STELLENBOSCH
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MUNISIPALITEIT • UMASIPALA • MUNICIPALITY

Application Number: LU/14484 (TP70/2022)
Our File Reference Number: Farm 490/2, Stellenbosch
Your Reference Number:
Enquiries: Ulrich von Molendorff
Contact No: 021 808 8682
Email address: Ulrich.Vonmolendorff@stellenbosch.gov.za

PER E-MAIL: [redacted]

Sir/Madam

APPLICATION FOR THE AMENDMENT OF THE APPROVED SUBDIVISION PLAN OF PORTION 2 (AMOI) OF FARM 490, STELLENBOSCH

1. The above application refers.

2. The duly authorised decision maker has decided on the above application as follows:

   2.1 That the application in terms of Section 15(2)(k) of the Stellenbosch Municipal Land Use Planning Bylaw, promulgated by notice number 354/2015, dated 20 October 2015 on Farm 490 Portion 2, Stellenbosch for the amendment of the approved Subdivision Plan, Plan No: FP/0622/1046, Dated: August 2022 to allow the following land uses.

   - 38 Conventional Residential Zone erven
   - 29 Conventional Residential Zone erven with a deemed Consent for Group Housing
   - 15 Private Space Zone erven (Private Open Space)
   - 4 Private Open Space Zone erf (Private Roads)
   - 1 Private Open Space Zone erf (allowing for infrastructure/entrance gate)
   - 1 Public Roads and Parking Zone erf (allowing for public road purposes to accommodate the Helshoogte Road Reserve as a separate entity)
   - 3 Utility Services Zone erven (allowing for infrastructure/sewer pump, booster pump and reservoir)

BE APPROVED in terms of Section 60 of the said Bylaw and subject to conditions of approval.

3. The approval is subject to the following conditions imposed in terms of Section 66 of said Bylaw:

3.1 The approval granted shall not exempt the applicant from complying with any other legal prescriptions or requirements that might have a bearing on the proposed use.

3.2 The approval applies only to the application under consideration, as indicated on the amended Subdivision Plan, Plan No: FP/0622/1046, Dated: August 2022, attached as **Annexure B** and shall not be construed as authority to depart from any other legal prescriptions or requirements from Council or other legislation or Bylaws or Regulations that may be applicable.

3.3 The development be undertaken in accordance with the amended Subdivision Plan, Plan No: FP/0622/1046, Dated: August 2022, attached as **Annexure B.**

3.4 The development be undertaken in accordance with the amended Phasing Plan, Plan No: FP/0618/903, Dated: August 2022, attached as **Annexure C.**

3.5 Development charges are payable in accordance with the prevailing and applicable Council Tariffs at the time of payment prior to the approval of any building plans or as may be agreed on in writing with the Director Infrastructure Services.

3.6 The conditions of approval as imposed by the Directorate Infrastructure Services, in their memorandum dated 19 October 2022, be complied with, as attached as **Annexure F.**

3.7 The proposed subdivided portions within each phase be provided with an electrical connection and pro-rata electrical fees are payable per phase prior to these erven being connected to the electrical grid.

3.8 An electronic copy (shp, dwg, dxf) of the approved General Plan be submitted to the Directorate Planning and Economic Development for record purposes, which plan must indicate the following information:

a. Newly allocated erf numbers
b. Co-ordinates
c. Survey dimensions
d. Street names & numbers

3.9 The first AGM of the Homeowners Association be held within 12 months from approval of the said Constitution to the satisfaction of the Director Planning and Development.

3.10 The development be undertaken generally in accordance with the Botmanskop Mountain Estate Landscape Master Plan, attached as **Annexure H.**

3.11 The landscaping plan be implemented within the common areas such as the private open space and road reserves within each phase of the development prior to rates clearance being granted for the first property in that phase.

3.12 The development be undertaken in accordance with the Botmanskop Architectural Guidelines, attached as **Annexure G.**

3.13 Only one dwelling unit with associated outbuildings be allowed on the Conventional Residential Zone erven with a deemed Consent for Group Housing.

3.14 Building plans be submitted for the entrance gate and boundary wall / fencing.

3.15 That the construction of the entrance gates and boundary wall be completed prior to rates clearance being granted for the 1st phase of the development.

3.16 No building plan be submitted for approval prior to the applicable conditions of approval being adhered to in totality by the developer for each phase of the development.

4. The reasons for the above decision are as follows:

4.1 The proposed amendment of the Subdivision Plan is to create a number of additional residential erven within the development, without increasing the total number of residential units initially approved.

4.2 The proposal will only facilitate a change in ownership type, from sectional title units to single title units.

4.3 The approval will also have no impact on the traffic volumes as initially approved as the number of residential units will not be increased by the approval of the proposal.

4.4 The amendments proposed are in response to the demand within the property market and to ensure a more appropriate and environmentally sensitive "fit".

5. You are hereby informed in terms of section 79(2) of the Stellenbosch Municipal Land Use Planning Bylaw, 2015, of your right to appeal the above decision to the Appeal Authority within 21 days from the date of notification of the above decision. Please note that no late appeals or an extension of time for the submission of appeals are permitted in terms of Section 80(1)(a) of the said By-Law.

6. Appeals must be submitted with the prescribed information to satisfy the requirements of Section 80(2) of the said By-law, failing which the appeal will be invalid in terms of Section 81(1)(b) of the said By-Law. The following prescribed information is accordingly required:

(a) The personal particulars of the Appellant, including:

(I) First names and surname;
(II) ID number;
(III) Company of Legal person's name (if applicable)
(IV) Physical Address;
(V) Contact details, including a Cell number and E-Mail address;

(b) Reference to this correspondence and the relevant property details on which the appeal is submitted.

(c) The grounds of the appeal which may include the following grounds:

(i) that the administrative action was not procedurally fair as contemplated in the Promotion of Administrative Justice Act, 2000 (Act 3 of 2000);

(ii) grounds relating to the merits of the land development or land use application on which the appellant believes the authorised decision maker erred in coming to the conclusion it did.

(d) whether the appeal is lodged against the whole decision or a part of the decision;

(e) if the appeal is lodged against a part of the decision, a description of the part;

(f) if the appeal is lodged against a condition of approval, a description of the condition;

(g) the factual or legal findings that the appellant relies on;

(h) the relief sought by the appellant; and

(i) any issue that the appellant wishes the Appeal Authority to consider in making its decision;

(j) That the appeal includes the following declaration by the Appellant:

(i) The Appellant confirms that the information contained in the subject appeal and accompanied information and documentation is complete and correct

(ii) That the Appellant is aware that it is and offence in terms of Section 86(1)(d) of the said By-Law to supply particulars, information or answers in an appeal against a decision on an application, or in any documentation or representation related to an appeal, knowing it to be false, incorrect or misleading or not believing them to be correct.

7. Appeals must be addressed to the Municipal Manager and submitted to his/ her designated official by means of E-mail at the following address: landuse.appeals@stellenbosch.gov.za

8. Any party (applicant or other) who lodges an appeal must pay the applicable appeal fee in terms of the approved municipal tariffs and submit the proof of payment together with the appeal. The **LU** Reference number on this correspondence, or the applicable Erf/ Farm Number must be used as the reference for the payment of the appeal fee.

9. The approved tariff structure may be accessed and viewed on the municipal website (https://www.stellenbosch.gov.za/documents/finance/rates-and-tariffs) and the banking details for the General Account can also be accessed on the municipal website (https://www.stellenbosch.gov.za/documents/general/8314-stellenbosch-municipality-banking-details-1/file).

10. An applicant who lodge an appeal must also adhere to the following requirements stipulated in terms of section 80(3) to (7) of the said By-law:

(a) Simultaneously serve the appeal on any person who commented on the application concerned and any other person as the municipality may determine.

(b) The notice by the applicant must invite persons to comment on the appeal within 21 days from date of notification of the appeal.

(c) The notice must be served in accordance with section 35 of the said legislation and in accordance with the prescripts or such additional requirements as may be determined by the Municipality.

(d) Proof of serving the notification must be submitted to the Municipality at the above E-mail address within 14 days of serving the notification.

11. Kindly note that no appeal right exists in terms of Section 62 of the Local Government Municipal Systems Act, No 32 of 2000.

12. Kindly note the above decision is suspended, and in the case of any approval, may therefore not be acted on, until such time as the period for lodging appeals has lapsed, any appeal has been finalised and you've been advised accordingly.

Yours faithfully

FOR DIRECTOR: PLANNING AND ECONOMIC DEVELOPMENT

DATE: 28/11/2022

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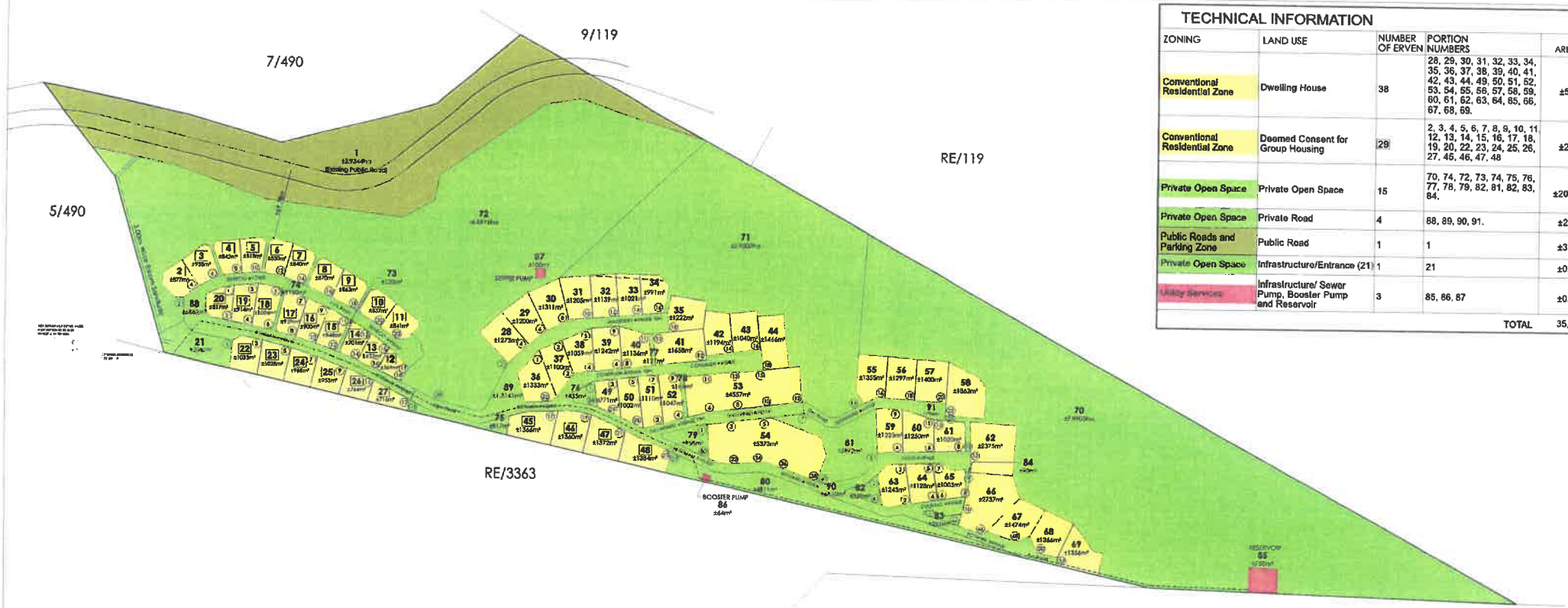
ANNEXURE B



TECHNICAL INFORMATION

ZONING	LAND USE	NUMBER OF ERVEN	PORTION NUMBERS	AREA	%
Conventional Residential Zone	Dwelling House	38	28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69.	±5,6ha	15.9
Conventional Residential Zone	Deemed Consent for Group Housing	29	2, 3, 4, 5, 6, 7, 8, 9, 10, 11 12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 23, 24, 25, 26, 27, 45, 46, 47, 48	±2,7ha	7.7
Private Open Space	Private Open Space	15	70, 74, 72, 73, 74, 75, 76, 77, 78, 79, 82, 81, 82, 83, 84.	±20,0ha	56.8
Private Open Space	Private Road	4	88, 89, 90, 91.	±2,7ha	7.7
Public Roads and Parking Zone	Public Road	1	1	±3,9ha	11.1
Private Open Space	Infrastructure/Entrance (21)	1	21	±0,2ha	0.6
Utility Services	Infrastructure/ Sewer Pump, Booster Pump and Reservoir	3	85, 86, 87	±0,1ha	0.3
			TOTAL	35,2ha	100

AMENDMENT OF SUBDIVISION
Portion 2 of Farm No. 490 STELLENBOSCH

BOTMANSKOP ESTATE

CLIENT:
RESET PROPERTIES (PTY) LTD.

PLAN NO	FP/0622/1046
ANNEXURE	12
DATE	August 2022

N

A3 = 1:4000

0 50 100 150 200

GENERAL NOTES

1. All dimensions are approximate and subject to a detailed site survey and Local Authority input.
2. The Copyright of this drawing, including the design and details shown herein, is reserved by First Plan.
3. ------ Centre line of 5m wide Municipal services servitude.
4. Municipal waterlines: 5m wide Municipal services servitudes provided as possible alternative to Municipal waterline across RE/3363 and RE/333 to new reservoir.
5. ------ 3m wide Eskom Servitude.

AMENDMENTS

REV.	DESCRIPTION	BY	DATE
1	Change layout	CT	09/06/2022
2	Add Service Servitudes	CT	05/08/2022
3	Add Waterline Servitude	CT	12/10/2022
4	Add General Notes	CT	18/10/2022
5	Zoning Correction	CT	25/11/2022

STELLENBOSCH MUNICIPALITY

THIS AMENDMENT OF THE SUBDIVISION PLAN HAS BEEN APPROVED IN TERMS OF SECTION 60 OF THE STELLENBOSCH MUNICIPAL LAND USE PLANNING BY-LAW (2015) SUBJECT TO THE CONDITIONS AS PER APPENDIX.

MUNICIPAL MANAGER

28/11/2022
DATE

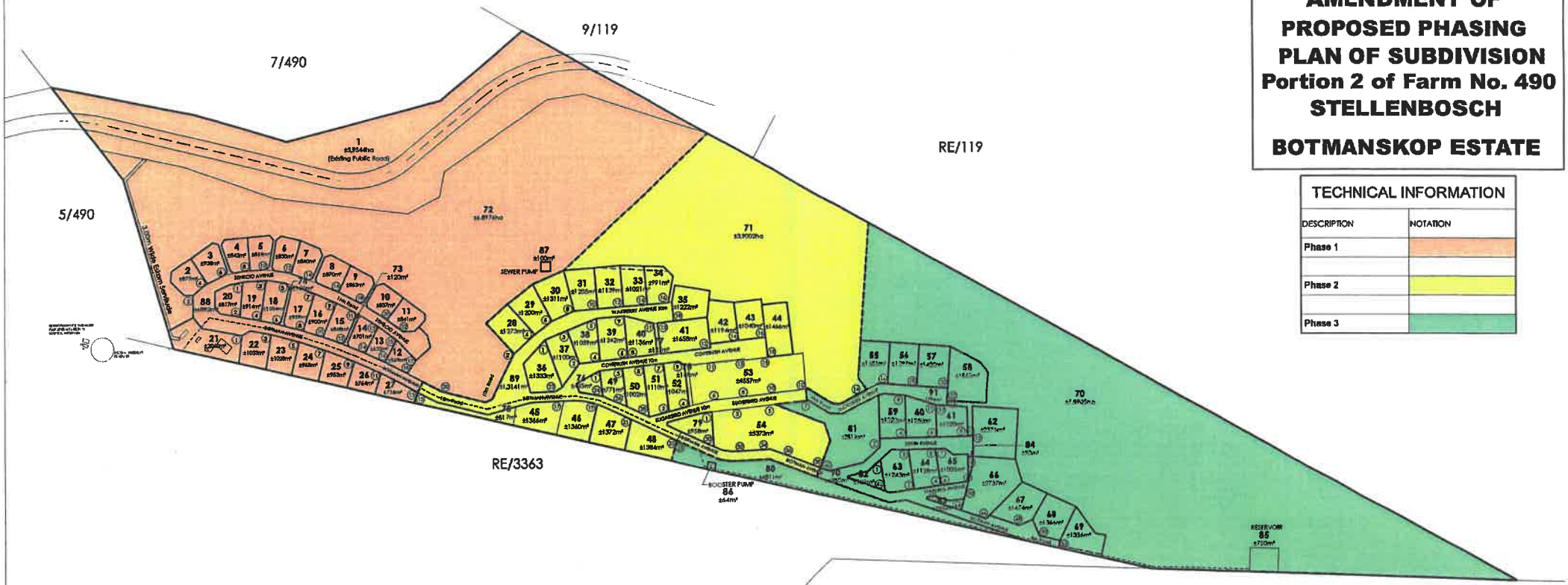
STELLENBOSCH
STELLENBOSCH • PNIEL • FRANSCHHOEK

MUNICIPALITY • UMASIPALA • MUNISIPALITEIT

ANNEXURE C

AMENDMENT OF PROPOSED PHASING PLAN OF SUBDIVISION Portion 2 of Farm No. 490 STELLENBOSCH

BOTMANSKOP ESTATE



TECHNICAL INFORMATION

DESCRIPTION	NOTATION
Phase 1	
Phase 2	
Phase 3	

STELLENBOSCH MUNICIPALITY

THIS SUBDIVISION / CONSOLIDATION HAS BEEN APPROVED IN TERMS OF SECTION 60 OF THE STELLENBOSCH MUNICIPAL LAND USE PLANNING BY-LAW (2015) SUBJECT TO THE CONDITIONS AS PER ATTACHED LETTER DATED

28/11/2022

AUTHORISED EMPLOYEE/MPT

GENERAL NOTES

1. All dimensions are approximate and subject to a detailed site survey and Local Authority input.
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5. ——— 3m wide Eskom Servitude.

AMENDMENTS

REV.	DESCRIPTION	BY	DATE
1	Add General Notes	CT	18/10/2022
2	Zoning Correction	CT	25/11/2022

CLIENT:
RESET PROPERTIES (PTY) LTD.

PLAN NO	FP/0618/903
ANNEXURE	13
DATE	August 2022

N

A3 = 1:4000

0 50 100 150 200

FIRST PLAN TOWN PLANNERS STADSBEPLANNERS

+27 (21) 930-7183 | info@firstplan.co.za | www.firstplan.co.za

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ANNEXURE F

MEMO

DIRECTORATE: INFRASTRUCTURE SERVICES
DIREKTORAAT: INFRASTRUKTUURDIENSTE

To ▫ Aan:	**Director: Planning + Economic Development**
Att Aandag	**Bulelwa Mdoda**
From ▫ Van:	**Manager: Development (Infrastructure Services)**
Author ▫ Skrywer:	**Tyrone King**
Date ▫ Datum:	**19 October 2022**
Our Ref ▫ Ons Verw:	**Civil LU 2390**
Your Ref:	**LU/14484- TP70/2022**
Re ▫ Insake:	**Farm 490/2, Stellenbosch: An application in terms of Section 15.2.k of the Stellenbosch Municipal Land Use Planning By-Law (2015) for the amendment of an approved Subdivision Plan and Phasing Plan. An application in terms of Section 15.2.h of the Stellenbosch Municipal Land Use Planning By-Law (2015) for the amendment of conditions in respect of an existing approval. (Condition 4.1, 4.2, 4.5) Application for approval of street names and street numbering. Application for approval of Architectural Guideline. Application for approval of Landscape Masterplan.**

Details, specifications and information reflected in the following documents refer:

- Motivation Report by Firstplan dated August 2022
- Subdivision Plan No FP/0622/1046 Annexure 12, by Firstplan, dated August 2022;
- Report on Civil Engineering Services, by Intergrate dated 19 Aug 2022 – Rev 4 (C18021) and Addendum dated 19 Oct 2022 regarding water provision.

These comments and conditions are based on the following proposed development parameters:

- Total Units: 73 residential erven

FARM 490/2 (FIJNBOSCH): DEVELOPMENT OF 77 RESIDENTIAL UNITS

The development was previously recommended for approval for 67 units (Memo 19 March 2020) and then again for 77 units (Memo dated 1 Feb 2021).

The reduction from units from 77 to 73 has no additional impact on municipal services and therefore, this application is supported and the conditions of our Memo dated 19 March 2020 (for the 67 units) remain valid. See attached for ease of reference

In terms of water infrastructure, the following new conditions will apply:

1. The water rising main from the exitsing reservoir to the new reservoir, the reservoir itself and the gravity main back to the entrance of the development, must be municipal infrastructure.

There are two options regarding the positioning of this infrastructure:

2. Option 1: The preferred location for this infrastructure is on the municipal erven 3363 and 333 to the south of the development as indicated on Drawing No 120.00 Rev F (**attached**) by Integrate. The Developer must start investigating the feasibility of this option and present it to Water Services because on face value it seems like the preferred option for the Municipality in terms of land ownership/access etc. Any approvals required (environmental approval etc) will be the developer's responsibility to obtain.

3. Option 2: Pipelines and reservoir located on Farm 490-2, within the private road reserves, and protected by a 5m servitude in favour of the municipality, as indicated on Drawing No 120.00 Rev F (**attached**) by Integrate and the Subdivision Plan No FP/0622/1046 Annexure 12, by Firstplan, dated August 2022. This option will only be entertained if Option 1 is not possible.

4. The position, details and sizing of the pipelines and reservoir will be finalized during the detail design stage. Provision must also be made in the infrastructure to potentially accommodate the African Valley Hotel on Farm 490/5 in the future.

5. The construction costs and professional fees for the municipal water infrastructure may be offset from the water and sewer DCs. Any shortfall on the DC's must be covered by the Developer.

6. Should any infrastructure be located on the private property, the area of land required for the pipeline servitude and the reservoir servitude, must be surrendered by the "Developer" to Stellenbosch Municipality, at no cost, prior to clearance of any erven.

The DCs are herewith recalculated and attached as **Annexure DC**.

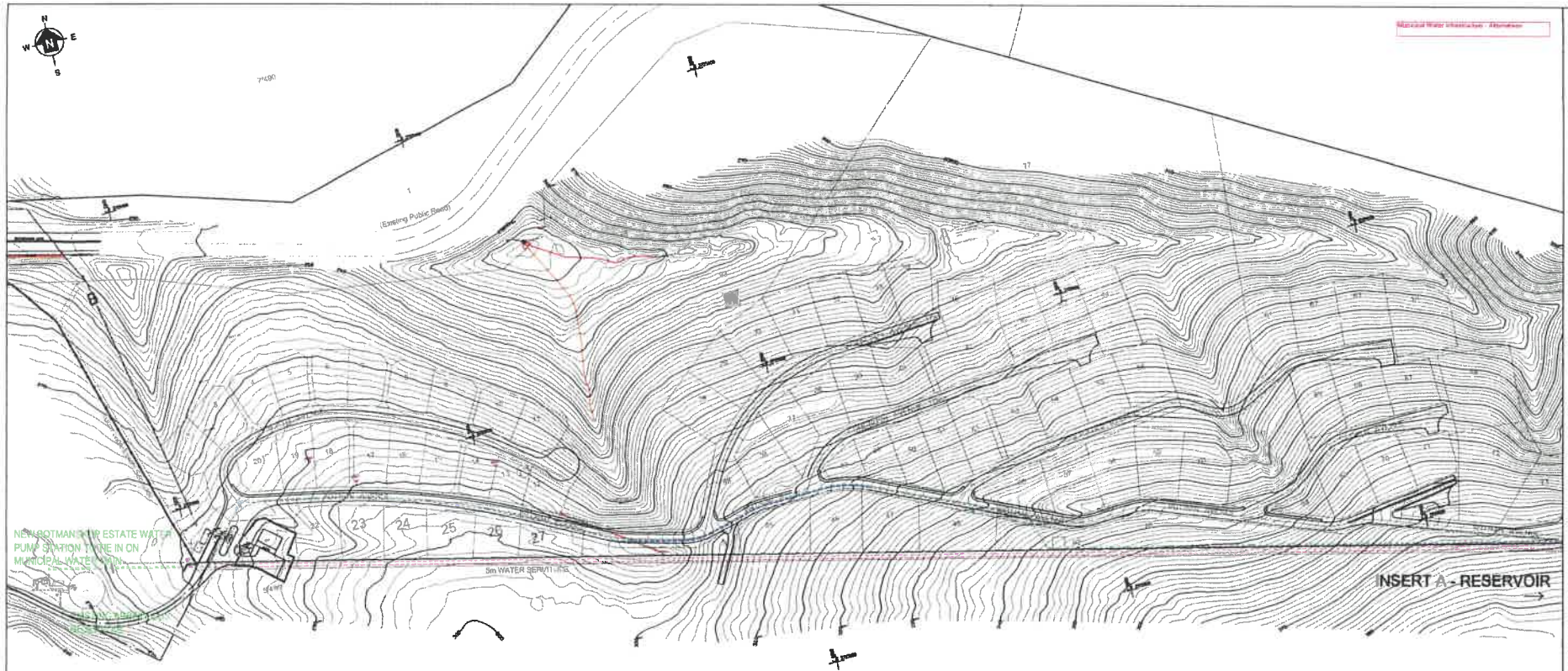
Electricity

Please refer to the conditions attached as **Annexure: Electrical Engineering**;

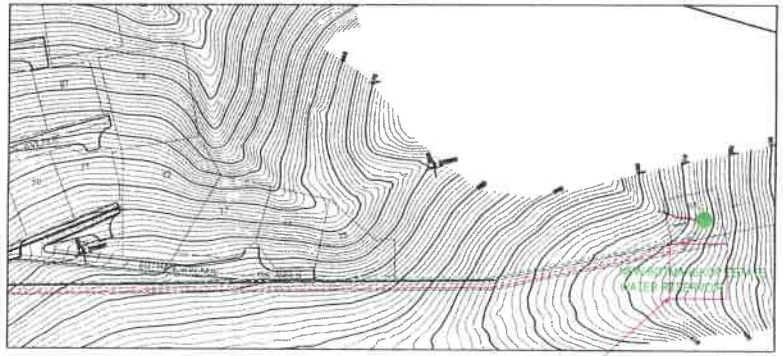
TYRONE KING Pr Tech Eng

MANAGER: DEVELOPMENT (INFRASTRUCTURE SERVICES)

W:\2.0 DEVELOPMENT\00 Developments\2390, 2126, 1869 (TK) Farm 490-2 Stellenbosch (LU-12106) - Fijnbosch-Arnol\2390 (TK) Farm 490-2 Stellenbosch (LU-14484 TP70-2022) - 73 units\2390 () Farm 490-2 Stellenbosch (LU-14484 TP70-2022)_1 (approved).doc



NOTE:
A 5m WIDE MUNICIPAL SERVICES SERVITUDE PROVIDED AS A POSSIBLE ALTERNATIVE TO MUNICIPAL WATERLINE (PUMP LINE AND GRAVITY FEED) ACROSS RE/3363 AND RE/333 TO NEW RESERVOIR.



INSERT A

Alternative location of reservoir on municipal property. Developer to investigate and make proposal to Water Services Department

PROJECT
BOTMANSKOP ESTATE

CLIENT
RESET PROPERTIES (PTY) LTD

LEGEND

INTEGRATE
STRUCTURAL AND CIVIL ENGINEERING

DRAWING
WATER RETICULATION LAYOUT

SCALE: 1:1000 ON A0
DATE: OCTOBER 2022

JOB No. C 1 8 0 2 1 /
DRAWING No. 1 2 0 · 0 0 rev. F

Stellenbosch Municipality

Development Charge Calculation

APPLICATION INFORMATION	
Application Number:	Civil LU 2390; LU/14484- TP70/2022
Development Name:	Amoi
Date:	26 September 2022
Financial Year:	2022/2023
Erf Location (Select from 7 Locations):	Stellenbosch Town
Vehicle Ownership (Select Normal or Low):	Normal
Erf Region (Select Urban or Rural):	Rural
Erf No:	Farm 490-2
DC Parameters Reference:	Motivation report

SUMMARY OF DC CALCULATION														
Service:	Water		Sewer		Stormwater		Solid Waste		Roads & Transport		Community		Totals	
Unit(s):	kl/day		kl/day		ha*C		t/week		trips/day		persons			
Total Increased Services Usage:	87.6		51.1		3.504		2.92		292		292			
Total Service Usage Reduction:	0		0		0		0		146.0		0			
Total Service Usage after Reduction:	87.60		51.10		3.50400		2.920		146.0		292			
Total Development Charges before Deductions:	R	2 458 701.12	R	1 578 546.28	R	650 154.16	R	255 803.68	R	1 578 376.80	R	1 008 860.00	R	7 530 442.05
Total Deductions:	R	-	R	-	R	-	R	-	R	789 188.40	R	-	R	789 188.40
Total Payable (excluding VAT):	R	2 458 701.12	R	1 578 546.28	R	650 154.16	R	255 803.68	R	789 188.40	R	1 008 860.00	R	6 741 253.65
VAT:	R	368 805.17	R	236 781.94	R	97 523.12	R	38 370.55	R	118 378.26	R	151 329.00	R	1 011 188.05
Total Payable (including VAT):	R	2 827 506.29	R	1 815 328.23	R	747 677.29	R	294 174.23	R	907 566.66	R	1 160 189.00	R	7 752 441.70

APPLICANT INFORMATION	
Application Processed by:	T King
Signature:	
Notes:	

Stellenbosch Town

	Land Use Category	Unit Type	Existing Usage			Proposed New Usage			Increased Usage	Development Charge Levied (excl VAT)						
										Water	Sewer	Stormwater	Solid Waste	Roads & Transport	Community	Total
	Description	Unit	Area (m2)	Unit Amount	Result	Area (m2)	Unit Amount	Result	Amount	Yes	Yes	Yes	Yes	Yes	Yes	
Residential	Single Residential >1000m2	du					73		73	R 2 458 701	R 1 578 546	R 650 154	R 255 804	R 1 578 377	R 1 008 860	R 7 530 442
	Single Residential >500m2	du							0	R -	R -	R -	R -	R -	R -	R -
	Single Residential >250m2	du							0	R -	R -	R -	R -	R -	R -	R -
	Single Residential <250m2	du							0	R -	R -	R -	R -	R -	R -	R -
	Second Dwelling	du							0	R -	R -	R -	R -	R -	R -	R -
	Less Formal Residential	du							0	R -	R -	R -	R -	R -	R -	R -
	Group Residential	du							0	R -	R -	R -	R -	R -	R -	R -
	Apartments	du							0	R -	R -	R -	R -	R -	R -	R -
	Retirement Village	du							0	R -	R -	R -	R -	R -	R -	R -
	Old age home	du							0	R -	R -	R -	R -	R -	R -	R -
Accom.	Student Accommodation/Commune	rooms							0	R -	R -	R -	R -	R -	R -	R -
	Guest House	rooms							0	R -	R -	R -	R -	R -	R -	R -
	Converted Guest House	rooms							0	R -	R -	R -	R -	R -	R -	R -
	Hotel, Residential	rooms							0	R -	R -	R -	R -	R -	R -	R -
Commercial	General Business	m2 GLA							0	R -	R -	R -	R -	R -	R -	R -
	Office	m2 GLA							0	R -	R -	R -	R -	R -	R -	R -
	Retail/Shop	m2 GLA							0	R -	R -	R -	R -	R -	R -	R -
	Restaurant	m2 GLA							0	R -	R -	R -	R -	R -	R -	R -
	Conference Facility/Place of assembly	m2 GLA							0	R -	R -	R -	R -	R -	R -	R -
	Hospital/Clinic/Medical Rooms	m2 GLA							0	R -	R -	R -	R -	R -	R -	R -
	School/University/College/Day Care	student							0	R -	R -	R -	R -	R -	R -	R -
Industrial	Industrial - light	m2 GLA							0	R -	R -	R -	R -	R -	R -	R -
	Industrial - heavy	m2 GLA							0	R -	R -	R -	R -	R -	R -	R -
	Warehousing/Light Manufacturing	m2 GLA							0	R -	R -	R -	R -	R -	R -	R -
Non-demand	Public Open Space	ha							0,0000	R -	R -	R -	R -	R -	R -	R -
	Private Open Space	ha							0,0000	R -	R -	R -	R -	R -	R -	R -
	Natural Environment	ha							0,0000	R -	R -	R -	R -	R -	R -	R -
	Public Roads and Parking	ha							0,0000	R -	R -	R -	R -	R -	R -	R -
Other	To be calculated	n/a							0							R -
	(Based on equivalent demands)	n/a							0							R -
		Total Area:	0		Total Area:	0										

Deduct	Total Development Charges before Deductions	R 2 458 701	R 1 578 546	R 650 154	R 255 804	R 1 578 377	R 1 008 860	R 7 530 442
	Deductions per service (amount)	R -	R -	R -	R -	R 789 188	R -	R 789 188
	Additional Deduction per service - from Service Agreement (sum)	R -	R -	R -	R -	R -	R -	R -
Totals	Sub Total after Deductions (excluding VAT)	R 2 458 701.12	R 1 578 546.26	R 650 154.16	R 255 803.68	R 789 188.40	R 1 008 860.00	R 6 741 253.66
	VAT	R 368 805.17	R 236 781.94	R 97 523.12	R 38 370.55	R 118 378.26	R 151 329.00	R 1 011 188.05
	Total	R 2 827 506.29	R 1 815 328.23	R 747 677.29	R 294 174.23	R 907 566.65	R 1 160 189.00	R 7 752 441.70

ELETRICITY SERVICES: CONDITIONS OF APPROVAL
Farm 490-2

GENERAL COMMENT:

1. Development Bulk Levy Contributions are payable.
2. *Please note that the Stellenbosch Municipality Electrical Department is the supply authority for the new development.*

CONDITIONS

1. **The electrical consulting engineer responsible for the development shall schedule an appointment with Manager Electricity Services (Engineering Services) before commencing with the construction of the development. As well as to discuss new power requirements if required.**

2. The development's specifications must be submitted to Stellenbosch Municipality (Engineering Services) for approval. i.e.
   a) The design of the electrical distribution system
   b) The location of substations(s) and related equipment.

3. A separate distribution board/s shall be provided for municipal switchgear and metering. (Shall be accessible & lockable). Pre-paid metering systems shall be installed in domestic dwellings.

4. 24-hour access to the location of the substation, metering panel and main distribution board is required by Technical Services. (On street boundary)

5. Appropriate caution shall be taken during construction, to prevent damage to existing service cables and electrical equipment in the vicinity, should damage occur, the applicant will be liable for the cost involved for repairing damages.

6. On completion of the development, Stellenbosch Municipality (Technical Services) together with the electrical consulting engineer and electrical contractor will conduct a take-over inspection.

7. No electricity supply will be switched on (energised) if the Development contributions, take-over Inspection and Certificate(s) of Compliance are outstanding.

8. All new developments and upgrades of supplies to existing projects are subject to **SANS 10400-XA** energy savings and efficiency implementations such as:
   - Solar water Heating or Heat Pumps in Dwellings
   - Energy efficient lighting systems
   - Roof insulation with right R-value calculations.
     - In large building developments;
     -Control Air condition equipment tied to alternative efficiency systems
     -Preheat at least 50% of hot water with alternative energy saving sources
     -All hot water pipes to be clad with insulation with R-value of 1
     -Provide a professional engineer's certificate to proof that energy saving measures is not feasible.

9. All electrical wiring should be accordance with SANS 10142 and Municipal by-laws.
10. If connecting a generator for backup, the generator needs to comply to SANS10142

Signature

20/10/2022
Date

MEMO

DIRECTORATE: INFRASTRUCTURE SERVICES
DIREKTORAAT: INFRASTRUKTUURDIENSTE

TO	:	**The Director: Planning and Development**
FOR ATTENTION	:	**B Mdoda**
FROM	:	**Manager: Development (Infrastructure Services)**
AUTHOR	:	**Tyrone King**
DATE	:	**19 March 2020**
RE.	:	**Farm 490/2 (Fijnbosch): comment on land use application for the development of 67 residential units (38 free standing + 29 sectional title residential units on 10 residential Zone IV erven)**
YOUR REF	:	**LU/9573**
OUR REF	:	**LU Civil 1869**

Details, specifications and information reflected in the following documents refer:

- The abovementioned application dated 17 May 2019 and motivation report by First Plan Town Planners, dated June 2019;
- Proposed Subdivision Plan No FP/0618/903 Rev 3, by Firstplan, dated April 2019;
- Transport Impact Statement dated 23 April 2019 and Addendum dated 30 September 2019, by ICE Group;
- ICE Group (Yolandi Obermeyer) e-mail dated Tue 2020/03/17 16:04 re turning circle analysis for emergency vehicles.
- Report on Civil Engineering Services, by Intergrate dated April 2019 (C18021);
- GLS water and sewer analysis report dated 15 October 2019

Comments from the Directorate: Infrastructure Services i.e. Roads & Stormwater, Water Services, Traffic Engineering and Development Services will be reflected in this memo and is to be regarded as development conditions to be reflected in the land-use approval.

These comments and conditions are based on the following proposed development parameters, as per page 5 of the town planning motivation report:

FARM 490/2 (FIJNBOSCH): DEVELOPMENT OF 67 RESIDENTIAL UNITS

- 38 Single residential houses
- 29 smaller semi-detached sectional title units on 10 Residential Zone IV erven
- Total Units: 67 No

Any development beyond these parameters would require a further approval and/or a recalculation of the Development Charges from this Directorate.

Definitions

1. that the following words and expressions referred to in the development conditions, shall have the meanings hereby assigned to except where the context otherwise requires:

   (a) *"Municipality"* means the STELLENBOSCH MUNICIPALITY, a Local Authority, duly established in terms of section 9 of the Local Government Municipal Structures act, Act 117 of 1998 and Provincial Notice (489/200), establishment of the Stellenbosch Municipality (WC024) promulgated in Provincial Gazette no. 5590 of 22 September 2000, as amended by Provincial Notice 675/2000 promulgated in Provincial Gazette;

   (b) *"Developer"* means the developer and or applicant who applies for certain development rights by means of the above-mentioned land-use application and or his successor-in-title who wish to obtain development rights at any stage of the proposed development;

   (c) *"Engineer"* means an engineer employed by the *"Municipality"* or any person appointed by the "*Municipality*" from time to time, representing the Directorate: Infrastructure Services, to perform the duties envisaged in terms of this land-use approval;

2. that all previous relevant conditions of approval to this development application remain valid and be complied with in full unless specifically replaced or removed by the *"Engineer"*;

Recommendation:

3. **The development is recommended for approval, subject to the conditions as stated below.**

Conditions specific to this Development:

4. **that the following upgrades are required to accommodate the development. No taking up of proposed rights including Section 28 Certification in terms of the Stellenbosch Municipal Land Use Planning By-law / building plan approval / occupation certificates (whichever comes first) will be allowed until the following upgrades have been completed and/or conditions have been complied with:**

    a. **Stellenbosch WWTW (Waste Water Treatment Works):** The proposed development falls within the catchment area of the existing Stellenbosch WWTW (Waste Water Treatment Works). There is sufficient capacity at the WWTW for the proposed development.

    b. **Water Network:** The items as indicated in the GLS capacity analysis of the bulk water and sewer services dated 15 Oct 2019 (See **Annexure A**):

        i. The development area can be supplied with water from the existing Arbeidslus reservoir. The existing water system has sufficient capacity to accommodate the proposed development. New internal water infrastructure (pump station, supply pipe and reservoir) is however required to establish the proposed Mountain Retreat reservoir in order to supply the proposed development with sufficient water pressure and to comply with the fire flow criteria as set out in the master plan.

        ii. SSW10.1 : New Pump Station (capacity of 2,5 l/s)Estimated cost: R 365 000*
        Funding: Developer's cost

        iii. SSW10.2 : 1 270 m New supply pipe to the proposed reservoir
        Funding: Developer's cost

        iv. SSW10.3 : New Mountain Retreat reservoir (minimum volume of 165 kl)
        Funding: Developer's cost. However the Directorate: Infrastructure Services may require the "Developer" to construct the reservoir and/or link services to a higher capacity than warranted by the project, for purposes of allowing other existing or future developments to also utilise such services. This will be confirmed by our Water Services department at detail design stage and prior to the approval of engineering services drawings. The costs of providing services to a higher capacity could be offset against the Development

Charges payable in respect of bulk civil engineering services if approved by the Directorate: Infrastructure Services;

c. **Sewer Network:** The items as indicated in the GLS capacity analysis of the bulk water and sewer services dated 15 Oct 2019 (See **Annexure B**):

   i. The recommended sewer connection position for the proposed development is to the existing 150 mm Ø sewer pipe in Vaalboom Road at the western boundary of the proposed development, as shown on Figure 2 (**Annexure B**) attached. There is sufficient capacity in the existing sewer reticulation and bulk system downstream of Farm 490/2 to accommodate the proposed development. The link sewer pipeline required to connect the development to the existing municipal sewer crosses a private erf, erf 10557. It will be the Developer's responsibility to obtain permission from the owner and to register a servitude across this erf to protect the proposed sewer. The Developer has to date provided proof that the process of registering the servitude is underway. **Servitude registration must be completed before the approval of the engineering services drawings, so that there is no risk in terms of access to a sewer connection point.**

d. **Roads Network:** As per the TIS no bulk road upgrades are required for the proposed development.

e. **Stormwater:**

   i. the difference between the pre- and post-development stormwater run-off must be accommodated on site.

   ii. Taking into account the recent water crisis, and associated increase in borehole usage, it is important that the groundwater be recharged as much as possible. The quality of SW run-off is also very important. One way of achieving the above is to consider using Sustainable Drainage Systems (SuDS) approach wrt SW management. From Red Book: "SuDS constitute an approach towards managing stormwater runoff that aims to reduce downstream flooding, allow infiltration into the ground, minimise pollution, improve the quality of stormwater, reduce pollution in water bodies, and enhance biodiversity. Rather than merely collecting and discarding stormwater through a system of pipes and culverts, this approach recognises

that stormwater could be a resource." The Developer is encouraged to implement SuDS principles that are practical and easily implementable. Details of such systems can be discussed and agreed with the Municipality and must be indicated on the engineering drawings.

f. **Devon Valley landfill site:**

i. The municipality will provide a waste collection service. Due to the limited airspace capacity available, waste arriving at the site needs to be dramatically reduced in order to extend the lifespan of the landfill site. All new developments must have a mandatory separation-at-source programme to encourage recycling, possible organic waste separation to tie in with the municipality's future diversion programme, and adequate storage facilities to enable waste removal.

ii. Due to limited capacity, large spoil volumes from excavations, to be generated during the construction of this development, will not be accepted at the Stellenbosch landfill site. The Developer will have to indicate and provide evidence of safe re-use or proper disposal at an alternative, licensed facility. This evidence must be presented to the Manager: Solid Waste (Mr Saliem Haider; 021 808 8241; saliem.haider@stellenbosch.gov.za), before building plan approval and before implementation of the development. Clean rubble can be utilized by the Municipality and will be accepted free of charge, providing it meets the required specification.

5. that the upgrades mentioned above be met by the "*Developer*" before Section 28 Certification in terms of the Stellenbosch Municipal Land Use Planning By-law / building plan approval / occupation certificates (whichever comes first) will be given or on discretion of the Directorate: Infrastructure Services, the "*Developer*" furnish the Council with a bank guarantee equal to the value of the outstanding construction work as certified by an independent engineering professional, prior to a Section 28 Certification in terms of the Stellenbosch Municipal Land Use Planning By-law being given;

Development Charges

6. that the "*Developer*" hereby acknowledges that Development Charges are payable towards the following bulk civil services: water, sewerage, roads, stormwater, solid waste and community facilities as per Council's Policy;

7. that the "*Developer*" hereby acknowledges that the development charges levy as determined by the "Municipality" and or the applicable scheme tariffs will be paid by the "*Developer*" towards the provision of bulk municipal civil services in accordance with the relevant legislation and as determined by Council's Policy, should this land-use application be approved;

8. that the "*Developer*" immediately familiarise himself with the latest Development Charges applicable to his/her development;

9. that the "*Developer*" accepts that the Development Charges will be subject to annual adjustment up to date of payment. The amount payable will therefore be the amount as calculated according to the applicable tariff structure at the time that payment is made;

10. that the "*Developer*" may enter into an engineering services agreement with the "*Municipality*" to install or upgrade bulk municipal services at an agreed cost, to be off-set against Development Charges payable in respect of bulk civil engineering services;

11. that the Development Charges levy to the amount of R 6 327 625. 03 (Excluding VAT) as reflected on the DC calculation sheet, dated **21 October 2019**, and attached herewith as **Annexure DC**, be paid by the "*Developer*" towards the provision of bulk municipal civil services in accordance with the relevant legislation and as determined by Council's Policy.

    Based on the 2019/2020 tariff structure and the proposed lay-out, the following amounts are payable:

Water	:	R 2 104 260. 48
Sewer	:	R 1 177 271. 95
Stormwater	:	R 351 784. 54
Solid Waste	:	R 137 278. 75
Roads	:	R 1 690 185. 77
Community Facilities	:	R 866 843. 53
Total exclusive of VAT:		**R 6 327 625. 03**
VAT:		R 949 143. 75
Total inclusive of VAT:		**R 7 276 768. 79**

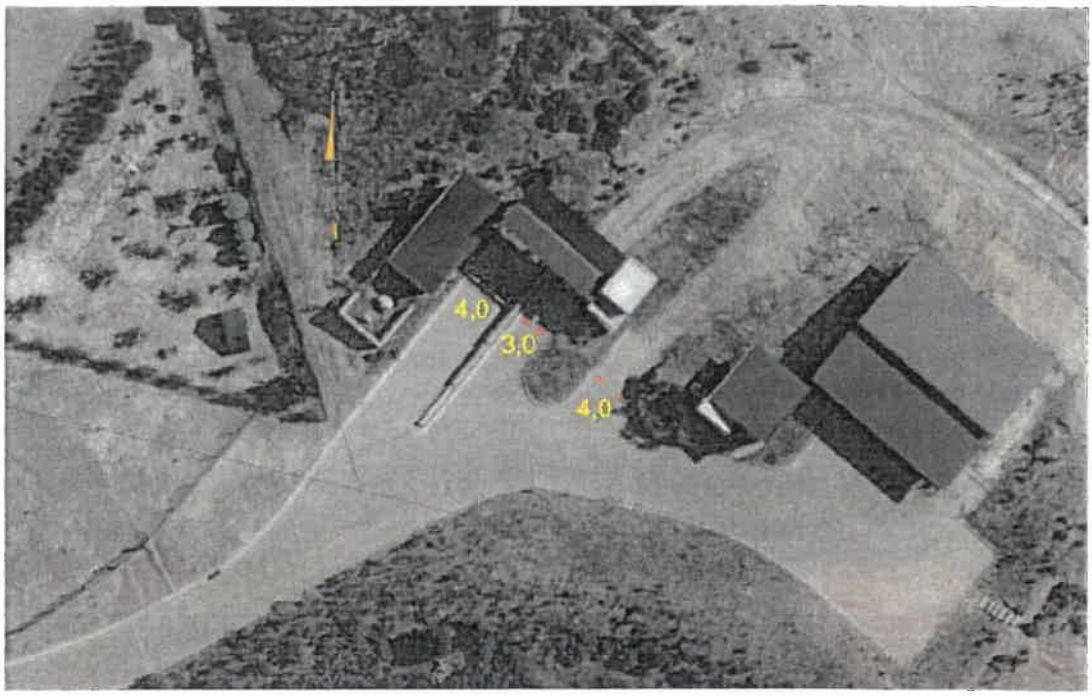
12. that the Development Charges levy be paid by the "*Developer*" per phase –
    - prior to the approval of any building- and/or services plans in the case of a Sectional title erf in that phase or where a clearance certificate is not applicable and/or;
    - prior to the approval of Section 28 Certification in terms of the Stellenbosch Municipal Land Use Planning By-law in all cases and or;
    - prior to the erf or portion thereof being put to the approved use;

13. that the development shall be substantially in conformance with the Site Development Plan submitted in terms of this application. Any amendments and/or additions to the Site Development Plan, once approved, which might lead to an increase in the number of units i.e. more than **67 units**, will result in the recalculation of the Development Charges;

14. Bulk infrastructure Development Charges and repayments are subject to VAT and are further subject to the provisions and rates contained in the Act on Value Added Tax of 1991 (Act 89 of 1991) as amended;

Site Development Plan

15. that it is acknowledged that a security controlled access exists on the property with two lanes in and one lane out. The in-lanes measure 4.0 meters and 3.0 metres **as indicated below**, which are considered sufficient (to accommodate emergency vehicles, the 4.0m must be without horizontal obstruction and must have a height clearance of 4.3m). These dimensions must be clearly indicated on the engineering construction drawings submitted for approval;



16. that the access to the subject property is obtained from the existing Helshoogte Road/Neil Ellis Wines access intersection, which includes dedicated right turn lanes toward both accesses. The existing security controlled access to the subject property is situated +/- 850m from Helshoogte Road;

17. that should any changes be considered to the geometric layout of the existing access, the design thereof must be approved by the municipality;

18. that provision be made for a 3-point turning head in front of the entrance gate, to the satisfaction of the Directorate: Infrastructure Services in order to enable a vehicle to turn around;

19. that provision be made for a refuse room at the entrance as per the specification of the standard development conditions below;

20. that if the "Developer" wishes to remove the waste by private contractor, provision must still be made for a refuse room should this function in future revert back to the "Municipality";

21. that provision be made for a refuse embayment at the entrance to the development to accommodate refuse removal. This must be clearly indicated on the engineering construction drawings when submitted for approval. The specifications of such embayment shall be as per the standard development conditions below, or as negotiated with the Municipality during

approval of the engineering drawings;

22. that the design make provision for sufficient turning space for emergency vehicles, specifically a fire truck, as illustrated by the turning circle analysis received via e-mail form ICE Group (Yolandi Obermeyer e-mail dated Tue 2020/03/17 16:04);

23. that any amendments to cadastral layout and or site-development plan to accommodate the above requirements will be for the cost of the "*Developer*";

Ownership and Responsibility of services

24. that it be noted that as per Subdivision Plan No FP/0618/903 Rev 3, by Firstplan, dated April 2019, the roads are reflected as private roads. Therefor all internal services on the said erf will be regarded as private services and will be maintained by the "*Developer*" and or Owner's Association;

Bulk Water Meter

25. that the "*Developer*" shall install a bulk water meter conforming to the specifications of the Directorate: Infrastructure Services at his cost at the entrance gate of all private developments before the practical completion inspection is carried out;

Servitudes

26. all servitudes required for the services of the development must be clearly indicated on the engineering drawings;

27. The "*Developer*" will be responsible for the registration of the required servitude(s), as well as the cost thereof;

28. **Servitude registration for the sewer line that connects to the municipal sewer in Vaalboom Street must be completed before the approval of the engineering services drawings, so that there is no risk in terms of access to a sewer connection point**;

29. The width of the registered servitudes must be a minimum of 3 m or twice the depth of the pipe (measured to invert of pipe), whichever is the highest value.

Floodplain Management (if applicable)

30. that the 1:50 and 1:100 year flood lines of any river of stream be shown on all plans submitted. The flood lines are to be verified by a suitably qualified registered engineering professional. Where flood lines have not previously been determined, the "*Developer*" must procure the services of a suitably qualified registered engineering professional to undertake such determinations at his/her own cost. No new development will be allowed under the 1:100 year flood line;

31. that the floor level of all buildings be at least 100 mm above the 1:100 year flood level. These levels must be indicated on all building plans submitted and must be certified by a Registered Professional Engineer;

32. that all perimeter fencing below the 1:50 year flood line be visually permeable from ground level and not adversely affect the free flow of water (e.g. palisade fencing). No fences will be allowed across the watercourse;

Roads

33. that, the conditions as set by the Provincial Administration: Western Cape be adhered to before Section 28 Certification in terms of the Stellenbosch Municipal Land Use Planning By-law will be issued;

34. that the "*Developer*", at his/her cost, implement the recommendations of the Transport Impact Statement, by ICE Group, and where required, a sound Traffic Management Plan to ensure traffic safety shall be submitted for approval by the Directorate: Infrastructure Services and the approved management plan shall be implemented by the "*Developer*", at his/her cost. If any requirement of the TIS is in conflict with one of the conditions of approval, the conditions of approval shall govern;

35. that the access to the subject property is obtained from the existing Helshoogte Road/Neil Ellis Wines access intersection, which includes dedicated right turn lanes toward both accesses. The existing security controlled access to the subject property is situated +/- 850m from Helshoogte Road;

36. that the "*Developer*" will be held liable for any damage to municipal/provincial infrastructure, caused as a direct result of the development of the subject property. The "*Developer*" will

therefore be required to carry out the necessary rehabilitation work, at his/her cost, to the standards of the Directorate: Infrastructure Services and or Provincial Government (Roads);

37. that on-site parking be provided by the owner of the property in the ratio as prescribed by the relevant zoning scheme;

Electricity

38. Please refer to the conditions attached as **Annexure: Electrical Engineering**;

Standard development conditions:

(if there is a contradiction between the specific and standard development conditions, the specific conditions will prevail):

39. that the "*Developer*" will enter into an Engineering Services Agreement with the "*Municipality*" in respect of the implementation of the infrastructure to be implemented in lieu of DCs if the need for such infrastructure is identified at any stage by the Municipality;

40. that should the "*Developer*" not take up his rights for whatever reason within two years from the date of this memo, a revised Engineering report addressing services capacities and reflecting infrastructure amendments during the two year period, must be submitted to the Directorate: Infrastructure Services by the "*Developer*" for further comment and conditions. Should this revised Engineering report confirm that available services capacities is not sufficient to accommodate this development, then the implementation of the development must be re-planned around the availability of bulk services as Section 28 Certification in terms of the Stellenbosch Municipal Land Use Planning By-law will not be supported by the Directorate: Infrastructure Services for this development if bulk services are not available upon occupation or taking up of proposed rights;

41. that the "*Developer*" indemnifies and keep the "*Municipality*" indemnified against all actions, proceedings, costs, damages, expenses, claims and demands (including claims pertaining to consequential damages by third parties and whether as a result of the damage to or interruption of or interference with the municipalities' services or apparatus or otherwise) arising out of the establishment of the development, the provision of services to the development or the use of servitude areas or municipal property, for a period that shall commence on the date that the installation of services to the development are commenced with and shall expire after completion of the maintenance period.

42. that the "*Developer*" must ensure that he / she has an acceptable public liability insurance policy in place;

43. that, if applicable, the "*Developer*" approach the Provincial Administration: Western Cape (District Roads Engineer) for their input and that the conditions as set by the Provincial Administration: Western Cape be adhered to before Section 28 Certification in terms of the Stellenbosch Municipal Land Use Planning By-law will be issued;

44. that the "*Developer*" informs the project team for the proposed development (i.e. engineers, architects, etc.) of all the relevant conditions contained in this approval;

45. that the General Conditions of Contract for Construction Works (GCC) applicable to all civil engineering services construction work related to this development, will be the SAICE 3rd Edition (2015);

46. Should the "Developer" wish to discuss the possibility of proceeding with construction work parallel with the provision of the bulk services listed above, he must present a motivation and an implementation plan to the "Engineer" for his consideration and approval. The implementation plan should include items like programmes for the construction of the internal services and the building construction. Only if the programme clearly indicates that occupation is planned after completion of the bulk services, will approval be considered. If such proposal is approved, it must still be noted that no occupation certificate will be issued prior to the completion and commissioning of the bulk services. Therefore should the proposal for proceeding with the development's construction work parallel with the provision of the bulk services be agreed to, the onus is on the "Developer" to keep up to date with the status in respect of capacity at infrastructure listed above in order for the "Developer" to programme the construction of his/her development and make necessary adjustments if and when required. The Developer is also responsible for stipulating this condition in any purchase contracts with buyers of the properties;

47. that the "*Developer*" takes cognizance and accepts the following:

    a.) that no construction of any civil engineering services may commence before approval of internal – and external civil engineering services drawings;
    b.) that no approval of internal – and external civil engineering services drawings will be given before land-use and or SDP approval is obtained;

c.) that no approval of internal – and external civil engineering services drawings will be given before the "*Developer*" obtains the written approval of all affected owners where the route of a proposed service crosses the property of a third party;

d.) that no building plans will be recommended for approval by the Directorate: Infrastructure Services before land-use and or SDP approval is obtained;

e.) that no building plans will be recommended for approval by the Directorate: Infrastructure Services before the approval of internal – and external civil engineering services drawings;

f.) that no building plans will be recommended for approval by the Directorate: Infrastructure Services before a Section 28 Certification in terms of the Stellenbosch Municipal Land Use Planning By-law is issued unless the *"Developer"* obtains the approval (for construction work of his development parallel with the provision of the bulk services).

Site Development Plan

48. that it is recognized that the normal Site Development Plan, submitted as part of the land-use application, is compiled during a very early stage of the development and will lack engineering detail that may result in a later change of the Site Development Plan. Any later changes will be to the cost of the "Developer";

49. that even if a Site Development Plan is approved by this letter of approval, a further fully detailed site plan be submitted for approval prior to the approval of engineering services plans and or building- and/or services plans to allow for the setting of requirements, specifications and conditions related to civil engineering services. Such Plan is to be substantially in accordance with the approved application and or subdivision plan and or precinct plan and or site plan, etc. and is to include a layout plan showing the position of all roads, road reserve widths, sidewalks, parking areas with dimensions, loading areas, access points, stacking distances at gates, refuse removal arrangements, allocation of uses, position and orientation of all buildings, the allocation of public and private open spaces, building development parameters, the required number of parking bays, stormwater detention facilities, connection points to municipal water- and sewer services, updated land-use diagram and possible servitudes;

50. that if the fully detailed Site Development Plan, as mentioned in the above item, contradicts the approved Site Development Plan, the "Developer" will be responsible for the amendment thereof and any costs associated therewith;

51. that an amended Site Development Plan be submitted for approval prior to the approval of building plans for new buildings not indicated on the Site Development Plan applicable to this application and or changes to existing buildings or re-development thereof;

Internal- and Link Services

52. that the "*Developer*", at his/her cost, construct the internal (on-site) municipal civil services for the development, as well as any link (service between internal and available bulk municipal service) municipal services that need to be provided;

53. that the Directorate: Infrastructure Services may require the "*Developer*" to construct internal municipal services and/or link services to a higher capacity than warranted by the project, for purposes of allowing other existing or future developments to also utilise such services. The costs of providing services to a higher capacity could be offset against the Development Charges payable in respect of bulk civil engineering services if approved by the Directorate: Infrastructure Services;

54. that the detailed design and location of access points, circulation, parking, loading - and pedestrian facilities, etc., shall be generally in accordance with the approved Site Development Plan and / or Subdivision Plan applicable to this application;

55. that plans of all the internal civil services and such municipal link services as required by the Directorate: Infrastructure Services be prepared and signed by a Registered Engineering Professional before being submitted to the aforementioned Directorate for approval;

56. that no construction of engineering services may commence prior to approval of the service plans by the Directorate: Infrastructure Services;

57. that the construction of all civil engineering infrastructure shall be done by a registered civil engineering services construction company approved by the "*Engineer*";

58. that the "*Developer*" ensures that his/her design engineer is aware of the Stellenbosch Municipality Design Guidelines & Minimum Standards for Civil Engineering Services (as amended) and that the design and construction/alteration of all civil engineering infrastructure shall be generally in accordance with this document, unless otherwise agreed with the Engineer. The said document is available in electronic format on request;

59. that a suitably qualified professional resident engineer be appointed to supervise the construction of all internal – and external services;

60. that engineering design drawings will only be approved once approval in terms of the Stellenbosch Municipal Land Use Planning By-law is issued;

61. that prior to the issuing of the Certificate of Practical Completion, in terms of GCC 2015 Clause 5.14.1, all internal - and link services be inspected for approval by the "*Engineer*" on request by the "*Developer's*" Consulting Engineer;

62. that a Certificate of Practical Completion, in terms of GCC 2015 Clause 5.14.1 be issued before Section 28 Certification in terms of the Stellenbosch Municipal Land Use Planning By-law will be issued (prior to transfer of individual units or utilization of buildings);

63. that Section 28 Certification in terms of the Stellenbosch Municipal Land Use Planning By-law will only be issued if the bulk watermeter is installed, a municipal account for the said meter is activated and the consumer deposit has been paid;

64. that a complete set of test results of all internal – and external services (i.e. pressure tests on water - and sewer pipelines as well as densities on road structure and all relevant tests on asphalt), approved and verified by a professional registered engineer be submitted to the "Engineer" on request;

65. that the *"Developer"* shall be responsible for the cost for any surveying and registration of servitudes regarding services on the property;

66. that the *"Developer"* be liable for all damages caused to existing civil and electrical services of the "*Municipality*" relevant to this development. It is the responsibility of the contractor and/or sub-contractor of the "*Developer*" to determine the location of existing civil and electrical services;

67. that all connections to the existing services be made by the "*Developer*" under direct supervision of the *"Engineer"* or as otherwise agreed and all cost will be for the account of the *"Developer"*.

68. that the "*Developer*", at his/her cost, will be responsible for the maintenance of all the internal (on-site) municipal – and private civil engineering services constructed for this development

until at least 80% of the development units (i.e. houses, flats or GLA) is constructed and aoccupied whereafter the services will be formally handed over to the Owner's Association, in respect of private services, and to the Municipality in respect of public services;

Stormwater Management

69. that the geometric design of the roads and/or parking areas ensure that no trapped low-points are created with regard to stormwater management. All stormwater to be routed to the nearest formalized municipal system;

70. that overland stormwater escape routes be provided in the cadastral layout at all low points in the road layout, or that the vertical alignment of the road design be adjusted in order for the roads to function as overland stormwater escape routes. If this necessitates an amendment of the cadastral layout, it must be done by the "*Developer*", at his/her cost, to the standards of the Directorate: Infrastructure Services;

71. that the design engineer needs to apply his/her mind to ensure a design that will promote a sustainable urban drainage system which will reduce the impacts of stormwater on receiving aquatic environments;

72. that no disturbance to the river channel or banks be made without the prior approval in accordance with the requirements of the National Water Act;

73. that the consulting engineer, appointed by the "*Developer*", analyses the existing stormwater systems and determine the expected stormwater run-off for the proposed development, for both the minor and the major storm event. Should the existing municipal stormwater system not be able to accommodate the expected stormwater run-off, the difference between the pre- and post-development stormwater run-off must be accommodated on site, or the existing system must be upgraded to the required capacity at the cost of the "*Developer*" and to the standards and satisfaction of the Directorate: Infrastructure Services. The aforementioned stormwater analysis is to be submitted concurrent with the detail services plans;

74. that for larger developments, industrial developments or developments near water courses a stormwater management plan for the proposed development area, for both the minor and major storm events, be compiled and submitted for approval to the Directorate: Infrastructure Services.

75. that the approved management plan be implemented by the "*Developer*", at his/her cost, to the standards of the Directorate: Infrastructure Services. The management plan, which is to include an attenuation facility, is to be submitted concurrent with the detail services plans;

76. that in the case of a sectional title development, the internal stormwater layout be indicated on the necessary building plans to be submitted for approval.

77. that no overland discharge of stormwater will be allowed into a public road for erven with catchment areas of more than 1500m² and for which it is agreed that no detention facilities are required. The *"Developer"* needs to connect to the nearest piped municipal stormwater system with a stormwater erf connection which may not exceed a diameter of 300mm.

Roads

78. that, where applicable, the application must be submitted to the District Roads Engineer for comment and conditions . Any conditions set by the District Roads Engineer will be applicable;

79. that no access control will be allowed in public roads;

80. The design and lay-out of the development must be such that emergency vehicles can easily drive through and turn around where necessary;

81. that, prior to commencement of any demolition / construction work, a traffic accommodation plan for the surrounding roads must be submitted to the Directorate: Infrastructure Services for approval, and that the approved plan be implemented by the "*Developer*", at his/her cost, to the standards of the Directorate: Infrastructure Services;

82. that each erf has its own access (drive-way), *(the new access(es) (dropped kerb(s)) to the proposed parking bays be)* constructed to standards as set out by the the Directorate: Infrastructure Services and in line with the Road Access Guideline;

83. that the access road to the existing facility be kept in an acceptable condition, i.e. maintained to a standard which will result in a comfortable ride for a standard passenger vehicle and to a standard which will not endanger the lives or property of road users;

Wayleaves

84. that way-leaves / work permits be obtained from the Directorate: Infrastructure Services prior to any excavation / construction work on municipal land or within 3,0m from municipal services located on private property;

85. that wayleaves will only be issued after approval of relevant engineering design drawings;

86. that it is the Developer's responsibility to obtain wayleaves from any other authorities/service provider's who's services may be affected.

Owner's Association (Home Owner's Association or Body Corporate)

87. that an Owner's Association be established in accordance with the provisions of section 29 of the Stellenbosch Municipal Land Use Planning By-law and shall come into being upon the separate registration or transfer of the first deducted land unit arising from this subdivision;

88. that the Owner's Association take transfer of the private roads simultaneously with the transfer or separate registration of the first deducted land portion in such phase;

89. that in addition to the responsibilities set out in **section 29** of the Stellenbosch Municipal Land Use Planning By-law, the Owner's Association also be responsible for the maintenance of the private roads, street lighting, open spaces, retention facilities and all internal civil services;

90. that the Constitution of the Owner's Association specifically empower the Association to deal with the maintenance of the roads, street lighting, open spaces, retention facilities and all internal civil services;

91. that the Constitution of the Owner's Association specifically describes the responsibility of the Owner's Association to deal with refuse removal as described in the "Solid Waste" section of this document;

Solid Waste

92. The reduction, reuse and recycle approach should be considered to waste management:

- Households to reduce waste produced
- Re-use resources wherever possible
- Recycle appropriately

To give effect to the above, the following are some typical waste minimization measures that should be implemented by the Developer, to the satisfaction of the Stellenbosch Municipality:

- Procedures should be stipulated for the collection and sorting of recyclable materials;
- Provision should be made for centralized containers for recyclable materials including cardboard, glass, metal, and plastic and green waste;
- A service provider should be appointed to collect recyclable waste. Such service provider must be legally compliant in terms of all Environmental Legislation and/or approved by the Municipality's Solid Waste Management Department;
- Procedures for removal of waste (materials that cannot be reused or recycled) from the site should be stipulated;
- General visual monitoring should be undertaken to identify if these measures are being adhered to;
- Record shall be kept of any steps taken to address reports of dumping or poor waste management within the Development;

Where an Owner's Association is to be established in accordance with the provisions of section 29 of the Stellenbosch Municipal Land Use Planning By-law, the Constitution of the Owner's Association shall incorporate the above in the Constitution and:

- Each party's (Developer/Owner's Association/Home Owner) responsibilities w.r.t. waste management and waste minimization should be clearly defined in such constitution
- A set of penalties for non-compliance should be stipulated in the Constitution

93. that it be noted that the Solid Waste Branch will not enter private property, private roads or any access controlled properties for the removal of solid waste;

94. that the "*Developer*" must apply and get approval from the Municipality's Solid Waste Department for a waste removal service prior to clearance certificate or occupation certificate (where clearance not applicable). Contact person Mr Saliem Haider, 021 808 8241; saliem.haider@stellenbosch.gov.za;

95. that should it not be an option for the *"Municipality"* to enter into an agreement with the *"Developer"* due to capacity constraints, the "*Developer*" will have to enter into a service

agreement with a service provider approved by the *"Municipality"* prior to clearance certificate or occupation certificate (where clearance not applicable);

96. that if the "Developer" wishes to remove the waste by private contractor, provision must still be made for a refuse room should this function in future revert back to the "Municipality";

97. Access shall be provided with a minimum travelable surface of 5 meters width and a minimum corner radii of 5 meters;

98. Maximum depth of cul-de-sac shall be 20 meters or 3 erven, whichever is the lesser. Where this requirement is exceeded, it will be necessary to construct a turning circle with a minimum turning circle radius of 11m or, alternatively – a turning shunt as per the Directorate: Infrastructure Services' specifications. With respect to the latter, on street parking are to be prohibited by way of "red lines" painted on the road surface as well as "no parking" signboards as a single parked vehicle can render these latter circles and shunts useless;

99. Minimum turning circle radius shall be 11 meters to the center line of the vehicle;

100. Road foundation shall be designed to carry a single axle load of 8.2 tons;

101. Refuse storage areas are to be provided for all premises other than single residential erven;

102. Refuse storage areas shall be designed in accordance with the requirements as specified by the Solid Waste Branch. Minimum size and building specifications is available from the Solid Waste Branch;

103. A single, centralized, refuse storage area which is accessible for collection is required for each complete development. The only exception is the case of a single residential dwelling, where a refuse storage area is not required;

104. The refuse storage area shall be large enough to store all receptacles needed for refuse disposal on the premises, including all material intended to recycling. No household waste is allowed to be disposed / stored without a proper 240 ℓ Municipal wheelie bin;

105. The size of the refuse storage area depends on the rate of refuse generation and the frequency of the collection service. For design purposes, sufficient space should be available to store two weeks' refuse;

106. Where the premises might be utilized by tenants for purposes other than those originally foreseen by the building owner, the area shall be sufficiently large to store all refuse generated, no matter what the tenant's business may be;

107. All black 85 ℓ refuse bins or black refuse bags is in the process of being replaced with 240 ℓ black municipal wheeled containers engraved with WC024 in front, and consequently refuse storage areas should be designed to cater for these containers. The dimensions of these containers are:

Commercial and Domestic : 585 mm wide x 730 mm deep x 1100 mm high

108. With regard to flats and townhouses, a minimum of 50 litres of storage capacity per person, working or living on the premises, is to be provided at a "once a week" collection frequency;

109. Should designers be in any doubt regarding a suitable size for the refuse storage area, advice should be sought from the Solid Waste Department : Tel 021 808-8224

110. Building specifications for refuse storage area:

Floor

The floor shall be concrete, screened to a smooth surface and rounded to a height of 75mm around the perimeter. The floor shall be graded and drained to a floor trap (See: Water Supply and Drainage).

Walls and Roof

The Refuse Storage Area shall be roofed to prevent any rainwater from entering. The walls shall be constructed of brick, concrete or similar and painted with light color high gloss enamel. The height of the room to the ceiling shall be not less than 2.21 meters.

Ventilation and Lighting

The refuse storage area shall be adequately lit and ventilated. The room shall be provided with a lockable door which shall be fitted with an efficient self-closing devise. The door and ventilated area shall be at least 3 metres from any door or window of a habitable room. Adequate artificial lighting is required in the storage area.

Water Supply and Drainage

A tap shall be provided in the refuse storage area for washing containers and cleaning spillage. The floor should be drained towards a 100 mm floor trap linked to a drainage pipe which discharges to a sewer gully outside the building. In some cases a grease gully may be required.

111. Should the refuse storage area be located at a level different from the level of the street entrance to the property, access ramps are to be provided as stairs are not allowed. The maximum permissible gradient of these ramps is 1:7;

112. A refuse bay with minimum dimensions of 15 meters in length x 2, 5 meters in width plus 45 degrees splay entrance, on a public street, must be provided where either traffic flows or traffic sight lines are affected. The refuse bays must be positioned such that the rear of the parked refuse vehicle is closest to the refuse collection area;

113. Any containers or compaction equipment acquired by the building owner must be approved by the Directorate: Infrastructure Services, to ensure their compatibility with the servicing equipment and lifting attachments;

114. Refuse should not be visible from a street or public place. Suitable screen walls may be required in certain instances;

115. Access must be denied to unauthorized persons, and refuse storage areas should be designed to incorporate adequate security for this purpose;

116. All refuse storage areas shall be approved by the Directorate: Infrastructure Services, to ensure that the Council is able to service all installations, irrespective of whether these are currently serviced by Council or other companies;

AS-BUILTs

117. The "*Developer*" shall provide the "*Municipality*" with:
    a. a complete set of as-built paper plans, signed by a professional registered engineer;
    b. a CD/DVD containing the signed as-built plans in an electronic DXF-file format, reflecting compatible layers and formats as will be requested by the "*Engineer*" and is reflected herewith as Annexure X;

    c. a completed Asset Verification Sheet in Excell format, reflecting the componitization of municipal services installed as part of the development. The Asset Verification Sheet

will have to be according to the IMQS format, as to be supplied by the "Engineer", and is to be verified as correct by a professional registered engineer;

d. a complete set of test results of all internal – and external services (i.e. pressure tests on water - and sewer pipelines as well as densities on road structure and all relevant tests on asphalt), approved and verified by a professional registered engineer;

e. Written verification by the developer's consulting engineer that all professional fees in respect of the planning, design and supervision of any services to be taken over by the "*Municipality*" are fully paid;

118. All relevant as-built detail, as reflected in the item above, of civil engineering services constructed for the development, must be submitted to the "*Engineer*" and approved by the "*Engineer*" before any application for Certificate of Clearance will be supported by the "*Engineer*";

119. The Consulting Civil Engineer of the "*Developer*" shall certify that the location and position of the installed services are in accordance with the plans submitted for each of the services detailed below;

120. All As-built drawings are to be signed by a professional engineer who represents the consulting engineering company responsible for the design and or site supervision of civil engineering services;

121. Section 28 Certification in terms of the Stellenbosch Municipal Land Use Planning By-law shall not be issued unless said services have been inspected by the "*Engineer*" and written clearance given, by the "*Engineer*";

Section 28 Certification in terms of the Stellenbosch Municipal Land Use Planning By-law

122. It is specifically agreed that the "*Developer*" undertakes to comply with all conditions of approval as laid down by the "*Municipality*" before clearance certificates shall be issued, unless otherwise agreed herein;

123. that the "*Municipality*" reserves the right to withhold any clearance certificate until such time as the "*Developer*" has complied with conditions set out in this contract with which he/she is in default. Any failure to pay monies payable in terms of this contract within 30 (thirty) days after an account has been rendered shall be regarded as a breach of this agreement and the

"*Municipality*" reserves the right to withhold any clearance certificate until such time as the amount owing has been paid;

124. that clearance will only be given per phase and the onus is on the "*Developer*" to phase his development accordingly;

125. **The onus will be on the "Developer" and or his professional team to ensure that all land-use conditions have been complied with before submitting an application for a Section 28 Certification in terms of the Stellenbosch Municipal Land Use Planning By-law. Verifying documentation (proof of payment in respect of Development Charges, services installation, etc.) must be submitted as part of the application before an application will be accepted by this Directorate;**

126. that any application for Certificate of Clearance will only be supported by the "*Engineer*" once all relevant as-built detail, as reflected in the item "AS-BUILT's" of this document, is submitted to the "*Engineer*" and approved by the "*Engineer*".

Avoidance of waste, nuisance and risk

127. Where in the opinion of the "*Municipality*" a nuisance, health or other risk to the public is caused due to construction activities and/or a lack of maintenance of any service, the "*Municipality*" may give the "*Developer*" and or OWNER'S ASSOCIATION written notice to remedy the defect failing which the "*Municipality*" may carry out the work itself or have it carried out, at the cost of the "*Developer*" and or OWNER'S ASSOCIATION.

Streetlighting

128. The "*Developer*" will be responsible for the design and construction at his own expense of all internal street lighting services and street lighting on link roads leading to his development (excluding Class 1, 2 and 3 Roads) according to specifications determined by the municipality's Manager: Electrical Services and under the supervision of the consulting engineer, appointed by the "*Developer*";

129. Prior to commencing with the design of street lighting services, the consulting electrical engineer, as appointed by the "*Developer*" must acquaint himself with, and clarify with the municipality's Manager: Electrical Engineering, the standards of materials and design requirements to be complied with and possible cost of connections to existing services;

130. The final design of the complete internal street lighting network of the development must be submitted by the consulting electrical engineer, as appointed by the "*Developer*", to the municipality's Manager: Electrical Engineering for approval before any construction work commences;

131. Any defect with the street lighting services constructed by the "*Developer*" which may occur during the defects liability period of 12 (TWELVE) months and which occurs as a result of defective workmanship and/or materials must be rectified immediately / on the same day the defect was brought to the attention of the consulting electrical engineer, appointed by the "*Developer*". Should the necessary repair work not be done within the said time the "*Municipality*" reserves the right to carry out the repair work at the cost of the "*Developer*";

132. The maintenance and servicing of all private internal street lighting shall be the responsibility and to the cost of the "Developer" and or Home Owner's Association.

TYRONE KING Pr Tech Eng
MANAGER: DEVELOPMENT (INFRASTRUCTURE SERVICES)

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ATTACHMENT X

Geographic Information System (GIS) data capturing standards

In drawing up the As-build Plans relating to this development, the consultant must create the following separate layers in ESRI .shp, electronic file format in order for the data to reflect spatially correct.

Layer name	Content
TITLE	Title information, including any endorsements and references
NOTES	All noted information, both from the owner / surveyor and SG
PARENT_PROPLINES	Parent property lines
PARENT_PROPNUM	Parent erf number (or portion number)
PROPLINES	New portion boundaries
PROPANNO	New erf numbers
SERVLINES	Servitude polygons
SERVANNO	Servitude type
STREET_NAMES	Road centre lines with street names

STREET_NUMBERS	Points with street numbers
COMPLEX BOUNDARIES	Where applicable, polygon with complex name (mention whether gated or not and if so, where gates are)
SUBURB	Polygon with suburb name, where new suburb / township extension created
ESTATE	Where applicable, polygon with estate name (mention whether gated or not and if so, where gates are)

When data is provided in a .shp format it is mandatory that the .shx, .dbf, files should accompany the shapefile. The prj file containing the projection information must also accompany the shapefile.

It is important that different geographical elements for the GIS capture process remains separate. That means that political boundaries like wards or suburbs be kept separate from something like rivers. The same applies for engineering data types like water lines, sewer lines, electricity etc. that it is kept separate from one another. When new properties are added as part of a development, a list of erf numbers with its associated SG numbers must be provided in an electronic format like .txt, .xls or .csv format.

For road layer shapefiles; the road name, the from_street and to_street where applicable as well as the start en end street numbers needs to be included as part of the attributes. A rotation field needs to be added to give the street name the correct angle on the map.

In addition to being geo-referenced and in WGS 1984 Geographic Coordinate System, the drawing must be completed using real world coordinates based on the Stellenbosch Municipality standard as follows:

- Datum : Hartebeeshoek WGS 84
- Projection : Transverse Mercator
- Central Longitude/Meridian 19
- False easting : 0.00000000
- False northing : 0.00000000
- Central meridian : 19.00000000
- Scale factor : 1.00000000
- Origin latitude : 0.00000000
- Linear unit : Meter

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MUNICIPALITY • UMASIPALA • MUNISIPALITEIT

ANNEXURE G

BOTMANSKOP ESTATE

STELLENBOSCH

ARCHITECTURAL DESIGN GUIDELINES

2022-04-14

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South Africa

INTRODUCTION

> "There is something timeless in the beauty of mountain landscapes. Constantly renewed by changing light, weather, and seasons, mountains are nevertheless resolute and unmoved, cutting the same distinctive form into the sky as they have for millions of years." [Phaidon Editors. (2020) *Living in the Mountains.* Phaidon. ISBN 9781838660840. p9]

Mountains are formed over millions of years and mountain landscapes have ever since civilization captured the fascination of the human mind. Mountains account for some of the most delightful scenery as well as being one of the most majestic and permanent features of the natural world. In previous centuries buildings in the mountains were simple structures with minimal glazing with the priority to protect man from the elements. Contemporary building techniques have enabled structures to be built high up in more challenging terrain and simultaneously be opened to the landscape through high-technology glazing and modern insulating building materials. The opportunity that the architect has to maximize views from a particular site, embeds the direct condition to be sensitive to the environment.

> "It is an art that takes an understanding of when to open the interior to expansive vistas that stretch for miles, and when to create a sense of intimacy, to use focused views - on details of the topography or the local flora - that express the beauty of the mountain on a different scale. " [Phaidon Editors. (2020) *Living in the Mountains.* Phaidon. ISBN 9781838660840. p9]

The awareness that the insertion of a building into the mountain landscape has a diminishing effect on the flora on a micro scale, but also influence the silhouette of complete mountain region on a macro scale, is important. These settlements are visible from a distance. To preserve the beauty of the natural environment that has initially drawn human settlement to take place on these locations, can also contribute to diminish this beauty. Careful design consideration should be applied for the buildings to become one with nature; to preserve the scenic beauty inherent to the mountainous R310 route and the endemic fynbos.

The access to build and live on a cliffside location presents the unique opportunity for total communion with nature.

> "One strategy is to source materials from the local area, settling the building into its surroundings and blurring the division between interior and exterior spaces. The topography can be used to inform the internal organization, echoing the terrain within the scheme. The local architectural vernacular offers a cultural context from which to draw, similarly contributing to softening a building's visual impact. Or a house can be designed to disappear into the

mountainside completely. A place to see but not be seen. [Phaidon Editors. (2020) *Living in the Mountains.* Phaidon. ISBN 9781838660840. p91]

Botmanskop Estate (hereafter BKE) is located on the northern slopes on the western side of Botmanskop in a traditional fynbos area characterized by the presence of Proteaceae, Ericoid and Restionaceae species, which has partly been disturbed by Eucalyptus trees.

BKE has beautiful vistas towards Tafelberg, Simonsberg and Botmanskop. Vistas reach as far as Melkbosstrand on a clear day. BKE has the unique opportunity to establish residences utilizing these vistas, nestled within the beautiful fynbos landscape. The prime position of the BKE within the protected fynbos landscape comes with the distinct responsibility to respect and conserve the environment as the most prominent asset of the estate. The purpose of the Architectural Design Guidelines is to promote a design approach and philosophy, rather than to impose restrictive conditions. Although each property has a unique design opportunity, the holistic approach for the development is to be in harmony with the natural environment. These design principles are as follow:

Principle 1: Look out, not in

Working on a site of exceptional natural beauty presents a significant responsibility to preserve this quality while interjecting human intervention into this environment. In this setting buildings are seen as second to nature and nature to be profound, permanent, and dominant. The architecture in its basic form provides habitation while embracing the vantage point. Orientation of buildings as well as the placement of fenestration should carefully be considered.

Principle 2: Build in, not on the landscape

Buildings need to follow the contours and individual opportunities arranged linear and run parallel to the contours. Buildings are not to be designed to stand out from its natural surroundings, but rather to respect and blend in with nature. Due to the expansive surrounding landscape displaying horizontal characteristics, the emphasis on individual designs will be to extend this horizontal character.

Principle 3: Work with the contours and build horizontally in the landscape

The BKE Architectural Design Guidelines enforce the principle that buildings should follow the contours. Buildings should be placed parallel to the contours and not perpendicular. Buildings perched on stilts are not allowed. The restriction on height, arrangement of roof slopes and rectangular building shapes will prevent buildings from beings perched on stilts as individual objects.

Buildings are to be moulded into nature and although they are of geometric shape, the architectural elements should collectively contribute to blend in with nature.

Principle 4: Terraced and layered buildings.

Although the steep incline in the BKE provides unique opportunities, each subsequent level or storey should step back from the level below. Retaining walls of prescribed materials are necessary to create building platforms. The principle of each layer or level being subordinate to the previous and by utilising horizontal lines in the building components, a terraced nature of the building moulded into the slope is established as opposed to large shapes being in contrast with its natural surroundings. The perceived height of the top structures is reduced by applying this principle.

Principle 5: Plug in compatible materials as top structures that recede when viewed from a distance

The perceived mass of buildings is reduced by the principle of terracing and layering. The character, colour and texture of the finishes applied to the building mass should further contribute to let the building dissipate into the natural surroundings. The character, colour and texture of finishes should imitate those in the immediate natural environment. High reflective surfaces and bold or contrasting colours do not support this principle and will not be accepted. The residential units are collectively bound by a set of materials, finishes and colours.

Principle 6: Contain building footprints and allow fynbos to permeate the spaces between them

Each erf has an allowed coverage. The building footprint is governed by the allowed coverage and building lines imposed on each site. The disturbance to the remainder of the landscape outside of the footprint should be the least possible and be re-established once the building has been constructed. Endemic Fynbos should be re-established and allowed to permeate between buildings. Only selective contained horizontal lawned areas will be allowed if screened from and not visible from a distance. Furthermore, all disturbed natural Fynbos vegetation will be re-established once building construction is completed. Refer to the Botmanskop Mountain Estate Landscaping Guidelines.

Principle 7: Consider the fifth elevation by selectively introducing green roofs and/or pergolas and allow for infiltrating overgrowth

Planted roofs as an option to be considered to soften the effect of the built form injected into the landscape. Hard and straight-lined edges of man-made structures is softened by allowing indigenous and plated landscape to infiltrate the structure. Careful consideration should be

given on how to incorporate vegetation into the design and how this anchors the building to the landscape.

Principle 8: Optimise cut-and-fill and employ terraced- and/or hidden geometries to mitigate the visual impact of houses and roads when viewed from below.

For each individual erf to apply the terraced and layered principles of design and to develop a purpose-made and appropriate design for the conditions and topography of each erf, careful consideration should be given to cut and fill. Delivery and removal of material to site should also be considered. The steep incline of the topography allows for ample views and buildings on stilts are not allowed.

Principle 9: Use the form of the building to create carved out contained spaces.

An architectural language that facilitates for the residential units to be crafted into the landscape with the occupants looking out and appreciating the landscape is encouraged. Contained external courtyards with selective views outward, place more emphasis on the extraordinary beautiful surrounding landscape.

source: https://www.smalldesignideas.com/modern-courtyard-house-plans-classic-luxury-nowadays.html#court

source: https://www.huntingforgeorge.com/blog/figr-architecture-templestowe-house/

source: https://a3w3j4i7.stackpathcdn.com/wp-content/uploads/2017/09/Templestowe-House-5.jpg

Principle 10: Balance Inward and Outward looking uses.

This principle is a continuation of the previous principle. The use of the building form to create contained external spaces or courtyards is encouraged. The zoning or arrangement of the different uses within the building should be carefully considered to balance extended views into the landscape as well as contained views into courtyards and framed portions of the landscape.

Principle 11: Cohesion within the total composition

Consideration and awareness of principles 1- 10 should result in sufficient cohesion between buildings as well as for the composition of buildings to dissipate with the natural surroundings.

The objective is to optimize each property by ensuring vistas are utilized while simultaneously establishing the best possible privacy for each erf. The development needs to respect and conserve the fynbos environment, with minimal impact to the Botmanskop mountain relief silhouette.

These Architectural Design Guidelines are not intended to inhibit innovative design but serve as an instrument to guide and maintain the external appearance and positioning of buildings. Specific exclusions in this document refer to elements or finishes that will not be allowed.

To achieve the objectives of the Architectural Design Guidelines, the guidelines and conditions set in this document are binding on all erven in the BKE. Although the document is binding it remains subordinate to all SANS 10400 Building Regulations and Town Planning Regulations and Bylaws.

Departures that are broadly aligned with the objective of the Architectural Guidelines will be considered by the

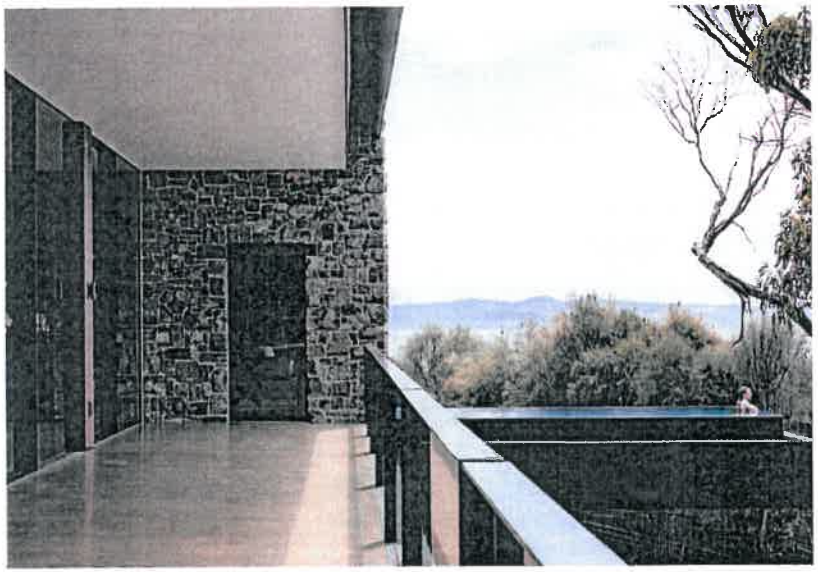
Botmanskop Estate Home Owners Association (hereafter BKE HOA) or their appointed representative aesthetic control architect. Rulings by the BKE HOA will be final and binding. The BKE Architectural Design Guidelines are subject to periodic revision.

PRECEDENTS

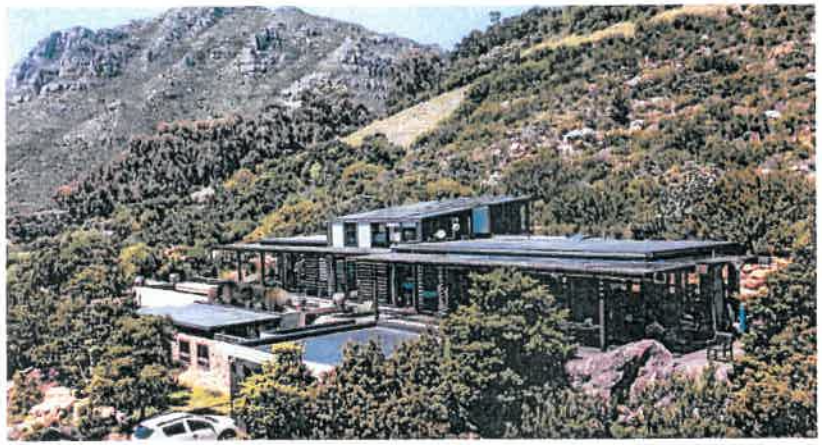
Design principles 1-9 are substantiated by means of precedents displaying the characteristics narrated in each principle.

1. Boulders House, Scottsdale USA, *The Ranch Mine Architects.* (Source: Archdaily.com)

2. Tinderbox House, Tinderbox Australia, *Studio ILK Architecture*. (Source: Archdaily.com)



3. House Hout Bay, South Africa (Source: House Hunting in South Africa, New York Times)



4. Hill House, Colorado USA, *CCY Architects.*

5. Botmanskop Estate Residence 1 Perspective.

6. Botmanskop Estate Residence 2 Perspective.

TOPOGRAPHICAL ELEVATION

BKE has a prominent slope towards the north. The contours of each erf needs to be carefully evaluated in relation to surrounding erven. It is required for each erf to be surveyed and certified by a Professional Land Surveyor. This is the responsibility of the owner of each erf. The primary advantage of BKE is the prime location within the natural environment and therefore each intervention should preserve this advantage and blend in with the natural environment in terms of slope, silhouette, materials, finishes, reflection, and artificial lighting.

ARCHITECTURAL ELEMENTS

VISTAS AND BUILDING ORIENTATION
BUILDING MASS AND SHAPE

- The prominent slope of the estate necessitates the building mass to follow the contours, predominantly facing north.
- Simple rectangular and geometric building shapes are allowed.
- Double storey dwellings with basements are allowed, but all storeys must be staggered. Each successive storey must at least be set back from the previous by at least 1,5 meters. Open patios or terraces are encouraged for these set-back areas.

- Each erf has an assigned coverage allowance which will not be exceeded. All roofed structures are calculated into the coverage.

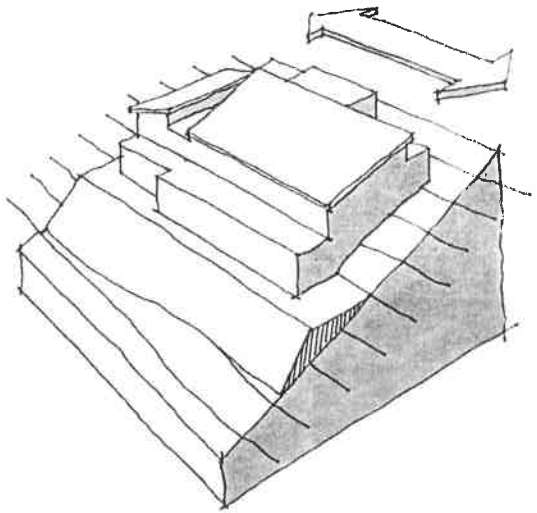


figure 1: Rectangular building mass following contours

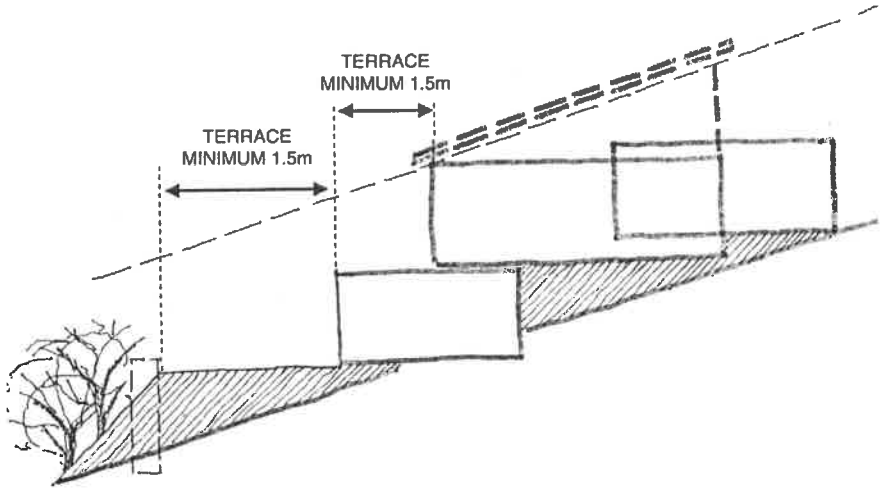


figure 2: Terrace setback

Specific exclusions:
Round and organic building shapes are not allowed.

RETAINING STRUCTURES

Terraces are allowed and necessary to facilitate outdoor living spaces. Due to the prominent slope, retaining structures will be required to stabilize platforms. The following retaining structures are allowed:

- Stabilized earth backfill at a maximum 45 degree slope. All sloped earth backfill will be rehabilitated with indigenous Fynbos soft landscaping.

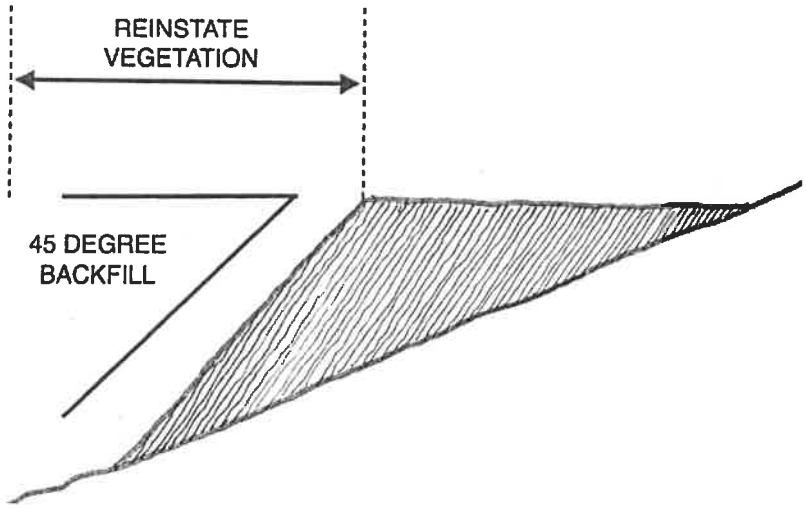


figure 3: Earth backfill

- Vertical constructed retaining walls are allowed but may not protrude more than 1,8m from the shaped surrounding landscape to the north of the property running parallel to the contours.

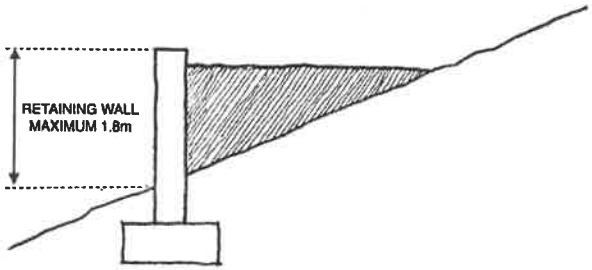


figure 4: Retaining wall height restriction

- Any retaining walls to the side of the residence or property may not exceed the height of the associated storey.
- A combination of stabilized earth backfill retaining and vertical built structures should be used to limit the height of vertical retaining walls.

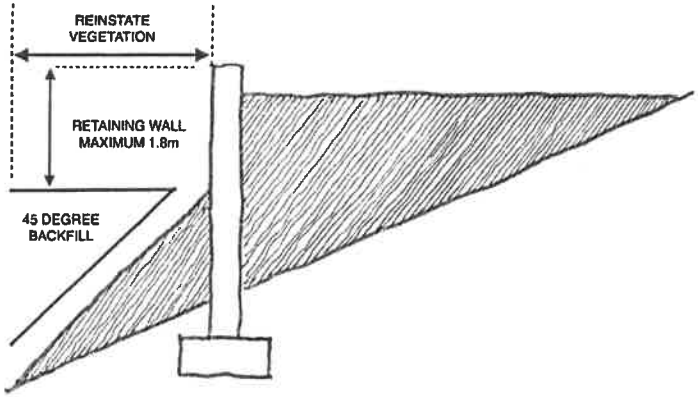


figure 5: Retaining wall and backfill combination

- Retaining walls may be constructed from dry-packed gabions, natural stone cladding to brick walls, off-shutter concrete or plastered brick walls with proper subsoil drainage.
- The following colours are allowed:
  - Dry-packed gabions: Brown and charcoal coloured stone. No light grey aggregate allowed.
  - Plastered retaining walls: Earth toned colours. (Pantone range / NCS colour range)

- Natural Stone cladding: Brown earth toned natural stone are allowed. No artificial stone is allowed.

Specific exclusions:
Concrete retaining blocks are not allowed.
Exposed face brick retaining or foundation wall structure.

EXTERNAL WALLS

- Permitted finishes for external walls include plastered brick walls, bagged finish masonry walls, natural stone cladding to brick walls, hardwood timber vertical cladding, fibre cement cladding and sheetmetal cladding matching the roof sheeting utilized. Timber cladding may be in horizontal or vertical format. Fibre cement cladding may only be in vertical format.
- Bagged and smooth plaster masonry walls should have a painted finish.
- Colours for painted external walls: Only earth toned colours are allowed. Colour range is available from the BKE HOA.
- Limited Stone Cladding is allowed as feature walls, chimneys or plinth walls. Only natural stone construction in 75mm minimum profile depth in dry-stack or jointed format is allowed. No straight edge engineered stone tiles are allowed. Sample walls to be constructed for BKE HOA approval.


figure 6: Allowed stone cladding construction

Specific exclusions:
Exposed facebrick walls.
Vertical slate cladding
Artificial stone cladding
Straight edge engineered stone tiles.

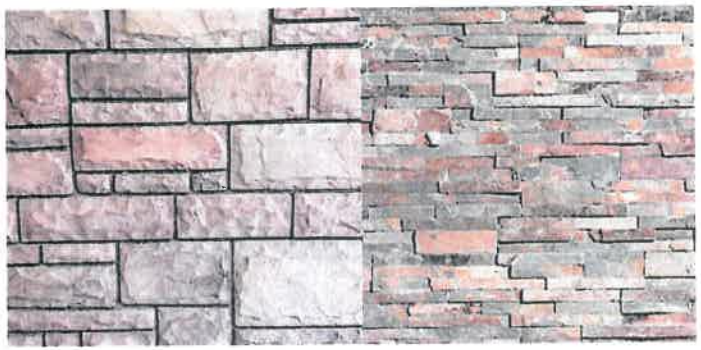


figure 7: Stone Cladding not allowed

DOOR OPENINGS AND FENESTRATION

To mimic the muted and earth toned colours of the immediate natural surround, reflective surfaces should be

concealed from direct sunlight as far as possible. The following measures are to be adopted:

- All windows and glass doors predominantly facing north are to be set back at least 600mm from the external wall surface or have a roof overhang of at least 1meter.
- Slatted pergola and canopy structures are encouraged to reduce exposure of reflective glass surfaces to direct sunlight.
- East and West facing window openings should be limited in number and size in order to respect the privacy of neighbouring properties and avoid reflective surfaces.
- Any glass door openings exceeding 3m in width must have a pergola structure protruding at least an additional 1m from the roof edge, to limit any reflection on the glass surface.

Door and window frames can be manufactured either from hardwood timber or aluminium. Hardwood timber frames should be maintained regularly by being oiled or receive suitable preservative. In case of aluminium frames, only the following powder coating colours are allowed:

- ANP 3057 Matt Dark Umber Grey
- ANP 3047 Matt Light Bronze
- ANP 3056 Matt N.M. Bronze
- ITC 37024 Matt Graphite Grey
- ITC 37016 Matt Anthracite Grey
- ANP 9085 Matt Bronze 543
- ANP 37030 Matt Stone Grey
- ANP 39007 Matt Grey Aluminium

Specific exclusions:
Arched openings, doors or windows.
White PVC door and window frames
Steel door and window frames

GARAGE DOORS

Single or double garage doors are allowed. Garage doors will have a horizontal or vertical slatted design manufactured from hardwood timber, aluminium or sheetmetal. Hardwood doors may have an oiled or painted finish. Aluminium doors will have a powder coated finish in either charcoal or brown. Sheetmetal doors may have powder coated or painted finish in earth toned colours (colour range available from BKE HOA).

Specific exclusions:
Field panel doors
Fibre glass doors.
Translucent or transparent panels in garage doors.

GATES

Gates may have a horizontal or vertical design complimenting the overall design, including materials such as steel, hardwood timber, aluminium and fibre

cement. Gates may not be higher than the adjoining wall. In case where gates are used in conjunction with the Clearvu / Betafence fencing, the gate must match the material and colour.

Specific exclusions:
Ornamental or curve shaped gates.
Any reflective surface, for example glass.
Wrought iron gates

COLUMNS

Rectangular shaped columns constructed from masonry, hardwood timber, steel or aluminium are allowed.

Specific exclusions:
Ornamental precast columns of Doric, Ionic or Corinthian shape.
Tapered columns.

SHUTTERS

Only functional shutters manufactured from aluminium or a combination of hardwood timber and steel will be allowed, in a horizontal or vertical design. Shutters are to be applied to reduce glare and reflectiveness of windows. Aluminium will be powder coated as per colours listed under Doors Openings and Fenestration.

Specific exclusions:
Tongue and Groove shutters.
Shutters with ornamental embellishments
Non-functional decorative shutters.

PERGOLAS

Pergola structures are allowed and will be manufactured from hardwood timber and aluminium only. Aluminium will be powder coated in one of the colours listed under Door Openings and Fenestration. The application of pergolas will be cognizant of sun angles to enhance the micro building climate.

Pergola members may terminate in rectangular or angled shaped ends. Rounded or ornamental edges will not be allowed. Only natural or oiled hardwood pergolas will be allowed. Pergola design must be approved with the building plan submission to the BKE HOA.

Any glass door openings exceeding 3m in width must have a pergola structure protruding at least an additional 1m from the roof edge, to limit any reflection on the glass surface.
Specific exclusions:
Painted hardwood pergolas
CCA H4 Treated SA Pine or any other SA Pine

BALUSTRADES

Balustrades will comply to the National Building Regulations (SANS 10400) safety regulations. Balustrades may be constructed from masonry, hardwood timber, powder coated aluminium or painted mildsteel. Balustrades will be geometrically shaped. Only earth toned, dark grey or black colours will be allowed for balustrades.

Specific exclusions:
Ornamental or curved balustrades.
Any reflective surface, such as glass.
Wrought iron balustrades

ROOFS

In order for built structures to blend in with the natural landscape and not to significantly alter the mountain silhouette, roof slopes should predominantly follow the topography. Flat and mono-pitched roofs or a combination thereof are allowed, adhering to the following criteria:

Mono-pitched Roofs:

- Mono-pitched roofs must predominantly be running parallel to the topography slope. In the case where mono-pitched roofs are utilized, a maximum of 25% of the building footprint area may be in contradiction of predominant slope of the topography. Roof pitch may not exceed a 25 degree slope.
- Mono pitched secondary lean-to roofs are allowed but should not deter from the main roof following the topography slope.

Flat Roofs:

- Non-reflective concrete roofs or planted concrete roofs are allowed. In the case where concrete roofs are not covered with vegetation, it should have a brown aggregate cover layer over the waterproofing.
- Low-pitched sheet metal flat roofs are allowed.

Materials and Colours:

- Specialist stand-up seam roofs are allowed in natural earth toned colours only. (Greys, browns and muted greens are allowed; subject to BKE HOA approval. Samples must be submitted as part of the BKE HOA approval process.
- Brown Built roof sheeting.
- Natural Slate is allowed in even charcoal colour.
- Klip-loc or IBR roof sheeting manufactured from steel sheetmetal with Chromadek finish in the following colours are allowed:
    - Charcoal Grey
    - Dark Dolphin
    - Dove Grey
    - Aloe Green

- Klip-loc or IBR roof sheeting manufactured from Zincalume sheetmetal with Colourbond finish in the following colours are allowed:
    - Armour Grey
    - Volcanic Grey
    - Coffee MATT
    - Hidden MATT
    - Graphite MATT
- Gutters and downpipes must be pre-coated or painted. Seamless aluminium gutters are preferred with painted uPVC downpipes.

  Specific exclusions:
  Victorian profile roof sheeting.
  IBR Roof sheeting profile.
  Any bare galvanized or zinc-alum roof sheeting finish.
  No roof terraces are allowed.
  Variegated slate tile colours.
  Unpainted uPVC gutters and downpipes.

CHIMNEYS

Chimneys with a simple rectangular shape are encouraged, constructed from masonry and may have natural stone cladding on the external facade, as described under WALLS. Cappings should be integrated in the chimney design and be an extension of the proportion of the chimney.

Metal chimney flues and pipes are allowed to protrude through roof sheeting in cases where wood burning stoves or fireplaces are located in the centre of open plan living spaces and the construction of masonry chimneys are not desirable. All protruding flues, pipes and cowls are to be epoxy coated in non-reflective black. Simple chimney cowls allowed.

Specific exclusions:
Tapered or rounded chimneys
Stainless steel or reflective metal chimney flues or cowls
Ornamental weathervanes and ornamental cowls.

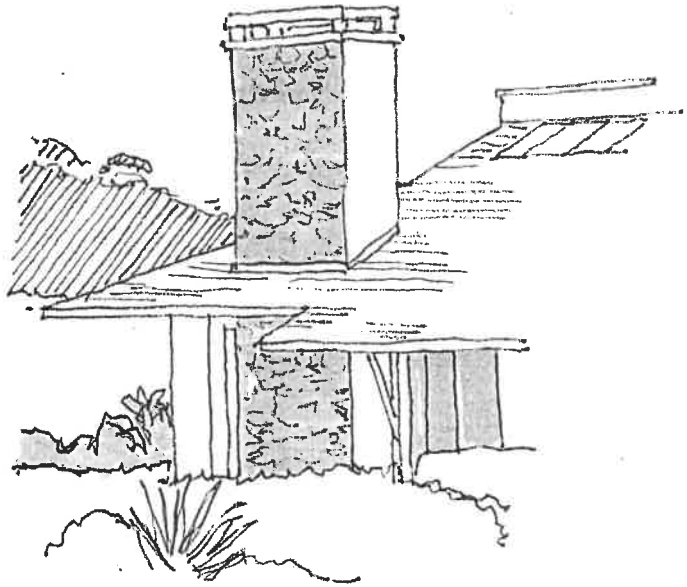


figure 8: Rectangular chimney shape

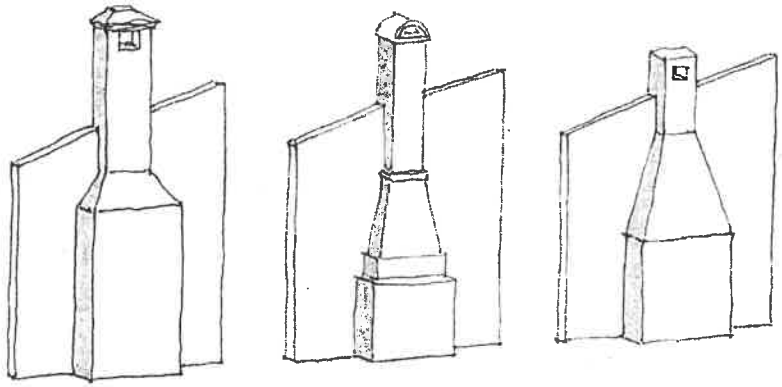


figure 9: Chimney shapes not allowed

SERVICE AREAS

BKE adopts the principle to be waste efficient. Waste material production should be minimized and disposed of responsibly. Recycling and re-use is encouraged. Due to the significant slope of the estate, properties will be visible not only from the sides but from higher top angles as well. For this purpose, service areas should be properly planned and shielded from unsightly view. Measures to be applied:

- Service yards are to allow for municipal refuse bins as well as recyclable waste.
- Dedicated refuse bin rooms or cupboards for municipal refuse bins and recyclable waste, with louvred doors are encouraged.
- Should a dedicated refuse room / cupboard not be allowed, service yards should have a slatted pergola structure perpendicularly facing the main approach or viewing angle towards the property. This is to prevent view into the service yard.
- Washing lines will only be accommodated within service courtyard with pergola cover as prescribed.
- All rainwater storage equipment must be integrated into the design of the dwelling and be approved with the drawings. All PVC water tanks must completely be shielded from view either in a yard or in a basement structure. Corrugated water storage tanks will be allowed in view if properly reconciled with the design.
- The installation of alternative power sources is permitted but all photovoltaic panels should be integrated in the design and follow the same angle of the roof, if it is not obscured from sight.
- Alternative energy sources for hot water generation should be followed as per National Building Regulations. All solar panels should be integrated in the design and follow the same angle of the roof, if it is not obscured from sight. Heatpump equipment to be shielded from sight and incorporated into the design.
- Air-conditioner external units must be hidden from plain sight and be incorporated into the design. External units are to be placed to limit noise pollution to neighbouring properties.
- Specific exclusions:
  Garden sheds or wendy houses.

BOUNDARY WALLS

The continuity of the landscape and re-establishment of endemic fynbos is one of the key principles of the estate. Boundary walls and fencing are discouraged and will only be allowed selectively. Contained courtyards as narrated in Principles 9 and 10 integrated into the residence design will be allowed to have built boundary walls. Selective use of Clearvu or Betafence mesh fencing is allowed. The colour is to be anthracite. The average height may not exceed 1,2 meter. The boundary fence may not project further towards the street boundary than the street facing facade of the main building mass. All terrain slopes must be rehabilitated in both slope and vegetation, once fencing is installed.

STORMWATER MANAGEMENT

The introduction of hard surfaces such as driveways, roads, sidewalks and roofs result in concentrated and channeled stormwater flow. The significant slope on site requires a comprehensive stormwater management strategy in order to maintain the natural environment and avoid soil erosion. Concentrated stormwater collected from hard surfaces such as the roof, will be collected in a closed piped stormwater system and disperse into the central BKE stormwater management system.

Established vegetation prevents erosion. Where any soil has been disturbed due to construction of a residence, installation of boundary fence or any other building activity, the vegetation must either be re-instated to match the existing or be according to an approved soft landscaping design drawing.

LIGHTING

All external lighting will follow the principle of low reflectivity and low glare. The following principles will apply:

- Only light fittings that wash up or down against the building facades will be allowed. No flood light or lantern type light fittings will be allowed.
- Site lighting will only be low level route markers.

CARRIAGE WAYS

Only one carriage way (driveway) is allowed per erf. Carriage ways will not be wider than 6m. Carriage ways will at least be 5m deep as measured from the road kerb, to enable guest parking for a minimum of 1 vehicle per erf.

Carriage way finishes allowed are clay paving brick and exposed aggregate concrete (pre-cast blocks or in-situ), complimentary to the earth toned colour scheme of the BKE. All paving samples must be approved with the BKE HOA.

Specific exclusions:
Artificially coloured concrete paving bricks
Concrete or stone cobbles

SWIMMING POOLS

Swimming pools are allowed only if integrated into the design and if complimentary to the holistic design approach. Simple rectangular shaped pools will be allowed. The position of the pool, pump and filter will be within the building lines and must be shown on plan and sections submitted for approval.

Specific exclusions:
Portable pools
Organic or kidney shaped pools.

CARPORTS

Carports are allowed if it is integrated with the holistic design of the residence and will be roofed only as per the guidelines described under ROOFS and COLUMNS.

Specific exclusions:
Round steel tubing carport structures with shade cloth covering.
Carports to 0m street building line are not allowed.

TOWN PLANNING AND BUILDING REGULATIONS

BUILDING LINES

The following building lines, coverage and height shall apply to all buildings within this zone:

Street building line: 4m
Common boundary line: 2,5m (refer to (c) below.
Coverage: As per BKE Coverage table.

The following additional parameters apply in respect of building lines:

- Garages are permitted up to 1 meter from the street boundary; subject to the 5m accommodation for visitors parking as measured from the street kerb.
- Garages and carports are permitted 0 meters from the common boundary provided that the wall on the common boundary is no higher than one storey, the height of the entire garage may not exceed one storey and no stormwater may be discharged directly from the building roof onto the neighbouring property other than the adjacent public or private road. No windows may face the common boundary if the garage is placed on the erf boundary.
- The common boundary building lines for buildings and structures on the ground floor shall be deemed to be automatically relaxed if the neighbouring

owner of the land unit or land units of the shared abutting common boundary grants permission in writing by signing both the relaxation form as prescribed by the Municipality and the accompanying building plan. Such relaxation may not be written permission for any reason whatsoever, an application for departure may be duly submitted to and considered by the Municipality;

- Projecting eaves may exceed the common building line or street building line by at most 1 meter but may not exceed the land unit boundary unless a servitude is registered in favour thereof;
- Notwithstanding the building lines in this section, the Municipality may require a common boundary building line and/or servitude for the protection of any municipal services provided along land unit boundaries.

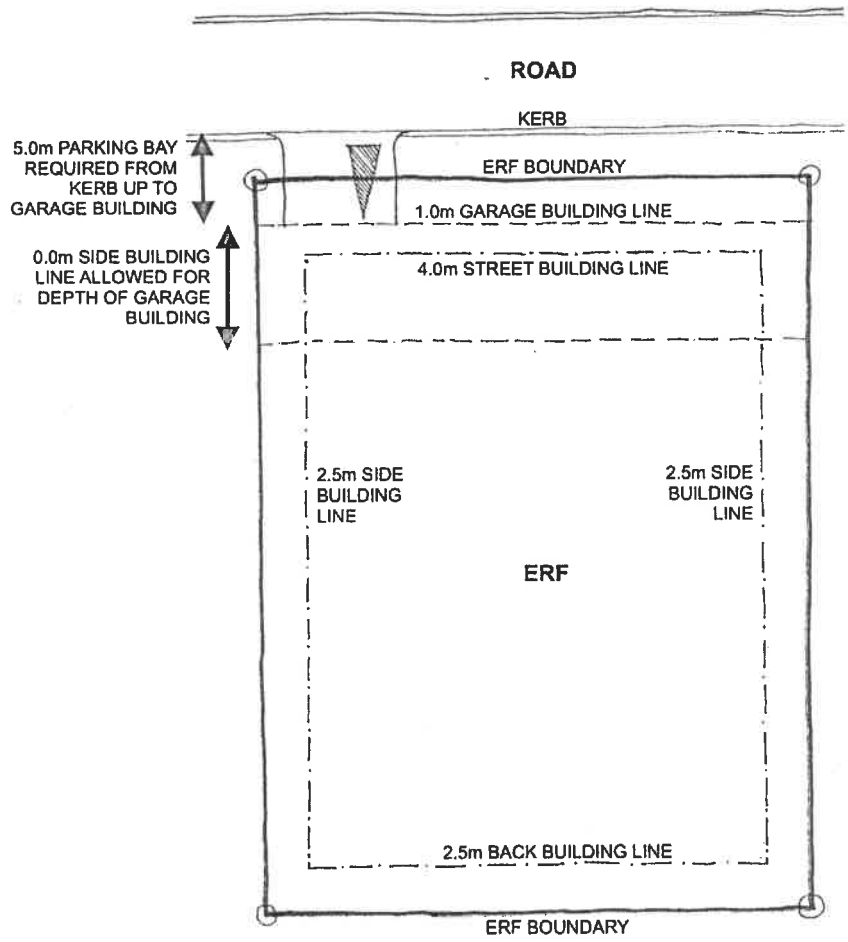


figure 10: Building lines

HEIGHT RESTRICTION

No building shall exceed 8m up to wall plate height as projected directly 8m upward from the natural ground level as per the survey by the registered land surveyor as previously mentioned. This must clearly by indicated on all drawings submitted to the BKE HOA.

2 Storeys with a basement is allowed.

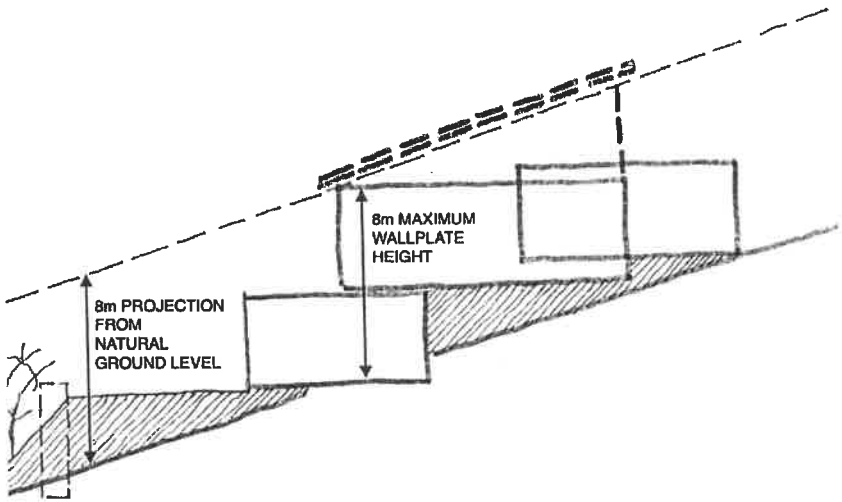


figure 11: 8m Height restriction to wallplate

LANDSCAPING

A separate document available from the BKE HOA guides the soft landscaping and vegetation prescriptions.

BUILDING PLAN SUBMISSION PROCEDURE

All design documentation must be prepared and submitted by a professional registered Architect.

A two-stage submission process to the BKE HOA will be adhered to:

- Submission 1: Concept design. At the time of this submission, the relevant erf must have been surveyed by a registered Land Surveyor and the survey certificate and contours on the erf clearly indicated, as well as the projected height restriction. Designs may be communicated with 3D modelling but must be accompanied by a layout drawing and coverage calculations. Final finishes are not required at this stage.
- Submission 2: Municipal drawings. Once Submission 1 has been approved, the design architect may proceed with the preparation of the municipal drawings. This submission should include a separate specification document listing all finishes. Only when the BKE HOA has approved Submission 2 and received the BKE HOA approval stamp, may drawings be submitted to the Stellenbosch Municipality for approval. The BKE HOA approval

only warrants that the design is coherent with the design guidelines. It remains the responsibility of the design architect to ensure that the design adhere to SANS 10400 Building Regulations and Stellenbosch Municipality Town Planning Bylaws.

CONSTRUCTION MANAGEMENT

During construction the stockpiling of all building materials will be carefully managed in order not to disturb the natural environment and sight lines of the BKE. Quantities of materials on site are to be limited and stored responsibly with proper protections against wind, water and unsightliness.

All rubble generated during construction must be stored neatly and be removed soonest after being generated, at least twice weekly.
Complete particulars are disclosed in the Construction Management Regulations, which Owners and Contractors will obtain from the BKE HOA. Owners and Contractors are to familiarize themselves of the prescriptions applicable during construction. This document contains the required application forms and deposit amounts payable prior to commencement of construction.

STELLENBOSCH
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ANNEXURE H

BOTMANSKOP
ESTATE

STELLENBOSCH

LANDSCAPE DESIGN GUIDELINES

2022-08-02

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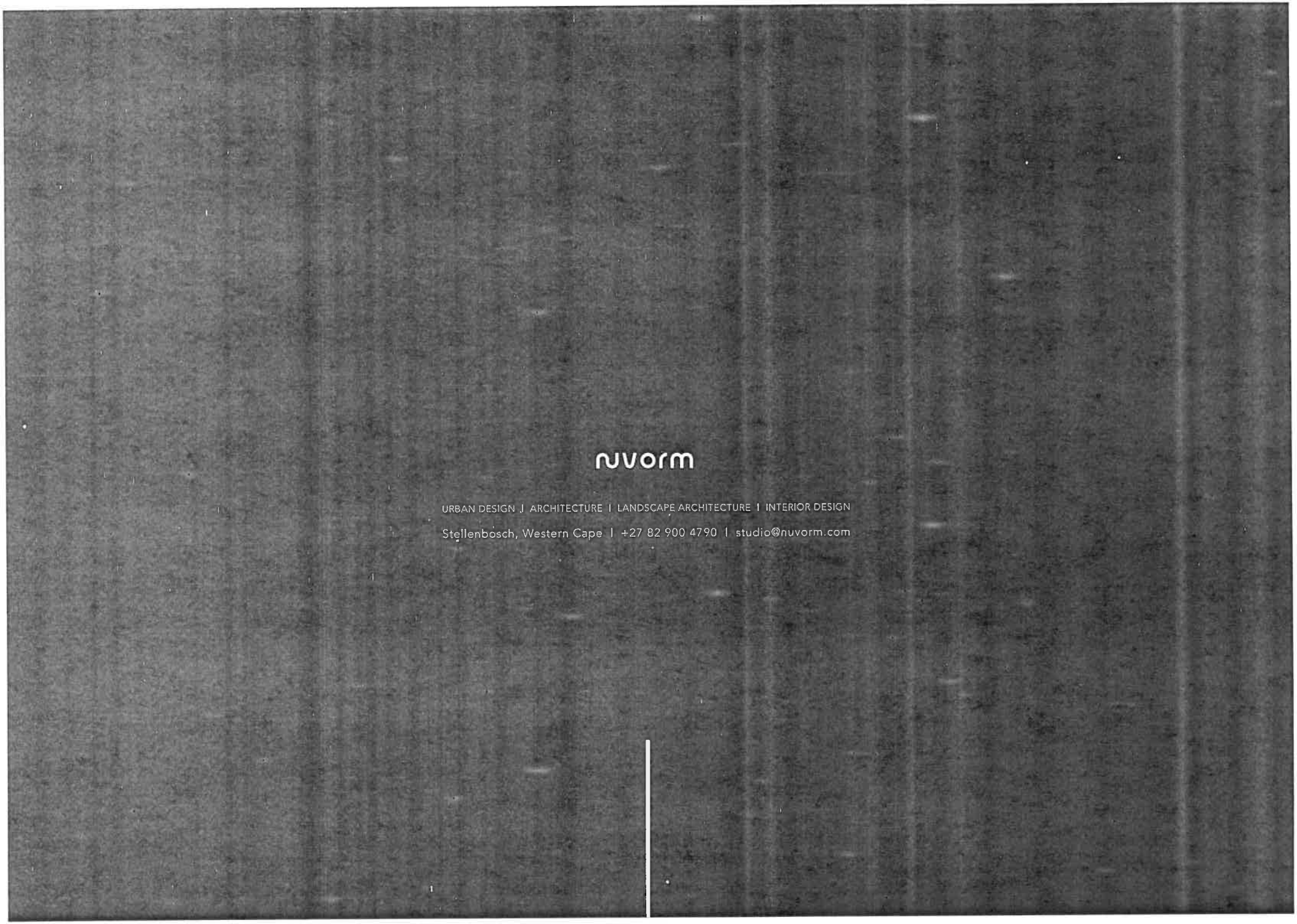
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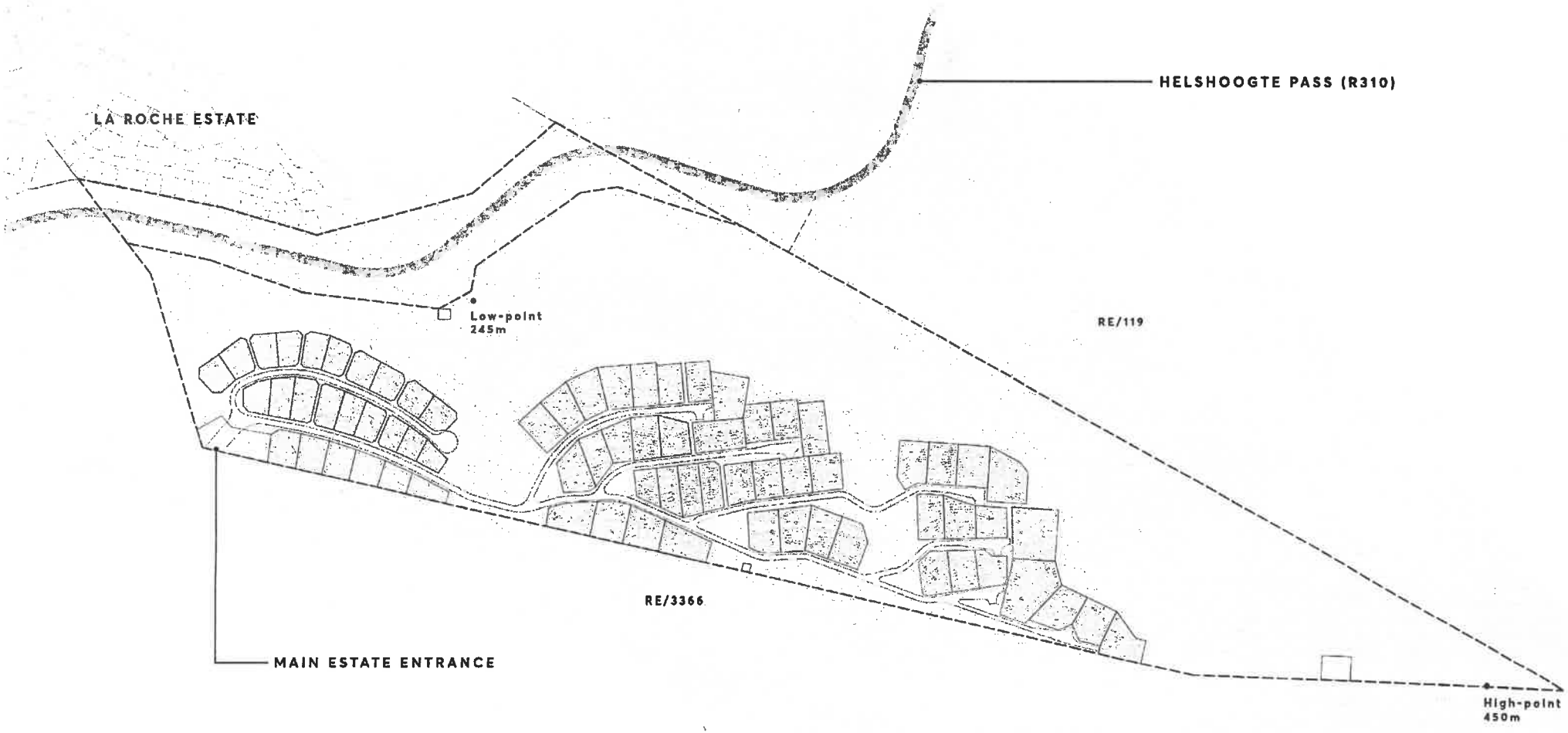
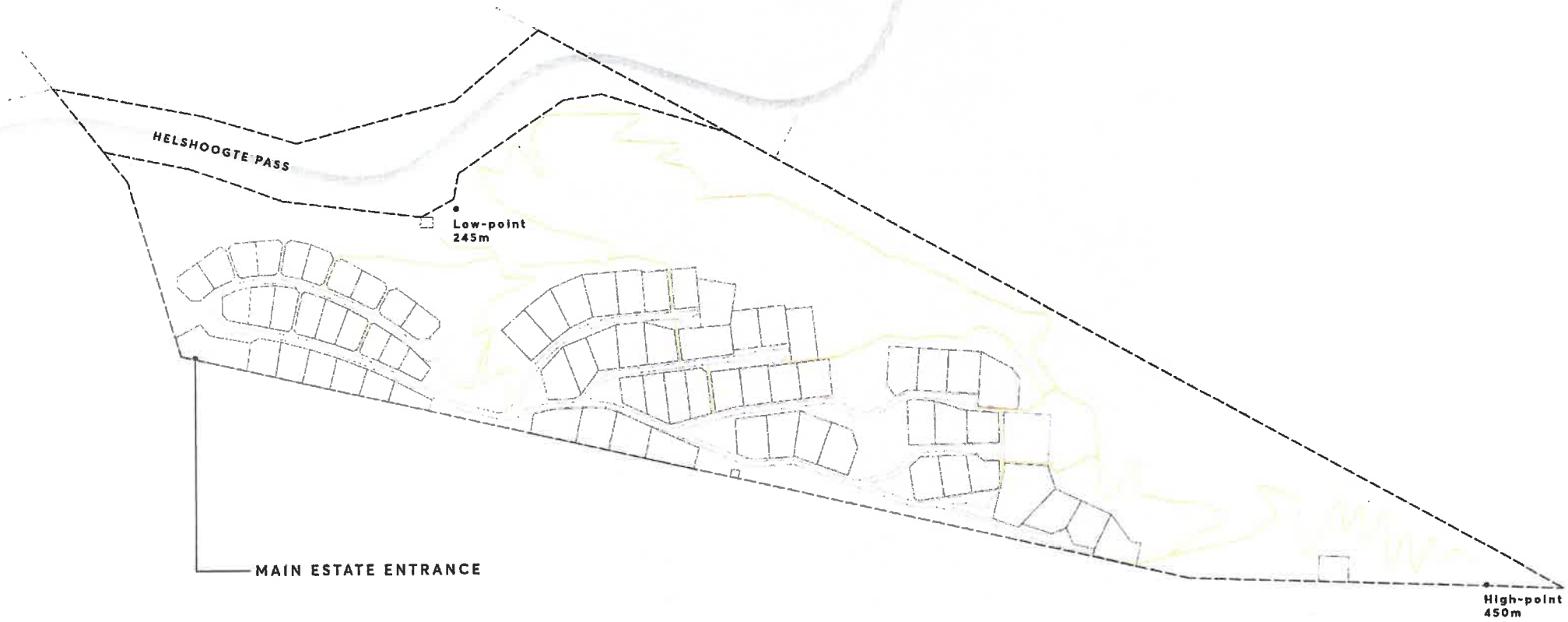
PROPOSED ESTATE LAYOUT



MOVEMENT
PATHWAYS

Due to the placement of the residential buildings on a very steep site, residents are unlikely to walk long distances on foot unless they can avoid moving up and down the slope. Pathways thus need to follow the contour as far as possible, connecting residences along a form of promenade to the stream. At regular intervals these get connected with stairways linking pedestrian terraces and vehicular roads.

There are secondary pathways that provide for longer walks and take joggers / walkers to more remote and steeper parts of the site where advantage can be taken of the amazing views the site offer. Way-finding signage will assist pedestrians to navigate the site the various features and zones within the development.

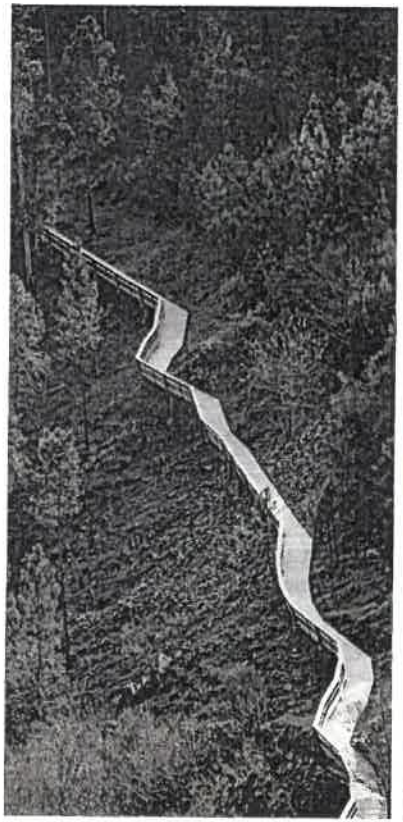


MOVEMENT
PATHWAYS

Pathways can every so often become imposing elements in a landscape. These linear routes are there to guide users from point to point and often don't need more than a form of marking to do this, rather than an over complicated and bulky construction. Choice of materials is also very important and an approach where the landscape merges with the path (in form, texture, or hue) is best suited to a sensitive site.

Water stream crossings, landscape stairs, lookout points and pause areas all become part of the landscape fabric and should blead seamlessly into the natural context.



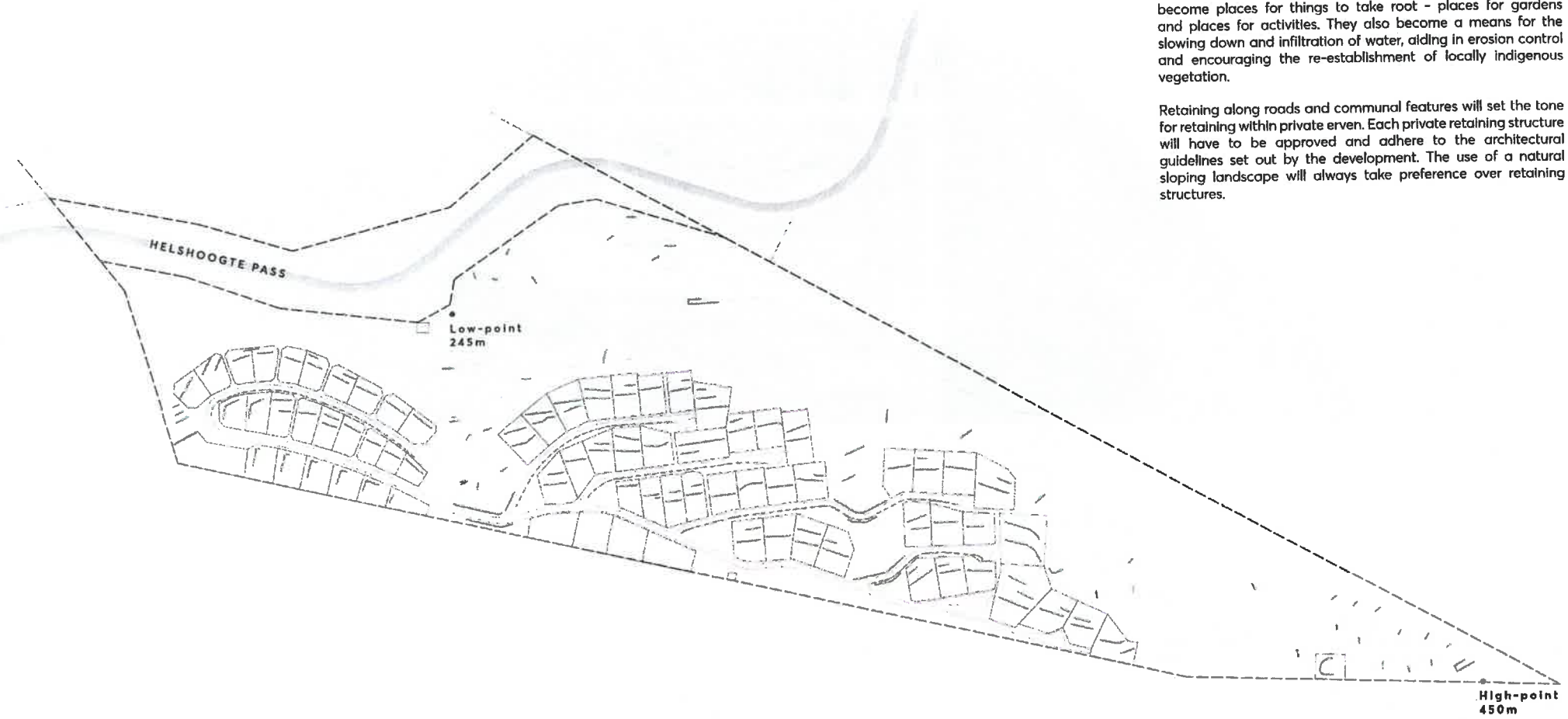




RETAIN
TERRACE, CUT & FILL

Due to the steep nature of the site, retaining structures are necessary to provide the platforms required for roads, pathways, and buildings. The nature of these structures needs to relate back to the language and material palette set by the architectural guidelines. This language is then repeated across the entire landscape so that individual interventions don't read as isolated features but rather as part of a bigger fabric and hue of the context. These landscape terraces and retaining structures become places for things to take root - places for gardens and places for activities. They also become a means for the slowing down and infiltration of water, aiding in erosion control and encouraging the re-establishment of locally indigenous vegetation.

Retaining along roads and communal features will set the tone for retaining within private erven. Each private retaining structure will have to be approved and adhere to the architectural guidelines set out by the development. The use of a natural sloping landscape will always take preference over retaining structures.



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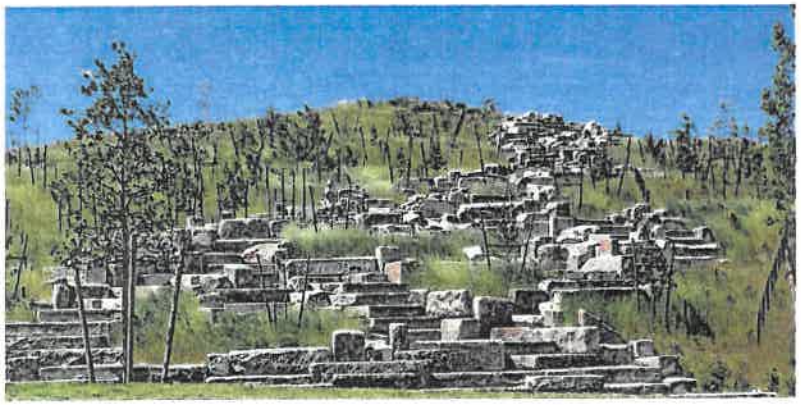
RETAIN
TERRACE WALLS & STAIRS

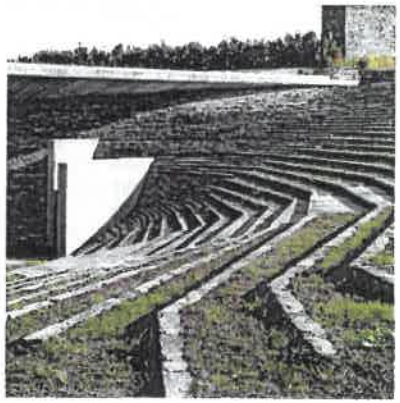
Where pathways connect individual stands, roads or other paths, opportunity exists to create more of a promenade language with terraced balconies and opportunities for covered pause spaces or seating areas.

Steps very much form part of the architectural language set by the buildings, pathways, and roads. They are carved out of the spaces between and link one area with another. While their form borrows from the language of the landscape and adjacent buildings or property edges, landscape and planting become important ways of connecting the user back to the site and for providing an immersed landscape experience. Steps should be integrated into landscape and building terraces.









SHAPE
EARTH BERMS & SHAPING

As individual stands get developed, large volumes of soil will need to be excavated to create the building platforms. While a large percentage of this soil will need to be removed from the site, the opportunity exists to use some soil to fill and reshape areas throughout the development. The additional soil could be used to create areas for public activities or for the shaping of walkways and water streams. It could also be used to create gardened natural terraces that extend out in front of the buildings. These become a 'softer' form of the terrace wall language, aiding in merging the two languages - architecture and landscape - together. These landforms can also be used to slow down concentrated stormwater, allowing for better infiltration.

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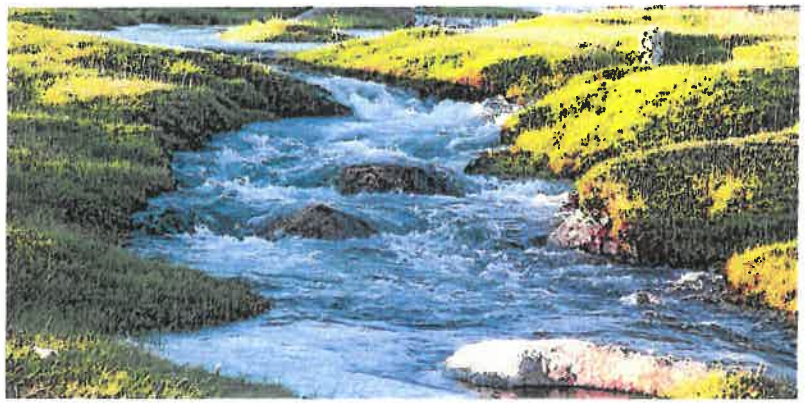
SHAPE
EARTH BERMS & SHAPING

Earth berms and soil terraces should be stabilised with vegetation and backed stone to prevent any soil erosion. Topsoil should be harvested from all private stands prior to any excavation and earth works. Harvested topsoil could be used as the top layer after the shaping of earth berms and terraces. This will assist in the rehabilitation of areas in and around the plot as the topsoil contains seeds, bulbs, and other valuable organic material.



WATER
SEASONAL STREAMS & ATTENUATION

As earth becomes available from excavation work on building stands and roads, opportunity exists to use this material to create weirs across the valley floor. In the rainy season, these structures will retain runoff and small dams and wetlands will form, creating opportunity for passive recreation spaces. Opportunity also exists to connect these retention structures to the contour paths, allowing water to run by gravity in manmade channels and aqueducts, filling constructed ponds and animating the public environment.

WATER
WETLANDS

As earth becomes available from excavation work on building stands and roads, opportunity exists to use this material to create weirs across the valley floor. In the rainy season, these structures will retain runoff and small dams and wetlands will form, creating opportunity for passive recreation spaces. Opportunity also exists to connect these retention structures to the contour paths, allowing water to run by gravity in manmade channels and aqueducts, filling constructed ponds and animating the public environment.

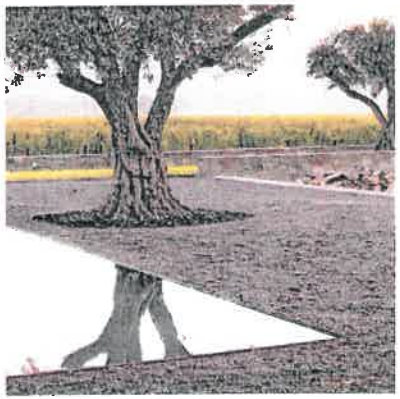
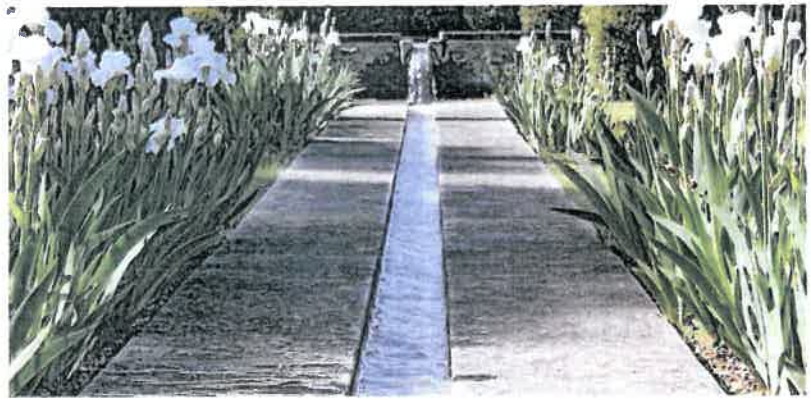
WATER
CHANNEL & FEATURE

By tapping into weir structures built across the stream, water can be diverted into small channels and 'aqueduct' like structures, reminiscent of the agricultural legacy of the surrounding farms. Water is gravity fed from one side of the site to the other and becomes a jewel-like thread that connects and animates the shared walkways and terraces.

As water is fed through the channel system to various points in the landscape, it can be collected in man-made structures, creating mirror-like surfaces which reflect the natural beauty of the site and surrounding vistas.






REHABILITATE
STRATEGY

In its current state, the site is completely disturbed with very few traces of the original fynbos ecology. The first priority in rehabilitating the site will be to eradicate alien vegetation while controlling soil erosion. As water is detained and encouraged to infiltrate and recharge the aquifer below, fynbos species can be introduced on the upper slopes and riverine vegetation re-established in the valley along the stream.

Rehabilitation will be phased out following the same sequence as the civil and private dwelling development in and around the more built-up zones. The outlying area will be rehabilitated at the same time and will have a management plan in place to continue with the maintenance and rehabilitation of the landscape post development. The rehabilitation of the river (from its lowest point moving upstream) is to take preference, whereafter rehabilitation of the outlying hill area is to follow.

REHABILITATE
FYNBOS LANDSCAPE

One of the key concepts to integrating the buildings into the landscape is allowing the mountain slope to re-establish itself as a rich, biodiverse environment. A combination of natural landscapes flowing down the hill and interacting with a series of terraces, provides usable space for residents to engage with and enjoy the open space environment. This horizontal layering and stepping of the site blends architectural form with landscaping, creating a rich tapestry of ecological and recreational opportunities. The variety of Fynbos vegetation becomes a landscape exploration of texture and form, a tapestry of abstracted colour + delight.







REHABILITATE
SCREEN & SHADE

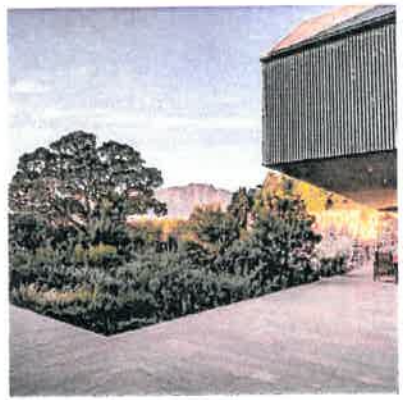
Building, roads, walkways, and architecture features should feel as though they had grown up out of the landscape - rooted rather than imposed. The combination of cutting and filling, to allow buildings to sit within the earth, together with the planting of new indigenous trees, which will grow to shade walls movement corridors and courtyards, both works to root the scheme fully into the hillside. Strategic screening with trees and large scrubs will provide the best long-term screening of built features against the mountain slope.











VIEW
LOOKOUTS & VIEWING POINTS

Due to the nature of the terrain, each and residence will enjoy incredible views of the surrounding valley and maintains. Pedestrians moving through the open space will enjoy great views while exploring the various trails, pause areas and lookout points.

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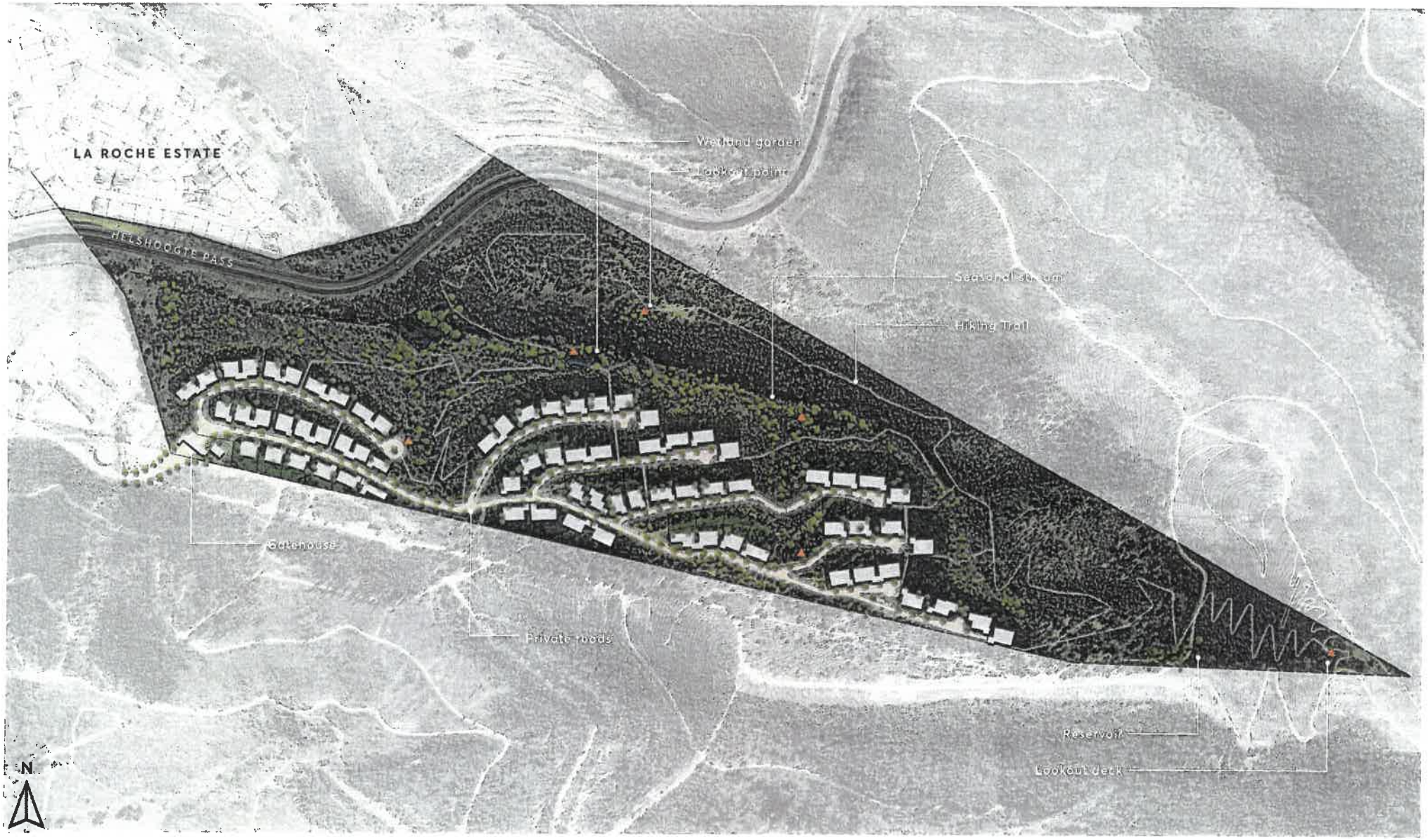
VIEW
LOOKOUTS & VIEWING POINTS

The site offers amazing views to north and the west. Moments along the pathway network have been chosen to offer users different experiences of the site, some elevating views to the beyond while others focus the residents to features of the site itself. Whereas the primary language of the site is about carving down into the landscape and creating an immersed experience, these select spaces off er an alternative - a chance to see the bigger picture.







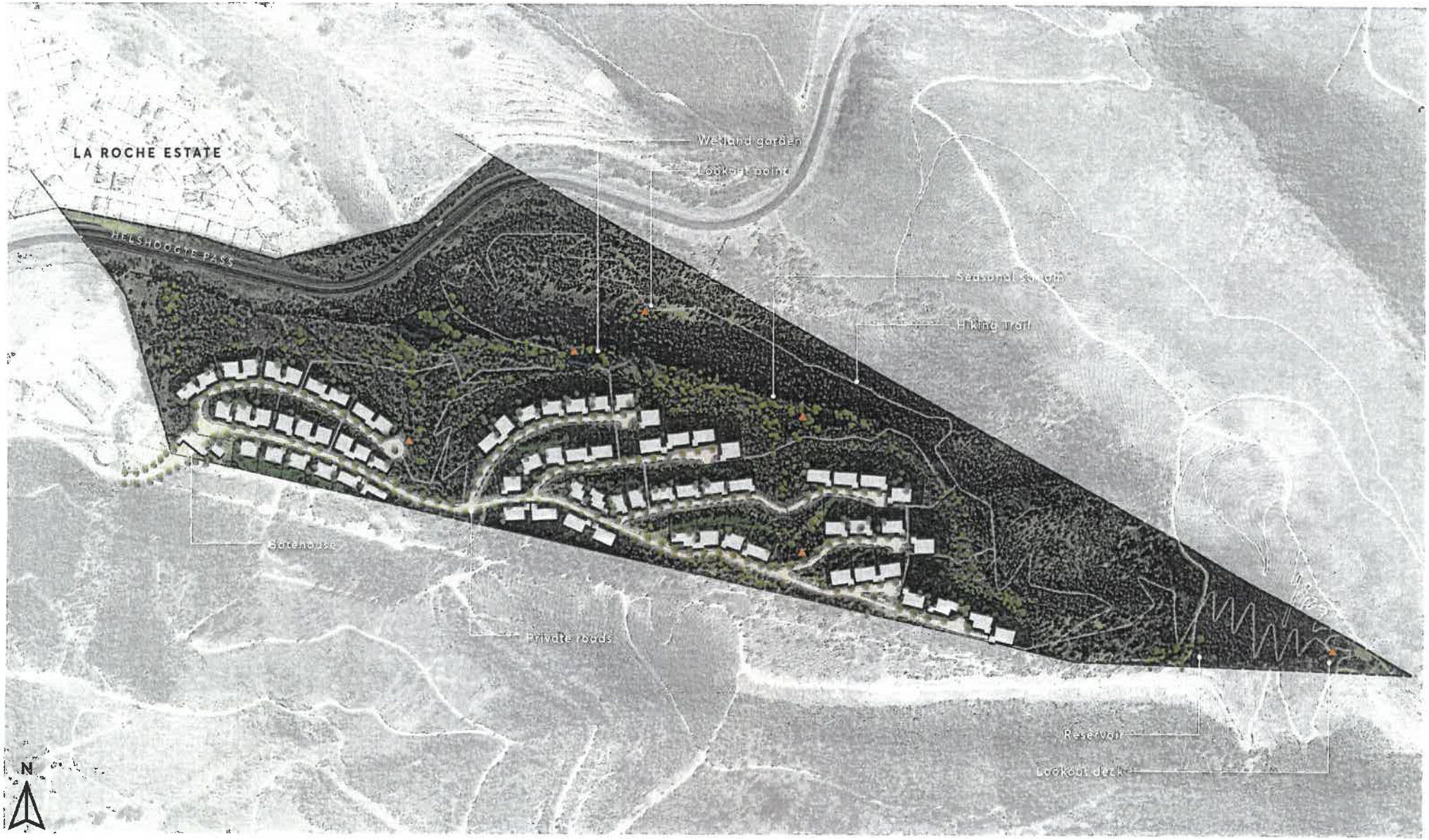


LA ROCHE ESTATE
HELSHOOGTE PASS
Wetland garden
Lookout point
Seasonal stream
Hiking Trail
Gatehouse
Private roads
Reservoir
Lookout deck
N

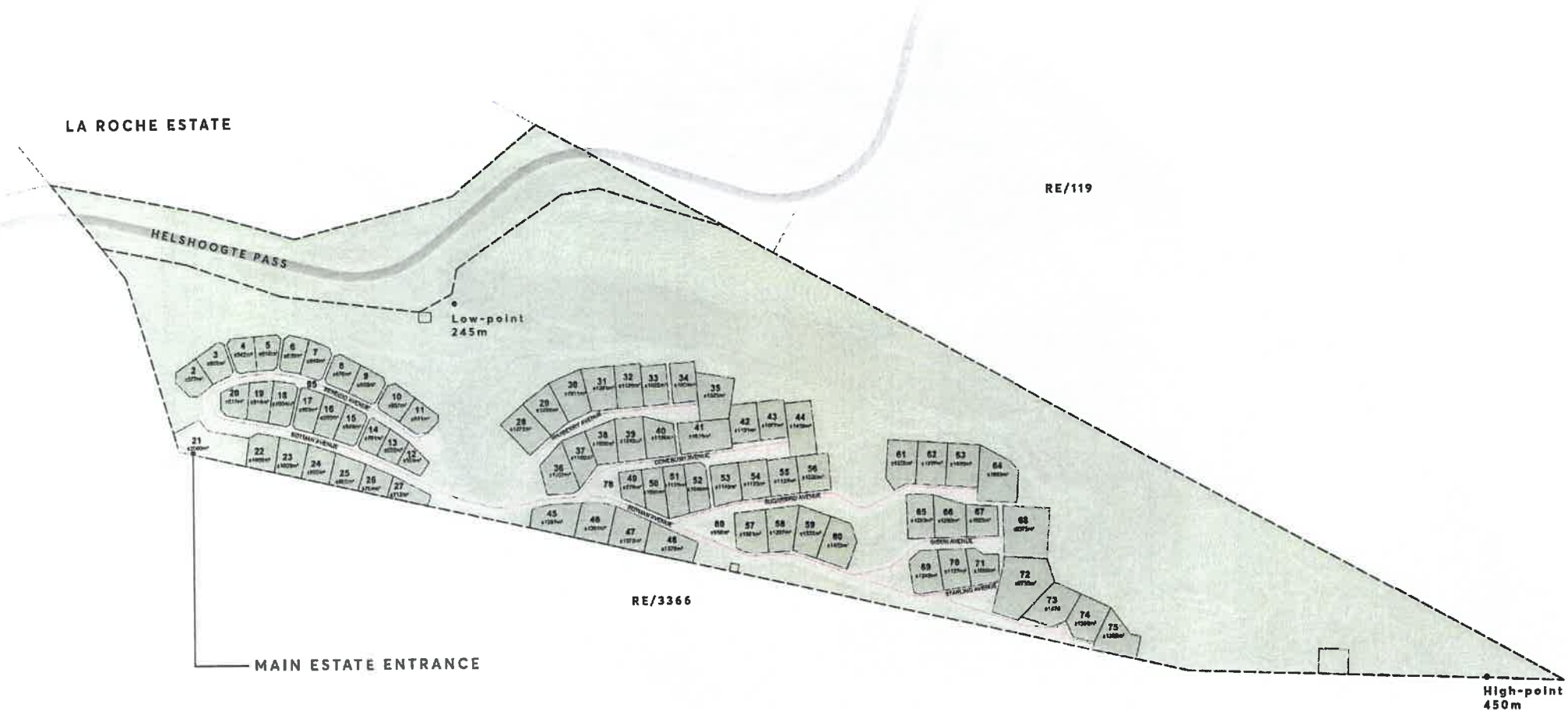
BOTMASKOP MOUNTAIN ESTATE
PROPOSED DEVELOPMENT PHASING

The proposed landscape interventions and rehabilitation will be phased alongside the civil and private stand development. A detailed landscape drawing (Landscape Development Plan or SDP) will be submitted to the municipality with each phase ensuring the continues development & rehabilitation of the overall site. The environmental management plan (EMP) together with the various SDP landscape plans will be read together to mutually enable/support one another in terms of the continues rehabilitation strategy.

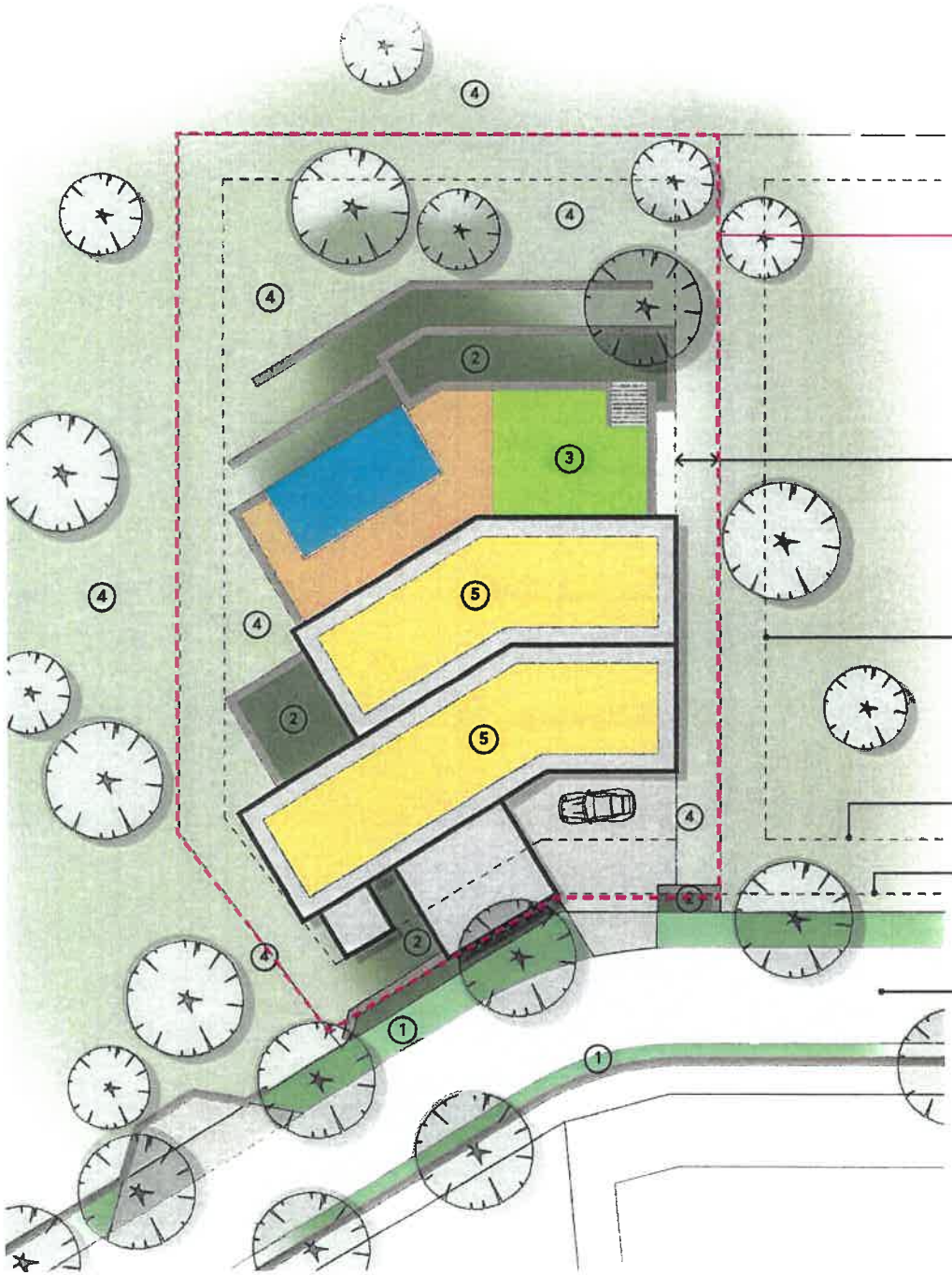
The Landscape submission for each phase will provide more details regarding the responsibilities of the developer when it comes to areas that will be managed as part of the commons. Specific detail will be provided with regards to the actions, activities, requirements within each rehabilitation zone.

Phasing will largely depend on property sales of the individual erven and won't necessarily follow a predetermined timeline or programme. The EMP will ensure the continues eradication of alien vegetation, the protection of endemic vegetation, and the prevention of uncontrolled erosion. The EMP will remain in place for the duration of the construction process and will be replaced by a landscape maintenance management plan post construction. This will ensure that the overall landscape remains healthy and as per the intended design set out in this document.


LA ROCHE ESTATE
HELSHOOGTE PASS
Wetland garden
Lookout point
Seasonal stream
Hiking trail
Batenouse
Private roads
Reservoir
Lookout deck
N


LA ROCHE ESTATE
HELSHOOGTE PASS
Low-point
245m
RE/119
RE/3366
MAIN ESTATE ENTRANCE
High-point
450m
N

LANDSCAPE GUIDELINES
TYPICAL ERF PLAN



1 Road Verge

2 Fynbos Garden

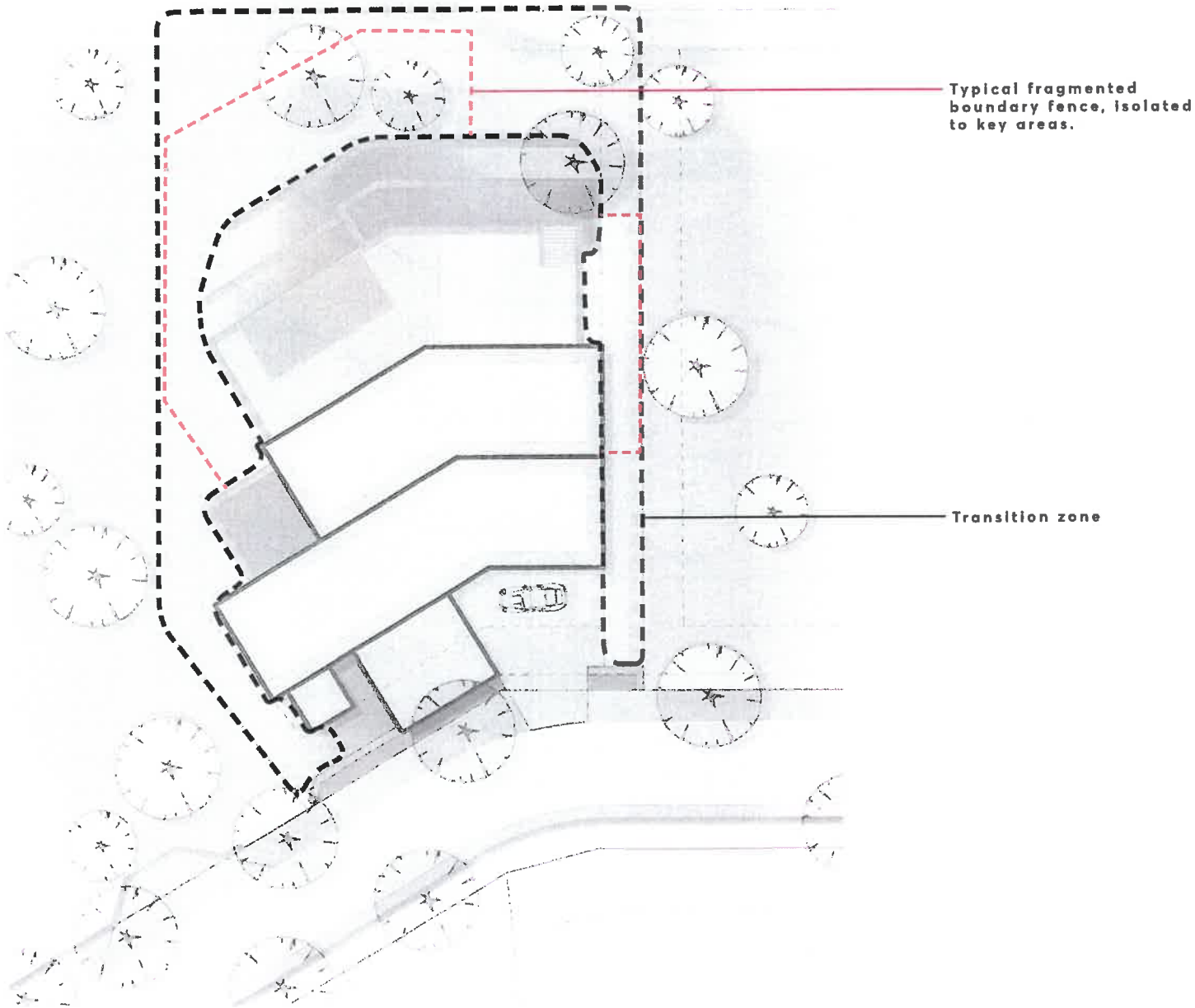
3 Private Garden / Lawn

4 Rehabilitation

5 Roof Garden

NOTE: Private formal gardens to be limited to courtyards and terraces bordering the residence. The 2.5m building line to be used as a transition zone blending the private gardens and the rehabilitated open space.

LANDSCAPE GUIDELINES
TYPICAL ERF PLAN



The transition zone is the most sensitive landscape portion of each erf. These areas are responsible for connecting each residence into the surrounding natural context. The Botmaskop HOA will continually monitor these areas together with the common area landscape to ensure that all residents adhere to the guidelines and that all transitions zones flow naturally into the surrounding landscape.

Any perimeter fencing, walls or terrace structures should be screened by a mixture of fynbos and indigenous trees matching the surround area. Fencing or boundary walls should be fragmented and used only where needed. This will support natural character of the estate and limit the visual impact at a larger scale. Continues fencing in a straight line for the full extent of the stand will not be allowed.

The transition zone should be clearly marked on the landscape plan submitted to the design review committee for approval. All boundary treatments need to be submitted and approved before the commencement of construction.

LANDSCAPE DESIGN CONTROL AND DEVELOPMENT GUIDELINES

All land owners within the Botmaskop Mountain Estate will be required to adhere to the general landscape guidelines as stipulated in this clause and elsewhere in this Guideline. The integrity of the spaces can only be achieved through the successful integration of the landscape and the architectural components.

Landscape Guidelines are of essential importance as it guides the development and land owners regarding the required aesthetic and environmental character of this mountain estate development. In the same respect these guidelines act as a regulatory document for the HOA and the DesignReview Comittee to ensure that the desired landscape quality and character are maintained. The development's landscaping code is defined as a design with nature approach with specific attention to rehabilitation and conservation, as well as design, which is responsive to the natural environment therefore conserving as much of the natural landscape. The primary goal of the landscape design of each property shall be to blend with its overall setting.

Landscape proposals shall incorporate, rehabilitate and enhance existing vegetation. Consideration should be given in the design to aesthetic and functional aspects of planting (screening, space definition, erosion control, glare reduction, dust control, continuity, shading, and aesthetics).

The objective of these guidelines is to describe a method whereby the design and rehabilitation of private and public open spaces will enhance the development of
the outdoor environment. The landscape design guidelines establish minimum landscape standards that are applicable to all owners within the development and are required for the preservation, conservation, rehabilitation and enhancement of the natural and historic character of the site in order to unify the area in terms of vegetation, materials, and design features. The specific landscape character of the development site is a combination of fynbos rehabilitation and riverine areas.
The proposed landscape character will flow through the development, incorporating a distinctive selection of indigenous planting material into the personalised signature of the development.

In order to ensure that the natural landscape is taken into account, it is recommended that all land owners, developers and occupants apply the following guidelines;

- Simplicity of design to evoke a personalised theme which unifies the aesthetic character of the development;
- To follow the design language, namely design lines and elements, similar plant material, hard landscaping and sculptural elements, to achieve unity;
- To recognize the functional qualities of planting, namely ornamental, screening, shading, rehabilitation, space definition.
- To incorporate ecologically sound principles in the design i.e.:
  - The plant palette will incorporate structural plants which can be used in feature vegetation pockets created along the edges of residence.
  - These vegetation choice should predominantly be indigenous species but should not be limited to indigenous species as some exotics may serve some micro climate environments better.
  - Vegetation choice from planting palette should also celebrate the seasonal change encouraging colour, texture and vibrancy year round.
- Utilisation of natural and locally sourced materials.
- Hard landscaping and site elements to have unity through the use of materials
- To minimise maintenance.
- Harmonious interaction between the built and natural environment is essential
- Terrace retaining structures are to be planted using indigenous creeping groundcovers to minimise hard vertical surfaces. Drainage behind the retaining walls are to be included to maintain stable retaining.
- The designs may include bioswales or biofilters, which comprise swaled drainage courses with wetland vegetation to slow down water flow and to treat the surface runoff water, by removing silt and pollution before releasing it into a watershed or storm water sewer.
- The occupier of each erf must maintain the road reserve area as prescribed above at his own cost.
- Erven alongside riverine, dams and wetland areas:
  - All riverine areas are to be protected, rehabilitated and enhanced – with selected indigenous plants being introduced and extended into the development;
  - These areas are to be planted only with indigenous and preferably endemic species;
  - All low-lying areas and surrounding banks shall be protected against erosion and left to establish with minimal interference;
  - Trees to be planted on riverine and wetland edges.
- All work shall be monitored, to ensure enhancement of natural areas, and achievement of Environmental Management Plan (EMP) requirements.
- All threatened species must be protected during construction where applicable.
- Topsoil must be separated and protected during construction, Stored topsoil will be free of deleterious matter such as large roots, stones, refuse, stiff or heavy clay and noxious weeds which would adversely affect its suitability for planting; and
- Topsoil stockpiles are not to exceed 2 (two) meters in height. Topsoil, which is to be stockpiled for periods exceeding 28 days, must be treated with mulch, roughened and seeded with an approved grass mixture or ground cover specified by the specialist. The mulch cover must be kept free of alien vegetation/seeds.
- Topsoil to be spread over the impacted area to a minimum depth of 200mm after construction to reinstate the soil for landscape works.
- All proposed site furniture / elements to be integrated within the overall landscape design theme and character of the development. Vegetation of erven directly adjacent to the ridges and riverines, as well as other open spaces must be indigenous, and specifically endemic to the area.
- The selection criteria should include the following:
  - Indigenous, in order to ensure biodiversity and a sustainable design
  - Plants are to be hardy to the onsite soil and climatic conditions and be disease-resistant.
  - They should require limited maintenance.
  - To provide shade and general climate control and screening where necessary
  - Create seasonal interest, i.e.
  - Autumn colours, flowers
  - Attract birds and insects
- The size and scale of materials should not conflict with the area into which they are planted. For example – trees should not be used where space is limited & Planting should be used to reduce problems caused by excessive glare from buildings and cars.
- Predominantly deciduous trees are to be used on the northern faces of buildings to provide shading in summer and to allow warming solar radiation in winter
- Good visual interest is to be maintained throughout the year, this can be achieved by introducing a limited proportion of deciduous material, which reflects the seasons. Plant material should however be dominated by evergreen materials to ensure a good all year round appearance.
- Low maintenance and water wise planting should be taken into account when making plant selections
- Adapting planting to local climatic conditions promotes exuberant growth and continuous flowering
- Existing trees must be preserved as far as possible and may not be removed without the approval of the HOA.
- An indigenous tree selection with different textures and bark colours is advised to unify the natural theme throughout the development, but still creating a defined character for each residence. Establishment of exotic species will not be permitted.
- Shrubs are mainly used for low-level screening and to create interest of form, texture, foliage, flowers, and fruits. Groundcovers are used in the landscape for erosion control, soil retention, maintenance reduction, and to naturalise foregrounds.

PEST CONTROL

Do not use chemicals indiscriminately. Biological control should be relied upon as much as possible. Fully indigenous gardens should never require the use of chemicals to control insect populations.

In general, the use of pesticides and herbicides are strictly forbidden within the development and will be subject to use by prior arrangement and written approval by the HOA. In such instances compliance is to be in accordance with the National Health and Safety Act which encompasses, amongst others, storage and application, recordal of activities etc. The HOA, however reserves all rights unto itself and the land owner/s shall have no recourse for possible damages suffered as a result of refusal by the HOA not to grant permission to use pesticides and herbicides.

ALIEN INVASIVE SPECIES

Alien invasive species should be continuously monitored and eradicated post-construction in order to promote biodiversity in the area and limit the distribution of alien invasive species.

IRRIGATION

Any water extraction rights will remain with the HOA. The HOA reserves unto itself all rights to re-allocate irrigation water in times of drought and for any other reason whatsoever to prioritize the distribution of irrigation water as it deems fit. Residence shall have no recourse for possible damages suffered in the event of irrigation water cut backs for any reason whatsoever.

The owner will not be permitted to irrigate the landscape installation directly from the Estate Irrigate Back Bone Pipe System.

Water storage on site to be approved by the HOA. Any storage structure to esthetically match architectural structures and materials in all aspects (no corrugated iron structures or JoJo tanks to be vissible from outside the erf). The maximum height of any reservoir will be no higher than 1200 mm above the surrounding final soil/paving levels.

Irrigation water storage reservoirs may not be used for leisure activities. A detailed irrigation design to be submitted as part of the landscape design review.

DUMPING

A land owner will not deposit, throw, dump or permit any contractor to deposited any rubbish, fill material, soil, dirt, or any other litter , thrown or dumped, on HOA property whatsoever. The same conditions applies to the dumping on any other private erf.

PROPERTY AMENDMENTS

The owner, occupier, lessor, or visitor of property will not place or do anything on any part of the HOA property that, at the discretion of the Design Review Committee, is aesthetically displeasing or undesirable. An occupier, tenant or visitor of any property will not damage, or alter, any part of the HOA property and should advise the Design Review Committee immediately upon such an event occurring. No occupier will park or stand any vehicle on the HOA property, or permit or allow any vehicle to be parked or stored on the HOA property or road reserve area which property includes roads, sidewalks and pavements.

TEMPORARY STRUCTURES

Temporary structures other than for construction related activities are not permitted. Temporary construction structures are not permitted in highly visible areas and must be removed immediately upon the completion of the permanent facility.

TELECOMMUNICATIONS

Sleeves for telecommunication cables will be provided throughout the township. Each land owner is responsible to submit an application to the relevant service provider for access to telecommunication services. No provision has been made for internal communications between erven. All telephone and electrical supply and reticulation are to be underground. No overhead or external surface wiring or cabling is allowed. Antennae, satellite dishes and other radio wave transmitting/receiving equipment must not protrude above the roofline and must be screened in a manner visually compatible with the building's design and materials.

STONE WALLS

Masonry retaining walls and free standing screen walls to be clad with natural stone. Choice of stone limited within a range and to be as per architectural guideline. Solid stone to be used as copings and on the corners. Superficial thin cut stone cladding is not permitted.

GABIAN STRUCTURES

Gabion retaining walls and free standing screen walls to be manufactured from galvanised weld mesh baskets. The baskets should not be larger than a cubic meter and the openings should not exceed 100 x 100 mm. The gabion baskets can also be contained within a mild steel framework, with a painted or rusted finish (colour as per approved architectural colours). The stone should be packed neatly and should resemble a stone clad wall. Choice of stone limited within a range and to be as per architectural guideline.

SLOPE STABILISATION

Bio-engineered walls offer a softer alternative to gabion terrace walls. These walls make use of live staking, where live, rootable vegetative cuttings of suitable trees are staked into the cut embankments. If correctly prepared and placed, these stakes will root and leaf out, naturally holding the soil in place and creating a suitable environment for other plant species to establish. Slopes are to have a maximum gradient of 45 degrees (1:1) and stakes are to be placed in rows 1m apart. Plants species and detailed specs to be submitted for approval.

DRIVEWAYS

Road surfaces can be constructed from in-situ cast concrete, with an exposed aggregate finish. Reinforcing, slab thickness, layer-works and compaction to be specified by an engineer. Choice of stone limited within a range and to be as per architectural guideline.

Road surfaces should be edged with granite or pre-cast concrete kerbs to Engineer's specifi cation. Where the road surface adjoins a wall, it can be edged with a natural cut stone header course or permanent mild steel shutter-work. Movement joints are to be set out to max of 2.5m in any one direction. Movement joints should be provided between the exposed aggregate surface and any other surface or wall adjoining it.

Interlocking, pre-cast concrete paving blocks, with an exposed aggregate fi nish can be used on the road surfaces. Layer-works and compaction to be specifi ed by an Engineer. Interlocking Course Exposed Aggregate Pavers (203 x 102 x 70 mm) from C.E.L Paving Products or similar approved should be specified. Colour to match the approved natural stone range. Road surfaces should be edged with granite or pre-cast concrete kerbs to Engineer's specification.
Paving bricks shall be hard, well-burnt, non-dusting, resistant to sulphate attack, and true to shape, size and sample. Poor quality, half or broken bricks shall not be accepted.

WALKWAYS

Pedestrian paving can be constructed from in-situ cast concrete, with an exposed aggregate finish. Reinforcing, slab thickness, layer-works and compaction to be specified by an Engineer. Choice of stone limited within a range and to be as per architectural guideline. Concrete surfaces can be edged with a natural cut stone header course or with permanent mild steel shutter-work.

Movement joints are to be set out to max of 2.5m in any one direction. Movement joints should be provided between the exposed aggregate surface and any other surface or wall adjoining it. A sample panel should be provided for approval, prior to construction. Alternatively, walkways could be constructed from the same exposed aggregate concrete paved finish specified for the driveways.

No black asphalt/tar roads or walkways will be allowed.

TERRACES

Terrace paving can be constructed with natural stone. Ornamental gravel and natural stone flagstones are limited within a range and to be as per architectural guideline.

A layer of ornamental gravel should not be thinner than 100mm and stone size should not exceed 20mm dia. It should be washed until it is free of sand and installed over a layer of geo-fabric over compacted layer-works. If not bordered by walls, it should be edged with a natural stone header course or mild steel angle over concrete foundations. Flagstone paving should be constructed over a layer of sand over compacted layer-works. Where not edged by walls, it should be edged with fl agstones over concrete foundations.

EXTERNAL STAIRS

Stairs can be constructed from in-situ cast concrete, with a brushed or exposed aggregate finish. Reinforcing, slab thickness, layer-works and compaction to be specifi ed by an Engineer. Choice of stone limited within a range and to be confi rmed. Concrete surfaces to cast using steel shutter work or edged with a permanent mild steel shutter-work.

Alternatively, stairs can be clad with natural stone to match the adjoining walls and surfaces. The choice of stone is limited within a range and to be confi rmed. The thickness of the stone used on the face of the treads should not be less than 50mm. Superfi cial thin cut stone cladding is not permitted. All stairs regardless of material should have a minimum tread width of 300mm and a maximum riser hight or 170mm.

EXTERNAL LIGHTING

Due to the nature and position of the development, external lighting has the possibility to have a large visual impact on the surrounding context. Any site lighting or related (eg. illuminated signage, building facade lighting or feature lighting) will be subject to scrutiny and approval by the Design Review Committee. External lighting should be minimal and as far as possible functional.

Any floodlighting of the surrounding landscape will not be allowed. Only ambient lighting should be considered and not directed up or out of the property towards the surrounding landscape. (Ambient lighting is lighting that creates a soft glow, gently illuminating an area without causing glare or light pollution.) Only low-level bollard and foot lights will be allowed in the landscape. All lighting sources to be "warm white", this is usually considered to be below 3000K (3000 kelvin). All building or facade lighting as per architectural guideline.

TREES

- Acacia caffra
- Acacia karroo
- Apodytes dimidiata
- Brabejum stellatifolium
- Brachylaena discolor
- Buddleja auriculata
- Buddleja saligna
- Buddleja salviifolia
- Calodendrum capense
- Cassine peragua subsp. peragua
- Celtis africana
- Cryptocarya angustifolia
- Cunonia capensis
- Curtisia dentata
- Cussonia spicata
- Cussonia thrysifl ora
- Diospyros scabrida
- Diospyros whyteana
- Ehretia rigida
- Ekebergia capensis
- Ficus natalensis
- Grewia occidentalis var. occidentalis
- Gymnosporia buxifolia
- Halleria lucida
- Heeria argentea
- Ilex mitis
- Kiggelaria africana
- Loxystylis alata
- Maytenus oleoides
- Metrosideros angustifolius
- Olea europaea subsp. africana
- Pittosporum viridifl orum
- Platylophus trifoliatus
- Podocarpus elongatus
- Podocarpus falcatus
- Podocarpus latifolius
- Pterocelastrus tricuspidatus
- Rapanea melanophloeos
- Rhamnus prinoides
- Rothmannia capensis
- Searsia chirindensis
- Sideroxylon inerme
- Syzygium cordatum
- Tarchonanthus camphoratus
- Virgilia divaricata
- Virgilia oroboides
- Widdringtonia cedarbergensis
- Widdringtonia nodifl ora
- Widdringtonia schwarzii

SHRUBS

- Agathosma serphyllaceae
- Anisodontea scabrosa
- Athanasia crithmifolia
- Athanasia dentata
- Athanasia trifurcata
- Barleria 'Purple Prins'
- Barleria obtusa
- Barleria repens
- Brachycarpaea juncea
- Buddleja davidii
- Buddleja salvifolia
- Carissa macrocarpa
- Chondropetalum tectorum
- Chrysanthemoides incana
- Chrysanthemoides monilifera
- Cistus cv.
- Cliffortea graminea
- Cliffortea obcordata
- Cliffortea odorata
- Dodonaea angustifolia
- Dracaena aletriformis
- Encephalartos spp.
- Eriocephalus africanus
- Eriocephalus pedunculatus
- Eriocephalus racemosus
- Euryops abrotanifolius
- Euryops chrysanthemoides
- Euryops pectinatus
- Euryops speciosissimus
- Euryops virgineus
- Freylinia densifl ora
- Freylinia lanceolata
- Freylinia tropica
- Gnidia pinifolia
- Gnidia squarossa
- Halleria elliptica
- Helichrysum dasyanthum
- Helichrysum splendidum
- Heliptrum argyropsis
- Hymenolepsis parvifl ora
- Indigofera natalensis
- Lebeckia simsiana
- Liparia splendens
- Mackaya bella
- Metalasia muricata
- Morella cordifolia
- Morella quercifolia
- Myrsine africana
- Myrtis nana
- Nylandtia spinosa
- Oftia africana
- Otholobium decumbens
- Otholobium fruticans
- Othosiphon labiatus
- Passerina vulgaris
- Pavetta lanceolata
- Pavetta revoluta
- Phylica auxillaris
- Phylica buxifolia
- Phylica ericoides
- Phylica gnidioides
- Plumbago auriculata
- Podalyria calyptrata
- Polygala myrtifolia
- Polygala virgata
- Psychotria capensis
- Pycnostachys urticifolia
- Rhigoda hastata
- Searsia lucida
- Sersia crenata
- Sersia lucida
- Strelitzia juncea
- Strelitzia reginae
- Struthiola dodecandra
- Struthiola striata
- Syncarpha cv.
- Syncolostemon spp.
- Tecomaria capensis
- Tetradinia riparia
- Ursinia sericea
- Westringea cv.

PROTEAS

- Aulax cancellata
- Diastella proteoides
- Leucadendron argenteum
- Leucadendron coniferum
- Leucadendron daphnoides
- Leucadendron discolor
- Leucadendron eucalyptifolium
- Leucadendron fl oridum
- Leucadendron laureolum
- Leucadendron salignum
- Leucadendron teretifolium
- Leucospermum bolusii
- Leucospermum catherinae
- Leucospermum conocarpodendron
- Leucospermum cordifolium
- Leucospermum mundii
- Leucospermum oleifolium
- Leucospermum refl exum
- Leucospermum tottum
- Leucospermum vestitum
- Mimetes chrysanthus
- Mimetes cucullatus
- Paranomus refl exus
- Protea aristata
- Protea aurea
- Protea compacta
- Protea cynaroides
- Protea glabra
- Protea grandiceps
- Protea magnifi ca
- Protea neriifolia
- Protea obtusifolia
- Protea repens
- Protea scolymocephala
- Protea susannae
- Serruria aemula
- Serruria fl orida
- Spatalla incurva

BUCHUS

- Acmadenia heterophylla
- Acmadenia mundiana
- Acmadenia obtusata
- Adenandra unifl ora
- Agathosma apiculata
- Agathosma betulina
- Agathosma capensis
- Agathosma cerefolium
- Agathosma cilliaris
- Agathosma collina
- Agathosma crenulata
- Agathosma glabrata
- Agathosma ovata
- Coleonema album
- Coleonema aspalathoides
- Coleonema pulchrum

ERICAS

- Erica baccans
- Erica banksia
- Erica perspicua
- Erica peziza
- Erica speciosa
- Erica versicolor
- Erica vestita

RESTIOS, REEDS & SEDGES

- Elegia capensis
- Elegia cuspidata
- Elegia racemosa
- Elegia stipularis
- Elegia tectorum
- Ischyrolepis sieberi
- Ischyrolepis subverticillata
- Restio festucaeformis
- Rhodocoma capensis
- Rhodocoma foliosa
- Rhodocoma gigantea
- Thamnochortus cinereus
- Thamnochortus dichotomus

PERENNIALS

- Arctotis aspera
- Arctotis cv.
- Arctotis stoechadifolia
- Asastasia gangetica
- Begonia sutherlandii
- Brachycombe iberidifolia
- Carissa 'Green Carpet'
- Chironia baccifera
- Chironia laxa
- Chironia linoides
- Chrysocoma ciliaris
- Chrysocoma coma - aurea
- Cineraria saxifraga
- Cliffortia ferruginea
- Convolvulus mauritanicus
- Cuphea spp.
- Dianthus caespitosus
- Diascia integerrima
- Diascia mollis
- Diascia vigilis
- Dimorphotheca cuneata
- Dymondia margaretae
- Evolvulus glomerata
- Falkea repens
- Felicia aethiopica
- Felicia amelloides
- Felicia echinata
- Felicia erigeroides
- Felicia fi lifolia
- Felicia hyssopifolia
- Felicia variegata
- Gazania krebsiana
- Gazania rigens
- Gazania unifl ora
- Geranium incanum
- Geranium multisectum
- Hebenstretia dura
- Helichrysum argyrophyllum
- Helichrysum 'Curly Whirly'
- Helichrysum cymosum
- Helichrysum odoratismum
- Helichrysum petiolare
- Helichrysum retortum
- Helichrysum teretifolium
- Hermannia muricate
- Hermannia pinnata
- Hermannia saccifera
- Hermannia scabra
- Heterolepis aliena
- Hypoestes aristata
- Impatiens fl anaganiae
- Impatiens sylvicola
- Jordaaniella dubia
- Lasiospermum bipinnatum
- Leonotis leonurus
- Limonium perigrinum

- Lobelia alata
- Lobelia cuneifolia
- Lobelia pubescens
- Monopsis lutea
- Monopsis unidentata
- Nemesia fruticans
- Orphium frutescens
- Osmitopsis asteriscoides
- Osteospermum cv.
- Osteospermum ecklonis
- Osteospermum fruticosus
- Osteospermum imbricatum
- Osteospermum jucundum
- Pelargonium betulinum
- Pelargonium capitatum
- Pelargonium citronellum
- Pelargonium cordifolium
- Pelargonium cucullatum
- Pelargonium fruticosum
- Pelargonium hispidum
- Pelargonium ionidifolium
- Pelargonium magenteum
- Pelargonium pandurifolium
- Pelargonium peltatum
- Pelargonium radens
- Pelargonium ribifolium
- Pelargonium tomentosum
- Phygelius aequalis
- Phygelius capensis
- Plectranthus ambiguus
- Plectranthus cilliatus
- Plectranthus ecklonii
- Plectranthus fruticosus
- Plectranthus madagascariensis
- Plectranthus neochilus
- Plectranthus saccatus
- Plectranthus strigosus
- Plectranthus verticillatus
- Plectranthus zuluensus
- Pleucostachys serphyllifolia
- Psoralea repens
- Ruschia lineolata
- Ruschia macowanii
- Salvia africana-caerulea
- Salvia africana-lutea
- Salvia chamelaeagnea
- Salvia dentata
- Salvia dolomitica
- Salvia lanceolata
- Salvia leucantha
- Salvia muirii
- Salvia namaensis
- Salvia thermara
- Scabiosa africana
- Scabiosa incisa
- Selago canescens
- Selago corymbosa
- Selago dregei
- Selago glomerata
- Senecio halimifolius
- Stachys aethiopica
- Stoebe cinerea
- Stoebe plumosa
- Streptocarpus cyaneus
- Streptocarpus formosus
- Streptocarpus gardenii
- Streptocarpus rexii
- Sutera cordata
- Thorncroftia succulenta
- Thunbergia natalensis
- Ursinia abrotanifolia
- Ursinia paleaceae
- Verbena cv.
- Viola hederaceae
- Wahlenbergia rivularis

FERNS

- Adiantum capillus-veneris
- Asparagus densifl orus
- Asparagus virgatus
- Asplenium rutifolium
- Blechnum tabulare
- Cyathea dregei
- Cyrtomium falcatum
- Pteris vittata
- Rumohra adiantiformis
- Todoe barbara

CLIMBERS

- Aloe ciliaris
- Asparagus falcatus
- Asparagus plumosa
- Bolusafra bituminosa
- Clematis brachiata
- Dipogon lignosus
- Jasminum glaucum
- Jasminum multipartitum
- Rhoicissus digitata
- Rhoicissus tomentosa
- Rhoicissus tridentata
- Senecio macroglossus
- Senecio tamoides

HEDGES

- Portulcaria afra nana

AQUATIC PLANTS

- Aquatic plants
- Aponogeton distachyos
- Nymphaea nouchali var. caerulea
- Nymphoides indica
- Onixotis triquetra
- Romulea multisulcata
- Spiloxene aquatica

SUCCULANTS

- Succulents
- Aloe arborescens
- Aloe commixta
- Aloe ferox
- Aloe mitriformis
- Aloe perfoliata
- Aloe plicatilis
- Aloe succotrina
- Aloe tenuior
- Aptenia cordifolia
- Carpobrotus deliciosus
- Carpobrotus edulis
- Cotyledon 'Firesticks'
- Cotyledon orbiculata
- Crassula coccinea
- Crassula fascicularis
- Crassula multicava
- Crassula spathulata
- Delospermum cv.
- Delospermum lydenbergensis
- Drosanthemum cv.
- Lampranthus aureus
- Lampranthus cedarbergensis
- Lampranthus coccineus
- Lampranthus deltoides
- Lampranthus emarginatus
- Lampranthus falciformis
- Lampranthus multiradiatus
- Lampranthus repens
- Lampranthus roseus
- Lampranthus spectabilis
- Lampranthus steenbergensis
- Oscularia deltoides

BULBS

- Agapanthus spp.
- Amaryllis belladonna
- Aristea capitata
- Aristea ecklonii
- Babiana ambigua
- Chasmanthe fl oribunda
- Clivia gardenii
- Clivia miniata
- Crinum moorei
- Crocosmia aurea
- Dierama pendulum
- Bulbs (cont.)
- Dietes bicolor
- Dietes grandifl ora
- Freesia alba
- Hesperantha bachmannii
- Hesperantha coccinea
- Hesperantha cucullata
- Ixia campanulata
- Ixia dubia
- Ixia viridifl ora
- Kniphofi a praecox
- Kniphofi a uvaria
- Scadoxus membranaceus
- Scadoxus multifl orus subsp. catharinae
- Velthemia bracteata

LAWN

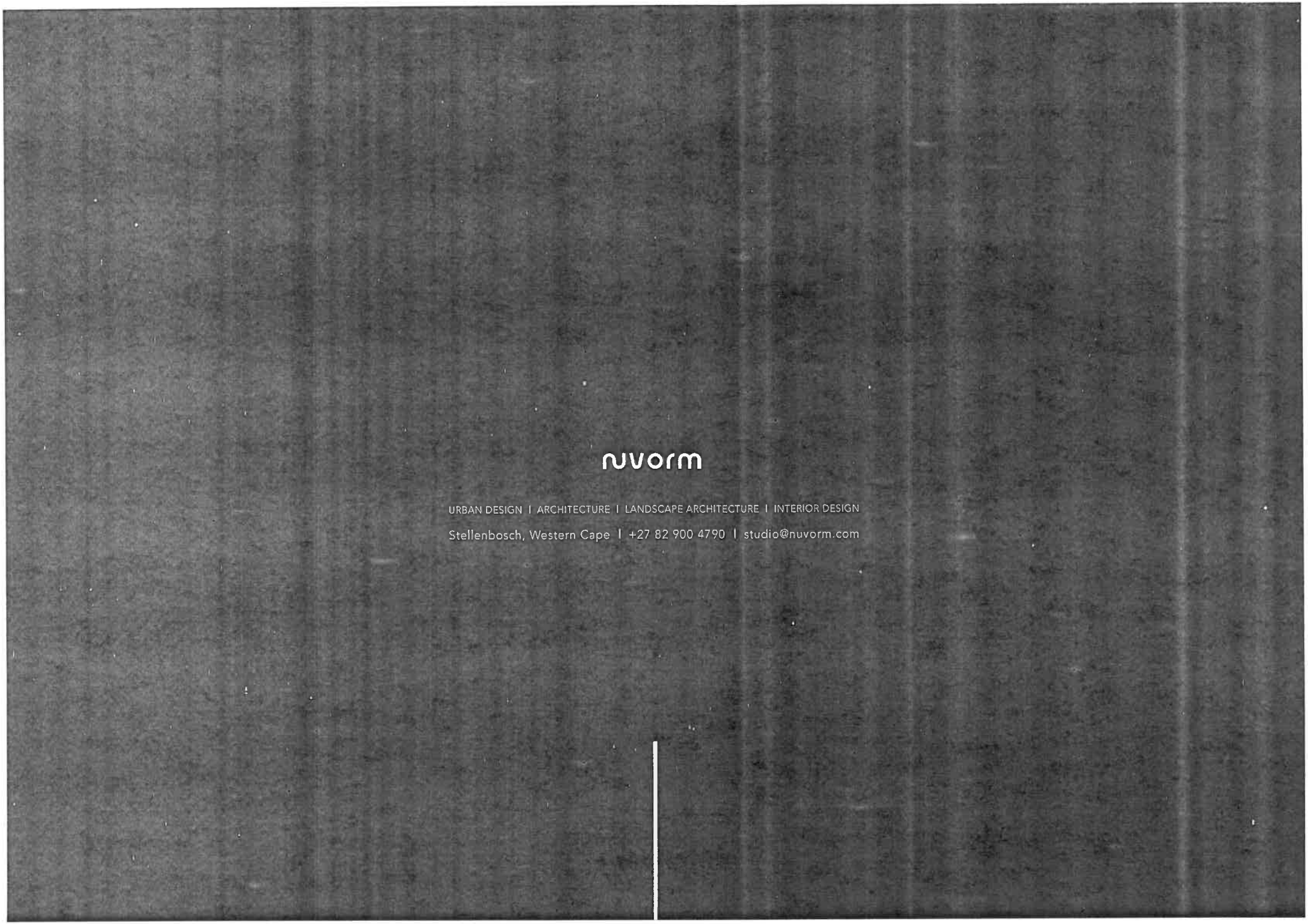
- All Seasons Evergreen (shade)
- Stenotaphrum secondatum (sun)

LANDSCAPE DESIGN SUBMISSION
CHECKLIST

- [ ] **Latest site development plan by architect**
- [ ] **Landscape sketch plan**
- [ ] **Planting specification, size, and densities**
- [ ] **Irrigation plan / irrigation methodology**
- [ ] **External lighting plan with specifications**
- [ ] **Fencing or boundary wall plan**
  (transition zone & screen planting clearly indicated)
- [ ] **Elevations / details of walls, fencing, pergolas or any other external built features**
- [ ] **Storm water management plan**

LANDSCAPE GUIDELINES
LANDSCAPE DESIGN SUBMISSION

A full landscape approval process will form part of each architectural building plan approval process. The aim is to ensure the impact of each individual landscape development on both the surrounding neighbouring residences as well as the overall estate. Each submission should include the following items (as a minimum) on the checklist.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