

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

Sir / Madam

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

Application Property Address: Trumali Road, Stellenbosch, 7600

Application Property Number: Remainder of the Farm Brandwacht No. 1049, Stellenbosch

Applicant: TV3 Projects (Pty) Ltd – C Heys (contact details: 021 861 3800)

Owner: Brandwacht Land Development (Pty) Ltd – N du Toit (contact details: 083 226 9858)

Application Reference: LU/13953

Application Type: Rezoning and deviation from the Spatial Development Framework

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

- Application is made i.t.o. section 15.2(a) of the of the Stellenbosch Municipality Land Use Planning By-Law, 2015 for the rezoning of the Remainder of the Farm Brandwacht No. 1049, in the Division of Stellenbosch, Province of the Western Cape from Agriculture and Rural Zone to Subdivisional Area, consisting of Conventional Residential Zone erven (i.e. dwelling houses at a maximum residential density of 25 erven per hectare), Multi-Unit Residential Zone erven (i.e. group housing units at a maximum residential density of 50 units per hectare), a Local Business Zone erf (i.e. offices with a maximum bulk of 1.0 located west of Elsie du Toit Street and which will not form part of the residential estate), Private Open Space Zone erven (i.e. private open spaces and private roads) and Public Roads and Parking Zone erven (i.e. public road to accommodate the Eastern Link Road, utility services, etc.), and a site specific deviation from the approved Stellenbosch Municipality's Spatial Development Framework, 2019 to initiate an urban infill development outside the approved urban edge of Stellenbosch.

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_portal/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: TV3 Projects (Pty) Ltd – C. Heys clifford@tv3.co.za

The comments must be submitted within 30 days from the date of this notice to be received on or before the closing date of **3 October 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 021 861 3800 during normal office hours.

Yours faithfully

CLIFFORD HEYS
TV3 PROJECTS (PTY) LTD
(1 September 2022)

KENNISGEWING VAN GROND ONTWIKKELINGSAANSOEK AAN GEINTERESSEERDE EN GEAFFEKTEERDE PARTYE VIR KOMMENTAAR

Meneer / Dame

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

Adres van aansoek eiendom: Trumaliweg, Stellenbosch, 7600

Aansoek eiendom beskrywing: Restant van die Plaas Brandwacht No. 1049, Stellenbosch

Aansoeker: TV3 Projects (Pty) Ltd – C Heys (kontak besonderhede: 021 861 3800)

Eienaar: Brandwacht Land Development (Pty) Ltd – N du Toit (kontak besonderhede: 083 226 9858)

Aansoek Verwysing: LU/13953

Tipe Aansoek: Hersonerings en afwyking van die Ruimtelike Ontwikkelingsraamwerk

Besonderhede van die grondgebruiksaansoek, insluitende die doel en uitkoms:

- Aansoek word hiermee gemaak in terme van Afdeling 15.(2)(a) van die Stellenbosch Munisipaliteit se Beplanning Bywet, 2015 vir die hersonerings van die Restant van die Plaas Brandwacht No. 1049 vanaf Landbou en Landelike Sone na Onderverdelingsgebied, bestaande uit Konvensionele Residensiële Sone (d.w.s. woonhuise teen 'n maksimum residensiële digtheid van 25 erwe per hektaar), Multi Eenheid Residensiële Sone (d.w.s. groephuise teen 'n maksimum residensiële digtheid van 50 eenhede per hektaar), 'n Plaaslike Besigheid Sone erf (d.w.s. kantore met 'n vloerfaktor van 1.0 geleë wes van Elsie du Toitstraat en wat nie deel van die residensiële landgoed sal vorm nie), Privaat Oopruimte Sone erwe (d.w.s. private oopruimtes en private strate) en Publieke Pad en Parkering Sone erwe (d.w.s. publieke pad om die Oostelike Verbypad te akkommodeer, ingenieursdienste, ens.), en vir 'n terrein spesifieke wysiging van die goedgekeurde Stellenbosch Munisipaliteit se Ruimtelike Ontwikkelingsraamwerk, 2019 ten einde 'n stedelike invul ontwikkeling buite die goedgekeurde stedelike grens van Stellenbosch te insiseer.

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_portal/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 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: TV3 Projects (Pty) Ltd – C. Heys clifford@tv3.co.za

Die kommentaar moet binne 30 dae vanaf die datum van hierdie kennisgewing gestuur word en moet ontvang word voor of op die laaste dag van die sluitingsdatum van **3 Oktober 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 voorsienning gemaak is nie, kan die Aansoeker geskakel word vir bystand by die vermelde elektroniese pos adres of telefonies by 021 861 3800 gedurende normale kantoor ure.

Die uwe

CLIFFORD HEYS
TV3 PROJECTS (PTY) LTD
(1 September 2022)

ATTACHMENTS:

- 1. EXECUTIVE SUMMARY OF THE APPLICATION**
- 2. LOCALITY PLAN**
- 3. CONCEPT SITE DEVELOPMENT PLAN**

EXECUTIVE SUMMARY

1. The following applications are made on the Remainder of the Farm Brandwacht No. 1049, in the Division of Stellenbosch, Province of the Western Cape, namely:
 - A site specific deviation from the approved Stellenbosch Municipality's Spatial Development Framework, 2019 to initiate an urban infill development outside the approved urban edge of Stellenbosch; and
 - Application i.t.o. section 15.2(a) of the of the Stellenbosch Municipality Land Use Planning By-Law, 2015 for the rezoning of the Remainder of the Farm Brandwacht No. 1049, in the Division of Stellenbosch, Province of the Western Cape from Agriculture and Rural Zone to Subdivisional Area, consisting of Conventional Residential Zone erven (i.e. dwelling houses at a maximum residential density of 25 erven per hectare), Multi-Unit Residential Zone erven (i.e. group housing units at a maximum residential density of 50 units per hectare), a Local Business Zone erf (i.e. offices with a maximum bulk of 1.0 located west of Elsie du Toit Street and which will not form part of the residential estate), Private Open Space Zone erven (i.e. private open spaces and private roads) and Public Roads and Parking Zone erven (i.e. public road to accommodate the Eastern Link Road, utility services, etc.).
2. A detailed and final urban development proposal must still be prepared. However, a concept layout plan is included in this report, to illustrate vision of the proposed urban development (see **Section D**).
3. In 2018 and 2019 – as part of the Stellenbosch Municipal Spatial Development Framework process – we submitted numerous planning reports to the Municipal Manager motivating why the subject property should be included in the urban edge and earmarked for future urban development. As part of these submissions, detailed specialist studies were prepared (such as a traffic impact

assessment, engineering services report, visual impact assessment, heritage impact assessment, etc.) and included in the planning motivation reports. Copies of these specialist reports are again included in this application. However, these specialist input will be revisited and updated when the detailed urban development proposal is finalised.

4. The approval of the site specific deviation from the Stellenbosch Municipality's Spatial Development Framework and the rezoning of the subject property will allow the landowner to proceed with all the necessary specialist investigations and impact studies of the proposed development, and then to prepare and submit all the applications i.t.o. the Subdivision of Agricultural Land Act, 1970, the Land Use Planning Act, 2015, the Advertising on Roads and Ribbon Development Act, 1940, the National Environmental Management Act, 1998 and the National Heritage Resources Act, 1999.
5. These applications, specialist input, impact assessments and approvals will in turn provide the agreed development framework / envelope within which the final development proposal will be conceptualised.
6. In 2019, as part of the Stellenbosch Municipality's Spatial Development Framework process, a planning application report was submitted to motivate the inclusion of the subject property in the urban edge. This report included numerous preliminary specialist reports (transport, engineering, heritage, visual, etc.) which are again included as part of this land use planning application. These specialist reports will be updated with the subsequent planning, environmental, heritage, agriculture and transport applications.
7. With receipt of all the required planning, environmental, heritage, agriculture and transport approvals, a land use planning application i.t.o. the Stellenbosch Municipality's Planning By-Law, 2015 will be prepared and submitted for approval of the final development proposal.

8. The subject property is currently located outside the Stellenbosch Municipality's approved urban edge. This application will illustrate and motivate that a wide range of site specific circumstances exists which serves to support a deviation from the approved urban edge so as to allow for the inclusion of the application property as well as the subsequent development thereof of urban related purposes.
9. This application is based on the following motivating considerations as set out in more detail in the full application document:
 - The farm's agricultural potential is limited, and the Western Cape Department of Agriculture has no objection against the proposed urban development of the subject property;
 - The proposed urban development will generally support the municipal spatial planning policies;
 - The plan alignment for the proposed Eastern Link Road will traverse the application property and effectively by default divide it into two smaller land portions;
 - The proposed development of the application property for urban development purposes is compatible with the character of the immediate surrounding area;
 - It will provide different housing typologies in the Stellenbosch Municipal area;
 - It will not lead to a loss of a critical biodiversity area;
 - It will have a limited impact on heritage resources;
 - It will have a limited visual impact;
 - It will have significant socio-economic benefits for Stellenbosch town (e.g. it will create new employment opportunities);
 - It will increase the municipal tax base;
 - The resulting traffic impact will be limited; and

- It will contribute to the upgrading of municipal engineering infrastructure (e.g. payment of development charges).

10. We submit that well motivated considerations exist for the site specific based rezoning application to be considered favourably. Accordingly, we recommend that the application be approved, so that the landowner may formally proceed with satisfying the other legal requirements for the application process.



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fax (021) 882 8025
e-mail: stel@tv3.co.za
web: www.tv3.co.za

ARCHITECTS AND TOWN PLANNERS

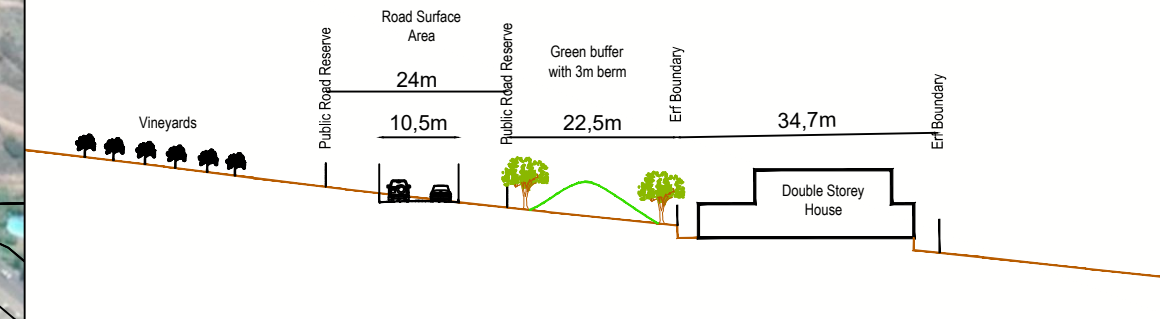
Farm Brandwacht No.1049, Stellenbosch

Drawing:		Plan no.:
Local Locality		2
Date:	Scale:	
13/04/2018	1:20 000 (A4)	
Project no.:	Drawn:	Checked:
3504-P	WH	CH



Concept Layout

Cross Section



2/368

3/1049

3/961

Remainder Farm 369
Grondvles

Farm 370
Grondvles

Brandwacht aan Berg Phase I

Erf No.	Zoning	Land Use	No. of Erven	Area	%
1-172	Conventional Residential	Group Housing & Dwelling House	172	7.34ha	24.34
236	Local Business	Commercial/Offices	1	0.29ha	0.96
237	Private Open Space	Open Space	1	5.72ha	18.96
239	Private Open Space	Private Road	1	2.09ha	6.94
241-243	Public Roads and Parking	Public Road	3	1.59ha	5.27
Total			178	17.03ha	56.46

Brandwacht aan Berg Phase II

Erf No.	Zoning	Land Use	No. of Erven	Area	%
173-235	Conventional Residential	Group Housing & Dwelling House	63	5.25ha	17.41
238	Private Open Space	Open Space	1	4.17ha	13.82
40	Private Open Space	Private Road	1	3.71ha	12.31
Total			65	13.13ha	43.54

Grand Total 243 30.17ha 100.00



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STELLENBOSCH 7600 | TEL +27 (21) 861 3800 | www.tv3.co.za

Brandwacht aan Berg Phase I & II

Property Description:
Remainder Farm 1049, Stellenbosch

Drawing:		Plan no.:	
Concept SDP		2	
Date:	27/10/2021	Scale:	1:3000 (A2)
Project no.:	3504-P	Drawn:	WH
		Checked:	JvR

Notation:
Cadastral information obtained from Surveys and Mapping (DRDLR).
Aerial Photography obtained on Google Earth.
1m Contours are generalized and should be surveyed for design purposes

* All areas and dimensions are approximate and should be verified by a professional land surveyor.

* This drawing is the property of TV3 Architects and Town Planners (Pty) Ltd and copyright is reserved

MUNICIPALITY • UMASIPALA • MUNISIPALITEIT

DATE:	2022-04-13	DOCUMENT NO:	728340
ERF / FARM NO:	1049	CREATED BY:	Bulelwa Mdoda
LOCALITY:	Trumali Road, STELLENBOSCH FARMS	APPLICATION NO:	LU/13953
OWNER'S NAME:	Brandwacht Land Development (Pty) Ltd	APPLICATION VAT NO:	412017447
ADDRESS:	PO Box 91 Stellenbosch 7599	VAT NO:	4700102181
		APPLICANT:	Brandwacht Land Development (Pty) Ltd
		TEL NO:	0218613800

[illegible]

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

SIGNATURE

DATE:

APPLICANT TO RETURN THIS FORM TO THE ADVICE CENTRE FOR
DIRECTOR: PLANNING & ECONOMIC DEVELOPMENT

SIGNATURE

DATE:

REFERENCE: LU/ and ERF/FARM

Please use both the Land Use Application number and the Erf/Farm number indicated on this invoice as a reference when making EFT payment.

0.00

0



STELLENBOSCH • FINE
MUNISIPALITEIT • UMASIPALA • MUNICIPALITY

[illegible][illegible]

computers co za

AMPTELIKE KWITANSIE / OFFICIAL RECEIPT

✉ 17, STELLENBOSCH 7599
☎ 021 808-8578 / 8547 / 8546
📠 021 886 7318

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PLANNING & ECONOMIC DEVELOPMENT

LAND USE APPLICATION COMPLIANCE CHECKLIST ITO S38 OF THE LAND USE PLANNING BYLAW, 2015				Date of Submission of Application	04-04-2022	
Erf / Erven/ Farm no	1049	Portion(s) if farm		Allotment Area	STELLEBOSCH	
Owner / Applicant	Clifford Heys		Contact number	021- 8613800		
Email address	Clifford@tv3.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: Clifford Heys <Clifford@tv3.co.za>
Sent: Monday, 04 April 2022 13:16
To: Pedro April; Bulelwa Mdoda
Cc: Landuse Applications; Jan van Rensburg
Subject: [EX] RE: Pre-application scrutiny: Farm No 1049, Stellenbosch: Application for rezoning to subdivisional area.

Hi Bulelwa

Re. Pedro's pre-app scrutiny feedback below.

We have amended the LUMS application as per Pedro's request, and I will send it to you via WeTransfer.

Regards

Clifford

From: Pedro April <Pedro.April@stellenbosch.gov.za>
Sent: 04 April 2022 10:28 AM
To: Clifford Heys <Clifford@tv3.co.za>
Cc: Bulelwa Mdoda <Bulelwa.Mdoda@stellenbosch.gov.za>
Subject: Pre-application scrutiny: Farm No 1049, Stellenbosch: Application for rezoning to subdivisional area.

Dear Mr Clifford Heys

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 as depicted in the submission represents on face value an accurate approach to the prevailing provisions in the Stellenbosch Land Use Planning Bylaw (2015) [SLUPB] and Stellenbosch Zoning Scheme Bylaw (2019) [SZSB] and **you may proceed to submit for consideration a corresponding application for the rezoning of Farm No 1049, Stellenbosch from Agricultural and Rural Zone to Subdivisional Area as specified in the motivational documentation, e.g. zoning categories and densities. Your attention is however drawn to the following;**
 - a) It is noted that no application is made for the amendment of the Urban Edge, but reference is made on some plans attached to the assessment documentation of a "Propose Urban Edge" and should be removed were applicable.
 - b) The zoning category of Public Road and Parking Zone is also more appropriate for the intend of the Eastern Link Public Road and consideration must be given to change the zoning category for the intended use.

- c) **Section 15 of the Stellenbosch Municipal Land Use Planning By-law do not make provision for an application for a deviation from the SDF for site specific reasons. Consider the wording as part of your Section 15 application for rezoning if it must be included in the advert.**
4. The intended land use and/ or land development application 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 to email landuse.applications@ Stellenbosch.gov.za. 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.
7. For any enquiries on this correspondence please respond by e-mail to the writer hereof or to the email; landuse.enquiries@ Stellenbosch.gov.za



**REMAINDER OF THE FARM BRANDWACHT NO.
1049, IN THE DIVISION OF STELLENBOSCH**

Application for Rezoning (3504-P)

4 April 2022



ARCHITECTS
TOWN PLANNERS
URBAN DESIGNERS

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STELLENBOSCH 7600 | TEL +27 (21) 861 3800 | www.tv3.co.za

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EXECUTIVE SUMMARY

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3. In 2018 and 2019 – as part of the Stellenbosch Municipal Spatial Development Framework process – we submitted numerous planning reports to the Municipal Manager motivating why the subject property should be included in the urban edge and earmarked for future urban development. As part of these submissions, detailed specialist studies were prepared (such as a traffic impact

assessment, engineering services report, visual impact assessment, heritage impact assessment, etc.) and included in the planning motivation reports. Copies of these specialist reports are again included in this application. However, these specialist input will be revisited and updated when the detailed urban development proposal is finalised.

4. The approval of the site specific deviation from the Stellenbosch Municipality's Spatial Development Framework and the rezoning of the subject property will allow the landowner to proceed with all the necessary specialist investigations and impact studies of the proposed development, and then to prepare and submit all the applications i.t.o. the Subdivision of Agricultural Land Act, 1970, the Land Use Planning Act, 2015, the Advertising on Roads and Ribbon Development Act, 1940, the National Environmental Management Act, 1998 and the National Heritage Resources Act, 1999.
5. These applications, specialist input, impact assessments and approvals will in turn provide the agreed development framework / envelope within which the final development proposal will be conceptualised.
6. In 2019, as part of the Stellenbosch Municipality's Spatial Development Framework process, a planning application report was submitted to motivate the inclusion of the subject property in the urban edge. This report included numerous preliminary specialist reports (transport, engineering, heritage, visual, etc.) which are again included as part of this land use planning application. These specialist reports will be updated with the subsequent planning, environmental, heritage, agriculture and transport applications.
7. With receipt of all the required planning, environmental, heritage, agriculture and transport approvals, a land use planning application i.t.o. the Stellenbosch Municipality's Planning By-Law, 2015 will be prepared and submitted for approval of the final development proposal.

8. The subject property is currently located outside the Stellenbosch Municipality's approved urban edge. This application will illustrate and motivate that a wide range of site specific circumstances exists which serves to support a deviation from the approved urban edge so as to allow for the inclusion of the application property as well as the subsequent development thereof of urban related purposes.
9. This application is based on the following motivating considerations as set out in more detail in the full application document:
 - The farm's agricultural potential is limited, and the Western Cape Department of Agriculture has no objection against the proposed urban development of the subject property;
 - The proposed urban development will generally support the municipal spatial planning policies;
 - The plan alignment for the proposed Eastern Link Road will traverse the application property and effectively by default divide it into two smaller land portions;
 - The proposed development of the application property for urban development purposes is compatible with the character of the immediate surrounding area;
 - It will provide different housing typologies in the Stellenbosch Municipal area;
 - It will not lead to a loss of a critical biodiversity area;
 - It will have a limited impact on heritage resources;
 - It will have a limited visual impact;
 - It will have significant socio-economic benefits for Stellenbosch town (e.g. it will create new employment opportunities);
 - It will increase the municipal tax base;
 - The resulting traffic impact will be limited; and

- It will contribute to the upgrading of municipal engineering infrastructure (e.g. payment of development charges).

10. We submit that well motivated considerations exist for the site specific based rezoning application to be considered favourably. Accordingly, we recommend that the application be approved, so that the landowner may formally proceed with satisfying the other legal requirements for the application process.

CHAPTER 1: LAND USE PLANNING APPLICATIONS

1.1 BRIEF

This firm has received a brief from the directors of Brandwacht Land Development (Pty) Ltd to prepare the necessary documentation for the rezoning et al. of the Remainder of the Farm Brandwacht No. 1049, in the Division of Stellenbosch, Province of the Western Cape [hereafter referred to as the subject property]. A power of attorney to this affect is attached hereto (see ***Section A***).

Subsequent to the appointment, numerous pre-submission consultations were held with the provincial and municipal planning officials regarding the proposed urban development of the subject property.

The aim of this land use planning application report is to provide the Stellenbosch Municipality with sufficient information to approve a site specific deviation from the Stellenbosch Municipality's Spatial Development Framework to initiate an urban infill development outside the approved urban edge of Stellenbosch, and to approve the rezoning of the subject property from Agriculture and Rural Zone to Subdivisional Area.

A final urban development proposal does not yet exist, but the approval will allow the landowner to proceed with the preparation and submission of all the required planning, environmental, heritage, agriculture and transport applications that will lead to the finalization of the urban development proposal.

1.2 LAND USE PLANNING APPLICATIONS

As discussed with the planning officials (in order to facilitate the proposed urban development of the subject property) the following land use planning

applications are hereby made, namely:

- ***Application i.t.o. section 15.2(a) of the of the Stellenbosch Municipality Land Use Planning By-Law, 2015 for the rezoning of the Remainder of the Farm Brandwacht No. 1049, in the Division of Stellenbosch, Province of the Western Cape from Agriculture and Rural Zone to Subdivisional Area, consisting of Conventional Residential Zone erven (i.e. dwelling houses at a maximum residential density of 25 erven per hectare), Multi-Unit Residential Zone erven (i.e. group housing units at a maximum residential density of 50 units per hectare), a Local Business Zone erf (i.e. offices with a maximum bulk of 1.0 located west of Elsie du Toit Street and which will not form part of the residential estate), Private Open Space Zone erven (i.e. private open spaces and private roads) and Public Roads and Parking Zone erven (i.e. public road to accommodate the Eastern Link Road, utility services, etc.), and a site specific deviation from the approved Stellenbosch Municipality's Spatial Development Framework, 2019 to initiate an urban infill development outside the approved urban edge of Stellenbosch.***

1.3 PURPOSE OF THE LAND USE PLANNING APPLICATIONS

The purpose of the land use planning applications is to obtain the Stellenbosch Municipality's approval for a site specific deviation from the Stellenbosch Municipality's Spatial Development Framework and for the rezoning approval for the proposed urban development of the subject property. This will allow the landowner to proceed with the preparation and submission of all the required planning, environmental, heritage, agriculture and transport applications; i.e. applications i.t.o. the Subdivision of Agricultural Land Act, 1970, the Land Use Planning Act, 2015, the Advertising on Roads and Ribbon Development Act,

1940, the National Environmental Management Act, 1998 and the National Heritage Resources Act, 1999.

With receipt of all the required planning, environmental, heritage, agriculture and transport approvals, a final land use planning application i.t.o. the Stellenbosch Municipality's Planning By-Law, 2015 will be prepared and submitted for approval of the final development proposal and subdivision plan.

CHAPTER 2: SUBJECT PROPERTY DETAILS

2.1 THE SUBJECT PROPERTY

The subject property is described in the Deed of Transfer No. T118189/1998 as the Remainder of the Farm Brandwacht No. 1049, in the Division of Stellenbosch, Province of the Western Cape. A copy of the Deed of Transfer with Surveyor-General Diagram is attached hereto (see **Section B**).

2.2 OWNERSHIP

Brandwacht Land Development (Pty) Ltd is the registered owner of the subject property.

2.3 PROPERTY SIZE

The subject property is 30ha in extent.

2.4 DEEDS OFFICE SEARCH

Cluver Markotter Attorneys were instructed to undertake a Deeds Office search to determine if there are any title conditions that will prohibit the proposed urban development of the subject property. According to their Conveyancer Certificate there are no conditions contained in the title deed that will restrict the proposed urban development of the subject property. A copy of their Conveyancer Certificate is attached hereto (see **Section C**).

2.5 LOCALITY

The subject property is located on Trumali Road approximately two kilometres south of the Stellenbosch central business district, as indicated on Figures 2.1

and 2.2 below.

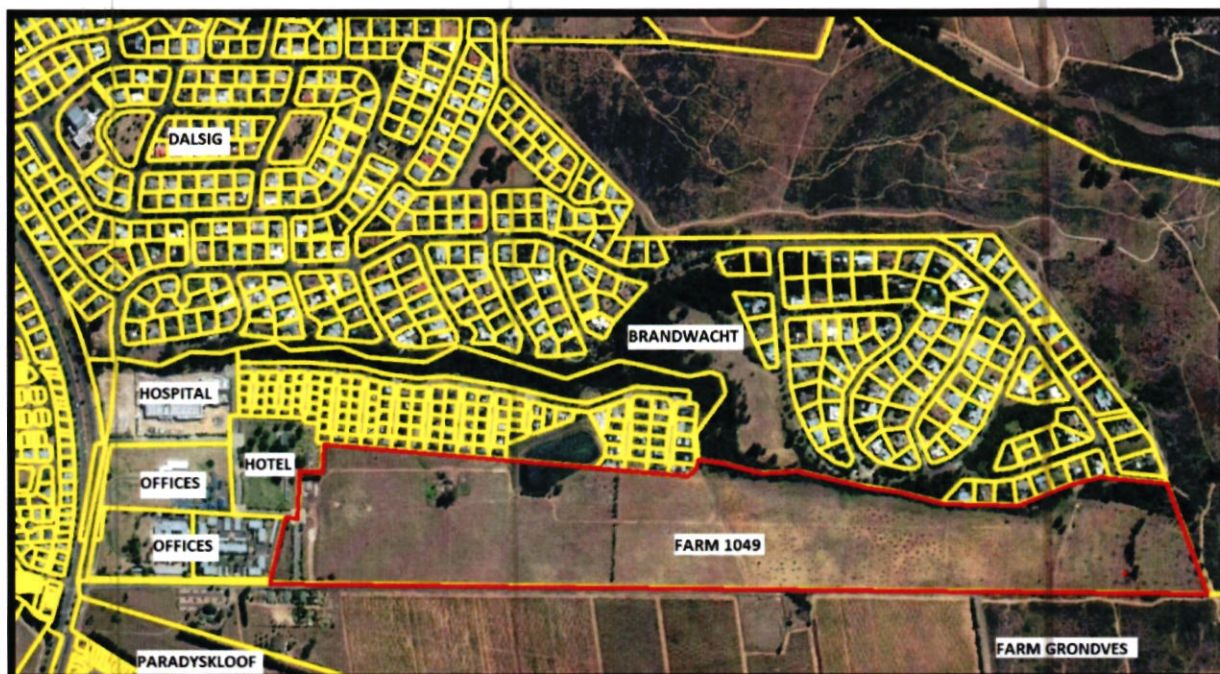


Figure 2.1: The Locality of the subject property



Figure 2.2: The context of the subject property

The locality and context of the property is indicated in more detail on the attached locality plans attached hereto (see **Section D**).

2.6 CURRENT ZONING AND LAND USE

The subject property is zoned Agriculture and Rural Zone (i.e. for agriculture purposes) but is currently not cultivated. The ruins of a farm shed, two farm labourer's cottages and a portion of a dam are located on the subject property.

2.7 SURROUNDING LAND USES

The subject property is located in an urban part of Stellenbosch. The residential areas of Brandwacht and Brandwacht aan Rivier are located directly to the north. The Stellenbosch Mediclinic hospital, the Brandwacht Office Park and the Brandwacht manor house (with rights for a rural hotel) are all located directly west of the subject property. The Stellenbosch Municipality's Farm Grondves No. 369, Stellenbosch – that is leased by the KWV and utilised for the propagation of vines – and the Paradyskloof residential area are located directly to the south of the subject property. To the east of the subject property is undeveloped mountain land.

The surrounding land uses are indicated on Figure 2.3 below.

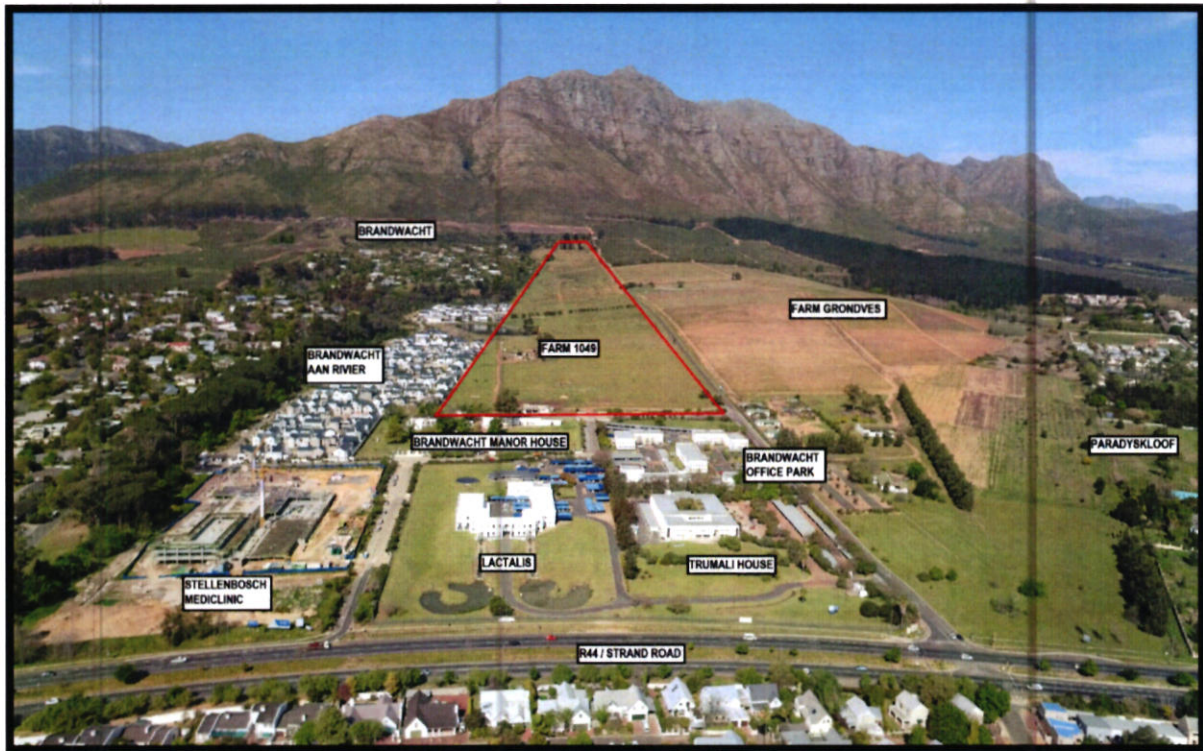


Figure 2.3: Surrounding land uses

CHAPTER 3: DEVELOPMENT PROPOSAL

3.1 DEVELOPMENT PROPOSAL DESCRIPTION

The proponent, Brandwacht Land Development (Pty) Ltd, is proposing an urban land use development on the subject property, consisting of primarily residential land uses with the opportunity for a variety of residential densities (similar to the abutting Brandwacht aan Rivier residential estate). For this reason, application has been made for the rezoning of the subject property from Agriculture and Rural Zone to Subdivisional Area. The proposed urban development will consist of the following land uses:

- Conventional Residential Zone erven (i.e. dwelling houses at a maximum residential density of 25 erven per hectare);
- Multi-Unit Residential Zone erven (i.e. group housing units at a maximum residential density of 50 units per hectare);
- a Local Business Zone erf (i.e. offices with a maximum bulk of 1.0 located west of Elsie du Toit Street and will not form part of the residential estate);
- Private Open Space Zone erven (i.e. private open spaces and private roads); and
- Public Roads and Parking Zone erven (i.e. public road for the Eastern Link Road, utility services, etc.).

Owing to the success and popularity of the Brandwacht aan Rivier residential estate as well as the subject property's similar shape to the estate, we have attempted to emulate the design principles of Brandwacht aan Rivier. The proposed residential development on the subject property will have an elongated open space system that will act as a buffer between the proposed and existing developments. This open space system will connect with the Brandwacht stream and the mountain land. The residential schemes will consist of a network of cul-de-sac streets to create a sense of community in

each of these closes. In order to limit the proposed development's visual impact, the higher densities will be located on the lower portion of the subject property and the lower densities on the higher portion of the subject property.

We have prepared a Concept Layout Plan for the proposed urban development that illustrates these principles. However, this is only a preliminary design that will be finalised during the required environmental, heritage and planning application processes. A copy of the Concept Layout Plan is attached hereto (see **Section D**).

3.2 LANDSCAPE MASTER PLAN

As part of the final design process, a Landscape Master Plan will be prepared for the proposed urban development. The Landscape Master Plan will address human issues of scale, orientation, and microclimatic mitigation, whilst also satisfying conservation and aesthetic demands. To this end the responsibilities for the design of the landscape, range across various disciplines into the surrounding spaces, being effectively and affected by architectural and municipal requirements as well as the natural environment. This understanding will allow for the integration of landscape and urban design in a fresh pattern of urban and natural ecology, inclusive of the envisaged residential lifestyle.

3.3 PHASING OF THE DEVELOPMENT

It is the proponent's intention to develop the subject property in phases (not all in once) and to provide the required bulk infrastructure for each development phase (as needed). For this reason, a Phasing Plan will be submitted to the Stellenbosch Municipality for approval (as part of the Subdivision Plan application).

CHAPTER 4: SPATIAL PLANNING POLICIES

4.1 COMPLIANCE WITH THE SPATIAL PLANNING POLICIES

The development of the subject property is governed primarily by the following spatial planning policy documents. This chapter illustrates how the proposed development will comply with the recommendations and principles of these spatial planning policies.

4.2 SPATIAL PLANNING AND LAND USE MANAGEMENT ACT

The Spatial Planning and Land Use Management Act, 2013 (SPLUMA) provides a framework specifying the relationship between the spatial planning and the land use management system and other kinds of planning. The goal is to provide a framework which insures inclusive, developmental, equitable and efficient spatial planning at the different spheres of government, to address past spatial and regulatory imbalances, to promote greater consistency and uniformity in the application procedures and decision-making by authorities responsible for land use decisions and development applications.

In order to reach the above goals, SPLUMA has the following five development principles which guide all aspects of spatial development planning, land development and land use management, namely:

- **Spatial Justice**

The proposed development will support the principle of spatial justice through improved access to housing opportunities close to employment opportunities (e.g. the Stellenbosch central business district and Techno Park) and public transport facilities (taxi route on the R44).

The Stellenbosch Municipality is in the process of drafting an inclusionary housing policy that will tap the economic gains from rising real estate values to include persons and areas that were previously excluded. Such an inclusionary housing policy will provide mechanisms which are flexible and allow developers to make a contribution to affordable housing in the form of a fee in lieu of on-site units, to redress access to land by disadvantaged communities and persons in areas of most need and characterised by widespread poverty and deprivation. The applicant is aware of its social responsibility i.t.o. inclusionary housing and will engage with Council to determine a way to contribute.

- **Spatial Sustainability**

The proposed development will support the principle of spatial sustainability by building a new community in a previously undeveloped area and uphold consistency of land use measures in accordance with the environmental management instruments. The proposed development is considered an infill development opportunity that will limit urban sprawl and protect the agricultural hinterland.

- **Spatial Efficiency**

The proposed development will support the principle of spatial efficiency as the proposed development will result in less time, effort, or cost for governments, businesses, and households to conduct their daily activities and will produce stronger economic growth. The subject property is located near employment opportunities. This will save travel time and make an employee more efficient.

Also, the Concept Layout Plan – including the type and number of residential units, the typology of residential units, etc. – might be amended

and will be finalised during the submission of the final Subdivision Plan. The outcome of the subsequent environmental and heritage processes will guide the development's application procedure and provide mitigating measures to safeguard against development inefficiency.

- **Spatial Resilience**

Flexibility in spatial plans, policies and land use management systems are necessary to ensure sustainable livelihoods in communities likely to suffer the impacts of economic and environmental shocks. The locality of the proposed development – close to employment opportunities – will support inclusive economic growth and stimulate the local economy. These factors are essential for the growth, development and sustainability of the region, as well as the local communities.

- **Good Administration**

This development principle relates to procedural fairness and planning making decision tools. Application has been made for the rezoning of the subject property to Subdivisional Area. This will allow the landowner to proceed with the preparation and submission of all the other required planning, environmental, heritage, agriculture and transport applications. Good administration will ensure that the land use planning application is processed in accordance with all the statutory requirements, and that a decision is taken within the prescribed timeframe so that the landowner may proceed with the next steps.

In view of the above, the proposed development supports the five development principles of SPLUMA.

4.3 STELLENBOSCH MUNICIPALITY'S INTEGRATED DEVELOPMENT PLAN

The Municipal Systems Act, 2000 mandates all South African municipalities to formulate a five-year Integrated Development Plan (IDP) to inform the municipal budget and guide all developments within the municipal area. The IDP is the Municipality's principle strategic plan and deals with the most critical development needs of the Municipal area. The main objectives of the IDP are:

- Create economic growth;
- Enable a quality and inclusive living environment;
- Improve wellness and safety, and address social ills;
- Improve education and opportunities for the youth; and
- Embed good governance and integrated service delivery through partnership and service alignment.

The Stellenbosch Municipal Spatial Development Framework (MSDF) forms a key component of the Stellenbosch Municipality's IDP as it indicates the spatial location and opportunities to achieve the IDP's objectives and to meet the demands of the local communities. It must therefore be aligned with the principles of the IDP and indicate where the prioritized needs of Council (as set out in the IDP) could be achieved in a spatially ordered manner.

The Stellenbosch IDP acknowledges the fact that Stellenbosch Municipality is experiencing rapid transformation as a result of the influx of job seekers, residents and investors, as well as the overall restructuring of the economy and means of production and wealth creation. The economic sectors, which have shown the greatest growth, are the service industry and construction industry. Future growth, expansion and innovation should be guided by specific development principles, limiting ad hoc urban developments that will result in expensive outward low-density urban sprawl and the related destruction of valuable eco-systems and agricultural resources.

The objective of the MSDF is to provide maximum certainty to all role players (property developers, financial investors, development planners, municipal officials and ordinary households) with regards to the future form of Stellenbosch and according to the IDP the Stellenbosch Municipality will consider following amendments to the MSDF (approved in 2013), namely:

- Amendment of the urban edges;
- Adjustments to include the northern extension to Stellenbosch;
- Adjustments to include the Jamestown housing development;
- Infill and development areas;
- Major new transport infrastructure;
- Institutional development and facilities; and
- Upgrading of the R44.

The Stellenbosch Municipality's northern extension project and their new Jamestown housing project will unlock additional land for predominantly affordable-to-middle income housing. These amendments to the urban edge will however not address the current and future housing backlog for the middle-to-higher income housing (which are needed to help subsidize the affordable housing projects and to contribute to the expansion of the town's tax base).

The Stellenbosch Integrated Human Settlement Plan (2017) has a target of $\pm 18\,775$ residential units to cater for the current housing backlog. This plan aims to guide and facilitate the development processes involved for housing projects aimed at informal settlement upgrade, social housing, formalized home ownership, employer housing and GAP housing. A key proposal was to utilize municipal land provided at reduced cost for these types of housing projects in order to cross subsidize other housing types.

A cohesive effort has been made with Provincial and National Departments of Human Settlements to declare Stellenbosch a Restructuring Town with Restructuring Zones where economic, social and ecological sustainability are promoted while improving the lives of communities through rental housing programs. This achievement will accelerate the processes and supply of housing development aimed at the lower income residents.

There is however a scarcity in formal guiding policies and plans specifically aimed at addressing the current and future housing demand for the middle to higher income households, who are predominantly attracted to Stellenbosch by the booming services sector. Development, focused on providing for the much-needed residential opportunities on this side of the economic continuum, predominantly derives from the private sector on privately owned land. The IDP makes provision for possible amendments to the current MSDF to accommodate for this need through the identification of infill and development areas. The subject property, being located between the residential areas of Brandwacht and Paradyskloof, can be deemed spatially desirable as it is infill development and will not perpetuate ad hoc or leap-frog development.

The proposed development of the subject property will further support the IDP by contributing towards a future revenue stream for the Stellenbosch Municipality by way of rates, taxes, tariffs and development charges which could be utilized to fund municipal bulk infrastructure upgrading projects (e.g. the construction of the Techno Park Link Road).

4.4 STELLENBOSCH MUNICIPALITY'S SPATIAL DEVELOPMENT FRAMEWORK

The Stellenbosch Municipal Spatial Development Framework (MSDF) is a Sectoral Plan of the Stellenbosch Municipality's IDP, adopted i.t.o. the Municipal Systems Act, 2000. In 2019 the Stellenbosch Municipality's Spatial

Planning, Heritage and Environment Department were instructed to prepare a new MSDF for the Stellenbosch Municipality. This was an onerous process that included detailed specialist input and numerous public participation processes to finalize the MSDF.

In March 2019 the draft MSDF was advertised for public comment. The draft MSDF included the subject property in the urban edge and identified it for future urban development – see Figure 4.1 below.

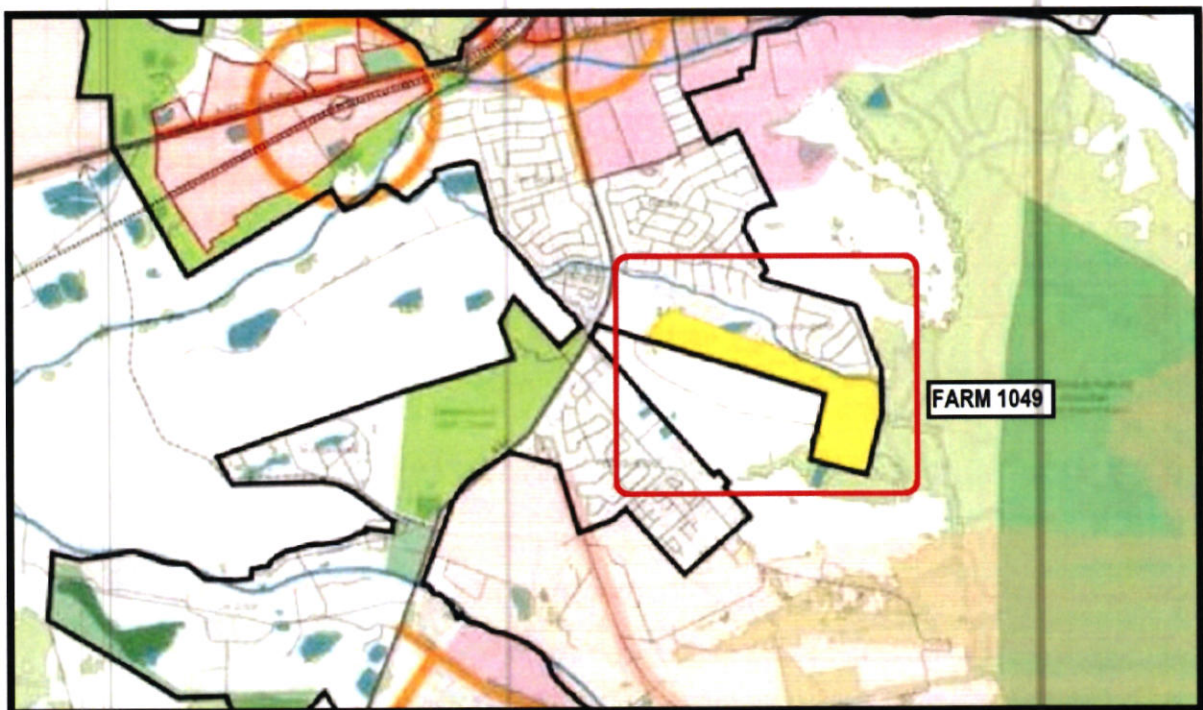


Figure 4.1: Extract of the draft MSDF (Mar 2019)

In June 2019 the final draft MSDF was advertised for public comment. The final draft MSDF also included the subject property in the urban edge and identified it for future urban development and urban agriculture – see Figure 4.2 below.



Figure 4.2: Extract of the final draft MSDF (Jun 2019)

In August 2019 the final draft MSDF served before Council for adoption. At this meeting Council adopted the MSDF but decided to exclude the subject property from the urban edge – see Figure 4.3 below.

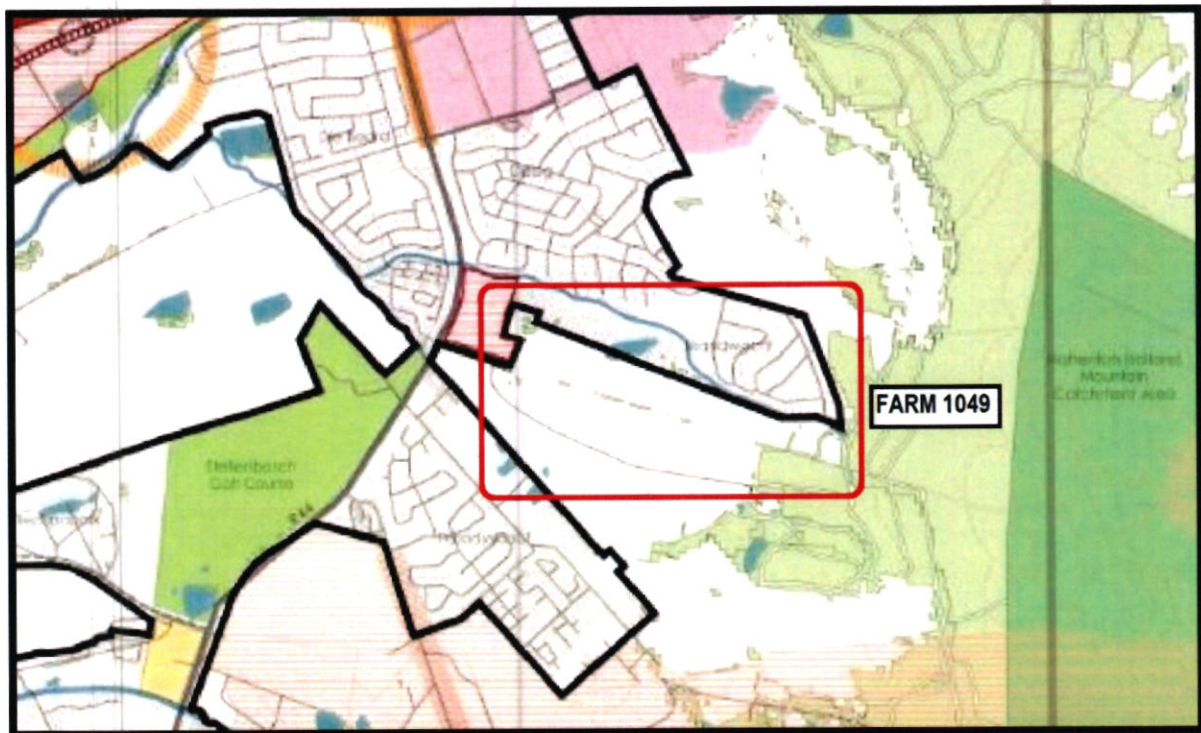


Figure 4.3: Extract of the approved MSDF (Aug 2019)

This decision by Council to amend the final draft MSDF – to exclude the subject property from the urban edge – was unreasonable, did not include a public participation process, ignored the Western Cape Department of Agriculture's comments and ignored the current demand for middle-to-higher income housing opportunities in town.

The proposed development of the subject property was supported by the Stellenbosch Municipality's Spatial Planning, Heritage and Environment Department. They included the subject property in the urban edge. However, Council amended their proposal and adopted an MSDF that excluded the subject property from the urban edge. This means that the proposed development of the subject property is inconsistent with the MSDF's proposals and according to the SPLUMA section 22.(1): *"A Municipal Planning Tribunal, or any other authority required or mandated to make a land development decision in terms of this Act or any other law relating to land development, may*

not make a decision which is inconsistent with municipal spatial development framework”.

However, according SPLUMA section 22.(2): *“Subject to section 42, a Municipal Planning Tribunal or any other authority required or mandated to make a land development decision, may depart from the provisions of a municipal spatial development framework only if site-specific circumstances justify a departure from the provisions of such municipal spatial development framework”.*

In other words, if there are justifiable site-specific circumstances to motivate a development proposal that is inconsistent with an MSDF, then a Municipal Planning Tribunal may approve such a development proposal even if it is inconsistent with an MSDF.

In this case, there are justifiable site-specific circumstances that warrants the approval of this development proposal even if it is inconsistent with the MSDF. These site-specific circumstances are explained in detail in Chapter 5 of this report.

4.5 STELLENBOSCH MUNICIPALITY’S ADAM TAS CORRIDOR PROJECT

The Stellenbosch Municipality has initiated the Adam Tas Corridor Project to absorb development pressure in Stellenbosch. The aim of the Adam Tas Corridor Project is to launch the restructuring of Stellenbosch through the redevelopment of the Adam Tas Corridor, the area that stretches from the Cape Sawmills site to the Kayamandi / Cloetesville areas – see Figure 4.4 below:

housing market that is not catered for by the Adam Tas Corridor Project) in order to create a more balanced town with a wide array of housing typologies (and not only flats).

We submit that there will be a synergy between the Adam Tas Corridor Project and the proposed development of the subject property, that will produce a combined effect greater than the sum of the separate effects. In other words, the development of the Adam Tas Corridor Project and the subject property, will work together to benefit the broader community of Stellenbosch and it can therefore be deemed desirable.

CHAPTER 5: PLANNING MOTIVATION

5.1 NEED AND DESIRABILITY

The need and desirability of the proposed urban development is motivated in this chapter, including all the justifiable site-specific circumstances that warrants the approval of this rezoning application.

5.2 URBAN INFILL DEVELOPMENT

The proposed development of the subject property is considered to be an infill urban development; i.e. the development of vacant land located in an urban environment, between existing urban areas such as Brandwacht and Paradyskloof. Infill and densification of urban areas is promoted by the Stellenbosch Municipality from a spatial planning policy side, as it will lead to the optimal use of the existing bulk infrastructure, contain urban sprawl and protect the agricultural hinterland. The densification of an urban area will also support the further development of non-motorized transport routes and contribute to the viability of public transport and provide housing opportunities (in Stellenbosch) for commuters living in Somerset West and working in Stellenbosch.

The proposed development will allow for the effective utilizing of available developable land and can therefore be deemed desirable.

5.3 COMPATIBILITY WITH THE SURROUNDING ENVIRONMENT

The surrounding environment consists of urban land uses, such as commercial (offices), residential (Brandwacht and Paradyskloof), community (hospital), etc. The proposed residential and commercial land uses will be similar to the existing surrounding land uses. The development proposal is therefore

considered to be compatible with the surrounding urban environment and character.

5.4 PARADYSKLOOF SPECIAL DEVELOPMENT AREA

The Stellenbosch Municipality is investigating the development of numerous innovation projects in Stellenbosch as it strives to become the “Innovation Capital” of South Africa. At the Stellenbosch Municipality Planning and Economic Development Committee meeting (held on 2 June 2015) one of these innovation projects identified was the Paradyskloof Special Development Area (SDA) located on a portion of the Farm Grondves No. 369, Stellenbosch – see Figure 5.1 below.

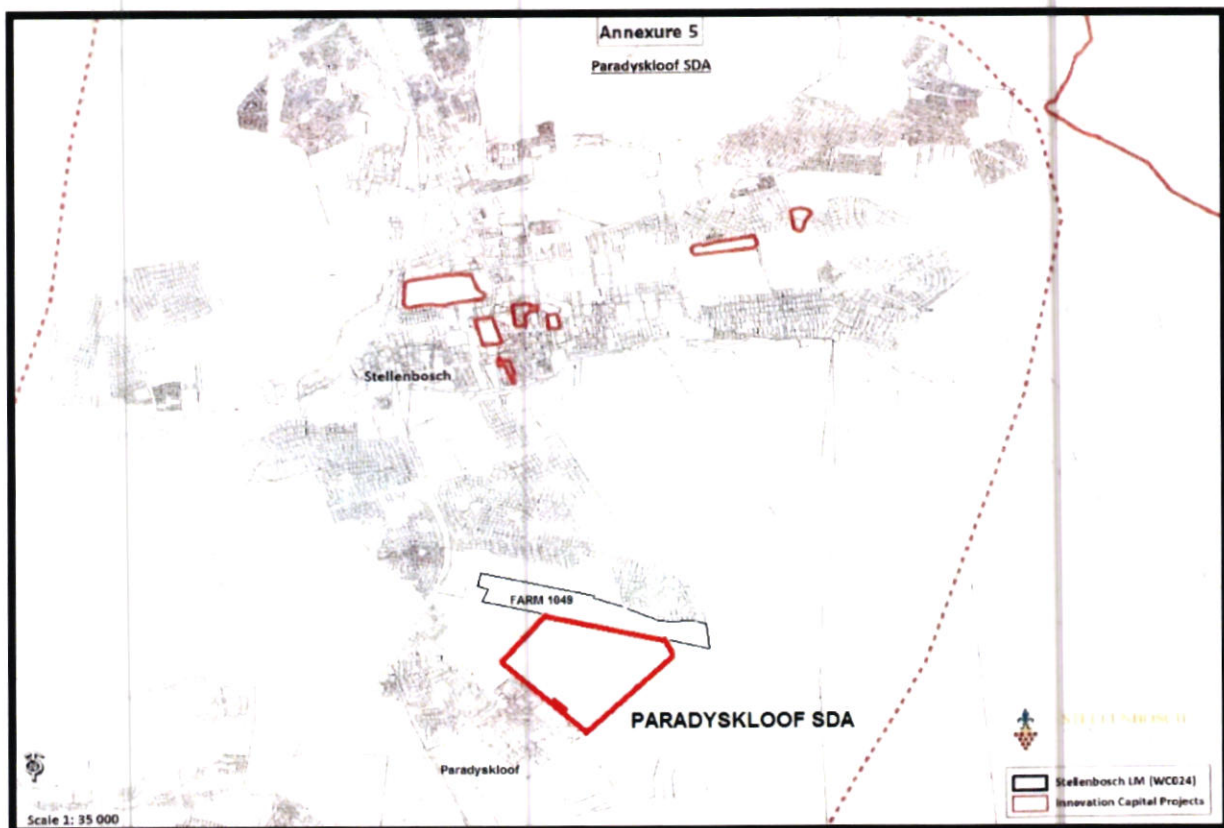


Figure 5.1: Locality of the Paradyskloof SDA

The purpose of these innovation projects is to establish a unique attraction and

economic use that does not currently exist in Stellenbosch. The Planning and Economic Development Committee concluded that the Stellenbosch Municipality must be pro-active in making land available for the establishing of innovation projects and recommended that approval be granted for the implementation of the Paradyskloof SDA.

The Paradyskloof area is well known for its attraction to property and other developers. The area has a unique opportunity to create a very special kind of development that can serve as a long-term, on-going attraction for Stellenbosch and will have real benefits for the Stellenbosch Municipality and the community at large and that will generate direct foreign investment. For this reason JSA Associates were instructed to prepare a report that deals specifically with the Paradyskloof SDA and how to develop this area to attract direct external investment, conservation of the natural environment within which the development occurs, creating opportunities for small, micro and medium local enterprises to provide services, conferencing tourism and education.

According to JSA Associates' report the Paradyskloof SDA innovation project entails the development of an Institutional Village on a portion of the Farm Grondves No. 369, Stellenbosch as indicated on Figure 5.2 below.

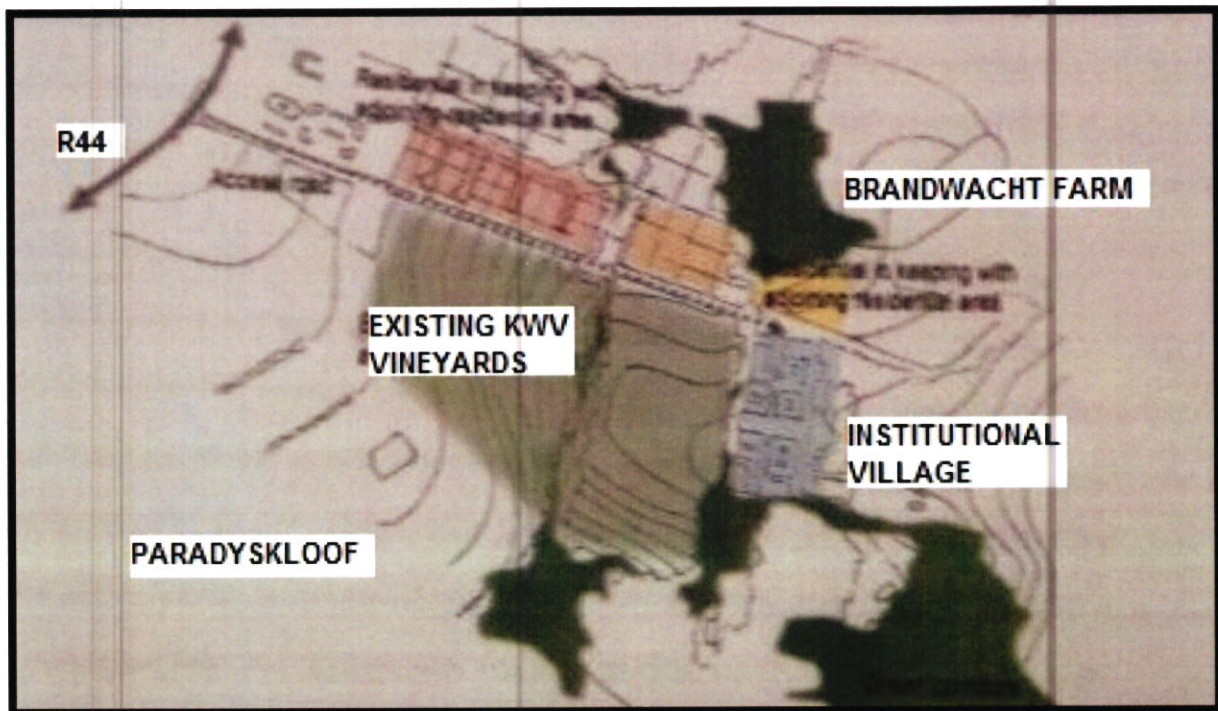


Figure 5.2: The proposed Institutional Village on Farm Grondves

The Institutional Village will be located on Farm Grondves – abutting the subject property. This implies the future inclusion of the Paradyskloof SDA into the urban edge of Stellenbosch. The subject property will subsequently be wedged in between the existing residential area of Brandwacht and the Paradyskloof SDA. It will therefore only make sense to also include the subject property in the urban edge.

5.5 CREATING A COMPACT URBAN FORM FOR STELLENBOSCH TOWN

It is accepted that a town's urban form is dictated mainly by biophysical factors such as topography, rivers and infrastructure (e.g. major roads) which may lead to an irregular organic form with tentacles and nodes. However, there will always be the natural inclination to follow a regular compact form, striving towards optimum proximity and connectivity. In this regard the subject property is ideally located between the residential areas of Brandwacht and Paradyskloof and can therefore be regarded as logical infill development,

rather than conventional urban sprawl. This view is further supported in the redefinition of the town's future urban form by the construction of the foreseen future main road network (e.g. the proposed eastern link road).

The artificial indentation of the proposed urban edge to exclude the subject property is unjustifiable. The urban edge is defined in the IDP as being the boundary between urban development and the valuable natural and agricultural hinterland which, along with interrelated policy, serves to manage, direct and control the outer limits of urban expansion.

The subject property does not form part of any rural hinterland. It is located within Stellenbosch town (adjacent to the Municipality's planned Institutional Village) and there are built-up urban areas next to more than 60% of its boundaries. Developing the subject property will therefore lead to a more compact urban form.

5.6 IMPACT ON THE EASTERN LINK ROAD

A main contributing factor for our land use planning application and development proposal is the proposed Eastern Link Road (i.e. previously commonly referred to as the North-South Road), which has already been proclaimed in the late 1960's and for which an alignment has been determined. A copy of iCE Group's Eastern Link Road design is attached hereto (see **Section D**).

The construction of the Eastern Link Road will subdivide the subject property into two smaller portions of $\pm 17\text{ha}$ and $\pm 11\text{ha}$ each which will have an additional negative impact on the feasibility of using the land for agricultural purposes. The proposed alignment of the Eastern Link Road is indicated on Figure 5.3 below.



Figure 5.3: Alignment of the proposed Eastern Link Road

The Eastern Link Road section through Paradyskloof already exists and is known as Wildebosch Street. Furthermore, the Eastern Link Road's reserve has already been established in the Brandwacht residential area (although the road has not yet been constructed), as well as over Blaauwklippen farm (referred to as public road reserve Farm 369/18), connecting it with the R44.

The proposed Eastern Link Road, together with the proposed Western Bypass and the proposed Techno Park Link Road, forms part of the Master Road Network Plan for Stellenbosch and will eventually have a significant impact on the town's mobility and urban form.

The proposed Eastern Link Road traversing Paradyskloof and Brandwacht, will grant direct access from Stellenbosch central to the R44 (Strand Road) and thus also to the proposed Western Bypass. This will greatly improve traffic flow in and around Stellenbosch.

5.7 USE FOR AGRICULTURAL PURPOSES NOT FEASIBLE

The experts agree that the use of the property for agricultural purposes is not feasible based on the following reasons:

- Previously, the relatively high agriculture soil potential was a reason why development rights were not obtained on the subject property. This portion of land, however, remains currently fallow as a result of factors reducing the viability of agricultural use. These factors include the scarcity of available water (currently limited to only the one farm dam, which is sufficient for only one or two irrigation cycles during the months of summer) and exposure to the “black southeaster wind” (making plantation of certain crops impossible). Due to insufficient water and the prevalence of strong winds, the only economically feasible crop suitable for the subject property is wine grapes. Wine is not an essential food, for which agricultural land must be preserved. Table grapes, which are successfully grown in Paarl, cannot be grown on the subject property.
- Practically, the land is only suitable for wine grapes, with input costs that could escalate to ±R300 000 per hectare (depending on the trellising system and irrigation system required). The return from wine grapes sales does not justify the high input and operational costs required. The soil is not ideally suited for food production; hence using the land for urban development will not directly impact on food security. The utilisation of agricultural land for development should therefore not be ruled out in cases where the land will not be farmed for the production of essential foods (wheat, meat, maize and vegetables), but rather for orchards and vineyards. In these cases, land use options should simply be evaluated on an equal basis on their ability to make profit, bringing in foreign capital, job creation, etc.
- The proposed Eastern Link Road, dissecting the subject property, further

reduces the economic viability and logistical operations of wine grape production on two divided portions of land, as result of the proposed road network.

- The subject property is, for all practical purposes, enveloped within Stellenbosch town and farming within an urban environment is impracticable. The proximity of the subject property to town encumbers the utilisation of the land for wine grape production, as the probability / potential for theft (of grapes as well as infrastructure) is inversely proportionate to the distance travelled from residential areas. Neighbouring residential areas also reduce the effectiveness of pesticides due to the limited type of pesticides appropriate for usage in close proximity to residential areas.
- The subject property is fairly small (only 30ha) and the agricultural land suitable for vines is only ± 20 ha in extent. The re-development of the subject property with the planting of new vines is not an economically viable option. According to Elsenburg 40ha of land is needed for a effective agricultural land unit.
- Being situated within an urban environment, the production of wine grapes on the subject property is susceptible to more negative influences than in a rural environment; e.g. pests (including birds), constraints on noise associated with farming activity, high labour costs and increased theft. The subject property will probably also be bisected by the proposed connecting thoroughfare and an investor intending to invest in vine farming will prefer to do so on land more suitable for that purpose than the subject property.
- A critical element in any farming enterprise is the availability of quality and quantity of water to establish and maintain crops. There are no short-term solutions, especially when one takes into account the current (and more frequent predicted occurrence of) drought conditions. The subject property has no water allocation from an irrigation scheme. According to a letter from the Helderberg Irrigation Board (dated 26 October 1995) the subject property is located outside the borders of the irrigation scheme and that the

farm cannot be incorporated into the irrigation scheme – see Figure 5.4 below.



Figure 5.4: Letter from the Helderberg Irrigation Board

- The property relies on the existing storage dam with a holding capacity of 34 000m³ litres of water. The farm dam is fed by runoff from the Brandwacht Stream during the winter months, but during the summer months this stream only flows occasionally. Without a consistent reliable water supply from an irrigation scheme the prospects for long term crop production is very limited. Even if the farm dam is at full capacity during the summer months the prospects of economically farming the subject property is unlikely.
- The only agricultural land adjacent to the subject property is Grondves farm, where the KWV produces virus-free material for the vine industry. The KWV grows virus-free vine root stocks under controlled greenhouse conditions in Paarl. These virus-free stocks are transported and multiplied at Grondves farm, adjacent to the subject property. More than 90% of the virus-free material that is used by the wine industry is produced on Grondves farm. The threat of contamination of the virus-free material from vines planted on the subject property would be considerably reduced if the subject property is not planted with vines. This will benefit the SA vine growing industry as a whole. KWV has asked on several occasions that no vine farming take place on the subject property.

5.8 AGRICULTURAL POTENTIAL IMPACT ASSESSMENT

OAS Development (Pty) Ltd – a company that specializes on agricultural business solutions – was instructed to assess the subject property's agricultural potential. A copy of their agricultural potential impact assessment report is attached hereto (see **Section E**).

According to their agricultural report the following can be concluded as an opinion on the subject property's agricultural potential:

- Brandwacht farm is already succumbed by urban development over the past years. The expansion developments actually defined Brandwacht

farm's future to be part of urban use.

- Dividing the property into two portions will escalate the inability to execute farming practices successfully. The isolated piece of land can become a dilemma for all involved if unprohibited informal housing floods the area. We have seen, in the recent past, how quickly and uncontrollably easy events like this take place in Stellenbosch (e.g. Stefan Smit / Farm Watergang now called Azania).
- Finally, the assessment is that Brandwacht farm is a prime property stripped from its original purpose as a productive farm with financial viability. City expansion / urbanization onto the farm's borders – on three sides – accompanied by a proposed road across the property define (logically) its future to become an integral part of Stellenbosch urban environment.

Furthermore, the Western Cape Department of Agriculture has confirmed that they have no objection against the proposed urban development of the subject property as it is located inside the department's their boundary line of land not designated for agricultural land (commonly referred to as the "*agricultural urban edge*") – see Figure 5.5 below.



Figure 5.5: Western Cape Department of Agriculture's "urban edge plan"

A copy of the Western Cape Department of Agriculture's letter of no objection is attached hereto (see **Section F**).

In 2018 and 2019 the Western Cape Department of Agriculture commented on the Stellenbosch Municipal Spatial Development Framework process and submitted their "*agricultural urban edge*" plan to the Stellenbosch Municipality as part of their comments on the process.

5.9 ADDRESSING THE TOWN'S HOUSING NEEDS AND BACKLOG

According to the Stellenbosch Municipality's IDP the inadequate supply of housing is a main concern. The greater municipal area has a current and future housing backlog, half of which are for middle and more affluent households. The availability of developable land for housing opportunities is extremely limited and the Stellenbosch Municipality will inevitably have to redefine the

current Stellenbosch urban edge to identify additional land deemed desirable for urban development and the creation of the much needed housing opportunities in alignment with all goals and objectives of the IDP.

From the above it is evident that the inclusion of the subject property for residential purposes will greatly contribute towards addressing the housing needs and backlog by providing much needed additional housing opportunities. Many people live in Somerset West and work in Stellenbosch. By providing additional housing opportunities in Stellenbosch for these people the local tax base will increase and the traffic impact on the R44 will decrease.

5.10 PROVIDING BALANCED HOUSING STOCK

In 2017 the Stellenbosch Municipality approved a development framework plan for the northern extension of Stellenbosch. This plan makes provision for $\pm 5\,200$ housing opportunities, ranging from subsidised housing to upper GAP housing ($\pm R1.2$ to $\pm R2$ million in value). In order to maintain economic balance in Stellenbosch with regards to housing stock, it is only logical that provision for housing opportunities aimed at the medium to higher end of the market should simultaneously be provided in Stellenbosch. The development of the subject property will provide housing opportunities aimed at the medium to higher end of the market and it is our opinion that the subject property is deemed a desirable geographic location for this purpose as well as for maintaining a healthy economic balance for Stellenbosch as a whole.

5.11 NO LOSS OF A CRITICAL BIODIVERSITY AREA

The subject property is not an environmentally sensitive site. It was planted with vineyards and actively farmed until the late 2000's. However, for the last ± 10 years the subject property has been uncultivated – as illustrated on Figures 5.6 and 5.7 below.

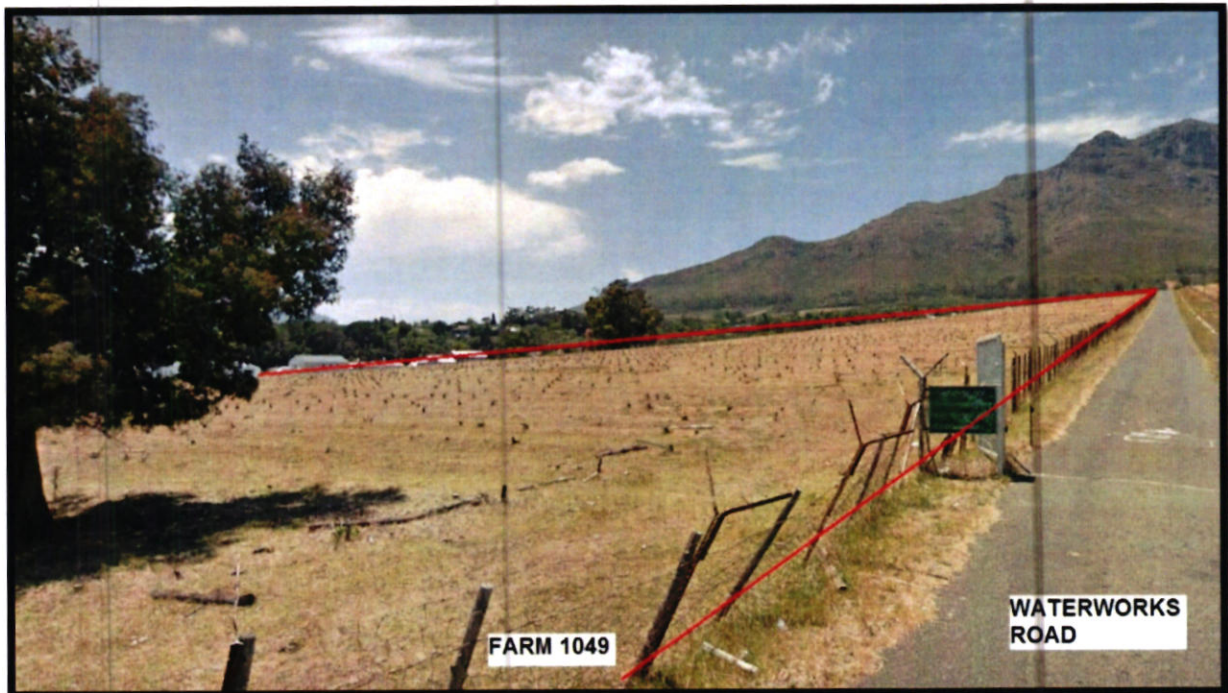


Figure 5.6: The subject property is fallow land

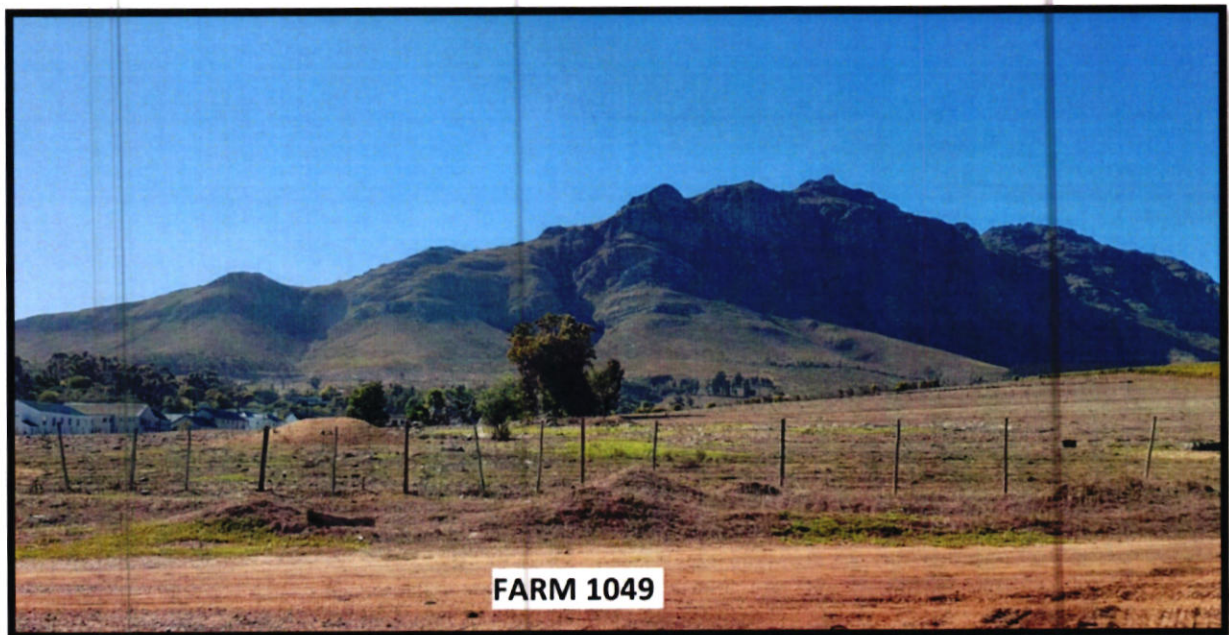


Figure 5.7: The subject property is fallow and uncultivated land

It is therefore clear that the subject property is not environmentally sensitive

and the inclusion thereof into the urban edge (and subsequent urban development) will not lead to a loss of a critical biodiversity area.

5.12 LIMITED IMPACT ON HERITAGE RESOURCES

Ms Lize Malan (heritage practitioner) was instructed investigate the subject property's heritage resources, the inclusion of the subject property within the Stellenbosch urban edge and future development of the subject property from a heritage point of view. A copy of her heritage assessment report is attached hereto (see **Section H**).

From her heritage assessment report, it is clear that the subject property's heritage resources are limited and that the inclusion of the subject property into the urban edge and subsequent urban development of the subject property will not lead to a significant loss of any heritage resources. In her report Ms Malan states that it is her opinion as a heritage practitioner that:

- *"The recent developments that have been allowed on the remains of the original Brandwacht farm, particularly the subdivision of the werf and the development of large office buildings along the R44 have eroded what was remaining of the heritage value of the Remainder of Farm 1049, Stellenbosch, to such an extent, that restrictions on the development of remaining farmland would be pointless. Although other considerations may come into play, it is the author's opinion that from a heritage perspective the property could be included in the urban edge for the settlement of Stellenbosch".*

5.13 LIMITED VISUAL IMPACT

Megan Anderson Landscape Architects (MALA) was appointed to prepare a visual framework report for the proposed development of the subject property.

The purpose of the visual framework report is to identify scenic resources, visually sensitive areas and receptors, and to determine visual opportunities and constraints. A copy of the visual framework report is attached hereto (see **Section I**).

In MALA's visual framework report it is stated that there are areas of the subject property that are lower lying and not visually sensitive, but there are also other areas of the subject property that are higher lying and more visually sensitive. Urban development can be permitted from a visual point of view on the lower lying areas, and the potential visual impact of urban development on the visually sensitive areas of the subject property can be mitigated through development rules, residential densities, erf sizes, building form, style and colour and landscaping.

The proposed development will be located below the 240m contour line (i.e. not higher than the existing Brandwacht and Paradyskloof residential areas) and only two large residential erven ($\pm 6\,000\text{m}^2$ each) will be located above this contour line. This will further mitigate the proposed development's visual impact.

It is consequently MALA's opinion that there are no reasons why visually appropriate urban development cannot be permitted on the subject property. The proposed urban development of the subject property is therefore supported from a visual impact point of view.

5.14 SOCIO-ECONOMIC BENEFITS

In 2018 – as part of the Stellenbosch Municipality's Spatial Development Framework process – Dr Jonathan Bloom (Multi-Purpose Business Solutions) undertook a market viability assessment and to determine the socio-economic implications associated with the proposed urban development of the subject

property. A full copy of Dr Bloom's 2018 report is attached hereto (see **Section G**) and is summarised as follows by Dr Bloom in the report's executive summary:

Nature and Scope of the project

Brandwacht II is conceived as a residential development of ± 30 ha located in an area that forms part of the Brandwacht Farm, abutting the Brandwacht and Brandwacht-on River residential area to the north, a commercial node to the west and open areas to the south. The objective of the study is to consider the scope of the project, its impact and relevance based on three pillars that cover (1) the market from a demand and supply perspective, (2) the socio-economic impacts from an income and employment perspective, and (3) its fit for purpose.

The Brandwacht II development covers the following scope of land uses:

- 260 residential stands of between 350m^2 and 800m^2 , with an average stand size of about 500m^2 .
- Sizes of dwelling units assuming a 50% coverage are anticipated to range from between 170m^2 and 400m^2 , with an average of about 250m^2 per unit.
- Private open space of ± 7 ha plus $\pm 1,35$ ha of the land a road reserve for the Eastern Link Road which splits the farm in half.

The Brandwacht II project caters for the middle to high-income segment of the market and is aimed at a portion of the income bracket for households that earn between R809 203 to R1.6 million per annum would also form part of the segment likely to take up the housing opportunity, with units ranging from R2.5 million and R4 million.

Brandwacht II offers a scope of housing that addresses various emerging trends related to demand for housing of which the key trends are lifestyle, proximity, availability of key infrastructure, access and transport. The proposed housing is intended to attract millennials and persons that work in Technopark, at the surrounding commercial enterprises and the surrounding area. The properties will be sold on an own-title basis and for the purposes of this analysis, are aligned in terms of the classification adopted by the Stellenbosch Municipality for the levying of development charges.

In order for the project to be fit for purpose, broad market and socio-economic criteria need to be considered. Brandwacht II should with some limited variance, fall within the demand forecasts for different housing units in Stellenbosch Town, must offer socio-economic benefits to locals and ensure that the Municipality is able to consider the project from both a financial, policy and planning context. This report adopts an economic perspective related to supply and demand, and the need to deliver benefit to the local economy and jobs to people. Stellenbosch Town includes central Stellenbosch, Jamestown, De Zalze, Onder-Papagaaienberg, Kyamandi, Cloeteville and Idas Valley.

Key outcomes

Stellenbosch housing trends

Higher priced houses have emerged as a trend in Stellenbosch Town over the period 2008 to 2017 and current supply is unable to meet the demand in the higher price segment. If this trend continues, average equilibrium prices and price points will increase and due to the lag in provision of supply or curtailing supply together with the inelasticity of supply, no integration of various housing typologies in development will be possible. The only way to reduce the average equilibrium price for houses is to permit development that underpins market demand for a range of housing typologies and implement

policies that make it attractive for developers and investors to provide in the need for different types of housing.

A total of 17 301 units form part of the estimated demand over the next 20 years, i.e. 9 277 houses smaller than 80 m², 2 793 houses larger than 80 m², 2402 flats and 2 829 townhouses. These figures represents the adjusted demand forecasts prepared by Rode and Associates for Stellenbosch Town.

Key salient outcomes from the analysis include the following:

- The current supply is unable to meet demand for all housing types in Stellenbosch Town;
- Sales trends in the Stellenbosch Municipal area suggest a demand for higher priced houses;
- Emerging trends suggest that average equilibrium prices¹ will increase and continue to increase in Stellenbosch Town due to the following:
 - Limited supply of new development (housing) stock;
 - Lag in the provision of supply caused by inelasticity², which suggests that supply is unable to meet demand in the short-term, resulting in price increases reaching new highs; and
 - Continuous and sustained price increases will curtail the opportunity to create and develop appropriate mixed-use residential projects that offer a range of affordability options.
- An estimated housing demand of 865 units per annum on average for next 20 years based on the adjusted Rode forecast:
 - 464 houses smaller than 80 m²
 - 140 houses larger than 80 m²
 - 120 flats
 - 141 townhouses
- It is possible to relate vehicle traffic and employment to future retail, commercial and industrial development in Stellenbosch Town over the next 20 years as follows:
 - 1 additional vehicle will **enter Stellenbosch Town** for every 52 m² of retail, office and industrial space developed;
 - 1 additional employee will originate from **outside Stellenbosch Town** for every 44 m² of Gross Lettable Area (GLA)³ developed
 - 1 additional employee would **reside in Stellenbosch Town** for every 30 m² of GLA developed (given the percentage of persons that commute for employment purposes)
- A total of 8 830 people⁴ working in Stellenbosch Town by 2036 would form part of the daily commuting workforce;
- Annual housing need per annum on average over the next 20 years based only on commuters:
 - 371 units for middle-income category

- 70 units for high-income category
- Demand for 388 dwelling units from commuters and persons that would reside in Stellenbosch due to future retail, commercial and industrial development based on a 50% take up of the need.
 - The average annual demand for houses smaller than 80 m², flats and small townhouses ranges from 194 to 241 units.
 - The demand for houses larger than 80 m² for the high-income group by 2036 ranges from 97 to 194 dwelling units on average per annum.

Development Pipeline for Stellenbosch Town

The pipeline of projects envisaged by developers for Stellenbosch Town has an envisaged rollout over the next 10 years. Although the pipeline does not necessary include all projects, indications are that approximately 9 100 units are envisaged to be supplied over the following 10 years. The table below provides an indication of the percentage contribution of the pipeline projects to the Rode adjusted forecast per housing type and the contribution of each housing type to the total number of units. **The results indicate that the Development pipeline would contribute 52,60% of the total units to the adjusted Rode demand forecast.**

Housing type	Amended Rode Demand forecast	Development Pipeline	Percentage of housing type	Percentage of total pipeline
Houses smaller than 80 m ²	9 277	2 860	30,83%	31,43%
Houses larger than 80 m ²	2 793	2 872	102,83%	31,56%
Flats	2 402	1 838	76,52%	20,20%
Townhouses	2829	1 530	54,08%	16,81%
Total units	17 301	9 100	52,60%	100,00%

The housing types envisaged for the Development Pipeline all fall within the adjusted Rode forecast, except for houses larger than 80 m² that exceeds the forecast by 2,83%. A breakdown of the envisaged supply suggests that 31,56% of housing units supplied over 10 years accrues to dwelling units larger than 80 m², which are more aligned with middle to high-income groups; 31,43% to affordable housing (lower to middle-income groups); 16,81% to townhouses (middle-income group) and 20,20% to flats.

The projects that form part of the pipeline, based on the progressive growth trajectory⁵ (same growth trajectory used to demonstrate demand over 20 years), is envisaged to deliver 9 100 units over 10 years, which is 31,83% more than the forecast over the same period. By year 12 of the forecast period, the forecasted number of units will exceed the number of pipeline units by 1 158 or 12,72%. In other words, slightly more than a one-year gap exists between the envisaged completion of development for the Pipeline projects and the projected demand for housing units in Stellenbosch Town after 10 years (refer to Figure 21 of the Report).

Brandwacht II: Fit for Purpose

Brandwacht II forms part of the pipeline of projects envisaged for Stellenbosch Town by developers over the next 10 years. The proposed development represents about 1,50% of the total number of housing units included in the adjusted Rode forecast by 2036, and 2,86% of the total number of housing units envisaged as part of the project pipeline envisaged by developers.

CHAPTER 6: ORDERLY PLANNING

6.1 ORDERLY PLANNING

Engineering consultants were appointed to determine the impact of the proposed development on the municipal bulk infrastructure, to investigate the availability of engineering services and to liaise with the municipal engineering departments.

6.2 IMPACT ON TRANSPORT

In 2018 iCE Group (Pty) Ltd transport engineers were instructed to assess the proposed development's transport impact and they concluded that the proposed urban development of the subject property is supported from a traffic point of view. A copy of their traffic impact statement report – which was prepared as part of the Stellenbosch Municipal Spatial Development Framework process – is attached hereto (see **Section J**).

6.3 IMPACT ON CIVIL ENGINEERING SERVICES

The construction of the Western Bypass and associated link roads will require considerable financial support and although the Western Bypass is deemed a Provincial Road, the associated link roads will have to be funded by Stellenbosch Municipality. The development charges of the proposed development will contribute towards the upgrading of the road network. Development charges deriving from the proposed residential development on the subject property will amount to ±R24.5 million. This money can be used by the Stellenbosch Municipality to assist in funding the construction of the proposed road network or other required municipal bulk infrastructure upgrades.

One of the objectives of the IDP is to use bulk engineering services more efficiently. With the subject property being surrounded on three sides by urban development, there is a well-established network of engineering services such as water, electricity, roads, etc. An "infill" development of this nature can effectively utilise this network. By comparison, a development on the urban periphery may require high costs of expanding the network. For this reason, Bart Senekal Inc. Consulting Civil & Structural Engineers were instructed to investigate the town's current situation with regards to the provision of the basic civil engineering services; i.e. water supply, sewerage, storm water drainage and solid waste removal for the proposed development of the subject property.

According to Bart Senekal Inc. Consulting Civil & Structural Engineers' civil engineering services report the required basic civil engineering services for the proposed development can be accommodated by the Stellenbosch Municipality in their existing infrastructure and that the attenuation of peak storm water run-off from the subject property will be implemented on site by way of three storage ponds. A storm water drainage route is proposed over Farm 1049/3, but alternative routes are also possible.

A copy of Bart Senekal Inc. Consulting Civil & Structural Engineers' civil engineering services report is attached hereto (see **Section K**).

CHAPTER 7: CONCLUSION

7.1 CONCLUSION

We submit (based on the planning motivation and specialist reports) that the proposed urban development of the subject property can be deemed desirable as there is a need for the development and the approval will lead to significant tangible benefits for the Stellenbosch Municipality and its residents.


We hereby confirm that the proposed development of the subject property (as put forth in this report):

- Will support the principles of the Stellenbosch Municipality's Integrated Development Plan;
- Will support the Stellenbosch Municipality's vision for the Paradyskloof Special Development Area;
- Will contribute to creating a compact urban form for Stellenbosch town;
- Will not lead to a loss of valuable agricultural land;
- Will not have a negative impact on engineering services;
- Will contribute to the upgrading of municipal engineering infrastructure;
- Will pay development charges to the Stellenbosch Municipality;
- Will increase the municipal tax base;
- Will address housing needs and backlog;
- Will provide balanced housing stock;
- Will not lead to a loss of a critical biodiversity area;
- Will have a limited impact on heritage resources;
- Will have a limited visual impact; and
- Will have significant socio-economic benefits for Stellenbosch town as it will (according to Dr Bloom's 2018 report):
 - Represent a direct investment of ±R1 002 million;
 - Create ±228 new residential units;

- Create $\pm 3\ 168$ new employment opportunities (during the construction phase) and ± 770 new permanent employment opportunities;
- Generate $\pm R24.5$ million in development charges; and
- Generate $\pm R8.2$ million per annum in property rates.

Restrictions on the development of the remaining farm land will be pointless but the urban development thereof will contribute positively to the town's future growth. There is a need for the product, and it is deemed to be desirable and for this reason, we strongly recommend that the site specific deviation from the provisions of the Stellenbosch Municipality's Spatial Development Framework be supported and that the rezoning application be approved.

7.2 SIGNATURE OF APPLICANT



CLIFFORD HEYS

PR. PLANNER (SA): A/1158/2000



<h2>LIST OF ANNEXURES</h2>

SECTION A	POWER OF ATTORNEY
SECTION B	TITLE DEED AND SG DIAGRAM
SECTION C	CONVEYANCER CERTIFICATE
SECTION D	PLANS
SECTION E	AGRICULTURAL POTENTIAL IMPACT ASSESSMENT REPORT
SECTION F	WESTERN CAPE DEPARTMENT OF AGRICULTURE'S LETTER OF SUPPORT
SECTION G	SOCIO-ECONOMIC IMPACT ASSESSMENT REPORT
SECTION H	HERITAGE ASSESSMENT REPORT
SECTION I	VISUAL FRAMEWORK REPORT
SECTION J	TRAFFIC IMPACT STATEMENT
SECTION K	CIVIL ENGINEERING SERVICES REPORT
SECTION L	LAND USE PLANNING APPLICATION FORM

SECTION A


POWER OF ATTORNEY

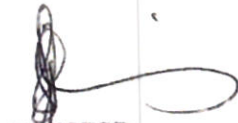
**RESOLUTION OF THE DIRECTORS OF BRANDWACHT LAND
DEVELOPMENT (PTY) LTD TAKEN ON 13 APRIL 2018**

RESOLVED

1. That the company, in respect of the Remainder of the Farm Brandwacht no. 1049, Stellenbosch:
 - Submit a comment on the Stellenbosch Municipality's Revised 4th Generation IDP 2018/2019; and
 - Submit an application to amend the Stellenbosch town's urban edge (as indicated in the Municipal Spatial Development Framework) to include the subject property in the urban edge and to earmark it for future urban development.
2. That TV3 Projects (Pty) Ltd be appointed as agent of the company and to submit the necessary comments and applications, and to prosecute the applications to their final determination.


DIRECTOR


DIRECTOR


DIRECTOR

SECTION B

TITLE DEED & SG DIAGRAM

HOFMEYR HERBSTEIN GIHWALA
CLUVER & WALKER INC.

Prepared by me

CONVEYANCER

J A I DE WAAL

000052384 / 2011

VERBIND MORTGAGED	
VIR FOR R 41-000 000.00	
003315 / 11	REGISTRATEUR/REGISTRAR
T 0 FEB 2011	

BC

GEKANSELLEER
CANCELLED

REGISTRATEUR/REGISTRAR

09 NOV 2011

SEC: RE FY	
FA	165.00

DEED OF TRANSFER

HOFMEYR HERBSTEIN GIHWALA CLUVER & WALKER INC.
ATTORNEYS
STELLENBOSCH

BE IT HEREBY MADE KNOWN

THAT MICHELLE SPENCER

Conveyancer, appeared before me, Registrar of Deeds, at Cape Town he being duly authorised thereto by a Power of Attorney signed at STELLENBOSCH on the 3rd day of DECEMBER 1998 and granted to him by

MAZATLAN ESTATES (EIENDOMS) BEPERK
No 55/00151/07

T 118189/98

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FOR ENDORSEMENTS SEE FILE

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AND the Appearer declared that his Principal on the 28 MAY 1998 sold the undermentioned property to the undermentioned Transferee and that he, the Appearer, in his capacity aforesaid, did by these presents, cede and transfer in full and free property to and on behalf of

BRANDWACHT LAND DEVELOPMENT (EIENDOMS) BEPERK
No 98/11656/07

its Administrators or Assigns

Remainder of the Farm BRANDWACHT No 1049, in the Division of STELLENBOSCH, Province of the WESTERN CAPE

MEASURING: 48,5702 (Forty Eight Comma Five Seven Zero Two) Hectares

FIRST TRANSFERRED and still held by Certificate of Consolidated Title No T 18631/1967 with Diagram No 2016/67 annexed thereto.

- A. The figure B C D E F G H J K Y X W V U T S R and M N Z on Diagram No 2016/67 annexed to Certificate of Consolidated Title No T 18631/1967 is **subject** to the conditions as are referred to in Deed of Transfer No T 2732 dated 3 March 1903.
- B. The figure A R S T U V W X Y L Z N O P Q on Diagram No 2016/67 annexed to Certificate of Consolidated Title No T 18631/1967 is **subject** to such conditions as are referred to in said Deed of Transfer No T 2732 dated 3 March 1903.

- C. AND SUBJECT FURTHER to the conditions referred to in the endorsement dated 12th May 1965 on said Deed of Transfer No T 847 dated 31st January 1955 which endorsement reads as follows:

"A portion of the herein-mentioned property in Para 1 meas. 0.027 Morgen has been expropriated by Divisional Council of Stellenbosch in terms of Section 130 of Ord. 15/1952 as amended Vide Notice of expropriation No. H/9/3 d.d. 28/4/65 filed as exprop. caveat 209/65 plans in duplicate filed herewith."

- D. BY VIRTUE OF Notarial Deed of Servitude No K 746/1986S dated 28 July 1986 the Remainder of the hereinmentioned property, measuring 48,5702 hectares, is subject to a servitude of pipeline which extend over an area of 7m wide, the eastern boundary of which is denoted by the letters ABC on Servitude Diagram No 8701/83 in favour of the Municipality of Stellenbosch. The Servitude Diagram is filed with the abovementioned Servitude Deed.

As will more fully appear from said Servitude Deed.

WHEREFORE the Appearer, renouncing all the right and title of the TRANSFEROR

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

TRANSFEREE

its Administrators or Assigns

now is and henceforth shall be entitled thereto, conformably to local custom; the State, however, reserving its rights; and finally declared that the purchase price amounting to R12 000 000,00 (Twelve Million Rand) has been satisfactorily paid or secured.

IN WITNESS whereof I, the said Registrar of Deeds, together with the Appearer, q.q., 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,

in Cape Town, Cape Province, on the 17 day of December in the year of our Lord, One Thousand Nine Hundred and Ninety Eight (1998).

q.q.



In my presence



Registrar of Deeds.

SERTIFIKAAT VAN 'N REGISTRERDE TITEL UITGEREIK CERTIFICATE OF REGISTERED TITLE ISSUED	
IN OPSIGT VAN IN RESPECT OF <u>ERF 16045, STELLEMBOSCH</u>	
<u>WEDERIGE OORDE</u> <u>12,8012 ha</u>	<u>RESTANT</u> <u>REMANDE</u> <u>35,7690 ha</u>
<u>T-000047233-1/2011</u>	<u>1/11</u> REGISTRAR
<u>2011-08-29</u>	

update

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FOR ENDORSEMENTS SEE PAGE 6

Endorsement

By Virtue of Notarial Deed of Servitude no 000000277 / 2012, dated 9th March 2012, the within-mentioned property is **subject** to the following:

1. A **servitude right of way**, which is depicted by the figure ABCDEFGHJKLMNP on diagram SG number 3034/2011, **in favour of** Erf 16167 Stellenbosch, measuring 2, 3515 hectares, held by Deed of Transfer no. T 63019/ 2011.
2. A **servitude right of way**, which is depicted by the figure ABCDEFGHJKLMNPQRSTUVWXYZ on diagram SG number 4509/2011, **in favour of** Erf 16167 Stellenbosch, measuring 2,3515 hectares, held by Deed of Transfer no. T63019/2011.
3. A **water pipeline servitude** which is situated within the servitude area along the western side of the line BCDEFG on diagram SG number 3034/ 2011, **in favour of** Erf 16167 Stellenbosch, measuring 2, 3515 hectares, held by Deed of Transfer no. T63019/2011
4. A **water pipeline servitude** along the southern side of the line WVTSR and the western side of the line RQPNMLK indicated on diagram SG number 4509/2011, **in favour of** Erf 16167 Stellenbosch, measuring 2, 3515 hectares, held by Deed of Transfer no. T63019/2011.
5. A **3 metre wide sewerage pipeline servitude** in perpetuity, which sewerage pipeline is situated within the servitude area along the western side of the line LK and the southern side of the line KJ indicated on diagram SG number 4509/2011, **in favour of** Erf 16167 Stellenbosch, measuring 2, 3515 hectares, held by Deed of Transfer no. T63019/2011.

6. A **3 metre wide sewerage pipeline servitude** in perpetuity, the south western boundary of which pipeline is indicated by the lines AB, BC, CD, DE and EF on diagram SG number 738/2011, **in favour of** Erf 16167 Stellenbosch, measuring 2, 3515 hectares, held by Deed of Transfer no. T63019/2011.

As will more fully appear from the said Notarial Deed together with ancillary rights.

Deeds Office

Cape Town


Registrar of Deeds

FOR FURTHER ENDORSEMENTS SEE 7
VIA VERDERE EINDOSSEMENTE SIEN

Endorsement

By Virtue of Notarial Deed of Servitude no K 000000278 / 2012, dated 8th February 2012, the within-mentioned property is **entitled** to a perpetual dam servitude to draw water from and to store water in the dam over Erf 16143 Stellenbosch, measuring 1,0330 hectares, held by Deed of Transfer no. T 63019/2011.

As will more fully appear from the said Notarial Deed together with ancillary rights.

Deeds Office

Cape Town

Registrar of Deeds

PORTION 3 = 2,3203 hectares

GETRANSPORTEER AAN	TRANSFERRED TO
KEE ENTERPRISES (PTY) LTD	
RESTANT/REMAINDER 33,4487 hectares	
T00-0026570 / 2013	
2013-06-04	
REGISTRATEUR/REGISTRAR	

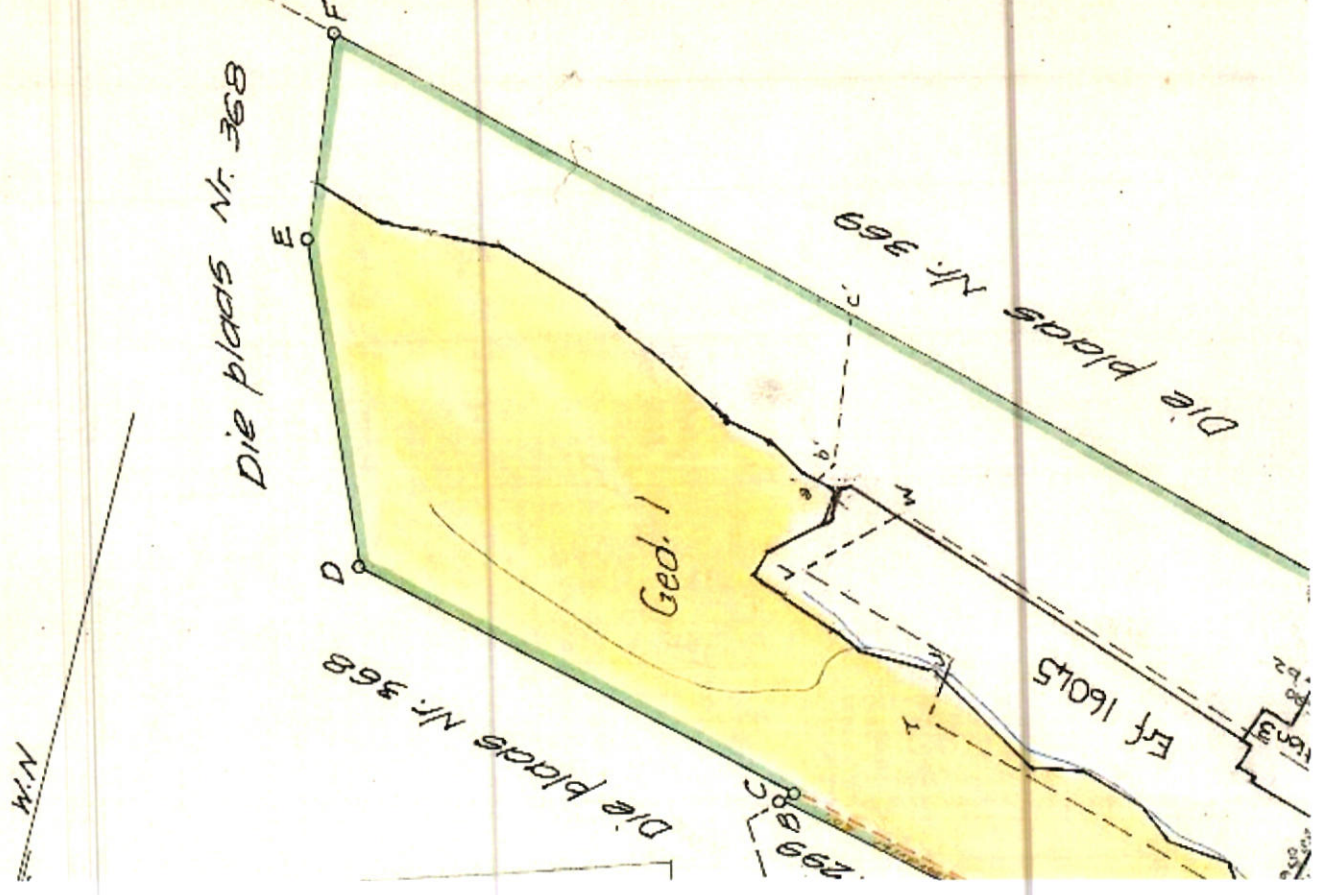
No. 2016/67

Goedgekeur.

L. Bary
Landmeter-generaal.

21 - 6 - 1967

SYE Kaapse Voet	RIGTINGS- HOEKE	STELSSEL 10 190 KOORDINATE	
		y	x
AB 3241.9	282 43 30	11300000.0	+11300000.0
BC 71.4	43 45 10	+42222.4	+35637.5
CD 2070.2	283 49 30	+39060.2	+36351.6
DE 1400.8	336 44 00	+39109.6	+36403.2
EF 885.6	353 22 50	+37099.4	+36897.9
FG 5117.1	104 53 40	+36546.1	+38184.8
GH 364.4	208 18 30	+36444.0	+39064.5
HJ 286.4	107 23 30	+41389.2	+37749.2
JK 385.8	191 37 10	+41216.4	+37428.4
KL 646.3	103 28 30	+41489.7	+37342.8
LM 746.4	24 25 50	+41412.0	+36964.9
MN 50.0	104 57 10	+42040.5	+36814.3
NO 848.2	206 04 00	+42349.2	+37493.9
OP 357.7	201 11 30	+42397.5	+37481.0
PQ 273.6	160 28 00	+42224.8	+36719.1
QA 543.8	154 20 40	+41895.5	+36385.6
		+41987.0	+36127.7



Beskrifwing van Baken:

- A.O. = Geen baken.
- B = Ingeplante Rijk 2'6" hoog met 1/2" gat.
- C.F. = Swaarysterhoekdraadpaal.
- D = Kruis op rots.
- E.H.J. = Ingeplante Rijk gelyk met grond.
- L.M. = Ysterpaal wat 6" vitskeek.
- V = 3/8" Ysterpen langs heerpaal.
- Q = 4'6" Ysterpaal wat 2' vitskeek geel geskilder.

Skaal 1:10,000

Die figuur A.B.C.D.E.F.G.H.I.J.K.L.M.N.O.P.Q

tel 116.0399 Morg grond voor, synde

MEETSTUKKE	KAARTNO.	LEWENTWIND	ANTE	GEPARAFEE
E.2454/183	8701/183	Die lyn 'abc' stel voor die oostelike grens van 'n 7m. wyd waterpyplyn-serwituut	Af K 746/863	af
E1060/2010	2406/2010 (See Dgm.)	Die Figur Si-508, J, Kard 521 stel voor 'n serwituut reg van weg	WITBOORD	
E1060/2010	4781/2010		Witdrakon	
326/2011	738/2011	binne die, effi, figi, ghm, en h'it stel voor die suidwestelike van 'n pyplynserwituut 3m wyd	*geens	
E1060/2010	3034/2010 (See Dgm.) and 1050/11	Die figur 02 b2 c2 d2 e2 f2 g2 h2 j2 k2 l2 m2 n2 p2 stel voor 'n Reg van weg Serwituut		
51855/2011	4509/2011	Die Figur Si-520, J, K and 521 stel voor 'n serwituut reg van weg		

SECTION C

CONVEYANCER CERTIFICATE



CONVEYANCER'S CERTIFICATE

I/We **Arend Leopold de Waal**

(conveyancer's name and surname)

Hereby wish to certify that a search was conducted in the Deeds Registry, Cape Town, regarding the following property(ies) (including both current and earlier title deeds/pivot deeds/deeds of transfer)

Remainder of the Farm BRANDWACHT No 1049, in the Division of Stellenbosch, Province of the Western Cape

(erf/ farm number/s and description/s as it appear in the title deed)

In respect of which it was found that there *are/are no restrictive conditions registered against such property(ies) prohibiting it from being utilised/developed for the following purposes (as elaborated in the accompanying application):

Residential development

(proposed use/development/zoning of property)

A. LIST OF RESTRICTIVE TITLE CONDITIONS *(if any)*


Categories	Are there title deed restrictions (indicate below)			Title deed and clause number if restrictive conditions are found
Use of land	Y	<input checked="" type="radio"/> N	NA	
Building lines	Y	<input checked="" type="radio"/> N	NA	
Height	Y	<input checked="" type="radio"/> N	NA	
Number of dwellings	Y	<input checked="" type="radio"/> N	NA	
Bulk floor area	Y	<input checked="" type="radio"/> N	NA	
Coverage/built upon area	Y	<input checked="" type="radio"/> N	NA	
Subdivision	Y	<input checked="" type="radio"/> N	NA	
Servitudes that may be registered over or in favour of the property	<input checked="" type="radio"/> Y	N	NA	<u>T118189/1998</u> - Endorsement (page 6A): Right of way servitude <u>T118189/1998</u> - Endorsement (page 6A): Water pipeline servitude <u>T118189/1998</u> - Endorsement (page 7): Dam servitude
Other restrictive conditions	Y	<input checked="" type="radio"/> N	NA	

B. AFFECTED PARTIES AS PER TITLE DEED (if any)

Organ(s) of state that might have an interest in the restrictive condition.	Y	<input checked="" type="radio"/> N	NA
A person whose rights or legitimate expectations will be affected by the removal/suspension/amendment of a restriction condition.	Y	<input checked="" type="radio"/> N	NA
All persons mentioned in the title deed for whose benefit the restrictive condition applies.	Y	<input checked="" type="radio"/> N	NA

C. PROCESS BY WHICH RELEVANT CONDITIONS WILL BE ADDRESSED*(please tick appropriate box)*

Application in terms of the Stellenbosch Municipal Planning By-Law (Section 15) <input checked="" type="checkbox"/>	National Deed of Cancellation (submit copy of signed agreement)	Expungement by means of 'rule nisi' application to the High Court (submit copy of court order)	If other, please specify N/A
---	---	--	---------------------------------

Signed at Stellenbosch on this 24 day of April 2018Full names and Surname: Arend Leopold de Waal Signature: 

Firm Postal Address:

Kindly endorse certificate by affixing firm's official stamp here and initial it.

<u>Cluver Markotter Building</u>
<u>Mill Street</u>
<u>Stellenbosch</u>

CLUVER MARKOTTER INC/ING.
Cluver Markotter Building/Gebou Mill Street / Meulstraat Docex 6, STELLENBOSCH, 7600 t (021) 808 5600 f (021) 886 5420 info@cm.law.za

Tel:

021 808 5600

E-mail:

arendw@cluvermarkotter.law

SECTION D

PLANS

- **PLAN 1: BROAD LOCALITY**
- **PLAN 2: LOCAL LOCALITY**
- **PLAN 3: CONCEPT LAYOUT**
- **PLAN 4: EASTERN LINK ROAD**

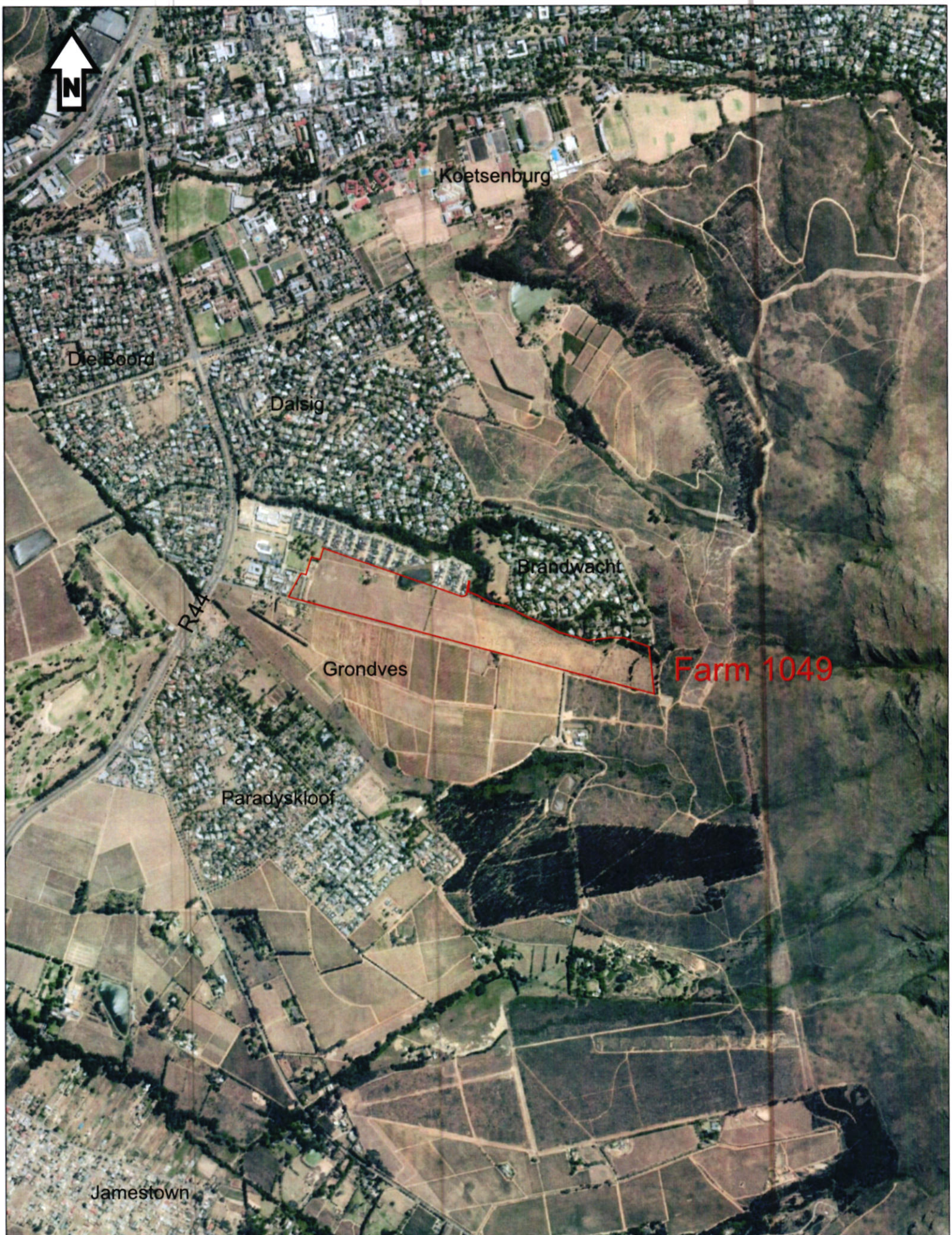


First Floor • La Gratitude Office Building
97 Dorp Street • Stellenbosch 7600
tel (021) 861 3800
fax (021) 882 8025
e-mail: stel@tv3.co.za
web: www.tv3.co.za

ARCHITECTS AND TOWN PLANNERS

Farm Brandwacht No.1049, Stellenbosch

Drawing:		Plan no.:	
Broad Locality		1	
Date:	13/04/2018	Scale:	1:50 000 (A4)
Project no.:	3504-P	Drawn:	WH
		Checked:	CH



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97 Dorp Street • Stellenbosch 7600
tel (021) 861 3800
fax (021) 882 8025
e-mail: stel@tv3.co.za
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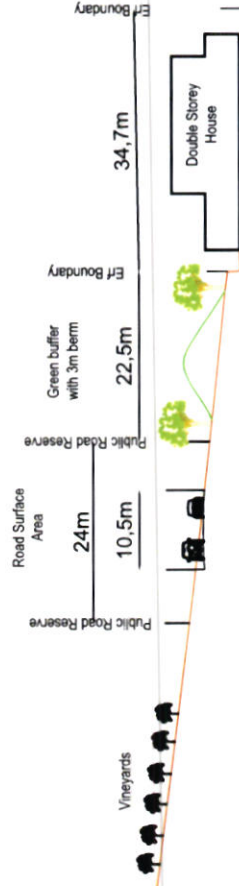
ARCHITECTS AND TOWN PLANNERS

Farm Brandwacht No.1049, Stellenbosch

Drawing:		Plan no.:
Local Locality		2
Date:	Scale:	
13/04/2018	1:20 000 (A4)	
Project no.:	Drawn:	Checked:
3504-P	WH	CH

yout

Cross Section





Note:
Road alignment information provided by ICE Traffic Engineers.



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97 Dorp Street • Stellenbosch 7600
tel (021) 861 3800
fax (021) 882 8025
e-mail: stel@tv3.co.za
web: www.tv3.co.za

ARCHITECTS AND TOWN PLANNERS

Farm Brandwacht No.1049, Stellenbosch

Drawing:		Plan no.:	
Eastern Link Road		4	
Date:	13/04/2018	Scale:	1:50 000 (A4)
Project no.:	3504-P	Drawn:	WH
		Checked:	CH

SECTION E

**AGRICULTURAL POTENTIAL IMPACT
ASSESSMENT REPORT**

The agricultural potential of the Farm Brandwacht No. 1049, Division of Stellenbosch

Contact person

Mr. Niel Du Toit
Director
Brandwacht Land Development (Pty) Ltd
Mobile: 083-226 9858

Compiled by

OABS Development (PTY) Ltd.

Researcher: Mr. Ariël Hugo
Email: hugo@oabs.co.za
Telephone number: 083-700 5323

Date

19 February 2018

Contact Details

Dr Daan Louw
Optimal Agricultural Business Systems
258 Main Street,
PO Box 3426
Paarl, 7622
Telephone number: +27 21 8702953
Mobile number : +27 82 8573458
E-mail : daan@oabs.co.za

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Figure 1: Location of the Farm Brandwacht No. 1049

Figure 2: Proposed north-south route

Figure 3: Letter from Helderberg Irrigation Board

1 INTRODUCTION

1.1 Background

OABS Development (Pty) Ltd is a company that specialises on agricultural business solutions and has been approached by the directors of Brandwacht Land Development (Pty) Ltd to assist them, as the owner of the Remainder of the Farm Brandwacht No. 1049, Stellenbosch, with an agricultural input on the Stellenbosch Municipality's proposed Municipal Spatial Development Framework.

1.2 Problem statement

The property is (in fact) located within existing urban environment of the Stellenbosch Municipality. The property's northern border is the Brandwacht residential area, to the west it is shielded by urban development next to R44 consisting of offices, a hotel and a hospital. The Stellenbosch Municipality owns land on the southern and eastern borders of the property (the Farm Grondves). Further south of the property is the Paradyskloof residential area.

Figure 1 illustrates the property's location graphically.

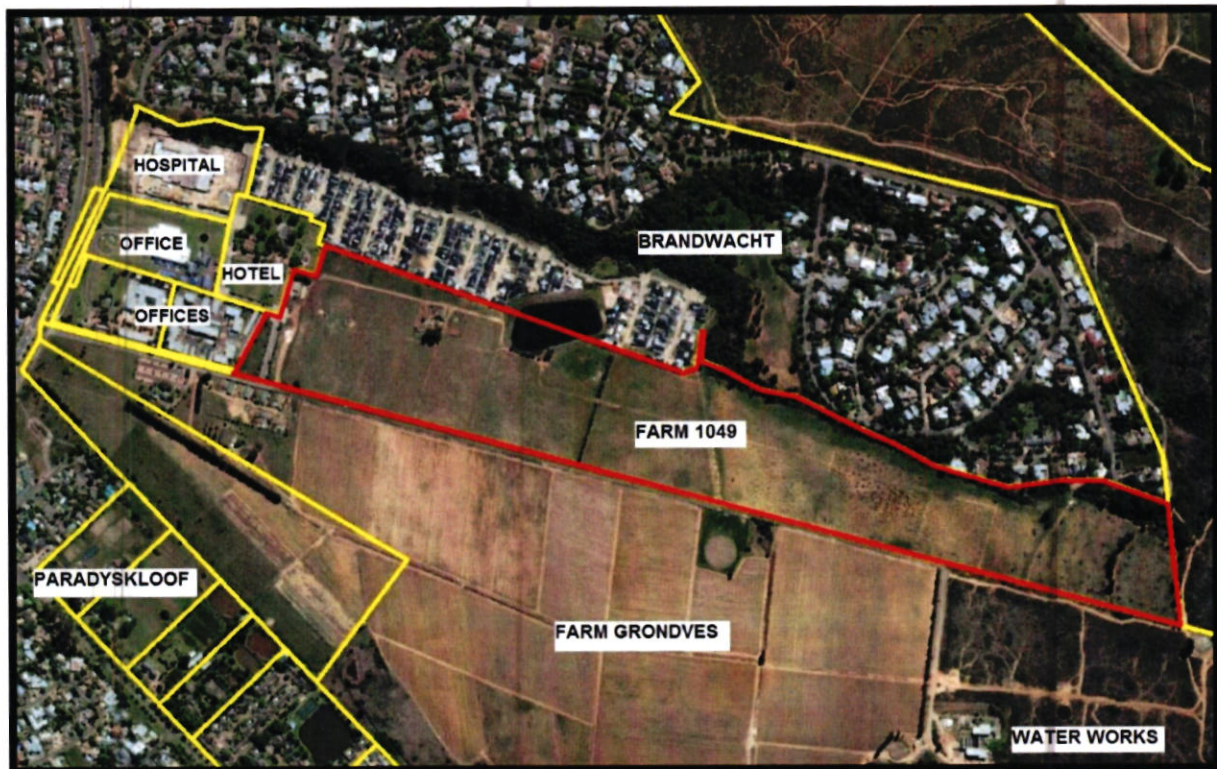


Figure 1: Location of the Farm Brandwacht No. 1049

Past experience indicate that the land owner has struggled to economically farm the property. This problem will now be exacerbated by the following:

- The property is 30ha in extent and only ± 20 ha of the property can effectively be planted with crops.
- The construction of the proposed north-south route – that will link the R44 with Stellenbosch central – will cut the subject property into two portions creating two smallholdings of ± 17.2 ha and ± 11.7 ha respectively. This will further diminish the subject property's agricultural potential.

Figure 2 illustrates the proposed north-south route's alignment.



Figure 2: Proposed north-south route

- The Stellenbosch Municipality is the owner of the abutting Farm 369. They are investigating the developing of an institutional village on a portion of Farm 369 (directly south of the subject property). The Municipality's proposed development will change the area's character from rural to urban and further complicate the successful farming of the subject property.
- The property is located in Stellenbosch between the existing residential areas of Brandwacht (to the north) and Paradyskloof (to the south). It has an urban character. Unfortunately, there is always a conflict between farming activities and urban activities; e.g. security, petty theft and vandalism of farming infrastructure and the negative impact on residents with the spraying of pesticides. The active farming of land located in an urban environment is logistically and practically challenging.
- Stellenbosch town is growing and if the subject property (which is located within the Stellenbosch urban environment) is not used for future urban development, then a farm located outside the Stellenbosch urban environment, will have to

be used for urban development in order to accommodate the town's urban expansion.

Against this background, the land owner approached OABS Developments (Pty) Ltd to provide them with an expert opinion on the existing agriculture development potential of the property, given these constraints.

Section 2 of this report will provide an analysis of the existing farming operations (and potential) and endeavour in concluding (Section 3) an agriculture opinion of potential future farming opportunities.

As a background study, the consultant relied on existing documentation regarding the subject and experience of similar situations or farming conditions.

2 STATUS QUO ANALYSIS

2.1 Ownership arrangements:

- Property: The property is described as the Remainder of the Farm Brandwacht No. 1049, Stellenbosch (in deed of transfer number T118189/1998).
- Location: Trumali Road, Stellenbosch.
- Local Authority: Stellenbosch Municipality.
- Ownership: Brandwacht Land Development (Pty) Ltd (Registration number: 1998/01165607)
- Extent: 30 hectares
- Servitudes: A notarial deed of servitude is registered (K746/1986S) for a pipeline in favour of the Stellenbosch Municipality.

2.2 Assessment of natural resources

This section will investigate and conclude on the available natural resources and infrastructure.

2.2.1 Soil

Stellenbosch holds the honour of being the most well-known and awarded wine region in South Africa. Rich soils and unique locations ideally suited to a variety of grape cultivars have ensured that Stellenbosch continues to dominate South African winemaking industry.

Studying the past performance of the Stellenbosch area the assessment is that the soil is conducive for wine production and probably a range of other cash crop varieties, however other site-specific factors result in utilizing the property for agricultural activities being unviable. These factors include the current limited available water supply, which makes the production of cash crops unviable, along with the black southeasterly winds, further inhibiting economic viability of crops, with the exception of vineyards and wine grapes. The size of the property however relinquishes economic vineyard production, being too small.

The black south easterly's potential harm can be mitigated using windbreakers, wind nets (which is visually undesirable) as well as the planting of trees (taking a lot of arable land due to its wide root structure and being a nesting place for birds).

2.2.2 Water

A critical element in any farming enterprise is the availability of quality and quantity of water to maintain or develop orchards in the long term. There are no short-term solutions, especially when one takes into account the current (and more frequent predicted occurrence of) drought conditions.

The property has no water allocation of any volume from any irrigation scheme. A letter from the Helderberg Irrigation Board dated, 26/10/1995, stated clearly that:

- *The farm Brandwacht is located outside the borders of the Irrigation scheme and that the farm therefore, cannot be incorporated into the scheme.*

See letter below (Figure 3).



Figure 3: Letter from Helderberg Irrigation Board

The property relies on the existing storage dam with a holding capacity of 34 000 m³ litre of water. The dam feeds from storm water and rain water downflow during the winter months and runs (occasionally) dry during the summer months.

Without a consistent reliable water supply (like from an irrigation scheme) the prospects for long term crop production (e.g. vine orchards) or cash crop production

(e.g. vegetables) is very limited and not advisable. Even if the dam is at full capacity during the summer months (which is highly unlikely) the prospects of an economically viable entity is in question.

The current drought conditions in the Western Cape emphasises the dilemma, where water supply from irrigation schemes cannot longer be guaranteed.

2.2.3 Climate

The Western Cape (Stellenbosch) is known for its Mediterranean winter rainfall climate and its conducive attributes for vine and cash crop production. The location of the property is also susceptible to the harmful effects of the black south-easterly winds, also known as the Cape doctor, which brings severe weather conditions such as very high wind speeds and heavy rainfall, resulting in flash floods.

2.3 Assessment of potential farming activities

This section will elaborate of potential farming activities for the area, taken into account the limited water resources (storage dam).

- The general accepted rule for a financially viable wine production unit (2016) is in the order of 40 – 50 ha unit. This number is disputable and can be argued lengthily. Point is, that if a producer has to establish 30 ha (size of the property) of orchards at R250 000+/ha and has to wait 3-4 years until full bearing, he will not survive financially. The wine industry commodity organization, Vinpro (2016 statistics) elaborates extensively on the subject.
 - Given the unfortunate water situation on the farm such an enterprise is not advisable at all. The Department of Environmental – & Water affairs (Worcester) allocated a water requirement of $\pm 6500 \text{ m}^3/\text{ha}/\text{annum}$. The unreliable inflow of water into the storage capacity of $34\,000 \text{ m}^3$ water will allow for 5.23 ha of vine orchards, which is much less than the 40+ ha requirement for an economically viable entity.

- Cash crops (vegetables) can be an option during the winter rainfall months, however it would be impractical and economically challenging, as these crops would not be an option at all during the summer months, which would result in unproductive months and high seasonal unemployment for farm labourers. Vegetable crops require regular irrigation/ water, which could also be challenging given the current drought conditions. Further factors reducing the viability of vegetable crops on the subject property include the use of fertilizers (unwanted odours), probable theft being in close proximity to residential environments.
- Low density livestock/cattle farming could be used for keeping the grass short to prevent possible veld fires, but would not be considered an economically viable farming practice. High density livestock farming (dairy, piggery, broilers and layers) is also in serious doubt due to environmental impacts and water shortage.

The potential division of the property into two portions (due to proposed eastern link road) will hamper farming activities to a large extent. Daily farming activities will cross the road on numerous occasions, causing traffic hazards and potential loss of life. A farming subway will be a requirement for the town planners and civil engineers at additional public costs.

2.4 Assessment of farm infrastructure: fixtures & irrigation equipment

Due to its location and water constraints, no active farming activity takes place on the property, a part of a small herd of cattle grazing on weeds and natural grazing. The fencing seems to be in good conditions keeping the animals at bay.

The property has no farm infrastructure and irrigation equipment.

2.5 Bulk services supply

The property has access to road infrastructure. Due to its location electricity -, sewerage – and drinking water connections can be established within a relative short period of time.

3 Conclusion and Recommendations

Considering the abovementioned analysis of the “current situation” the following can be **concluded as an opinion on the agriculture potential of the farm:**

- Brandwacht is already succumbed by Stellenbosch over the past years. The expansion developments actually defined Brandwacht's future to be part of the local authority.
- From a pure Agriculture perspective – as piece of land without any water allocations and stripped from its location and neighbourhood environment – the agricultural value will be low.
 - ☐ Guaranteed water is the key driver of any farming development. Brandwacht lacks in this regard and will not obtain any economy of scale doesn't matter which farming enterprise of choice they follow.
 - ☐ The lack of water rules any financially viable farming activities out of the equation.
- Dividing the property into two portions will escalate the inability to execute farming practices successfully.

Finally, the assessment is that Brandwacht farm is a prime property stripped from its original purpose as a productive farm with financial viability. City expansion / urbanisation onto the farm's borders – on three sides – accompanied by a proposed road across the property define (logically) its future to become an integral part of Stellenbosch Municipality.

It is OABS (Pty) Ltd **recommendation** that the owners and their advisors proceed with all possible actions to be incorporated into the Stellenbosch Municipality's urban edge.

Dr Daan Louw & A Hugo
19/02/2018

SECTION F

**WESTERN CAPE DEPARTMENT OF
AGRICULTURE'S LETTER OF SUPPORT**



**Western Cape
Government**

Agriculture

Cor Van Der Walt
LandUse Management
Email: LandUse.Elsenburg@elsenburg.com
tel: +27 21 808 5099 fax: +27 21 808 5092

OUR REFERENCE : 20/9/2/5/6/071 & STELLENBOSCH SDF
YOUR REFERENCE : -
ENQUIRIES : Cor van der Walt

TV3
97 Dorp Street
STELLENBOSCH
7600

Att: Clifford Heyes

PLAAS BRANDWACHT NO 1049 DIVISION STELLENBOSCH

The Western Cape Department of Agriculture (WCDoA) commented on the Stellenbosch Municipal Spatial Development Framework (MSDF) of February 2019 and June 2019 as part of the Steering Committee on the MSDF.

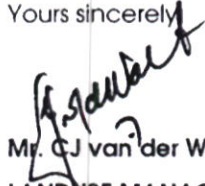
In letters dated 2019/04/17 and 2019/07/02 the WCDoA had no objection to the inclusion of Remainder of Farm BRANDWACHT no 1049, Stellenbosch for residential development, respectively.

Please note:

- That this is comment to the relevant deciding authorities in terms of the Subdivision of Agricultural Land Act 70 of 1970.
- Kindly quote the above-mentioned reference number in any future correspondence in respect of the application.

- The Department reserves the right to revise initial comments and request further information based on the information received.

Yours sincerely



Mr. CJ van der Walt

LANDUSE MANAGER: LANDUSE MANAGEMENT

2021-05-03

Copies:

Department of Environmental Affairs & Development Planning (Kobus Munro)

1 Dorp Street

Cape Town

8000

Stellenbosch Municipality (B de la Bat)

PO Box 17

STELLENBOSCH

7599

SECTION G

**SOCIO-ECONOMIC IMPACT
ASSESSMENT REPORT**



Market viability assessment and socio-economic implications associated with the Brandwacht II residential development with specific reference to Stellenbosch Town



Consultative Document

This report consists of 64 pages

Report prepared for TV3 Architects and Town Planners

Dr. Jonathan Bloom

April 2018

Executive Summary

Nature and Scope of the project

Brandwacht II is conceived as a residential development of ± 30 ha located in an area that forms part of the Brandwacht Farm, abutting the Brandwacht and Brandwacht-on River residential area to the north, a commercial node to the west and open areas to the south. The objective of the study is to consider the scope of the project, its impact and relevance based on three pillars that cover (1) the market from a demand and supply perspective, (2) the socio-economic impacts from an income and employment perspective, and (3) its fit for purpose.

The Brandwacht II development covers the following scope of land uses:

- 260 residential stands of between 350m^2 and 800m^2 , with an average stand size of about 500m^2 .
- Sizes of dwelling units assuming a 50% coverage are anticipated to range from between 170m^2 and 400m^2 , with an average of about 250m^2 per unit.
- Private open space of ± 7 ha plus $\pm 1,35$ ha of the land a road reserve for the Eastern Link Road which splits the farm in half.

The Brandwacht II project caters for the middle to high-income segment of the market and is aimed at a portion of the income bracket for households that earn between R809 203 to R1.6 million per annum would also form part of the segment likely to take up the housing opportunity, with units ranging from R2.5 million and R4 million.

Brandwacht II offers a scope of housing that addresses various emerging trends related to demand for housing of which the key trends are lifestyle, proximity, availability of key infrastructure, access and transport. The proposed housing is intended to attract millennials and persons that work in Technopark, at the surrounding commercial enterprises and the surrounding area. The properties will be sold on an own-title basis and for the purposes of this analysis, are aligned in terms of the classification adopted by the Stellenbosch Municipality for the levying of development charges.

In order for the project to be fit for purpose, broad market and socio-economic criteria need to be considered. Brandwacht II should with some limited variance, fall within the demand forecasts for different housing units in Stellenbosch Town, must offer socio-economic benefits to locals and ensure that the Municipality is able to consider the project from both a financial, policy and planning context. This report adopts an economic perspective related to supply and demand, and the need to deliver benefit to the local economy and jobs to people. Stellenbosch Town includes central Stellenbosch, Jamestown, De Zalze, Onder-Papagaaienberg, Kyamandi, Cloeteville and Idas Valley.

Key outcomes

Stellenbosch housing trends

Higher priced houses have emerged as a trend in Stellenbosch Town over the period 2008 to 2017 and current supply is unable to meet the demand in the higher price segment. If this trend continues, average equilibrium prices and price points will increase and due to the lag in provision of supply or curtailing supply together with the inelasticity of supply, no integration of various housing typologies in development will be possible. The only way to reduce the average equilibrium price for houses is to permit development that underpins market demand for a range of housing typologies and implement

policies that make it attractive for developers and investors to provide in the need for different types of housing.

A total of 17 301 units form part of the estimated demand over the next 20 years, i.e. 9 277 houses smaller than 80 m², 2 793 houses larger than 80 m², 2402 flats and 2 829 townhouses. These figures represents the adjusted demand forecasts prepared by Rode and Associates for Stellenbosch Town.

Key salient outcomes from the analysis include the following:

- The current supply is unable to meet demand for all housing types in Stellenbosch Town;
- Sales trends in the Stellenbosch Municipal area suggest a demand for higher priced houses;
- Emerging trends suggest that average equilibrium prices¹ will increase and continue to increase in Stellenbosch Town due to the following:
 - Limited supply of new development (housing) stock;
 - Lag in the provision of supply caused by inelasticity², which suggests that supply is unable to meet demand in the short-term, resulting in price increases reaching new highs; and
 - Continuous and sustained price increases will curtail the opportunity to create and develop appropriate mixed-use residential projects that offer a range of affordability options.
- An estimated housing demand of 865 units per annum on average for next 20 years based on the adjusted Rode forecast:
 - 464 houses smaller than 80 m²
 - 140 houses larger than 80 m²
 - 120 flats
 - 141 townhouses
- It is possible to relate vehicle traffic and employment to future retail, commercial and industrial development in Stellenbosch Town over the next 20 years as follows:
 - 1 additional vehicle will **enter Stellenbosch Town** for every 52 m² of retail, office and industrial space developed;
 - 1 additional employee will originate from **outside Stellenbosch Town** for every 44 m² of Gross Lettable Area (GLA)³ developed
 - 1 additional employee would **reside in Stellenbosch Town** for every 30 m² of GLA developed (given the percentage of persons that commute for employment purposes)
- A total of 8 830 people⁴ working in Stellenbosch Town by 2036 would form part of the daily commuting workforce;
- Annual housing need per annum on average over the next 20 years based only on commuters:
 - 371 units for middle-income category

¹ Average equilibrium price is the average price over a period where the demand for property and supply of property are in balance.

² Supply is price inelastic if a change in price causes a smaller percentage change in supply, i.e. the supply of a few properties results in a greater increase in the price due to demand exceeding supply.

³ Gross lettable area (GLA) is the amount of floor space available to be rented in a commercial, retail or industrial property.

⁴ The number of people commuting to work in Stellenbosch Town is based on the current daily commuting traffic of approximately 11527 people less students that emanate from outside of Stellenbosch town which is 25% of the total on the Stellenbosch campus plus an estimate of people that will live outside Stellenbosch and take up employment from the future development of retail, commercial and industrial properties over 20 years.

- 70 units for high-income category
- Demand for 388 dwelling units from commuters and persons that would reside in Stellenbosch due to future retail, commercial and industrial development based on a 50% take up of the need.
 - The average annual demand for houses smaller than 80 m², flats and small townhouses ranges from 194 to 241 units.
 - The demand for houses larger than 80 m² for the high-income group by 2036 ranges from 97 to 194 dwelling units on average per annum.

Development Pipeline for Stellenbosch Town

The pipeline of projects envisaged by developers for Stellenbosch Town has an envisaged rollout over the next 10 years. Although the pipeline does not necessary include all projects, indications are that approximately 9 100 units are envisaged to be supplied over the following 10 years. The table below provides an indication of the percentage contribution of the pipeline projects to the Rode adjusted forecast per housing type and the contribution of each housing type to the total number of units. **The results indicate that the Development pipeline would contribute 52,60% of the total units to the adjusted Rode demand forecast.**

Housing type	Amended Rode Demand forecast	Development Pipeline	Percentage of housing type	Percentage of total pipeline
Houses smaller than 80 m ²	9 277	2 860	30,83%	31,43%
Houses larger than 80 m ²	2 793	2 872	102,83%	31,56%
Flats	2 402	1 838	76,52%	20,20%
Townhouses	2829	1 530	54,08%	16,81%
Total units	17 301	9 100	52,60%	100,00%

The housing types envisaged for the Development Pipeline all fall within the adjusted Rode forecast, except for houses larger than 80 m² that exceeds the forecast by 2,83%. A breakdown of the envisaged supply suggests that 31,56% of housing units supplied over 10 years accrues to dwelling units larger than 80 m², which are more aligned with middle to high-income groups; 31,43% to affordable housing (lower to middle-income groups); 16,81% to townhouses (middle-income group) and 20,20% to flats.

The projects that form part of the pipeline, based on the progressive growth trajectory⁵ (same growth trajectory used to demonstrate demand over 20 years), is envisaged to deliver 9 100 units over 10 years, which is 31,83% more than the forecast over the same period. By year 12 of the forecast period, the forecasted number of units will exceed the number of pipeline units by 1 158 or 12,72%. In other words, slightly more than a **one-year gap exists between the envisaged completion of development for the Pipeline projects and the projected demand for housing units in Stellenbosch Town after 10 years** (refer to Figure 21 of the Report).

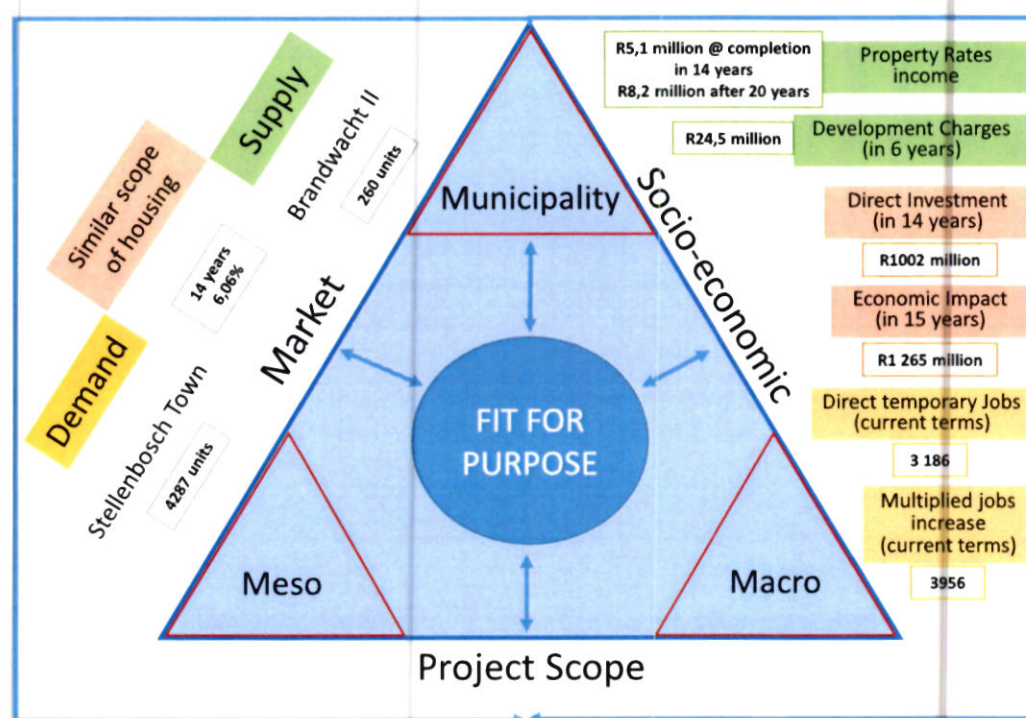
Brandwacht II: Fit for Purpose

Brandwacht II forms part of the pipeline of projects envisaged for Stellenbosch Town by developers over the next 10 years. The proposed development represents about 1,50% of the total number of housing units included in the adjusted Rode forecast by 2036, and 2,86% of the total number of housing units envisaged as part of the project pipeline envisaged by developers.

⁵ Progressive growth implies exponential growth over slightly less than the first half of the 20-year forecast period, reaching saturation point after about 10 years and tapering off significantly thereafter to flatten out over the last five years of the forecast period (refer to Section 8.1).

The following figure⁶ summarises the outcomes of the analysis and alignment with the premise of a fit for purpose, i.e. whether or not the development project is able to “tick the boxes” from a socio-economic perspective, i.e.

- The project needs to ensure that potential demand is met from a supply perspective;
- The housing types fit with the need and emerging trends and the housing development framework of the Stellenbosch Municipality;
- The project does not result in a fund flow deficit for the Municipality in terms of service infrastructure (which should be covered by DCs);
- The local economy benefits from the development in terms of direct capital expenditure and backward and forward linkages between sectors; and
- Jobs, even on a temporary basis, are created and devolved to locals that are able to work on the project.



In terms of demand and supply, the Brandwacht II development adds 260 units of stock to the demand for housing, which based on the housing typology envisaged for the project, represents 4,62% of the total number of 5 622 units or 6,06% after 14 years once the development is complete and occupied. The development represents a direct investment of R1002 million (in 14 years) that will generate estimated Development Charges of R24,5 million (in six years) and property rates of R8,2 million for Stellenbosch Municipality over 20 years. Over the duration of the construction period, 3 186 people would directly work on the project, while a further 770 jobs would accrue due to the indirect effects of developing Brandwacht II. All of these benefits are estimates based on the development of 260 dwelling units over the 8-year construction period.

⁶ The **meso-level** represents the linkage between what is envisaged with the development and its contribution to the residential supply, hence the project has specific implications at a project level to satisfy demand and enhance supply. The **macro-level** represents the contribution of the development to the local economy in terms of direct investment in infrastructure and superstructure, while also having an indirect benefit to the local economy and businesses through multiplied demand for goods and services required to support the direct investment.

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1. INTRODUCTION

1.1 Introduction and objective

Brandwacht II is conceived as a residential development of ± 30 ha located in an area that forms part of the Brandwacht Farm, abutting the Brandwacht and Brandwacht-on River residential area to the north, a commercial node to the west and open areas to the south. Brandwacht II is also in close proximity to the R44 between Stellenbosch Town and Somerset West.

The objective of the study is to consider the scope of the project, its impact and relevance based on three pillars that cover (1) the market from a demand and supply perspective, (2) the socio-economic impacts from an income and employment perspective, and (3) the fit for purpose.

Dr Jonathan Bloom of Multi-Purpose Business Solutions was appointed to prepare a market demand and supply assessment to align the supply of housing units envisaged by the Brandwacht II Development with the future demand for residential dwelling in Stellenbosch Town. For the purpose of this report, Stellenbosch Town includes central Stellenbosch, Jamestown, De Zalze, Onder-Papagaaiberg, Kyamandi, Cloeterville and Idas Valley. Although towns and settlements such as Klapmuts, Franschhoek, Koelenhof, Vlootenburg, Pniel and Kylemore fall within the Stellenbosch Municipal area, they are considered outside Stellenbosch Town.

1.2 Approach and basis for assessment

The premise for this assessment is based on understanding the fit of the project in the context of several stakeholders' inputs used to derive certain outputs and the core outcomes that reflect the scope of the project in terms of the market and socio-economic benefits. The approach is illustrated in Figure 1.

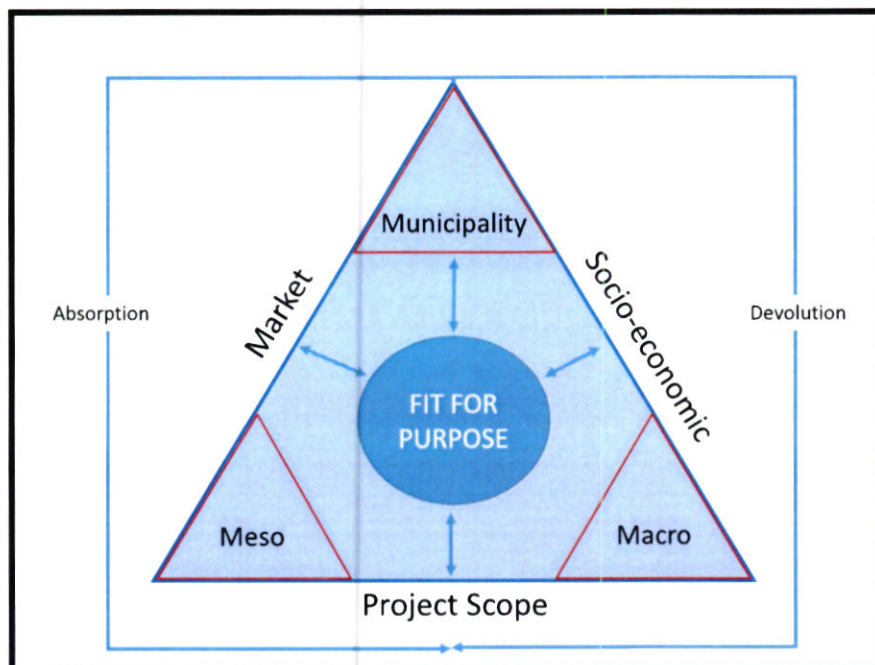


Figure 1: Understanding the fit for purpose of the Brandwacht II Development

Source: Multi-Purpose Business Solutions

The terms used to contextualise the fit for purpose principle illustrated in Figure 1, are discussed below.

- The **project scope** underpins the market represented by the interaction between demand and supply, together with the socio-economic implications that inform the fit of the project for the intended purpose.
- The **meso-level** represents the linkage between what is envisaged with the development and its contribution to the residential supply, hence the development has specific implications at a project level to satisfy demand and enhance supply.
- The **macro-level** represents the contribution of the development to the local economy in terms of direct investment in infrastructure and superstructure, while also having an indirect benefit to the local economy and businesses through multiplied demand for goods and services required to support the direct investment.
- The **Municipality** is the enabler and benefits in the form of an increase to the rates base. Development Contributions (DCs) are received from developers to fund external bulk service provision. The DCs for the purposes of understanding the linkages, equate to the need for external bulk services, although the infrastructure requirements would be unique to each project and require a project-specific assessment.
- In order to assess whether a development is **fit for purpose**, it must satisfy the need, i.e. demand, contribute to the socio-economic fabric of the municipal area by adding income to the economy and creating jobs, while also benefiting the Municipality, i.e. create a mutual symbiosis.
- **Absorption** is premised on the ability of the market to take up the supply provided by a project once completed. Notwithstanding, a need also exists to ensure acceptable levels of **devolution** of the socio-economic benefit that accrue from the project to the intended beneficiaries. This is a continuous and dynamic process and should be considered in the context of the overall supply of development linked to different land uses.

1.3 Nature and scope of the project

The Brandwacht II development covers the following scope of land uses:

- 260 residential stands of between 350m² and 800m², with an average stand size of about 500m².
- Sizes of dwelling units assuming a 50% coverage are anticipated to range from between 170m² and 400m², with an average of about 250m² per unit.
- Private open space of ±7 ha plus ±1,35 ha of the land a road reserve for the Eastern Link Road which splits the farm in half.

The total land extent for the proposed development is ±30 ha with a total of 260 units. A provisional layout of the proposed Brandwacht II residential development is illustrated in Figure 2.

The properties will be sold on an own-title basis and for the purposes of this analysis, are aligned in terms of the classification adopted by the Stellenbosch Municipality for the levying of development charges. In terms hereof, 182 units are referred to as Single Residential units smaller than 250 m² and 72 units as Medium-Density Residential units smaller than 250 m².



Figure 2: Site development plan for the Brandwacht II development in the context of the Brandwacht suburb, Brandwacht-on River, commercial buildings and adjacent farmland
Source: TV3 Architects and Town Planners, 2017

2. RESIDENTIAL MARKET TRENDS

The residential market refers to land uses associated with human habitation, including housing or dwelling units. Residential use can vary in typology, density, tenure, structure, layout and affordability. It should, however, be noted that “residential” does not include hotels or guesthouses, which are defined as “short-stay” accommodation.

Residential property in South Africa has experienced slow, but steady growth in recent years, reporting a rise in activity as well as ongoing demand for housing, especially in the Western Cape. Demand for residential property in the major metropolitan areas and specific geographical areas and nodes in close proximity, has outstripped supply and thus created a seller’s market in cities like Johannesburg and Cape Town. A continuous lack of medium-income (affordable) housing options remains a key feature of the marketplace.

2.1 Housing demand and supply challenges for urban areas

The long-term home densification process is expected to continue as the long-term effective scarcity of urban land increases, semi-gration to the Western Cape continues, price increases in the Western Cape and especially the Winelands areas (including Stellenbosch) continue and increase in real terms. The key challenges emanating of this rising urban land scarcity and according to the FNB Property Barometer (2017), which are relevant to Stellenbosch Town in particular, include the following:

- Creating safe open public spaces to largely replace the private space and amenities that many used to have on their own properties;
- Improving the health of the household sector in the face of declining physical activity, partly as a result of less open space;
- Creating mass public transport systems to reduce the myriad of costs associated with transport congestion;
- Designing lifestyle developments that could be attractive to highly skilled labour, which can be attracted or repelled by lifestyle aspects, implying that urban design is key;
- A key driver is the competitive advantage of an area, which is reinforced by semi-migration trends, regional significance and the status of Stellenbosch Town as a key player in the Cape Winelands district;
- Zoning for densification in certain areas, notably along transport corridors, and preventing densification in other areas; and
- Improving key infrastructure and facilities such as water/sewage, schools and hospitals in existing areas to keep up with growing demand per area as densification occurs.

2.2 Housing design trends

The need for housing is also influenced by the nature and scope of properties and top structures. Consequently, demand needs to be aligned with factors such as economic growth, disposable income, debt levels and affordability criteria, which are essential for development in Stellenbosch Town. If past trends were replicated in the future, then according to the FNB Barometer (2017), the nature and scope of housing would reflect the following:

- Size of average full title stands is decreasing;

- Building size over the long-term appears to be decreasing, but not as rapidly as average stand size;
- Sectional title options will remain significant with a declining trend in full-title options;
- Luxuries will be reduced in order to address the long-term decline in home affordability;
- Percentage of homes built with swimming pools will drop dramatically in terms of water shortages and tariff increases;
- “Non-essentials” are being increasingly done away with in new buildings, such as a study and dining room;
- Declining fertility rates and a smaller average size of households have also contributed to the demand for smaller sized homes with fewer bedrooms; and
- Even the previously most popular 3-bedroom home category has seen some decline, with 2-bedroom homes apparently favoured over 3-bedroom homes.

2.3 Millennials housing market segment

Millennials (also called Generation Z-ers) make up one third of the global population. There is a debate about when Generation Z starts, but they were typically born in the 1990's or 2000's. As millennial consumers approach their peak earning years, a significant percentage is searching for their first home. This particular generation's needs and preferences are quickly becoming the driving force in the property market.

Millennials are tech-savvy and need to connect with people and products, which mean that they have to be engaged through technology, are more entrepreneurial and ambitious than previous generations, with many of them expecting to own a company. In order to understand the housing typology that this segment would demand, it is important to understand what millennial home buyers search for and prefer in their first home (Source: 5-things-millennials-want-in-a-new-home):

- **Homes that are 'ready to go'** - newer homes that are ready to move in, are convenient and have the “ready-to-go” factor address the needs of millennial home buyers;
- **Open layouts and multi-functional interiors** – fewer partitions and walls, eating meals at the kitchen table (not at the dining room) and a multi-media room or gaming room;
- **Energy efficiency and green living** – convenience and efficiency with smart homes delivering these aspects. Millennials identify themselves as environmentally-conscious, preferring a sustainable lifestyle with a low carbon footprint;
- **Technologically equipped homes** –a connected smart home that includes electronic access, keyless locks, interconnected doorbells, mobile-controlled security systems, voice-activated assistants, etc.; and
- Millennials' **buying and selling activity is more frequent** than other age groups, which is also having a noticeable impact on property values, particularly in areas that offer great short-term potential and fulfil a few key lifestyle needs. Demand for properties in areas where buyers can live, work, play, eat and shop - all practically within acceptable walking or driving distance of their homes are key (Source: rise-of-the-millennials-a-property-revolution/24370).

3. STELLENBOSCH HOUSING SUPPLY MARKET

Notwithstanding the economic downturns and political upheaval of the recent past, we have witnessed continuous growth in and around the City of Cape Town (the "CMA") and the Cape Winelands region. The rate of urbanisation and trends such as semi-gration have influenced the demographics in the target area and have contributed to an increase in inherent value of land on the perimeter of the CMA and in nearby towns such as Paarl, Stellenbosch and Franschhoek. In addition, ever-increasing traffic congestion and worsening public transport services are prompting a greater focus on mixed-use/live-work-play developments on the periphery of the CMA and in the growth nodes (such as Stellenbosch) in close proximity to the CMA.

3.1 Trends in housing sales in Stellenbosch

Stellenbosch Town is a unique case when analysing the trends in house and flat sales, which is illustrated in Figures 3 and 4 for the period 2008 to 2017. The more important take-out of the analysis is to understand the value ratio derived by Multi-Purpose Business Solutions as an indication of supply and demand reflected in the average selling price. A high ratio can be interpreted as properties that are being sold at higher average prices in relation to the number of units sold. This could imply a willingness to purchase higher-priced properties or a scarcity in certain market segments, i.e. a supply constraint.

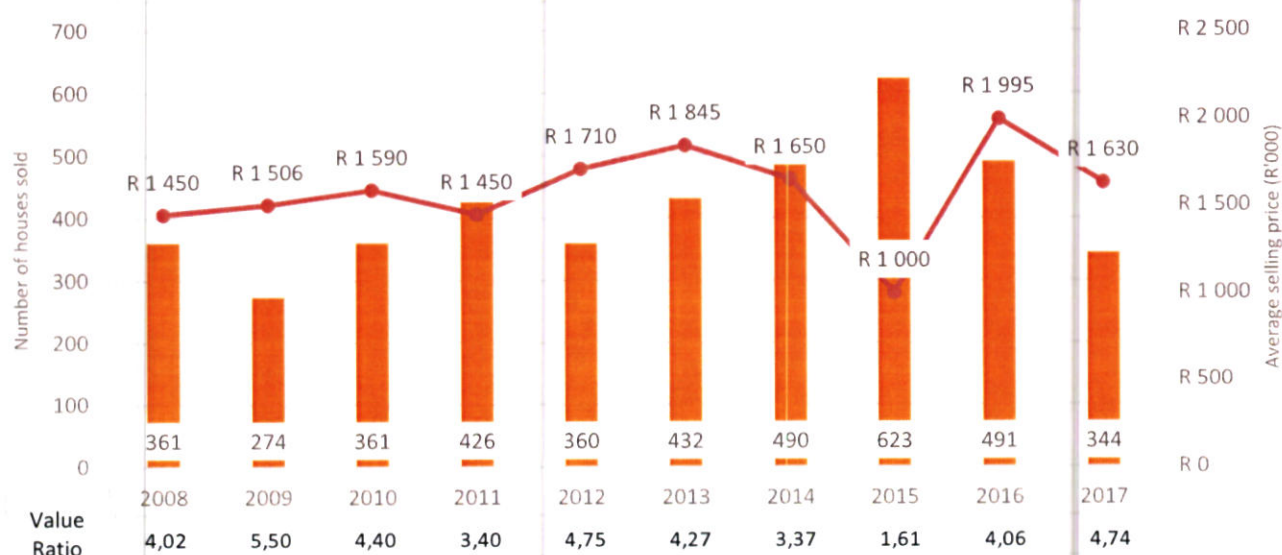


Figure 3: Number of housing units sold and the average annual price per unit for the period 2008 to 2017

Source: Prepared from data - Property24.com and own calculations

The value ratio suggests that from 2015 through 2017, higher-priced houses were acquired from the available supply of houses for sale. A similar trend occurred in 2012 and 2013, while 2015 apparently bucked the trend with a significant decrease (65%) in the average price of houses relative to 2014. The analysis over the period suggests that Stellenbosch experienced higher value ratios of above 4,0 over the past 10 years, except in 2011, 2014 and 2015. Demand for higher priced houses on average is evident and it appears that supply is unable to meet the demand in the higher price segment.

- Current supply unable to meet demand for all housing types
- Demand for higher priced houses

If the emerging trends illustrated in Figure 3 would continue, average equilibrium prices for houses will increase due to the following reasons:

- Limited supply of new development stock;
- Lag in provision of supply due to inelasticity; and
- No or limited integration of various housing typologies in developments.

The only way to reduce the average equilibrium price or price points for residential dwellings, is to permit development that underpins market demand for a range of housing typologies and implement policies that make it attractive for developers and investors to provide in the need for housing.

3.2 Trends in flat sales in Stellenbosch

The prices of flats have remained range bound from 2008 to 2013, as illustrated in Figure 4. Thereafter, the average price increased by 45,65% over the period 2013 to 2017, suggesting a tapering off in supply. Clearly, demand outstripped supply, hence a higher price equilibrium, which is also evident by a value ratio of 3,87 in 2017, the highest recorded figure over the period covered in the analysis.

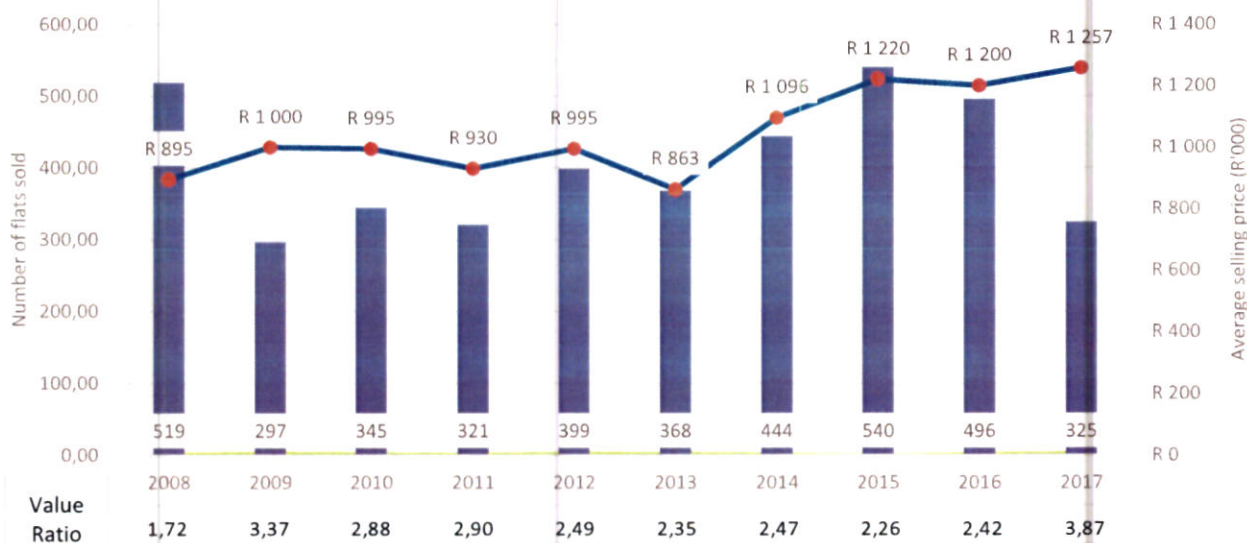


Figure 4: Number of flats sold and the average annual price per unit for the period 2008 to 2017

Source: Prepared from data - Property24.com

3.3 Residential housing market stock

The residential market within Stellenbosch Town is mainly driven by households attracted by the rural lifestyle of the area, which is known for its beauty and unique quality of life. Demand for residential development is most active in Stellenbosch Town. Various factors are driving this market, including quality of life and Stellenbosch University, which is attracting students from across South Africa (and foreign countries) to the area. The student accommodation market is driving investment opportunities such as buy-to-let, and this market has seen significant growth specifically in the Stellenbosch area. Figure 5 indicates sales in the Stellenbosch residential market over the past year.

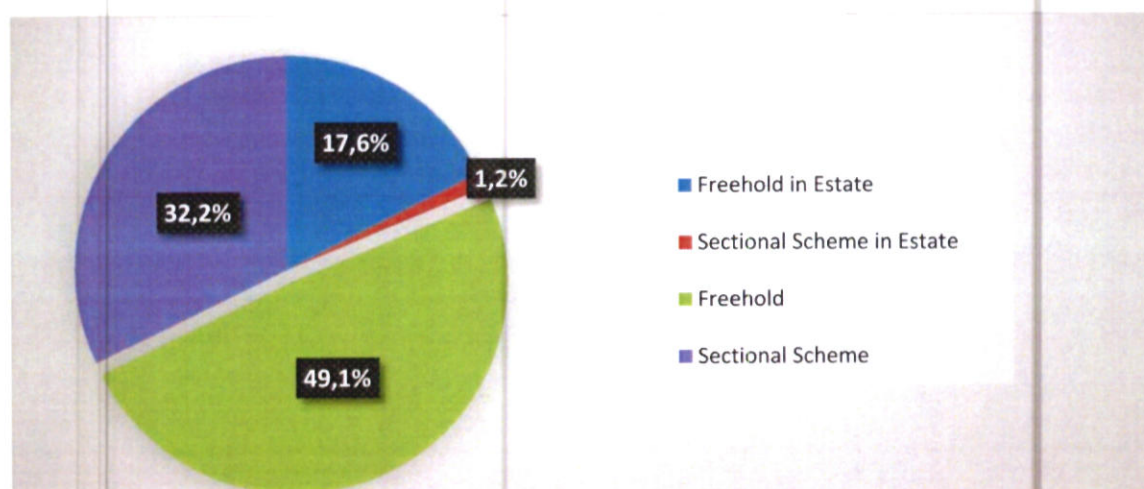


Figure 5: Stock of Stellenbosch residential units for different ownership options
Source: Lightstone data

The largest percentage of the current housing stock comprises of freehold properties (49.1%), followed by sectional scheme properties (32.2%) and freehold developments in estates (17.6%). The current residential sales market within the Stellenbosch area is mainly based on repeat sales, which indicates few new entrants into the market and a lag in or inelasticity of supply.

Estate agents in Stellenbosch indicate that residential property prices in Stellenbosch Town are increasing, and this is mainly attributed to the limited stock available to serve the high demand for residential units. Residents within the Western Cape (specifically Cape Town and Stellenbosch) as well as Gauteng purchase the majority of properties in Stellenbosch Town. Estate agents also further indicated that properties are mainly purchased as a primary residence, but there is also a growing trend to purchase investment properties (specifically focussed on the student accommodation market).

3.4 Residential housing supply

The supply analysis entails research into the existing and the future planned residential units within the Stellenbosch area and specifically for Stellenbosch Town. The existing supply and possible future additions are indicative of the effective supply of residential units in the market.

Based on Census 2011 data and **building plans completed** between 2012 and 2015, it is estimated that the current supply of residential units in the Stellenbosch Municipal area is 34 500 units. These residential units are distributed according to income categories as illustrated in Figure 6.

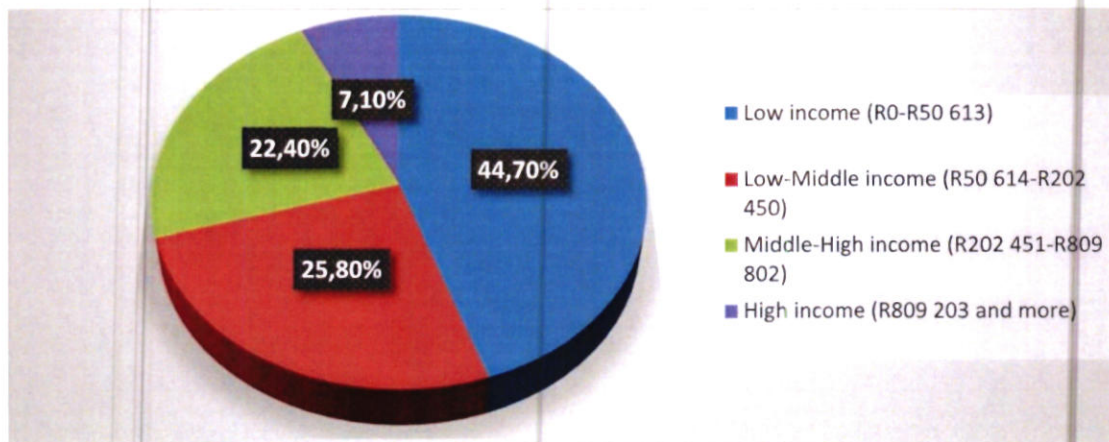


Figure 6: Supply of residential dwelling units based on household income categories

Source: Statistics South Africa and own calculations

Figure 7 illustrates the distribution of residential nodes throughout Stellenbosch Town (residential nodes are indicated with yellow, orange and pink areas).

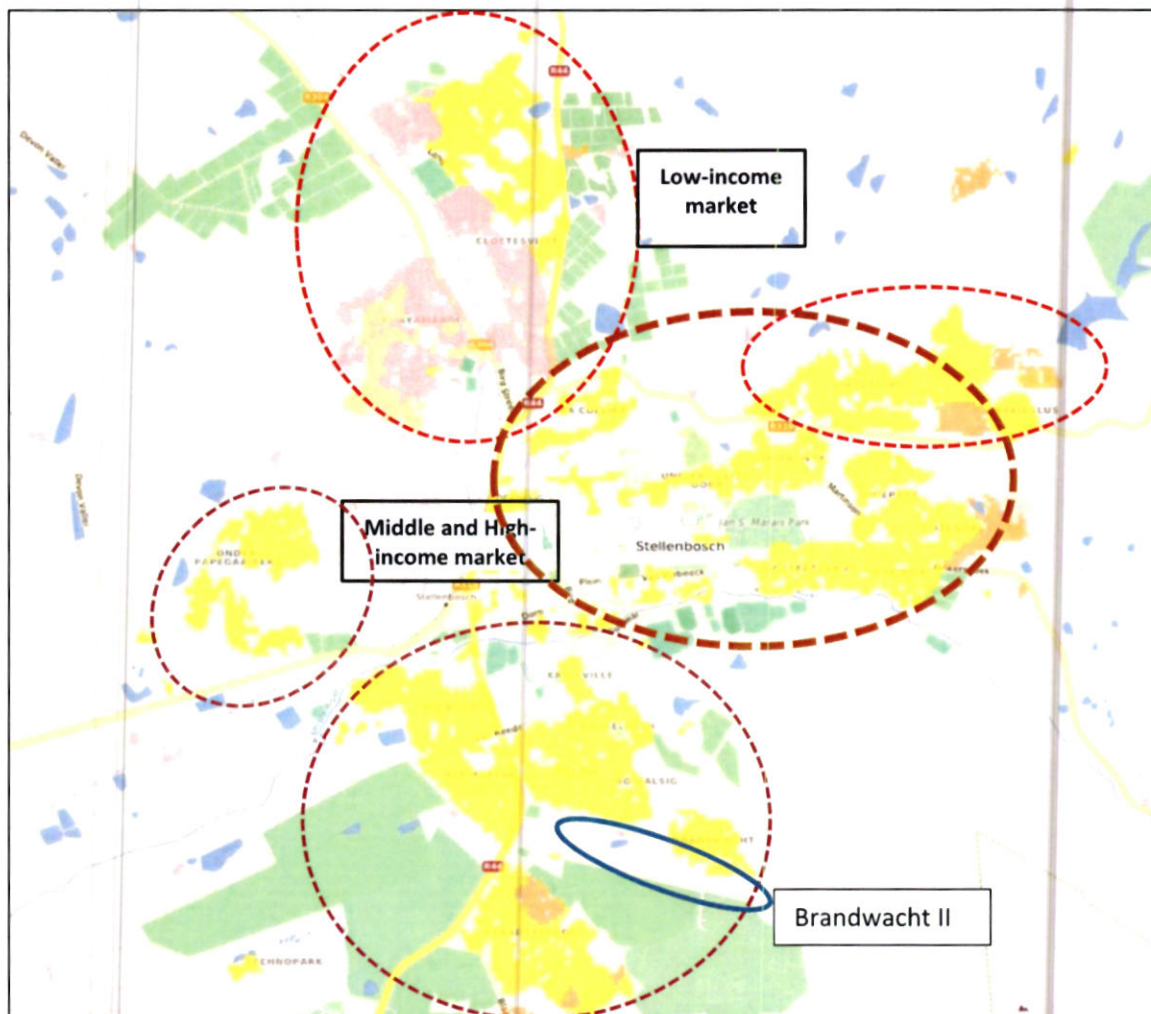


Figure 7: Distribution of residential nodes within Stellenbosch Town with an indication of the location for the Brandwacht II development

Source: Mapable Database: Land Cover, 2016

3.4.1 Approved plans for residential development

Figure 8 illustrates the building plans passed by the Stellenbosch Municipality for the Municipal area. In the absence of specific nodal data for different towns within the Stellenbosch Municipal area, a need exists to apportion a part of building plans passed to Stellenbosch Town. The approach adopted is based on the proportional historic land take-up over the period 2000–2015 for different towns within the Stellenbosch Municipal area. For the purposes of the analysis, this mechanistic method assumes that historic land take-up will be maintained. Over the stated period, Stellenbosch Town accounted for 60% of the total take-up of land for residential purposes. The percentage is applied to building plans approved for the municipal area and assumes an alignment between the historic take-up of land and building plans passed for the different housing typologies.

The average number of square metres passed by the Stellenbosch Municipality per annum over the period 2007 to 2016 for dwellings units smaller than 80 m², dwelling units larger than 80 m², flats and townhouses was 5 345 m², 44 432 m², 9 342 m² and 1 540 m², respectively. The classification is based on standards of reporting by Municipalities as required by Statistics South Africa. Large standard deviations for housing types suggest that significant fluctuations occur from year to year. This is also evident in Figure 8.

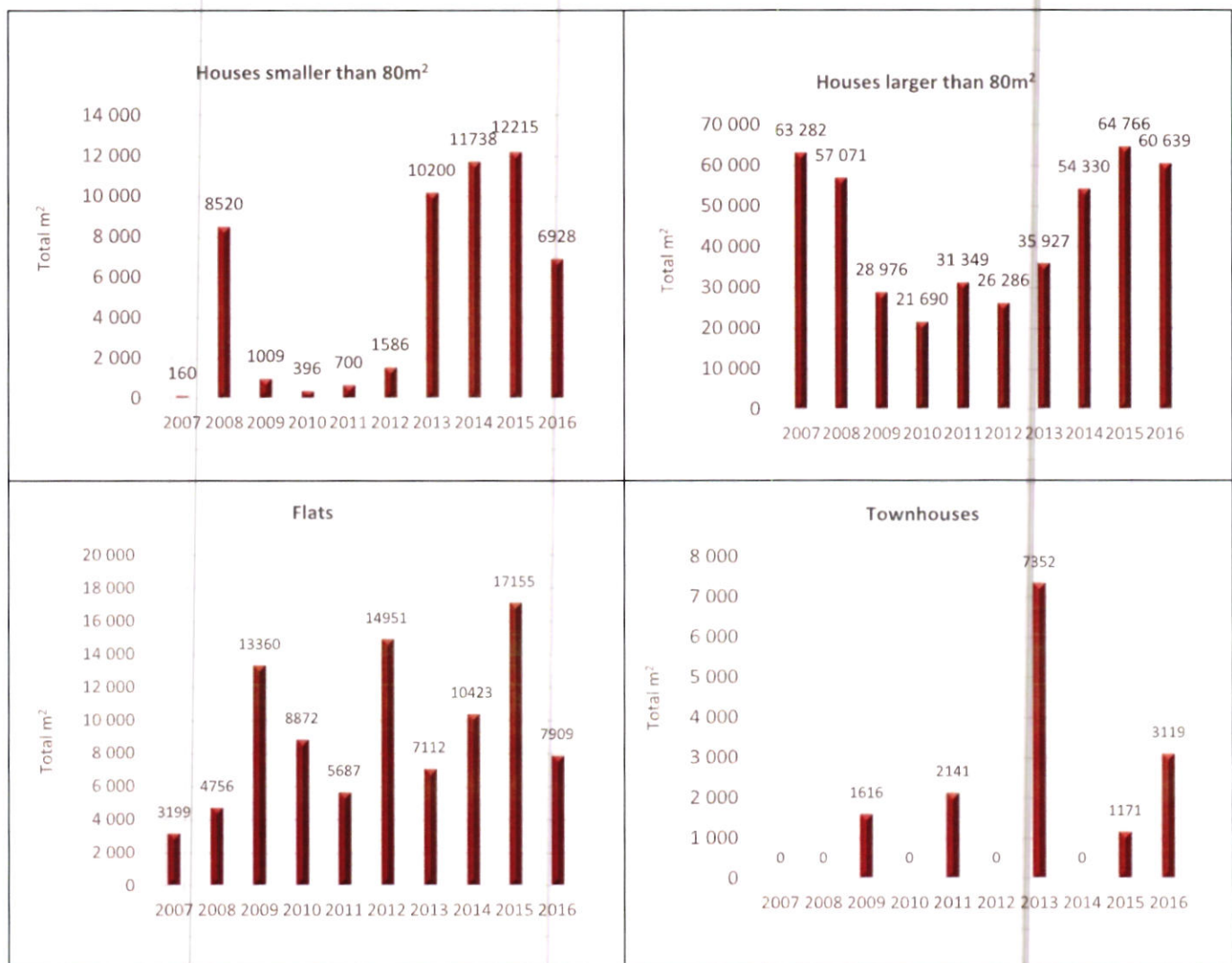


Figure 8: Building plans approved by the Stellenbosch Municipality per housing type per annum for the period 2007 to 2016

Source: Statistics South Africa

The square meterage of building plans approved for different housing types on an annual basis from 2007 to 2016 for Stellenbosch Town is indicated in Table 1. These figures were used to generate the information illustrated in Table 2.

Table 1: Estimated square meterage of building plans passed for different housing types on annual basis from 2007 to 2016 for Stellenbosch Town

<80m ² Building plans approved				>80m ² Building plans approved			
Year	Total m ²	Annual %	% Total	Year	Annual m ²	Annual %	% Total
2007	96	0,34%	0,24%	2007	37969	16,49%	94,96%
2008	5112	18,31%	12,11%	2008	34243	14,87%	81,13%
2009	605	2,17%	2,24%	2009	17386	7,55%	64,45%
2010	238	0,85%	1,28%	2010	13014	5,65%	70,06%
2011	420	1,50%	1,76%	2011	18809	8,17%	78,61%
2012	952	3,41%	3,70%	2012	15772	6,85%	61,38%
2013	6120	21,92%	16,83%	2013	21556	9,36%	59,29%
2014	7043	25,23%	15,35%	2014	32598	14,16%	71,03%
2015	7329	26,26%	12,82%	2015	38860	16,88%	67,96%
2016	4157	14,89%	8,81%	2016	36383	15,80%	77,15%
Total	27914	100,00%	8,81%	Total	230 206	100,00%	72,67%

Flats Building plans approved				Townhouses Building plans approved			
Year	Total m ²	Annual %	% Total	Year	Total m ²	Annual %	% Total
2007	1919	3,74%	4,80%	2007	0	0,00%	0,00%
2008	2854	5,56%	6,76%	2008	0	0,00%	0,00%
2009	8016	15,62%	29,71%	2009	970	13,16%	3,59%
2010	5323	10,37%	28,66%	2010	0	0,00%	0,00%
2011	3412	6,65%	14,26%	2011	1285	17,43%	5,37%
2012	8971	17,48%	34,91%	2012	0	0,00%	0,00%
2013	4267	8,32%	11,74%	2013	4411	59,87%	12,13%
2014	6254	12,19%	13,63%	2014	0	0,00%	0,00%
2015	10293	20,06%	18,00%	2015	703	9,54%	1,23%
2016	4745	9,25%	10,06%	2016	1871	25,40%	3,97%
Total	51309	100,00%	16,20%	Total	7368	100,00%	2,33%

Source: Statistics South Africa and own calculations

Table 2 indicates the average number of dwelling units per housing type per annum for an assumed house size, and aligns with the analyses and metrics applied throughout this assessment. The building plans passed for Stellenbosch Town indicate that, assuming that these plans translated into completed buildings, the annual average supply from 2007 to 2016 included 40 units of 80 m², 103 of 260 m², 123 flats of 40 m² and 7 townhouses of 130 m².

Table 2: Number of dwelling units per annum based on average m² per housing type for Stellenbosch Town from 2007 to 2016

Type of units	Applied dwelling sizes (m ²)	Average number of dwelling units p.a.
Smaller than 80 m ²	80	40
Larger than 80 m ²	260	103
Flats	40	123
Townhouses	130	7

3.5 Development “Pipeline”

A need also exists to factor residential projects into the equation that are in the planning stages or in different phases of the process from conceptualisation to pre-approval (prior to plans being passed by the Municipality). This data should be considered in the broader context of the analysis, do not necessary include all envisaged residential projects, are merely estimates of known projects, but do offer some indication of future supply based on a need perceived by developers.

Our research suggests that based on the housing typology adopted throughout this assessment, the envisaged supply for dwelling units covers an estimated period of 10 years with a split based on three, five and ten-year occupation periods. Figure 9 indicates an estimate of the number of units per housing type based on the three envisaged occupation timeframes.

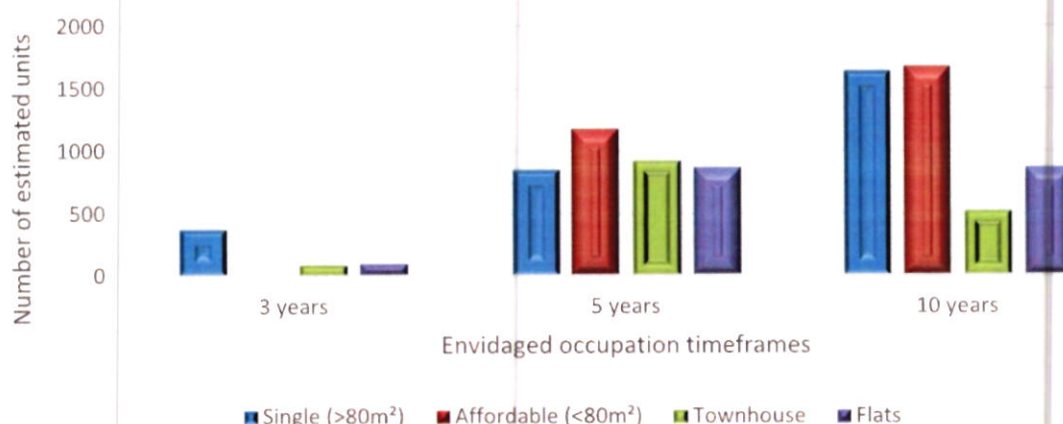


Figure 9: Envisaged supply of different housing types for three occupation timeframes

Note: These estimates of the projects pipeline include the Brandwacht II project being assessed as part of this report. The categories of dwelling units are based on the residential classification used by Statistics South Africa to ensure the necessary alignment

Source: Various

The envisaged supply of all housing types suggest that from 2018, occupation of 569 units (6,25%) is envisaged over the first three years; 3 820 (41,98%) for occupancy over the first five years; and 4 711 (51,77%) for occupancy over the first 10 years. The total number of units envisaged to be supplied over the following 10 years is approximately 9 100. A breakdown of the envisaged supply is indicated in Table 3, which suggests that 31,56% of housing units supplied over 10 years accrues to dwelling units larger than 80 m², which are more aligned with middle to high-income groups; 31,43% to affordable housing (lower to middle-income groups); 16,81% to townhouses (middle-income group); and 20,20% to flats.

9 100 new units
envisaged for next
10 years as part
of a Developer
Pipeline

Table 3: Percentage contribution to potential supply for three occupation periods

Occupation period	Single (>80m²)	Affordable (<80m²)	Townhouse	Flats
3 years	13,20%	0,00%	5,88%	5,44%
5 years	29,63%	41,26%	60,13%	47,28%
10 years	57,17%	58,74%	33,99%	47,28%
Total	100,00%	100,00%	100,00%	100,00%
Percentage per housing type	31,56%	31,43%	16,81%	20,20%

4. NEED AND DEMAND FOR HOUSING IN STELLENBOSCH TOWN

In order to estimate the need and subsequent demand for housing in Stellenbosch Town, an understanding of two terms are required. The **need** for housing from an economic perspective refers to a want or is simply something that people desire to have, which they may (or may not) be able to obtain. **Demand** is an **economic** principle that describes a consumer's desire and willingness to pay a price for a dwelling unit and is able to do so, i.e. affordability, which is the conversion of "latent" demand (or the need) into effective demand.

The analysis focuses on two inputs required to understand and assess potential demand for housing in Stellenbosch Town, namely a forecast over 20 years of land take-up translated into demand by Rode and Associates ("Rode"), and commuter traffic entering Stellenbosch from different directions on a daily basis (the "cordon counts"). The latter would be used to understand whether the demand forecasts by Rode as adjusted could accommodate the potential need and subsequent demand from persons commuting to Stellenbosch on a daily basis.

4.1 Demand for residential accommodation in Stellenbosch Town

The focus of the Rode forecasts for the purposes of this report, is the land take-up associated with houses larger than 80 m² and flats/townhouses as defined by Statistics South Africa. Several scenarios were developed by Rode to reflect different outcomes of possible future land take-up to address the housing demand for Stellenbosch Town over 20 years until 2036.

A linear regression equation is fitted to historic data of the square meterage of completed flats/townhouses and houses larger than 80 m² to reflect a Business-as-Usual scenario⁷. A long-term trend line is used to extrapolate the demand for these property types for 20 years until 2036. This mechanistic method of trend extrapolation assumes that over the forecast period, demand will continue to grow at the constant growth rate implied by the fitted linear trend line. Alternatively, the method assumes growth in the demand for space (and ultimately dwelling units) is not influenced by economic factors.

Econometric models were developed to reflect the historic relationship between the square meterage of completed flats/townhouses and dwellings larger than 80 m², and macro-economic variables such as real GDP and interest rates for the Consensus⁸ and Junk⁹ scenarios. The models were then used to forecast demand for these property types for the period 2016 to 2021. For the forecasts beyond 2021, a long-term trend of completed flats/townhouses and houses larger than 80 m² is used to extrapolate the 5-year forecast until the end of the forecast period (2036).

Note that the demand forecast until 2021 (in terms of the macro-economic Consensus and Junk scenarios) used by Rode for houses larger than 80 m² and flats/townhouses, is subject to the inherent assumption that there has historically been sufficient developable land available in the municipal area. In other words, one therefore assumes that there was no land-supply constraints for development. If this was not the case, the forecast would be underestimated compared to the potential future demand.

⁷ The **Business-as-usual** scenario is a mechanistic line-of-best-fit extrapolation over a 20-year period (2016–2036) of historic demand in Stellenbosch municipality (1996–2015). This scenario implies the historic growth rate will be maintained, even though the country's economy might decelerate. This scenario is quite likely in light of the popularity of the Western Cape in general and Stellenbosch in particular.

⁸ The **Consensus** scenario is based on the opinions of a panel of economists whom Rode polls every six months. In effect, their forecasts represent a low-growth scenario, compared with the average post-WWII GDP growth (which was three to three and half percent per annum).

⁹ The **Junk** scenario is in effect a very-low-growth macroeconomic scenario, constructed by Rode. As the tag implies, it assumes a worsening political and economic environment over the period of the production of the demand forecasts.

4.1.1 20-Year forecast in demand for housing

The FNB Property Barometer categorises houses in one of three categories: “Small-Sized Segment that include homes from 20 m² to 80 m², the “Medium-Sized Segment”, which include homes from 80 m² to 230 m², and the “Large-Sized Segment” that include homes from 230 m² to 800 m² (http://www.wylie.co.za/wp-content/uploads/fnb-property-barometer_jul_2015_house-price-trends-by-home-size.pdf). Town houses would most likely be classified as part of the Medium-sized segment in terms of the FNB classification. Statistics South Africa defines townhouses as multiple, medium-density dwelling units including cluster housing, group housing, simplexes, duplexes, triplexes and other similar dwelling units that are usually grouped together, with one level of each unit on ground level (<http://www.statssa.gov.za/publications/P50411/P50411September2017.pdf>).

The house-size trends emerging from the FNB Property Barometer also suggest that a move to smaller houses is gaining momentum, which is reflected in the building statistics of houses completed in the Western Cape. Stellenbosch could be considered an outlier in terms of the split between townhouses and flats, but it is not beyond the realms of possibility that such a trend could emerge in Stellenbosch for new developments based on market need and affordability.

Table 4 provides an indication of the number of units required per housing type as determined by Rode for the three scenarios in the **Stellenbosch Municipal area** by 2036. In order to determine a separate figure for flats and townhouses, a share of 86% of the total net land extent required for flats/townhouse in 2036 is allocated to flats based on its historic share of demand. Rode determined the number of flats required by dividing the forecast of land for flats by 78, which is the average size (m²) of flats completed between 1996 and 2015. The number of townhouses was determined by dividing the remaining share of the net land extent required in 2036 by 200, which is the average size (m²) of townhouses completed between 1996 and 2015 in the Stellenbosch Municipal area. The future demand for townhouses is likely not to reflect the figures determined by Rode, which is based on historic take-up from 1996 to 2015. Townhouses could also be classified as houses of approximately 80 m² in size and therefore could be categorised in the housing typology category of units smaller than or equal to 80 m².

Table 4: Combined demand for residential units by 2036 per housing type and by scenario for the Stellenbosch Municipal area

Type of housing	Business-as-Usual	Consensus	Junk
Houses smaller than 80 m ²	23 106	25 417	20 796
Houses larger than 80 m ²	3 057	2 018	1 117
Flats	2 886	3 220	2 370
Townhouses	183	204	150
Total units	29 232	30 859	24 433

Source: Rode and Associates (2017)

Note that the above calculations of future required land extent assume the demand for and supply of land are currently in equilibrium, i.e. there is no significant pent-up demand (demand that cannot be satisfied because of a shortage of developable land¹⁰). However, note that ‘equilibrium’ would implicitly assume that a proportion of developable land is permanently vacant and available for development in order to prevent pent-up demand developing, which is referred to by Rode as iron vacancy. This concept is analogous to an iron inventory of a retail business (or any business that has to keep inventory), i.e. a required minimum stock level in order to prevent the business running out of stock from time to time. What exactly this iron vacancy of developable land for a municipality is or should be, is unknown.

¹⁰ Developable land means land that has a realistic potential of acquiring development rights

Based on the historic take-up from 1996 to 2015 for Stellenbosch Town as stated previously, it represented 60% of the take-up of all land developed across the Stellenbosch Municipal area. The figures in Table 5 reflect the number of units based on a positioning strategy determined by Rode and Associates for development in urban areas of Stellenbosch by 2036, with specific reference in this study to **Stellenbosch Town**.

Table 5: Scenario outcomes of demand for residential units by 2036 per scenario for Stellenbosch Town

Type of dwelling unit	Business-as-usual	Consensus	Junk	Average of scenarios
Houses smaller than 80 m ²	16 868	18 554	15 181	16 868
Houses larger than 80 m ²	2 598	1 716	950	1 755
Flats	2 453	2 737	2 015	2 401
Townhouses	156	173	128	152
Total units	26 446	34 174	24 297	28 305

Source: Rode and Associates (2017)

4.1.2 Alignment of affordability and the housing typology

Effective demand is created by the ability to pay for the dwelling, which in turns refers to affordability. An analysis was prepared to understand the alignment between loan repayments and price of dwelling units and the type of house. Affordability is based on 30% of a household's annual income, an interest rate of 10.5% and instalments payable over a period of 20 years. Table 6 provides an overview of the outcome of the analysis.

Table 6: Affordability analysis of bond repayment coupled to approximate unit price and the type of dwelling unit

Annual household income categories	Monthly bond repayments	Approximate cost per unit	Proposed type of residential
Low-income (R0 – R50 613)	R0 – R998	R0 – R100 000	Subsidised/ Social Housing (BNG)
Low to middle-income (R50 614 – R202 450)	R1 997 – R4 992	R200 000 – R500 000	GAP Housing
Middle to high-income (R202 451 – R809 802)	R5 990 – R19 968	R600 000 – R2 million	Middle-income – Apartments and small townhouses
R809 203 – R1.6 million	R24 959 – R39 935	R2.5 million – R4 million	Luxury duplex/single residential
R1.6 million – R3.2 million	R44 927 – R79 870	R4.5 million – R8 million	Luxury high-end single residential
R3.2 million and above	R84 862 and more	R8.5 million and above	

Note: The household income categories emphasised in the above table are aligned with the type of housing envisaged for the proposed Brandwacht II project.

Based on the above affordability analysis, it is evident that the residential market consists of the following categories:

- Low and low- to-middle-income aimed at the BNG and GAP housing markets;
- Middle to high-income group – this market caters for young families, private student accommodation, households employed in blue-collar jobs (i.e. teachers, police officers, municipal workers, etc.); and
- Higher-income luxury market.

As indicated above, the **middle to high-income market** is specifically aimed at the following income brackets:

- | |
|--|
| <ul style="list-style-type: none"> • R202 451 – R809 802 per annum income (units between R600 000 and R2 million) • R809 203 – R1.6 million per annum income (units between R2.5 million and R4 million) |
|--|
- R1.6 – R3.2 million per annum income (units between R4.5 and R8 million)
 - R3.2 million and above per annum income (units R8.5 million and above)

The nature and scope of the Brandwacht II development is most likely aligned to the first category and a portion of the second category of households based on income levels.

4.1.3 Adjustment of Rode demand forecasts

Accurate forecasts of demand related to the housing typology over the next 20 years are impossible. Given the context provided above and based on emerging market trends, an adjustment is made to the demand forecasts for different housing types prepared by Rode in order to reflect a higher need for town houses and larger homes. Although the market will dictate demand and developers will react accordingly, the tendency to provide for smaller erf sizes and smaller houses in medium to high-density developments is gaining momentum. In order to reflect the principles stated above, the following adjustments are made to the baseline allocation of demand for different types of dwelling units determined by Rode.

- Current size and consequently the number of townhouses as per the Rode forecast, are adjusted down from a dwelling size of 200 m² to reflect a size of 130 m², which implies that the base number determined by Rode, increases by a factor of 1,5384.
- Twenty percent (20%) of the houses smaller than 80 m² as determined by Rode are re-allocated to townhouses. This figure is divided by a factor of 1,625 to reflect the need to increase the size of the house to 130 m², which implies less units of 80 m² or smaller are available.
- Twenty-five percent (25%) of houses smaller than 80 m² in the affordable category are allocated to the category of houses larger than 80 m². Note that Rode used a house size of 260 m² to reflect the size of a house in the category above 80 m². The re-allocation of houses from the smaller than 80 m² category required a downwards adjustment of the number of units re-allocated to the above 80 m² category; a factor of 3,25 was therefore applied.

Our analysis of emerging trends suggests that the 20% and 25% re-allocations stated above is not unrealistic in terms of the envisaged market supply dynamics, project ideas, conceptualisation and developer risk and returns.

The re-weighting per scenario is indicated in Table 7 for the housing types based on the baseline forecasts prepared by Rode. In terms of the categorisation adopted by Rode, the combination of affordable houses smaller than 80 m², flats and townhouses when compared to houses larger than 80 m², represented a split of 91% to 9%. The adjusted allocation reflects a split of 84% to 16% for the stated two respective categories.

Table 7: Percentage allocation adopted by the Rode forecast per housing type for each scenario versus the adjusted percentages based on the reallocation of units

Housing type	Business-as-Usual scenario		Consensus scenario		Junk scenario		Consolidated adjustment
	Rode	Adjusted	Rode	Adjusted	Rode	Adjusted	
Houses smaller than 80m ²	76%	51%	80%	54%	83%	56%	54%
Houses larger than 80m ²	12%	20%	7%	15%	5%	13%	16%
Flats	11%	13%	12%	14%	11%	14%	14%
Townhouses	1%	16%	1%	16%	1%	17%	16%

Source: Rode and Associates (2017) and own calculations

Table 8 indicates the result of the adjustments for **Stellenbosch Town** made to the baseline allocation of dwelling units by Rode in the forecast to 2036. The percentage allocation was recalculated to include affordable houses of smaller than 80 m², houses larger than 80 m², flats and townhouses. The findings suggest that 464 houses smaller than 80 m², 140 larger than 80 m², 120 flats and 141 townhouses, or a total of 865 dwelling units per annum on average, are required to serve the demand for dwelling units. Also note that due to reallocation and adjustments, the total number of units required by 2036 are 17 301 as opposed to the 28 305 stated in the Rode forecast.

Housing demand per annum on average:

- 464 houses <80 m²
- 140 houses >80 m²
- 120 flats
- 141 townhouses

Table 8: Adjusted demand for housing types in Stellenbosch Town with an annual average of the scenarios over a period of 20 years

Type of house	Business-as-Usual scenario	Consensus scenario	Junk scenario	Average of scenarios	Average per annum over 20 years
Houses smaller than 80 m ²	9 277	10 205	8 349	9 277	464
Houses larger than 80 m ²	3 636	2 857	1 884	2 793	140
Flats	2 453	2 737	2 015	2 402	120
Townhouses	2 835	3 121	2 532	2 829	141
TOTAL	18 201	18 920	14 780	17 301	865

Source: Rode and Associates (2017) and own calculations

The greatest demand is for houses smaller than 80 m², which represents 53,6% of the total annual demand. Similar numbers of town houses and houses larger than 80 m² are required on an annual basis, while 120 flats per annum on average are required to cater specifically for the student and young working adult market.

One in every two dwelling units demanded is part of the affordable category (houses smaller than 80 m²)

5. ALIGNING COMMUTER TRAFFIC AND DEMAND FOR HOUSING

5.1 Linkage between commuting employees and housing demand

Housing demand is traditionally based on population growth and is influenced by factors such as income levels, access to finance and market conditions. A requirement also exists to align the housing need with employment generated by existing and new development opportunities, as the current demand for employment cannot be met from internal supply, i.e. many people live elsewhere and commute to their place of employment in Stellenbosch Town. This results in various other issues, such as the exacerbation of an already congested road and parking network, increase in property prices and negative effect on household lifestyles.

A large number of people commute daily to Stellenbosch Town for work, with many of these commuters that cannot afford to purchase a dwelling unit in Stellenbosch. Figure 10 illustrates current and new employment in the commercial, retail and industrial sectors in relation to persons that live and work in Stellenbosch Town and those that commute on a daily basis together with the potential need for housing.

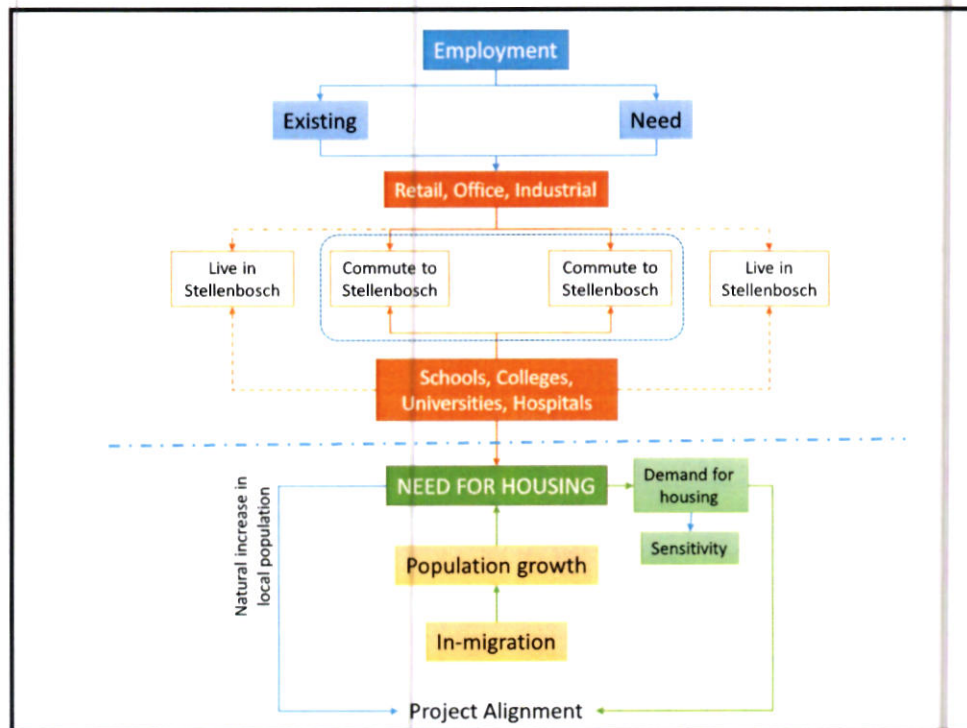


Figure 10: Contextualisation of employment by commuters travelling to Stellenbosch and the need for housing

Source: Multi-Purpose Business Solutions

The approach adopted to ascertain the potential demand for housing is based on an understanding of the existing supply and future demand for retail, commercial and industrial space. A need therefore exists to determine the number of people that work in the businesses and institutions operating in Stellenbosch Town. The approach adopted is based on a determination of the total GLA occupied by businesses in the retail, office and industrial sectors, and applying employee densities to obtain an estimate of the number of people being employed within Stellenbosch Town.

Stellenbosch Town has various JSE-listed entities, other large unlisted businesses, a large education sector comprising primary, secondary and tertiary institutions, hospitals and other public and government institutions. These entities include among others, Stellenbosch University, Capitec, MediClinic, Remgro, Parmalat, Distell, Boland College, Stellenbosch Municipality, Stellenbosch and MediClinic hospitals, etc.

After characterising the employment population of Stellenbosch, it is necessary to determine what percentage of employees that work at these and other firms, are domiciled in Stellenbosch Town versus those that commute on a daily basis from the surrounding towns or the CMA.

The maximum need for housing is derived from estimates of the existing number of employees commuting daily to Stellenbosch Town and the “potential” number of new employment opportunities that any new retail, commercial and industrial development would generate. We assume that displacement and substitution is likely to occur, but when applied to persons that commute to Stellenbosch Town, the impact is zero as the vacant position is filled by another person who either originates from within Stellenbosch Town or forms part of the commuter work force. This is obviously not possible to determine without primary research.

5.2 Need and demand assessment of commuters

Cordon traffic entering Stellenbosch from various access routes determined by Royal Haskoning DHV for the Stellenbosch TOD study (2016), was considered as a point of departure. The cordon counts of vehicles were translated into a figure representing the number of persons entering Stellenbosch during the daily commute by using the Hatch-Goba (2015) study, which drew on information from a study prepared by Jeffares and Green in 2010.

It was apparent from the Hatch-Goba survey (2015) among the larger employers in Stellenbosch (i.e. Distell, MediClinic, Remgro, Parmalat, Denel and Stellenbosch Municipality) that 80% of the workforce use a car for travelling to work, while 20% of employees make use of a lift club on a regular or irregular basis (p. 23). Jeffares and Green (2010) determined that occupancy per vehicle ranged between 1,1 and 2,6 for high- and low-income groups, respectively. We adopted a vehicle occupancy ratio ranging from 1,1 to 2,6 based on the distance travelled and the origin of the vehicles entering Stellenbosch Town. In other words, longer travelling distances would assume greater vehicle occupancy levels.

- 14 409 commuters entering Stellenbosch in morning peak traffic
- 11 527 commuters working in Stellenbosch

These ratios were applied to determine the number of individuals entering Stellenbosch Town in the morning peak from 7:00 to 9:30, which is estimated at 14 409. It may also be argued that the peak starts at 6:30, which results in an undercount of traffic entering Stellenbosch.

Jeffares and Green (2010) determined that 20% of the vehicles could be considered as through-traffic (Hatch-Goba, 2015, p. 11). The adjusted number of people commuting to and working in Stellenbosch Town is therefore 11 527. Once the number of persons commuting was determined, the Hatch-Goba 2015 study relying on the Jeffares and Green estimates, determined that 40% of the Stellenbosch work force resides in neighbouring towns from where they commute every day, while 25% of Stellenbosch University students commute from neighbouring towns. The cordon counts, through-flow, vehicle occupancy and employees residing outside Stellenbosch Town form the basis for the baseline establishment of the need for dwellings units.

Stellenbosch University students were deducted from the baseline as they could not realistically be considered as potential purchasers of dwellings in Stellenbosch Town. A ratio of 40%, as indicated above, was applied to the remaining part of the workforce entering Stellenbosch Town on a daily basis. This implies a figure of 6 527 that could be considered as part of the potential take-up of dwellings in the future. We assumed that the number of commuters would increase by 1,52% per annum, which is

derived from the estimated annual growth in retail, commercial and industrial development envisaged for Stellenbosch Town as determined by Rode for the following 20 years.

However, it is unrealistic to assume that 8 830 people working in Stellenbosch Town by 2036 forming part of the daily commuting workforce that reside elsewhere, would be able to afford to purchase a dwelling and/or even be willing to or want to live in Stellenbosch Town. Although affordability can be determined based on categories of income, no personal or household income data are available from commuters, neither any indication of whether or not they would exercise a choice to live in Stellenbosch Town. Choice could be influenced by financial, general economic conditions, family structures and other decisions.

8 830 people
working in
Stellenbosch Town
by 2036 would form
part of the daily
commuting
workforce

A factor that further affects the need for housing and ultimately demand is in-migration, which could be due to the following:

- People move to Stellenbosch Town in response to a need for additional staff by existing commercial or public/government institutions;
- People move to Stellenbosch Town, but work elsewhere in the Winelands District or in the CMA;
- Normal population progression of people that were raised in Stellenbosch, accepted employment and remained here, creating further demand.

These categories of persons/households also form part of the potential need, which as indicated, translates over time into demand for housing. The limitations of the analysis thus far relate to the following:

- No data on the household income levels of persons commuting to Stellenbosch Town are available;
- No data on preferences to reside in Stellenbosch could be considered;
- Population projections can offer an indication of the population growth, which then address the categories of persons highlighted above, but current data are estimates and subject to a large margin of error.

It is not the purpose of this report to assess whether or not development can occur, which is affected (among others) by the Municipality's financial ability to provide infrastructure, planning policies and market conditions, but how the potential need could translate into effective demand. Consequently, it is required to align the demand forecasts by Rode as adjusted, with the potential demand suggested by commuter traffic.

For the purposes of further assessing the potential demand from commuter traffic, the demand, which represents the take-up of residential units and commercial opportunities as determined by Rode and Associates for input into the Draft Stellenbosch Urban Development Strategy (UDS) (2017), is used as a base. The percentage contributions of different housing types determined by Rode are amended and applied to the dwelling need by commuters (see Section 4.1.3).

5.3 Aligning the Rode demand forecast and potential commuter need for dwelling units

Rode forecasted demand for housing based on different housing types that included houses smaller than 80 m² (affordable), houses larger than 80 m², flats and townhouses. The percentage split between the housing types was applied to the housing need in order to estimate an effective demand from persons commuting to Stellenbosch. Table 9 indicates an example of the split for 100% of commuters (8 830) that could express a need for dwellings in Stellenbosch Town based on the adjustment of the Rode demand forecasts for middle-income and high-income groups. The average need for dwelling units per annum based on the commuter need is 371 (for the middle-income category) and 70 (for the high-income category) over the next 20 years. The Rode adjusted forecasts suggest demand for 725 and 140 units for the middle-income and high-income groups, respectively. From a break-even perspective, the average annual demand determined by Rode as adjusted covers the estimated need of the middle-income commuting group (taken as 100%) by 1,95 times and the high-income need by 1,98 times.

Annual housing need:

- 371 units for middle-income category
- 70 units for high-income category
- Coverage 1,95 to 1,98

Table 9: Break-even analysis for alignment of Rode demand forecasts and need from 100% of persons commuting to Stellenbosch

	BAU Scenario	Consensus Scenario	Junk Scenario	Average Need p.a.	Break-even percentage	Break even	Adjusted Rode Forecast	Demand average p.a.	Difference
Middle Income – Apart. & small									
Houses smaller than 80m ² , flats & townhouse	7067	7498	7706	371	195,43%	725	14508	725	0
High income									
Houses larger than 80m ²	1764	1334	1126	70	198,34%	140	2793	140	0

Source: Multi-Purpose Business Solutions

A sensitivity analysis was applied to determine a more realistic demand of the commuter need for dwellings in Stellenbosch Town. The figures in Table 10 indicate the estimated percentage of the need that could be converted to effective demand, which assumes that commuters can afford to purchase a dwelling and would choose to stay in Stellenbosch. A 50% take-up (or demand for dwellings) indicates a requirement for 186 units in the middle-income and 35 units in the high-income category per annum on average over the next 20 years.

Annual average housing demand with 50% take-up:

- 186 units for middle-income category
- 35 units for high-income category

Table 10: Sensitivity analysis of potential demand derived from the need for different types of dwelling units by commuters

Sensitivity analysis	Rode adjusted	Commuter demand for dwellings			
(Demand per annum)	avg. p.a.	100%	75%	50%	25%
Middle Income – Apart. & small					
Houses smaller than 80m ² , flats & townhouse	725	371	278	186	93
High income					
Houses larger than 80m ²	140	70	53	35	18

Figure 11 is an illustration of different demand levels derived from the commuter need. It is clear that irrespective of the commuter need, the Rode adjusted forecasts would still be able to absorb any demand that would be realised from commuters acquiring dwelling units of the different housing types in Stellenbosch Town.



Figure 11: Alignment of potential need for different housing types based on commuters with the Rode demand forecasts for dwelling units

An application of the sensitivity analysis indicates that even with the adjustment of demand for housing types adopted by Rode, the adjusted demand forecasts would be sufficient to cover the need that may emanate from commuters. The findings are indicated in Table 11.

Table 11: Coverage ratios of commuter housing need for different dwelling types (categories)

Housing category	Coverage of possible commuter demand by adjusted Rode forecasts			
	100%	75%	50%	25%
Houses smaller than 80m ² , flats & townhouses	2,0	2,6	3,9	7,8
Houses larger than 80m ²	2,0	2,6	4,0	7,9

The take-out of the analysis of the potential commuter need for dwelling units, suggests that the demand projections determined by Rode as adjusted is sufficient to cover a 100% of the need that may arise from commuters. This effectively implies that any demand for dwelling units derived from the commuter need, is absorbed in the projections for all types of housing considered in this analysis.

6. DEMAND FOR DWELLING UNITS ARISING FROM COMMERCIAL DEVELOPMENT

The analysis considered in the previous sections was based on the current workforce commuting to Stellenbosch on a daily basis. It is assumed that businesses in Stellenbosch Town are operating at near full employment capacity and that no substantial vacancies exist. It is further assumed that additional capacity is available from persons residing in Stellenbosch Town for the nature and scope of jobs required by existing firms operating in Stellenbosch Town. Consequently, development of any additional retail, commercial and industrial activity, especially in the office and retail space, as well as development of special purposes properties (e.g. schools) would require employees that originate from outside Stellenbosch Town.

It is also accepted that the substitution effect would occur among existing businesses and people moving to other new opportunities in Stellenbosch Town due to retail, commercial and industrial development will be replaced by new persons and therefore create new demand. Hence, for the purposes of the next part of the analysis, it is assumed that no additional employment is available to be met from internal (Stellenbosch Town) supply.

The additional need for dwelling units arising from future retail, commercial and industrial development is based on the following principles:

- a. The forecast of demand for retail, industrial and office space in Stellenbosch Town over the next 20 years prepared by Rode, forms the basis of the calculation to determine the potential need for dwelling units;
- b. Typical employment densities expressed as a full-time equivalent job per m² are used to determine the potential number of employees that would be required:
 - Industrial: 47 m²
 - Office: 16 m²
 - Retail: 15 m²
- c. Densities are applied to the Gross Lettable Area (GLA) to determine the number of employees; and
- d. The same factors and ratios applied to the cordon counts are used to determine the number of employees that would originate from outside Stellenbosch.

6.1 Impact of retail, commercial and industrial development

Our analysis suggests an average of 509 employees per annum is required for new retail, office and industrial development in Stellenbosch Town over a period of 20 years, of which 203 persons would originate from outside Stellenbosch and 306 would acquire housing in Stellenbosch Town, thus creating further demand. The 40% applied to the workforce originating from neighbouring towns could be higher depending on the nature and scope of skill levels required and the assumption that more than two-thirds of the economic activity in Stellenbosch Town is generated by businesses operating in the tertiary sector of the economy. The same percentages adopted for the assessment of the housing need from commuters are applied to the need for housing due to future development. This is required in order to achieve the necessary alignment between demand for housing from commuters and demand that arises from future commercial, retail and industrial development.

An additional 175 vehicles per annum on average would enter Stellenbosch Town due to the rollout of retail, commercial and industrial development over 20 years. We assumed a worst-case scenario with one occupant per vehicle, i.e. 175 extra persons are factored into the 8830 calculated in Section 5.2.

The previous analysis was based on number of vehicles and vehicle occupancy, while the analysis in this section uses a different approach based on employment densities. The application of the employment densities suggests that 203 persons would work in Stellenbosch Town, but originate from elsewhere. A difference of 28 persons occurs due to the different approaches.

Table 12 indicates that the average demand per annum based on the Rode forecast for retail, office and industrial space in Stellenbosch Town over the next 20 years ranges from 51 to 203 dwelling units for take-up percentages ranging from 25% to 100% for those persons that commute to Stellenbosch. A further 77 to 306 persons could take up residence in Stellenbosch based on the application of the sensitivities.

Table 12: Sensitivity analysis of the potential need for dwelling units arising from non-residential development

Sensitivity analysis for number of units based on annual average (commercial, retail & industrial development)				
	100%	75%	50%	25%
Middle to High Income				
Houses smaller than 80m ² , flats & townhouses (commuters)	171	128	86	43
High income				
Houses larger than 80m ² (commuters)	32	24	16	8
Total	203	153	102	51
Middle to High Income (residing in Stellenbosch Town)				
Houses smaller than 80m ² , flats & townhouses (residents)	257	193	129	64
High income (residing in Stellenbosch Town)				
Houses larger than 80m ² (residents)	49	37	24	12
Total	306	230	153	77

A need also exists to include an additional 306 persons arising from future retail, commercial and industrial development that would reside in Stellenbosch Town, using the upper figure of the commuters as the base. In terms of understanding the total demand, an additional 334 persons are added to the potential need for dwelling units to prevent double counting, i.e. not all 509 persons representing the employment requirement for Stellenbosch Town due to future retail, commercial and industrial development.

Figure 12 is an illustration of different demand levels derived from the commuter need. It is clear that irrespective of the commuter need, the Rode forecasts would still be able to absorb any demand for dwelling units for the different housing types that would be realised from non-residential development in Stellenbosch Town.

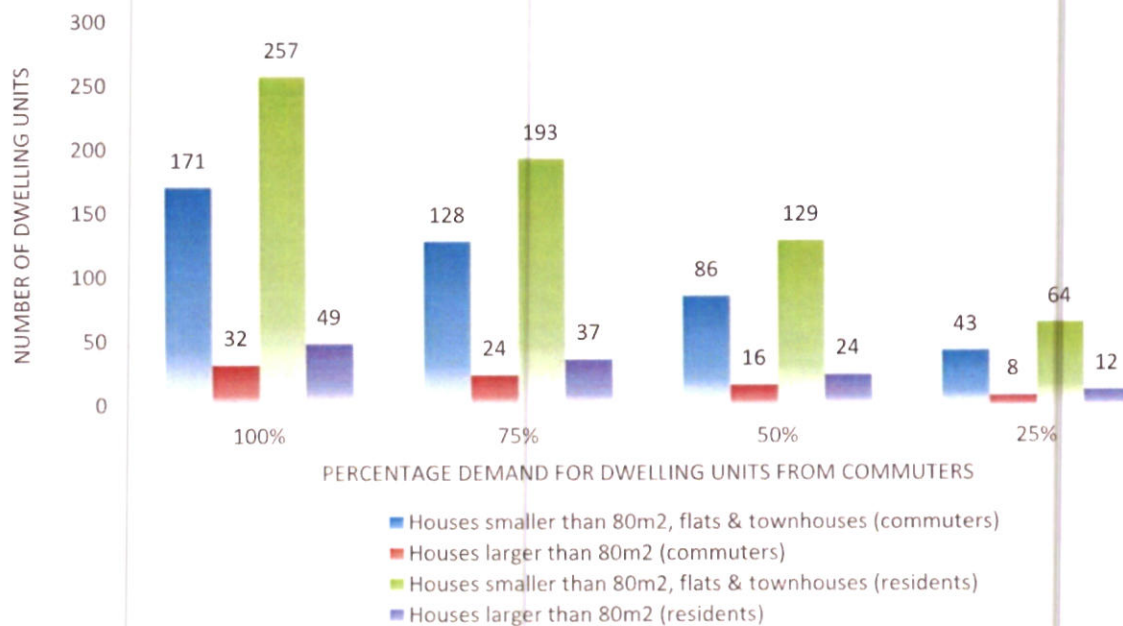


Figure 12: Alignment of potential need for different housing types from commuters and Stellenbosch Town residents with the Rode forecasts for dwelling units arising from non-residential development

6.2 Metrics for analysis of future commercial development

It is useful to understand the figures derived from the analysis in the context of the relationship between two variables, i.e. vehicle traffic and commercial development. We determined that the addition of 52 m² of retail, office and industrial space would result in one additional vehicle entering Stellenbosch Town daily for work. Furthermore, one additional employee will originate from outside Stellenbosch Town for every 44 m² of GLA developed in Stellenbosch Town. Assuming the remainder of the need that arises from future commercial development arises from persons that want to reside in Stellenbosch Town, one additional employee originates from within Stellenbosch Town for every 30 m² of GLA developed. These ratios are derived from figures calculated from the assumptions applied in the analysis.

- 1 additional vehicle will enter Stellenbosch Town for every 52 m² of GLA developed
- 1 additional employee will originate from outside Stellenbosch Town for every 44 m² of GLA developed
- 1 additional employee would/could reside in Stellenbosch Town for every 30m² of GLA developed

7. CONSOLIDATED DEMAND FOR DWELLING UNITS

The potential demand for dwelling units related to current commuters is added to the demand that could be generated from additional commuters entering Stellenbosch Town as well as persons that would/could reside in Stellenbosch Town due to future commercial, retail and industrial development. Table 13 indicates the consolidated demand for dwelling units from current and additional commuters with the latter representing an increase in commuters due to commercial, retail and industrial development over time. An average annual need for dwelling units from commuters ranges from 195 to 775, with 50% that could represent effective demand for 326 houses smaller than 80 m², flats and small town houses and 62 houses larger than 80 m². The findings indicate that the adjusted demand forecasts by Rode, which did not consider the possible need for housing arising from future retail, commercial and industrial development, are able to cover 100% of the need. The different demand levels derived from the combined commuter need is also illustrated in Figure 13.

Combined commuters need between 195 to 775 dwelling units of different housing types on average per annum

Table 13: Combined housing need for existing and growth in commuters (due to retail, commercial and industrial development) compared to the adjusted Rode forecast for different levels of need

Sensitivity analysis (annual average demand) (Commuters and future commercial development)	Rode forecast				
		100%	75%	50%	25%
Middle Income					
Houses smaller than 80m ² , flats & townhouses	725	652	489	326	163
High income					
Houses larger than 80m ²	140	123	93	62	31
TOTAL	865	775	582	388	195

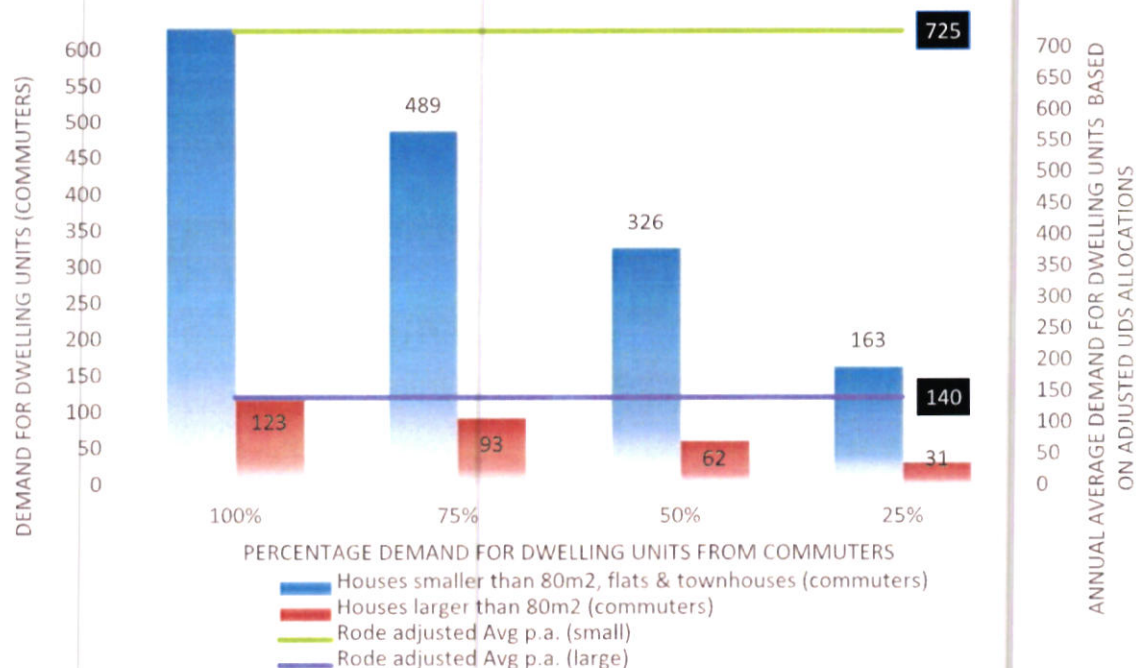


Figure 13: Alignment of the combined potential need by commuters for dwelling units of different housing types with the Rode forecasts for dwelling units

7.1 Sensitivity analysis related to adjustment of the housing type mix

As stated previously, houses smaller than 80 m², flats & small townhouses originally represented 91,88% of the housing mix determined by Rode, while houses larger than 80 m² represented 8,12%. This split was adjusted down to 84,06% for houses smaller than 80 m², flats & small townhouses and increased to 15,94% for houses larger than 80 m². These are the percentages applied in the analysis below. Various splits are applied to understand different allocation options; although these are for illustrative purposes, it offers an indication of different market scenarios for the two housing categories.

The analysis below is based on the allocations indicated in Table 14 for different percentages of the need for housing types. Proportional splits are used to demonstrate the adjusted output of the two housing mixes ranging from a 50%:50% (or equal) ratio to a ratio of 75%:25%.

Table 14: Combinations of different percentages representing the split between housing categories

Houses <80m ² , flats & small townhouses	50%	55%	60%	65%	70%	75%
Houses >80m ²	50%	45%	40%	35%	30%	25%

The findings of the sensitivity analysis presented in Table 15 based on the above proportional allocations suggest that the number of dwelling units required on an annual basis for the **50% scenario** (represented by a total demand of 388 dwelling units) ranges from 194 to 241 units for houses smaller than 80 m², flats and small townhouses. The demand for houses larger than 80 m² for the high-income group by 2036 ranges from 97 to 194 dwelling units on average per annum. This aligns with the forecast period adopted in the Rode forecasts.

50% of the need by 2036 would require on average per annum:

- 194 to 241 units smaller than 80 m²
- 97 to 194 units larger than 80 m²

The 75% scenario (represented by 582 dwelling units), indicates demand that ranges from 291 to 346 units for houses smaller than 80 m², flats and small townhouses. Demand for houses larger than 80 m² for the high-income group by 2036, ranges from 145 to 291 dwelling units on average per annum by 2036.

Table 15: Sensitivity analysis for different allocations between housing types based on different levels of need from current and future commuters

Adjusted split	Housing type	Sensitivity analysis					
84,06%	Houses <80m ² , flats & small townhouses	50%	55%	60%	65%	70%	75%
15,94%	Houses >80m ²	50%	45%	40%	35%	30%	25%
Total need arising from commuters		100%					
Adjusted annual housing demand		775					
Middle Income – Apart. & small townhouses							
Houses smaller than 80m ² , flats & townhouses		388	426	465	504	543	581
High income							
Houses larger than 80m ²		388	349	310	271	233	194
Adjusted split	Housing type	Sensitivity analysis					
84,06%	Houses <80m ² , flats & small townhouses	50%	55%	60%	65%	70%	75%
15,94%	Houses >80m ²	50%	45%	40%	35%	30%	25%
Total need arising from commuters		75%					
Adjusted annual housing demand		582					
Middle Income – Apart. & small townhouses							
Houses smaller than 80m ² , flats & townhouses		291	320	349	378	407	436
High income							
Houses larger than 80m ²		291	262	233	204	174	145
Adjusted split	Housing type	Sensitivity analysis					
84,06%	Houses <80m ² , flats & small townhouses	50%	55%	60%	65%	70%	75%
15,94%	Houses >80m ²	50%	45%	40%	35%	30%	25%
Total need arising from commuters		50%					
Adjusted annual housing demand		388					
Middle Income – Apart. & small townhouses							
Houses smaller than 80m ² , flats & townhouses		194	213	233	252	272	291
High income							
Houses larger than 80m ²		194	175	155	136	116	97
Adjusted split	Housing type	Sensitivity analysis					
84,06%	Houses <80m ² , flats & small townhouses	50%	55%	60%	65%	70%	75%
15,94%	Houses >80m ²	50%	45%	40%	35%	30%	25%
Total need arising from commuters		25%					
Adjusted annual housing demand		195					
Middle Income – Apart. & small townhouses							
Houses smaller than 80m ² , flats & townhouses		97	107	117	126	136	146
High income							
Houses larger than 80m ²		97	88	78	68	58	49

Figures 14 and 15 illustrate the outcomes of the different percentage allocations to the two housing categories (houses smaller than 80 m², flats and small townhouses, and houses larger than 80 m²) based on the adjusted allocation stated above. The colours in Figures 15 and 16 correspond, which enables a direct comparison of the two housing categories starting at an equal allocation (50%) for both housing categories.

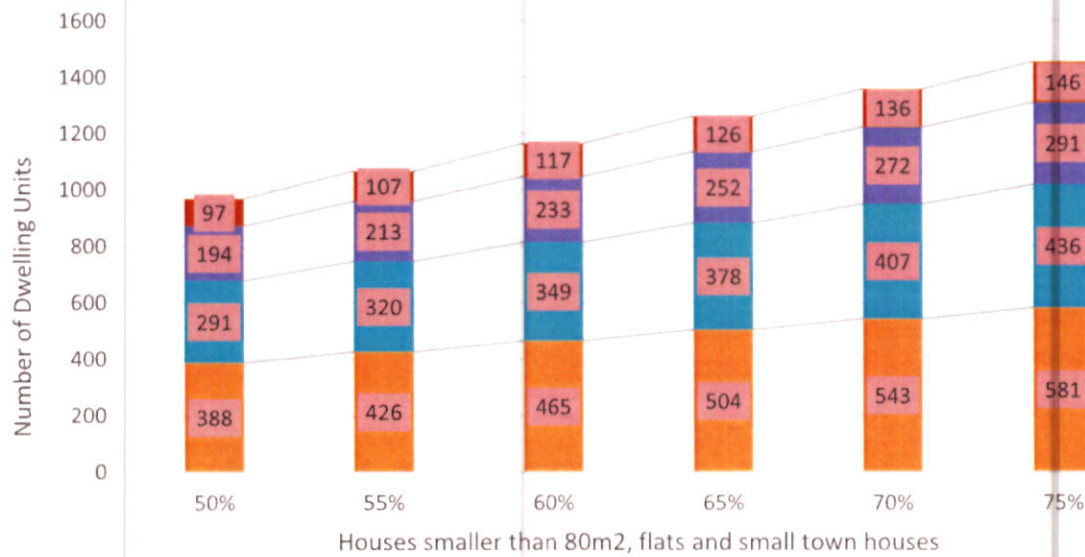


Figure 14: Illustration of different outcomes for an increasing percentage allocation to houses smaller than 80 m², flats and town houses

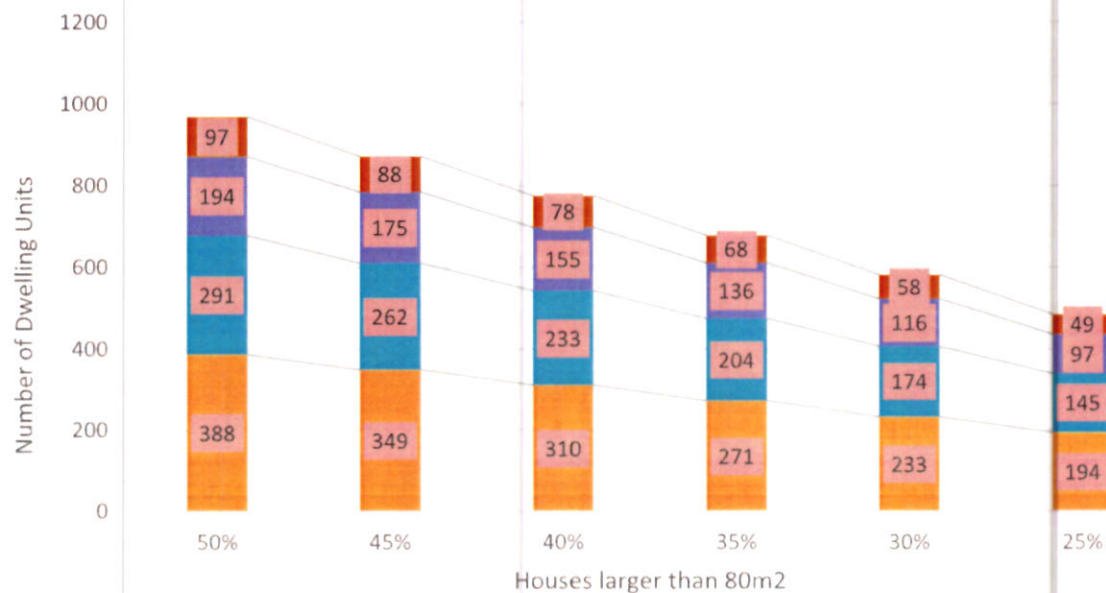


Figure 15: Illustration of different outcomes for an increasing percentage allocation to houses larger than 80 m²

7.2 Synopsis of key findings

The assumptions, adjustments, findings and discussion in the previous sections suggest that the demand for units determined by the Rode forecasts as adjusted would absorb a 100% of the potential need accruing from current and future commuting traffic and from future demand for additional retail, commercial and industrial development space.

A more realistic take-up of 50% of the total need could be considered as effective demand, and results in a coverage ratio of 2,23 units for all housing types considered in the analysis (i.e. houses smaller than 80 m², flats & townhouses and houses larger than 80 m²). This implies that the need for every unit is covered 2,23 times by the demand projection in the Rode forecasts as adjusted. The coverage ratio for houses smaller than 80 m², flats & townhouses and houses larger than 80 m² is 2,22 and 2,27, respectively. The coverage ratios do not include other categories of demand outlined in Section 5.2.

*The **surplus** in terms of the forecast arises from the difference between the demand determined by the Rode forecasts as adjusted and the estimates emanating from the existing commuter traffic and additional commuter traffic derived from new commercial, retail and industrial development.* In terms hereof, a 100% take up of the need for housing arising from the combined commuter traffic, suggests a total surplus of 90 units for both housing categories, with 74 units for houses smaller than 80 m², flats & townhouses, and 16 units for houses larger than 80 m² on average per annum.

A take-up of 50% of the need by all commuters, which is assumed to be half of the total potential need and represents the effective demand for the purposes of this analysis, indicates that the surplus for houses smaller than 80 m², flats and townhouses and houses larger than 80 m², is 477 units on average per annum. The surplus at the 50% take-up of the housing need is 399 for units smaller than 80 m², flats and townhouses and 78 units for houses larger than 80 m² on average per annum.

**Surplus for all housing types
houses per annum on average by
2036:**

- 477 units in total
- 399 for units smaller than 80 m², flats and townhouses
- 78 units for houses larger than 80 m²

A need exists to contextualise the proposed project in terms of demand by considering the possible take-up of dwelling units and the fit thereof with the growth paths envisaged in the Development Strategy prepared for the urban areas of Stellenbosch, including Stellenbosch Town, as well as estimates of the timeframe for the completion of the proposed Brandwacht II project.

8. DEVELOPMENT OF AND IN STELLENBOSCH TOWN

In order to place the Brandwacht II development project in the context of the future development and growth of Stellenbosch Town, a requirement exists to consider the strategic positioning, development strategy and growth trajectory envisaged in the Urban Development Strategy prepared by Rode and Associates for the urban areas of Stellenbosch, including Stellenbosch Town. The application of these strategic principles permits the estimation of certain benefits that would accrue to the Stellenbosch economy and the Stellenbosch Municipality due to a development project.

8.1 Strategic positioning, development strategy and growth trajectory for Stellenbosch Town

Stellenbosch Town is positioned to provide service-orientated activity driven by and aligned with tertiary sector development. In terms of the development strategy over the next 20 years, Stellenbosch Town should facilitate complementary and supplementary land uses, i.e. residential, commercial and a low-key industrial component aligned to and focused on tertiary sector economic activity. Development can be incentivised to, among others, accelerate and facilitate private sector investment (considering mix, timing and extent) and to provide skills development and upskilling opportunities for locals.

The development landscape in and around Stellenbosch Town over the past 10 years has been characterised by low levels of development (except for the Brandwacht-on-River residential development), with mostly brownfields projects (demolition of houses for construction of flats or other commercial uses) and limited greenfields development, together with the risks of supply and demand and the impact of increasing equilibrium price points. Rode envisaged a progressive growth trajectory for Stellenbosch Town over the next 20 years. Progressive growth implies exponential growth over slightly less than the first half of the 20-year forecast period, reaching saturation point after about 10 years and tapering off significantly thereafter to flatten out over the last five years of the forecast period. Figure 16 illustrates the growth trajectory for a progressive development path for Stellenbosch Town over 20 years.

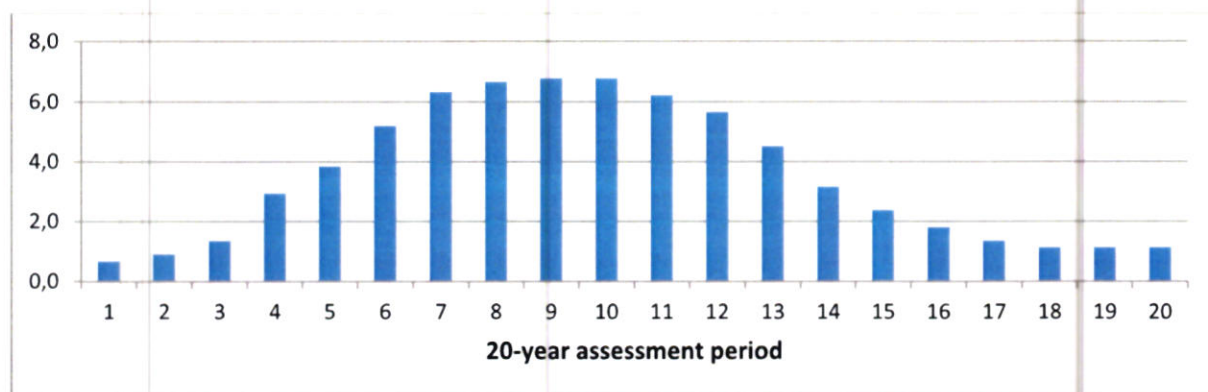


Figure 16: Growth trajectory for Stellenbosch Town over 20 years

Table 16 provides a summary of the housing typology with amended demand forecasts by 2036 (refer to Table 8). The figures stated in Table 16 are annualised based on the application of the adopted growth trajectory for Stellenbosch Town. The envisaged annual take-up of dwelling units based on the housing typology and application of the growth trajectory is illustrated on an annual and cumulative basis in Figure 17 and 18, respectively.

Table 16: Summary of the adjusted demand based on the Rode forecast for different housing types

Housing type	Amended Rode demand forecast
Houses smaller than 80 m ² (affordable)	9 277
Houses larger than 80 m ²	2 793
Flats	2 402
Townhouses	2 829
Total units	17 301

Source: Rode and Associates and own calculations

As indicated below, the units are allocated per year based on an application of the progressive growth trend for Stellenbosch Town adopted as part of the Draft Stellenbosch Municipality's Urban Development Strategy (2017). A peak is reached in about 11 to 12 years, but it should be noted that market conditions, supply and demand dynamics will impact the actual outcome of this growth trajectory, as will municipal funding to provide bulk and infrastructure services. Note that the first two years of the forecast period are used for the introduction of bulk and internal services as part of the roll-out of a development project. The timeframe is variable depending on the nature and scope of the project.

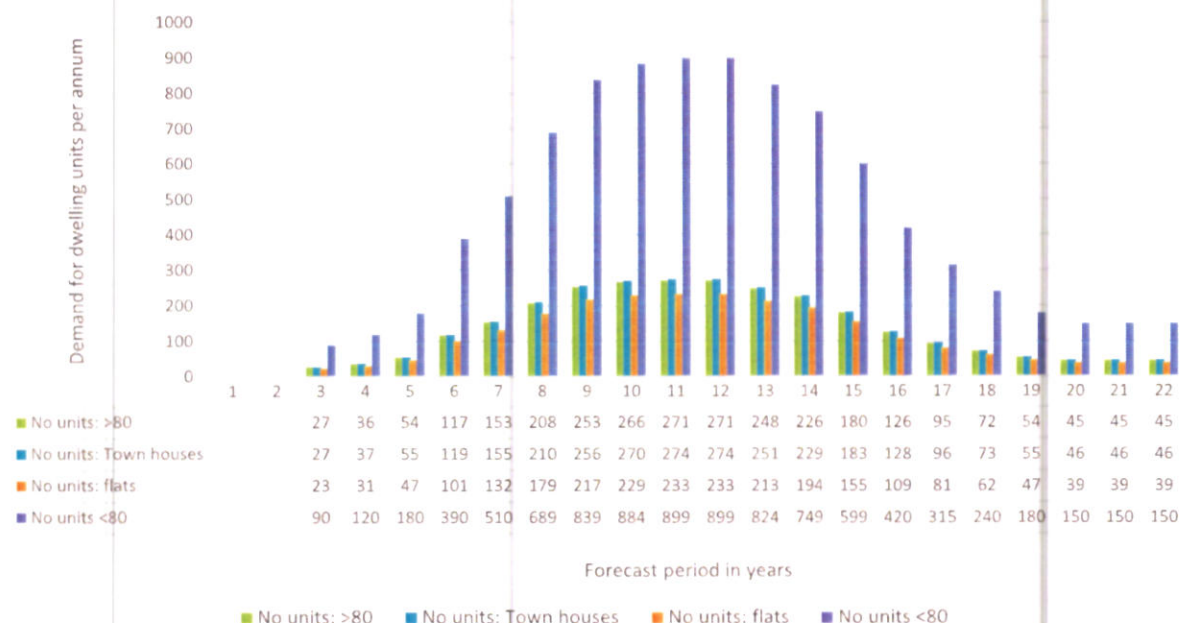


Figure 17: Forecast of the annual dwelling units per housing type for a period of 20 years based on adjusted demand forecasts

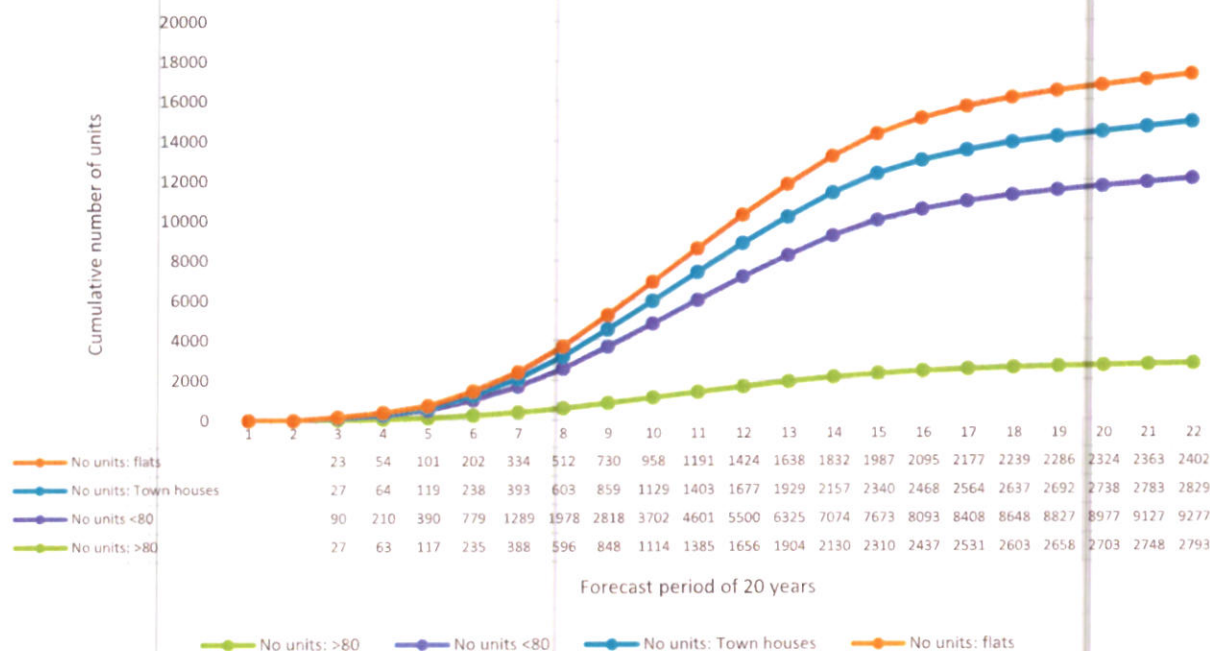


Figure 18: Cumulative take-up of dwelling units per property type over 20 years

8.2 Benefits to Stellenbosch economy and Stellenbosch Municipality

8.2.1 Economic and labour contribution

Estimating the impact of a project or development assists role-players to understand the potential **benefits for the economy** and stakeholders. The assessment of the economic impact of a project generates an estimate of the economic consequences associated with development of a project on the Stellenbosch economy and is used to assess the direct and indirect contributions of construction spend and operational revenues (final demand) on the economy through the application of multipliers.

The assessment of the **employment contribution** is at best very risky. The results are driven largely by the assumptions, which entail the following:

- The structure and composition of the Western Cape and Stellenbosch economy will remain unchanged. This assumption is necessary to enable the use of multiplier analyses.
- No political and other administrative changes will take place on a national or provincial level.
- Salaries and wages are fixed in real terms. Household income will adjust purely by the constant wage multiplied by the increase in employment.
- The supply of skilled labour will be a limiting factor in the construction process.

Demand for labour (employment) is in economic terms considered as a derived demand; a forecast for labour demand can therefore be derived from the planned increase in capital and operational spending. The basic assumption focuses on the relationship between growth in real spending and growth in labour demand. If growth in labour demand equals the growth in real spending, labour productivity will stay constant. If labour productivity increases, the demand for labour will grow at a slower rate than real spending.

The assessment offers an indication of direct and indirect contributions to the Stellenbosch economy and the labour impact based on the annual change over the period envisaged for development using 2015 as a base.

8.2.2 Municipal development charges (DCs) and property rates

Infrastructure provision to enable the development of a project such as Brandwacht II is generally the responsibility of the relevant sphere of government, which is Stellenbosch Municipality in this case. In order to recoup all or a major part of the costs related to the introduction of infrastructure for a project (development opportunity), the government introduces Development Charges (DCs) payable by the developer based on the nature and scope of the external services and infrastructure required for the envisaged project.

The Stellenbosch Municipality will also benefit from levying property rates based on the market value of the scope of components comprising the development. The latter is a continuous funds inflow for the Municipality. Over and above the levying of rates, other service charges are obtained together with the sale of electricity and water, which further enhances the revenue base of the Municipality.

The focus of this assessment is an estimation of the DCs and property rate accruing to the Municipality over the duration of the development period envisaged for a new project.

9. ALIGNMENT OF DEVELOPMENT PIPELINE WITH RODE ADJUSTED FORECASTS AND SOCIO-ECONOMIC IMPLICATIONS

9.1 Alignment with housing typology of adjusted Rode forecasts

The scope of the “Development Pipeline” for Stellenbosch Town as illustrated and discussed in Section 3.5 is placed in context of the adjusted forecasts of demand for housing based on the stated typology adopted by Rode. Also refer to the nature of the housing typology described in Section 4.1.

Table 17 provides a comparison of the housing typology (with amended demand forecasts by 2036) and the scope of dwelling units associated with the Development Pipeline. This is a snapshot and not directly comparable from a timing perspective as the forecasts related to a planning term of 20 years for Stellenbosch Town, whilst the Pipeline timeframes of about 10 years are based on an envisaged occupancy over a shorter timeframe, hence the two timeframes do not coincide.

It should be noted that the Development Pipeline indicates the developers’ intention related to different housing types. The numbers are aligned with the housing typology adopted throughout this analysis.

Table 17: Comparison of the adjusted demand forecast of Rode and the scope of the Development Pipeline for Stellenbosch Town

Housing type	Amended Rode Demand forecast	Development Pipeline
Houses smaller than 80 m ² (affordable)	9 277	2 860
Houses larger than 80 m ²	2 793	2 872
Flats	2 402	1 838
Townhouses	2 829	1 530
Total units	17 301	9 100

Source: Rode and Associates and own calculations

9.2 Application of growth trajectory to Development Pipeline over 20 years

The figures stated in Table 17 are annualised based on the application of the adopted growth trajectory for Stellenbosch Town. The envisaged annual take-up of dwelling units based on the housing typology and application of the growth trajectory is illustrated in Figure 19 on an annual basis over a period of 20 years.

As indicated above, the units are allocated per year based on an application of the progressive growth path for Stellenbosch Town adopted as part of the Draft Stellenbosch Municipality’s Urban Development Strategy (2017). A peak is reached in about 11 to 12 years, but market conditions, supply and demand dynamics will impact the actual outcome of this growth trajectory, as will municipal funding to provide bulk and infrastructure services. Note that the first two years of the forecast period are used for the introduction of bulk and internal services as part of the rollout of a development project. The timeframe is variable depending on the nature and scope of the project.

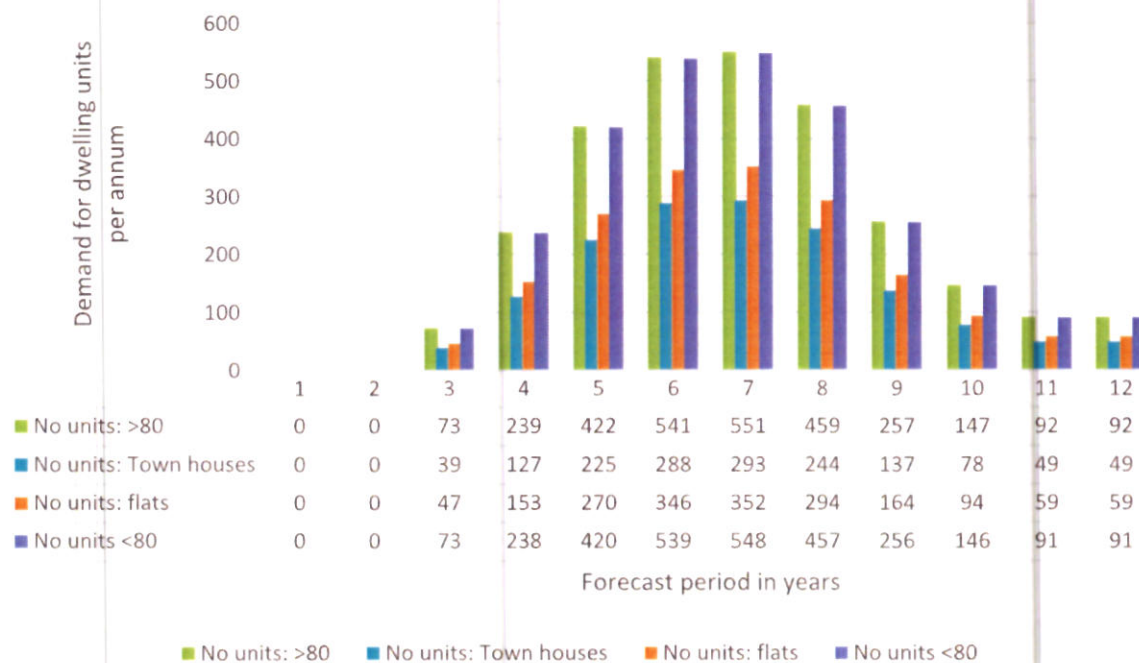


Figure 19: Forecast of the annual units per housing type for the Development Pipeline over a period of 20 years

Figure 20 illustrates the cumulative take-up of units per housing type for the Pipeline over a period of 10 years. The growth trajectory adopted for Stellenbosch Town is applied to the Development Pipeline over its duration based on the assumptions below.



Figure 20: Cumulative take-up of dwelling units per property type for the Pipeline over the forecast period of 20 years

9.2.1 Assumptions applied for the application of the Development Pipeline

To realistically understand the Development Pipeline in the context of the adjustment to the housing unit forecasts prepared by Rode, several assumptions are applied to create the alignment with specific reference to the take-up, construction and occupation of dwelling units. The assumptions are as follows:

- Duration of the project culminating in the construction and occupancy of all dwelling units and other components in accordance with the following:
 - Year 1 – external services
 - Year 2 – internal services
 - Year 3 – selling and construction commences
- Sell-out of the project (number of years for the completion of construction and occupancy of all units);
- Phasing of the project with the introduction of components at different stages over the duration of the project;
- Costs of construction (reflect the current per m² costs for different dwelling types);
- Inflation projections;
- Building cost escalations assumed to be 6% per annum, which is an average of in-contract building costs forecast by Medium-Term Forecasting Associated (2017)
- Development charges applied by the Stellenbosch Municipality based on 2017; and
- Property rates applied based on the Stellenbosch Rates Policy and 2017 factors.

9.2.2 Alignment of annual demand forecasts and Pipeline occupancy projections

Figure 21 indicates the outcome from an application of the growth trajectory and reflects the annual and cumulative take-up of dwelling units over the envisaged duration for the completion of the entire pipeline over a period of 10 years, i.e. all dwelling units are constructed with occupation. In addition, this is aligned with the demand forecasts prepared by Rode as adjusted, applying the same progressive growth trajectory displaying annual number of units and cumulative number of units over the 20-year period.

An analysis of the data illustrated in Figure 21, focuses on the 10-year duration envisaged for the Development Pipeline with a comparison of the first 10 years envisaged in the urban development planning for Stellenbosch Town. Note that to ensure the validity of the analysis, it is necessary to compare the same scope (type) of housing envisaged as part of the Development Pipeline and that included in the demand forecasts for said houses prepared by Rode and Associates as adjusted.

Demand for housing in the urban area of Stellenbosch Town (applying the principle stated above) is estimated at 6 904 units by year 10 for the same type of housing as envisaged for the Development Pipeline. The projects that form part of the pipeline, based on the same growth trajectory, is envisaged to deliver 9 100 units over 10 years, which is 31,83% more than the forecast over the same period. By year 12 of the forecast period, the forecasted number of units will exceed the number of Pipeline units by 1 158 or 12,72%. In other words, slightly more than a one-year gap exists between the envisaged completion of development for the Pipeline projects and the projected demand for housing units in Stellenbosch Town.

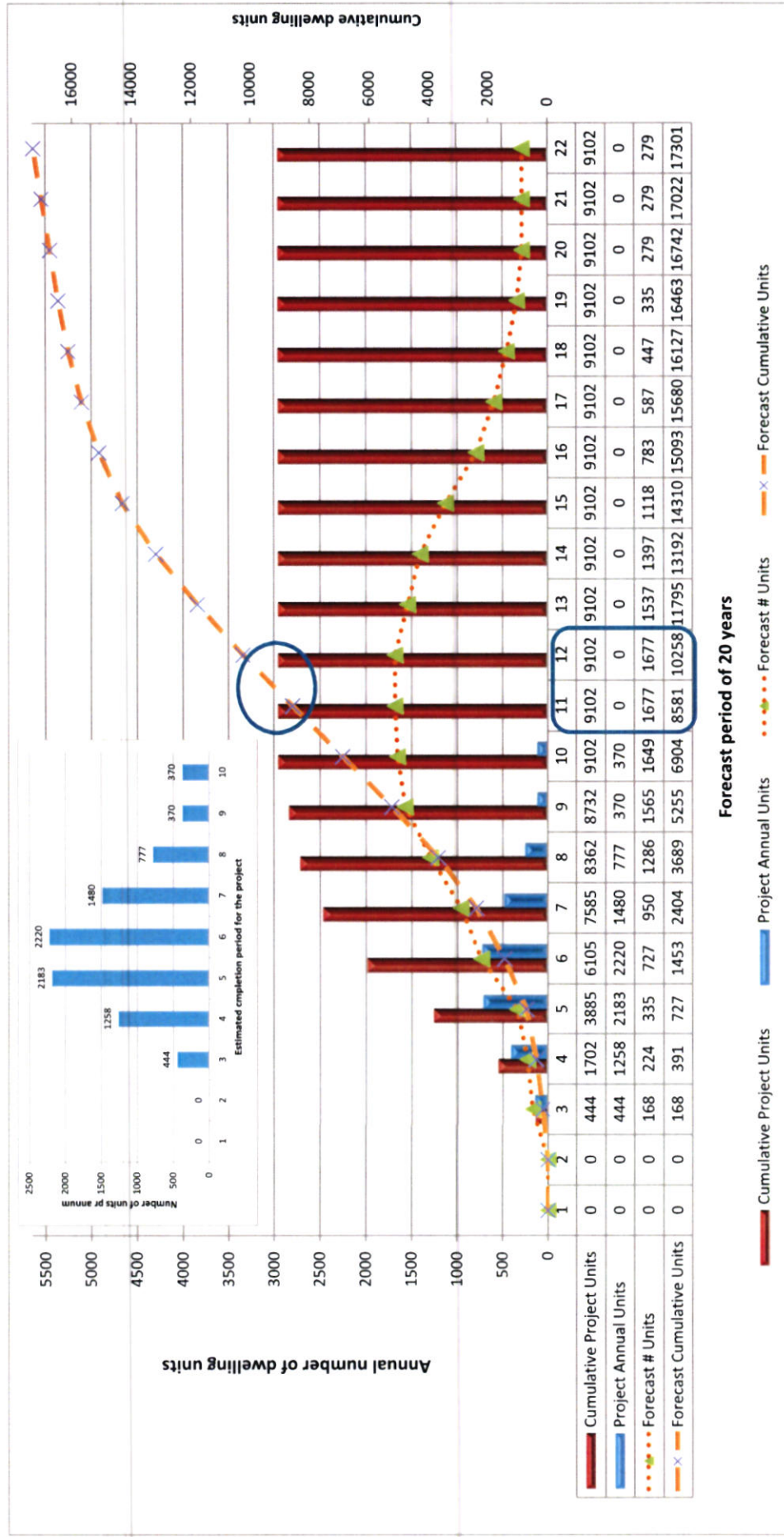


Figure 21: Annual and cumulative demand forecasts and the estimated occupancy timeframe envisaged for the Development Pipeline

9.3 Benefits to Stellenbosch economy and Stellenbosch Municipality

9.3.1 Development Charges (DCs)

DCs that would accrue to the Stellenbosch Municipality are based on the nature and scope of the Pipeline projects. The DCs are illustrated on an annual basis, but in practice, DCs normally accrue to a Municipality based on the commencement of a project phase. We also assume that the Municipality (and not the developer) will introduce the required bulk services, which in turn has implications for the Municipality's funds flow, budgeting and any negotiations associated with the introduction of bulk services by the developer.

Given the anticipated period for the rollout of the Pipeline projects, it is illustrated that DCs would accrue to the Municipality in five-year intervals over the 10-year rollout. This is uncertain and is dependent on the commencement of a Pipeline project. The DCs are reflected on an annual basis with an indication of the two five-year periods related to the rollout of the Pipeline as illustrated in Figure 22.

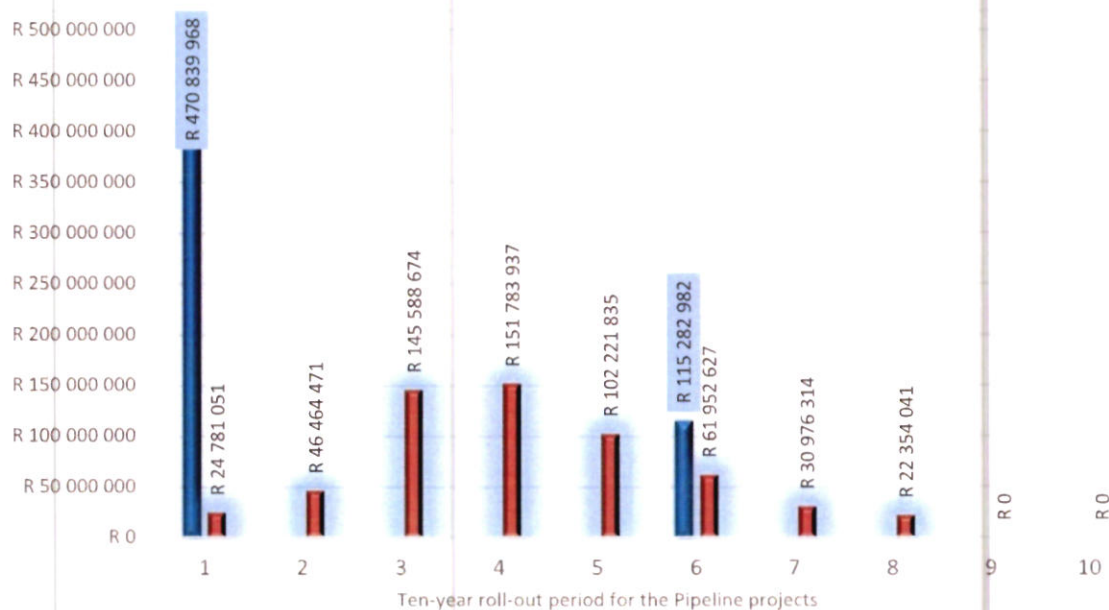


Figure 22: Annual and cumulative DCs over the development period of the Pipeline projects

Based on the current development charges levied by the Municipality (in 2017 terms), it is estimated that R561,1 million would be due and payable for the provision of external bulk and service requirements of the Pipeline projects.

9.3.2 Total capital expenditure

The capital expenditure of and associated with the Pipeline projects refers to three components: the introduction or provision of bulk (external) services (subject to capacity constraints) by the Municipality, introduction of internal services by the developer and the construction of the dwelling units and other components. Figure 23 indicates the combined annual and cumulative capital expenditure for the three components over the envisaged rollout of the Pipeline projects.

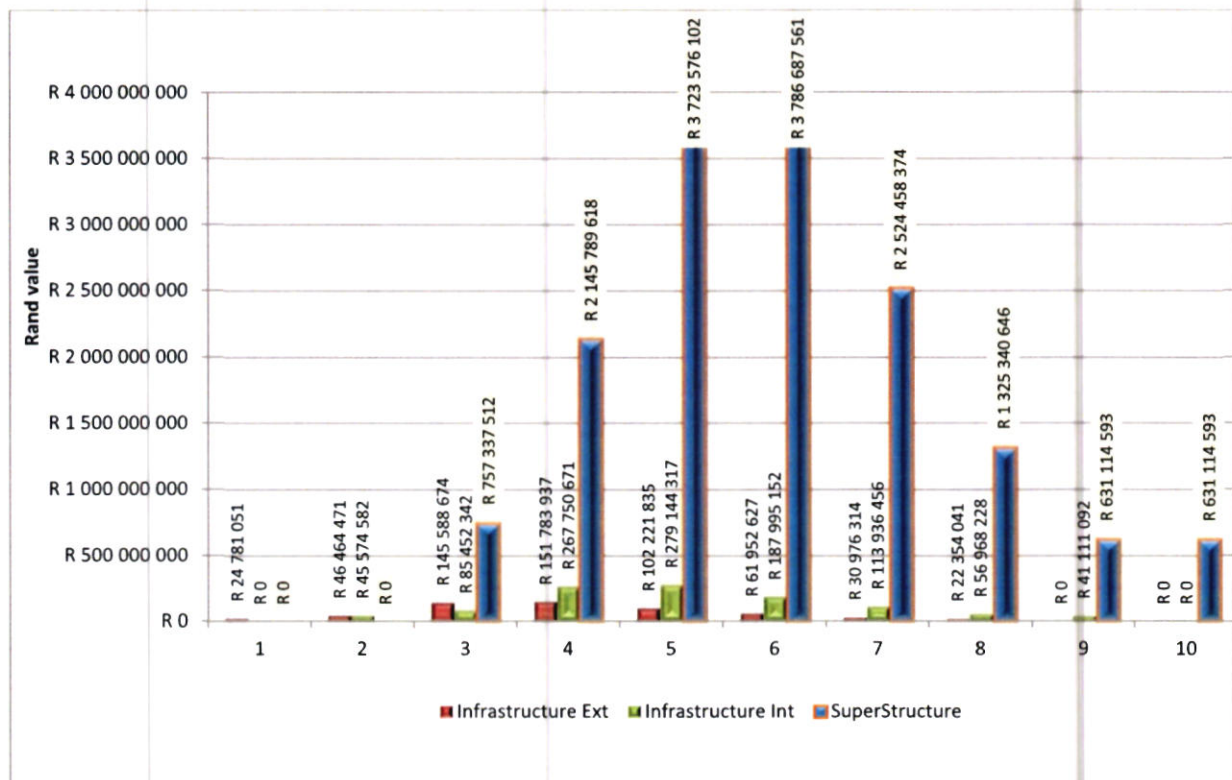


Figure 23: Annual envisaged capital expenditure for the timeframe envisaged for the completion of construction

The Development pipeline has a 10-year rollout plan. The introduction of services is envisaged over the period and it is therefore assumed that the services would follow the same growth trajectory assumed for the take-up of units within the Pipeline projects. Internal services are introduced a year later and follow the same trajectory. Once external and internal services are complete, construction commences after the sales of erven during the preceding years. It is not possible to anticipate which projects in the pipeline would be commenced first or what housing types would be introduced as part of a mixed-use residential development. Notwithstanding, a period of 10 years is assumed for the completion of the projects.

Note that the construction period mimics the progressive growth trajectory for planning development in Stellenbosch Town over a period of 20 years. Based on the growth trajectory for Stellenbosch Town, the total investment in infrastructure (external and internal) and superstructure over the duration of the project, is estimated at R17 189 million (in current terms). The spending on top structures amounts to R15 525 million over the 10 years, translating to R1 552 million per annum on average.

9.3.3 Property rates

The Municipality will levy property rates on the sale of a land portion and on the improved value. We have assumed for the purpose of this assessment, that property rates will apply to the completed dwelling unit or commercial component (if applicable) based on the envisaged duration of the project and the application of the growth trajectory. We determined the cumulative rates income after 10 years and thereafter applied an escalation of 8% for the remaining period of the forecast period, even though it is not possible to estimate the values of the properties going forward or estimate the increase in the rates factor applied by the Stellenbosch Municipality for budgetary purposes. Also note that the rates are considered in current terms (2017). Figure 24 illustrates the rates accruing to the Municipality on an annual and cumulative basis for the duration of the Development Pipeline once units are complete, by applying the progressive growth trajectory and the stated escalation.

Once the Development Pipeline is complete, a rates income of R132,7 million would accrue to the Municipality. Over a period of 20 years, applying the escalation of 8%, the rates income would increase to R286,5 million. Note that no increase in the value of the properties is assumed and only the escalation on the rates factor is taken into account.

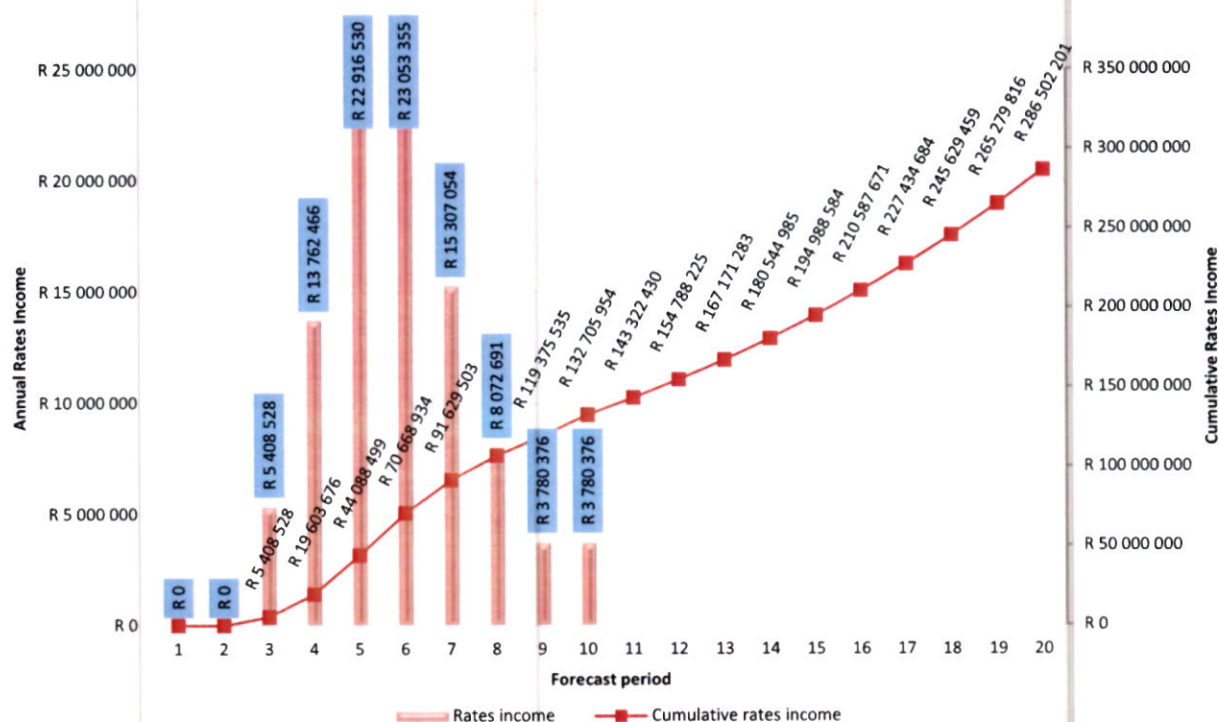


Figure 24: Property rates accruing to the Municipality on an annual and cumulative basis for the timeframe of completion and escalations up to 20 years

9.3.4 Economic impact

The economic impact is reflected by a direct investment into the bulk and external services, internal and site-specific services and the construction of top structures (housing units). The economic impact is realised through the multiplying effect of those funds through the Stellenbosch economy. Figure 25 illustrates the direct and indirect economic impact based on the estimate of the total capital expenditure over the envisaged duration of the Pipeline projects and reflects the effect over three-year revolving periods, hence the fact that the impact of the Pipeline projects extends beyond the 10 years into years 11 and 12. The impact does not abruptly end after 10 years, but tapers off, whereafter the economy achieves additional benefit from the occupation of the dwellings by residents and their ongoing spend.

Figure 25 indicates that the projects associated with the Development Pipeline would generate an economic benefit for the secondary sector of the Stellenbosch and regional economies of R17 405 million. The direct investment to achieve that impact, is R17 189 million over 10 years in nominal terms. Other areas of the Cape Winelands and the Cape Metropolitan Area as well as the Western Cape and other parts of South Africa would also benefit from direct and indirect purchases during the construction period. Consequently, the direct investment impact considers the inter-regional effects and backward and forward linkages that exist between the Stellenbosch economy, Cape Town Metropolitan Area, rest of the Western Cape and South Africa, and captures the full effect of regional and provincial trade.

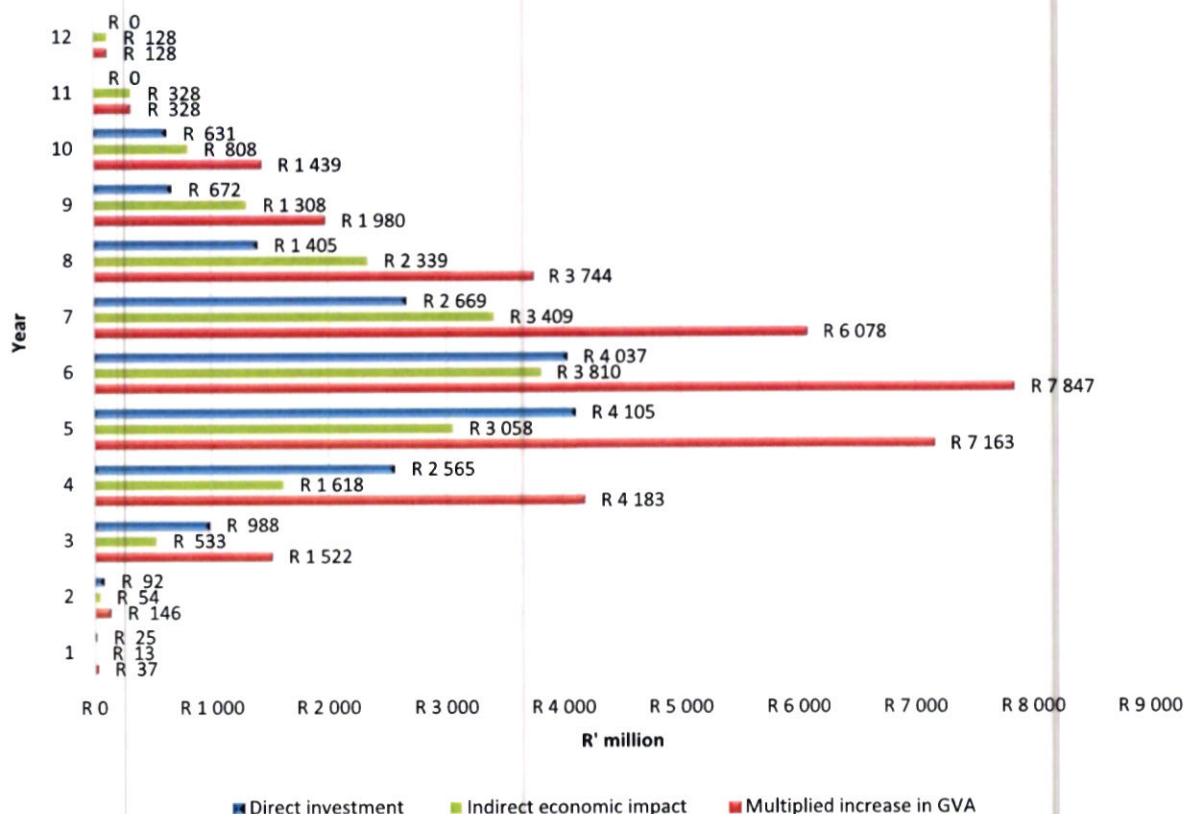


Figure 25: Direct and indirect impact of the Pipeline projects on the Stellenbosch economy over the duration of the construction period

9.3.5 Employment impact

Employment generated over the construction period of the Pipeline projects based on the applied growth trajectory, is premised on a ratio of Gross Value Added (GVA) per employee. Figure 26 illustrates the employment created per annum based on the extrapolation of the GVA per employee trend for the Stellenbosch economy. This is reflected in the change per annum (defined as the difference between the multiplied increase in employment on an annual basis in the secondary sector of the economy and employment in Stellenbosch Municipal area in 2015 as the base employment number).

Figure 26 illustrates that in year 1, which is the commencement of the introduction of bulk and external infrastructure, 1 630 temporary jobs are created based on the estimated capital expenditure. The latter would continue at various stages of the rollout of Pipeline projects and the employment is factored into applicable years based on the rollout assumptions. Once construction of top structures commences, more jobs are added, but it should also be noted that these employment opportunities would only exist if there was a strain on the labour market and no unemployment exists. It is therefore realistic to assume that the opportunities could be halved as persons move from one project to the next over the 10-year period.

Many temporary job opportunities would be added by the Pipeline projects to the existing employment of the Stellenbosch Municipal area, with direct and indirect jobs totalling 18 661 in year 6. As is evident in year 11 and 12, some jobs will endure for a further two years once construction is complete, before indirect opportunities would taper off.

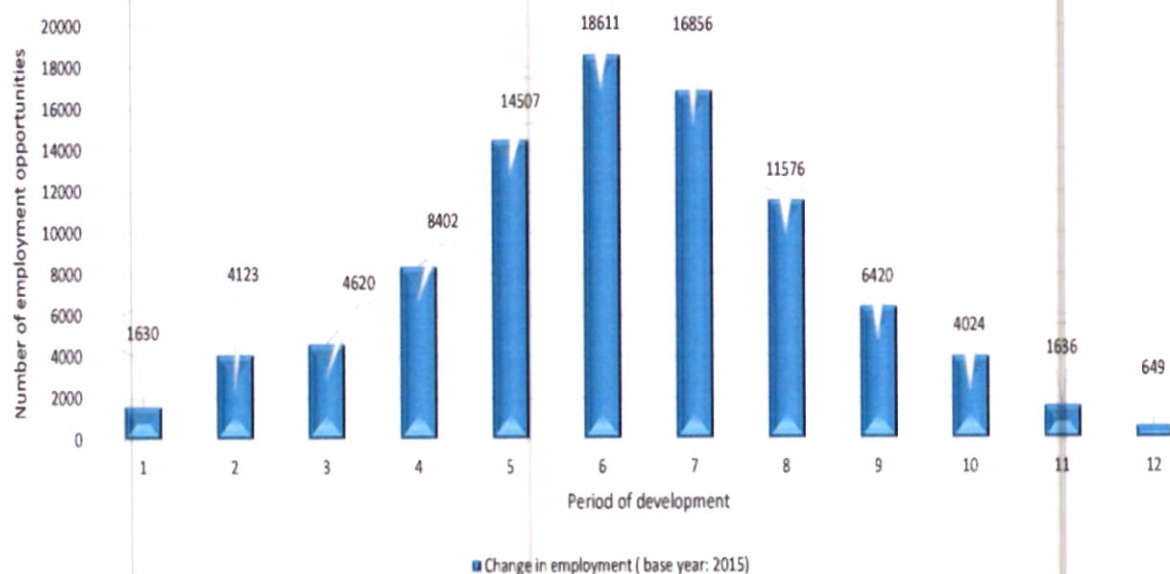


Figure 26: Change in annual employment resulting from the rollout of the Pipeline projects over 10 years

The direct employment related to the Pipeline projects is determined based on an estimated 12 workers of varying skills per house. These workers can work on two houses simultaneously and therefore the direct employment need is halved. Table 18 indicates the employment numbers for different skill levels at the highest requirement in terms of the rollout, i.e. year 6.

Table 18: Direct employment opportunities related to the peak year of the rollout of the Development Pipeline

Category of worker	Percentage allocation	Employment (Year 6)
Skilled	4%	555
Artisans (semi-skilled)	8%	1 031
Semi-skilled Labour	23%	3 092
Unskilled labour	46%	6 184
Finishing specialists (semi-skilled)	18%	2 458
TOTAL	100%	13 320

10. ALIGNMENT OF BRANDWACHT II WITH RODE ADJUSTED FORECASTS AND SOCIO-ECONOMIC IMPLICATIONS

10.1 Alignment with housing typology of adjusted Rode forecasts

The scope of a proposed development project is placed in context of the adjusted forecasts of demand for housing based on the stated typology adopted by Rode for forecasting purposes. Also refer to the nature of the housing typology adopted in Section 4.1. Table 19 provides a comparison of the housing typology (with amended demand forecasts by 2036) and the scope of dwelling units associated with the Brandwacht II development proposal. This is a snapshot and not directly comparable from a timing perspective as the forecasts relate to a planning term of 20 years for Stellenbosch Town and the project timeframe is based on an envisaged completion and occupancy over a much shorter timeframe, i.e. the two timeframes do not coincide.

Table 19: Comparison of the adjusted demand forecast of Rode and the development scope for Brandwacht II

Housing type	Amended Rode demand forecast	Brandwacht II Project
Houses smaller than 80 m ² (affordable)	9 277	
Houses larger than 80 m ²	2 793	182
Flats	2 402	
Townhouses	2 829	78
Total units	17 301	260

Source: Rode and Associates and own calculations

10.2 Alignment with annual demand forecasts

In order to realistically understand the Brandwacht II project in the context of the adjustment to the housing unit forecasts prepared by Rode, several assumptions are applied to create the alignment with specific reference to the take-up, construction and occupation of dwelling units. The assumptions are as follows:

- Duration of the project culminating in the construction and occupancy of all dwelling units and other components in accordance with the following:
 - Year 1 – external services
 - Year 2 – internal services
 - Year 3 – selling and construction commences
- Sell-out of the project (number of years for the completion of construction and occupancy of all units);
- Phasing of the project with the introduction of components at different stages over the duration of the project;
- Costs of construction (reflect the current per m² costs for different dwelling types);
- Inflation projections;

- In contract building cost escalations;
- Development charges applied by the Stellenbosch Municipality based on 2017 ratios; and
- Property rates applied based on the Stellenbosch Rates Policy and 2017 factors.

Figure 27 indicates the outcome from an application of the growth trajectory and reflects the annual and cumulative take-up of dwelling units over the envisaged duration for the completion of the entire Brandwacht II project, i.e. all dwelling units are constructed with occupation. In addition, this is aligned with the demand forecasts prepared by Rode as adjusted, applying the same progressive growth trajectory displaying annual and cumulative number of units over 20 years.

An analysis of the data illustrated in Figure 27 focuses on the following timeframes using year 1 of the Rode adjusted forecast as the point of departure. Based on this premise, it is further assumed that it would take five years to obtain the requisite approvals, a further two years to introduce the external bulk and internal infrastructure and a further eight years to fully develop Brandwacht II. These time frames are aligned with the start of the forecast period envisaged in the urban development planning for Stellenbosch Town. Note that to ensure the validity of the analysis, it is necessary to compare the same scope (type) of housing envisaged for Brandwacht II and that included in the adjusted demand forecasts for said houses prepared by Rode.

Demand for housing in the urban area of Stellenbosch Town is estimated (applying the principle stated above) at 4287 units by year 14 for the same category of housing envisaged for Brandwacht II. At the end of the 8-year construction period, the Brandwacht II project would deliver 260 units, keeping all other thing equal and ignoring other development projects that have the same mix of residential housing as envisaged for Brandwacht II.

It is important to understand the context of planning for housing demand in Stellenbosch Town over 20 years and how this fits with development proposals such as Brandwacht II, hence the complete forecast period is illustrated in Figure 27. The illustration suggests that the cumulative units envisaged for the Brandwacht II project at the end of 14-years, which includes a development period of 8 years, contributes 6,06% to the total cumulative number of units forecast over the first 14 years of the residential development planning forecast for Stellenbosch Town.

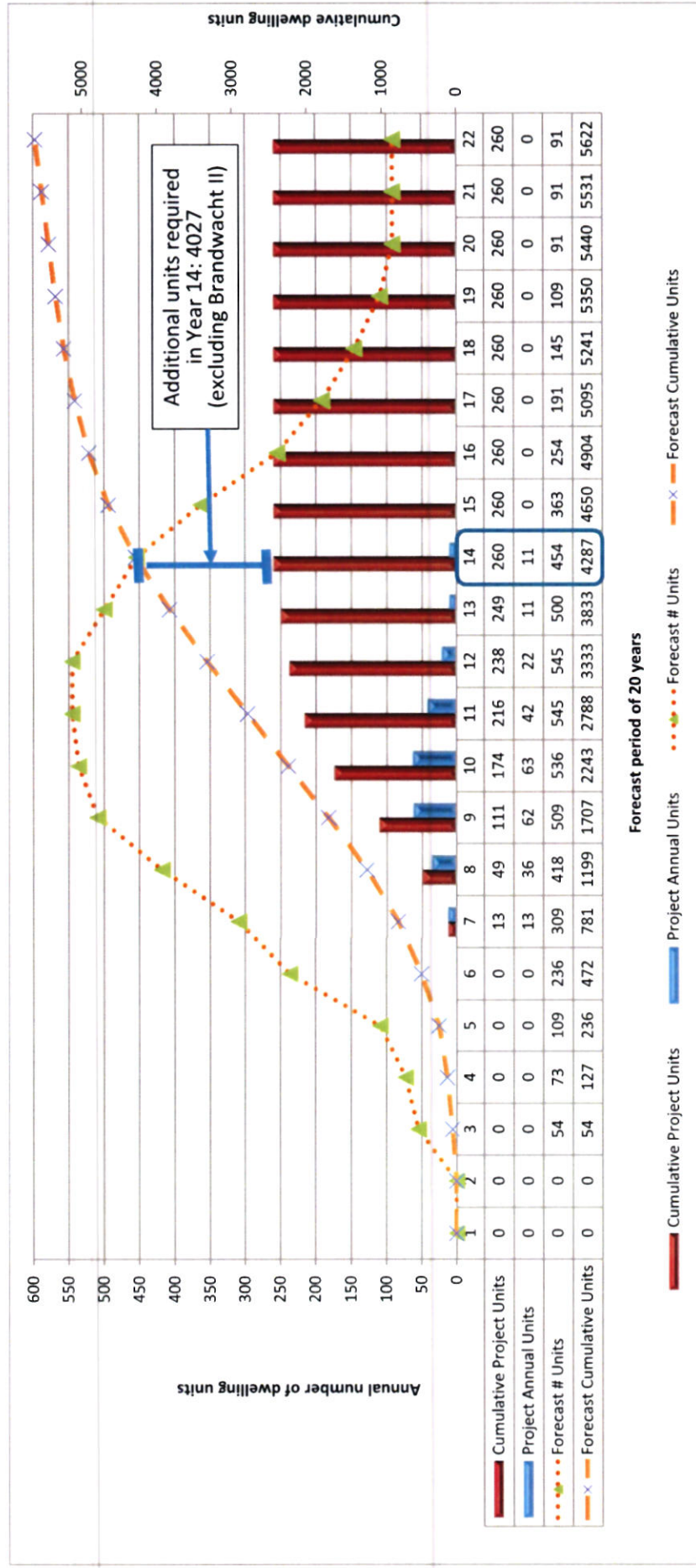


Figure 27: Annual and cumulative demand forecasts and the estimated occupancy timeframe for the Brandwacht II development

10.3 Benefits to Stellenbosch economy and Stellenbosch Municipality

10.3.1 Development Charges (DCs)

DCs would accrue to the Stellenbosch Municipality based on the nature and scope of the Brandwacht II development. The DCs normally accrue to a Municipality based on the commencement of a project phase. We also assume that the Municipality (and not the developer) will introduce the required bulk services, which in turn has implications for the Municipality's funds flow and any negotiation associated with the introduction of bulk services by the developer.

Given the anticipated time frame for the Brandwacht II development, it is envisaged that DCs would be paid as a lump sum and not as part of phasing the project. Based on the current DCs levied by the Municipality (in 2017 terms), it is estimated that R18,3 million would be due and payable to cover the external bulk and service requirements for the project. An escalation of this figure at 6% per annum over the following four years prior to the introduction of the services, results in a figures of R24,5 million.

10.3.2 Total capital expenditure

The capital expenditure of and associated with the Brandwacht II development refers to three components: the introduction or provision of bulk (external) services (subject to capacity constraints) by the Municipality, introduction of internal services by the developer and the construction of the dwelling units and other components. Figure 28 indicates estimates of the combined annual and cumulative capital expenditure for the three components over the envisaged duration for the development of the proposed Brandwacht II project.

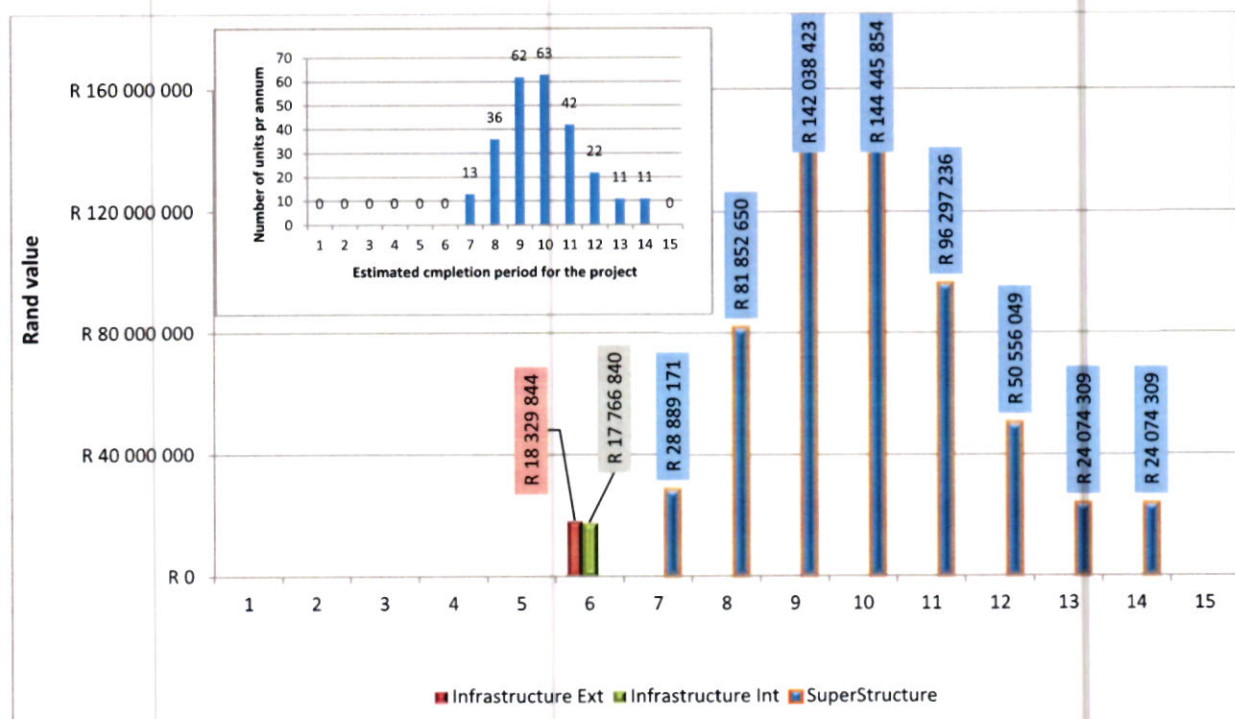


Figure 28: Annual envisaged capital expenditure for the timeframe envisaged for the completion of construction

The Brandwacht II project has a four-year lag period, followed by a one-year period for the introduction of any bulk and internal services and an 8-year development period for completion of the development and occupancy of the dwellings. Sales will commence once the planning and approval period is complete which refers to the four-year lag associated with the said processes.

Note that the construction period mimics the progressive growth trajectory for planning development in Stellenbosch Town over a period of 20 years. Based on this growth trajectory, the total investment in infrastructure (external and internal) and superstructure over the duration of the project, is estimated at R628,3 million in current terms. The spending on top structures is estimated at R592,2 million over the 8-year construction period in current terms. Accounting for building cost inflation through in-contract escalations of an assumed 6% per annum, by the time top structures are introduced based on the timeframes stated above, the total capital expenditure related to top structures would increase in to be R1 002,7 million.

10.3.3 Property rates

The Municipality will levy property rates on the sale of a land portion and on the improved value. We have assumed for the purpose of this assessment, that property rates will apply to the completed dwelling unit or commercial component (if applicable) based on the envisaged duration of the project and the application of the growth trajectory. We determined the cumulative rates income after five years and thereafter applied an escalation of 8% for the remaining period of the forecast period even though it is not possible to estimate the values of the properties going forward, or to estimate the increase in the rates factor applied by the Stellenbosch Municipality for budgetary purposes. Also note that the rates are considered in current terms (2017).

Figure 29 illustrates the rates accruing the Municipality on annual and cumulative basis for the duration of the project applying the progressive growth trajectory and the stated escalation. Once the development is complete, a rates income of R5,1 million would accrue to the Municipality once construction is complete and occupation is taken per the adopted time frames. Over a period of 20 years, applying the escalation of 8% to the rates income, this would increase to R8,1 million once the development is complete with accumulation until the end of the forecast period of 20 years. Note that no increase in the value of the properties is assumed and only the escalation on the rates factor is taken into account.

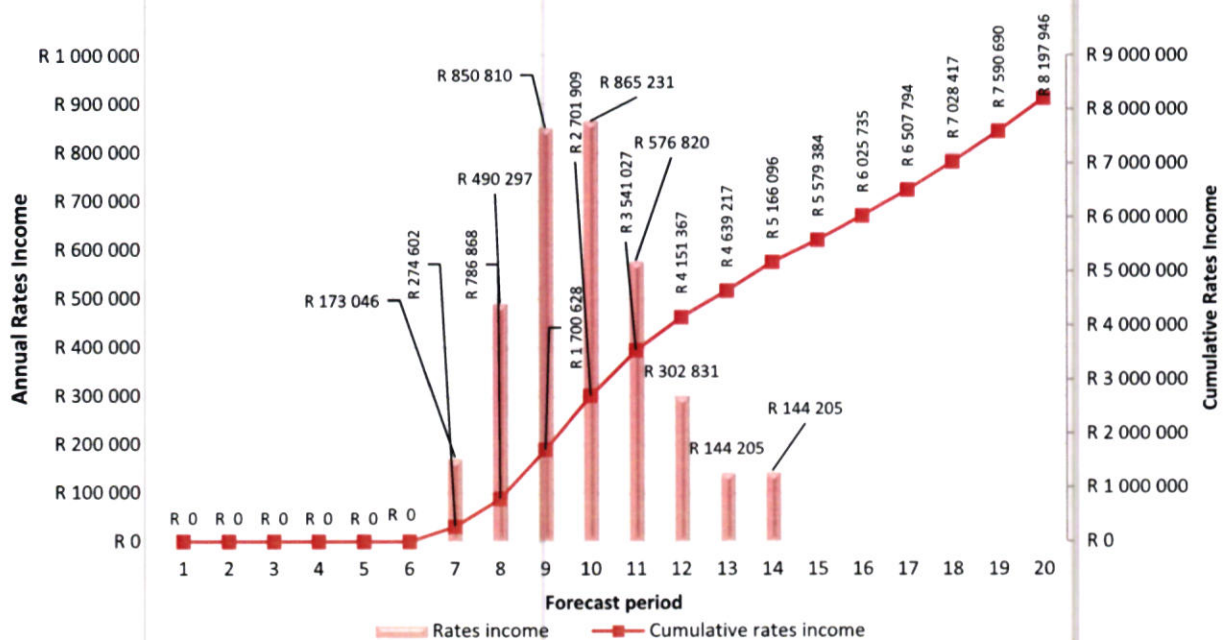


Figure 29: Property rates accruing to the Municipality on an annual and cumulative basis of 20 years

10.3.4 Economic impact

The economic impact is reflected by a direct investment into the bulk and external services, internal and site-specific services and the construction of top structures (housing units). The economic impact is realised through the multiplying effect of those funds through the Stellenbosch economy. Figure 30 illustrates the direct and multiplied economic impact based on the estimate of the total capital expenditure over the envisaged duration of the project and reflects the effect over three-year revolving periods, hence the fact that the impact of the Brandwacht II project extends beyond the 8-year development phase for a further two years. The impact does not abruptly end after five years, but tapers off, where-after the economy achieves additional benefit from the occupation of the dwellings by residents and their ongoing spend.

Figure 30 indicates that the Brandwacht II development would generate an economic benefit of R1 265 million over the 8-year development period, of which a large portion of the R1002 million direct investment at the time and a portion of the indirect spending would accrue to the Stellenbosch economy. Note these figures are based on the impact six years from now and after an 8-year development period. Other areas of the Cape Winelands, Cape Metropolitan Area, Western Cape and other parts of South Africa would also benefit from direct and indirect purchases during the construction period. Consequently, the direct investment impact considers the inter-regional effects and backward and forward linkages that exist between the Stellenbosch economy, Cape Town Metropolitan Area, the rest of the Western Cape and South Africa.

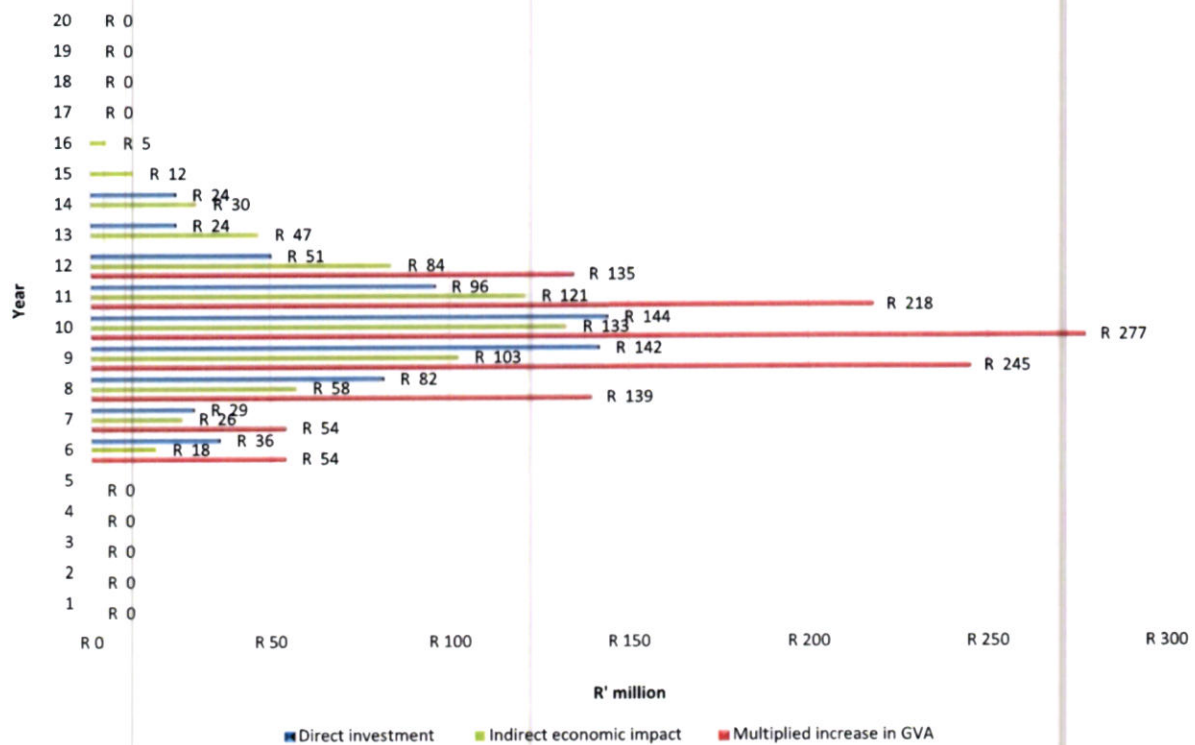


Figure 30: Direct and indirect impact of the Brandwacht II project on the Stellenbosch economy and further afield over a period of seven years

10.3.5 Employment impact

Employment generated over the construction period of the Brandwacht II development based on the applied growth trajectory is premised on a ratio of Gross Value Added (GVA) per employee. Figure 31 illustrates the employment created per annum based on the extrapolation of the GVA per employee trend for the Stellenbosch economy. This is reflected in the change per annum (defined as the difference between the multiplied increase in employment on an annual basis in the secondary sector of the economy and employment in the Stellenbosch Municipal area in 2015 as the base employment number).

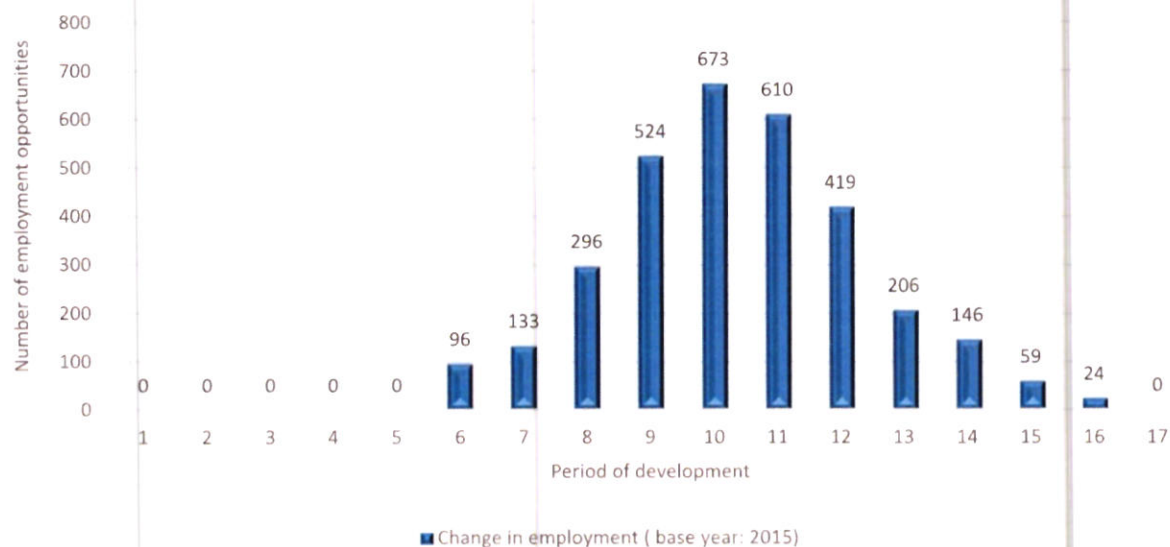


Figure 31: Change in annual employment of the secondary sector of the Stellenbosch economy resulting from the Brandwacht II development

Figure 31 illustrates that in year 1, which is the introduction of bulk and external infrastructure, 53 jobs are created based on the estimated capital expenditure. Once construction of top structures commences, 673 temporary jobs would be added to the existing employment of the Stellenbosch Municipal area at the peak of the construction period. A total of 3 186 temporary jobs will be added during the entire construction period. Some jobs will endure for a further two years, i.e. in Year 15 and 16 once construction is complete as tapering off of indirect opportunities occurs.

11. FIT FOR PURPOSE

In order for the project to be fit for the purpose, broad market and socio-economic criteria need to be considered. Brandwacht II should with some limited variance, fall within the demand forecasts for different housing units in Stellenbosch Town, must offer socio-economic benefits to locals and ensure the Municipality is able to consider the project from both a financial, policy and planning context. This report adopts an economic perspective related to supply and demand, and the need to deliver benefit to the local economy and jobs to people.

Figure 32 contributes to the illustration of the fit for purpose presented in Figure 1 by indicating the outcomes of the analysis and alignment with the premise of a fit for purpose. Fit for purpose implies whether or not the development project is able to tick the boxes. From an economic perspective, several criteria would apply, including the following:

- The project needs to ensure that potential demand is met from a supply perspective;
- The housing types fit with the need and emerging trends and the housing development framework of the Stellenbosch Municipality;
- The project does not result in a fund flow deficit for the Municipality in terms of service infrastructure (which should be covered by DCs);
- The local economy benefits from the development in terms of direct capital expenditure and backward and forward linkages between sectors; and
- Jobs, even on a temporary basis, are created and devolved to locals that are able to work on the project.

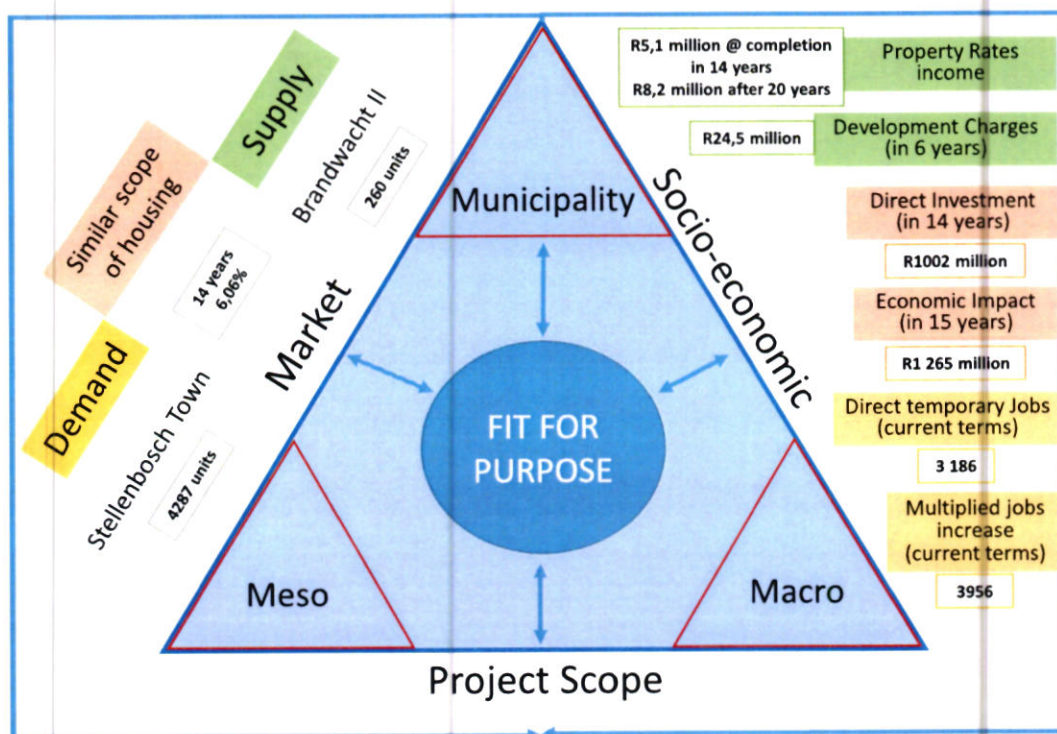


Figure 32: Market related and socio-economic contributions of the Brandwacht II project in the context of the fit for purpose

In terms of demand and supply, the Brandwacht II development adds 260 units of stock to the demand for housing, which based on the housing typology envisaged for the project, represents 4,62% of the total number of 5 622 units or 6,06% after 14 years once the development is complete and occupied. The development represents a direct investment of R1002 million (in 14 years) that will generate estimated Development Charges of R24,5 million (in six years) and property rates of R8,2 million for Stellenbosch Municipality over 20 years. Over the duration of the construction period, 3 168 people would directly work on the project, while a further 770 jobs would accrue due to the indirect effects of developing Brandwacht II. All of these benefits are estimates based on the development of 260 dwelling units over the 8-year construction period.

Note that there are no set benchmarks as each project is unique and has its own set of development objectives that result in a specific outcome. The question therefore arises whether or not the Brandwacht II project is able to tick some boxes:

Criteria	Outcome
The project addresses housing demand from a supply perspective	✓
The housing types fit with the need and emerging trends in terms of size, affordability and market segment	✓
The project does not result in a fund flow deficit for the Municipality in terms of service infrastructure (which should be covered by DCs)	✓
The local economy benefits from the development in terms of direct capital expenditure and leakages are minimised	✓
Jobs are created on a temporary basis with an emphasis on unskilled local labour	✓

As indicated above, the Brandwacht II project ticks the boxes based on the criteria used for assessment. Funding implications for the Municipality are flagged (indicated in orange), as well as the ultimate scope of housing types envisaged in the context of the environment and the housing policy framework of the Municipality.

12. KEY OUTCOMES

Brandwacht II offers a scope of 260 housing units that addresses various emerging trends related to demand for housing of which the key trends are lifestyle, proximity, availability of key infrastructure, access and transport. The proposed housing is intended to attract millennials and persons that work in Technopark and the surrounding areas.

Higher priced houses have emerged as a trend in Stellenbosch over the period 2008 to 2017 and it appears that supply is unable to meet the demand in the higher price segment. If this trend continues, average equilibrium prices and price points will increase and due to the lag in provision of supply or curtailing supply together with the inelasticity of supply, no integration of various housing typologies in development will be possible. The only way to reduce the average equilibrium price for houses is to permit development that underpins market demand for a range of housing typologies and implement policies that make it attractive for developers and investors to provide in the need for different types of housing.

Based on the adjustments of housing demand for Stellenbosch Town, indications are that 464 houses smaller than 80 m², 140 larger than 80 m², 120 flats and 141 townhouses (a total of 865 dwelling units per annum on average) are required to cover the forecast demand over the next 20 years. A total of 17 301 units form part of the demand over the next 20 years, of which 9 277 are houses smaller than 80 m², 2 793 houses larger than 80 m², 2402 flats and 2 829 townhouses.

Brandwacht II forms part of a pipeline of projects envisaged by developers over the next 10 years. Although the pipeline does not necessary include all projects, indications are that total of 9 100 units is envisaged to be supplied over the following 10 years. A breakdown of the envisaged supply suggests that 31,56% of housing units supplied over 10 years accrues to dwelling units larger than 80 m², which are more aligned with middle to high-income groups, 31,43% to affordable housing (lower to middle-income groups), 16,81% to townhouses (middle-income group) and 20,20% to flats. Brandwacht II represents about 6,5% of the total number of houses larger than 80 m² and 2,2% of the total number of housing units envisaged as part of the pipeline (excluding indigent houses of smaller than 80 m²).

The Brandwacht II project caters for the middle to high-income segment of the market and is specifically aimed at the household income bracket of between R809 203 to R1.6 million per annum, would also form part of the segment likely to take up the housing opportunity with units ranging from R2.5 million and R4 million.

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SECTION H

HERITAGE ASSESSMENT REPORT

**PROPOSED INCLUSION OF REMAINDER FARM 1049,
STELLENBOSCH, BRANDWACHT IN URBAN EDGE:**

Heritage Considerations



Prepared by Lize Malan

February 2018

1 INTRODUCTION

The report has been commissioned by TV3 Architects and Planners to establish the feasibility of the including the Remainder of Farm 1049, known as Brandwacht in the urban edge of the town of Stellenbosch from a heritage perspective. The Stellenbosch Municipality is currently reviewing their SDF for the municipal area, which would include a reassessment of the urban edge. This report has no legal status, but the assessment is based on the definition of what constitutes a heritage resource and significance as set out in the National Heritage Resources Act, Act 25 of 1999.

2 THE SITE AND ITS CONTEXT

The Remainder of Farm 1049, Stellenbosch is located on the south-eastern edge of the settlement of Stellenbosch, between the areas known as Bo-Dalsig and Brandwacht to the north and Paradyskloof to the south. The Brandwacht river forms the north-eastern boundary of the site, with the recent Brandwacht-aan-Rivier development forming the north-western boundary of the site. To the south it is bordered by municipal farm land planted with vineyards. The western boundary is formed by Portion 3 of Farm 1049, which constitutes the original werf of the Farm Brandwacht and Erf 16526, Stellenbosch which accommodates a number of large commercial buildings. To the west the property stretches to the foothills of the Stellenbosch Mountain. Municipal reservoirs are located just beyond the south-eastern corner of the site and the southern boundary, approximately at the middle of the site.



Figure 1: Location of Remainder Farm 1049, Stellenbosch (Source: <https://gis.elsenburg.com/apps/cfm/>)



Figure 2: Subdivided portions of Farm 1049 on western boundary of property including the original werf and new office parks (Source: <https://gis.elsenburg.com/apps/cfm/>)

The property itself is not actively farmed any more except for a few cattle that are kept on the property. On the western end of the property are the remains of what was an outbuilding. Two farmworker cottages are located in the north-western portion of the site and a farm dam straddles the northern boundary of the site, with one portion located in the Brandwacht-aan-Rivier development. The site slopes upwards from west to east with a low rise in the middle of the site.

3 ASSUMPTIONS AND LIMITATIONS

3.1 Availability of Information

This report is based on the information that was available at the time of writing. All material by others informing this assessment, most notably an earlier Heritage Impact Assessment by Dr Elzet Albertyn, is assumed to be accurate and a true reflection of the issues governing the property and its proposed redevelopment.

3.2 Statement of Significance

The significance of cultural resource is dynamic and multifaceted, in particular as interest groups and societal values change over time. It is thus neither possible, nor appropriate to provide a definitive statement of heritage significance. Nonetheless, every effort has been made to ensure that the heritage statement is as accurate a reflection of significance as is currently possible to ascertain.

3.3 Impacts beyond the Site Boundaries

This report does not consider heritage impacts resulting from the potential laying of pipelines, electrical and other related infrastructure between the site and elsewhere beyond its boundaries.

4 OVERVIEW OF HISTORY AND RECENT DEVELOPMENTS

Information on the history of the farm Brandwacht was largely obtained from a heritage impact assessment prepared by Dr Elzet Albertyn in 2003 for the development of a portion of the farm for a housing estate now known as Brandwacht-aan-Rivier.

4.1 Early and colonial history

Limited information is available on the likely use of the land in pre-colonial times, although it is known that early stone age people have lived along the river corridors. It is also highly likely that later the land was used on a periodic basis by the nomadic Khoekhoen (Mountain, 2003) up until the time of colonial settlement at the Cape.

The first farms in the Stellenbosch area were granted by Simon van der Stel as early as 1679. The farm Brandwacht was granted in 1741 to Philip Hartog, who probably erected the first buildings on the property. The farm werf is visible on the Schumacher aquarelle dating to 1776. The farm stayed in the Hartog family until the end of the 1700s. In 1825 the original freehold passed to Johannes Cornelias Eksteen and in 1829 further land was granted to him on a quitrent basis so that the farm more than doubled in size.

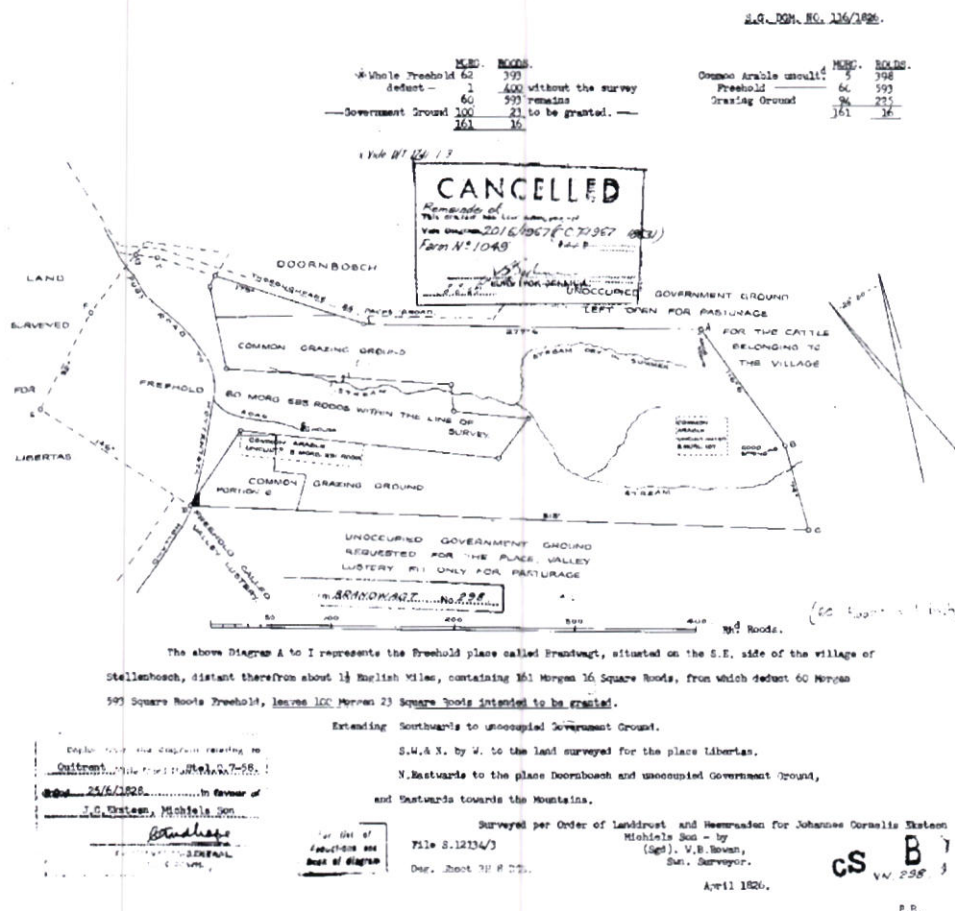


Figure 3: SG Diagram 116/1826 indicating the original freehold grant to Philip Hartog and the later quitrent grant to Eksteen

From the 1840s several portions were subdivided from the consolidated farm created in 1829, and at one stage Cecil John Rhodes owned one of these portions of Brandwacht. The Remainder which included the historic werf passed hands many times. Some of the portions were consolidated with the Remainder in 1967 to create the property now numbered as Farm 1049. In 1970, the Provincial administrator approved the establishment of a township on a portion of Farm 1049, now known as the suburb of Brandwacht and located to the north of the river.

4.2 Recent history

In the early 2000s the subdivision of Remainder of Farm 1049 was approved to allow for the development of the Brandwacht-aan-Rivier residential estate; the creation of three large erven used for commercial/office purposes located adjacent to the R44 and the establishment of separate property to house the historic werf with its Georgian manor house and flat-roofed wine cellar facing the R44. The house and outbuildings, which nowadays accommodate a boutique hotel, is now completely fenced in by a tall palisade fence. As noted earlier the Remainder of the farm Brandwacht now constitutes mostly abandoned farmland, with two occupied cottages, some grazing for cattle and the remains of an outbuilding.

5 HERITAGE SIGNIFICANCE AND RESOURCES

5.1 Introduction

The definition of a **heritage resource** is described in Section 2 (xvi) of the National Heritage Resources Act, 1999 (Act 25 of 1999) as: "any place or object of cultural significance" and **cultural significance** is defined in the Act as "aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value or significance" (Section 2 (vi) NHRA 1999:8). Section 3(2) of the NHRA lists the following as heritage resources:

- (a) places, buildings, structures and equipment of cultural significance;
- (b) places to which oral traditions are attached or which are associated with living heritage;
- (c) historical settlements and townscapes;
- (d) landscapes and natural features of cultural significance;
- (e) geological sites of scientific or cultural importance;
- (f) archaeological and palaeontological sites;
- (g) graves and burial grounds, including—(i) ancestral graves; (ii) royal graves and graves of traditional leaders; (iii) graves of victims of conflict; (iv) graves of individuals designated by the Minister by notice in the Gazette; (v) historical graves and cemeteries; and (vi) other human remains which are not covered in terms of the Human Tissue Act, 1983 (Act No. 65 of 1983) –
- (h) sites of significance relating to the history of slavery in South Africa;
- (i) movable objects.

Determining the significance of such resources is set out in Section 3(3) which states:

Without limiting the generality of subsections (1) and (2), a place or object is to be considered part of the national estate if it has cultural significance or other special value because of -

- (a) its importance in the community, or pattern of South Africa's history
- (b) its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;
- (c) its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;
- (d) its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects
- (e) its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;

- (f) its importance in demonstrating a high degree of creative or technical achievement at a particular period;
- (g) its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;
- (h) its strong or special association with the life or work of a person, group or organization of importance in the history of South Africa;
- (i) sites of significance relating to the history of slavery in South Africa.

Following on the above, HWC has expanded on the three tier grading system set out in the NHRA in its *A Short Guide to Grading*, Version 5 approved February 2007:

- **Grade I Sites (National Heritage Significance)**

South Africa's national heritage sites must as a whole represent the collective and balanced story of our South African consciousness as we understand it today. They must be the key sites which best illustrate the events, peoples and systems which have brought us to our current state of nationhood. They must represent development which occurred in South Africa, from its earliest geological formation, to the beginnings of humanity, and through its peopling - illustrating the traditions, values, conflicts and achievements which formed the South Africa we live in today.

Grade I sites must enjoy authenticity and carry a universal value and symbolic importance that promotes human understanding and contributes to nation building, and their loss would significantly diminish the national heritage. The Guide to Grading states that when considering potential National Heritage Sites, the following questions should be considered:

- (a) Is the site of outstanding national significance?
- (b) Is the site the best possible representative of a national issue, event or group or person of national historical importance?
- (c) Does it fall within the proposed themes that are to be represented by National Heritage Sites?
- (d) Does the site contribute to nation building and reconciliation?
- (e) Does the site illustrate an issue or theme, or the side of an issue already represented by an existing National Heritage Site - or would the issue be better represented by another site?
- (f) Is the site authentic and intact?
- (g) Should the declaration be part of a serial declaration?
- (h) Is it appropriate that this site be managed at a national level?
- (i) What are the implications of not managing the site at national level?"

- **Grade II Sites (Provincial Heritage Significance)**

Grade II heritage resources are those with special qualities which make them significant in the context of a province or region and should be applied to any heritage resource which -

- (a) is of great significance in terms of one or more of the criteria set out in section 3(3) of the Act; and
- (b) enriches the understanding of cultural, historical, social and scientific development in the province or region in which it is situated, but that does not fulfil the criteria for Grade 1 status

Sites graded as Grade II sites must enjoy a provincial sphere of significance. They need to be given a status beyond being granted recognition, by being entered in the heritage register, but they are not of outstanding national significance. They may be rare examples of their kind, or otherwise be highly

representative of a type. They may connect closely to an event or figure of provincial/regional significance. They may fall under the national themes, or under provincial themes.

Grade II sites should enrich the understanding of the cultural, historical, social and scientific development of the Western Cape and of the region in which it is situated. The cultural significance or other special value that Grade II sites may have, could include, but are not limited to –

- (a) places, buildings, structures and immovable equipment of cultural significance;
- (b) places to which oral traditions are attached or which are associated with living heritage;
- (c) historical settlements and townscapes;
- (d) landscapes and natural features of cultural significance;
- (e) geological sites of scientific or cultural importance;
- (f) archaeological and paleontological sites;
- (g) graves and burial grounds;
- (h) sites of significance relating to the history of slavery in the Western Cape

The cultural significance or other special value that Grade II sites may have, could include, but are not limited to–

- (a) its importance in the community or pattern of the history of the Western Cape
- (b) the uncommon, rare or endangered aspects that it possess reflecting the Western Cape's natural or cultural heritage
- (c) the potential that the site may yield information that will contribute to an understanding of the Western Cape's natural or cultural heritage;
- (d) its importance in demonstrating the principal characteristics of a particular class of the Western Cape's natural or cultural places or objects;
- (e) its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group in the Western Cape.
- (f) its importance in demonstrating a high degree of creative or technical achievement at a particular period in the development or history of the Western Cape
- (g) its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;
- (h) its strong or special association with the life or work of a person, group or organization of importance in the history of the Western Cape; and
- (i) sites of significance relating to the history of slavery in the Western Cape.

- **Grade III Resources (Local Heritage Significance)**

The Grade III category of heritage resources is divided into three sub-categories: Grade III A, Grade III B and Grade III C.

- **Grade III A**

This grading might be applied to a site that is authentic, and thus should be governed by a regulation or by-law that requires any alteration or change in use to take place only under special consent of the responsible local authority. Significances might include:

- (a) Highly significant association with a:
 - historic person
 - social grouping
 - historic events
 - historical activities or roles
 - public memory
 - (b) Historical and/or visual-spatial landmark within a place
 - (c) Historical fabric is mostly intact (past damage is reversible) (Fabric may however possess strong evidence for historical layering)
 - (d) Most elements of construction are authentic
 - (e) Fabric dates to the early origins of a place
 - (f) Fabric clearly illustrates an historical period in the evolution of a place
 - (g) Fabric clearly illustrates the key uses and roles of a place over time.
 - (h) Contributes significantly to the environmental quality of a Grade I or Grade II heritage resource
- **Grade III B** - This grading might apply to a site that may allow certain alterations to take place without being subjected to heritage scrutiny. Such a site might have similar significances to those of a Grade III A site, but to a lesser degree. Appropriate management would involve a regulation that would exempt certain types of change.

- **Grade III C**

This grading would apply to a site of contributing significance, which has significance that may be managed by means of a regulation managing publicly visible external alterations.

In terms of section 30(5) of the Act, a local planning authority must, at the time of the compilation or revision of a town or regional planning scheme or a spatial development plan, compile an inventory of the heritage resources which falls within its area of jurisdiction and submit the inventory to Heritage Western Cape. A planning authority may at this time decide to develop a framework, which could be used to determine the local, regional, provincial and national or international significance of each heritage resource or group of resources in its area of jurisdiction. The Stellenbosch Municipality is at present busy with a survey of heritage resources in its rural area, but no information was available at the time of the preparation of this report.

5.2 Description of heritage resources and assessment of significance

Following on the description of the site and its context, as well as its history, it is evident that the property has limited heritage resources and value.

- Architectural value

Although the historic manor house and wine cellar of Brandwacht clearly have architectural significance the value of these structures have been eroded by enclosure of the werf and sterile landscaping that now forms the setting of what was originally a working farm werf.



Figure 4: The enclosed and lawned farm werf of Brandwacht farm

None of the remaining structures on the property in question are regarded as significant from an architectural perspective. The outbuilding situated closest to the western boundary behind the werf, was indicated as a store and office building in the HIA prepared by Albertyn in 2003. She ascribed a Grade III status to this building as its core probably dated to the 1700s and noted that its relationship with the guest house to its north created a werf area at the back of the cellar and manor house.

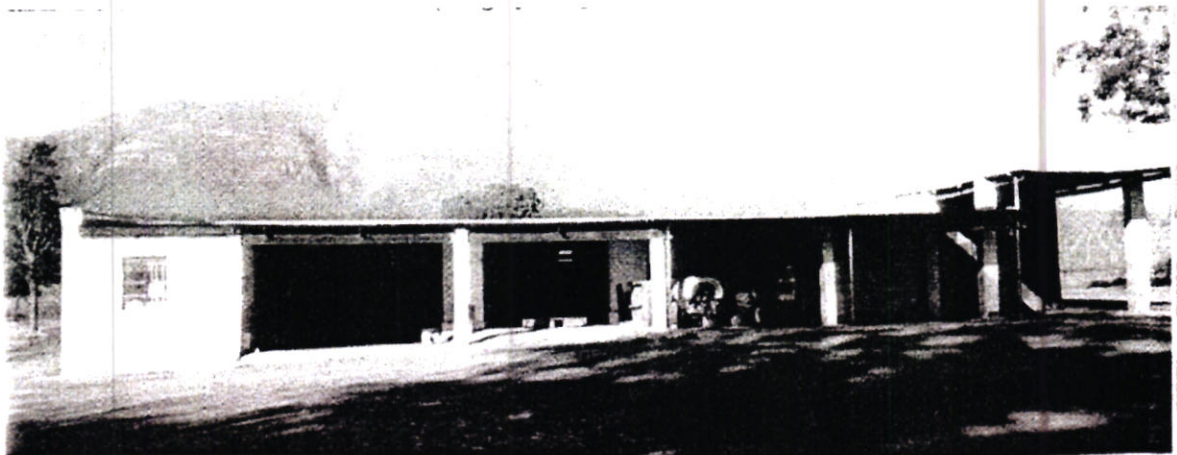


Figure 5: Photograph of store and office building from HIA by Albertyn (2003).

It is noted that this building was not particularly attractive when still in a good condition and could at best have been graded as a IIIC. The building is now in a state of disrepair with no roof, and it is unlikely that it could be restored and that it would be worthy of restoration. In addition the fencing of the Brandwacht werf has resulted in segregation between the werf and this building, which is unlikely to ever be restored. This building is thus currently not worthy of grading.

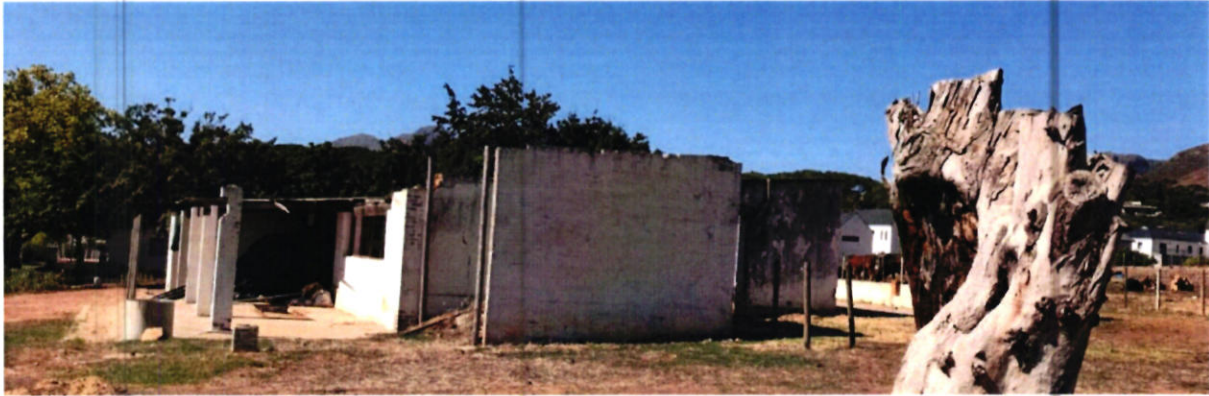


Figure 6: Current condition of store and office building



Figure 7: Interface between store and office building and original werf

The only other structures on the property are two farm worker cottages located some 200m to the east of the building discussed above. These cottages are not noted as heritage resources in Albertyn's HIA as it is evident that they are unlikely to be historic nor are they of architectural interest. They are also regarded as not worthy of grading by this author.



Figure 8: Remaining workers cottage on Remainder Farm 1049

- Scientific value

It is evident that there are no resources of scientific value on or related to the property.

- Historic value

Although the original grant dates to the 18th century, and was briefly associated with families of some standing such as the Eksteens; the farm never stayed in the ownership of a particular family for a

considerable length of time, and the farm has never played an important role in the history of the town and its region (compared to a nearby farm such as Libertas, for instance). Its historic value is thus mainly related to its manor house, with its historical layering of fabric and style.

- Social value

The farm in its original form would certainly have had some social value, as it was known for instance that original owner employed slaves (Albertyn, 2003) who would probably have undertaken the construction of the original buildings. It is also likely that generations of farm workers were employed on the farm when it was still actively farmed. The history and circumstances of the current residents of the farm worker cottages have not been established as part of this exercise, but it is regarded as unlikely that the social value of the remaining workers cottage would have a significant impact on decisions regarding the future of the property, provided that suitable arrangements could be made to any occupants with a legitimate claim to such arrangements.

- Archaeological value

An archaeological impact assessment was not undertaken as part of the HIA prepared by Albertyn in 2003. Given that the property in question constitutes mainly cultivated farmland, it is highly unlikely that any significant archaeological resources would remain on the land in question, but should an application for the development of land be considered, an AIA may well be required as an informant to a decision of the NHRA.

- Aesthetic and contextual value

Although the fallow farmland is not particularly attractive, nor the remaining structures on the property; the contextual value of the undeveloped land does warrant some consideration. In her earlier HIA, Albertyn regarded Farm 1049, which still included the historic werf and was bound by the Brandwacht River to the north as a worthy of a Grade II grading. This grading is inter alia attributed to the fact that it forms part of the remaining rural landscape to the east of the R44 (as opposed to urban development to the west), views onto the werf from the R44, views onto the site from the suburb of Brandwacht, and views onto the Stellenbosch mountain across the site. Since the HIA was prepared, much of the heritage value described by Dr Albertyn, has been eroded through the construction of numerous large office buildings between the werf and R44, which has now all but blocked views from the R44 onto the werf; the subdivision of the werf from the larger farm, and the subsequent fencing of of this property with high palisades so that the connection to the actual agricultural land is no longer obvious; the development of the Brandwacht-aan-River estate and other developments to the east, which has severed the connection with the Brandwacht River and the effective abandoning of active farming on the property, which has resulted in a barren landscape. It is in particular noted that the property is not visible from the R44, designated as a scenic route. In addition it is also noted that the other portions of undeveloped land between the Brandwacht and Paradyskloof are highly unlikely to possess any aesthetic, historic, social, architectural or scientific heritage value.

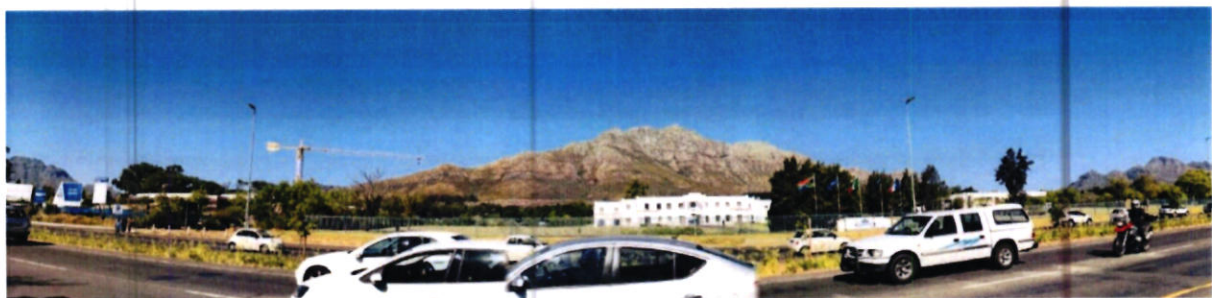


Figure 8: View onto the property from the R44 – note that the land in the middle ground is obscured by the buildings and trees in the foreground



Figure 9: View looking to the east across the property in question



Figure 10: View from the south-eastern corner looking across the site in the south-western direction. Brandwacht-aan-River is visible in the middle ground.

It is however evident that further development of the property in question would reinforce a precedent of urban development in this area between Stellenbosch and Paradyskloof and the question to be answered is whether this relatively large portion of undeveloped/rural land has contextual value of sufficient significance to warrant its retention. Given that that foreground as viewed from the R44 has already been compromised by urban development, the author is of the opinion that further development of this area, will not adversely affect views onto this area from the R44, provided that views onto the foothills of Stellenbosch Mountain is retained and development is softened by copious tree planting. Whereas it is acknowledged that views from surrounding residential areas will be affected by development, it should be recognised that those areas were also established on what was originally wilderness and later farmland – one would have to question current residents' expectations of unspoilt views in this context. On balance then the author is of the view that this remaining portion of Brandwacht farm does not retain sufficient *heritage* value to warrant its protection or retention, provided that care is taken to avoid impacts on views onto Stellenbosch Mountain and its foothills.

6 REQUIREMENTS ITO OF NHRA

This report provides an opinion on the heritage value of the property in question as part of a broader process of reconsidering the urban edge of the Stellenbosch settlement. This opinion should be tested against the findings of the survey of heritage resources currently being undertaken by the

Stellenbosch Municipality. Any formal proposal to develop the property will be subject to the requirements of Section 38 of the NHRA, which will require the preparation and submission of a notification of intent to develop (ito Section 38(1)) and then possibly a heritage impact assessment in terms of either Section 38(4) or (8) depending on the proposal and requirements in terms of other environmental legislation. These applications should then also deal with any structures older than 60 years on the property, such as the remainder of the old store and office building.

7 CONCLUSION

The author is of the opinion that the recent developments that have been allowed on the remains of the original Brandwacht farm, particularly the subdivision of the werf and the development of large office buildings along the R44 have eroded what was remaining of the heritage value of the Remainder of Farm 1049, Stellenbosch, to such an extent, that restrictions on the development of remaining farmland would be pointless. Although other considerations may come into play, it is the author's opinion that from a *heritage* perspective the property could be included in the urban edge for the settlement of Stellenbosch.

8 REFERENCES

Albertyn, E, 2003. **Erfenisevaluering Restant van die Plaas Brandwacht, Plaasnommer 1049, Stellenbosch.**

Mountain, A, 2003. **The first people of Cape.** Cape Town, David Philip.

SECTION I

VISUAL FRAMEWORK REPORT

Visual Framework Report

Brandwacht III

DRAFT REPORT

Prepared for:

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1. Name, Expertise and Declaration

1.1 Name

Megan Anderson, of Megan Anderson Landscape Architects, is a self-employed Landscape Architect who has been consulting in the Western Cape since 1991, to clients from the public and private sector.

1.2 Expertise

Megan Anderson's projects range from:

- visual impact assessments (VIAs) of proposed developments for EIA and HIA processes;
- environmental and landscape policy and planning;
- upgrading and rehabilitation of natural systems;
- planning and implementation in heritage and cultural precincts; and
- planning, design and landscape development in residential and urban areas and community projects.

PRINCIPAL AGENT: Megan Anderson Registered Professional Landscape Architect
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REGISTRATION OF PRINCIPLE AGENT

1994 South African Council for Landscape Architect Professionals (94063)
1992 Institute of Landscape Architects of South Africa (P217)

QUALIFICATIONS

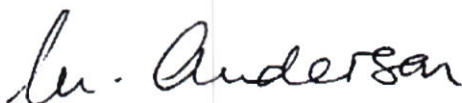
1983 University of Pretoria Bachelor of Landscape Architecture

VISUAL IMPACT ASSESSMENT EXPERTISE

Megan Anderson has been doing Visual Impact Assessments (VIA's) since 1989 when working for OvP and BOLA. Since then, she has completed more than 100 VIA's for a variety of developments including mining, harbours, wind and solar farms, communication towers, commercial and residential developments.

1.3 Declaration of independence

I Megan Anderson declare that I am an independent consultant and have no business, financial, personal or other interest in the proposed Wind Energy Project at two sites in the Western Cape, application or appeal in respect of which I was appointed, other than fair remuneration for work performed in connection with the activity, application or appeal. There are no circumstances that compromise the objectivity of my performing such work.



MEGAN ANDERSON

Megan Anderson Landscape Architects

Professional registration number: SACLAP - 94063

2. Introduction

2.1 Background to this report

Megan Anderson Landscape Architects have been appointed to undertake a Visual Framework Report for the proposed Brandwacht Residential Development on RE/1049, Stellenbosch.

This report is a preliminary Visual Framework study which is to inform the pre-application planning stage by identifying scenic resources, visually sensitive areas and receptors and will determine visual opportunities and constraints;

2.2 Terms of reference

The PGWC's DEA&DP's "Guidelines for involving visual and aesthetic specialists in the EIA process" provides 'triggers' (i.e. characteristics of either the receiving environment or the proposed project), which indicate that visibility and aesthetics are likely to be 'key issues' and may require specialist input.

The following characteristics of the site and project are probable triggers which suggest potential visual issues:

The nature of the receiving environment:

- Areas with proclaimed heritage sites or scenic routes;
- Areas with intact or outstanding rural or townscape qualities;
- Areas with a recognized special character or sense of place;
- Areas lying outside a defined urban edge line;
- Areas of important tourism or recreation value;
- Areas with important vistas or scenic corridors;

The nature of the project (type and scale):

- A change in land use from the prevailing use;
- A significant change to the fabric and character of the area;
- Possible visual intrusion in the landscape;

The guideline document goes on to correlate these two aspects, environment types and development types, to determine the varying levels of visual impact that can be expected, i.e. from little or no impact, to very high visual impact potential.

Table 1: Categorisation of issues to be addressed by the visual assessment

Type of environment	Type of development (see Box 3)				
	Category 1 development	Category 2 development	Category 3 development	Category 4 development	Category 5 development
Protected/wild areas of international, national, or regional significance	Moderate visual impact expected	High visual impact expected	High visual impact expected	Very high visual impact expected	Very high visual impact expected
Areas or routes of high scenic, cultural, historical significance	Minimal visual impact expected	Moderate visual impact expected	High visual impact expected	High visual impact expected	Very high visual impact expected
Areas or routes of medium scenic, cultural or historical significance	Little or no visual impact expected	Minimal visual impact expected	Moderate visual impact expected	High visual impact expected	High visual impact expected
Areas or routes of low scenic, cultural, historical significance / disturbed	Little or no visual impact expected Possible benefits	Little or no visual impact expected	Minimal visual impact expected	Moderate visual impact expected	High visual impact expected
Disturbed or degraded sites / run-down urban areas / wasteland	Little or no visual impact expected Possible benefits	Little or no visual impact expected Possible benefits	Little or no visual impact expected	Minimal visual impact expected	Moderate visual impact expected

We believe the "Type of environment" is "Areas or routes of high scenic, cultural or historic significance" and the "Type of Development" is a Category 4 development as defined below:

Category 4 development:

e.g. medium density residential type development, The expected visual impact is moderate to high, namely:

High visual impact expected:

- Potential intrusion on protected landscapes or scenic resources;
- Noticeable change in visual character of the area;
- Establishes a new precedent for development in the area.

Explanation of terms used:

Noticeable change – clearly visible within the view frame and experience of the receptor

Some change – recognisable feature within the view frame and experience of the receptor

The suggested level of visual impact assessment for expected moderate to high visual impacts will be a level 3 to 4 study.

2.3 Methodology

The Visual Framework Study will identify the visual opportunities and constraints of the site.

- a site inspection has been undertaken, including a photographic survey,
- a review of relevant literature will be done,
- the scenic and visual resources of the area and site will be described, quantified and assessed,
- the view catchment and zone of visual influence of the site will be established and mapped,
- view points and receptors will be established as well as the visual impact to these

- the site itself and surrounding areas will be studied to identify visual opportunities and constraints for the proposed development -
- the visual sensitivity of site will be established through mapping slope grades, landforms, vegetation, special features and land use

3. Literature Review

3.1 Stellenbosch Municipality Spatial Development Framework (Sustainability Institute, 2017)

The proposed site is situated predominantly outside of the proposed Stellenbosch Town urban edge. The SDF is currently being revised and this property is requiring to be included into the revised urban edge.

3.2 Provincial Spatial Development Framework (WCG 2014)

The Provincial Spatial Development Framework (PSDF) (WCG, 2014) identifies the portion of the R44 passing west of the site as a scenic route.

3.3 Heritage and Scenic Resources, Inventory and Policy Framework for the Western Cape (Oberholzer and Winter, 2013)

Brandwacht is situated in/adjacent to Stellenbosch in the Cape Winelands in the Western Cape. Oberholzer and Winter describe this area as follows in the 'Heritage and Scenic Resources: Inventory and Policy Framework for the Western Cape' as follows:

2.5 The Cape Winelands

The Cape Winelands is an area of fertile valleys nestled between the Cape Fold Mountains with their rugged sandstone peaks. It is an area high in scenic and heritage significance, its famous vineyards earmarked for declaration as a World Heritage Site.

At the base of the sandstone massifs, the steep scree slopes grade into gently rolling foothills of weathered Cape granites and Malmesbury shales, which have been incised by rivers to form wide alluvial valleys in places, such as those of the Berg and Breede Rivers. Interestingly the pattern of vineyards has a strong correlation with the occurrence of the granites, the unique combination of soil and climate having made this the centre of viticulture and fruit farming.

Towns, villages and farmsteads are strung along the valleys in response to the topography, sources of water and productive agricultural soils, Stellenbosch and Paarl being two of the oldest colonial settlements. Other towns in the District with 'Heritage Areas' include Franschhoek, Wellington, Montagu, Worcester, McGregor and Tulbagh.

The combination of mountain scenery, rural landscapes, colonial architecture and wine routes make this area a prime tourism destination of critical importance to the economy of the region. The area is however also under great threat of fragmentation through creeping urbanization.

The rugged terrain and tapestry of rural landscapes have given rise a network of scenic routes and mountain passes, many of which began as wagon routes to the interior. Passes such as Bainskloof Pass (a Provincial Heritage Site), Franschhoek Pass, Mitchell's Pass and Cogmanskloof, to name a few, are a legacy from the 1700s and 1800s by road-builders such as Andrew Bain.

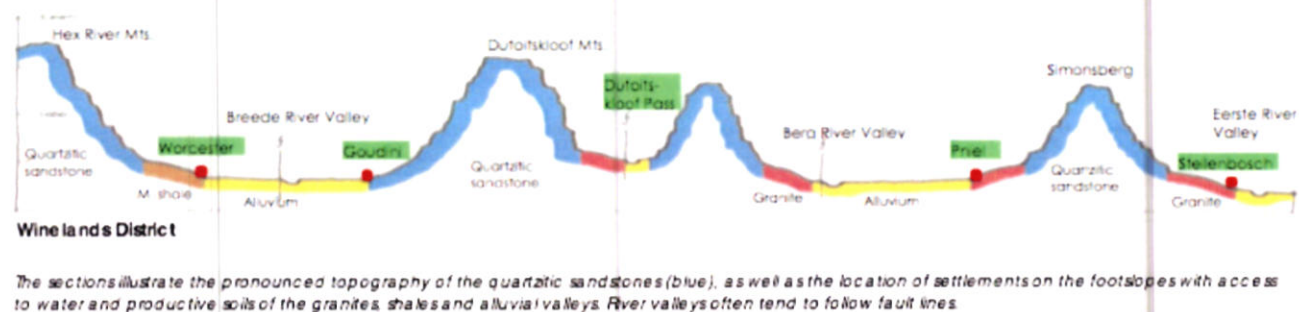


Figure 1: Section through Cape Winelands with the site in greater Eerste River valley, on the foothills of the Simonsberg (Source: adapted from Oberholzer and Winter, 2013).

3.4 Heritage Inventory of, and management plan for, the tangible resources in the Stellenbosch Municipality Project - Phase 2a Report Draft Heritage Inventory of Large Scale Landscape Areas in the Rural Domain of the Stellenbosch Municipality informing Proposed Heritage Areas (Cape Winelands Professional Practices in Association, 2017)

The Phase 2a Report of this study is an inventory of Heritage Resources of the Rural Domain of the Cape Winelands and proposes that the upper half of the Brandwacht RE/1049 site is an area of Very High Heritage Significance. Management Proposals for these areas are still to be published.

4. Proposed Development

4.1 Location

The proposed development will be located on a portion of the farm Brandwacht RE/1049, which is adjacent to and south of the established residential areas of Bo Dalsig and Brandwacht and the more recent Brandwacht Aan - Water residential development.

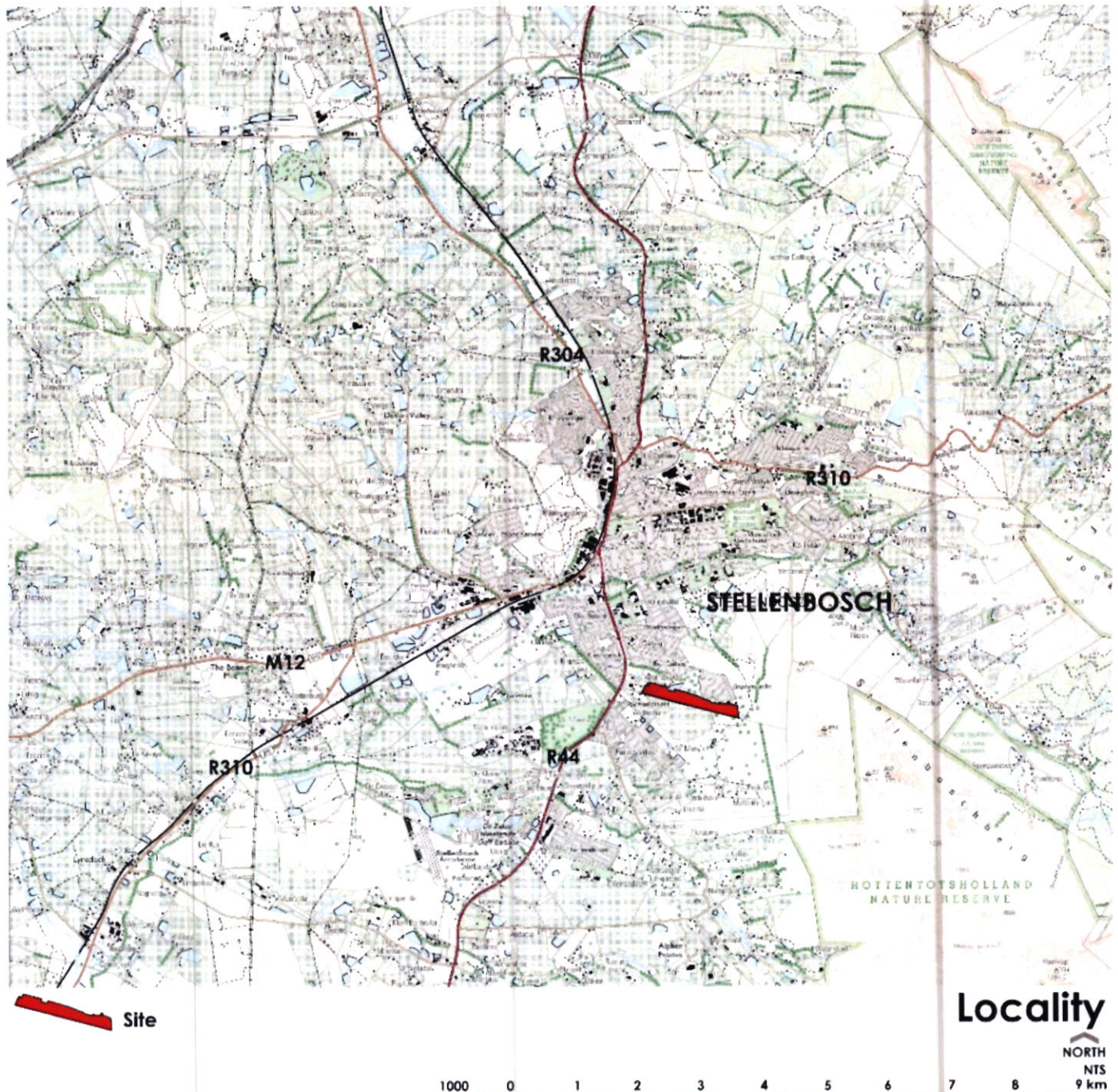


Figure 2: Site Location - regional

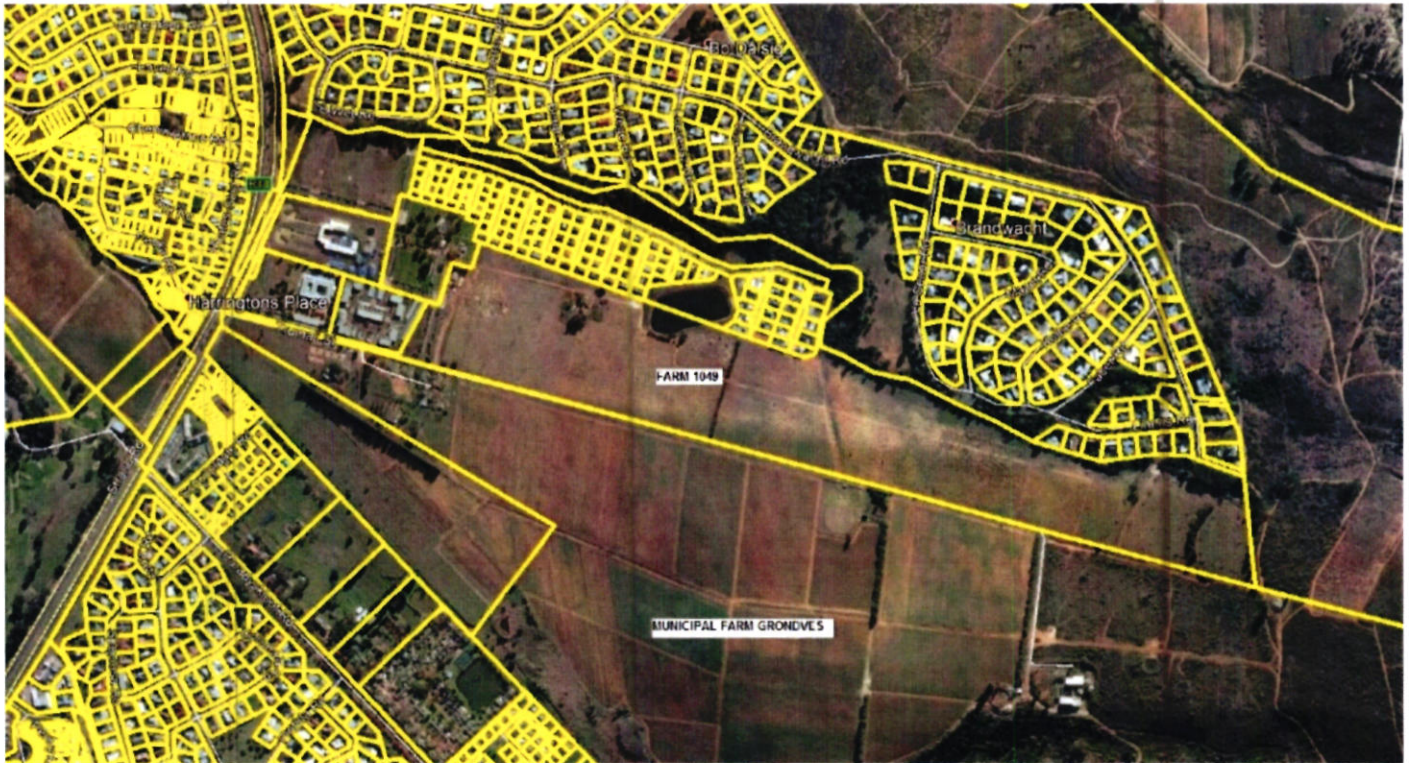


Figure 3: Site Location - local (Source TV3)

4.2 Proposed Development

It is proposed that the site will be developed for residential use. Access to the development will be taken from Trumali Road.

At this stage no Site Development Plan has been tabled.

5. Visual Framework Study

5.1 Scenic Resources

Brandwacht RE/1049 is situated in the rural domain of the Cape Winelands Area in the Western Cape. More specifically the Stellenbosch area.

A couple of Landscape Types, defined by the underlying geology of the area, provide the scenery of the area. These are:

- The sheer sandstone mountain cliffs and peaks of the Stellenbosch mountain in the north east, Haelkop, Suurberg in centre east and Helderberg in the south east which are sparsely vegetated due to the steepness thereof but with fynbos on less steep slopes;
- The fynbos covered mountain scree slopes below the cliffs and cultivated surrounding hills (to the north, west and south) comprised of shales and sandstones;
- The cultivated, rolling foothills of granites and associated quaternary soils; and
- The Eerste River and associated tributaries and their alluvial floodplains, planted with exotic Oak and Poplar trees, occasionally with indigenous riverine vegetation.

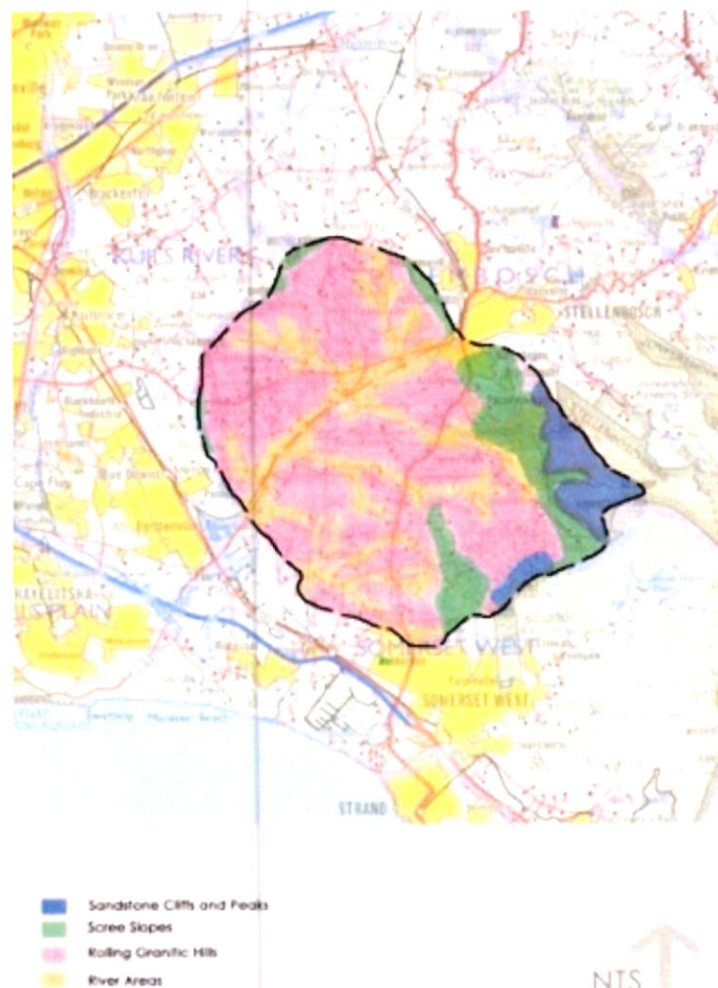


Figure 4 Landscape character of study area

The rugged, fynbos covered Stellenbosch and Helderberg sandstone and shale mountains form a spectacular backdrop in the east to the scree slopes and granitic, rural, rolling foothills (predominantly vineyard covered) on which numerous farms, are situated.



Photo Plate 1 Rugged Stellenbosch and Helderberg Mountain backdrop

Rivers including the Eerste and Blaauklippen Rivers and their tributaries have eroded kloofs into these mountains and provide valleys and ridges in the foothills in the study area.



Photo Plate 2 Mountains with undulating foothills through which rivers run

Urban settlement in the form of Stellenbosch is found in the study area, surrounding the sites on three sides, north, west and south - west.



Photo Plate 3 Urban settlement to the north of the site which is unvegetated area in foreground

To the south are cultivated vineyards and Stellenbosch Waterworks. Further south, farmsteads and agricultural buildings are scattered at regular intervals across the intensively cultivated, rural landscape, with many providing wine tasting facilities, restaurants and function venues for tourists – local, national and international. Towns and rural villages are ever expanding into the rural landscape.



Photo Plate 4 Vineyards to the south of the site which is area in centre

The landscape is criss-crossed by a hierarchy of roads, (dual carriage roadways – R44, two-way tarred commuter roads, tarred farm access roads and farm gravel roads), as well as a railway line. These transport routes link tourists, commuters and farmers to the local towns and towns further afield, including Cape Town (west), Paarl (north) and Kleinmond (south east).

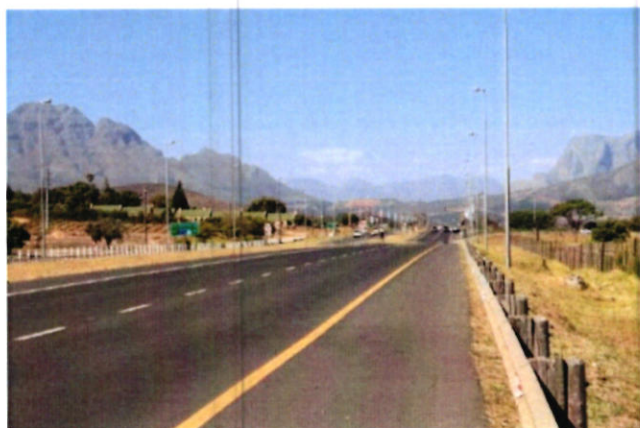


Photo Plate 5 M12 (left) and R310 (right) which form part of the network of roads in the area

Brandwacht Re/1049 is found in the mid reaches of the Brandwacht stream, a tributary of the Eerste River.



Photo Plate 6 Brandwacht III site in centre of photo with residential areas to left and vineyards to right

The Scenic resources of the area can be described as cultural and rural and are Highly rated.

5.2 Viewshed and Zone of Visual Influence (ZVI)

5.2.1 Viewshed

The geographical area from which the project will theoretically be visible, or view catchment area, is dictated primarily by topography.

Brandwacht RE/1049 is in the mid reaches of the Brandwacht River valley and on the lower to mid hill slopes of the southern Brandwacht River Valley. The Brandwacht River has its source in the Stellenbosch Mountains to the east of the site.

The Stellenbosch and Simonsberg Mountains forms the viewshed in the east and north and the view shed line continues westward along Pappegaaiberg to Kanonkop in the north west. The ridgeline between the Brandwacht and Blaauklippen rivers forming the view shed in the south

The extent is approximately 4 kms to the east, 10 kms to the north east, 9kms to the north and west, 3 kms to the south.

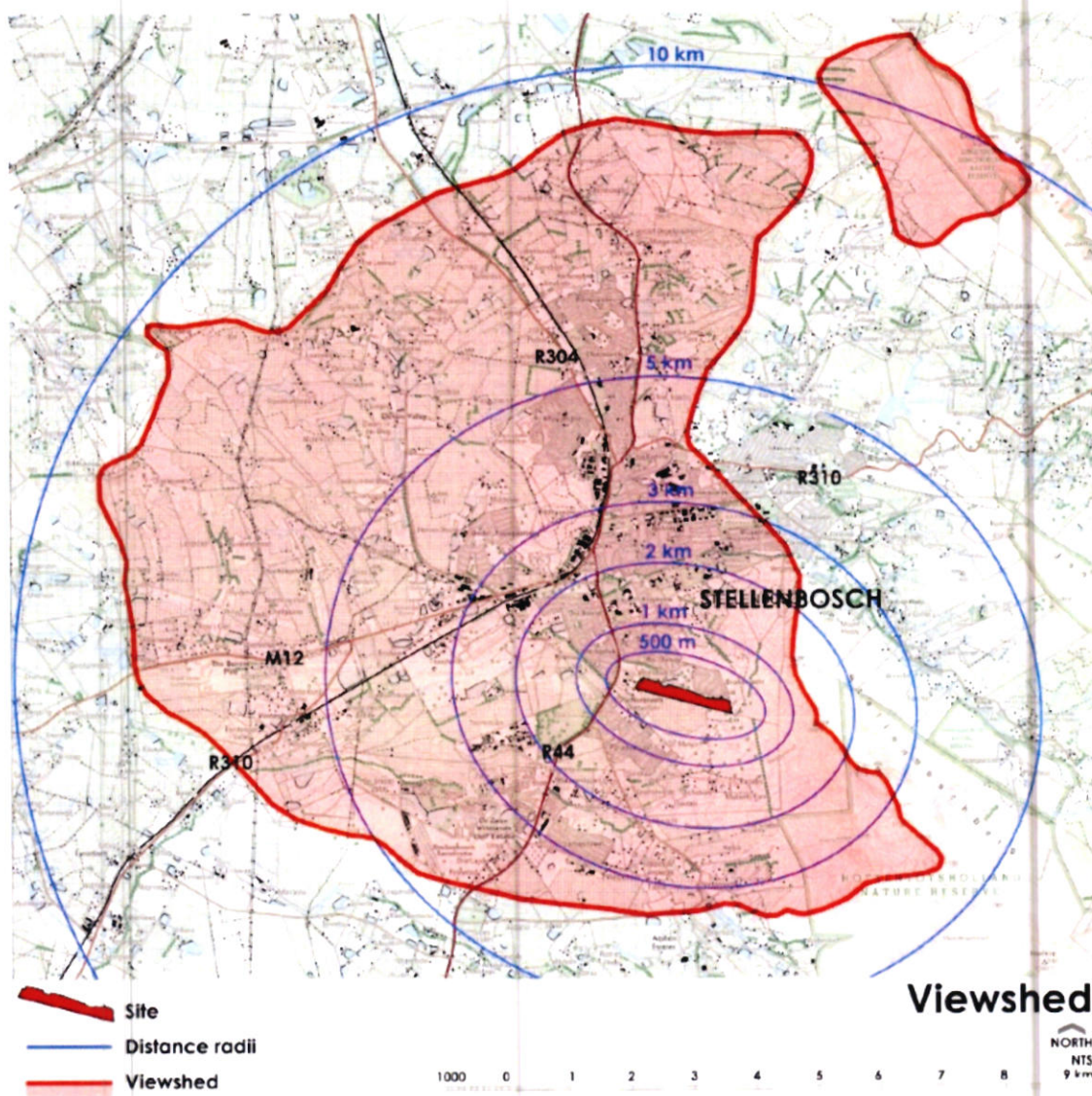


Figure 5 Viewshed of Brandwacht III

5.2.2 Zone of Visual Influence

Local features such as vegetation and landforms will reduce the extent of the area from which the proposed Brandwacht site and development will be seen, to an area known as the Zone of Visual Influence (ZVI) of the site.

The ZVI for the Brandwacht site and development is in some instances reduced by local ridgelines, and existing development but distant and elevated areas all around the site will have views thereof.

The site will be visible from the west from a distance with the M12 (Polkadraai Road) and R310 (Baden Powell Drive) having views thereof.

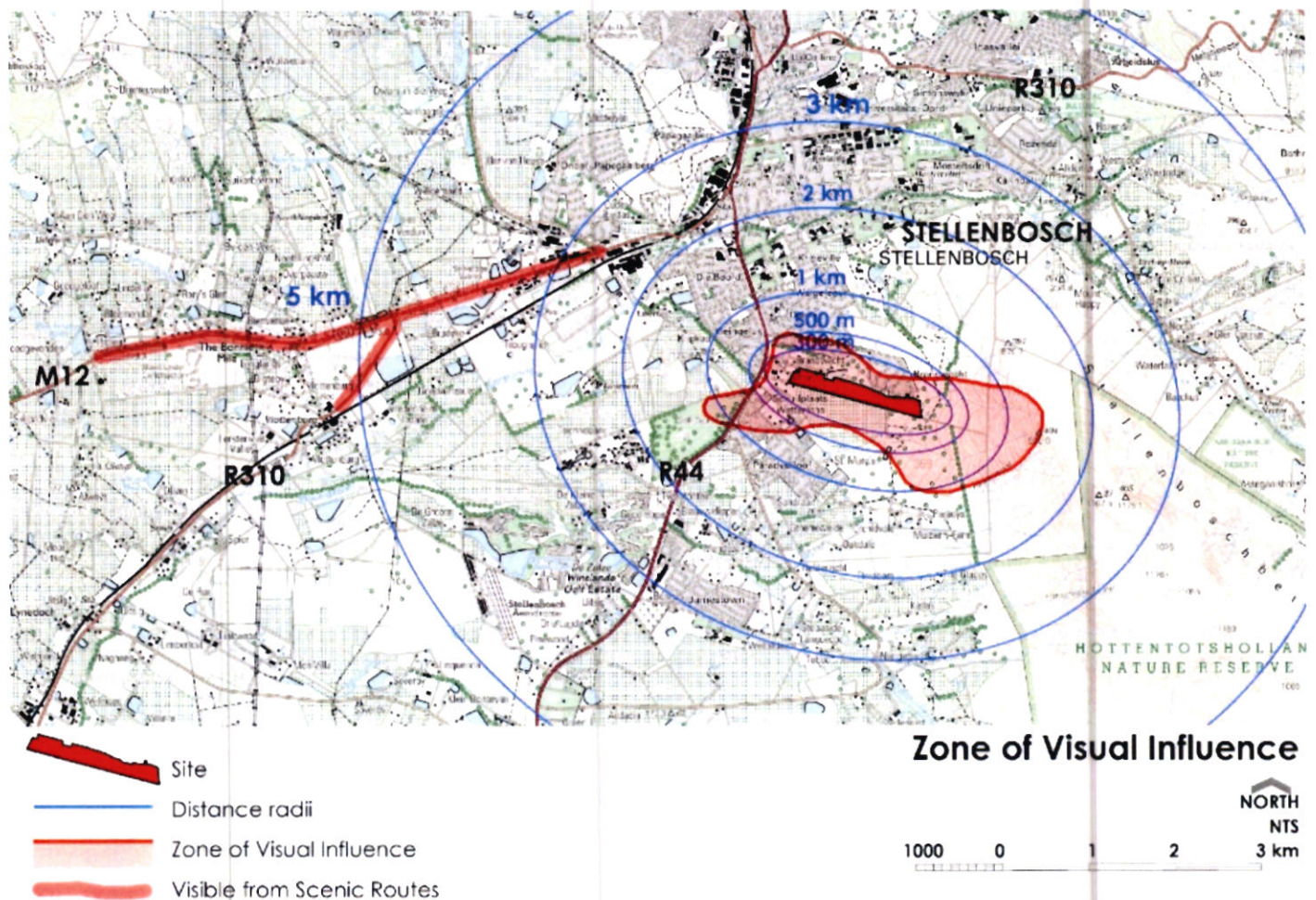


Figure 6: View Shed and ZVI of the proposed Brandwacht III site of development

5.3 Receptors

The level of visual impact considered acceptable is dependent on the type of receptors.

- **High sensitivity** – e.g. residential areas, nature reserves and scenic routes or trails;
- **Moderate sensitivity** – e.g. sporting or recreational areas, or places of work;
- **Low sensitivity** – e.g. industrial or degraded areas.

5.3.1 Highly sensitive receptors include:

- The Hottentot Holland Mountain Reserve and John Marais Nature Reserve
- The R44, M12 and M310 Scenic drive
- Residential areas in Stellenbosch to the north, west and south

5.3.2 Moderately sensitive receptors include:

- Areas of work (Waterworks) and the areas outside of the urban edge including farms
- Cycle and hiking trails above the site

5.3.3 Low sensitivity receptors include:

- Nil

The receptors within the ZVI are inclusive of those rated as **moderate** to **highly** sensitive.

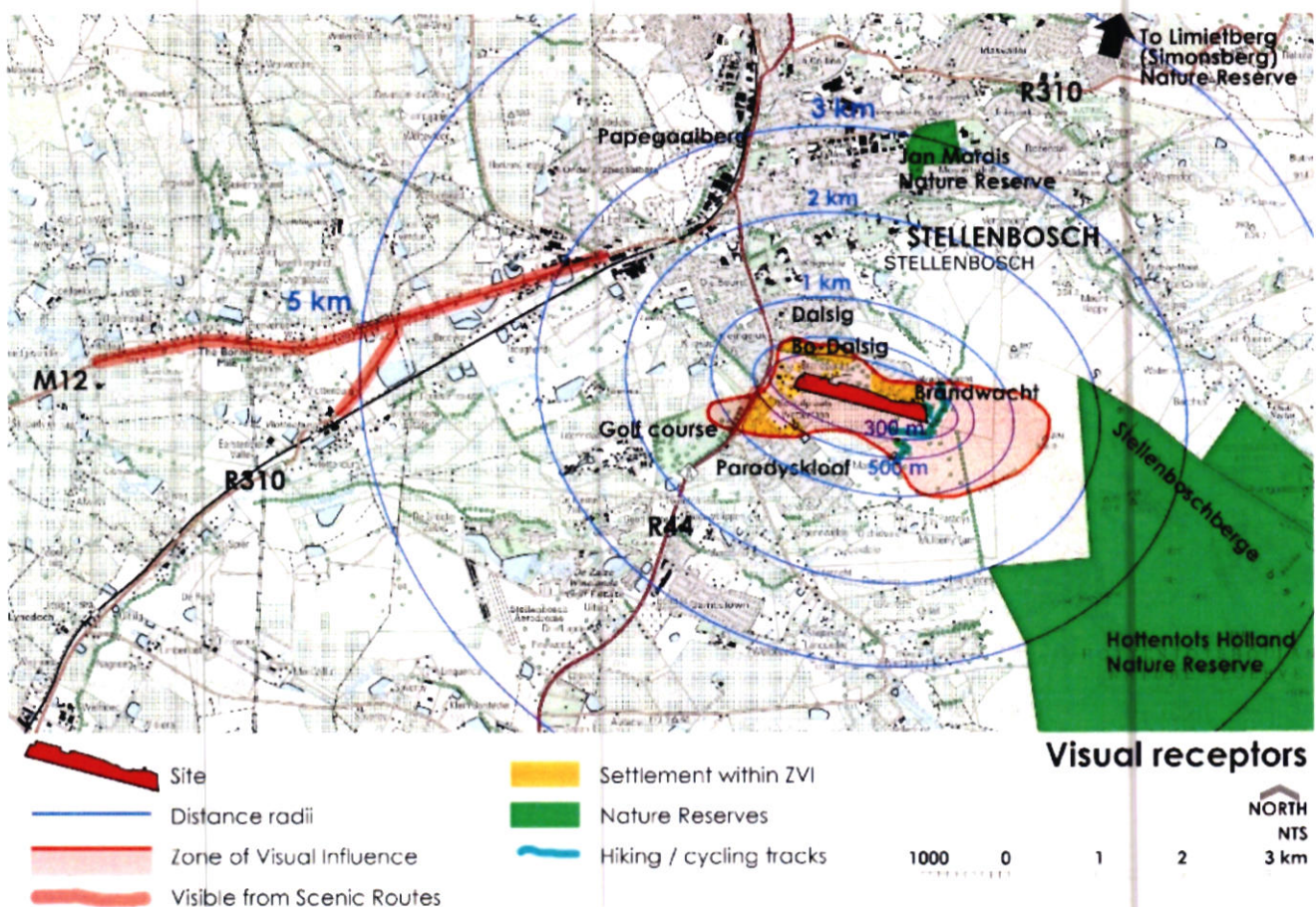


Figure 7: Receptors of the proposed Brandwacht III site of development

5.4 Visual Sensitivity of the site

The inherent visibility of the sites' landscape is usually determined by a combination of topography, landform, vegetation cover, settlement pattern and special features. This translates into visual sensitivity.

High visual sensitivity – highly visible and potentially sensitive areas in the landscape,

Moderate visual sensitivity – moderately visible areas in the landscape,

Low visual sensitivity – minimally visible areas in the landscape

The desktop mapping exercise looked at various aspects which contribute to the visual sensitivity of the site and in turn informs a visual framework of the site.

These aspects include:

- *Topography* – relative elevations can either provide subtle visual absorption capacity in the case of lower lying areas, which will be less visually sensitive or visual exposure in the case of higher lying land which will be highly visually sensitive. In the case of the Brandwacht site, it is situated:
 - * on the mid to upper slopes of the Brandwacht River valley,
 - * on north facing slopes from the Brandwacht River to close to the ridgeline between the Brandwacht and an unnamed tributary thereof, the higher lying slopes will be more visible than those closer to the river.

The topography of the site therefore renders the site moderately to highly sensitive.

- *Landforms* - The landform on which the site is located include a valley and its side slopes which are composed of both slightly convex and concave slope types. The concave slopes have a low - moderate visual sensitivity while the convex slopes have a moderate visual sensitivity.
- *Slopes* - the slope gradients affect the visual sensitivity of a site as development on steep slopes is likely to result in earthworks such as cut to fill/terracing resulting in visual scarring. The flatter the slope the less sensitive it becomes. With the exception of localised area in the upper portion of the site where the slopes are steeper than 1:4, the remainder of the slopes are less steep than 1:4. The slopes on the upper portion of the site are mainly between 1:4 and 1:10 and the slopes on the site are mainly less steep than 1:10 although there are areas between 1:4 and 1:10.
- *Adjacent landuses* - provide levels of compatibility or congruence of the project with the particular qualities of the area, or its 'sense of place'. This is related to the idea of context and maintaining the integrity of the landscape. Adjacent landuses include:
 - To the south - rural development in the form of vineyards and the Stellenbosch Water Works – these are moderately - highly visually sensitive
 - To the east - predominantly undeveloped, fynbos covered mountain with hiking and cycle tracks and a reservoir - these are predominantly highly visually sensitive
 - To the north and west - residential and commercial development – these are less visually sensitive,

- *Special features* – these include:
 - *Historic homestead* of Brandwacht which provide a cultural/heritage character and sense of place to the area;
 - *Scenic / tourist routes* - R44, M12 and M193 – views from scenic/tourists routes or view corridors are of importance to receptors. Currently, receptors using these routes experience views of a Rural and Wilderness nature as well as some development across cultivated hills to the surrounding mountains. The proposed Brandwacht site is visible from the:
 - o R44 roads approximately 200 ms of the road travelling north as it approaches Stellenbosch, passing the Golf Club.
 - o M12 road from a distance of 2,5 - 8 kms and a stretch of 5,5 kms
 - o M310 road from a distance of 5 kms and a stretch of 1 kms

All these special features are highly visually sensitive

- *Screening vegetation* - provides visual enclosure to a proposed development.
 - o The vineyards to the south provide partial screening
 - o taller trees along the river and within the residential development to the north providing screening from the north
 - o Old windrows provide some screening from the east

All these aspects are overlaid to produce a composite visual sensitivity map of the site illustrated in Figure 8.

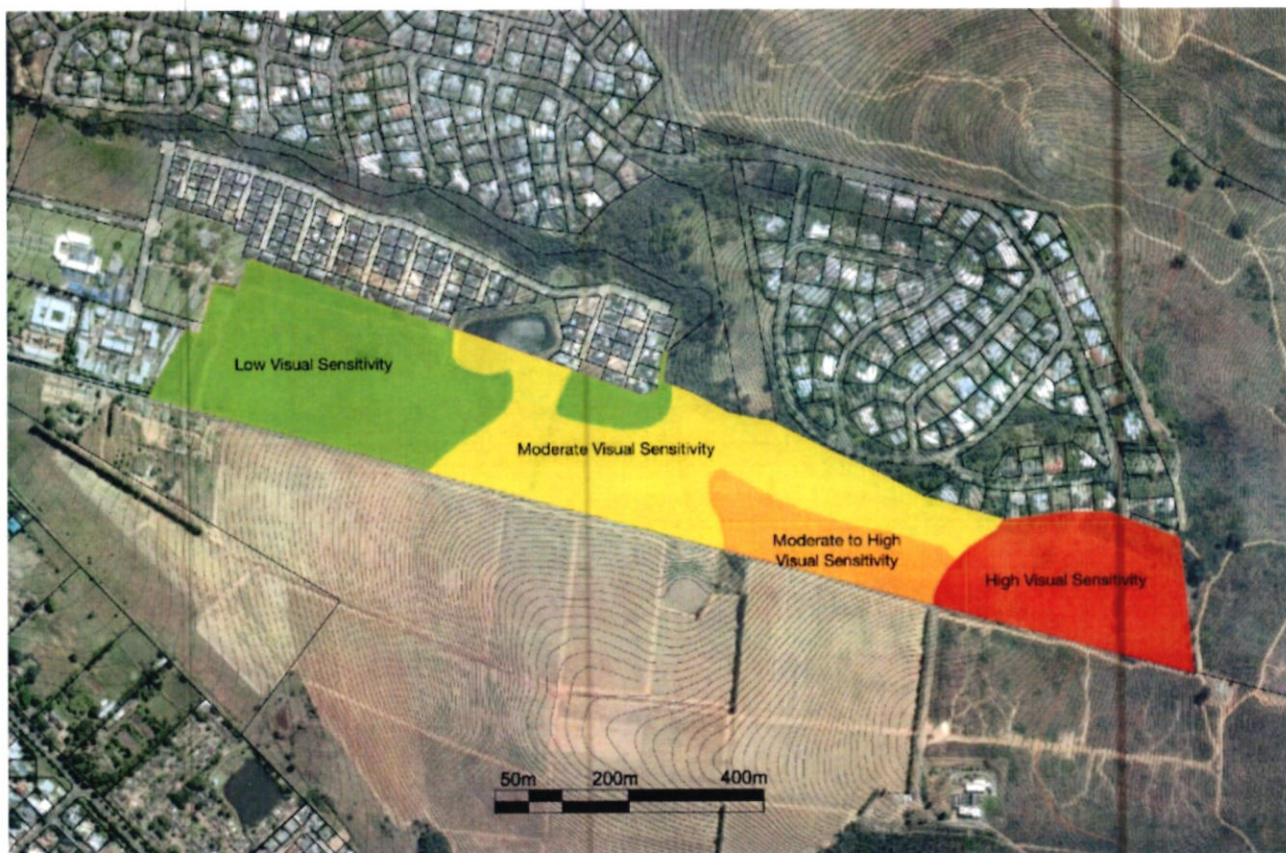


Figure 8: Visual sensitivity of the proposed site

The following aspects contribute to the sensitivity rating of the areas defined as having a low - moderate sensitivity or moderate to high visual sensitivity.

5.4.1 Areas of Low Visual Sensitivity (green):

- lower lying areas of the site;
- gentle slopes - less steep than 1: 10; and
- adjacent to existing development.

5.4.2 Areas of Moderate Visual Sensitivity (yellow):

- mid-slopes;
- gentle slopes - less steep than 1: 10; and

5.4.3 Areas of Moderate - High Visual Sensitivity (orange):

- Mid to upper slopes;
- Adjacent to rural landscape - of cultural and heritage significance
- visible from the scenic R310 and M12 scenic tourist routes

5.4.4 Areas of High Visual Sensitivity (red):

- upper slopes;
- adjacent to rural and natural/mountainous open space
- visible from the scenic R310 and M12 scenic tourist routes

5.5 Visual Absorption Capacity

Visual Absorption Capacity is the potential of the landscape to conceal the proposed project

- **High VAC – e.g. effective screening by topography and vegetation;**
- **Moderate VAC - e.g. partial screening by topography and vegetation;**
- **Low VAC - e.g. little screening by topography or vegetation.**

The proposed site of development is on the mid - upper valley/hill slopes close to a ridge line. The hill slopes are visually exposed to the opposite side of the valley, north, as well as to the upper eastern and far western extents of the valley. A ridgeline screens the lower lying areas to the south.

Trees partially screen the proposed site from the north, east and west, immediately adjacent to the site.

The **VAC** of the site is **moderate - high**, there is partial to effective screening by topography and vegetation

5.6 Visual Intrusion

Visual Intrusion is defined as the level of compatibility or congruence of the project with the particular qualities of the area, or its 'sense of place'. This is related to the idea of context and maintaining the integrity of the landscape or townscape.

- **High visual intrusion – results in a noticeable change or is discordant with the surroundings;**
- **Moderate visual intrusion – partially fits into the surroundings, but clearly noticeable;**
- **Low visual intrusion – minimal change or blends in well with the surroundings.**

The proposed site of development is situated on previously cultivated, old farm land, which is surrounded on two sides by urban development and on the other two sides by a vineyard and predominantly undeveloped, but not pristine, mountain land.

The **visual intrusion** of the proposed development is **moderate** - it partially fits into the surrounding area but will be clearly noticeable.

6. Visual Opportunities and Constraints

The proposed site of development can be divided into 3 or 4 separate areas/zones according to the inherent visual sensitivity of the site (see 5.4).

The visual sensitivity map illustrates areas of low - moderate, moderate - high and high visual sensitivity. This does not necessarily mean that nothing could happen in highly sensitivity areas but rather that appropriate developments/activities could happen in these areas. Likewise, this does not give the go ahead for uncontrolled/large scale development in the areas of low visual sensitivity.

6.1 Upper area/zone - high visual sensitivity

While the site is immediately adjacent to existing development and the urban edge, which provides some visual enclosure, the upper section of the site is highly visually sensitive as a result of it's elevation on the slopes (albeit lower slopes) of the Stellenbosch Mountain, and the rural and natural landscape to the south and east. This elevated portion of the site is visible from scenic, tourist routes, M12 and R310, to the west.

Development in this area therefore needs to be:

- sympathetic to contours with layout along the contours as per old Brandwacht
- less dense, similar to the adjacent (old) Brandwacht to the north of the river, where enough area is available for street and garden tree planting that will help soften and screen the proposed development;
- according to some architectural guidelines - form, shape, non reflective materials, colours etc - i.e. architecturally recessive buildings
- according to landscaping guidelines to ensure softening/screening of the new buildings

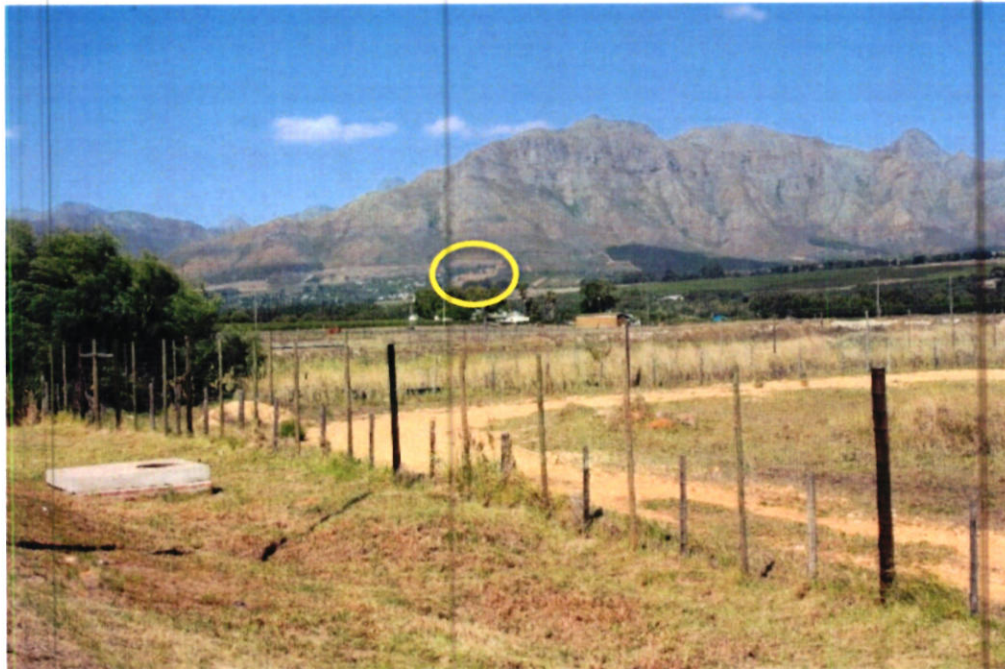


Photo Plate Taken from the M12 scenic tourist route, adjacent to the historic Neethlingshof wine farm entrance gate, indicating the upper section of the proposed site of development (circled)

6.2 Middle area/zone - moderate and moderate to high visual sensitivity

The mid slopes have a moderate to high visual sensitivity as:

- they are not screened from near and far;
- they have slopes that vary between 1:4 and 1:10 and some less steep than 1:10; and
- they are adjacent to development to the north and rural/vineyards to the south.

Development in this area needs to be:

- less dense, than Brandwacht - Aan -Rivier for street and garden tree planting that will help soften and screen the proposed development;
- sympathetic to contours with layout along the contours as per old Brandwacht
- according to some architectural guidelines - form, shape, non reflective materials, colours etc - I.e. architecturally recessive buildings
- according to landscaping guidelines to ensure softening/screening of the new buildings

6.3 Lower area/zone - low visual sensitivity

The lower slopes have a low visual sensitivity as:

- they are relatively screened from near and far;
- they have gentle slopes mainly less than 1:10; and
- they are adjacent to development.

With the exception of the area adjacent to the Historic Homestead, residential development as per adjacent may be applicable.

In general:.

- new buildings / structures should be appropriate in their siting, positioning, massing, density, scale and form in this transitional rural/urban landscape, some areas being visible from scenic routes

7. Conclusion of Visual Framework Study

The proposed Brandwacht III development is outside of the current urban edge line as per the Spatial Development Plan (SDP). This urban line and SDP is being reviewed.

There are areas of the Brandwacht III site of development that are not visually sensitive (lower lying areas) and there are other areas of the site that are more visually sensitive (higher lying areas).

The potential visual impact of residential development on the visually sensitive areas of the site can be mitigated through development density, erf sizes, building form, style and colour and landscaping.

In our opinion, there is no reason why visually appropriate development cannot happen on this site.

SECTION J

TRAFFIC IMPACT STATEMENT

Contact Address:

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**Consulting Services**

- Civil Engineering Service
- Roads
- Traffic Engineering

Contact Person: Piet van Blerk

Your Ref: Remainder Farm 1049, Stellenbosch

Our Ref: iCE/S/1243

Date: 15 March 2018

TV3 Architects and Town Planners
97 Dorp Street
First Floor, La Gratitude Office Building
STELLENBOSCH
7600

Attention: Mr Clifford Heys

Sir

**PROPOSED INCLUSION OF REMAINDER FARM 1049, BRANDWACHT, INTO
URBAN EDGE OF THE STELLENBOSCH MSDF 2018: TRAFFIC IMPACT
STATEMENT**

This company was appointed to prepare a Traffic Impact Statement (TIS) for the proposed residential development on Remainder Farm 1049, Stellenbosch. This TIS is in support of the proposal to include the subject property in the Urban Edge of the Stellenbosch MSDF 2018, and will be followed by a full Traffic Impact Assessment (TIA) which will be conducted during the further development application.

1. LOCALITY AND BACKGROUND

The subject property is situated to the south of the Brandwacht residential area and the Brandwacht Aan Rivier development, Stellenbosch. See the attached **Locality Plan**.

The future Stellenbosch Eastern Link Road (Proclaimed Main Road 169) passes through the subject property, resulting in two pockets as indicated on the attached **Conceptual Layout**. The position of the said future road is also indicated on the attached **Locality Plan**.

The idea of an "eastern bypass route", which would run from Jamestown, through Paradyskloof, Brandwacht/Dalsig, and intersect Van Riebeeck Street opposite Marais Street, originated many years ago. Building plans for Boland College was since approved across the said route. An adjusted route is thus now considered. The proclaimed Eastern Link Road as mentioned above, starts at the R44/Techno Avenue intersection, traverses Blaauwklippen Farm, runs along the existing Wildebosch Road (through Paradyskloof), through Brandwacht, to the east of Dalsig, across Welgevallen and Coetzenburg, and ties in opposite Marais Street.

Stellenbosch office:

Tel: 021 8800 443
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Directors:

P.J. Van Blerk, PrEng.

iCE Group (Overberg) t/a
iCE Group (Stellenbosch)
Reg No: 2006/133238/23



2. PROPOSED DEVELOPMENT

2.1 Proposed Development

The proposed residential development on the subject property will, at this stage, consist of 263 erven varying between 350 to 800 m² per erf. As previously mentioned, the property will be developed in two pockets as result of the Eastern Link Road. See the attached **Conceptual Layout** prepared by *tv3 Architects and Town Planners*.

2.2 Access to the Property

Based on aerial photos, access to the property is currently obtained from Trumali Road, slightly to the east of its intersection with Ben du Toit Drive, as well as from Ben du Toit Drive at the first bend. See the photo below. Access to the proposed residential development will be obtained from Trumali Road, further east. Detail on access will be discussed in *paragraph 4* below.

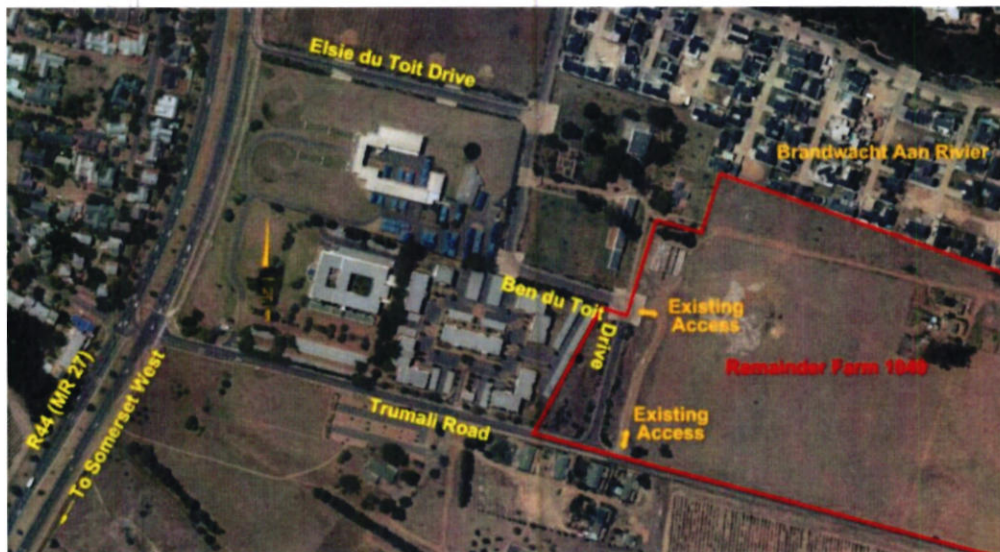


Photo 1 : Existing access to subject property

3. TRAFFIC

Trip generation rates as contained in the *TMH17 South African Trip Data Manual* was consulted to calculate the potential peak hour traffic that can be generated by the proposed development. The *TMH17* suggests 1 trip per dwelling unit, with a 25/75 in/out split during the AM peak hour and 70/30 during the PM peak hour.

Based on the above, the proposed residential development will have the potential to generate 263 peak hour trips (66 in, 197 out during the AM peak hour and 184 in, 79 out during the PM peak hour).

4. ACCESS, EXISTING AND FUTURE ROADS

As previously mentioned, access to the proposed residential development will be obtained further east of Ben du Toit Drive along Trumali Road. The future Eastern Link Road crossing the subject property will also in future provide access to the property (via an access road – no direct erf access). Trumali Road, as well as the future Eastern Link Road, can be classified as Class 4-roads.

The accesses proposed, at this stage, are as indicated on the attached **Conceptual Layout**. With the implementation of the Eastern Link Road, Trumali Road will intersect the said road ± 431 metres southeast of Ben du Toit Drive (226 + 205 as indicated below). It is thus proposed that access to the western portion of the

proposed residential development be obtained at a position between the said intersections. See the photo below. Access to the eastern portion of the proposed development will be obtained from an access road intersecting the Eastern Link Road. The said access will be situated along the access road, ± 360 metres southeast of the Eastern Link Road. The two intersections along the Eastern Link Road (i.e. Trumali Road and the access road) are proposed on the outside of the horizontal curves, approximately 405 metres apart. It is anticipated that these intersections will have to be signalised. Based on the classification of the roads and the surrounding development area, the spacing of these intersections is considered acceptable.



Photo 2 : Intersection spacing along Trumali Road (and Eastern Link Road)

Trumali Road currently consist of two lanes (one per direction), and serves an office park, the Brandwacht Aan Rivier development, the Medi Clinic hospital currently under construction, as well as the Stellenbosch Waterworks. Trumali Road terminates at the access to the said waterworks.

5. ANTICIPATED ROAD IMPROVEMENTS REQUIRED

As part of the conditions of approval for the Medi Clinic hospital currently under construction, the existing dedicated left-turn lane on Trumali Road (at its intersection with the R44) will be extended, as well as the existing left-slip lane along the R44 at the said hospital (Elsie du Toit Drive).

As part of residential developments currently proposed within Paradyskloof, the extension of Schuilplaats Road up to Trumali Road is currently being considered. It is anticipated that the said road extension will be implemented prior to the operation of the residential pockets mentioned.

Trumali Road currently intersects the R44 from the east by way of signalised T-intersection. Additional turning lanes were suggested at this intersection as part of a proposed office-development in the vicinity (not yet approved). Existing conditions along the R44 in the vicinity of the said intersection during peak times (AM/PM) are heavily congested. It is thus anticipated that at least a section of the Eastern Link Road will be required to accommodate the full proposed development. This will be addressed in the full TIA during further development applications.

6. PARKING

Parking will be provided on the individual erven. Detail regarding parking requirements and the layout will be addressed in the full TIA.

7. PUBLIC AND NON-MOTORISED TRANSPORT (NMT)

Existing formal public transport facilities in the area includes the public transport embayment along the R44 at its intersection with Trumali Road. It is anticipated that public transport facilities will be provided along the Eastern Link Road. Public transport embayments could also be considered along Trumali Road at the proposed access (outbound legs).

NMT facilities exist along the R44. Sidewalks currently exist along the northern side of Trumali Road between the R44 and Ben du Toit Drive. It is anticipated that the said sidewalk will have to be extended up to the proposed access. With the possible portion of the Eastern Link Road implemented, facilities along Trumali Road should be extended to tie in with the probable NMT facilities along the Eastern Link Road.

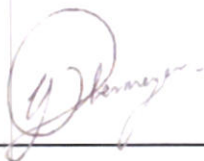
8. CONCLUSIONS AND RECOMMENDATIONS

From the above the following conclusions and recommendations are made:


- 1) That this TIS is in support of the proposal to include Remainder Farm 1049, Brandwacht, in the Urban Edge of the Stellenbosch MSDP 2018, and that a full TIA will be compiled during further development application;
- 2) That the subject property is situated to the south of the Brandwacht residential area and the Brandwacht Aan Rivier development, Stellenbosch;
- 3) That the proposed development will consist of 263 residential erven varying between 350 to 800 m² per erf;
- 4) That the proposed residential development has the potential to generate 263 peak hour trips (66 in, 197 out during the AM peak hour and 184 in, 79 out during the PM peak hour), with access obtained from Trumali Road at two positions;
- 5) That pending road upgrades in the area include the extension of Schuilplaats Road to Trumali Road (intersecting by way of roundabout) along with the changing of the existing R44/Paradyskloof Road intersection to allow only left-turn movements to/from Paradyskloof Road (right-turn movements to/from the golf course still accommodated), the extension of the dedicated left-turn lane on the Trumali Road-approach to its intersection with the R44, as well as the extension of the existing left-slip lane along the R44 towards Elsie du Toit Drive;
- 6) That additional pending upgrades anticipated are the provision of additional turning lanes at the R44/Trumali Road intersection;
- 7) That it is at this stage anticipated that at least a section of the Eastern Link Road will be required to accommodate the proposed residential development; and
- 8) That some public- and non-motorised transport facilities exist in the vicinity of the subject property, but that it is anticipated that additional such facilities will be provided along Trumali Road and the Eastern Link Road.

We trust that the Traffic Impact Statement will be to your satisfaction and will gladly provide any additional information required on request.

Yours faithfully



Yolandi Obermeyer (B. Eng Civil)
ICE GROUP (STELLENBOSCH)



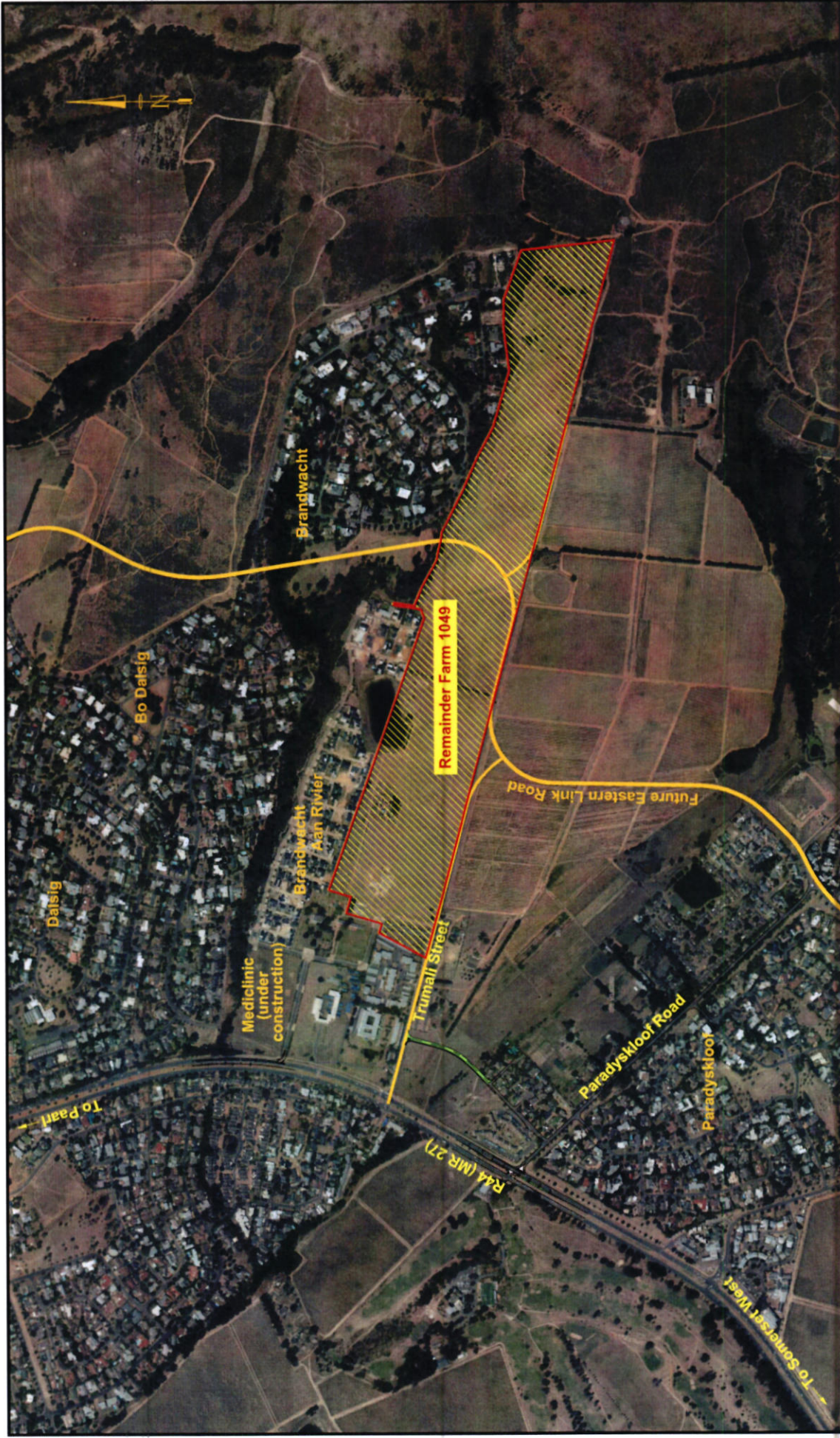
Piet van Blerk Pr. Eng
ICE GROUP (STELLENBOSCH)



Attachments

Locality Plan

Conceptual Layout (Brandwacht aan Rivier II) (*tv3 Architects and Town Planners*)



Locality Plan



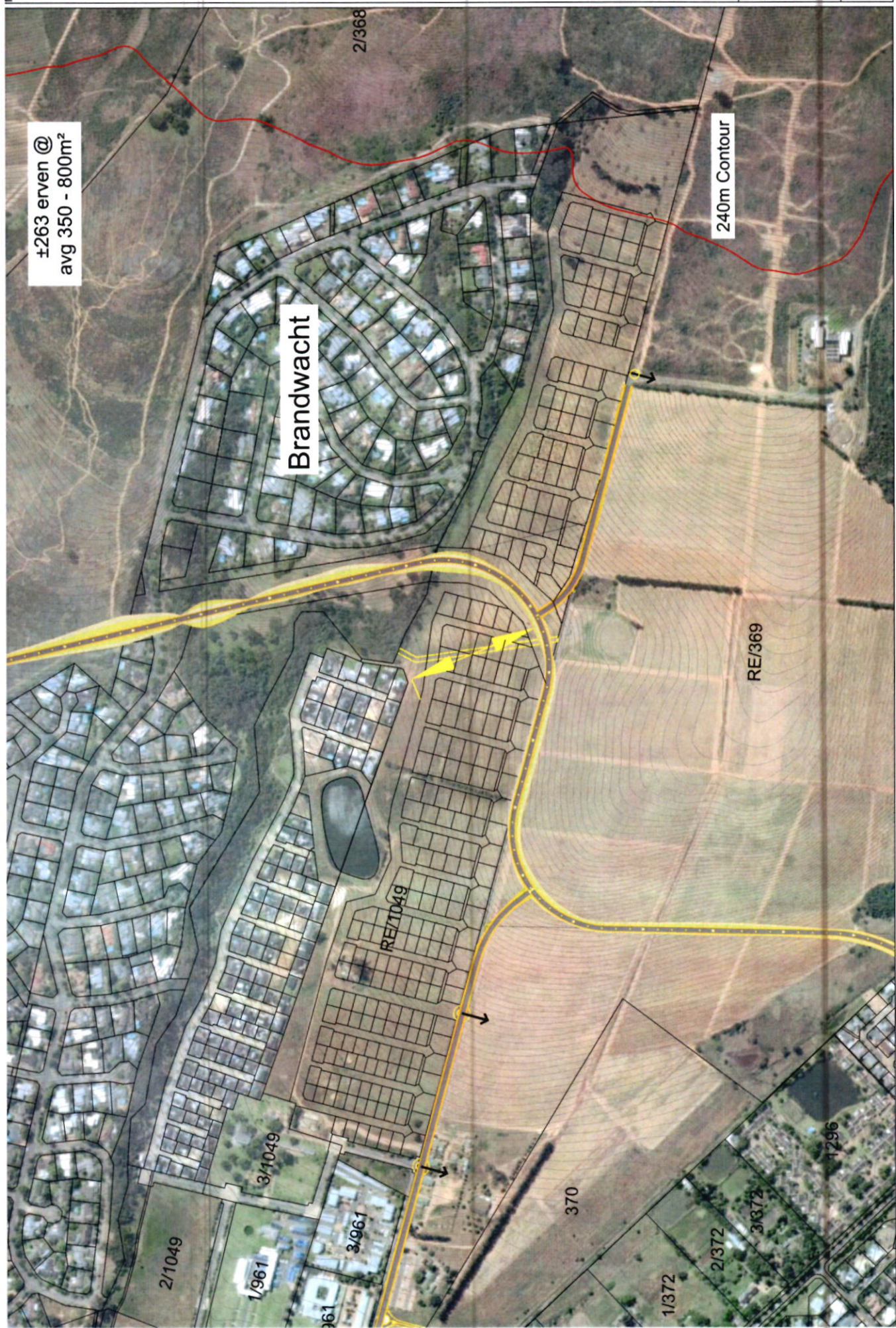
GROUP (Pty) Ltd.

Postbus / PO Box 131
Stellenbosch 7599

Time Square Unit 8
9 Electron Street
Techno Park
Stellenbosch 7600

Tel. : 021 - 880 0443
Faks / Fax : 021 - 880 0390
e-pos / e-mail : piet@icegroup.co.za

Notation:



±263 erven @
avg 350 - 800m²

Brandwacht

240m Contour

RE/369

RE/1049

2/1049

1/961

3/1049

3/961

370

1/372

2/372

3/372

1296

2/368



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Drawn:	CJC	Checked:	JVR	Date:	07/02/2018	Scale:	1:7500
Project no.:	3504 - P	Revision no.:					
Drawing:							
Plan no							
Conceptual layout							1

Brandwacht aan Rivier II

Stellenbosch

SECTION K

CIVIL ENGINEERING SERVICES REPORT



DATE: 5 March 2018

YOUR REF:

OUR REF: 1377 / A2

**PROPOSED RESIDENTIAL DEVELOPMENT ON
REMAINDER OF FARM BRANDWACHT No. 1049, STELLENBOSCH**

REPORT ON PROVISION OF CIVIL ENGINEERING SERVICES

1. INTRODUCTION

The proposed residential development on Remainder of Farm Brandwacht No. 1049, Stellenbosch comprises approximately 250 residential erven of varying sizes in a private estate. This report summarises the current situation with regard to the provision of the basic civil engineering services, i.e. water supply, sewerage, stormwater drainage and solid waste removal to the proposed development.

The development proposal is indicated on the site development plan by TV3 Planners & Architects in Appendix A. The concept of the civil engineering services is as indicated on Drawing 1377/01 in Appendix B.

2. SITE LOCATION AND DESCRIPTION

The property is located in the Brandwacht area of Stellenbosch.

The property is bordered to the north by Brandwacht-aan-Rivier residential estate, the Upper Brandwacht suburb and the Brandwacht Spruit, to the west by Brandwacht Office Park and the Brandwacht Manor House property, to the south by Trumali Road, and to the east by the foothills of Stellenbosch Mountain.

The site has a moderate to steep fall of approximately 1 in 10 in a north westerly direction.

3. WATER SUPPLY

3.1 Demand :

The demand for potable water for the proposed development is calculated as follows:

Single residential: 250 units @ 0,80 kl/unit/day = 200 kl/day

The development is classified as a "low-risk" fire protection area, with a required fire flow of 15 l/s at 7m minimum residual head.

3.2 Storage :

The development will be serviced with water storage capacity from two pressure zones due to the substantial level difference across the site. The lower portion of the development will be serviced from the Municipality's Paradyskloof 2 reservoir system at TWL (Top Water Level) = 222.5m. The higher portion of the development will be serviced from the Municipality's Brandwacht reservoir system at TWL = 280m. In both cases future augmentation of the storage capacities form part of the Municipality's Water Master Plan.

3.3 Supply :

Supply of potable water to the lower portion of the development will be from a proposed supply line of approximately 200mm Ø from the Paradyskloof 2 reservoir system. The location of the municipal watermain is as indicated on the drawing. Supply of potable water to the higher portion of the development will be directly from the Brandwacht reservoir through a dedicated supply watermain of approximately 160mm Ø.

3.4 GLS analysis :

The subject property has been taken into account in the latest Water Master Plan (refer future development area "S66" = ± 291 residential units) of the Stellenbosch Municipality compiled by GLS. It will be a requirement from the Municipality that the development proposal be evaluated against the model for the Water Master Plan by GLS for indication of any bulk water upgrades that may be required. Bulk water upgrades are generally implemented through BICL's funding.

4. SEWERAGE

4.1 Run-off :

Sewage run-off from the proposed development is calculated as follows:

Single residential: 250 units @ 0,65 kl/unit/day = 163 kl/day

4.2 Drainage :

Similarly as for water supply, the subject property has been taken into consideration in the latest Sewer Master Plan (refer future development area "S66") of the Stellenbosch Municipality.

The municipality's Sewer Master Plan indicates a connection for development area "S66" to the privately owned Brandwacht sewerage system, which drains across the Brandwacht Spruit and becomes a municipal system in Lower Dalsig and along the R44 Main Road towards the Stellenbosch Municipality's Waste Water Treatment Works (WWTW) in Devon Valley. As the

permission of the Brandwacht Master HOA will be required for a connection to their private system, we propose that an alternative option for sewerage be available.

The alternative option entails a connection to the municipality's 150mm Ø sewer main along the lower portion of Trumali Road. The said pipeline connects to the 300mm Ø sewer main through Die Boord residential suburb to Die Boord sewer pump station at the end of Rokewood Avenue. At Die Boord sewer pump station, sewage is pumped across the Eerste River to the bulk sewer that gravitates towards the Stellenbosch Municipality's Waste Water Treatment Works (WWTW) in Devon Valley.

This alternative for sewerage will possibly not be favoured by the Municipality, as it will convey the sewage through a pump station (Die Boord PS), a principle that is generally less favourable if a gravity flow system is available, as will be the case with a connection to the Brandwacht private sewerage system.

4.3 GLS analysis :

Similarly as for water supply, it will be a requirement from the Municipality that the development proposal be evaluated against the model for the Sewer Master Plan by GLS for indication of any bulk sewer upgrades that may be required.

4.4 Treatment :

Sewage from the development will be treated at the Municipality's Waste Water Treatment Works in Devon Valley. The treatment capacity of the WWTW has recently been upgraded, and sufficient spare capacity exist to accommodate this development.

5. STORMWATER DRAINAGE

5.1 General

The general stormwater drainage direction of the property is to the north and northwest as indicated on the concept engineering services plan. The Brandwacht Spruit is the natural drainage system of the area, and all stormwater run-off needs to reach the Brandwacht Spruit via existing pipe or overland draining routes. One of these draining routes is across Farm 1049/3 (Manor House property) and careful consideration will be given during the detail planning for protection of the said property.

5.2 Peak Run-off

The 50-year stormwater run-off from the undeveloped site is estimated at 0.89 m³/s. The 50-year stormwater run-off from the fully developed site is calculated at 4.16 m³/s, thus an increase of 3.27m³/s from the pre-development run-off.

5.3 Peak Stormwater Attenuation

It is proposed that stormwater run-off from the development be drained through attenuation ponds on route towards the Brandwacht Spruit.

Our calculations indicate that a total storage volume of approximately 3 500 m³ will be required to attenuate the post-development 50-year run-off to be in line with the pre-development run-off from the site. We propose that the stormwater attenuation be achieved by way of 3 separate attenuation facilities, one of them the existing dam. The proposed locations of the attenuation facilities are as indicated on the concept engineering services plan.

6. SOLID WASTE REMOVAL

Solid waste generated by the development is calculated as follows:

Single residential: 250 units @ 0,04 t/unit/week = 10,0 t/week


The Stellenbosch Municipality indicated that they can provide a waste removal service to the development. The Municipality's refuse truck does not enter private estates and a refuse bin storage area needs to be provided at the entrance to the estate. Alternatively, the development will make use of a suitable, private, waste collection company for the removal of solid waste from the development.

8. CONCLUSION

From the above it is concluded that:

- (a) The required basic civil engineering services for the proposed development, i.e. potable water, sewerage and solid waste removal can be accommodated by the Stellenbosch Municipality in their existing infrastructure.
- (b) Attenuation of peak stormwater run-off from the developed site will be implemented on site by way of three storage ponds.

For **BART SENEKAL & PARTNERS**


 L J Louw Pr. Eng.

APPENDIX A

DEVELOPMENT PROPOSAL

±263 erven @
avg 350 - 800m²

Brandwacht

240m Contour

RE/1049

2/1049

1/961

3/1049

3/961

370

1/372

2/372

3/372

1/296

Brandwacht

240m Contour

RE/369



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Drawn:	CJC	Checked:	JVR	Date:	07/02/2018	Scale:	1:7500
Project no.:		3504 - P		Revision no.:		1	
Drawing:				Plan no			
Conceptual layout				1			

Brandwacht aan Rivier II

Stellenbosch

First Floor • La Gratitude Office Building
97 Dorp Street • Stellenbosch 7600
tel (021) 861 3800
fax (021) 882 8025
e-mail: stel@tv3.co.za
web: www.tv3.co.za



ARCHITECTS AND TOWN PLANNERS

APPENDIX B

CONCEPT BULK ENGINEERING SERVICES

LEGEND

- EXISTING SEWER
- EXISTING WATER
- EXISTING STORMWATER
- BRANDWACHT SPRUIT
- WATER
- BULK WATER METER
- SEWER
- GENERAL FALL OF SITE
- DETENTION POND



<p>BART SENEKAL INC. Civil & Structural Consulting Engineers P.O. Box 1196 Stellenbosch 7589 TEL: 021 853 6710</p>	<p>PROPOSED DEVELOPMENT OF REMAINDER OF FARM 1049, BRANDWACHT</p>		Scale	1:5000	Sheet Size	A3
	<p>CONCEPT CIVIL ENGINEERING SERVICES</p>		Drawing No.	1377/01		

SECTION L

LAND USE PLANNING APPLICATION FORM



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)	Clifford				
Surname	Heys				
Company name (if applicable)	TV3 Projects (Pty) Ltd				
Postal Address	La Gratitude Offices (1 st floor) 97 Dorp Street				
	Stellenbosch	Postal Code	7600		
Email	clifford@tv3.co.za				
Tel	021 861 3800	Fax		Cell	083 309 9770

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

Registered owner(s)	Brandwacht Land Development (Pty) Ltd				
Physical address	Farm Brandwacht Trumali Road				
	Stellenbosch	Postal code	7600		
E-mail	djdutoit@iafrica.com				
Tel		Fax		Cell	083 226 9858

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

Farm	1049	Portion(s) if Farm		Allotment area	Stellenbosch	
Physical Address	Trumali Road Stellenbosch 7600					
Current Zoning	Agriculture & Rural Zone	Extent	30ha	Are there existing buildings?	Y	
Applicable Zoning Scheme	Stellenbosch Municipality Zoning Scheme By-Law (2019)					

Current Land Use	Vacant	
Title Deed number and date	T	T118189/1998
Attached Conveyance's Certificate	N	Any Restrictions to 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)?	N	If Yes, list the party(ies):
Is the property encumbered by a bond?	N	If Yes, list the bondholder(s):
Is the property owned by Council?	N	If Yes, kindly <u>attach a power of attorney</u> from the Manager Property Management
Is the building located within the historical core?	N	Is the building older than 60 years?
	N	Is the application triggered by the National Heritage Resources Act, 1999 (Act 25 of 1999) ¹
	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)?	N	If yes, is this application to legalize the building / land use ² ?
Are there any pending court case(s) / order(s) relating to the subject property(ies)?	N	Are there any land claim(s) registered on the subject property(ies)?

PART D: PRE-APPLICATION CONSULTATION

Has there been any pre-application consultation?	Y	If Yes, please attach the minutes of the pre-application consultation.
Has the pre-application scrutiny form been submitted?	Y	If yes, please attach the written feedback received.

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
	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)

* 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.

**All indigent residents who are registered as such with the Municipality and with proof submitted together 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

*** 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.

BANKING DETAILS

Account Holder Name: Stellenbosch Municipality
 Bank: FIRST NATIONAL BANK (FNB)
 Branch no.: 210554
 Account no.: 62869253684
 Payment reference: LU/_____ and FARM 1049 STELLENBOSCH

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)	Brandwacht Land Development (Pty) Ltd
Postal Address	P O Box 91, Stellenbosch, 7599
Vat Number (where applicable)	412017447

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)						

Brief description of proposed development / intent of application:

Application is made for a site specific deviation from the approved Stellenbosch Municipality's Spatial Development Framework, 2019 to initiate an urban infill development outside the approved urban edge of Stellenbosch.

AND

Application is made i.t.o. section 15.(2)(a) of the Stellenbosch Municipality Planning By-law, 2015 for the rezoning of the Farm Brandwacht No. 1049, Stellenbosch from Agriculture and Rural Zone to Subdivisional

Area, consisting of Conventional Residential Zone erven, Multi-Unit Residential Zone erven, a Local Business Zone erf, Private Open Space Zone erven and Public Roads and Parking Zone erven.

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

Y		Power of attorney / Owner's consent if applicant is not owner			N	Bondholder's consent (if applicable)	
Y		Resolution or other proof that applicant is authorised to act on behalf of a juristic person			Y	Proof of any other relevant right held in the land concerned	
Y		Written motivation pertaining to the need and desirability of the proposal			Y	S.G. diagram / General plan extract (A4 or A3 only)	
Y		Locality plan (A4 or A3 only) to scale			Y	Site development plan or conceptual layout plan (A4 or A3 only) to scale	
Y		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			Y	Proof of registered ownership (Full copy of the title deed)	
Y		Conveyancer's certificate			Y	Written feedback of pre-application scrutiny and Minutes of pre-application consultation meeting (if applicable)	
		N/A	Consolidation plan (A4 or A3 only) to scale			N/A	Land use plan / Zoning plan (A4 or A3 only) to scale
		N/A	Street name and numbering plan (A4 or A3 only) to scale				
		N/A	Landscaping / Tree plan (A4 or A3 only) to scale			N/A	1 : 50 / 1:100 Flood line determination (plan / report) (A4 or A3 only) to scale
		N/A	Abutting owner's consent			N/A	Home Owners' Association consent
		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)		Y		Services Report or indication of all municipal services / registered servitudes
		N/A	Copy of original approval and conditions of approval			N/A	Proof of failure of Home owner's association
		N/A	Proof of lawful use right			N/A	Any additional documents or information required as listed in

							the pre-application consultation form / minutes
		N/A	Required number of documentation copies			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))
			N/A National Environmental Management: Air Quality Act, 2004 (Act 39 of 2004)
Y		Subdivision of Agricultural Land Act, 1970 (Act 70 of 1970)	N/A National Environmental Management: Waste Act, 2008 (Act 59 of 2008)
Y		Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013) (SPLUMA)	N/A National Water Act, 1998 (Act 36 of 1998)
	N/A	Occupational Health and Safety Act, 1993 (Act 85 of 1993): Major Hazard Installations Regulations	N/A Other (specify)
Y		Land Use Planning Act, 2014 (Act 3 of 2014) (LUPA)	
	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.	

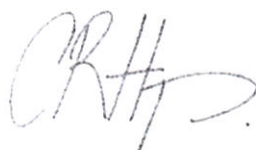
SECTION I: DECLARATION

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:

4 April 2022

Full name:

Clifford Heys – TV3 Projects (Pty) Ltd

Professional capacity:

Professional Town Planner (A/1158/2000)

FOR OFFICE USE ONLY

Date received: _____

Received By: _____

