habitats with high biodiversity and ecological value. Such areas include those that are likely to be in a natural condition (CBA 1) and those that are potentially degraded or represent secondary vegetation (CBA 2). Ecological Support Areas are not essential for meeting biodiversity targets but play an important role in supporting the functioning of Protected Areas or CBAs and are often vital for delivering ecosystem services. A distinction is made between ESAs that are still likely to be functional (i.e. in a natural, near-natural or moderately degraded condition; (ESA 1) and Ecological Support Areas that are severely degraded, or have no natural cover remaining, and therefore require restoration (ESA 2). Other Natural Area (ONA) sites are not currently identified as a priority, but retain most of their natural character and perform a range of biodiversity and ecological infrastructure functions. Although not prioritised, they are still an important part of the natural ecosystem.

Figure 6 shows the spatial distribution of the conservation planning categories. A large portion of the study area is assigned as CBA1, on the western side and southern portion. The ESA2 is continuous with the CBA1 but occupies a far smaller proportion of the site.

BOTANICAL ASSESSMENT: PORTION 211 OF FARM 10 STELLENBOSCH

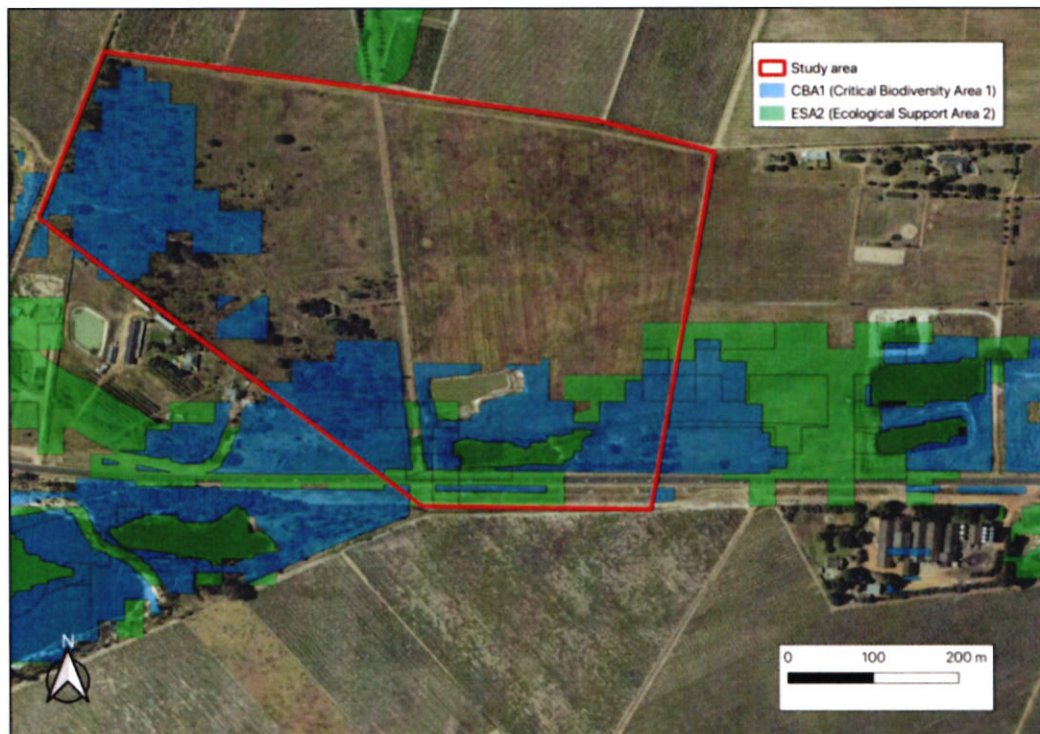


Figure 6. CONSERVATION PLANNING MAP: The study area in relation to the Western Cape Biodiversity Spatial Plan (Pool-Stanvliet et al, 2017) overlaid on a CDNGI 50 cm mosaic aerial image.

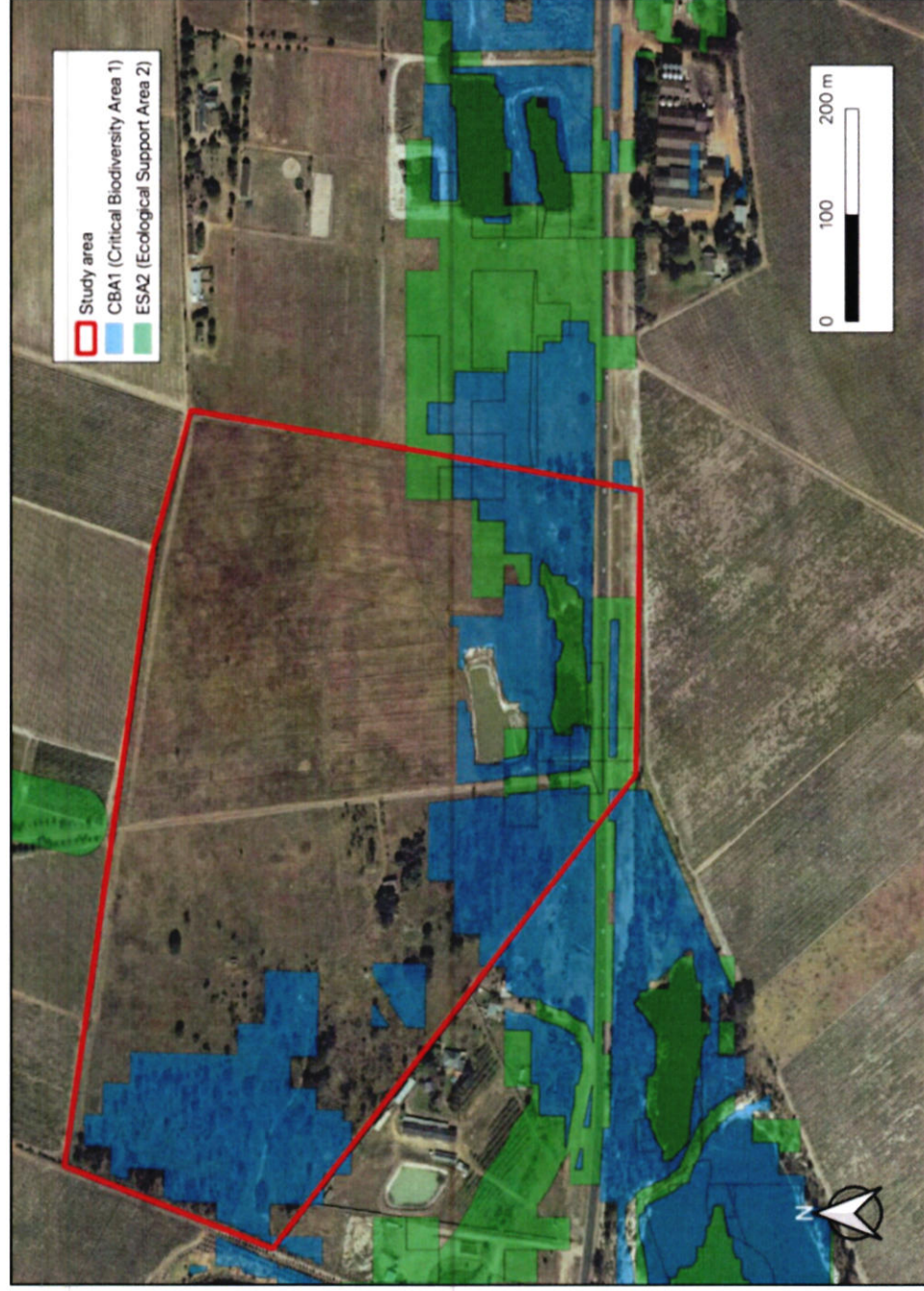


Figure 6. CONSERVATION PLANNING MAP: The study area in relation to the Western Cape Biodiversity Spatial Plan (Pool-Stanvliet et al, 2017) overlaid on a CDNGI 50 cm mosaic aerial image.

6.4. THE VEGETATION OF THE STUDY AREA

The vegetation is described with the aid of survey waypoints (Figure 7). The broad habitats are described according to the habitat condition categories listed in Table 1. The habitats are shown in Figure 9 and include the following:

1. Degraded with remnant species.
2. Highly degraded to Transformed.
3. Highly degraded restorable habitat.
4. Transformed.
5. Wet areas.

Species of Conservation Concern occur within the various habitats and are indicated in the habitat map.

Table 1. Habitat category descriptions and criteria

Habitat category	Description
Intact vegetation	A true representation of the original vegetation type in terms of structure and species makeup. Minimal soil disturbance. Unlikely to have ever been ploughed. Disturbance may be evident.
Semi-intact	Resembles the original vegetation type in terms of structure and species makeup but has lower species diversity than intact vegetation. Dominated by disturbance-resilient species. Soils may have been heavily disturbed in the past. Restoration potential is high.
Degraded	Only a few species representative of the original vegetation type are present. The vegetation has undergone heavy disturbance. Restoration potential is either low or moderate.
Highly degraded	The original vegetation is usually absent and has been removed in the past. Only a few remnant or pioneer species are present. Soils usually ploughed in the past. Restoration potential is very low.
Transformed	No remnant species exist anymore. The landscape is altered irreversibly with no restoration potential. Examples include cultivated farmland and the built environment.

BOTANICAL ASSESSMENT: PORTION 211 OF FARM 10 STELLENBOSCH

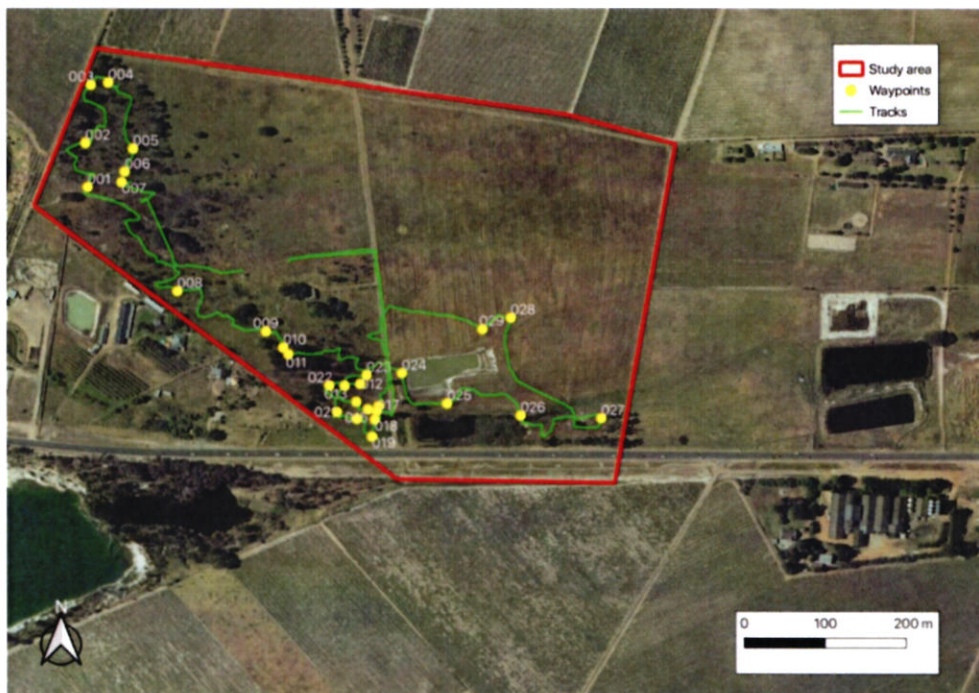


Figure 7. SURVEY MAP: The study area survey waypoints and tracks overlaid on a CDNGI 50 cm mosaic aerial image.

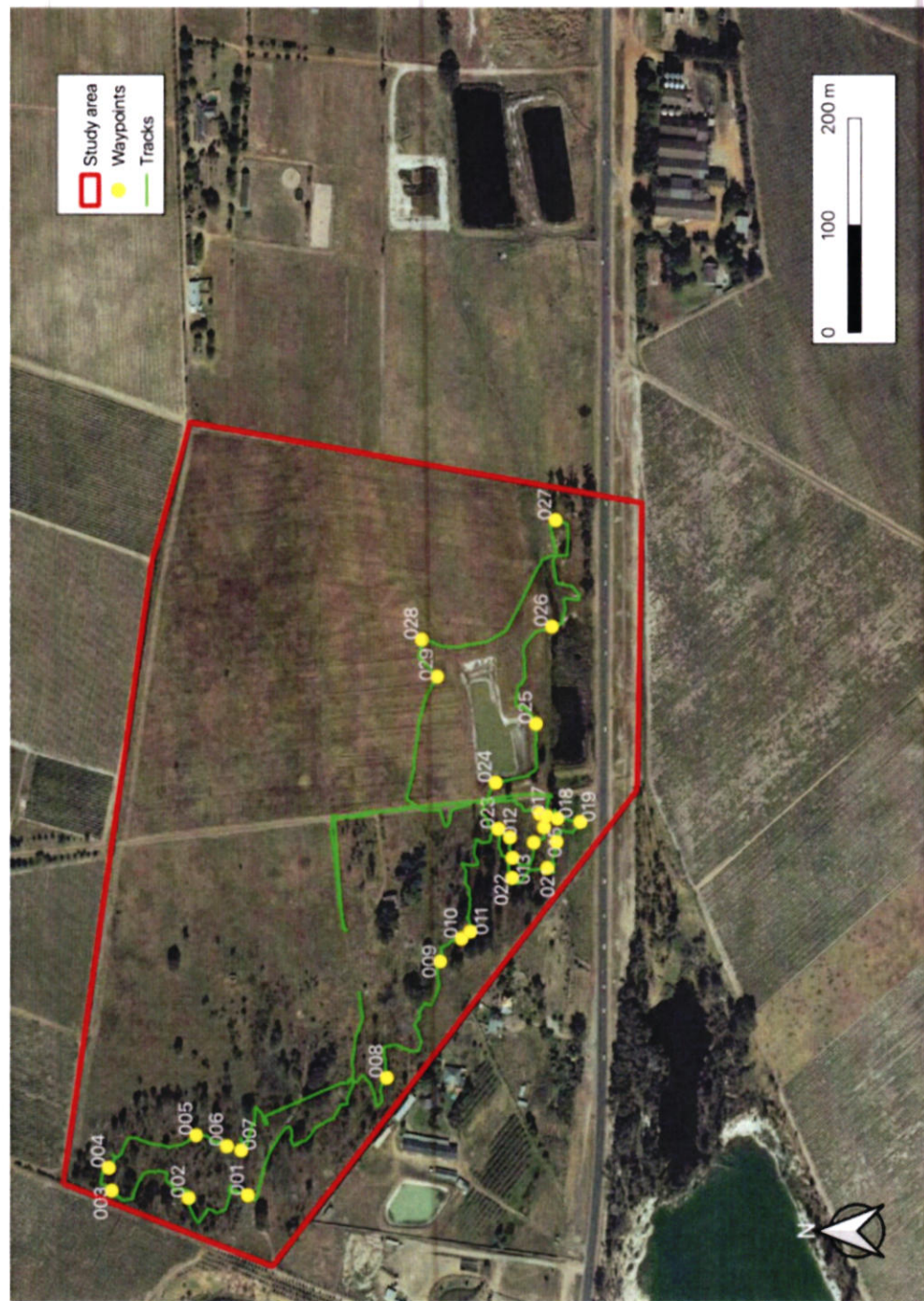


Figure 7. SURVEY MAP: The study area survey waypoints and tracks overlaid on a CDNGI 50 cm mosaic aerial image.

BOTANICAL ASSESSMENT: PORTION 211 OF FARM 10 STELLENBOSCH

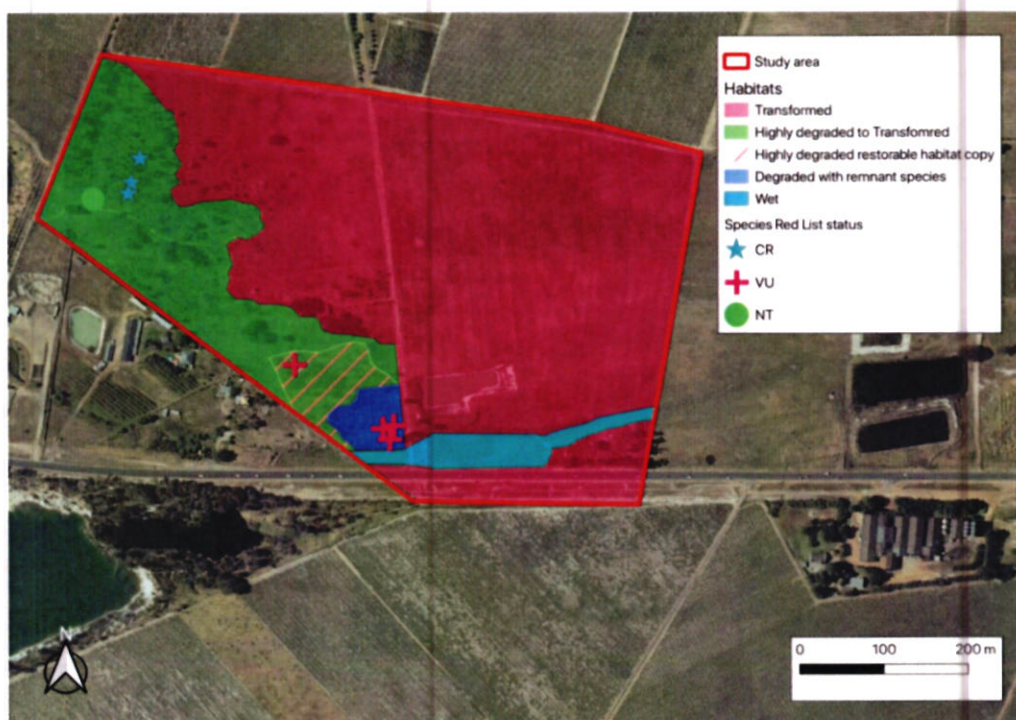


Figure 8. **HABITAT MAP:** The study area with broad habitat categories and SCC occurrences overlaid on a CDNGI 50 cm mosaic aerial image.

Highly degraded to Transformed

This habitat comprises abandoned farmland that has become infested with invasive alien plants (IAPs). The two dominant IAPs are Port Jackson willow (*Acacia saligna*: NEMBA category 1b) and Paterson's curse (*Echium plantagineum*: NEMBA category 1b) (Figure 9). The entire eastern portion of the site comprises agricultural fields with occasional wet patches with sea rush (*Juncus kraussii*) (Figure 10) and patches of common chink (*Ornithogalum thyrsoides*) (Figure 11).

Although no intact indigenous vegetation was found several indigenous species were found. The most conspicuous of these is willow karee (*Searsia angustifolia*) and hairy dottyea (*Otholobium hirtum*). These two species typically occur together in clumps but only very occasionally. The most significant find was the CRITICALLY ENDANGERED renoster Capesweetpea (*Podalyria microphylla*) (Figure 12). Only three plants of the species were found. These localities are shown in Figure 8 and occur at waypoints 005 (33°52'25.69"S; 18°46'39.96"E), 006 (33°52'26.81"S; 18°46'39.57"E) and 007 (33°52'27.33"S; 18°46'39.42"E). This subpopulation is significant given the Red List status. The Red List of South African Plants states the following regarding its status: "Nearly 90% of this long-lived resprouter's habitat has been lost to agriculture and urban development in the past 100 years (generation length 50 years). EOO 1198 km², remaining subpopulations are small, isolated and continue to decline due to ongoing habitat degradation as a result of invasive alien plants and habitat loss to urban expansion" (redlist.sanbi.org).

Species

Graminoides: *Ehrharta* cf. *capensis*, *Ficinia* sp., Natal grass (*Melinis repens*), Cape pegreed (*Restio capensis*), *Pentameris* sp., hare grass (*Tribolium uniolae*); **Geophytes:** blue ladieshand (*Cyanella hyacinthoides*), bract disa (*Disa bracteata*), hollowleaf combflower (*Micranthus tubulosus*), *Moraea* sp.; **Exotics:** wild oats (*Avena fatua*), greater quaking grass (*Briza maxima*) (D), ripgut brome (*Bromus diandrus*) (D), gum (*Eucalyptus* sp.), umbrella pine (*Pinus pinea*), ribwort plantain (*Plantago lanceolata*) (D), jointed charlock (*Raphanus raphanistrum*), annual bastard cabbage (*Rapistrum rugosum*); **Shrubs/trees:** Cape asparagus (*Asparagus capensis*), hare bitterbuchu (*Diosma aspalathoides*) (NEAR THREATENED), fume everlasting (*Helichrysum cymosum*), fanleaf dollsrose (*Hermannia alnifolia*), wild olive (*Olea europaea* subsp. *africana*), slangbos (*Stoebe plumosa*), rough blue sage (*Salvia chamelaeagnea*). **Other perennials:** bristle Capegorse (*Aspalathus hispida*), lanky baroe (*Cyphia phyteuma*) and arum lily (*Zantedeschia aethiopica*).



Figure 9. Transformed area dominated by Paterson's curse and Port Jackson willow at waypoint 002 (33°52'25.41"S; 18°46'37.68"E).



Figure 10. Patch of sea rush (*Juncus kraussii*) in the Transformed agricultural fields at waypoint 029 (33°52'34.42"S; 18°46'56.69"E).



Figure 11. Patch of common chink (*Ornithogalum thyrsoides*) within the Transformed agricultural fields at waypoint 028 (33°52'33.88"S; 18°46'58.04"E).



Figure 12. The CRITICALLY ENDANGERED renoster Capesweetpea (*Podalyria microphylla*), one of only three individuals found growing in dense exotic grasses and partly shaded by Port Jackson willow.

Degraded with remnant species

The degraded habitat occurs close to the farm entrance (as indicated by the blue shading in Figure 8) just upslope of the watercourse and supports several renosterveld species.

23

Although invasive species such as Port Jackson willow are present in places, the habitat is mostly open and un-infested (Figure 13) and has good restoration potential.

Species

Graminoids: rush (*Juncus cephalotes*), kweek (*Cynodon dactylon*), slender veldrush (cf. *Schoenus gracillimus*)(D); **Shrubs:** three-tooth kaniedood (*Athanasia trifurcata*), juniper Caperose (*Cliffortia juniperina*), *Senecio* sp., slangbos (*Stoebe plumosa*); **Succulents:** branching spoonfig (*Erepsia ramosa*) (VULNERABLE); **Annuals:** rain daisy (*Dimorphotheca pluvialis*), *Ursinia* sp.(D); **Other perennials:** giant Capethistle (*Berkheya armata*), *Thesium* sp., *Lobelia* sp., purple sorrel (*Oxalis purpurea*), *Pentameris* sp. (D); **Geophytes:** *Albuca* cf. *acuminata*, blue ladieshand (*Cyanella hyacinthoides*), bract disa (*Disa bracteata*), *Moraea* sp., common chink (*Ornithogalum thyrsoides*), *Lachenalia* sp., long kabong (*Lapeirousia anceps*), cowl bonnet (*Pterygodium catholicum*), swordleaf coneflower (*Micranthus alopecuroides*), hollowleaf combflower (*Micranthus tubulosus*), common butterflylily (*Wachendorfia paniculata*), watsonia (*Watsonia* sp.); **Exotics:** Port Jackson willow (*Acacia saligna*)(D); ribwort plantain (*Plantago lanceolata*)(D), greater quacking grass (*Briza maxima*)(D).



Figure 13. The remnant patch of degraded renosterveld showing, Port Jackson willow (left), slender veldgrass (left of centre), slender veldrush (cf. *Schoenus gracillimus*) and slangbos (right of centre) at waypoint 021 (33°52'38.43"S; 18°46'49.74"E).

Highly degraded restorable habitat

The area is continuous with the 'degraded with remnant species' habitat but contains fewer indigenous species and dense infestations of Port Jackson willow, Paterson's curse and exotic grasses. Importantly, the habitat supports several plants of the VULNERABLE white flats mallow (*Anisodonteia biflora*) at waypoint 010 (33°52'35.32"S; 18°46'47.14"E)(Figure 14). This fire dependent species is very rare in the region.



Figure 14. Highly degraded habitat supporting the VULNERABLE white flats mallow (*Anisodonteia biflora*)(indicated by the red arrow) at waypoint 010 (33°52'35.32"S; 18°46'47.14"E).

Wet area

The wet area extends from the just south of the degraded area with remnant species eastwards along the southern end of the site. This habitat has been heavily disturbed to the point that it is dominated by ruderal species but does contain a few indigenous species. These include:

- Arum lily (*Zantedeschia aethiopica*) found within dense infestation of kikuyu (*Pennisetum clandestinum*) along the watercourse (Figure 15).
- Sea rush (*Juncus kraussii*) along the waterbody associated with the watercourse (Figure 16); and
- African thistle (*Berkheya rigida*) along the dam wall (Figure 17).



Figure 15. Watercourse, immediately adjacent to and parallel to Bottelary Road by invasive kikuyu grass (*Pennisetum clandestinum*) viewed from waypoint 019 (33°52'39.62"S; 18°46'51.41"E) looking west.



Figure 16. Waterbody running parallel to Bottelary Road with bands of see rush (*Juncus kraussii*) along the edge waypoint 026 (33°52'38.59"S; 18°46'58.52"E).



Figure 17. Transformed habitats with a few indigenous species that have naturally re-established such as weed African thistle (*Berkheya rigida*) at waypoint 024 (33°52'36.56"S; 18°46'52.84"E).

7. SENSITIVITY AND CONSTRAINTS

Sensitivity is defined here as the 'conservation value' together with the 'degree of resilience to disturbance'. The conservation value relates to the conservation status (including the ecosystem threat status) and other factors including ecological connectivity, habitat condition, persistence of ecological processes and the site's role in supporting biodiversity. The degree of resilience takes into consideration factors such as sensitivity to disturbance and restoration potential.

Four sensitivity rating are applied. These are **Very low, Low, Medium and High sensitivity**. The sensitivity map is indicated in Figure 18. The ratings apply to both habitats and sensitive species. The category and rationale for each rating is provided in Table 2.

Table 5: Description of sensitivity ratings. Colours match the sensitivity map presented in Figure 18.

Sensitivity rating	Description
Very Low	Usually transformed habitats with no remaining natural vegetation and with no to very limited spatial ecological function in threatened ecosystem. Not restorable.
Low	Usually degraded areas with compromised ecological integrity and low species diversity in threatened ecosystem. Potentially important from a spatial ecological perspective. Low restoration potential.
Medium	Semi-intact vegetation with functioning ecological processes in threatened ecosystem. Medium restoration potential.
High	Intact vegetation with functioning ecological processes in threatened ecosystem. Habitats are highly susceptible to loss of habitat and fragmentation and should only be impacted under certain conditions; assessed on a case by case basis.

The constraints map provided in Figure 19 is informed by the sensitivity map, which takes into consideration the sensitivity of the habitats and species but also considers the need to include a buffer area to protect the most sensitive areas and species. Linkages assigned in the 2017 WCBSP are also considered but these do not function in terms of movement of plant species due to the high degree of fragmentation.

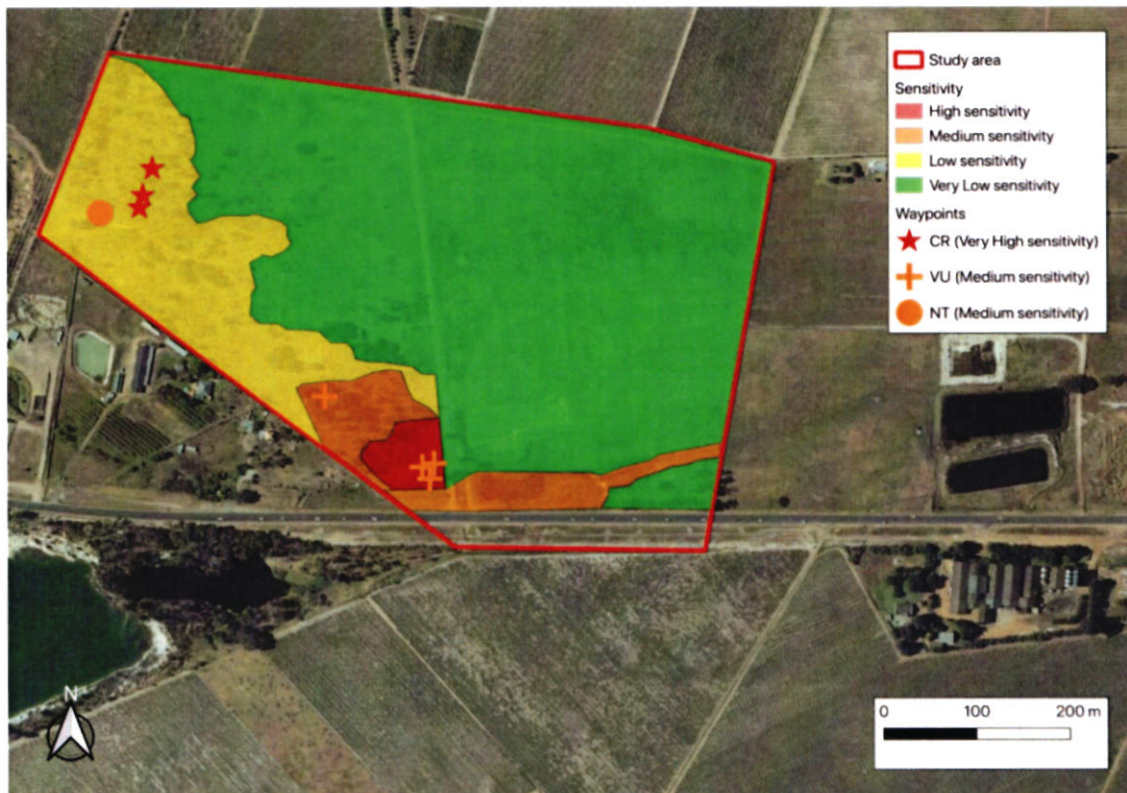


Figure 18. SENSITIVITY MAP: The study area with sensitivity rating of habitats and species overlaid on a CDNGI 50 cm mosaic aerial image.



Figure 18. SENSITIVITY MAP: The study area with sensitivity rating of habitats and species overlaid on a CDNGI 50 cm mosaic aerial image.

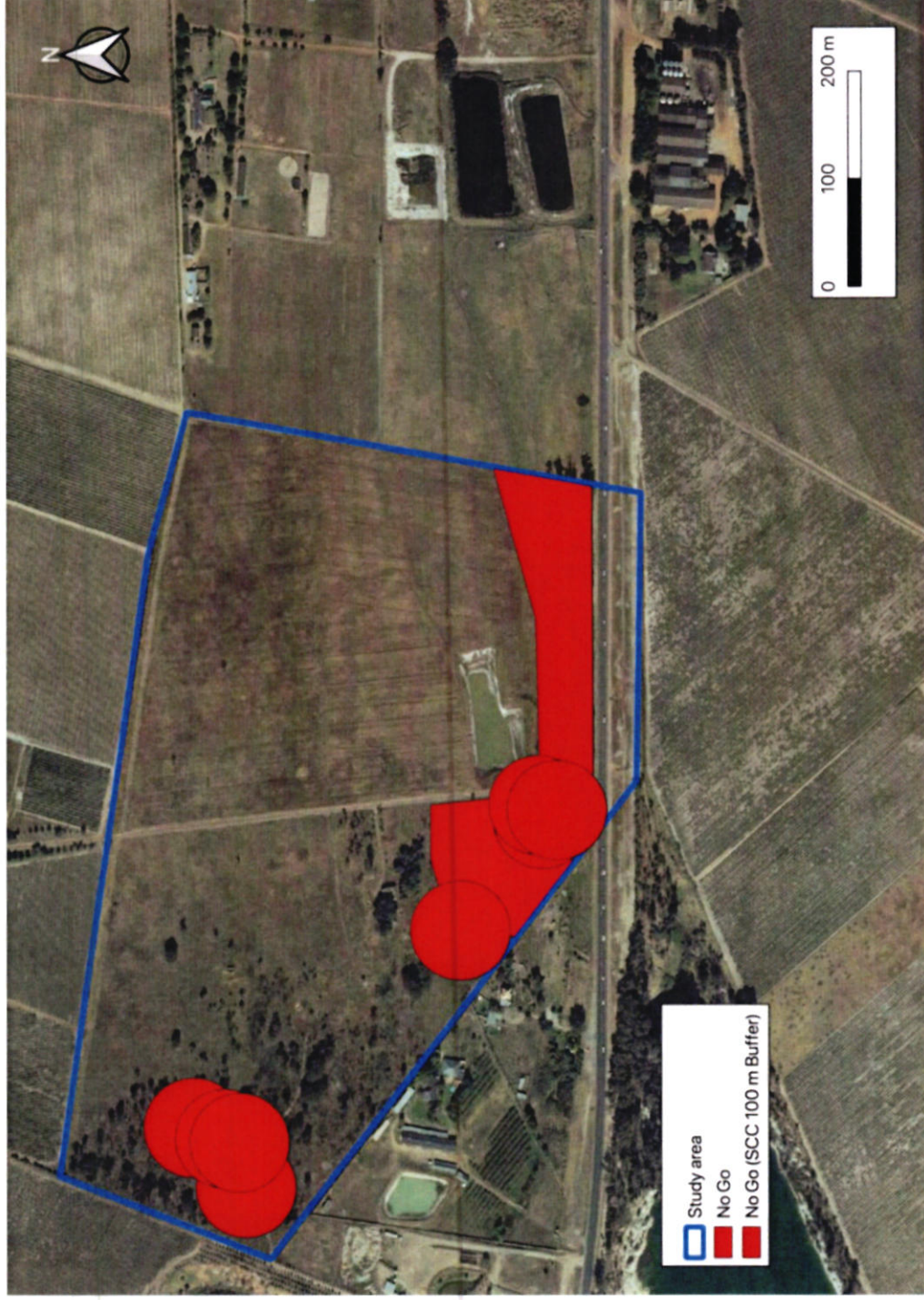


Figure 19. CONSTRAINTS MAP: The study area survey with potentially developable versus no go areas of habitats and species overlaid on a CDNGI 50 cm mosaic aerial image.

8. IMPACT ASSESSMENT

The impact assessment is a measure of the impacts likely to occur on the affected environment, specifically the vegetation, ecological processes, important species and habitats. They are considered for (a) the 'No Go' scenario and (b) the direct, indirect and cumulative impacts of the proposed project. Impacts are assessed for both construction and operational phases. The clients Spatial Development Plan is provided in Figure 20.

8.1. 'NO GO' OR NO DEVELOPMENT SCENARIO

The 'No Go' or no development scenario takes into consideration the impacts associated with the no construction option. It is a prediction of the future state of the affected area in the event of no construction activities taking place and is based on the current and/or anticipated future land use. If no development were to take place it is difficult to predict what the impacts would be under the No Go option. The most likely scenario under the No Go is further degradation of the site and loss of species but this assumes neglect of the land. Under this scenario the No Go is likely to result in a Negative Impact significance. If the CRITICALLY ENDANGERED renoster Capesweetpea *Podalyria microphylla* were to become locally extinct then impacts are would be **Medium to High Negative**. Since the No Go is impossible to predict impacts are rated as **Neutral to Negative** but as stated this could be higher given different scenarios.

It is emphasized that it is the landowner's responsibility to clear all invasive alien plants from the property in accordance with Section 73(2) of the Invasive and Alien Species (IAS) Regulations (published on 1 August 2014) in the NEMBA (National Environmental Management and Biodiversity Act, Act 10 of 2004). This means that if the High, Medium and Low sensitivity areas were to be cleared, passive restoration of these areas would occur to some degree. In reality, this is unlikely to happen given that there is no incentive on the landowner's behalf to actively restore the land.

8.2. DIRECT IMPACTS

8.2.1. Construction phase: Loss of vegetation and ecological processes

The construction phase would result in the most far reaching impact compared with the operation phase since this would involve clearing of vegetation, earth moving and construction vehicle and workforce that may impact the sensitive areas. If the areas in the SDP are the only portions where impacts will occur impacts would be Very **Low Negative** prior to mitigation (Table 4).

Table 4. Impact and significance for loss of vegetation type and associated ecological processes during the construction phase.

CRITERIA	'NO GO' ALTERNATIVE		CLIENTS PREFERRED ALTERNATIVE	
Status of direct impact	Neutral to Negative		Negative	
Loss of vegetation and species	WITHOUT MITIGATION	WITH MITIGATION	WITHOUT MITIGATION	WITH MITIGATION
Extent	Local (1)	Local (1)	Local (1)	Local (1)
Duration	None (0)	None (0)	Short-term (1)	Short-term (1)
Intensity	None (0)	None (0)	Low (1)	Low (1)
Consequence	Not significant (0)	Not significant (0)	Very Low (3)	Very Low (3)
Probability of occurrence	Unknown	Unknown	Probable	Probable
Confidence	High	High	High	High
Significance	Neutral to Negative	Neutral to Negative	Very Low (-ve)	Very Low (+ve)
Degree to which the impact may cause irreplaceable resources	Low	Low	Low	Very Low
Degree to which the impact can be reversed	High	High	Irreversible	N/A (+ve impact)
Nature of the residual impact (post mitigation)	Neutral to Negative	Neutral to Negative	Negative	Positive
Cumulative impact	Neutral to Negative	Neutral to Negative	Low	None (+ve impact)
Essential mitigation: Rehabilitate remainder remnant renosterveld (Degraded and Highly degraded restorable habitats) areas and reintroduce renoster Capesweetpea (<i>Podalyria microphylla</i>).				

8.2.2. Operational phase: Loss of vegetation and ecological processes

No impacts are anticipated during this phase since all construction would have been completed and sensitive areas would be maintained. Impacts are likely to be **Insignificant** prior to mitigation since no impacts are likely to occur on the sensitive vegetation and species (Table 5).

Table 5. Impact and significance for loss of vegetation type and associated ecological processes during the construction phase.

CRITERIA	'NO GO' ALTERNATIVE		CLIENTS PREFERRED ALTERNATIVE	
Status of direct impact	Neutral to Negative		Negative	
Loss of vegetation and species	WITHOUT MITIGATION	WITH MITIGATION	WITHOUT MITIGATION	WITH MITIGATION
Extent	Local (1)	Local (1)	Local (1)	Local (1)
Duration	None (0)	None (0)	Short-term (1)	Long-term (3)
Intensity	None (0)	None (0)	None (0)	Low (1)
Consequence	Not significant (0)	Not significant (0)	Not significant (2)	Low (5)
Probability of occurrence	Unknown	Unknown	Improbable	Definite
Confidence	High	High	High	High
Significance	Neutral to Negative	Neutral to Negative	Insignificant	Low (+ve)
Degree to which the impact may cause irreplaceable resources	Low	Low	Low	Very Low
Degree to which the impact can be reversed	High	High	Irreversible	N/A (+ve impact)
Nature of the residual impact (post mitigation)	Neutral to Negative	Neutral to Negative	Negative	Positive
Cumulative impact	Neutral to Negative	Neutral to Negative	Low	None (+ve impact)
Essential mitigation: Rehabilitate remainder remnant renosterveld (Degraded and Highly degraded restorable habitats) areas and reintroduce renoster Capesweetpea (<i>Podalyria microphylla</i>).				

8.3. MITIGATION

Mitigation options are generally considered in terms of the following mitigation hierarchy: (1) avoidance, (2) minimization, (3) restoration and (4) offsets. The constraints analysis identified areas that should be avoided (No Go areas)(Figure 19). These areas would be avoided since the SDP (Figure 20) takes these sensitive areas into consideration. In addition to avoidance mitigation, a condition of approval should be that the 'Highly degraded restorable and degraded restorable' habitats are restored. Furthermore, the CRITICALLY ENDANGERED renoster Capesweetpea should be protected in situ and reintroduced to these restorable areas. The following requirements should also be met as a condition of approval:

1. Removal and eradication of all Port Jackson willow. Note that this is not mitigation since it is a legal obligation of all landowner but it is the first step to restoring the infested areas. This will be a long-term task that should be carried out in perpetuity.
2. Reintroduction, propagation and broadcasting of seed of species currently not occurring on site from nearby sources.
3. Monitoring of restoration success.
4. Closure phase whereby the restoration phase is complete and maintenance phase is reached.

The above steps should be supervised by a restoration ecologist and detailed in a restoration report.

8.4. INDIRECT IMPACTS

Indirect impacts are those that do not occur as a direct result of the activity on the site but that occur further away. In this case no indirect impacts were identified.

8.5. CUMULATIVE IMPACTS

Cumulative impacts are those impacts linked to increased loss of vegetation type or the ecosystems listed in the National List of Threatened Terrestrial Ecosystems (Government Gazette, 2011). Cumulative impacts are assessed as the overall impact of loss of habitat in relation to loss of the same or similar habitat at a local scale due to past, present and future habitat loss. Since no net loss of Swartland Shale Renosterveld or Swartland Granite Renosterveld would occur cumulative impacts would be Neutral. If the Highly degraded restorable and degraded habitats is restored this would have a slightly positive cumulative impact.

9. CONCLUSIONS AND RECOMMENDATIONS

The initial constraints analysis identified potentially developable versus No Go areas within the study area. These align fairly well with the 2017 WCBSP. The constraints map also included other specialist studies and informed the applicant's Spatial Development Plan (SDP). The constraints map was informed by sensitive remnant vegetation and species. The most significant features are (1) the presence of a small subpopulation of the CRITICALLY ENDANGERED renoster Capesweetpea (*Podalyria microphylla*), and (2) a remnant patch of restorable CRITICALLY ENDANGERED Swartland Shale Renosterveld. The SDP, if approved would avoid these sensitive features. The proposed development is supported provided that the essential mitigation measures are adhered to. These include (1) avoidance of the aforementioned species and vegetation and (2) restoration of the remnant vegetation. Crucially, the renoster Capesweetpea must be reintroduced to the remnant vegetation patch.

10. REFERENCES

- Brownlie, S. 2005. Guideline for involving biodiversity specialists in EIA processes: Edition 1. CSIR Report No. ENV-S-C 2005-053 C. Provincial Government of the Western Cape: Department of Environmental Affairs and Development Planning.
- Cadman, Mandy (Editor). De Villiers, Charl, Holmes, Patricia, Tony Rebelo, Nick Helme, Doug-Euston Brown, Barry Clark, Sue Milton, W. Richard Dean, Susie Brownlie, Kate Snaddon, Liz Day, Dean Ollis, Nancy Job, Clifford Dorse, Julia Wood, James Harrison, Guy Palmer, Mandy Cadman, Kerry Maree, Jeffrey Manuel, Stephen Holness, Sam Ralston and Amanda Driver. 2016. Ecosystem Guidelines for Environmental Assessment in the Western Cape. Fynbos Forum, Cape Town.
- Government Gazette No 34809, 9 December 2011. Department of Environmental Affairs, No. 1002 of 2011. List of Ecosystems that are Threatened and in Need of Protection.

Government Gazette No. 43110, 20 March 2020. Procedures for the assessment and minimum criteria for reporting on Identified Environmental Themes in terms of Sections 24(5)(a) and 44 of the National Environmental Management Act, 1998, when applying for Environmental Authorisation.

Government Gazette No. 43855, 30 October 2020. 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 National Environmental Management Act, 1998, when applying for Environmental Authorisation.

Mucina, L. & Rutherford, M.C. 2006. (eds.) *The Vegetation of South Africa. Lesotho & Swaziland*. Strelitzia 19. South African National Biodiversity Institute, Pretoria.

Pool-Stanvliet, R., Duffell-Canham, A., Pence, G., Smart, R. 2017. *Western Cape Biodiversity Spatial Plan Handbook*. Stellenbosch: CapeNature.

Turner, A. 2013. CapeNature's requirements for providing comments on agricultural, environmental, mining planning and water-use related applications. Scientific Services: Standard letter issued to by CapeNature in December 2013.

Turner, A.A. (ed.) 2017. *Western Cape Province State of Biodiversity*. CapeNature Scientific Services, Stellenbosch.

South African National Biodiversity Institute. 2018 *Vegetation Map of South Africa, Lesotho and Swaziland* [vector geospatial dataset] 2018. Available from the Biodiversity GIS website, downloaded on 18 January 2020.

South African National Biodiversity Institute (SANBI). 2019. *National Biodiversity Assessment 2018: The status of South Africa's ecosystems and biodiversity*. Synthesis Report. South African National Biodiversity Institute, an entity of the Department of Environment, Forestry and Fisheries, Pretoria. <http://hdl.handle.net/20.500.12143/6362>.

APPENDIX 1: MINIMUM CONTENT REQUIREMENTS FOR TERRESTRIAL BIODIVERSITY SPECIALIST REPORTS AS PER PROTOCOL FOR THE SPECIALIST ASSESSMENT OF ENVIRONMENTAL IMPACTS ON TERRESTRIAL BIODIVERSITY (GN 320 OF 20 MARCH 2020).

Protocol ref	Terrestrial Biodiversity Specialist Assessment Report Content	Section Page /
3.1.1.	contact details of the specialist, their SACNASP registration number, their field of expertise and a curriculum vitae;	Page ii and Appendix 3
3.1.2.	a signed statement of independence by the specialist;	Page iii
3.1.3.	a statement on the duration, date and season of the site inspection and the relevance of the season to the outcome of the assessment;	Section 4
3.1.4.	a description of the methodology used to undertake the site verification and impact assessment and site inspection, including equipment and modelling used, where relevant;	Section 4
3.1.5.	a description of the assumptions made and any uncertainties or gaps in knowledge or data as well as a statement of the timing and intensity of site inspection observations;	Section 4
3.1.6.	a location of the areas not suitable for development, which are to be avoided during construction and operation (where relevant);	Section 8
3.1.7.	additional environmental impacts expected from the proposed development;	Section 9
3.1.8.	any direct, indirect and cumulative impacts of the proposed development;	Section 9
3.1.9.	the degree to which impacts and risks can be mitigated;	Section 9
3.1.10.	the degree to which the impacts and risks can be reversed;	Section 9
3.1.11.	the degree to which the impacts and risks can cause loss of irreplaceable resources;	Section 9
3.1.12.	proposed impact management actions and impact management outcomes proposed by the specialist for inclusion in the Environmental Management Programme (EMPr);	Section 9
3.1.13.	a motivation must be provided if there were development footprints identified as per paragraph 2.3.6 above that were identified as having a "low" terrestrial biodiversity sensitivity and that were not considered appropriate;	N/A
3.1.14.	a substantiated statement, based on the findings of the specialist assessment, regarding the acceptability, or not, of the proposed development, if it should receive approval or not; and	Section 10
3.1.15.	any conditions to which this statement is subjected.	Section 10

APPENDIX 2: ASSESSMENT METHODOLOGY

(Source: SRK Consulting)

7.3 Impact Rating Methodology

The standard methodology used in EIA to assess and rate impacts based on the methodology and rating criteria is outlined in this section.

The significance of an impact is defined as a combination of the consequence of the impact occurring and the probability that the impact will occur.

The criteria used to determine impact consequence are presented in Table 5 below.

Table 1: Criteria used to determine the Consequence of the Impact

Rating	Definition of Rating	Score
A. Extent– the area over which the impact will be experienced		
None		0
Local	Confined to project or study area or part thereof (e.g. site)	1
Regional	The region, which may be defined in various ways, e.g. cadastral, catchment, topographic	2
(Inter) national	Nationally or beyond	3
B. Intensity– the magnitude of the impact in relation to the sensitivity of the receiving environment		
None		0
Low	Natural and/or social functions and processes are negligibly altered	1
Medium	Natural and/or social functions and processes continue albeit in a modified way	2
High	Natural and/or social functions or processes are severely altered	3
C. Duration– the time frame for which the impact will be experienced		

None		0
Short-term	Up to 2 years	1
Medium-term	2 to 15 years	2
Long-term	More than 15 years	3

The combined score of these three criteria corresponds to a Consequence Rating, as set out in Table 6:

Table 2: Method used to determine the Consequence Score

Combined Score (A+B+C)	0 – 2	3 – 4	5	6	7	8 – 9
Consequence Rating	Not significant	Very low	Low	Medium	High	Very high

Once the consequence is derived, the probability of the impact occurring will be considered, using the probability classifications presented in Table 7.

Table 3: Probability Classification

Probability of impact – the likelihood of the impact occurring	
Improbable	< 40% chance of occurring
Probable	40% - 70% chance of occurring
Highly probable	> 70% - 90% chance of occurring
Definite	> 90% chance of occurring

The overall significance of the individual impacts will be determined by considering consequence and probability using the rating system prescribed in Table 8.

Table 4: Impact Significance Ratings

Significance Rating	Consequence		Probability
Insignificant	Very Low	&	Improbable
	Very Low	&	Possible

Significance Rating	Consequence		Probability
Very Low	Very Low	&	Probable
	Very Low	&	Definite
	Low	&	Improbable
	Low	&	Possible
Low	Low	&	Probable
	Low	&	Definite
	Medium	&	Improbable
	Medium	&	Possible
Medium	Medium	&	Probable
	Medium	&	Definite
	High	&	Improbable
	High	&	Possible
High	High	&	Probable
	High	&	Definite
	Very High	&	Improbable
	Very High	&	Possible
Very High	Very High	&	Probable
	Very High	&	Definite

Finally the impacts will also be considered in terms of their status (positive or negative impact) and the confidence in the ascribed impact significance rating. The prescribed system for considering impacts status and confidence (in assessment) is laid out in Table 9.

Table 5: Impact status and confidence classification

Status of impact	
Indication whether the impact is adverse (negative) or beneficial (positive).	+ ve (positive – a 'benefit')
	– ve (negative – a 'cost')
	Neutral
Confidence of assessment	

The degree of confidence in predictions based on available information, EAP's judgment and/or specialist knowledge.	Low
	Medium
	High

The impact significance rating should be considered by the authority in their decision-making process based on the implications of ratings described below:

- **Insignificant:** the potential impact is negligible and will not have an influence on the decision regarding the proposed activity/development.
- **Very Low:** the potential impact should not have any meaningful influence on the decision regarding the proposed activity/development.
- **Low:** the potential impact may not have any meaningful influence on the decision regarding the proposed activity/development.
- **Medium:** the potential impact should influence the decision regarding the proposed activity/development.
- **High:** the potential impact will affect the decision regarding the proposed activity/development.
- **Very High:** The proposed activity should only be approved under special circumstances.

In the EIA practicable mitigation measures will be recommended and impacts rated in the prescribed way both without and with the assumed effective implementation of mitigation measures.

Mitigation measures are either:

- **Essential:** must be implemented (as they minimise potentially significant negative impacts) and are non negotiable; and
- **Optional:** "nice-to-have's" as they do little to minimise a key potentially significant negative impacts and/or improve benefits.

APPENDIX 3: TERRESTRIAL PLANTS SPECIES SPECIALIST ASSESSMENT

Introduction

The Screening Tool used to derive the plant sensitivity theme (<https://screening.environment.gov.za>) assigned a Medium sensitivity for the proposed development footprint or site. The requirement for assessment and reporting of impacts on terrestrial plant species in accordance with new procedures for reporting on identified environmental themes published in October 2020 (Government Gazette No. 43844, 2020) states: "An applicant intending to undertake an activity identified in the scope of this protocol, on a site identified by the screening tool as being of "medium sensitivity" for terrestrial plant species, must submit either a Terrestrial Plant Species Specialist Assessment Report or a Terrestrial Plant Species Compliance Statement, depending on the outcome of a site inspection undertaken in accordance with paragraph 4". In this instance, the Medium sensitivity rating is confirmed based on the presence of SCC. A Terrestrial Plant Species Specialist Assessment thus required. A total of four SCC were found. These are assessed below.

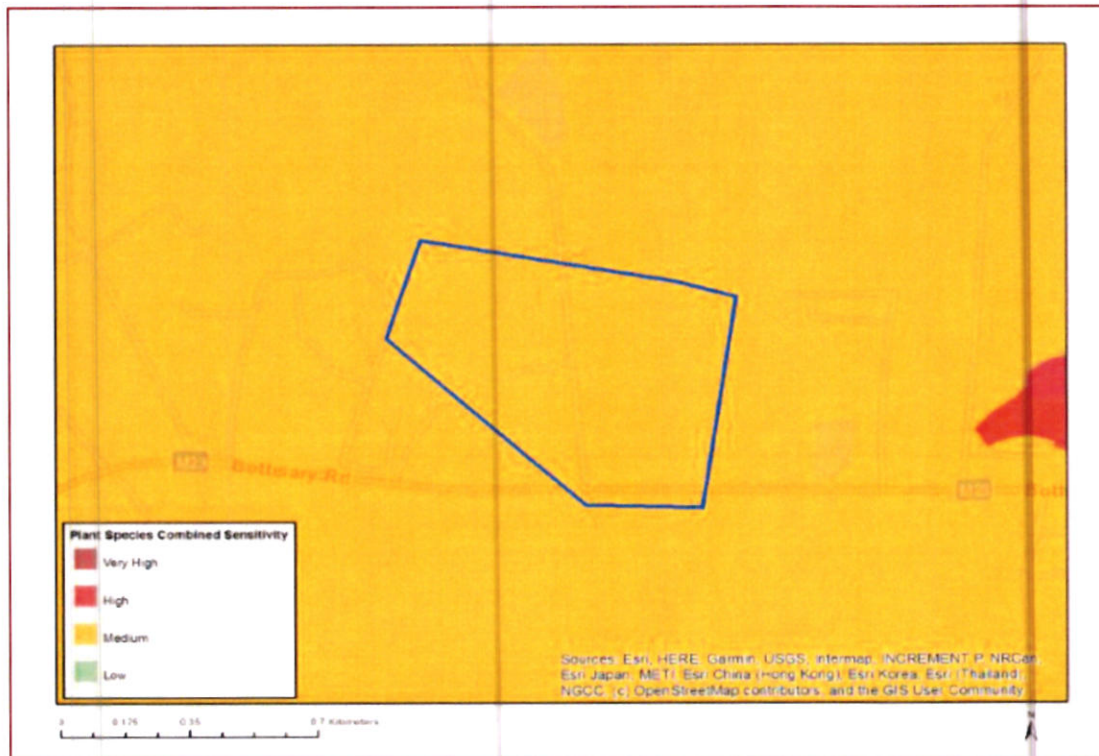


Figure 1. Map of relative plant species theme diversity.

Sample density

The site was surveyed on foot and 29 waypoints were samples were collected on the 34.4 ha study area, a sample density of 0.84 waypoints/ha.

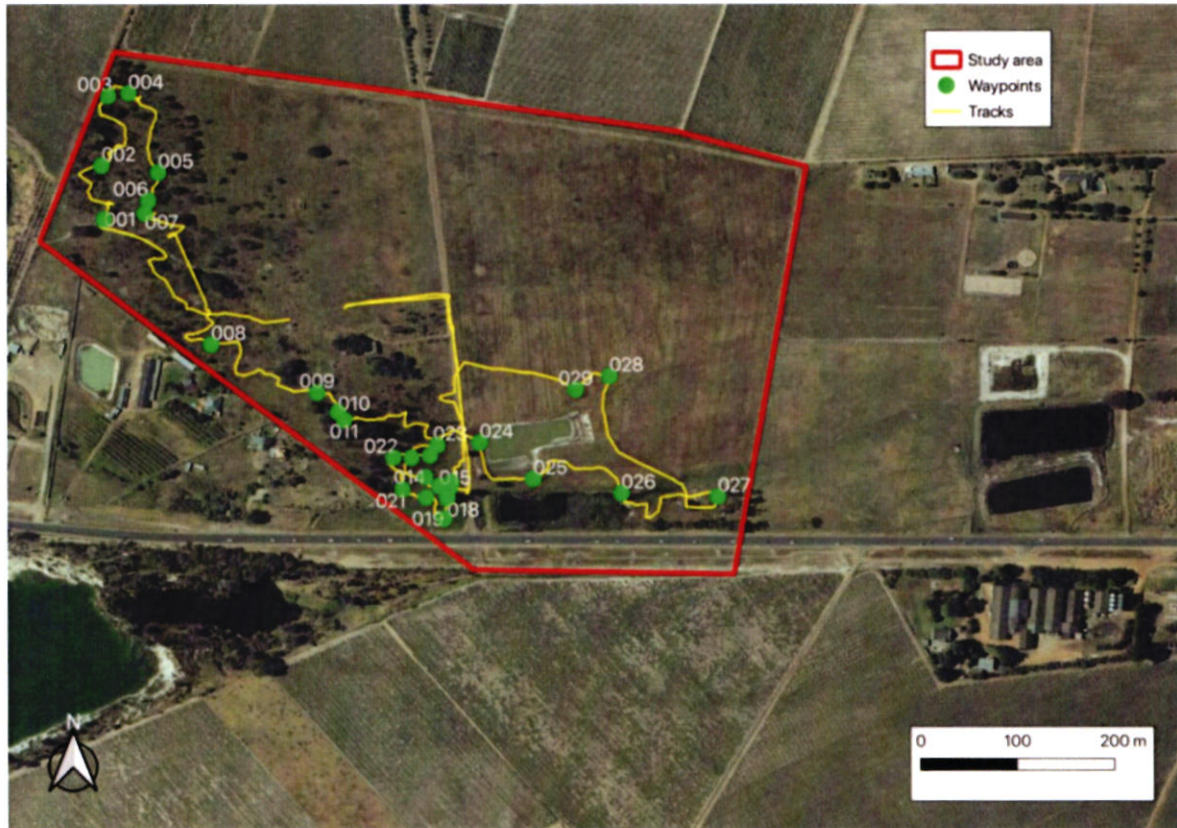


Figure 1. SURVEY MAP: Google Earth satellite image showing the study area with the survey waypoints and tracks.

SCC within the study area

The four SCC include VULNERABLE white flats mallow (*Anisodonteia biflora*), hare bitterbuchu (*Diosma aspalathoides*) (NEAR THREATENED), branching spoonfig (*Erepsia ramosa*) (VULNERABLE) and renoster Capesweetpea (*Podalyria microphylla*)(CRITICALLY ENDANGERED). The distribution of the SCC is shown in Figure 2. Tables 1 to 3 provided below include required information for this report.



Figure 2. SCC DISTRIBUTION MAP. The proposed in relation to the study area and SCC overlaid on A CDNGI 50 cm mosaic aerial image.

BOTANICAL ASSESSMENT: PORTION 211 OF FARM 10 STELLENBOSCH

Table 1. Species of Conservation Concern found within the study area and proposed footprint and those likely to be present.

FAMILY	Species and online observation URL	IUCN Status	Observed/Likelihood of occurrence	Justification for likelihood of occurrence	Within proposed footprint	Conservation importance of SCC	Estimated total numbers observed	Nature and extent of impact on SCC
AIZOACEAE	Erepsia ramosa https://www.inaturalist.org/observations/78201796	VU	Confirmed	Species was observed	No	Moderate	10	No impact
FABACEAE	Podalyria microphylla https://www.inaturalist.org/observations/74921276	VU	Confirmed	Species was observed	No	Very High	3	No impact
MALVACEAE	Anisodonteia biflora https://www.inaturalist.org/observations/77241670	VU	Confirmed	Species was observed	No	Moderate	3	No impact
RUTACEAE	Diosma aspalathoides	NT	Confirmed	Species was observed	No	Moderate	5	No impact

Table 1. Species of Conservation Concern found within the study area and proposed footprint and those likely to be present.

FAMILY	Species and online observation URL	IUCN Status	Observed/Likelihood of occurrence	Justification for likelihood of occurrence	Within proposed footprint	Conservation importance of SCC	Estimated total numbers observed	Nature and extent of impact on SCC
AIZOACEAE	Erepsia ramosa https://www.inaturalist.org/observations/78201796	VU	Confirmed	Species was observed	No	Moderate	10	No impact
FABACEAE	Podalyria microphylla https://www.inaturalist.org/observations/74921276	VU	Confirmed	Species was observed	No	Very High	3	No impact
MALVACEAE	Anisodonteia biflora https://www.inaturalist.org/observations/77241670	VU	Confirmed	Species was observed	No	Moderate	3	No impact
RUTACEAE	Diosma aspalathoides	NT	Confirmed	Species was observed	No	Moderate	5	No impact

Table 2. Species population information from the Red List of South African Plants

Name	Status and Criteria	Justification	Range	Habitat Description	Threats	Population
<i>Anisodonteia biflora</i> (Desr.) Bates	Vulnerable B1ab(i,ii,iii,iv,v)	A range-restricted species (EOO 6844 km ²), that is becoming increasingly rare due to ongoing habitat loss and degradation. There are an estimated five to eight remaining locations, but it is also possibly overlooked in areas where fires are excluded.	Veldrift to Tulbagh and the Cape Peninsula.	Stony lower slopes and coastal flats, predominantly occurring in clay soils derived from shale, granite and silcrete.	Urban expansion has caused the local extinction of this species on the Cape Flats around Cape Town and Kuils River, and habitat loss to urban expansion continues around Tygerberg, Malmesbury, Stellenbosch and on the Vredenburg Peninsula. Across the Swartland, it has lost more than 80% of its habitat to crop cultivation, and loss continues. Subpopulations at Tygerberg, Joostenberg, Stellenbosch and near Malmesbury are threatened by competition from spreading, unmanaged alien invasive plants. Apart from the Tygerberg Nature Reserve, lack of fire is a threat across this species' range.	<i>Anisodonteia biflora</i> is known from many historical records, but recent observations and collections are rare. It is now locally extinct over most of the Cape Flats, where it formerly occurred around Green Point, Black River and Kuils River. Further north, its habitat has been extensively transformed and fragmented. Field observations indicate that the species recruits in response to fire, but that it is fairly short-lived and rare in mature and senescent vegetation. Fires are excluded from many small, isolated renosterveld fragments, which means that dormant subpopulations could be easily overlooked. It has not been recorded in the Tulbagh Valley since 1894, but it possibly still persists in shale fynbos on the lower slopes of the Waaihoek Mountains near Mitchell's Pass. It continues to decline due to ongoing habitat loss and degradation.
<i>Diosma aspalathoides</i> Lam.	Near Threatened B1ab(ii,iii,iv,v)	EOO <5000 km ² , 13-20 locations continue to decline due to coastal development and alien plant invasion.	Minerton to Langebaan.	Deep sands, close to the sea.	Coastal development and alien plant invasion.	EOO <5000 km ² , 13-20 locations continue to decline due to coastal development and alien plant invasion.
<i>Erepsia ramosa</i> L.Bolus	Vulnerable B1ab(i,ii,iii,v)	EOO <6500 km ² , a formerly very common species that has lost >90% of its habitat to wheat cultivation. Remaining subpopulations are severely fragmented, occurring on isolated renosterveld remnants.	Piketberg to Cape Flats.	Shale flats in renosterveld.	Invasive Alien Species (direct effects), Harvesting (gathering), Habitat loss, Habitat degradation.	Decreasing

BOTANICAL ASSESSMENT: PORTION 211 OF FARM 10 STELLENBOSCH

Podalyria microphylla E. Mey.	Critically Endangered A2bc	and continue to decline due to urban expansion on the Cape Flats, and at Malmesbury and Paarl.	Nearly 90% of this long-lived resprouter's habitat has been lost to agriculture and urban development in the past 100 years (generation length 50 years). EOO 1198 km ² , remaining subpopulations are small, isolated and continue to decline due to ongoing habitat degradation as a result of invasive alien plants and habitat loss to urban expansion.	Tygerberg, Klipheuwel to Paarl and the Paardeberg.	Shale or granite in lowland renosterveld.	More than 88% of this species' habitat was lost in the past 100 years to urban expansion and agriculture. Urban expansion continues to threaten remaining subpopulations. Livestock grazing and invasive alien plants are resulting in ongoing degradation of habitat for remaining subpopulations.	Decreasing
-------------------------------------	----------------------------------	--	--	--	---	---	------------

Table 3. Species predicted to be in the study area (by the screening tool).

FAMILY	Species	IUCN Status	Observed/Likelihood of occurrence	Justification for likelihood of occurrence
POACEAE	Pentameris bachmannii	EN	Low	High level of disturbance
POACEAE	Pentameris pholiuroides	EN	Low	High level of disturbance
AIZOACEAE	Antimima aristulata	VU	Low	High level of disturbance
AIZOACEAE	Erepsia patula	VU	Confirmed	Recorded at site
AIZOACEAE	Erepsia ramosa	EN	Low	High level of disturbance
IRIDACEAE	Anthospermum ericifolium	VU	Low	High level of disturbance
BORAGINACEAE	Lobostemon capitatus	VU	Low	High level of disturbance
BORAGINACEAE	Echiotachys incanus	VU	Low	High level of disturbance
BORAGINACEAE	Echiotachys spicatus	EN	Low	High level of disturbance
IRIDACEAE	Aristea lugens	EN	Low	High level of disturbance
IRIDACEAE	Tritoniopsis elongata	EN	Low	High level of disturbance
IRIDACEAE	Hesperantha suffiava	CR	Low	High level of disturbance
IRIDACEAE	Hesperantha spicata subsp. spicata	VU	Low	High level of disturbance
IRIDACEAE	Sensitive species 85	CR		
IRIDACEAE	Sensitive species 72	VU		
IRIDACEAE	Sensitive species 78	EN		
IRIDACEAE	Sensitive species 90	CR		
IRIDACEAE	Sensitive species 96	EN		
IRIDACEAE	Geissorhiza erosa	EN	Low	High level of disturbance
IRIDACEAE	Geissorhiza furva	EN	Low	High level of disturbance
IRIDACEAE	Geissorhiza monanthos	EN	Low	High level of disturbance
IRIDACEAE	Geissorhiza purpurascens	EN	Low	High level of disturbance
IRIDACEAE	Geissorhiza radicans	EN	Low	High level of disturbance
IRIDACEAE	Geissorhiza setacea	EN	Low	High level of disturbance
IRIDACEAE	Sparaxis grandiflora subsp. grandiflora	EN	Low	High level of disturbance
IRIDACEAE	Ixia erubescens	EN	Low	High level of disturbance
IRIDACEAE	Ixia rouxii	EN	Low	High level of disturbance
IRIDACEAE	Codonrhiza aurea	EN	Low	High level of disturbance
X	Sensitive species 458	VU		
X	Sensitive species 464	VU		
X	Sensitive species 636	CRITICALLY RARE		
X	Sensitive species 642	VU		
X	Sensitive species 590	CR		
X	Sensitive species 640	VU		
X	Sensitive species 599	VU		
X	Sensitive species 621	VU		
X	Sensitive species 625	CR		
X	Sensitive species 772	CR		
X	Sensitive species 764	CR		
X	Sensitive species 777	CR		

BOTANICAL ASSESSMENT: PORTION 211 OF FARM 10 STELLENBOSCH

X	Sensitive species 557	NT		
HYPOXIDACEAE	Pauridia pygmaea	EN	Low	High level of disturbance
HYPOXIDACEAE	Pauridia alba	VU	Low	High level of disturbance
HYPOXIDACEAE	Pauridia canaliculata	EN	Low	High level of disturbance
AIZOACEAE	Ruschia geminiflora	VU	Low	High level of disturbance
AIZOACEAE	Ruschia schollii	EN	Low	High level of disturbance
AIZOACEAE	Ruschia diversifolia	VU	Low	High level of disturbance
AIZOACEAE	Drosanthemum striatum	VU	Low	High level of disturbance
AIZOACEAE	Drosanthemum hispidifolium	VU	Low	High level of disturbance
LOBELIACEAE	Monopsis variifolia	EN	Low	High level of disturbance
OXALIDACEAE	Oxalis falciculata	EN	Low	High level of disturbance
OXALIDACEAE	Oxalis natans	CR	Low	High level of disturbance
OXALIDACEAE	Oxalis strigosa	EN	Low	High level of disturbance
AIZOACEAE	Cephalophyllum parviflorum	CR	Low	High level of disturbance
MALVACEAE	Hermannia rugosa	VU	Low	High level of disturbance
X	Sensitive species 364	VU		
X	Sensitive species 351	VU		
X	Sensitive species 686	VU		
X	Sensitive species 690	VU		
X	Sensitive species 676	VU		
X	Sensitive species 697	EN		
X	Sensitive species 588	EN		
HAEMODORACEAE	Wachendorfia brachyandra	VU	Low	High level of disturbance
X	Sensitive species 479	EN		
ISOETACEAE	Isoetes capensis	EN	Low	High level of disturbance
X	Sensitive species 744	VU		
CYPERACEAE	Trianoptiles solitaria	EN	Low	High level of disturbance
RESTIONACEAE	Elegia extensa	EN	Low	High level of disturbance
RESTIONACEAE	Elegia squamosa	EN	Low	High level of disturbance
RESTIONACEAE	Hypodiscus rugosus	EN	Low	High level of disturbance
RESTIONACEAE	Restio impolitus	VU	Low	High level of disturbance
RESTIONACEAE	Restio rigoratus	EN	Low	High level of disturbance
RESTIONACEAE	Restio papillosus	VU	Low	High level of disturbance
RESTIONACEAE	Restio pratensis	EN	Low	High level of disturbance
RESTIONACEAE	Restio duthieae	VU	Low	High level of disturbance
RESTIONACEAE	Restio paludosus	VU	Low	High level of disturbance
MALVACEAE	Anisodonteia biflora	VU	Confirmed	Recorded at site
X	Sensitive species 306	EN		
X	Sensitive species 294	VU		
X	Sensitive species 299	CR		
X	Sensitive species 286	EN		
ORCHIDACEAE	Pterygodium inversum	EN	Low	High level of disturbance
ORCHIDACEAE	Pterygodium cruciferum	EN	Low	High level of disturbance
FABACEAE	Xiphotheca lanceolata	EN	Low	High level of disturbance
FABACEAE	Xiphotheca reflexa	EN	Low	High level of disturbance
FABACEAE	Lachnaea grandiflora	VU	Low	High level of disturbance
ASTERACEAE	Metalasia capitata	VU	Low	High level of disturbance

BOTANICAL ASSESSMENT: PORTION 211 OF FARM 10 STELLENBOSCH

ASTERACEAE	Metalasia octoflora	VU	Low	High level of disturbance
ASTERACEAE	Marasmodes dummeri	EN	Low	High level of disturbance
ASTERACEAE	Senecio cadiscus	CR	Low	High level of disturbance
ASTERACEAE	Athanasia capitata	EN	Low	High level of disturbance
ASTERACEAE	Pedicularis capense	VU	Low	High level of disturbance
X	Sensitive species 666			
FABACEAE	Psoralea fascicularis	EN	Low	High level of disturbance
FABACEAE	Psoralea alata	VU	Low	High level of disturbance
RUTACEAE	Agathosma propinqua	CR PE	Low	High level of disturbance
ROSACEAE	Cliffortia acokii	CR	Low	High level of disturbance
ROSACEAE	Cliffortia marginata	EN	Low	High level of disturbance
ROSACEAE	Cliffortia hirta	EN	Low	High level of disturbance
FABACEAE	Indigofera psoraloides	EN	Low	High level of disturbance
FABACEAE	Muraltia decipiens	EN	Low	High level of disturbance
FABACEAE	Muraltia macropetala	VU	Low	High level of disturbance
FABACEAE	Aspalathus aculeata	VU	Low	High level of disturbance
FABACEAE	Aspalathus lebeckioides	VU	Low	High level of disturbance
FABACEAE	Aspalathus muraltiioides	EN	Low	High level of disturbance
FABACEAE	Aspalathus araneosa	VU	Low	High level of disturbance
FABACEAE	Aspalathus puberula	EN	Low	High level of disturbance
FABACEAE	Aspalathus recurva	VU	Low	High level of disturbance
FABACEAE	Aspalathus varians	EN	Low	High level of disturbance
FABACEAE	Aspalathus attenuata	EN	Low	High level of disturbance
X	Sensitive species 514			
X	Sensitive species 518	VU		
X	Sensitive species 526	Sensitive species 518		
X	Sensitive species 547	EN		
X	Sensitive species 512	EN		
COLCHICACEAE	Wurmbea inusta	CR		
RHAMNACEAE	Phytica plumosa var. squarrosa	VU	Low	High level of disturbance
RHAMNACEAE	Phytica strigulosa	EN	Low	High level of disturbance
RHAMNACEAE	Phytica thunbergiana	VU	Low	High level of disturbance
FABACEAE	Rafnia lancea	EN	Low	High level of disturbance
FABACEAE	Rafnia angulata subsp. ericifolia	EN	Low	High level of disturbance
FABACEAE	Lebeckia plukenetiana	CR	Low	High level of disturbance
FABACEAE	Podalyria microphylla	EN	Low	High level of disturbance
FABACEAE	Podalyria sericea	CR	Confirmed	Species observed at site
FABACEAE	Podalyria argentea	VU	Low	High level of disturbance
APONOGETONACEAE	Aponogeton angustifolius	EN	Low	High level of disturbance
APONOGETONACEAE	Aponogeton fugax	NT	Low	High level of disturbance
PROTEACEAE	Leucadendron verticillatum	EN	Low	High level of disturbance
PROTEACEAE	Leucadendron cinereum	CR	Low	High level of disturbance
PROTEACEAE	Leucadendron corymbosum	VU	Low	High level of disturbance
PROTEACEAE	Leucadendron lanigerum var. lanigerum	VU	Low	High level of disturbance
PROTEACEAE	Leucadendron argenteum	EN	Low	High level of disturbance
PROTEACEAE	Leucospermum grandiflorum	EN	Low	High level of disturbance

BOTANICAL ASSESSMENT: PORTION 211 OF FARM 10 STELLENBOSCH

PROTEACEAE	Leucospermum hypophyllocarpodendron subsp. canaliculatum	VU	Low	High level of disturbance
PROTEACEAE	Protea scorzonifolia	VU	Low	High level of disturbance
PROTEACEAE	Protea burchellii	VU	Low	High level of disturbance
PROTEACEAE	Serruria brownii	EN	Low	High level of disturbance
PROTEACEAE	Serruria incrassata	EN	Low	High level of disturbance
PROTEACEAE	Serruria pinnata	CR	Low	High level of disturbance
AIZOACEAE	Lampranthus leptaleon	EN	Low	High level of disturbance
AIZOACEAE	Lampranthus peacockiae	VU	Low	High level of disturbance
AIZOACEAE	Lampranthus scaber	EN	Low	High level of disturbance
AIZOACEAE	Lampranthus sociorum	EN	Low	High level of disturbance
AIZOACEAE	Lampranthus debilis	EN	Low	High level of disturbance
AIZOACEAE	Lampranthus dilutus	EN	Low	High level of disturbance
AIZOACEAE	Lampranthus filcaulis	VU	Low	High level of disturbance
AIZOACEAE	Lampranthus glaucus	VU	Low	High level of disturbance
CAMPANULACEAE	Merciera tetraloba	EN	Low	High level of disturbance
CAMPANULACEAE	Treichelia dodii	EN	Low	High level of disturbance

Impacts and Mitigation

As noted in Section 8 of the Botanical Assessment Report none of the SCC would be impacted but owing to only three individuals of the renoster Capesweetpea (*Podalyria microphylla*) occurring in severely ecologically compromised portion of the site, it should be bulked up in terms of numbers and re-introduced to the remnant renosterveld patches. This should be achieved by broadcasting seed and growing the species in a nursery from seed and cuttings. Since the species is a dryland-associated plant, it should be planted and seeded in the dry habitat and not within the wet areas associated with the watercourse. The implementation of the restoration should be supervised by a suitably qualified restoration specialist.

Buffers

A 100 m buffer distance (50 m radius) was applied in order to determine if 100m would be an appropriate buffer distance in relation to the footprint. Figure 3 shows the applied buffers for each SCC which would allow for adequate protection of SCC outside the footprint. Note also that in addition to these buffers, a greater area is assigned as No Go in the Botanical Impact Assessment (Section 7 and 8).

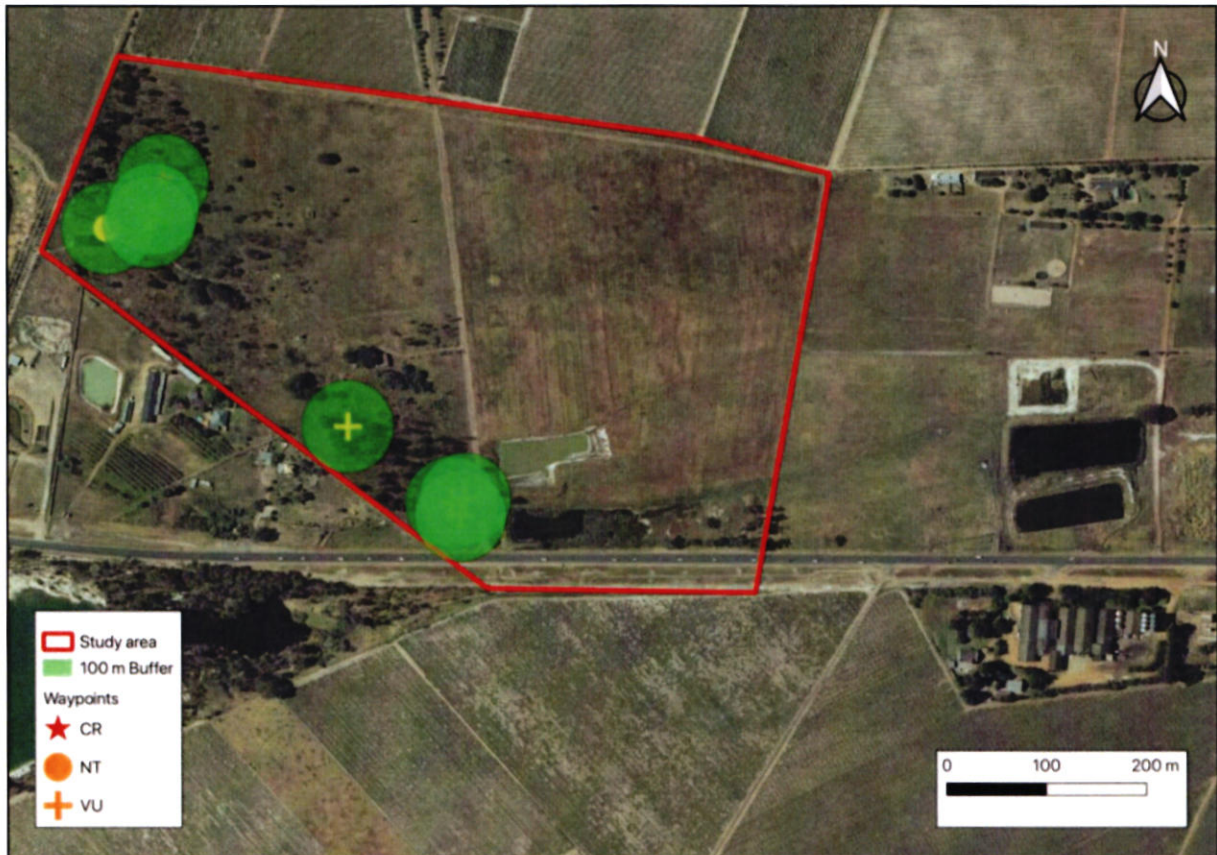


Figure 3. SCC DISTRIBUTION MAP WITH BUFFERS. The study area with 100 m buffers applied to SCC, overlaid on A CDNGI 50 cm mosaic aerial image.

Conclusions

The proposed project would not impact any SCC under the proposed development footprint (Client's Preferred Alternative). This would result in no loss or impact imposed on the subpopulations if carried out correctly.

Content of report requirement and relevant sections

		Section or page of report
2.1	The assessment must be undertaken by a specialist registered with the South African Council for Natural Scientific Professions (SACNASP), within a field of practice relevant to the taxonomic groups ("taxa") for which the assessment is being undertaken. ¹¹	Page ii and Appendix 3
2.2	The assessment must be undertaken within the study area. ¹¹	It was
2.3	The assessment must be undertaken in accordance with the <i>Species ¹¹Environmental Assessment Guideline²³</i> and must:	
2.3.1	Identify the SCC which were found, observed or are likely to occur within the study area; ¹¹	Tables 1 and 3 in Appendix 4
2.3.2	provide evidence (photographs) of each SCC found or observed within the study area, which must be disseminated by the specialist to a recognized online database facility immediately after the site inspection has been performed (prior to preparing the report contemplated in paragraph 3); ¹¹	Table 1. One species has no photographic records.
2.3.3	identify the distribution, location, viability and detailed description of population size of the SCC identified within the study area; ¹¹	Table 1 and 2 in Appendix 4
2.3.4	identify the nature and the extent of the potential impact of the ¹¹ proposed development to the population of the SCC located within ¹¹ the study area; ¹¹	Section 8
2.3.5	determine the importance of the conservation of the population of the ¹¹ SCC identified within the study area, based on information available in national and international databases including the IUCN Red List of Threatened Species, South African Red List of Species, and/or other relevant databases; ¹¹	Table 1 in Appendix 3
2.3.6	determine the potential impact of the proposed development on the habitat of the SCC located within the study area; ¹¹	Appendix 3
2.3.7	include a review of relevant literature on the population size of the SCC, the conservation interventions as well as any national or provincial species management plans for the SCC. This review must provide information on the need to conserve the SCC and indicate whether the development is compliant with the applicable species management plans and if not, a motivation for the deviation; ¹¹	Appendix 3
2.3.8	identify any dynamic ecological processes occurring within the broader landscape, that might be disrupted by the development and result in negative impact on the identified SCC, for example, fires in fire-prone systems; ¹¹	N/A
2.3.9	identify any potential impact on ecological connectivity within the broader landscape, and resulting impacts on the identified SCC and its long term viability; ¹¹	N/A
2.3.10	determine buffer distances as per the <i>Species Environmental Assessment Guidelines</i> used for the population of each SCC; and ¹¹	Appendix 3
2.3.11	discuss the presence or likelihood of additional SCC including threatened species not identified by the screening tool, <i>Data Deficient or Near Threatened Species</i> , as well as any <i>undescribed species</i> ²⁶ ; and	Appendix 3
2.3.12	identify any alternative development footprints within the preferred	N/A

BOTANICAL ASSESSMENT: PORTION 211 OF FARM 10 STELLENBOSCH

	development site which would be of “low” sensitivity” or “medium” sensitivity as identified by the screening tool and verified through the site sensitivity verification.	
--	---	--

3.	Terrestrial Plant Species Specialist Assessment Report²⁷	Section/Page
3.1	This report must include as a minimum the following information:	
3.1.1	contact details and relevant experience as well as the SACNASP registration number of the specialist preparing the assessment including a curriculum vitae;	See above
3.1.2	a signed statement of independence by the specialist;	Page iii
3.1.3	a statement on the duration, date and season of the site inspection and the relevance of the season to the outcome of the assessment;	Section 4
3.1.4	a description of the methodology used to undertake the site sensitivity verification and impact assessment and site inspection, including equipment and modelling used where relevant;	Section 4
3.1.5	a description of the assumptions made and any uncertainties or gaps in knowledge or data;	Section 4
3.1.6	a description of the mean density of observations/number of samples/sites per unit area of site inspection observations;	Appendix 3
3.1.7	details of all SCC found or suspected to occur on site, ensuring sensitive species are appropriately reported;	See above
3.1.8	the online database name, hyperlink and record accession numbers for disseminated evidence of SCC found within the study area;	Table 1 of Appendix 3
3.1.9	the location of areas not suitable for development and to be avoided during construction where relevant;	N/A
3.1.10	a discussion on the cumulative impacts;	Section 8
3.1.11	impact management actions and impact management outcomes proposed by the specialist for inclusion in the Environmental Management Programme (EMPr);	Section 8
3.1.12	a reasoned opinion, based on the findings of the specialist assessment, regarding the acceptability or not, of the development related to the specific theme considered, and if the development should receive approval or not, related to the specific theme being considered, and any conditions to which the opinion is subjected if relevant; and	Section 9
3.1.13	a motivation must be provided if there were any development footprints identified as per paragraph 2.3.12 above that were identified as having “low” or “medium” terrestrial plant species sensitivity and were not considered appropriate	N/A
3.2	A signed copy of the assessment must be appended to the Basic Assessment Report or Environmental Impact Assessment Report	

APPENDIX 4: CURRICULUM VITAE: PAUL EMMS

EDUCATION

MSc (Botany) - University of the Western Cape (2014).

BSc: Hons (Botany) – University of the Western Cape (2005).

BSc: Biodiversity and Conservation Biology - University of the Western Cape (2002 – 2004).

National Diploma in Horticulture - Cape Peninsula University of Technology (1998 – 2000).

CAREER HISTORY

April 2019 – present – Director at Capensis

March 2011 – April 2019 – independent botanical specialist and associate at Bergwind Botanical Surveys & Tours CC.

March 2008 - March 2010 - field botanist and botanical specialist - Coastec (Coastal & Environmental Consultants).

January 2006 – December 2007 - Kirstenbosch Scholarship: horticultural research - South African National Biodiversity Institute.

ACCREDITATION

Registered Professional Natural Scientist with the South African Council for Natural Scientific Practitioners (SACNASP). Registration number 400352/14.

EXPERIENCE and SKILLS

Botanical specialist consultant

- Environmental Impact Assessment
- Ecological Constraints Analysis
- Invasive Alien Plant Management Plans
- Vegetation Rehabilitation Plans
- Remediation Plans
- Open Space Management Plans
- Plant Search and Rescue Plans
- Conservation Implementation Management Plans
- Over 200 botanical assessments

PERSONAL DETAILS

- Paul Emms
- Fish Hoek, Cape Town
- Cell: 076 7377 468.
- emmspaul@gmail.com
- Date of birth – 31/08/1979
- Marital status - Married
- Dependents - 3

***CIVIL ENGINEERING SERVICES REPORT:
DEVELOPMENT OF PORTION 10 OF FARM 211,
KRAAIFONTEIN
OCTOBER 2021 (REV A)***



Prepared By:



**P.O. Box 1273
HERMANUS
7200
Tel: (028) 312 2292**

TABLE OF CONTENTS

1. INTRODUCTION	1
2. AVAILABLE INFORMATION.....	1
3. SITE DESCRIPTION	1
4. GEOTECHNICAL INFORMATION.....	2
5. SERVICES	2
5.1 WATER RETICULATION.....	2
5.1.1 Water Demand	2
5.2 SEWER RETICULATION	3
5.2.1 Sewerage Demand.....	3
5.2.2 Sewerage Reticulation System	3
5.3 STORMWATER RETICULATION	4
5.3.1 Calculations.....	4
5.3.2 Risks cost estimate and design flood frequencies	4
5.3.3 Hydrology	5
5.3.3.1 Climate.....	5
5.3.3.2 Storm Rainfall.....	5
5.3.4 Pre-and Post-Development Peak Flow Runoff	5
5.3.4.1 Existing and Proposed Stormwater Reticulation System	5
5.3.4.2 Results	6
5.4 ROADS	6
5.4.1 Structural Design	6
6. CONCLUSION	7

ANNEXURE A	-	Locality Plan and Project description
ANNEXURE B	-	Site Development Layout
ANNEXURE C	-	Site Aspect Plan
ANNEXURE D	-	Proposed Sewerage Reticulation System

1. INTRODUCTION

DECA Consulting Engineers were appointed by Wynland Trust to compile a preliminary Engineering Services Report for the provision of engineering services required for the proposed development on Portion 10 of Farm 211, the proposed development will therefore; for the purpose of this report hereinafter be referred to as "the site".

The development proposal entails the relocation of the Red Tractor Compost Facility from its existing location to Portion 10 of Farm 211, Kraaifontein and to ultimately increase the volume of compost produced. The developers aim to produce 14 000m³ of compost per month at the new facility which will require a total of 18 200m³ of incoming raw material. The proposed development will comprise of the following:

Land use	Unit	Area m ²
Warehouse & Distribution	-	7 950
Single residential > 1000 m ²	2	5 925
Single residential <1000 m ²	20	
Grazing Field	-	184 930
Decomposing Field		126 450

Please see attached the Site Development Plan (Red Tractor Compost by *Exact Plan Architectural Draughting*, Drawing No. 01019-GLC-STB211_10-20210128 dated 27 August 2021)

2. AVAILABLE INFORMATION

The following information was made available to DECA:

- a) 1:10 000 Orthophoto maps of the study area;
- b) Layout plan for the proposed development by Exact Plan Architectural Draughting;
- c) Existing cadastral information of the study area;
- d) Aerial photographs of the study area obtained via Google Earth;
- e) Traffic Impact Assessment (TIA) by DECA Consulting Engineers.

3. SITE DESCRIPTION

The site is situated between Stellenbosch and Kraaifontein, approximately 3.1km west of the R304 / Bottelary Road intersection. Bottelary Road is situated south of the development. The majority of the site drains in a southern direction with an average gradient of approximately 1.57%.

Please find the locality plan and project description attached hereto as **Annexure A**, the Site Development Plan as **Annexure B** and the site aspect plan as **Annexure C**.

4. GEOTECHNICAL INFORMATION

No geotechnical investigation was done for the site but it was found that the site has mainly Phyllite, metagreywacke, quartzite and minor volcanic rocks from the Tygerberg formation. The site consist of soils with strong texture and soils with a marked clay accumulation, strongly structured and non-reddish colour. In addition one or more of vertic, melanic and plinthic soils may be present. Less than 15% of clay is found on site at a depth greater or equal to 450mm but shallower than 750mm.

For the purpose of this report, the soil conditions are accepted to be as follows:

Soil Description : Sandy Loam
Soil Type : CA
Conductivity : 10.922 mm/hr
Suction Head : 109.982 mm

Source: <https://gis.elsenburg.com/apps/cfm/>

5. SERVICES

The farm lies outside of the area serviced by both Stellenbosch Municipality and the City of Cape Town Municipality. Wynland Water Association serve other farms in the vicinity of the development. The Wynland Water Association confirmed that Portion 10 of Farm 211 does not have rights to obtain water from the association. Portion 10 of Farm 211 is therefore proposed to be self-sufficient regarding water and wastewater infrastructure.

The design of services will be in accordance with the "Guidelines for the provision of Engineering Services for Residential Townships" (Red book), and the TRH4, and the specific standards of the Local Authority

5.1 WATER RETICULATION

The proposed internal water reticulation system will consist of an uPVC water reticulation system. Potable water demand will be sourced from a bore hole on the farm and water for the composting manufacturing is described in *Paragraph 5.3.4.2*.

5.1.1 Water Demand

Table 1 indicates the design criteria that will be applicable to the envisaged water reticulation system:

Table 1: Water Demand for Proposed Development

Description	Unit	Water Demand/Unit (l/day)	Total AADD (l/day)
Main Dwelling	1 Unit	1 000 l / unit / day	1 000
Second Dwelling	1 Unit	1 000 l / unit / day	1 000
Employee Housing	20 Units	600 l / unit / day	12 000
Warehousing and Distribution	71.55 /100m ² GLA*	400 l / 100 m ² GLA /day	28 620
Total ADD			42 620
Equivalent Units	43		
Peak Factor	2.5		
Instantaneous Peak Flow (l/day)	107 500		
Fire Flow Requirement (High Risk)	15 l / s		

* GLA is taken as 90% of total floor area

5.2 SEWER RETICULATION

The proposed internal sewerage reticulation system will consist of an uPVC piped system to be connected to an on-site treatment facility.

5.2.1 Sewerage Demand

The expected sewerage flow was taken as 70% of the water demand of the development. The design criteria which will be applicable for the envisaged sewerage reticulation system was calculated as 29 834 l/day total AADD for the whole development.

Due to the size of the development and the positioning of the various land uses it is proposed that the main dwelling (system 1), employee housing (system 2) and the second dwelling and warehousing and distribution (system 3) all have separate sewerage reticulation systems for their various sewerage demand as described below.

5.2.2 Sewerage Reticulation System

It is proposed that all three systems (as mentioned above) be treated by means of an on-site treatment facility / package plant. System 1 requires an on-site treatment facility that can treat 700 l /day, system 2 requires 8 400 l/day and system 3, 20 734 l/day. It is proposed that all 3 systems have a soak away that will guide the effluent from the treatment facility / package plant to the grazing fields.

Please see attached **Annexure D** for the proposed services layout drawing.

5.3 STORMWATER RETICULATION

5.3.1 Calculations

Hydrological calculations were conducted with the PCSWMM computer program for the various Return Interval (RI) storm events with a 24 hour SA Type 1 SCS storm, peaking at 12 hours.

5.3.2 Risks cost estimate and design flood frequencies

Although run-off calculations are performed with great care, it is still possible that the capacity of a system could be exceeded because of non-hydrological reasons. There has to be a limit to the elimination of probabilities as costs could become unrealistically high in comparison with the benefit of lower risks.

Although the relationship between function, risk, original cost and maintenance cost plays a major role in determining the design flood frequency, it is assumed in general that the flood frequencies as discussed in **Table 2** below should be provided for under normal circumstances.

The applicable analysis; assessment and design standard will be those given in table 6.1 and 6.2 of the "Red Book" and are as follows:

Table 2: Typical Storm water analysis requirements based on land uses

LAND USE	DESIGN STORM RETURN PERIOD (MAJOR STORM EVENTS)
Residential	50 years
Institutional (e.g.) schools	50 years
General Commercial and Industrial	50 years
High Value Central Business Districts	50 - 100 years

LAND USE	DESIGN STORM RETURN PERIOD (MINOR STORM EVENTS)
Residential	1 - 5 years
Institutional (e.g.) schools	2 - 5 years
General Commercial and Industrial	5 years
High Value Central Business Districts	5 - 10 years

In the light of the general application and support of the above-mentioned guidelines, it is accepted as minimum acceptable standards for stormwater drainage. Any deviation from these standards should be justified on the basis of economical and risk analysis.

For the purpose of this report these guidelines will thus apply throughout as reference and any deviation from that will be motivated.

5.3.3 Hydrology

5.3.3.1 Climate

The study area is situated in the winter rainfall region of the Western Cape. No extreme rainfall intensities occur. A representative mean annual rainfall (MAP) of **653mm** has been obtained from the "Design Rainfall and Flood Estimation in South Africa" report by JC Smithers and RE Schiltze.

5.3.3.2 Storm Rainfall

A summary of the rainfall station and related storm rainfall data is given in the **Table 3** below:

Table 3: Rainfall records from nearby weather stations

	STATION NAME					ACCEPTED VALUE
	KRAAIFONTEIN	ELSENBURG	KLAPMUTS	STELLENBOSCH	STELLENBOSCH (TNK)	
SAWA STATION NO	0021441_W	00215591_A	0021621_W	0021625_A	0021655_W	
LATITUDE	33°51'	33°51'	33°51'	33°55'	33°55'	
LONGITUDE	18°45'	18°50'	18°51'	18°51'	18°52'	
MAP* (mm)	541	658	734	685	647	653
ALTITUDE	143	169	187	122	116	
DISTANCE FROM CATCHMENT CENTROID (KM)	5.1	6.5	8	8	9.7	
LENGTH OF RECORDS (YRS)	56	87	47	48	86	
RAINFALL RETURN PERIOD	RAINFALL DEPTH (mm)					
1 IN 2 YEAR	34.7	40.0	40.06	47.5	43.2	41.1
1 IN 5 YEAR	46.6	53.6	54.4	63.7	57.9	55.2
1 IN 10 YEAR	55.2	63.6	64.5	75.6	68.7	65.5
1 IN 20 YEAR	64.2	73.9	75.1	87.9	79.8	76.2
1 IN 50 YEAR	76.8	88.5	89.8	105.2	95.6	91.2
1 IN 100 YEAR	87.1	100.4	101.9	119.3	108.4	103.4

5.3.4 Pre-and Post-Development Peak Flow Runoff

5.3.4.1 Existing and Proposed Stormwater Reticulation System

There is no existing stormwater reticulation systems on site. **Table 4** summarizes the site characteristics in terms of the pre-and post-development scenarios. Based on the Layout Plan (**Annexure B**) the site will be approximately 19.5% impervious post development.

SCENARIO	TOTAL SITE AREA (m ²)	IMPERVIOUS AREA (m ²)	IMPERVIOUS %
Pre-development	346 068	17 303.4	5
Post-development	346 068	67 620.5	19.5

The majority of the site drains in a southern direction with an average gradient of approximately 1.57%.

5.3.4.2 Results

The development area was modelled with the PCSWMM program as indicated to determine peak flow runoff volumes for the pre- and post-development scenarios for each of the Return Interval (RI) storm events. The **pre- and post-development** stormwater run-off from the catchment area during the various recurrence interval storm events are expected to be as follows:

Recurrence Interval Storm Event	Pre-Development Runoff (m ³ /s)	Post-Development Runoff (m ³ /s)
2	0.079	0.216
5	0.130	0.450
10	0.233	0.679
20	0.374	0.954
50	0.646	1.385
100	0.916	1.770

As per the project description (Annexure A) two stormwater collection ponds are proposed east of the access road, within the composting areas. These proposed 750m² ponds will allow for the capture and re-use of water in the composting process. It is anticipated that these ponds will provide 50% of the approximate 160 kiloliters of water required per day for the compost manufacturing. The other 50% will be obtained from the existing dams to the east of the access and are non-perennial tributary of the Bottelary River which intersects the site along the south.

The roads are proposed to be graded to ensure that the stormwater runoff expected during the 1:50 year RI storm event and larger can be discharged via these roads to the proposed ponds within the composting area.

No stormwater quantity- (attenuation) or quality control measures are proposed.

5.4 ROADS

The site consists of one access point off Swartrivier Road. Swartrivier Road is a Local Street (Class 5) that intersects with Bottelary Road, Major Arterial (Class 2). Please refer to the Traffic Impact Assessment (TIA) for the proposed development by DECA Consulting Engineers (September 2021).

5.4.1 Structural Design

It is proposed that the access road / parking area be constructed according to the following

specifications:

For asphalt surfacing:

SURFACE	ASPHALT	30mm
BASE	G4	125mm
SUBBASE	G5	150mm
SUBGRADE	To be confirmed subsequent to tests	150mm

6. CONCLUSION

From the above, the following can be concluded:

- That the proposed internal water reticulation system will consist of an uPVC water reticulation system;
- The site will be self-sufficient and potable water will be sourced from a borehole;
- That the proposed internal sewerage reticulation system will consist of an uPVC piped system, which will be connected to on-site treatment facilities / package plant;
- Three on-site treatment facilities are proposed; one for the main dwelling, one for the employee housing and one for the second dwelling and warehousing and distribution;
- The majority of the stormwater runoff from the site will be captured in a proposed stormwater collection pond to be re-used in the composting manufacturing;
- No further stormwater quantity - (attenuation) or quality control measures are proposed;
- That access and intersection control to the development be provided according to the TIA by DECA Consulting Engineers.



Renette Opperman B.Eng (Civil)
On behalf of: DECA

ANNEXURE A

Locality Plan and Project Description



<p>ENGINEER</p> <p>deca</p> <p>CONSULTING ENGINEERS</p> <p>PO Box 1273 7 Farnham Street Harare Zimbabwe</p> <p>Tel: 029 312 2292 Email: info@deca.co.zw</p>	<p>PORTION 10 OF FARM 211 BOTTELARY ROAD <u>LOCALITY PLAN</u></p>	<p>SCALE</p> <p>1:25 000 (A4)</p> <p>PLAN NUMBER</p> <p>ANNEXURE A</p>
---	---	--

Red Tractor Compost Facility – project description

The applicant (Red Tractor Compost) proposes to develop a commercial composting facility and associated infrastructure on Portion 10 of the farm Welgelegen 211 in Stellenbosch (the “Site”). The site is currently zoned agricultural however it is not fully utilised for agricultural purposes. The access is off Bottelary Road and this road bisects the property from north to south and provides access to the northern farm portion (Portion 3 of farm 211). Two existing dams are located on the southern part of the property to the east of the access road and a non-perennial tributary of the Bottelary River intersects the site along the south. Most of the site has been transformed with scattered indigenous vegetation along the western portion of the site.

The proposed development requires the spot rezoning of the site, to Industrial zoning as the facility will obtain organic waste in excess of 50% from outside the farm. Additional infrastructure also proposed as part of the development includes a warehouse, packaging facility (for packaging the compost prior to distribution), a workshop, offices, a main residential dwelling, a second residential dwelling, 20 workers duplex residential units as well as internal roads.

The table below summarises the proposed land-uses on the site:

Table 1: Land use coverages proposed

Land Use	m²	% of total
The Site/ Property Total Area approximate	346068	100
Total development footprint proposal (waste management area, roads, residential areas)	149 245	43.13
Decomposing Field (including collection ponds, screening platforms and shed)	126450	36.54
Warehouse, packaging and yard	21000	6.07
Transport	13715	3.96
Residential Areas	5925	1.70
Area to remain undeveloped/Existing open field not to be developed	196823	56.87

Earthworks will be required in order to create a compost pad on which the equipment can safely traverse. It is expected that the existing material (clayey soil) on site, cleared and compacted, will provide a suitable composting pad.

A covered screening shed (approximately 500m² in size) and four uncovered concrete screening platforms are proposed, to be located within the composting area. Stormwater collection ponds are planned within

each composting area, each $\pm 750\text{m}^2$ in size. These ponds allow for the capture and re-use of water used in the composting process. It is anticipated that approximately 160 kilolitres of water will be required per day for compost manufacture, with half of this volume expected to be available from the collection ponds. The additional water necessary for keeping the compost moist will be obtained from the existing ponds on site (re-use).

A 650m^2 workshop and a 7100m^2 warehouse and packaging facility are proposed, with associated parking, paving and carports covering approximately 10085m^2 . Storage of fuel will be necessary at the workshop and it is proposed that 2 x 23 000 litres (i.e. approximately 46 000 litres) of diesel will be stored for use on site.

The main dwelling is proposed to have a building coverage of less than 600m^2 , with a private garden of 1500m^2 in size. The "Second" proposed residential dwelling is 350m^2 in extent, with a 187m^2 private garden. The 20 duplex units allocated for workers accommodation cover a total area of 3150m^2 . With each unit having a building footprint of approximately 55m^2 , and private gardens covering 1600m^2 (80m^2 per unit).

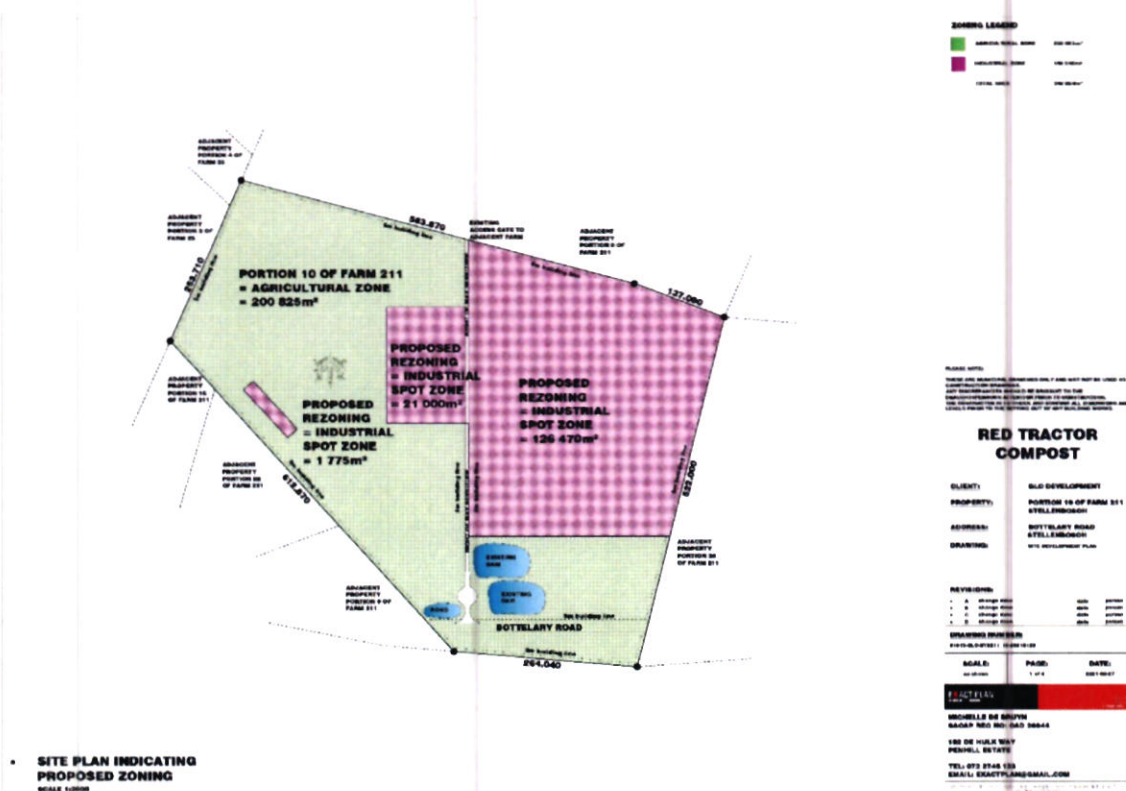


Figure 1: Proposed layout

A windrow composting technique is proposed with greens (chipped vegetation) and manure (kraal manure) feedstock. This primary proposed method of composting involves the formation of this organic waste into rows of long piles (windrows) and aerating them by periodically mechanically turning the piles. It is envisioned that the windrows and curing heaps will range between 2.5 and 3.5 meters in height. The proposed windrows and compost heap will be irrigated in order to ensure adequate moisture levels in the heaps for the survival of microorganisms in the compost. This proposed windrow size is large enough to generate adequate heat and maintain temperatures necessary for proper composting but still small enough to allow oxygen flow to the windrow's core.

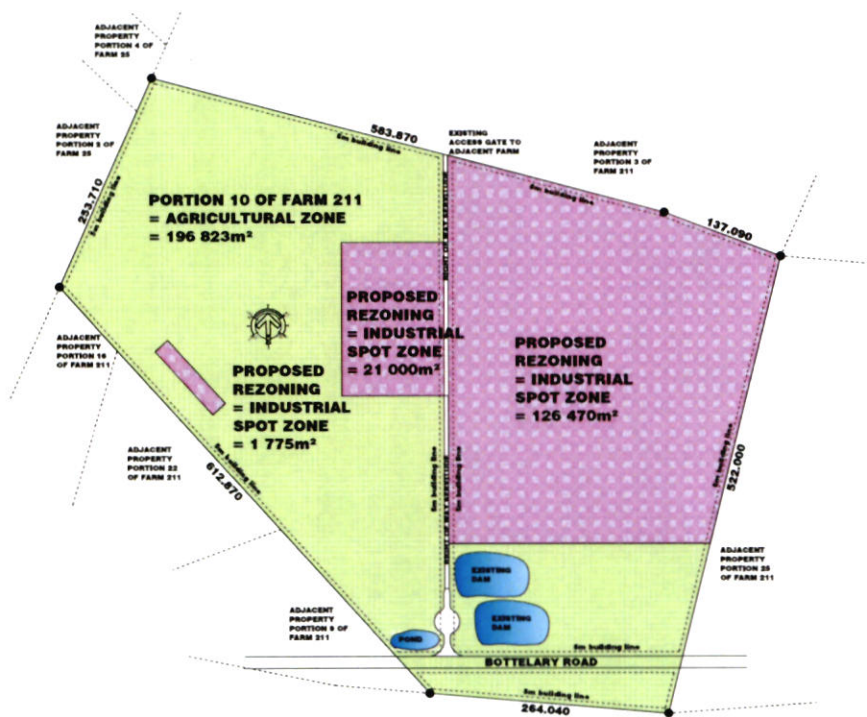
The facility will utilise green/organic waste and kraal manure (which is added to the greens waste at a ratio of 1:9 by weight). It is proposed that the facility will accept low hazard feedstocks including agricultural residues, source-separated organics (manure) and source-separated yard trimmings, woody material, agricultural crop residues, and other materials determined to pose a low level of risk to human health and the environment. Crop residues such as stalks, stems, leaves, seed pods, husks, bagasse, and roots will make up a portion of the feedstock. The operator will ensure that no hazardous feedstocks such as asbestos-containing wastes; biomedical wastes; toxic or radiological wastes; hazardous wastes; and any other prohibited wastes are accepted.

The chipped greens will arrive at the site and be screened to remove any large vegetation or debris. Removed material will be separated into organic and inorganic heaps, before the organic material is chipped as required and the plastic and other inorganic material taken to a landfill site.

It is envisioned that the facility will have an operational output of approximately 14000m³ of compost per month. The incoming material needed to produce this quantity of compost will be at least 30% more as the decomposition of material must be taken into consideration. Incoming material for compost making will therefore be approximately 18 200m³ per month.

ANNEXURE B

Site Development Plan



ZONING LEGEND	
AGRICULTURAL ZONE	196 823m ²
INDUSTRIAL ZONE	126 470m ²
TOTAL AREA	34 893m ²

PLEASE NOTE
THIS IS A PRELIMINARY DRAWING ONLY AND MAY NOT BE USED AS A CONSTRUCTION DOCUMENT.
ANY DISCREPANCIES SHOULD BE BROUGHT TO THE ATTENTION OF THE CLIENT PRIOR TO CONSTRUCTION.
THE CONTRACTOR IS TO CHECK AND CORRECT ALL DIMENSIONS AND LEVELS PRIOR TO THE SETTING OUT OF ANY BUILDING WORK.

RED TRACTOR COMPOST

CLIENT:	WYNLAND TRUST
PROPERTY:	PORTION 10 OF FARM 211 STELLENBOSCH
ADDRESS:	BOTTELARY ROAD STELLENBOSCH
DRAWING:	NOTE DEVELOPMENT PLAN
REVISIONS:	
1. A change done	del. person
2. B change done	del. person
3. C change done	del. person
4. D change done	del. person

DRAWING NUMBER:	01010-010-010-010
SCALE:	as shown
PAGE:	1 of 1
DATE:	2021-08-27

EXACT PLAN

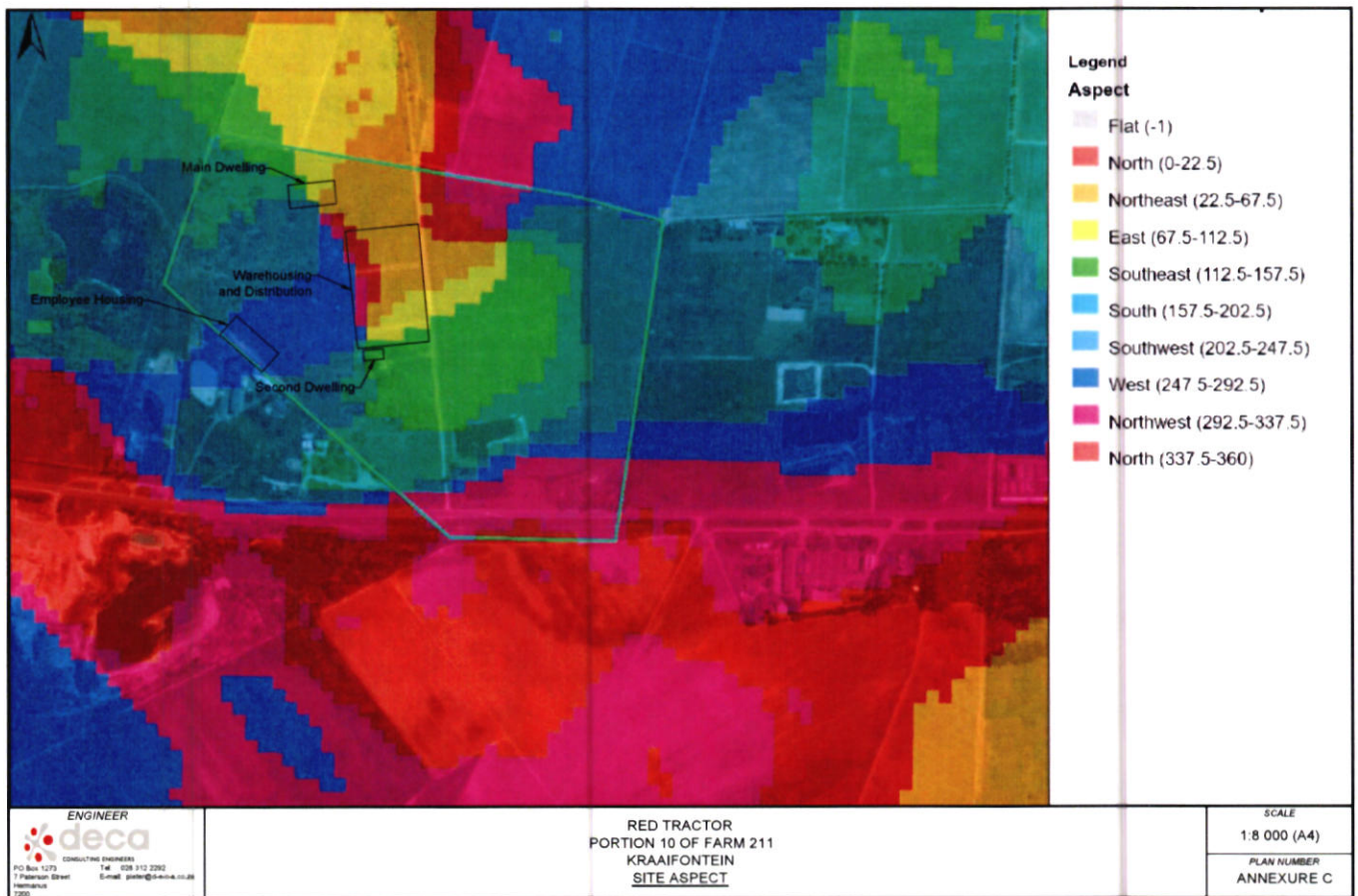
NICHOLLE DE BRUYN
SACAP REG NO: CAD 20844
103 DE HULK WAY
PENHILL ESTATE
TEL: 072 2748 123
EMAIL: EXACTPLAN@GMAIL.COM

COPYRIGHT SUBSISTS OVER THIS DRAWING AND REMAINS THE PROPERTY OF THE DESIGNER.

• **SITE PLAN INDICATING PROPOSED ZONING**
SCALE 1:2500

ANNEXURE C

Site Aspect Plan



ANNEXURE D

Proposed Sewerage Reticulation



Contact Person: Renette Opperman (Tel: 072 504 5276)
Our Ref: D423
Date: 18 October 2021

Stellenbosch Municipality
Engineering Services
PO Box 17
Stellenbosch
7599

For attention: Mr. Nigell Winter

Sir

TRANSPORT IMPACT ASSESSMENT FOR THE PROPOSED AGRICULTURAL AND COMMERCIAL DEVELOPMENT ON PORTION 10 OF FARM 211, KRAAIFONTEIN.

1. BACKGROUND

Deca Consulting Engineers were appointed by Wynland Trust Pty Ltd to investigate the transport impact of the proposed agricultural and industrial development on Portion 10 of Farm 211, Kraaifontein. The proposed development is situated between Stellenbosch and Kraaifontein, approximately 3.1 kilometers west of the MR00174 (R304) / MR00187 (Bottelary Road) intersection. Bottelary Road is situated south of the development. The location is shown in the attached **Figure 1**.

2. DEVELOPMENT PROPOSAL

The development proposal entails the relocation of the Red Tractor Compost Facility from its existing location to Portion 10 of Farm 211, Kraaifontein and to ultimately increase the volume of compost produced. The developers aim to produce 14 000m³ of compost per month at the new facility which will require a total of 18 200m³ of incoming raw material. The proposed development will comprise of the following:

Land use	Unit	Area m ²
Warehouse & Distribution	-	7 950
Single residential > 1000 m ²	2	5 925
Single residential <1000 m ²	20	
Grazing Field	-	184 930
Decomposing Field	-	126 450

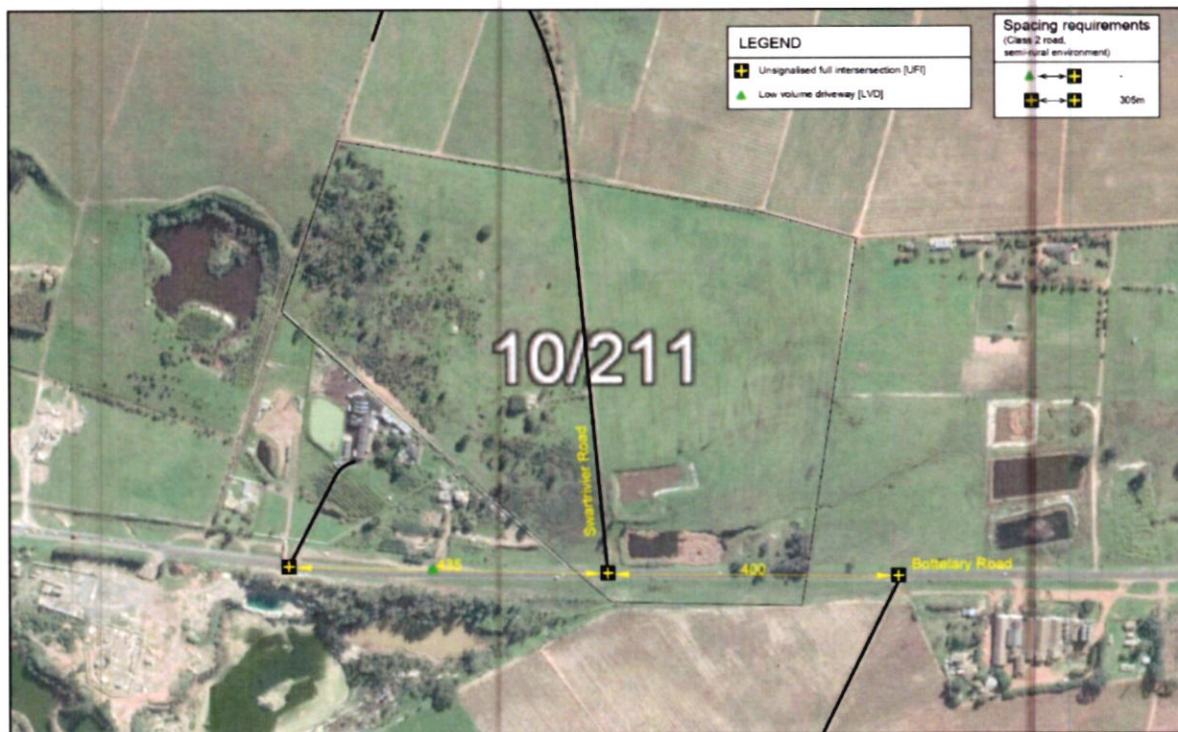
Please see attached the Site Development Plan (Red Tractor Compost by *Exact Plan Architectural Draughting*, Drawing No. 01019-GLC-STB211_10-20210128 dated 27 August 2021)

3. EXISTING ROADS AND ACCESS

Higher order roads in the vicinity of the proposed development include Bottelary Road, Botfontein Road and the R304. Other roads in the vicinity that will be affected by the development include Swartrivier Road and a number of farm accesses in the vicinity of the development. According to the 2020 Western Cape Access Management Guidelines Bottelary Road can be classified as a Class 2, Major Arterial and Swartrivier Road as a Class 5, Local Street.

The development will gain access off Bottellary Road via Swartrivier Road, which is an existing access. The access is situated approximately 3.1 kilometers west of the R304 / Bottellary Road intersection. The access complies with the minimum spacing requirement of 305m between unsignalised full intersections off a Class 2 road with a semi-rural roadside environment ([2020 Western Cape Government Access Management Guidelines](#)). See **Diagram 1**. Swartrivier Road has adequate shoulder sight distance of 300 meters in both directions.

Diagram 1: Access spacing off a Class 2 road

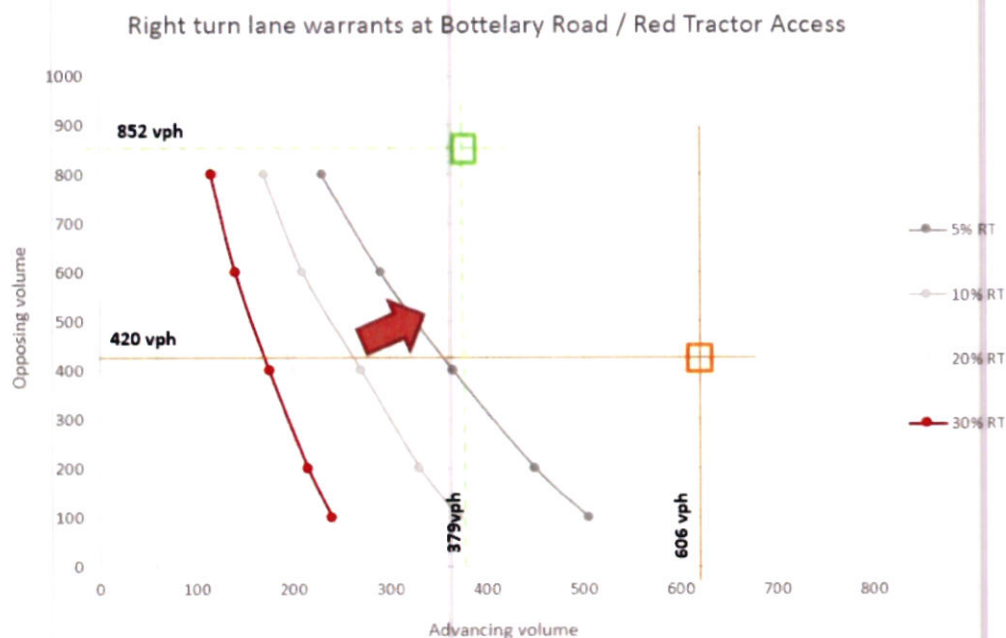


Currently the section of Bottellary Road that intersects with Swartrivier Road is a two-way road with one lane in each direction. The trips generated by the proposed development (*Paragraph 7*) will warrant a right turning lane on the eastern approach according to the 2020 Western Cape Access Management Guidelines standards (see **Diagram 2**). An exclusive left-turn lane is not warranted.

Figure 2 and Figure 2.1 shows the proposed exclusive right turn lane on the eastern Bottellary Road approach. The right turn lane design was preliminary approved by the Chief Engineer for the Western Cape Government Land Transport department but should be designed in accordance with the Western Cape Road Planning design requirements when at detail design

phase. The verge north of Bottelary Road has a definite level change, but the developer is willing to fill to obtain the desired levels to accommodate the warranted exclusive right-turn lane.

Diagram 2: 2020 AMG Right turn lane warrants



4. EXISTING TRAFFIC AND SERVICE LEVELS

The intersection expected to be affected the most by the proposed development is the Bottelary Road / Swartrivier Road (access road) intersection. Traffic counts were done at the above mentioned intersection for an hour and 30 minutes in the morning as well as the afternoon on Wednesday 22 September 2021. The AM peak hour was observed between 07:00 and 08:00 and the PM peak hour between 17:00 and 18:00, this coincide with the RNIS historic peak hours for Bottelary Road.

The traffic volumes were used to analyse the intersections with the SIDRA computer programme to obtain existing service levels. Service levels give an indication of the delays experienced at an intersection. A level of service A represents a short delay, while a level of service F represents unacceptably long delays. A level of service D is generally used as the lowest acceptable standard for overall intersection operation.

Bottelary Road / Swartrivier Road intersection: This is a T-intersection with stop control on the Swartrivier Road approach and free-flow on Bottelary Road. The Sidra analysis with existing 2021 traffic volumes show that all movements on Bottelary Road operate at a level of service A. The Swartrivier Road approach operate at a level of service B during the AM peak hour and a level of service A during the PM peak hour.

Please see attached **Figure 3** for existing traffic volumes and levels of service.

5. BACKGROUND TRAFFIC

The proposed development is expected to be completed by 2024. Existing traffic volumes were increased by 2.45% per annum (rate obtained from the **Road Network Information System, Growth Chart for MR00187, km8.06, between 2009 and 2019**) to obtain expected 2024 traffic volumes.

The affected intersection was analysed with SIDRA to determine the baseline traffic situation against which the impact of the development could be measured. The results of the analysis are discussed below and shown in **Figure 4**.

Bottelary Road / Swarttrivier Road intersection: The SIDRA analysis with year 2024 background traffic volumes indicate that all movements will operate at a level of service B or better during the AM and PM peak hours.

6. TRIP GENERATION

The South African COTO TMH17 trip generation document was used to obtain the trip generation rates for the new warehousing and distribution (Gross Lettable Area was taken as 90% of the total floor area) as well as the residential land uses.

The compost trips were based on the developer's assumptions that 79.5 single unit trucks per day will transport the compost from the development and 12 heavy vehicles will transport the incoming waste per day. The peak hour trips were taken as 14.07% of the daily trips (based on another composting facility TIA done by this office: *Organic Waste Processing Facility Proposal, Remainder Erf 711, Philippi, dated February 2021* for which a traffic survey was conducted).

The proposed development will have the potential to generate 85 trips (41 in, 44 out) during the morning peak hour and 85 trips (44 in, 40 out) during the afternoon peak hour.

Table 1 indicates the trip generation potential of the proposed development during the AM and PM peak hours.

Table 1: Trip Generation Potential of the proposed development

Land Use	Unit	TGR	% In	% Out	Total Trips	In	Out
AM							
Warehouses & Distribution	71.55 100m ² GLA	0.5	60%	40%	36	21	14
Single Residential	2 Unit	1	25%	75%	2	1	2
Residential -workers	20 Unit	0.85	25%	75%	17	4	13
Incoming Waste			50%	50%	30	15	15
TOTAL					85	41	44
PM							
Warehouses & Distribution	71.55 100m ² GLA	0.5	45%	55%	36	16	20
Single Residential	2 Unit	1	70%	30%	2	1	1
Residential - workers	20 Unit	0.85	70%	30%	17	12	5
Incoming Waste			50%	50%	30	15	15
TOTAL					85	44	40

7. TRIP DISTRIBUTION

The trips generated by the proposed development were distributed according to the existing directional splits at the intersection. The trip distribution is shown in **Figure 5**.

8. TRAFFIC IMPACT

The trips generated by the proposed development were added to the background traffic volumes to determine the expected total number of trips on the affected intersection after completion of the proposed development. The affected intersection was again analysed with the SIDRA computer programme to determine the expected service levels.

Bottelary Road / Swartrivier Road intersection: The SIDRA analysis with total 2024 traffic volumes and proposed new intersection layout with exclusive right turning lane (as shown in **Figure 2**) indicate that all movements on Bottelary Road will continue to operate at a level of service A. The Swartrivier Road approach will operate at a level of service C during the AM peak hour and a level of service B during the PM peak hour.

The proposed development will have a moderate impact on the surrounding road network. Please see attached **Figure 6** for expected total traffic volumes and levels of service of 2024

9. PARKING

The minimum off-street parking ratio for the proposed development as indicated by the 2019 Stellenbosch Municipality Zoning Scheme By-Law are listed in **Table 2**.

Table 2: Required off-street parking for the proposed development

Land Use	Area (x100m ²)	Unit	Required Ratio	Bays Required
Warehousing and Distribution	71.55	-	1.5	107
Single residential	-	2	2	4
Duplex employee houses	-	20	1	20
Total				131

The SDP indicates that 145 parking bays will be provided at the industrial warehouse and distribution component and is more than the parking bays required. It is proposed that two garages / parking bays should be provided at each single residential house and a single carport at each employee house.

The sizes of all parking bays should be in accordance with the South African Road Traffic Signs Manual.

10. PUBLIC TRANSPORT AND NON-MOTORISED TRANSPORT

The proposed development is situated in an area that is mostly agricultural and on the outskirts of two residential areas, Stellenbosch and Kraaifontein. The SDP indicates that employee housing will be provided on site and that will lessen the number of public transport trips generated by the proposed development. It is anticipated that a small number of public transport trips will be generated by means of minibus taxis that currently operate on Bottelary Road as per the www.citymapviewer.co.za website and observed during the traffic counts. The proposed entrance has ample space to accommodate a minibus-taxi and it is proposed a taxi embayment be constructed as shown in **Figure 7**. It is anticipated that most non-motorised transport trips

generated will be intra-development trips and it is proposed that a sidewalk be constructed along at least one side of the Swartrivier Road and the road leading from the employee housing up to the warehouse and offices.

11. GEOMETRY

The access (Swartrivier Road) will carry a large amount of heavy vehicles and it is proposed that the access road (Swartrivier Road) have a cross section adequate for an industrial major access road with a black top width of 8 meters and bell-mouth radii of 15 meters. The developers want to incorporate a turning circle for heavy vehicles at the entrance gate. It was indicated that at the current site it occurs often that an unauthorised heavy vehicle will try and enter the facility and then need to make a U-turn to return to its original path. A swept path analysis of a WB40 and an inter-link truck was carried out and can be seen in **Figure 8** and **Figure 9** respectively. The turning circle (**see Figure 7**) proposed at the access off Bottellary Road is adequate for a heavy vehicle to easily manoeuvre. To accommodate this proposed turning circle the culvert needs to be extended as shown.

For the other internal roads, not carrying heavy vehicles, it is proposed that the road reserve must be 10 meters with a blacktop width of 5 meters and bell mouth radii of 5 meters.

12. CONCLUSIONS

It can be concluded that the proposed agricultural and industrial development, Red Tractor Compost Facility in Kraaifontein will have a moderate transport impact. Other conclusions drawn from the transport impact assessment may be summarised as follows:

- The proposed development is situated between Stellenbosch and Kraaifontein, approximately 3.1 kilometers west of the MR00174 (R304) / MR00187 (Bottellary Road) intersection;
- The proposed development entails the relocation of the Red Tractor Compost Facility from its existing location to Portion 10 of Farm 211, Kraaifontein and to ultimately increase the volume of compost produced. The development will have a warehousing and distribution component on site, as well as residential houses;
- The development will gain access off Bottellary Road via Swartrivier Road, which is an existing access;
- The intersection expected to be affected the most by the proposed development is the Bottellary Road / Swartrivier Road (access road) intersection;
- The intersection currently operates at acceptable levels of service and will continue to operate at acceptable levels of service with the background 2024 traffic volumes;
- The proposed development has the potential to generate 85 trips (41 in, 44 out) during the morning peak hour and 85 trips (44 in, 40 out) during the afternoon peak hour;
- The total 2024 traffic volumes warrants an exclusive right-turn lane on the Bottellary Road eastern approach;
- The Bottellary Road / Swartrivier Road intersection will operate at acceptable levels of service with total 2024 traffic volumes and the proposed intersection layout as shown in **Figure 7**;

- The proposed 145 off-street parking bays at the warehouse and distribution zone is deemed sufficient;
- A small number of public motorised transport trips is anticipated to be generated by the proposed development and that non-motorised transport trips will be intra-development;

13. RECOMMENDATIONS

The recommendations made in the transport impact assessment that should be implemented by the Developer may be summarised as follows:

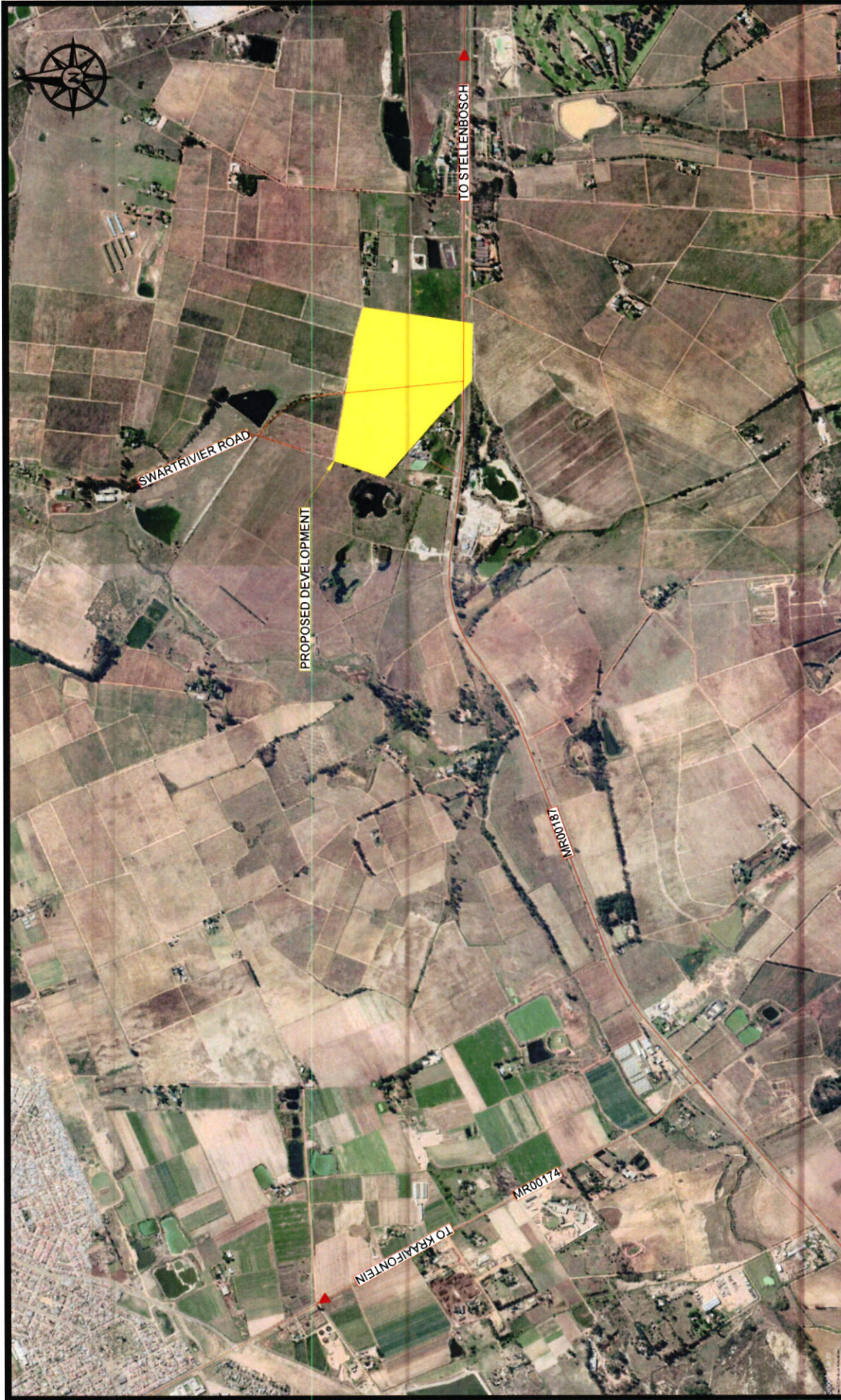
- An exclusive right turning lane should be implemented at the proposed access on the eastern Bottelary Road approach as per **Figure 2** and **Figure 2.1**;
- A taxi embayment should be provided at the access as shown in **Figure 7**;
- A side walk should be provided on at least one side of Swartrivier Road from the access up to the warehouse and distribution area as well as along the road from the employee housing to the warehouse and distribution area.

We trust that you will find this transport impact assessment in order. Please contact the undersigned should there be any queries.

Yours truly,



Renette Opperman (B. Eng Civil)
On behalf of: Deca



ENGINEER



deca
CONSULTING ENGINEERS
PO Box 1273
7 Palmson Street
Hermanus
Tel: 028 312 2292
E-mail: info@deca.co.za
1200

PORTION 10 OF FARM 211
BOTTELARY ROAD
LOCALITY PLAN

SCALE

1:25 000 (A4)

PLAN NUMBER

FIGURE 1

ZONING LEGEND	
	AGRICULTURAL ZONE
	INDUSTRIAL ZONE
196 823m²	148 246m²
TOTAL AREA	
34 608m²	

PLEASE NOTE:
THIS SET OF MUNICIPAL DRAWINGS ONLY AND MAY NOT BE USED AS
A BASIS FOR CONSTRUCTION. ANY DISCREPANCIES SHOULD BE BROUGHT TO THE
DRAWING PERSON'S ATTENTION PRIOR TO CONSTRUCTION.
THESE DRAWINGS ARE NOT TO BE USED FOR ANY OTHER PURPOSES AND
LEVELS PRIOR TO THE SETTING OUT OF ANY BUILDING WORK.

RED TRACTOR COMPOST

CLIENT: WYNLAND TRUST
PROPERTY: PORTION 10 OF FARM 211
STELLENBOSCH
ADDRESS: BOTTELARY ROAD
STELLENBOSCH
DRAWING: SITE DEVELOPMENT PLAN

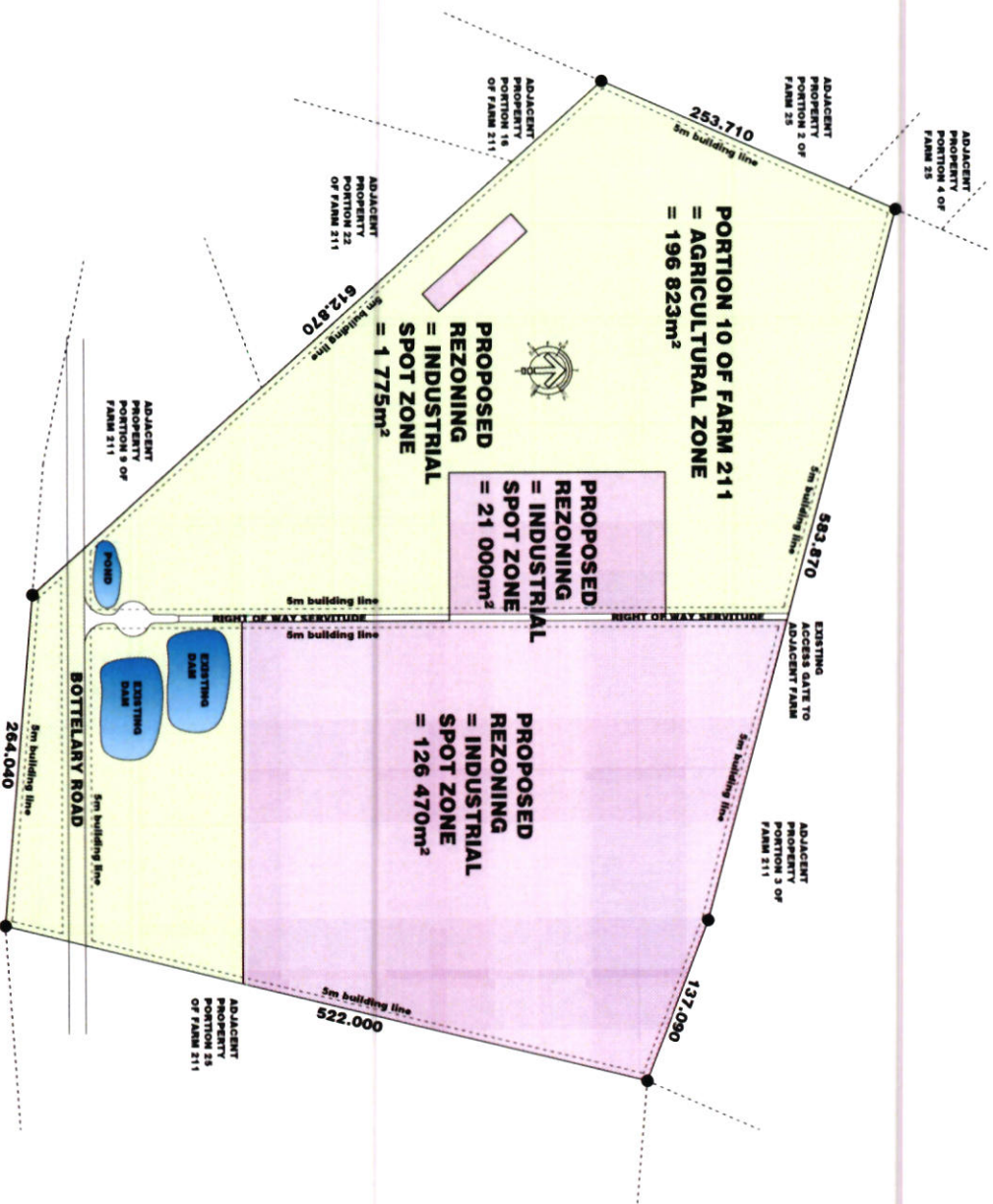
REVISIONS:	
A	change done
B	change done
C	change done
D	change done
DATE	PERSON

DRAWING NUMBER:
01919-00-071811_16-20181218

SCALE:	PAGE:	DATE:
as shown	1 of 4	2021-08-27

EXACT PLAN

MICHELLE DE BRUYN
SACAP REG NO: CAD 20844
102 DE HULK WAY
PENHILL ESTATE
TEL: 072 2746 133
EMAIL: EXACTPLAN@GMAIL.COM
COPYRIGHT SUBSISTS OVER THIS DRAWING AND REMAINS THE PROPERTY
OF THE DESIGNER'S



SITE PLAN INDICATING PROPOSED ZONING

SCALE 1:2000

- LEGEND**
- CATASTRAL BOUNDARY LINE
 - MUNICIPAL BOUNDARY LINE
 - LINE OF FENCING
 - PROPOSED BUILDINGS
 - RIGHT OF WAY SERVITUDE
 - INTERNAL ACCESS ROAD

BULK CALCULATIONS (MAXIMUM FOR WHICH SHALL BE APPLIED FOR)

AGRICULTURAL ZONE - MAIN HOUSE	600m ²
AGRICULTURAL ZONE - SECOND DWELLING	600m ²
AGRICULTURAL ZONE - STAFF HOUSING (15 UNITS)	660m ²
INDUSTRIAL ZONE - WAREHOUSE	7 800m ²
INDUSTRIAL ZONE - SHED	450m ²
INDUSTRIAL ZONE - STAFF HOUSING (15 UNITS)	660m ²
TOTAL AREA	10 170m ²

PARKING CALCULATIONS

LAND USE	NO OF OPERATREY PARKING REQUIRED	NO OF PARKING PROVIDED	DOES THE CATEGORY REQUIRE PARKING COMPLY
INDUSTRIAL	15 BAYS PER 119 BAYS	146 BAYS	YES
RESIDENTIAL	100m ² OF G.A.	44 BAYS	YES
RESIDENTIAL	2 BAY PER DWELLING	44 BAYS	YES

PLEASE NOTE:

THESE ARE MINIMUM REQUIREMENTS ONLY AND MAY NOT BE USED AS A BASIS FOR DETERMINING THE ACTUAL NUMBER OF PARKING SPACES REQUIRED. ANY DISCREPANCIES SHOULD BE BROUGHT TO THE ATTENTION OF THE CLIENT PRIOR TO THE START OF CONSTRUCTION. THE CLIENT SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND LETS PRIOR TO THE STARTING OF ANY BUILDING WORK.

RED TRACTOR COMPOST

CLIENT: WYNLAND TRUST
PROPERTY: PORTION 10 OF FARM 211
ADDRESS: BOTTELARY ROAD
STELLENBOSCH
DRAWING: SITE DEVELOPMENT PLAN

REVISIONS:

	DATE	BY	REASON
A	change done		
B	change done		
C	change done		
D	change done		

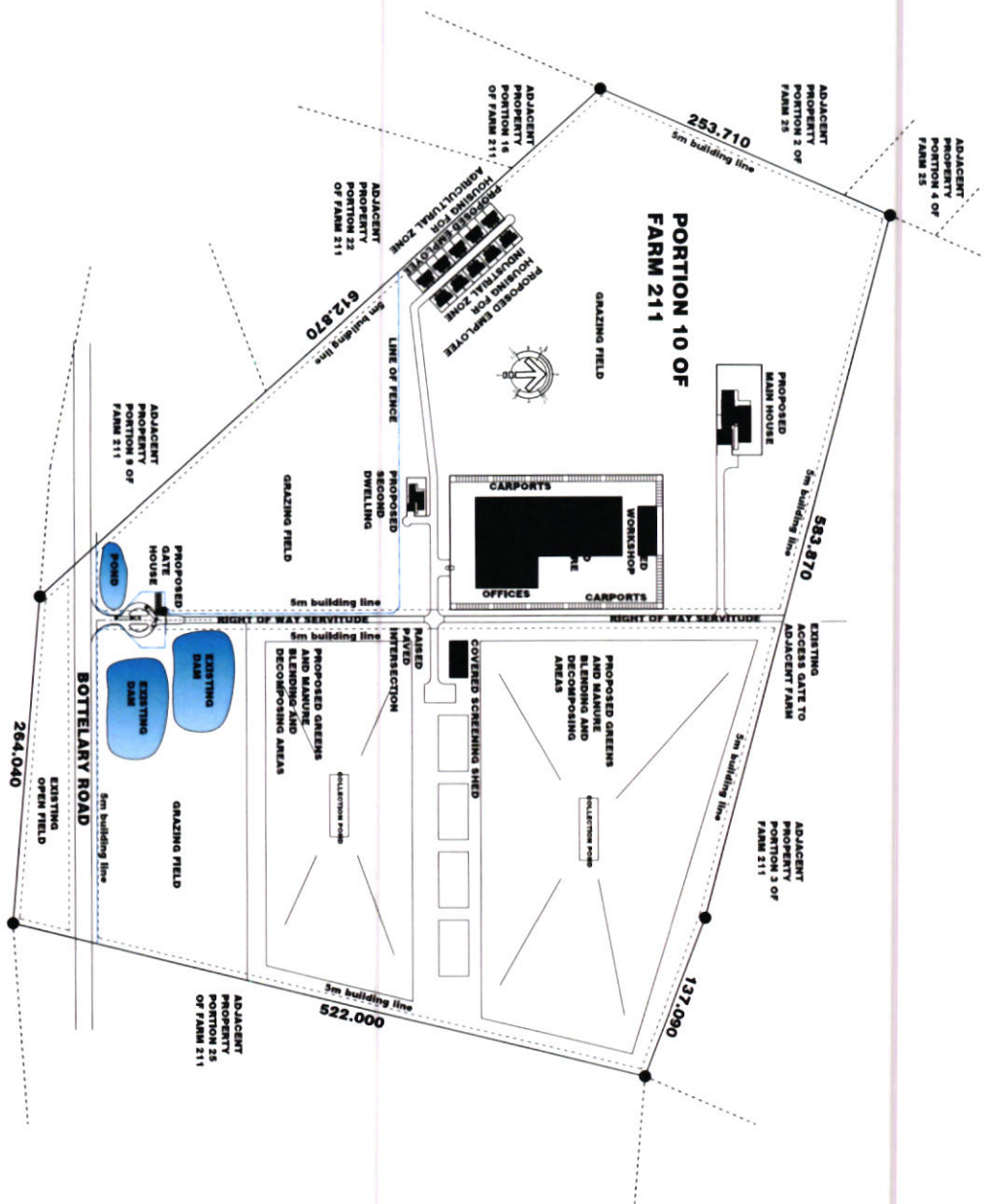
DRAWING NUMBER:

01010-0-C-ATB211_1-0-20191218

SCALE:	PAGE:	DATE:
as shown	2 of 4	2021-08-27

E-PLAN

MICHELLE DE BRUYN
SACAP REG NO: CAD 20844
102 DE HULK WAY
PENHILL ESTATE
TEL: 072 2748 133
EMAIL: EXACTPLAN@GMAIL.COM
COPYRIGHT SUBSIST OVER THIS DRAWING AND REMAINS THE PROPERTY OF THE DESIGNER'S



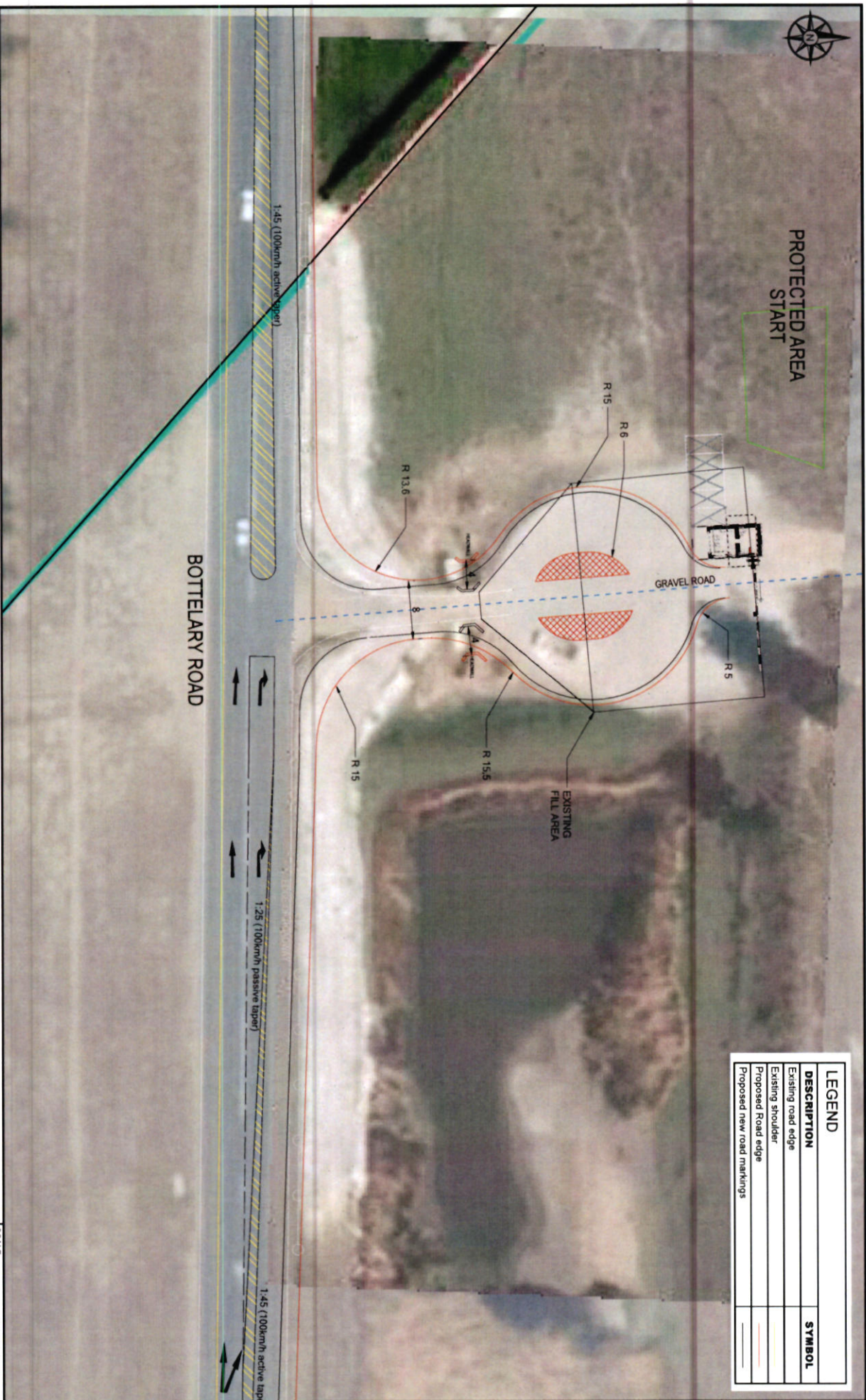
**SITE PLAN INDICATING
USE OF LAND**

SCALE 1:2000



PROTECTED AREA
START

LEGEND	
DESCRIPTION	SYMBOL
Existing road edge	—
Existing shoulder	—
Proposed Road edge	—
Proposed new road markings	—



ENGINEER



PO Box 1273
Hartbeespoort
2700
Tel: 072 504 1273
Email: info@deca.co.za
2700

PORION 10 OF FARM 211
BOTTELARY ROAD
PROPOSED EXCLUSIVE RIGHT TURN LANE

SCALE 1:500 (A3)

DATE JUNE 2021

PLAN NUMBER
FIGURE 2



LEGEND	
DESCRIPTION	SYMBOL
Existing road edge	
Existing shoulder	
Proposed Road edge	
Proposed new road markings	



ENGINEER



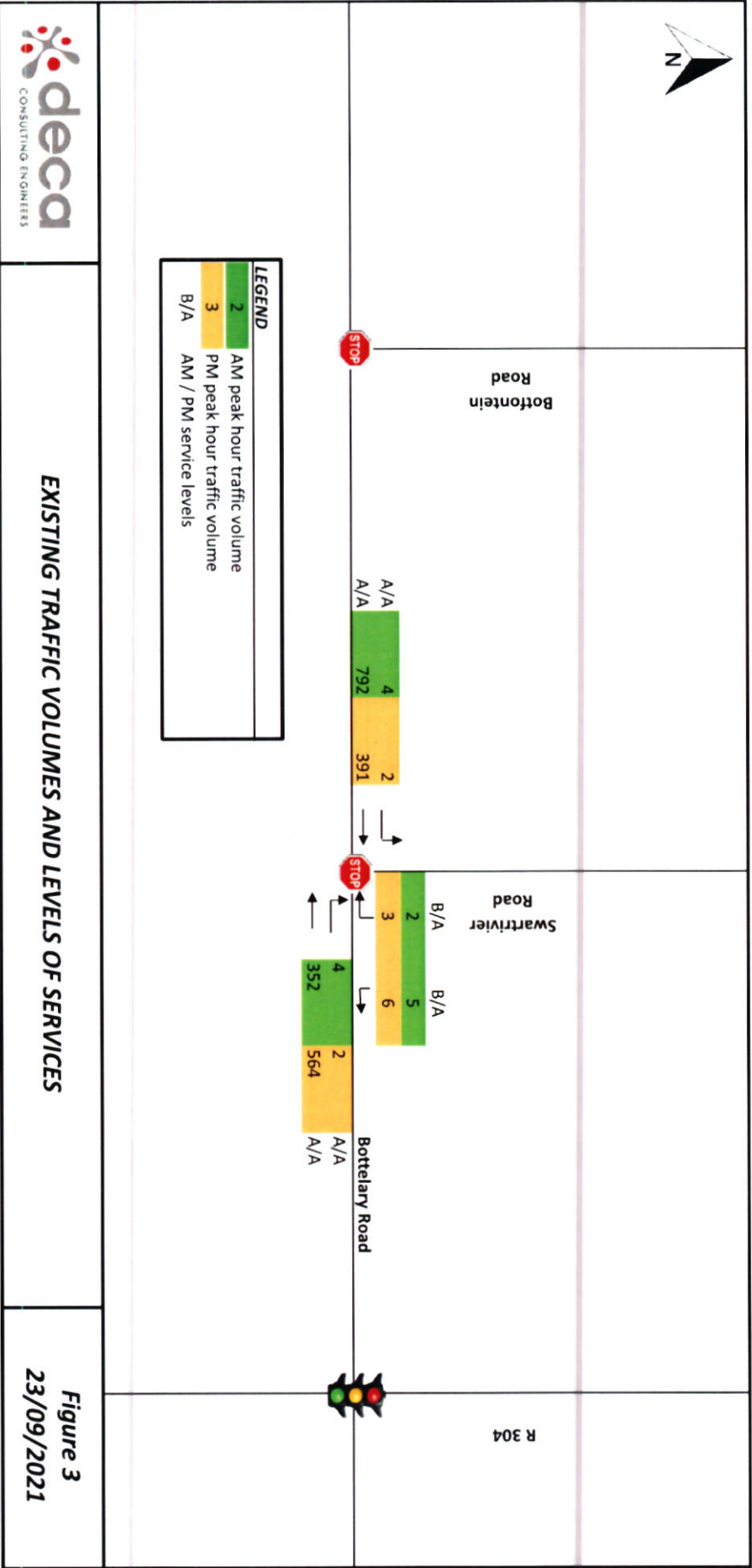
PO Box 1273
7 Pioneer Street
Telfer 072 504 5276
E-mail: enquiries@deca.co.za
7700

PORTION 10 OF FARM 211
BOTTELARY ROAD
PROPOSED EXCLUSIVE RIGHT TURN LANE

SCALE 1:1 000 (A3)

DATE JUNE 2021

PLAN NUMBER
FIGURE 2.1

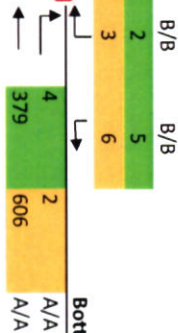




Botfontein
Road



Swartkops
Road



Bottelary Road



R 304

LEGEND

- 2 AM peak hour traffic volume
- 3 PM peak hour traffic volume
- B/B AM / PM service levels



BACKGROUND TRAFFIC VOLUMES AND LEVELS OF SERVICES

Figure 4
23/09/2021



Botfontein
Road



R 304



0.5

0.5

21

22

13

20

21

22

0.5

0.5

0.3

0.3

0.7

0.7

20

30

20

21

22

0.5

0.5

0.3

0.3

0.7

0.7

20

30

20

21

22

0.5

0.5

0.3

0.3

0.7

0.7

20

30

20

21

22

0.5

0.5

0.3

0.3

0.7

0.7

20

30

20

21

22

0.5

0.5

0.3

0.3

0.7

0.7

20

30

20

21

22

0.5

0.5

0.3

0.3

0.7

0.7

20

30

20

21

22

0.5

0.5

0.3

0.3

0.7

0.7

20

30

20

21

22

0.5

0.5

0.3

0.3

0.7

0.7

20

30

20

21

22

0.5

0.5

0.3

0.3

0.7

0.7

20

30

20

21

22

0.5

0.5

0.3

0.3

0.7

0.7

20

30

20

21

22

0.5

0.5

0.3

0.3

0.7

0.7

20

30

20

21

22

0.5

0.5

0.3

0.3

0.7

0.7

20

30

20

21

22

0.5

0.5

0.3

0.3

0.7

0.7

20

30

20

21

22

0.5

0.5

0.3

0.3

0.7

0.7

20

30

20

21

22

0.5

0.5

0.3

0.3

0.7

0.7

20

30

20

21

22

0.5

0.5

0.3

0.3

0.7

0.7

20

30

20

21

22

0.5

0.5

0.3

0.3

0.7

0.7

20

30

20

21

22

0.5

0.5

0.3

0.3

0.7

0.7

20

30

20

21

22

0.5

0.5

0.3

0.3

0.7

0.7

20

30

20

21

22

0.5

0.5

0.3

0.3

0.7

0.7

20

30

20

21

22

0.5

0.5

0.3

0.3

0.7

0.7

20

30

20

21

22

0.5

0.5

0.3

0.3

0.7

0.7

20

30

20

21

22

0.5

0.5

0.3

0.3

0.7

0.7

20

30

20

21

22

0.5

0.5

0.3

0.3

0.7

0.7

20

30

20

21

22

0.5

0.5

0.3

0.3

0.7

0.7

20

30

20

21

22

0.5

0.5

0.3

0.3

0.7

0.7

20

30

20

21

22

0.5

0.5

0.3

0.3

0.7

0.7

20

30

20

21

22

0.5

0.5

0.3

0.3

0.7

0.7

20

30

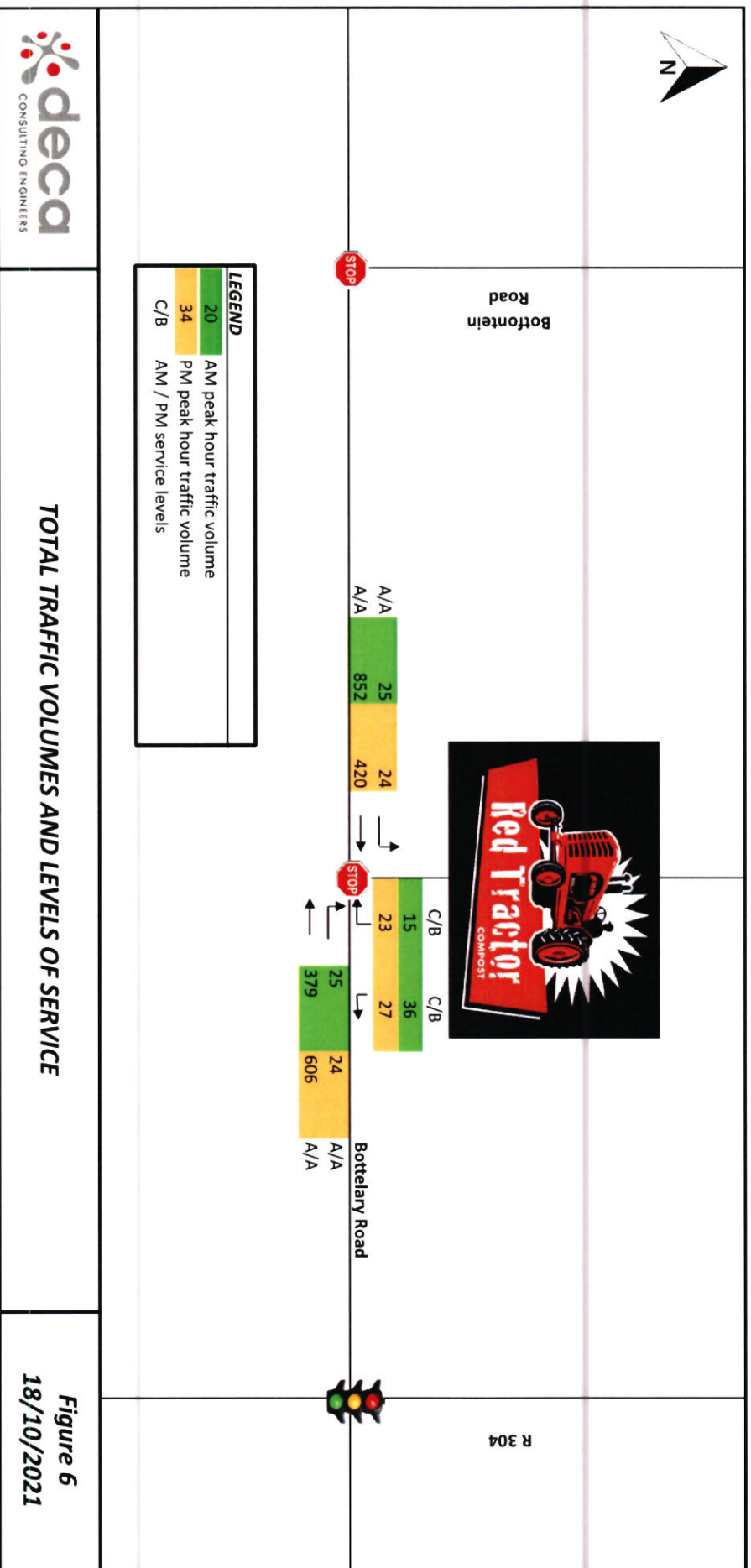
20

21

22

0.5

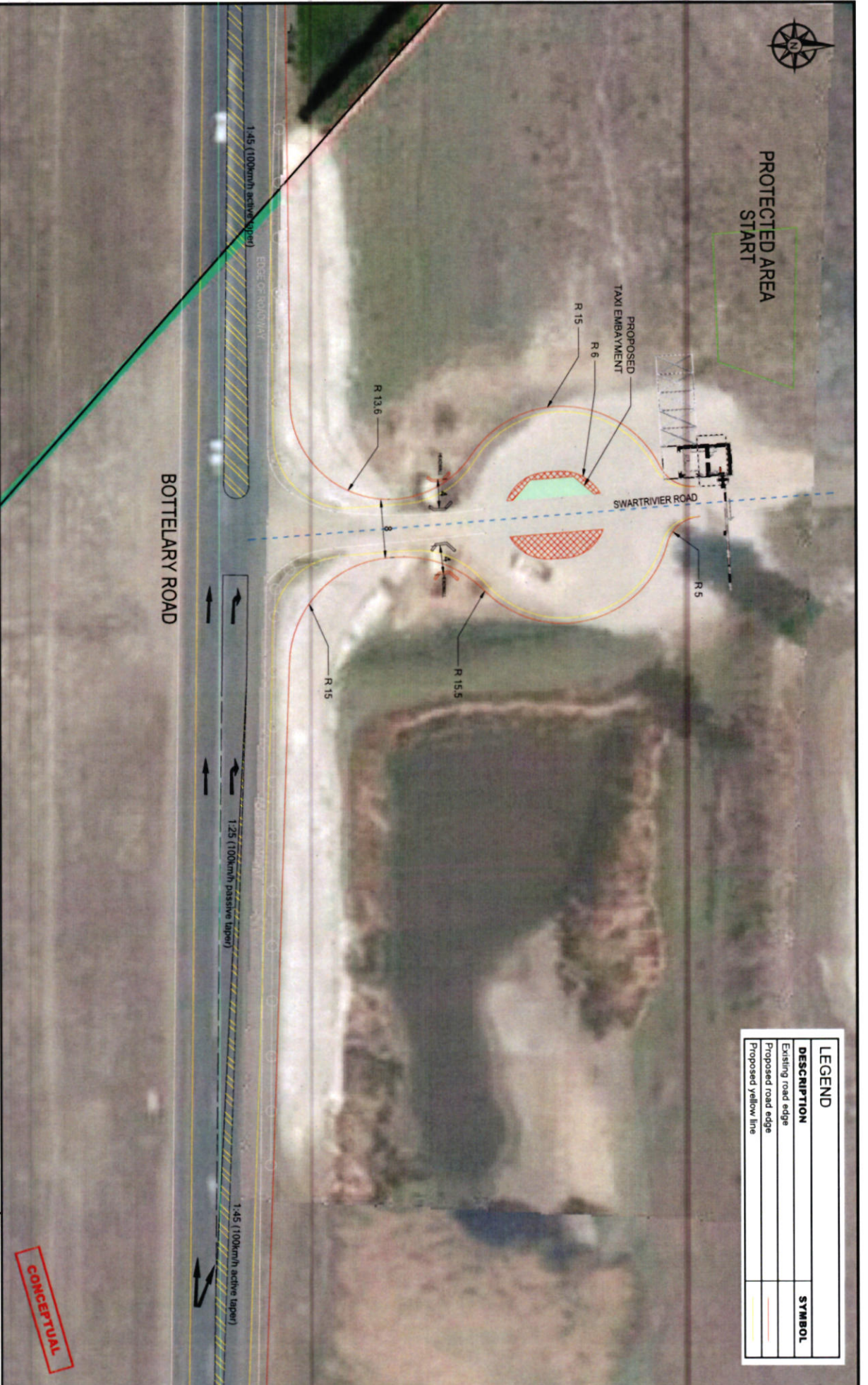
0.5





PROTECTED AREA
START

LEGEND	
DESCRIPTION	SYMBOL
Existing road edge	
Proposed road edge	
Proposed yellow line	



ENGINEER



PO Box 1273
11 Avenue Street
Stellenbosch
7600

Tel: 021 534 5279
E-mail: info@deca.co.za

PORTION 10 OF FARM 211

STELLENBOSCH

ACCESS ROAD (SWARTVIVER ROAD) LAYOUT

SCALE 1:500 (A3)

DATE SEPTEMBER 2021

PLAN NUMBER

FIGURE 7



PROTECTED AREA
START

PROPOSED
TAXI EMBAYMENT

SWARTKOP RIVER ROAD

R 5

R 6

R 15

R 13.6

R 15.5

R 15

BOTTELARY ROAD

1:45 (100km/h active taper)

1:25 (100km/h passive taper)

1:45 (100km/h active taper)

LEGEND

DESCRIPTION	SYMBOL
WB40 Truck Front Wheel Tracks	
WB40 Truck Back Wheel Tracks	
WB40 Truck Body Tracks	
Existing Road Edge	
Proposed Road Edge	

ENGINEER



PO Box 1273
1 Palmer Street
Durban 4001
Tel: 072 504 0279
Email: info@deca.co.za
2020

PORTION 10 OF FARM 211
BOTTELARY ROAD
WB 40 SWEPT PATH ANALYSIS

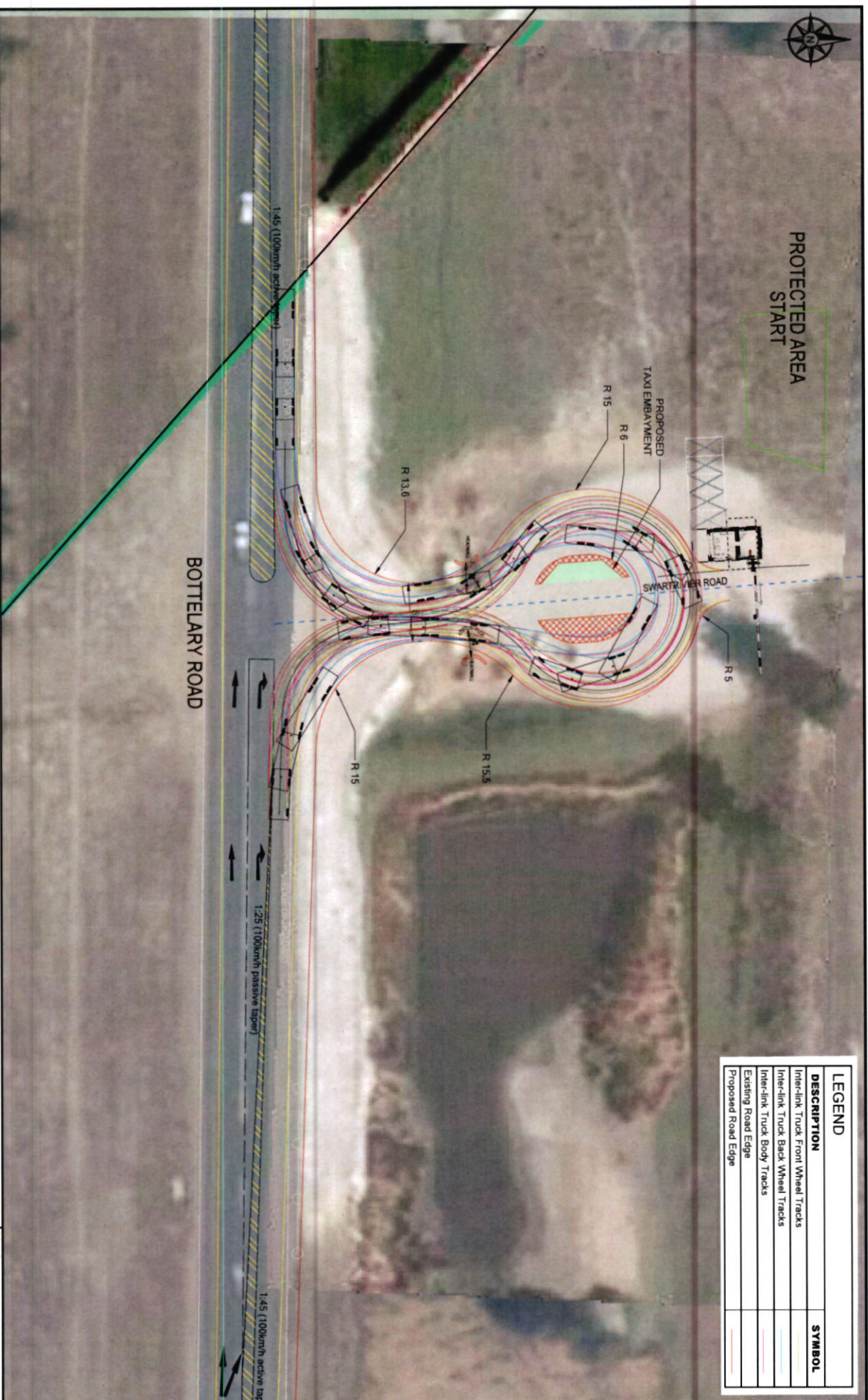
SCALE 1:500 (A3)

DATE SEPTEMBER 2021

PLAN NUMBER
FIGURE 8



PROTECTED AREA
START



LEGEND

DESCRIPTION	SYMBOL
Inter-link Truck Front Wheel Tracks	
Inter-link Truck Back Wheel Tracks	
Inter-link Truck Body Tracks	
Existing Road Edge	
Proposed Road Edge	

ENGINEER



PO Box 1273
7 Parkview Street
Toll Free 072 504 1273
E-mail: info@deca.co.za
12700

PORTION 10 OF FARM 211
BOTTELARY ROAD
INTER-LINK SWEEP PATH ANALYSIS

SCALE 1:500 (A3)

DATE SEPTEMBER 2021

PLAN NUMBER
FIGURE 9



MOTIVATION

Application for the spot rezoning of parts of portion 10 (Portion of Portion 3) of the Farm Welgelegen No 211 from Agriculture to Industrial Zone in order to establish a compost manufacturing facility; and for a departure to allow for employee housing within the Industrial spot zone; as well as for an additional use to provide for employee housing related to agricultural activities.



Application submitted to
The Stellenbosch Municipality

By

BZPlan

Professional Planners

On behalf of

Wynland Trust

October 2021

CONTENT

1. EXECUTIVE SUMMARY

2. PURPOSE OF THE MOTIVATION

3. PROPERTY INFORMATION

3.1 Ownership and title description

3.2 Location

3.3 Existing land uses

3.4 Description of application property

3.5 Overview of proposed development

3.6 Existing zoning

3.7 Pre-application consultations / Pre-Application Scrutiny

4. PROPOSED SPOT REZONING, DEPARTURE AND ADDITIONAL USE

4.1 Building development parameters in Agriculture and Rural Zone

4.2 Building development parameters in Industrial Zone

4.3 Parking Calculation

5. PROPOSED LAND USES

5.1 Warehouse

5.2 Blending area

5.3 Accommodation

5.4 Agriculture

5.5 Roads

6. ASSESSMENT OF PROPOSALS

6.1 (c) The Desirability of the Proposed Utilisation of Land

6.2 (f) Investigations Carried out in terms of Other relevant Laws

6.2.1 Heritage

6.2.2 Environmental impact

6.2.3 Agriculture

6.2.4 Aquatic

6.2.5 Botanical

6.3 (h) The Impact of the Proposal on Municipal Engineering Services;

6.3.1 Engineering Services Report

6.3.2 Traffic Impact Assessment

6.4 (i) The Integrated Development Plan, including the MSDF, November 2019

6.5 (m) Applicable Policies of the Municipality that Guide Decision-making

6.6 (n) The Provincial Spatial Development Framework

6.7 (p) National and Provincial Policies, Principles, Norms and Criteria

6.8 (q) & (r) Matters Contained in Section 42 of SPLUMA and Chapter VI of LUPA

6.9 (s) Applicable Provisions Contained in the Stellenbosch Municipal Zoning Scheme By-law, 2019

6.9.1 Definitions

6.9.2 Development parameters

6.9.3 Parking Requirements as per Table A in the Municipal Zoning Scheme By-Law

7. CONCLUSIONS AND RECOMMENDATIONS

ENCLOSED AS SEPARATE DOCUMENTS

- Attachment 1 - Application form
- Attachment 2 - Powers of Attorney & Resolution
- Attachment 3 – Title Deed
- Attachment 4 – SG Diagram
- Attachment 5 – Conveyancer’s Certificate
- Attachment 6 – Location plan
- Attachment 7 – Land use plan
- Attachment 8 – Pre-Application Scrutiny Form
- Attachment 9 – Rezoning Plan
- Attachment 10 – Site Development Plan (SDP)
- Attachment 11 – Landscaping Plan
- Attachment 12 – Agricultural Compliance Statement
- Attachment 13 – Aquatic Report
- Attachment 14 – Botanical Report
- Attachment 15 – Services Report
- Attachment 16 – Traffic Impact Assessment (TIA)

1. EXECUTIVE SUMMARY

Property description	Portion 10 (Portion of Portion 3) of Farm Nr 211, Welgelegen, Stellenbosch (Further referred to as Farm 211/10 in this document and attachments)
Property address	Off Bottelary Rd
The Application	1. For spot rezonings of parts of portion 10 of the Farm Welgelegen No 211 from Agriculture to Industrial Zone; 2. For a departure to allow for 10 employee housing within the Industrial spot zone; 3. For an additional use to allow for 10 employee housing related to agricultural activities; and 4. For the approval of a Site Development Plan (SDP).
Site extent	34,6068ha
Current zoning	Agriculture
Current land use	Mostly vacant – with one living unit
Overlay zone applicable	N/A
PHRA or SAHRA heritage	N/A

2. PURPOSE OF THE MOTIVATION

The purpose of this motivation is to supplement the information contained in the enclosed **Application form** in order to enable the Stellenbosch Municipality to objectively evaluate this application. The applicant is available to supply any further information that may be required.

Refer Attachment 1 - Application form.

3. PROPERTY INFORMATION

3.1 Ownership and title description

Ownership	Bond	Title description
Wynland Trust	No Bond	T35977/2013

Powers of Attorney

The power of attorney that indicate that BvZPlan is appointed as the registered owner's legal representative/agent, is attached. It should be noted that, in terms of the Resolution, also attached, Mr Gerhard Conradie is empowered to represent the registered owner.

Copies of the ***Title Deed, Conveyancer's Certificate and the Surveyor General Diagram*** are enclosed. There are no restrictive conditions that limit the use of the property for the industrial activities applied for and indicated in the SDP.

Refer to Attachment 2 - Powers of Attorney & Resolution

Attachment 3 - Title Deed

Attachment 4 - SG Diagram

Attachment 5 - Conveyancer's Certificate

3.2 Location

The location of the site is shown on the attached ***Location Plan***. It is located off Bottelary Rd, from which it takes access. See image below:



LOCATION PORTION 10 OF FARM 211 STELLENBOSCH

Figure 1 (Screenshot from CapeFarmMapper)

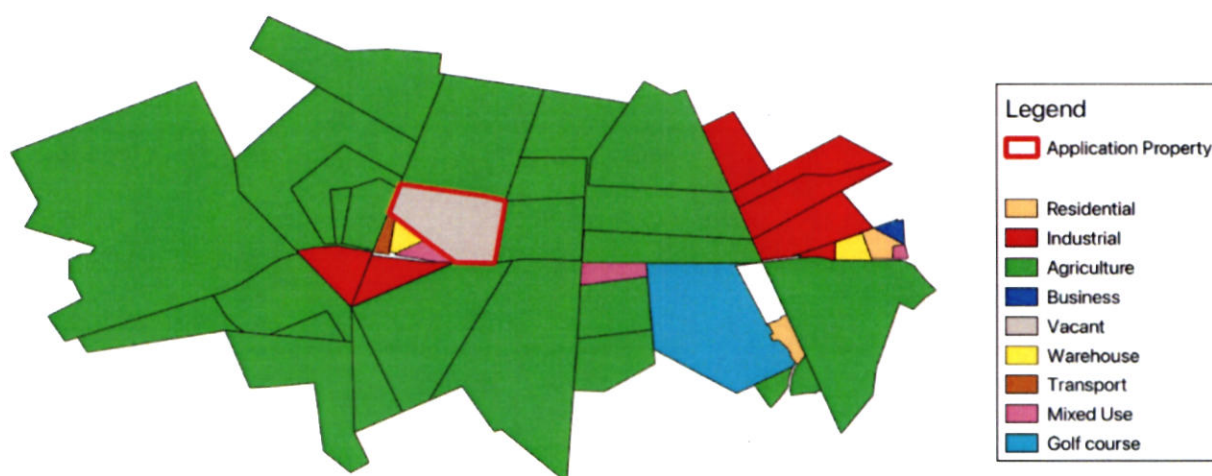
Refer Attachment 6 – Location

3.3 Existing Land Uses

The property is currently largely vacant with a few building ruins with no heritage value.

Refer Attachment 7 – Land Use Plan

The property is situated in a primarily agricultural area but there are other non-agricultural uses present, e.g. on the opposite side of the Bottelary road a concrete ready-mix business is operational with trucks doing deliveries; neighbouring properties to the South West accommodate warehousing that does not fit within the definition of agricultural industry; and on another portion a large number of trucks are parked and seems to be used as a transport business. A couple of kms down the road towards Stellenbosch, a brick manufacturing plant is operational. Other uses worth mentioning include mixed uses that are not agricultural in nature and a golf course with a residential component. The below image is an extract from the provided Land Use plan.



Land use along the Bottelary rd

Figure 2

3.4 Description of Application Property

The applicant (Red Tractor Compost) proposes to develop a commercial composting facility and associated infrastructure on Portion 10 of the Farm Welgelegen 211, Stellenbosch (the "Site"). The site is currently zoned as Agriculture. It is, however, not fully utilised for agricultural purposes. The access is off Bottelary Road and this access road bisects the property from south to north, also providing access to the northern farm portion (Portion 3

of Farm 211). Two existing dams are located on the southern part of the site, to the east of the access road and a non-perennial tributary of the Bottelary River intersects the site along the south. Most of the site has been transformed, with scattered indigenous vegetation along the western portion of the site.

3.5 Overview of Proposed Development

The proposed development requires a spot rezoning on the site, from Agriculture to Industrial zoning, as the facility will obtain organic waste in excess of 50% from outside Farm 211/10. Additional infrastructure is proposed as part of the development, including a warehouse, packaging facility (for packaging the compost prior to distribution), a workshop, offices, a main residential dwelling, a second residential dwelling, 20 duplex workers' residential units, as well as internal roads.

The table below summarises the proposed land-uses on the site. Also see paragraphs 4 and 5 below.

Table 1: Proposed Rezoning and Land Uses

	m ²	% of total
Total Area of the Application Property	346 068	100
Zoning:		
Area (of Farm 211/10) to remain Agricultural Zone	196 823	56.87
Total Proposed Industrial Zone as per Zoning Map	149 245	43.13
Land Use:		
Decomposing Field (including collection ponds, screening platforms and shed) as per SDP	126 470	36.54
Warehouse, packaging and yard as per SDP	21 000	6.07
Transport (estimated)	13 715	3.97
Residential Areas (estimated)	5 925	1.71
Agriculture (estimated)	178 958	51.71

Earthworks will be required in order to create a compost pad on which the equipment can safely traverse. It is expected that the existing material (clayey soil) on site, cleared and compacted, will provide a suitable composting pad.

A covered screening shed (approximately 500m² in size) and four uncovered concrete screening platforms are proposed to be located within the composting area. Stormwater collection ponds are planned within each composting area, each ± 750m² in size. These ponds will allow for the capture and re-use of water used in the composting process. It is anticipated that approximately 160 kilolitres of water will be required per day for compost manufacturing, with half of this volume expected to be available from the collection ponds. The additional water necessary for keeping the compost moist will be obtained from the existing ponds on site (to be re-used).

A 650m² workshop and a 7100m² warehouse and packaging facility are proposed, with associated parking - paving and carports covering approximately 10 085m². Storage of fuel will be necessary at the workshop and it is proposed that 2 x 23 000 litres (i.e. approximately 46 000 litres) of diesel will be stored for use on-site.

The main dwelling is proposed to have a building coverage of less than 600m², with a private garden of 1500m² in size. The “second” proposed dwelling is 350m² in extent, with a 187m² private garden. The 20 duplex units allocated for workers' accommodation cover a total area of 3150m², with each unit having a building footprint of approximately 55m² and private gardens covering 1600m² (80m² per unit).

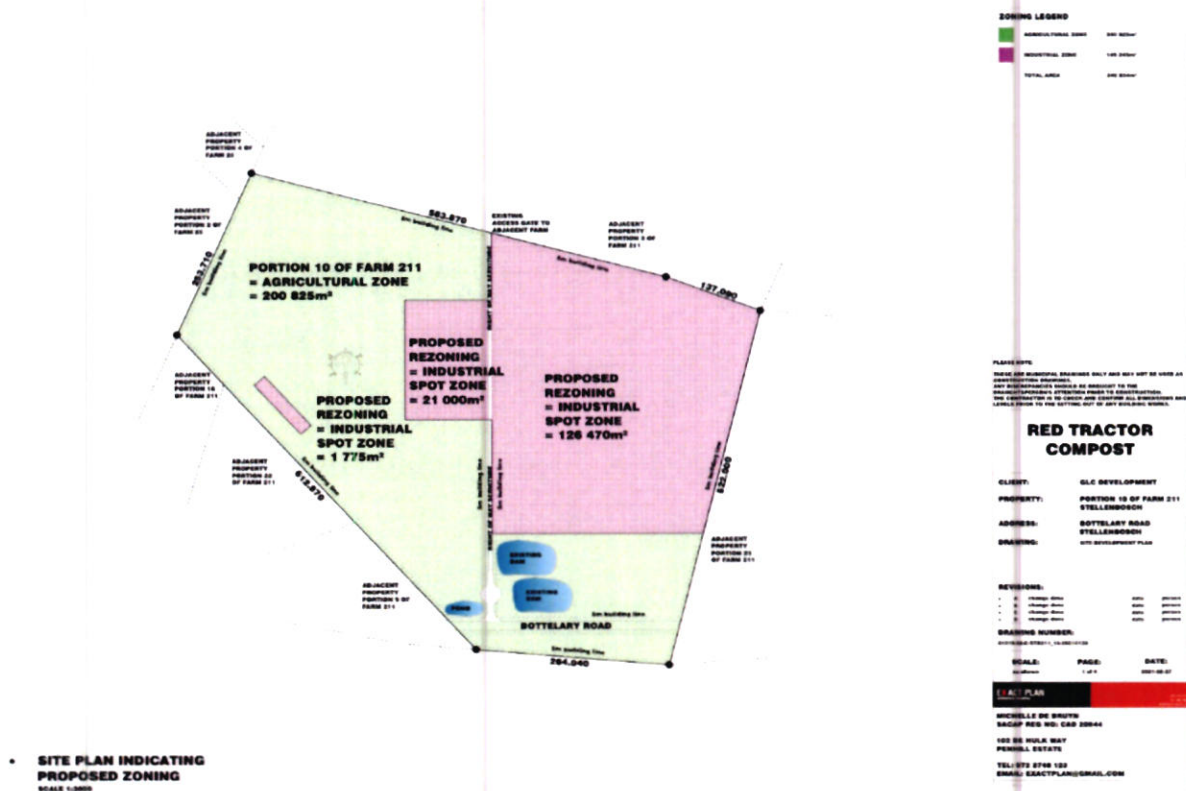


Figure 3: Proposed Layout

A windrow composting technique is proposed with greens (chipped vegetation) and manure (kraal manure) feedstock. This primary proposed method of composting involves the formation of this organic waste into rows of long piles (windrows) and aerating them by periodically mechanically turning the piles. It is envisioned that the windrows and curing heaps will range between 2.5m and 3.5 meters in height. The proposed windrows and compost heaps will be irrigated in order to ensure adequate moisture levels in the heaps for the survival of micro-organisms in the compost. This proposed windrow size is large enough to generate adequate heat and maintain temperatures necessary for proper composting, but still small enough to allow oxygen flow to the windrows' cores.

The facility will utilise green/organic waste and kraal manure (which is added to the green waste at a ratio of 1:9 by weight). It is proposed that the facility will accept low hazard feedstocks, including agricultural residues, source-separated organics (manure) and source-separated yard trimmings, woody material, agricultural crop residues and other materials determined to pose a low level of risk to human health and the environment. Crop residues such as stalks, stems, leaves, seed pods, husks, bagasse and roots will make up a portion of

the feedstock. The operator will ensure that no hazardous feedstocks such as asbestos-containing wastes, biomedical wastes, toxic or radiological wastes, hazardous wastes and any other prohibited wastes are accepted.

The chipped greens will arrive at the site and be screened to remove any large vegetation or debris. Removed material will be separated into organic and inorganic heaps, before the organic material is chipped as required and the plastic and other inorganic material taken to a landfill site.

It is envisioned that the facility will have an operational output of approximately 14 000m³ of compost per month. The incoming material needed to produce this quantity of compost will be at least 30% more as the decomposition of material must be taken into consideration. Incoming material for compost making will therefore be approximately 18 200m³ per month.

3.6 Existing Zoning

The site is currently zoned Agriculture.

3.7 Pre-Application Scrutiny / Pre-application consultations

On 12 August 2021 a pre-application consultation took place. The following people were present at the meeting via conference call:

1. Stiaan Carstens
2. Chrizelle Kriel
3. Pedro April
4. Bernabe De La Bat
5. Katherine Robinson
6. Kaizer Makati
7. Kaylin Coetzee
8. Viola Anthony
9. Tanya de Villiers
10. Michelle de Bruyn
11. Monique Sham
12. Lize Malan
13. Renette Opperman
14. Nico van Zyl

The following meeting notes have been taken:

- Apply for Industrial zone - spot zone industrial activity on agricultural land.
- Employee housing:

Indicate which house will be used for what function: make sure it fits within the definition of Agriculture or Industry housing - departure to provide more than one house under Industry and additional use application to provide more than one house under Agriculture.

- In the motivation we need to indicate the full extent of the operation, for instance what functions will be fulfilled on-site like admin, ancillary uses, marketing etc. Make sure everything is indicated on the SDP, including sizes & indicate building lines (5m) and check if any building line departures will be needed.
- Make sure that the industry fits within the agricultural landscape with mitigating landscaping and building design.
- Contact Infrastructure Services for the development charges and ask what they would require to assess.
- Bernabe confirmed that Bottelary Rd adjacent to the application site is not classified as a scenic route.
- Illumination of road and buildings should fit in with agricultural use.

Refer Attachment 8 – Completed Pre-Application Scrutiny form

4. PROPOSED SPOT REZONING, DEPARTURE AND ADDITIONAL USE

In order to accommodate the proposed compost facility, a spot rezoning of the land areas that are required for the manufacturing activity, needs to be rezoned to Industry. Below is an extract from the proposed rezoning map:

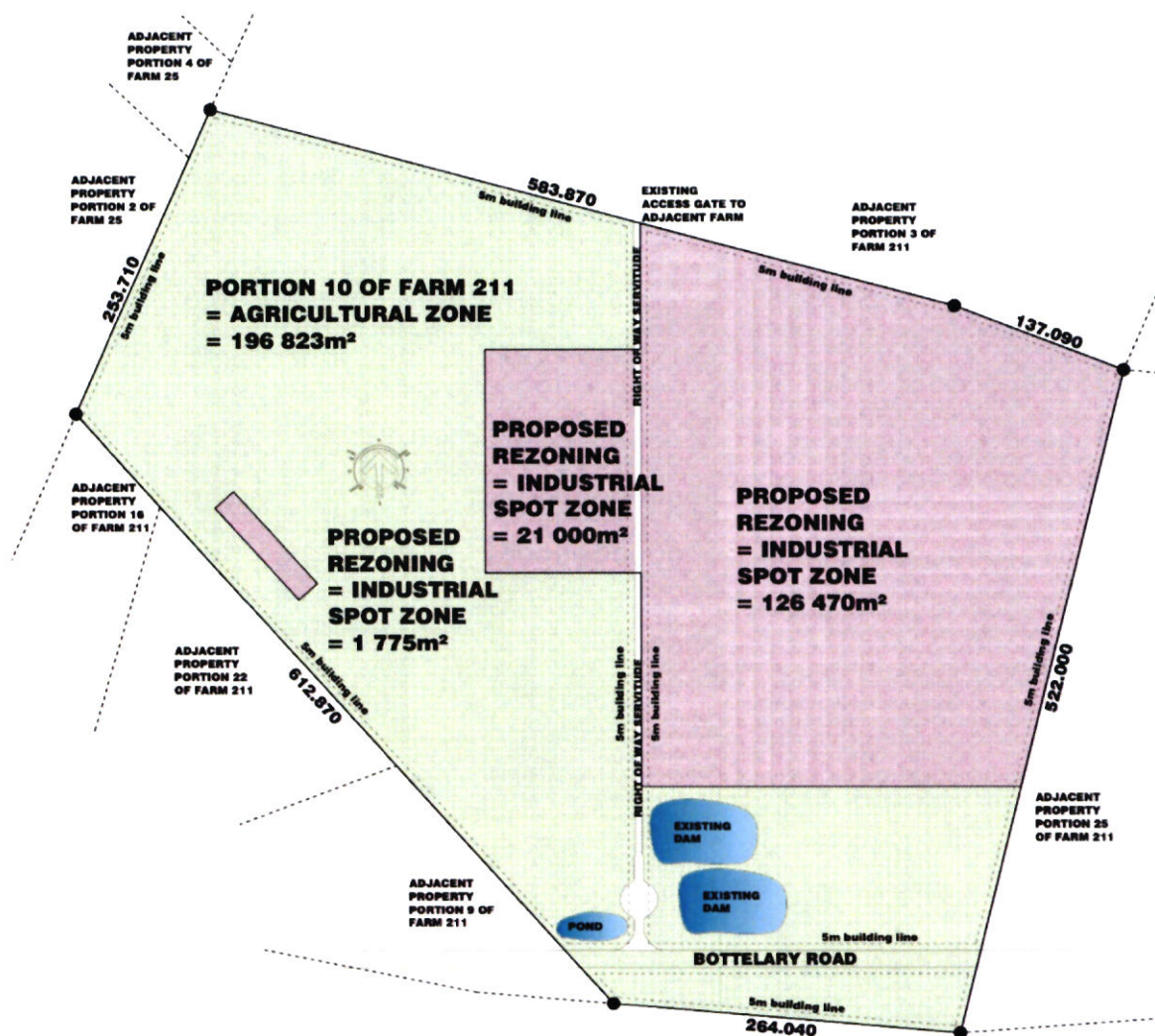


Figure 4 - Site plan indicating the proposed Zoning

The spot zone will be 149 245m² in size, covering 43.13% of the 346 068m² sized property. The owner of the land wishes to provide accommodation for the workers on-site as follows: 10 associated with the compost manufacturing activities (associated with the proposed Industrial spot zone) and 10 associated with the farming activities (associated with the agricultural and rural zone). In order to accomplish this, application is made for a departure from the one-dwelling-unit condition allowed for in the by-law within an industrial zoning, in order to provide for the proposed 10 units. Application is also made for an additional use in order to allow for 10 employee housing units for workers in the agricultural and rural portions.

The following development parameters apply:

4.1 Building Development Parameters in Agriculture and Rural Zone

	BUILDING LINES: Street & Common boundaries (incl. ROW servitudes)	HEIGHT	PRIMARY USE: Maximum Coverage Threshold	ADDITIONAL USE (SDP): Maximum Coverage Threshold	CONSENT USE: Maximum Coverage	Does the proposal comply?
Dwelling house and second dwelling house (excl. outbuildings, carport & garage)	5m	2 storeys	600m ² each	-	-	YES
Additional dwelling houses (excluding outbuildings, carport or garage): Max 4 dwelling units (1 unit/10ha for land units larger than 20ha)	5m	1 storey	-	-	120m ² each	N/A
Guest house, bed & breakfast & tourist dwelling units: in existing approved dwellings	-	-	N/A	-	-	N/A
Employee housing unit (excluding outbuildings, carport or garage)	5m	1 storey	120m ²	As approved by Municipality	-	YES

4.2 Building development parameters in Industrial Zone

Building type	Street boundary building lines (m)	Common boundary building lines (m)	Coverage/Floor area	Height
All buildings	3m	0m 3m if abutting another zone	75% coverage	4 storeys
Employee housing	3m	0m	75m ² floor area	

Ten of the employee housing units are proposed to slot in with the Industrial spot zone, with a building development parameter of 75m² floor area per unit maximum. The warehouse, workshop and all industrial related structures will be located outside the applicable 3m building lines. The warehouse will be a maximum of 10m in height not exceeding the allowed 16m allowed for 4 Storeys, it will have two storeys. The Coverage of the proposed warehouse and shed is: 2.23%.

Please refer to Attachment 10 for the Site Development Plan.

The proposed development does not require any departures in relation to the building development parameters. With regards to the parking requirements, the below calculation has been done on the requirement for industry and housing.

Please refer Attachment 9 – Rezoning Plan

4.3 Parking Calculation

Land use category	Off-street parking requirement i.t.o. the Stellenbosch Zoning Scheme	Number of Parking Bays required	Number of Parking Bays to be provided	Does the proposal comply?
Industry	1,5 bays/100m ² gross leasable area of 7950m ²	119	145	Yes
Housing	2 bays/dwelling unit with more than one room (22 units)	44	44	Yes

Please refer Attachment 10 – SDP, submitted for more detail on the proposed development.

5. PROPOSED LAND USES

The following activities are proposed as indicated on the Site Plan:

5.1 Warehouse

The intention is to use the warehouse for packaging, bulk storage, workshop and offices, all associated with the business of manufacturing compost and the distribution thereof.

5.2 Blending area

Within the blending area the manufacturing of compost will take place - specifically the blending of greens and manure using the windrow composting technique.

5.3 Accommodation

The following accommodation is proposed:

- Main Dwelling
- Second Dwelling

- 20 employee housing units - 10 units associated with agricultural activities and 10 units associated with the industrial activity of compost manufacturing.

5.4 Agriculture

It is proposed that the remainder of the farm not used for the compost manufacturing and accommodation will mainly consist of grazing due to the quality of the land. Please refer to the agricultural compliance statement (Attachment 12) and Figure 18 under Paragraph 6.4(l) below for more details on the potential of the farmland.

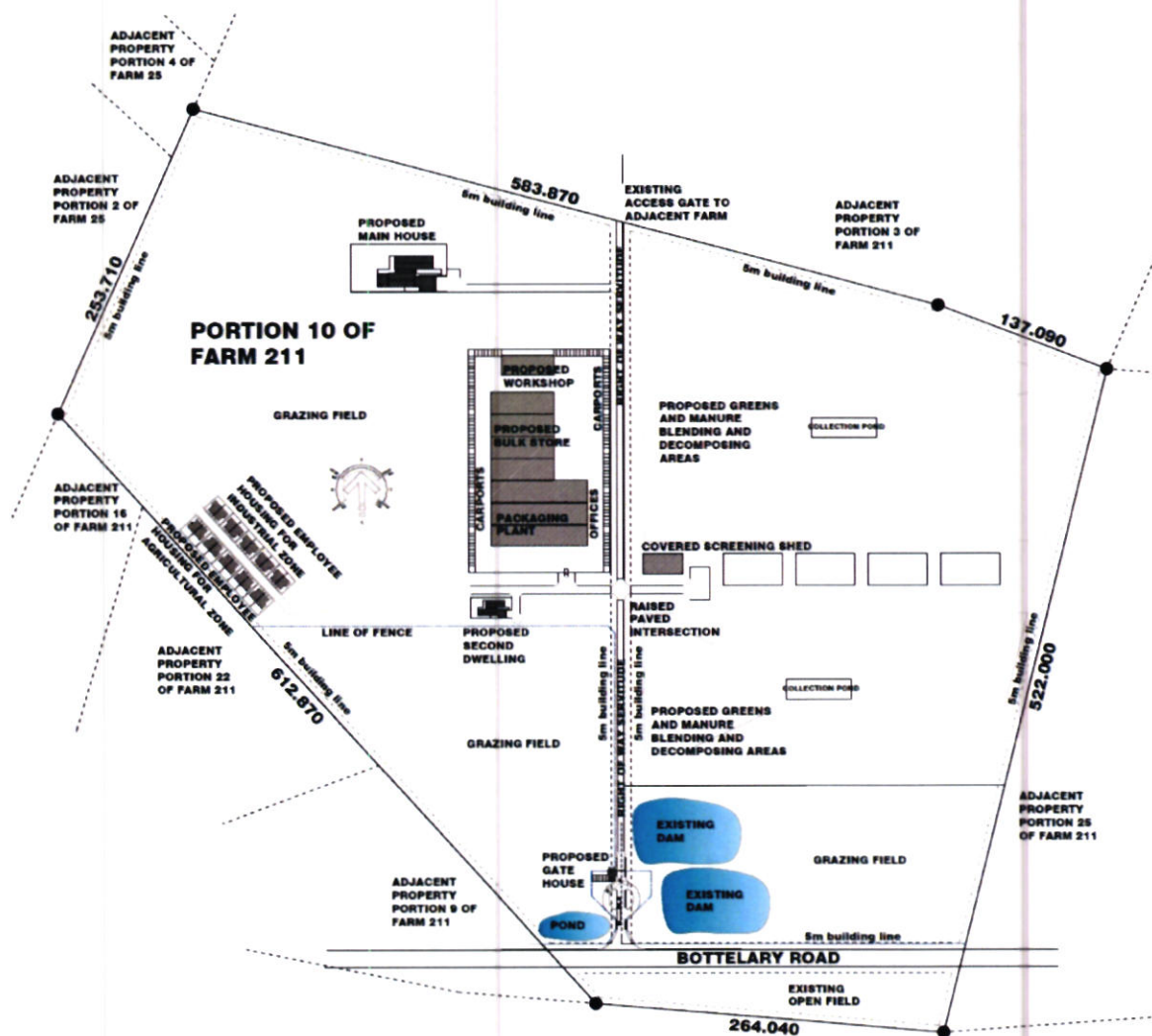


Figure 5 - Site Plan indicating Land Uses

Refer Attachment 10 – Site Development Plan

5.5 Roads

The property has a right of way running from the Bottelary road northwards more or less through the middle of the property. The title deed indicates an expropriation of land that is presumably associated with the Bottelary Road reserve by the then Divisional Council of Stellenbosch: Expropriation Notice 13/74 ($\pm 1,3265$ ha in size).

6. ASSESSMENT OF PROPOSALS (Refer to criteria contained in Item 65 of the By-Law)

Application is made in terms of Section 15 (2) of the STELLENBOSCH MUNICIPALITY LAND USE PLANNING BY-LAW 2015 for

(a) the rezoning of land: A proposed spot rezoning of certain portions from Agricultural Zone to Industrial Zone;

(b) a permanent departure from the allowed land use in the Zoning Scheme: The proposal is for the construction of 10 housing units in lieu of one employee housing unit within the industrial zone; and

(c) an additional use (Technical Approval): The proposal is for an additional use to be permitted, consisting of the construction of 10 housing units for the accommodation of agriculture related workers.

Only those criteria that have relevance to the above proposals are being addressed below:

6.1 (C) THE DESIRABILITY OF THE PROPOSED UTILISATION OF LAND

(Including any guidelines issued by the Provincial Minister in this regard)

The product proposed to be manufactured is compost. In order to assist in the marketing and a commitment to provide the best quality compost for soil improvement, the developer intends to use the farm as a showcase of the high quality of the products. To this end the developer plans large improvements to the farm in order to make it aesthetically pleasing, including as viewed from Bottelary Road. Everything possible will also be done to ensure the sustainability of the operation.

The following measures are proposed to accomplish this:

1. A Landscape Architect has been appointed to ensure that the visual impact of the proposed manufacturing activities is minimised by screening and other mitigating techniques such as the planting of indigenous vegetation and the creation of a berm to create a visually pleasing landscape. The landscape plan is attached and also shown below.

Refer attachment 11 – Landscaping Plan



Figure 7



Figure 8

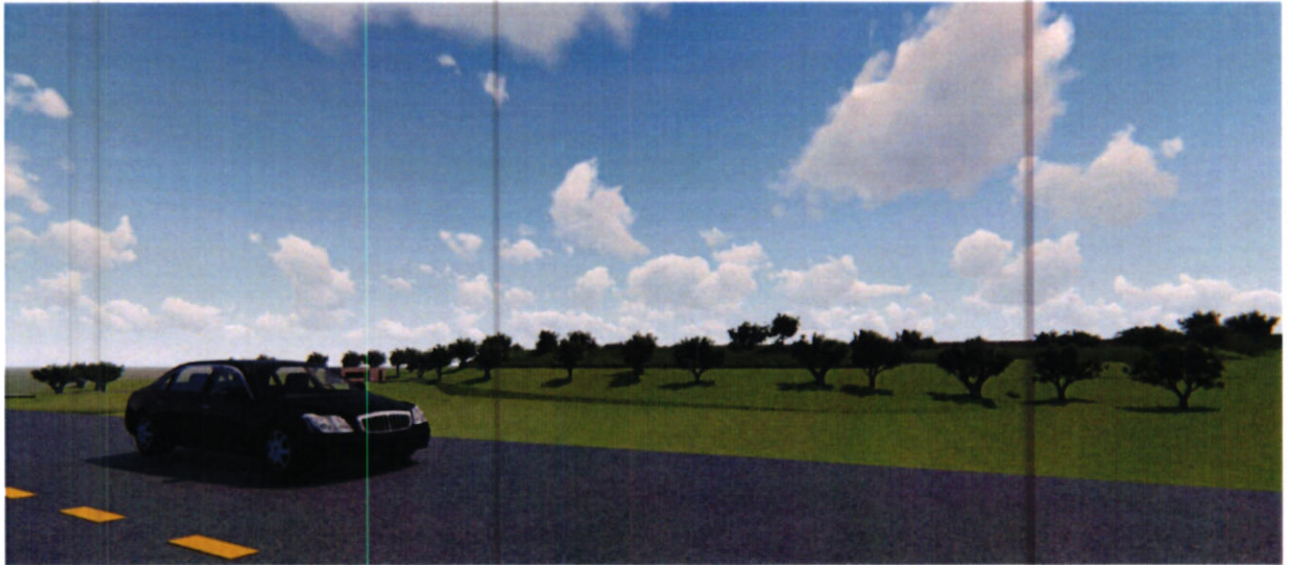


Figure 9

Figures 7, 8 and 9 above show perspective views of the proposed development off Bottelary Road. The berm and trees will screen the composting area.



Figure 10 - Warehouse and Packaging area Elevation

Refer Attachment 10 - SDP

With regards to the question of desirability, a composting facility aligns well with the National Waste Management Strategy 2020 (NWMS 2020) under its Pillar no 1 - waste minimisation:

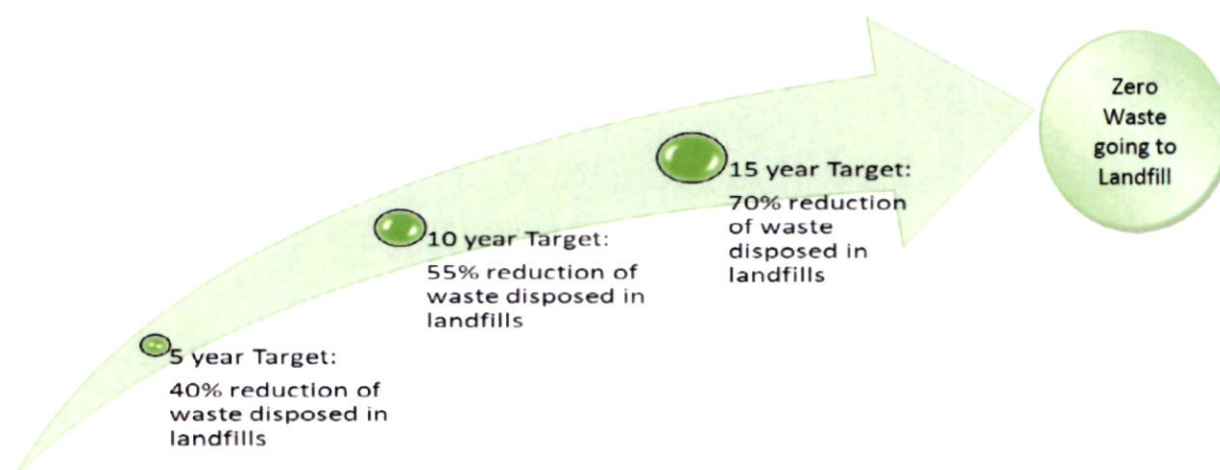


Figure 11 – Waste management targets

40% of waste diverted from landfill within 5 years; 55% within 10 years; and at least 70% within 15 years leading to Zero-Waste going to landfills, are the set targets. Implementing the compost facility will contribute positively towards these goals.

STRATEGIC PILLAR	OUTCOME	KEY INTERVENTIONS
Waste Minimisation	40% of waste from diverted from landfill within 5 years; 55% within 10 years; and at least 70% within 15 years leading to Zero-Waste going to landfill.	<ul style="list-style-type: none"> • Prevent waste generation through cleaner production, industrial symbiosis and extended producer responsibility; • Prevent Food Waste; • Increase re-use, recycling and recovery rates; • Divert organic waste from landfill through composting and the recovery of energy; • Divert construction and demolition waste from landfill through beneficiation; and • Increase technical capacity and innovation for beneficiation of waste.

Extract from the National Waste Management Strategy 2020, Pillar 1

Furthermore, the NWMS 2020 responds to the National Development Plan (NDP) directive of “implementing a waste-management system through the rapid expansion of recycling infrastructure and encouraging the composting of organic domestic waste to bolster economic activity in poor urban communities” and to the need to “cut down on solid waste disposal” (National Development Plan: Vision 2030, Our Future-Make it Work).

The following paragraphs are quoted from the NWMS 2020:

“

Having these entry points as part of South Africa’s strategy for waste minimisation and implementing the circular economy will result in the diversion of waste from landfill and the displacing of demand for virgin materials. The circular economy can significantly reduce the negative impacts of resource extraction and use on the environment and contribute to restoring biodiversity and natural capital.

“

The proposed compost facility will redirect organic material from the landfill to be composted and recycled. This in turn will create job opportunities in the region, beneficial to the local communities and contribute to minimising resource extraction.

“

Efficient and innovative approaches to the delivery of waste collection and disposal services are critical to leveraging the economic value of waste through increased rates of reuse and recycling. This also applies to the application of alternative waste treatment technologies such as composting and waste to energy. This requires municipalities to work more closely with private sector partners and the informal sector in separating and managing waste streams. (NWMS 2020)

“

It is clear from the above that municipalities need to consider composting as a means of recycling, minimizing waste and creating economic value in partnership with the private sector.

Reference to NWMS 2020:

https://www.environment.gov.za/sites/default/files/docs/2020nationalwaste_management_strategy1.pdf

Accommodation

It can be commended that the developer plans on providing accommodation to the employees on-site. The following are aspects that will be improved by implementing the employee housing. It will:

- improve the living conditions of employees;
- lower the employee travel costs;
- lower the carbon footprint of the development as a whole by enabling employees to walk to work rather than travel long distances;
- ensure that the development's expected trip generation will be lower, specifically with regards to passenger motor vehicles;
- improve safety aspects related to travel and on-site security;
- make a contribution towards improving historic imbalances that still exist, particularly those relating to marginalised workers having been forced to live far from job opportunities.

6.2 (F) INVESTIGATIONS CARRIED OUT IN TERMS OF OTHER RELEVANT LAWS

The following aspects have been investigated to determine the impact associated with the proposed development:

6.2.1 Heritage

The farm does not fall in an area that is sensitive from a heritage point of view. Investigations show that the site itself has no known heritage value. This has been confirmed by Bernabe De La Bat in the pre-application consultation meeting held on 12 August 2021 where it was confirmed that the application property falls within a 'low value cultural landscape' in terms of the Stellenbosch SDF. It was also established that the part of Bottelary Road passing the application site is not considered to be a scenic route. See below an extract from the SDP where the location on the application property is indicated with a red arrow:

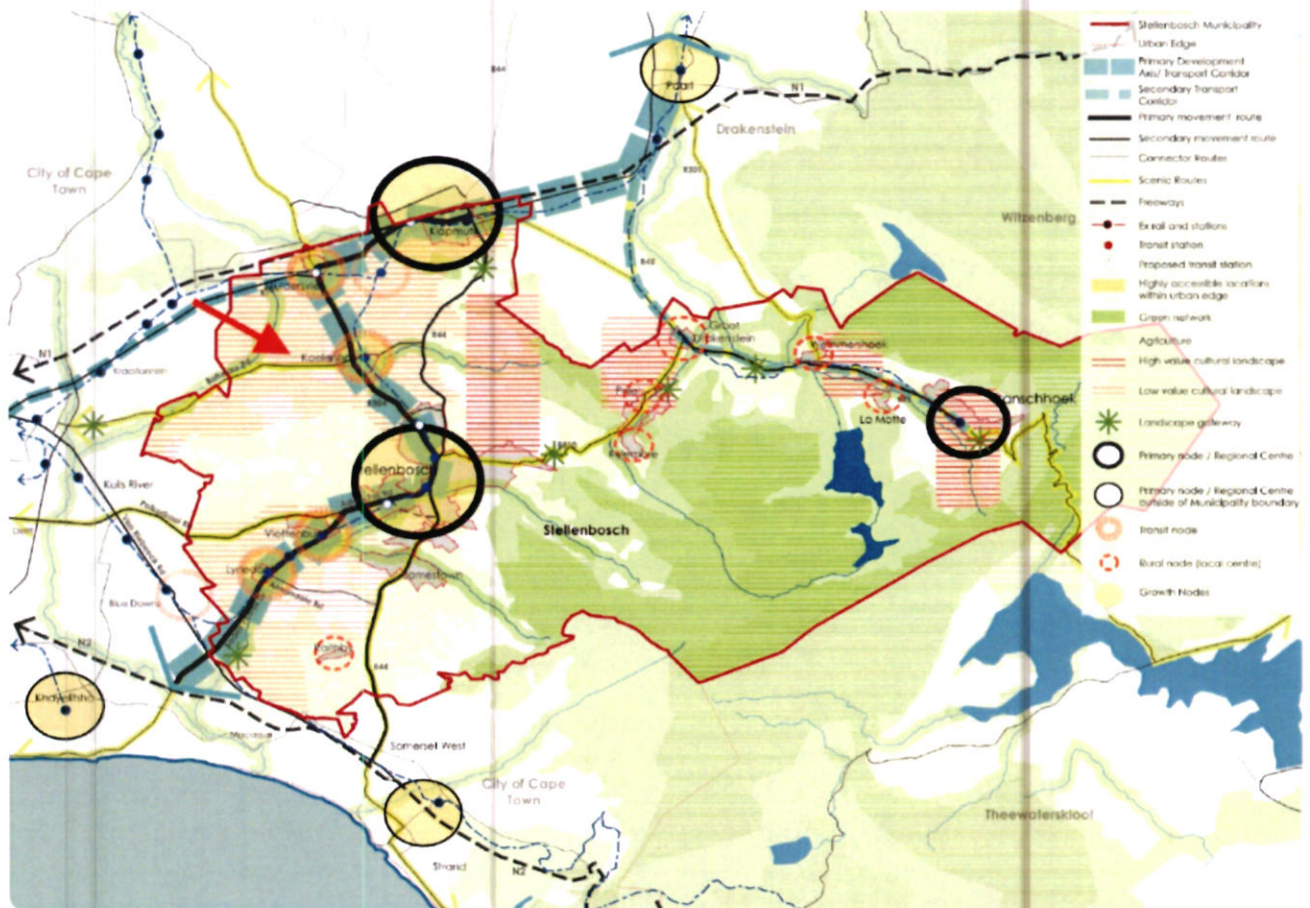


Figure 25. Consolidated Concept for the SM area

Figure 12 - Extract from the Stellenbosch SDF Nov 2019

6.2.2 Environmental impact

An EIA will be submitted shortly, evaluating the environmental impact of the proposed composting facility in detail.

The following supporting studies have been undertaken:

6.2.3 Agriculture

(Compiled in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998))

Only one small part of the site is rated by the national web-based environmental screening tool as highly sensitive for impacts on agricultural resources. However, the site inspection of soil conditions showed that the whole site, including this patch, is only of medium sensitivity. Therefore, the high sensitivity area has been disputed in the Site Sensitivity Verification (with

evidence of soil conditions). The finding of the Compliance Statement has been that the proposed development will not have an unacceptable negative impact on the agricultural production capability of the site. The medium sensitivity applies to the whole site, meaning that, from an agricultural point of view there are no “no-go” areas or other reasons that would necessitate restrictions on the proposed layout of the development. The agricultural productivity of the land is limited not only by the soils, but also by the small size of the property. The site has not been cultivated, nor has any significant agricultural production occurred on it for more than ten years. Only one agricultural impact was identified, namely loss of agricultural potential by occupation of land. This was assessed as not being of high significance. No mitigation measures for the protection of soil resources are considered necessary for this proposed development because it poses negligible risk. This is substantiated by the low agricultural potential of the site. It should be noted that the largest part of the development, the compost blending area, can be converted back to agriculture and the warehouse repurposed for an agriculture related activity, also contributing to the low impact of the development. The proposed development is therefore acceptable. The recommendation is that, from an agricultural impact point of view, the development can be approved.

Refer Attachment 12 - Agricultural Compliance Statement

6.2.4 Aquatic

(In terms of the national water act, 1998 (act no. 36 of 1998))

Below is a summary from the Aquatic specialist report:

Aquatic habitat within the proposed development site comprises a tributary of the Bottelary River and its associated wetland habitat in the Kuils/Eerste River System. The study site is not located within a FEPA River sub-catchment but contains several dams in and adjacent to the site that is mapped as artificial FEPA Wetlands. Much of the site has been mapped as an aquatic ESA (original channel of the Bottelary Tributary), while a few wetland patches have been mapped as aquatic CBAs.

The Bottelary Tributary is considered to be moderately to seriously modified and of moderate to low ecological importance and sensitivity. Similarly, the wetland habitat within the site is considered to be largely to seriously modified and of moderate to low ecological importance of sensitivity.

The proposal for the development of the site will result in the loss of most of the hillslope seep but will retain the valley bottom wetlands and channel associated with the Bottelary Tributary. The watercourse and valley bottom areas will be retained in the open space portions of the property that will not be developed. The hillslope seeps are within a section of the property that is proposed to be developed as the composting field. There are no aquatic features within the portion of the site where the residential, warehouse and packing areas are proposed.

The hillslope seep has long been subjected to modification and is in a highly modified and degraded condition. While there may not be any ecological value still associated with the remnant seep area, it does comprise a wet area that drains into the two dams on the site as well as the valley bottom wetland upstream of the instream dam on the Bottelary River. Retaining the seepage of the water from the hillslope seep as well as preventing contamination of this water and the water of the downslope Bottelary Tributary and wetland areas is thus an important consideration in the proposed development of this area.

The potential impacts on the aquatic ecosystems within the site that could be expected to be associated with the proposed development are:

1. Short and longer-term disturbance and loss of aquatic habitat;
2. Modified stormwater surface water runoff from the developed site; and
3. Potential for localised impairment of water quality during the construction and operational phases of the development.

The following mitigation measures are recommended to reduce the potential impact of the proposed layout on the aquatic ecosystems on the site:

- The stormwater management plan for the site should ensure that any impacts of stormwater from the composting area within the site are mitigated such that there would be no water quality impacts on the watercourse and wetland areas;
- No contaminated stormwater generated within the site should be discharged directly into the aquatic features;
- The water quality impacts during the construction phase should be addressed through a Construction Environmental Management Plan for the project, and implemented by an on-site Environmental Officer;

- To mitigate the loss of the hillslope seep area, the watercourse corridor should be rehabilitated, with the removal of invasive and alien vegetation in accordance with an approved Maintenance Management Plan. Monitoring and management of eroded areas within the watercourse corridor and re-vegetation with suitable local indigenous vegetation should also take place. Grazing of livestock should be restricted within the delineated wetland areas;
- Ongoing monitoring and removal of invasive alien plants within the wetland offset area is likely to be required, particularly to control invasive kikuyu grass; and
- Monitoring (particularly of nitrogen and phosphates) and management of runoff from the composting area should be undertaken.

If the recommended mitigation measures are implemented, there would be a medium to low significance impact on the aquatic ecosystems. Considering the potential water quality risks and the associated loss of hillslope seep loss, it is recommended that the proposed development layout be altered to avoid loss of wetland habitat as far as possible and to ensure that there would be a very low risk of contamination of the aquatic habitats on the site. The proposed development of the site would pose a moderate to low risk of impacting on the ecological condition of the Bottelary Tributary and associated wetland areas and as such would require a water use licence application to be submitted to the DWS for Section 21(c) and (i) water use activities associated with the development activities adjacent to the aquatic features.



Figure 15. Google Earth image (March 2021) with the watercourses and wetland areas within the site

Figure 13 : Image extracted from the aquatic study indicating the dams, wetlands and hillslope seep

Refer Attachment 13 – Aquatic report

6.2.5 Botanical

Compiled in terms of National Environmental Management Act, 1998 (Act No. 107 of 1998). Please refer to the Botanical Assessment Report (Attachment 14) for more detail. Below is an extract from this report, indicating the high level findings:

“The initial constraints analysis identified potentially developable versus No-Go areas within the study area. These align fairly well with the 2017 WCBSP. The constraints map also included other specialist studies and informed the applicant’s Spatial Development Plan (SDP). The constraints map was informed by sensitive remnant vegetation and species. The most significant features are (1) the presence of a small sub-population of the critically endangered renoster capesweetpea (*podalyria microphylla*), and (2) a remnant patch of restorable critically endangered Swartland Shale Renosterveld.

The SDP, if approved, will avoid these sensitive features. The proposed development is supported provided that the essential mitigation measures are adhered to. These include (1) avoidance of the
 aforementioned species and vegetation and (2) restoration of the remnant vegetation. Crucially, the renoster Capesweetpea must be reintroduced to the remnant vegetation patch. Below are two maps from the Botanical Report indicating the sensitive areas identified.

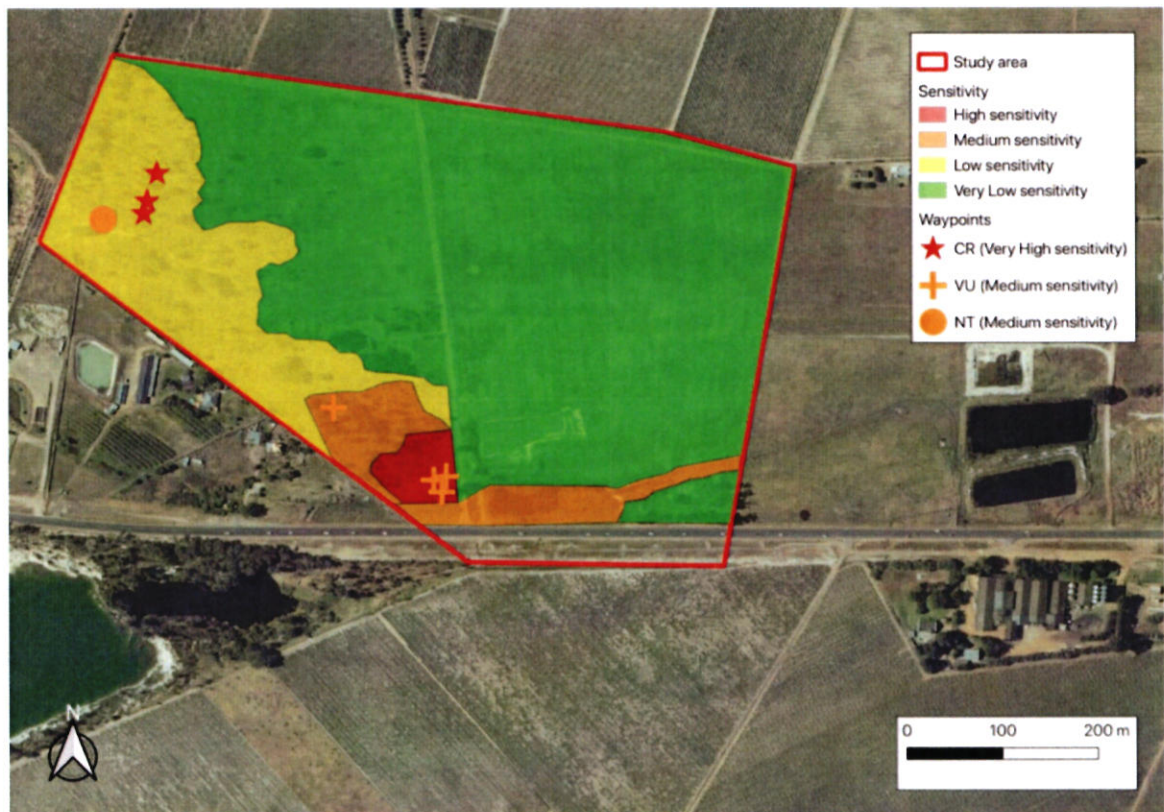


Figure 14: Botanical Sensitivity

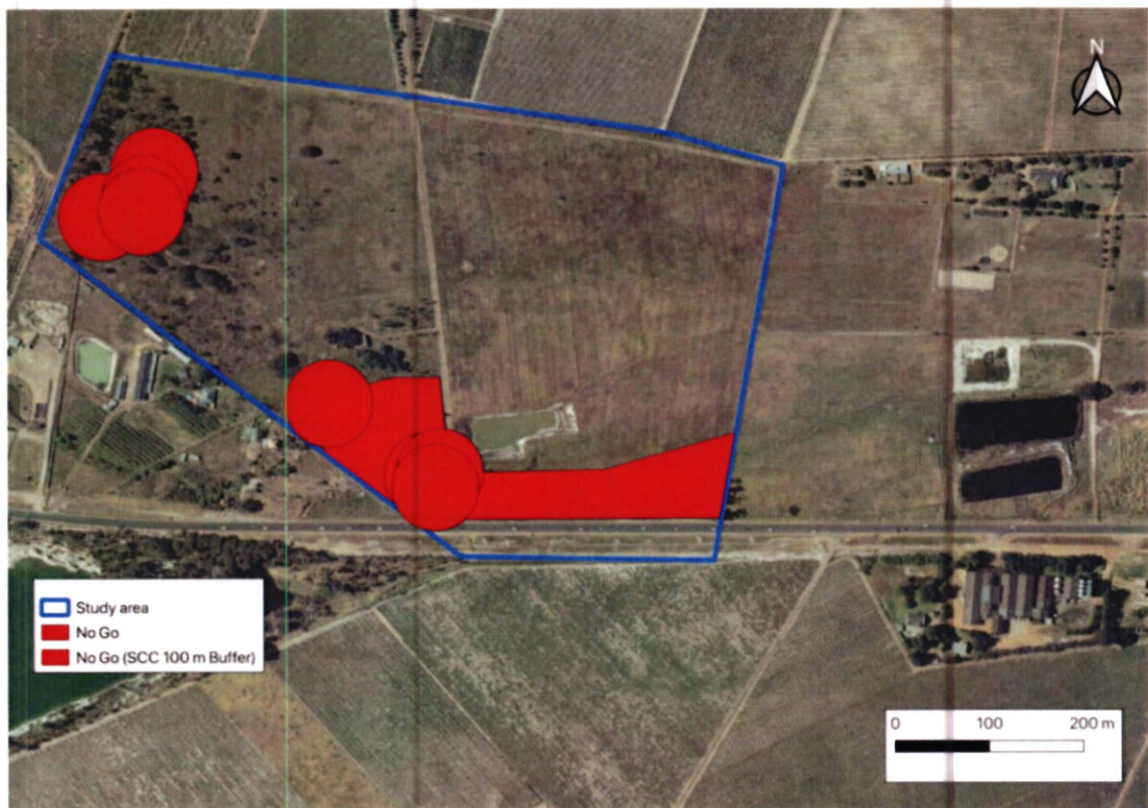


Figure 19. CONSTRAINTS MAP: The study area survey with potentially developable versus no go areas of habitats and species overlaid on a CDNGI 50 cm mosaic aerial image.

Figure 15: Extract from Botanical report

Refer Attachment 14 - Botanical Report

6.3 (H) THE IMPACT OF THE PROPOSAL ON MUNICIPAL ENGINEERING SERVICES

6.3.1 Engineering Services report

The following are extracts from the conclusions in the Engineering Services Report:

- The proposed internal water reticulation system will consist of an uPVC water reticulation system;
- The site will be self-sufficient and potable water will be sourced from a borehole;
- The proposed internal sewerage reticulation system will consist of an uPVC piped system, which will be connected to on-site treatment facilities / package plant;
- Three on-site treatment facilities are proposed; one for the main dwelling, one for the employee housing and one for the second dwelling and warehousing and distribution;

- The majority of the stormwater runoff from the site will be captured in a proposed stormwater collection pond to be re-used in the composting manufacturing;
- No further stormwater quantity - (attenuation) or quality control measures are proposed.

The application site is self-reliant and the proposal will have no impact on the engineering services from the municipality.

Refer Attachment 15 – Services Report

6.3.2 Traffic Impact Assessment

Below are the conclusions and recommendations extracted from the Traffic Impact Assessment report (TIA):

The main conclusion is that the proposed agricultural and industrial development (Red Tractor Compost Facility) in Kraaifontein will have a moderate transport impact only. Other conclusions drawn from the transport impact assessment may be summarised as follows:

- The proposed development is situated between Stellenbosch and Kraaifontein, approximately 3.1 kilometers west of the MR00174 (R304) / MR00187 (Bottelary Road) intersection;
- The proposed development entails the relocation of the Red Tractor Compost Facility from its existing location to Portion 10 of Farm 211, Kraaifontein and to ultimately increase the volume of compost produced. The development will have a warehousing and distribution component on site, as well as residential units;
- The development will gain access off Bottelary Road via Swartrivier Road, which is an existing access;
- The intersection expected to be affected most by the proposed development is the Bottelary Road / Swartrivier Road (access road) intersection;
- The intersection currently operates at acceptable levels of service and will continue to operate at acceptable levels of service with the background 2024 traffic volumes;
- The proposed development has the potential to generate 85 trips (41 in, 44 out) during the morning peak hour and 85 trips (44 in, 40 out) during the afternoon peak hour;

- The total 2024 traffic volumes warrants an exclusive right-turn lane on the Bottelary Road eastern approach;
- The Bottelary Road / Swartrivier Road intersection will operate at acceptable levels of service with total 2024 traffic volumes and the proposed intersection layout as shown in the figure below:

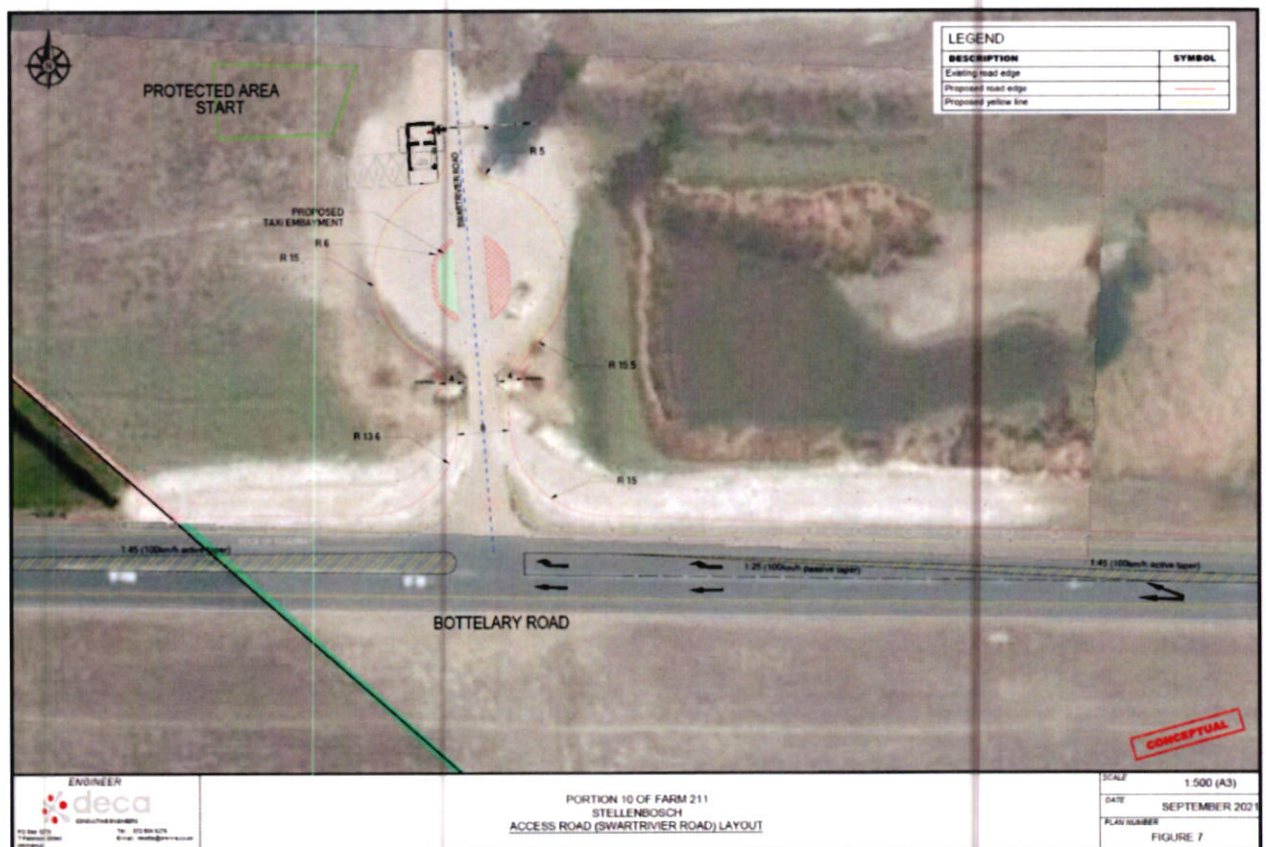


Figure 16 – Access Plan

- The proposed 145 off-street parking bays at the warehouse and distribution zone is deemed sufficient;
- A small number of public motorised transport trips is anticipated to be generated by the proposed development and non-motorised transport trips will be intra-development.

Recommendations

The recommendations made in the Transport Impact Assessment (TIA) that should be implemented by the Developer may be summarised as follows:

- An exclusive right turning lane should be implemented at the proposed access on the eastern Bottelary Road approach as per figures contained in the TIA;
- A taxi embayment should be provided at the access as shown in the relevant figure in the TIA;
- A side walk should be provided on at least one side of Swartrivier Road from the access up to the warehouse and distribution area.

Refer Attachment 16 – Traffic Impact Assessment (TIA)

Only relevant criteria are considered below:

6.4 (I) THE INTEGRATED DEVELOPMENT PLAN, INCLUDING THE MUNICIPAL SDF, NOVEMBER 2019

In terms of the SDF the site falls outside any settlement described in the Stellenbosch District. This is a positive attribute in favour of the proposed compost manufacturing business. The application site accommodates some critical biodiversity areas and water resources, as can be seen from the extract from the SDF (Figure 17) below. The biodiversity has been identified and evaluated by a botanical specialist by way of a site survey on foot. The results have been mapped as per the attached Figure 15 and in the Botanical Study, enclosed as Attachment 14. The placement of the proposed development has taken the critical biodiversity areas into account to ensure its preservation. The water resources have been studied by an aquatic specialist, the results of which are contained in Figure 13 and in the attached aquatic study (Attachment 13). The only aspect that will potentially be impacted upon is the hillslope seep. The aquatic study proposes mitigating factors in this regard (refer to section 6.2.4) to ensure that no pollution of the water resources takes place. The proposed solutions will be incorporated in the development of the composting facility. Furthermore the use of stormwater in the composting process and the recycling of used water will contribute to the preservation of the aquatic resources.

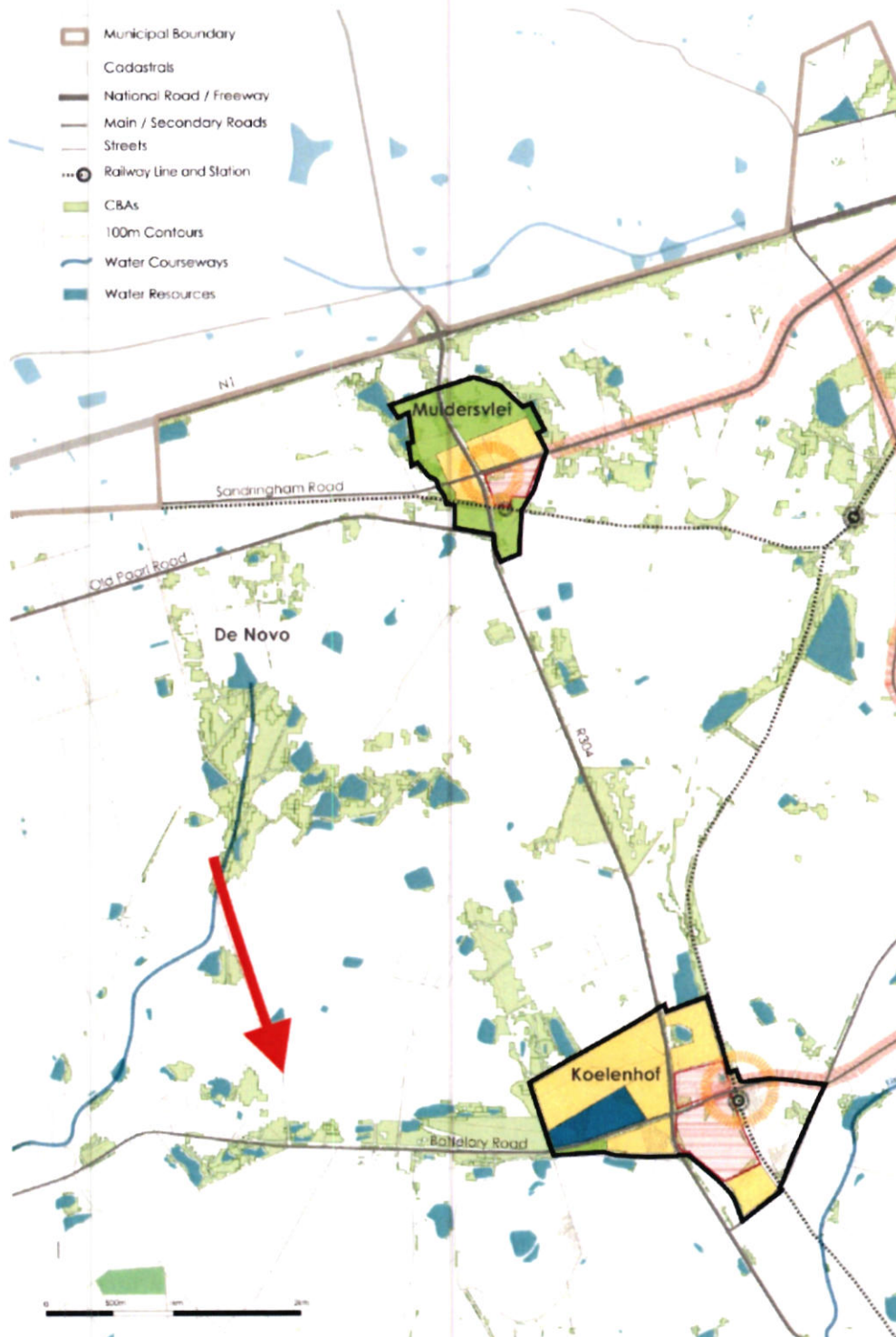


Figure 43. Koelenhof Muldersvlei Plan

Figure 17 - Extract from the Stellenbosch SDF indicating Critical Biodiversity Areas and water resources

It was further determined that the site is located within a low value cultural landscape, as is referred to in paragraph 6.2.1 above.

The SDF also indicates that the site falls within a 'marginal potential arable land' area.

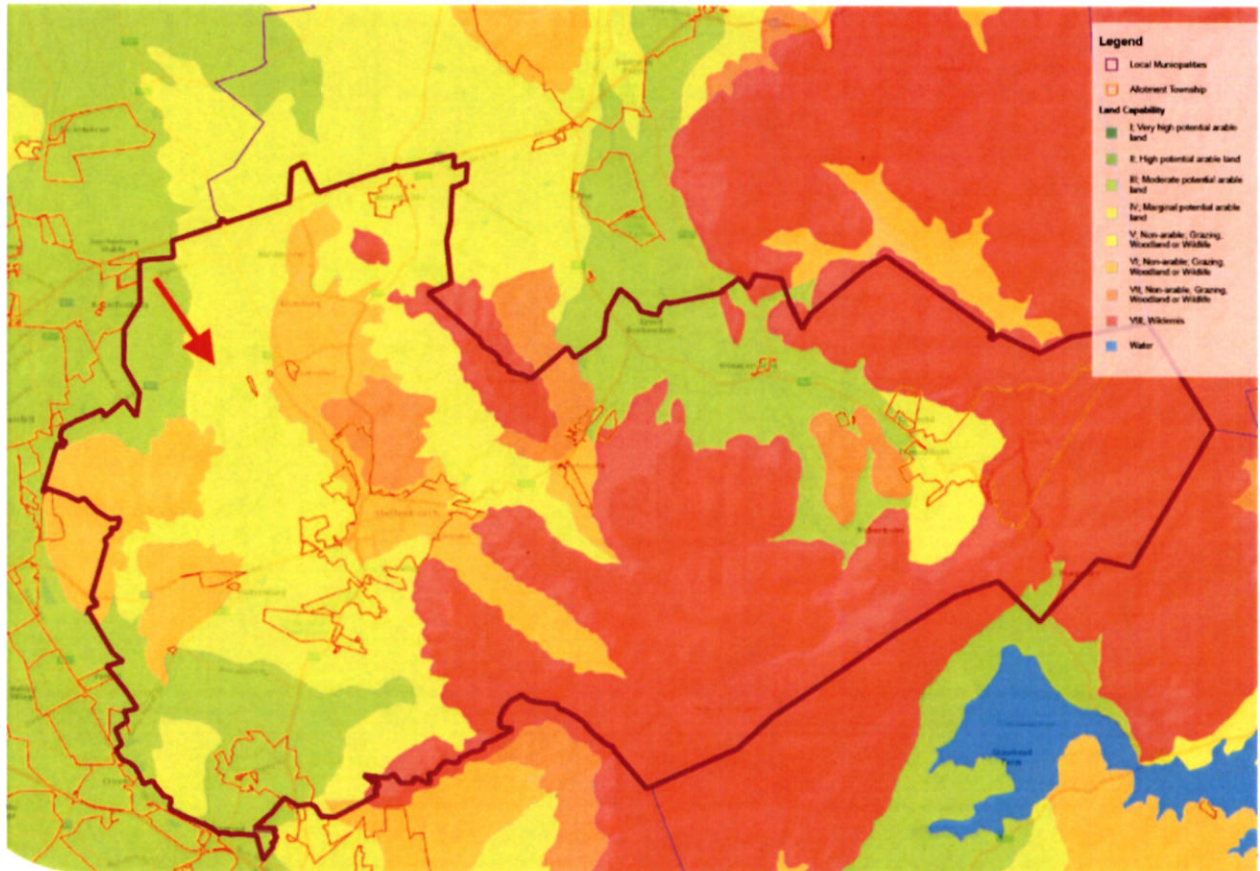


Figure 8. Land capability (Cape Farm Mapper)

Figure 18 - Extract from SDP showing (red arrow) the location of the site relative to land capability

Please refer to paragraph 6.2.3 above, as well as the Agricultural Compliance Statement, enclosed as Attachment 12, for more detail on the potential of the farm land. The conclusion is that there is no no-go areas on the farm.

The conclusion is that the application is compatible with the SDF and that further studies proved that any concerns related to loss of agricultural land, aquatic resources and critical biodiversity can be addressed.

6.5 (M) THE APPLICABLE POLICIES OF THE MUNICIPALITY THAT GUIDE DECISION-MAKING

Details of these are being dealt with in various sections of this motivation report and in the application in general.

6.6 (N) THE PROVINCIAL SPATIAL DEVELOPMENT FRAMEWORK

The Western Cape Government (WCG) Provincial Spatial Development Framework sets the following principles:

- Address spatial inequalities;
- Provide a shared spatial development vision; and
- Direct the location and form of public investment so as to influence other investment decisions.

The Provincial SDF focusses the work of government holistically and, amongst others, informs the Stellenbosch Municipality SDF. It has already been concluded in paragraph 6.4 that the proposal complies with the Stellenbosch SDF.

6.7 (P) NATIONAL AND PROVINCIAL POLICIES, PRINCIPLES, NORMS AND CRITERIA

Item 35 of the Municipal Systems Act, Act 32 of 2000 (MSA) states that a Spatial Development Framework, an integral component of the Council-approved IDP, serves as the principal strategic planning instrument to guide and inform long term planning and development in the Municipality.

Additionally, the provisions of the Stellenbosch Municipality Planning By-law and the nationally enacted Spatial Planning and Land Use Management Act (SPLUMA) and the provincial Land Use Planning Act (LUPA), have created a regulatory environment within which land development decisions are administered and advice is rendered. These provisions have strengthened the role of the Stellenbosch Municipality's SDF in land development decision-making.

It is considered that the proposal complies with national and provincial legislation – SPLUMA and LUPA in particular and that the proposal represents a positive response to the basic needs of the local community.

6.8 (Q) & (R) MATTERS CONTAINED IN SECTION 42 OF SPLUMA AND CHAPTER VI OF LUPA

- Principle of spatial justice

The proposal will make a contribution towards redressing imbalances through improved access to economic opportunities, employment as well as providing housing to workers on-site.

- Principle of spatial sustainability

The proposal will result in currently mostly vacant farm land being used for the sustainable recycling of organic waste. See several sections above for more detail on the positive impacts of such recycling. Recycling will result in the diversion of organic waste from landfill sites and the reduction of demand for virgin materials, that can significantly reduce the negative impacts of resource extraction, use on the environment and contribute to restoring biodiversity and natural capital.

- Principle of efficiency

Contextually appropriate intensification of land use, as is the case in this instance, results in more efficient use of land that would have otherwise at best be used for grazing on a land portion that is, on its own, not economically viable for this purpose. The composting/recycling process will have a positive impact on natural resource use and will divert organic waste away from landfills, producing a product that will boost efficiency within many agricultural related activities. This development will optimise the use of existing resources.

- Principle of good administration

The application will be processed in accordance with relevant legal provisions and future activities will be operated under existing policies and administrative structures.

- Principle of spatial resilience

Contextually appropriate intensification of land use, as in this instance, facilitates resilience, thus contributing to sustainable development. Providing increased recycling capability through composting not only has environmental benefits but provide a more economically resilient environment that will create sustainable jobs. The fact that the farmland used for the proposed composting activity can revert back to agriculture, should the compost manufacturing cease to continue, contributes to the resilience of this proposed development.

6.9 (S) APPLICABLE PROVISIONS OF THE MUNICIPAL ZONING SCHEME BY-LAW, 2019

6.9.1 Definitions

The applicable definitions in the context of this application are:

Employee housing (*werknemersbehuising*) means a dwelling unit provided for employees by an employer which is ancillary to the primary activity on the land unit, and may be accommodation for labourers, caretakers and/or supervisory staff, provided that the employee housing unit is for the accommodation of one family only, is located on the same land unit on which the employment activity takes place, is occupied by at least one bona fide employee and may not be sold separately;

Industry (*nywerheid*) means a place, which in the Municipality's opinion, is used for a factory and in which a product and/or article, or part thereof is made, manufactured, produced, built, assembled, compiled, printed, ornamented, processed, treated, adapted, repaired, renovated, rebuilt, altered, painted, spray-painted, polished, finished, cleaned, dyed, washed, broken up, disassembled, sorted, packed, bottled, chilled, brewed, distilled, fermented, frozen and/or stored, and includes any activity which is ancillary and subservient to the aforementioned activities mentioned, for example an office, employee housing, point of sale, but does not include a noxious industry;

Agriculture (*landbou*) means the cultivation of land for crops and/or plants, the keeping and/or breeding of animals, livestock, game, bees, birds, whether or not in the open or in enclosures, and/or the breeding of water fauna and/or flora in artificially constructed dams or natural waterways, and includes a riding school, generating compost for own use on the land unit or farm, but excludes intensive feed farming or any other additional or consent uses in the Agriculture and Rural zone.

6.9.2 Development Parameters

Please refer to section 4.1 & 4.2 above.

6.9.3 Parking Requirements as per Table A in the Stellenbosch Municipality Zoning Scheme By-Law

Please refer to section 4.3 above.

It is considered that the general criteria for consideration of the approval of this application are being complied with.

7. CONCLUSIONS AND RECOMMENDATIONS

From this report and other available documentation, it is concluded that:

- Although the compost manufacturing activity does not fit the definition of agricultural industry in its entirety, the activity still has an acceptable overlap with the surrounding land uses. There are already residents in the area with regards to industrial activities in the form of concrete manufacturing, warehousing, transport related activities and brick manufacturing (clay mining). Please refer to Figure 2 above.
- There are aquatic resources as well as other biodiversity characteristics on the site that needs to be considered. These characteristics have been used as opportunities and constraints in drawing up the proposed SDP. The preservation of the wetland areas, including the lower watercourses and the critical biodiversity areas identified by the specialists, therefore form part of the design of the SDP.
- The Agricultural Compliance Statement (enclosed as an attachment) indicates that the proposed development is acceptable in that it does not identify any no-go areas on the farm.
- In the context of sustainable development and the need to improve on waste management activities within the Stellenbosch Municipality area, the proposed development contributes to the solution for a shortage in landfill sites in the region through the recycling of organic material that would otherwise end up in landfills.
- The proposed compost manufacturing contributes to the circular economy that is created by the recycling of waste. This in turn:
 - creates jobs,
 - lessens stress on natural resources and
 - increases production and revenue in the area that it serves, through the fact that the use of compost improves soil quality.
- The proposal will improve the farm aesthetically by creating a berm and planting of indigenous vegetation.
- The development will implement sustainable practices such as the recycling of water and rooftop solar PV.

- Providing on-site employee housing will be a benefit to the development, the environment, traffic generation, as well as to the employees.
- The proposed warehouse will be designed to blend into the agricultural landscape.
- All the development parameters contained in the Stellenbosch Zoning Scheme regulations will be adhered to.
- It is concluded that all the evaluation criteria contained in Item 65 of the By-Law are being satisfied.

In light of the facts and motivation contained in this report and in the attachments thereto, the approval of the following is therefore recommended:

- The spot rezoning of portions of Farm 211/10 from Agriculture to Industrial zone;
- A departure from the provision of allowing one employee housing unit only to allow for ten housing units within the industrial zone;
- To allow for an additional use for ten employee housing units for agricultural purposes; and
- The proposed SDP, enclosed as Attachment 10.



STELLENBOSCH

STELLENBOSCH • PNIEL • FRANSCHHOEK

MUNISIPALITEIT • UMASIPALA • MUNICIPALITY

DUPLICATE RECEIPT

Receipt M/c: DIR1 Duplicate Rec.No: 185152 Date: 03/11/2021

Local Authority: Stellenbosch Municipality

1 STB

N

16956.52

30111060201 05236 ABSA BANK

DIRECT 030111060201 ABSA BANK LU/13382

X100 Key: STB -009-20211103-00000061

X10 Key: STB 0000018515200001

AMPTELIKE KWITANSIE / OFFICIAL RECEIPT

✉ 17, STELLENBOSCH 7599

☎ 021 808-8578 / 8547 / 8546

📠 021 886 7318