

CITY OF CAPE TOWN

DEVELOPMENT MANAGEMENT

Recommended for Approval

Building Control Officer / Delegate

GENERAL NOTES:

(1) (a)

1. This application is submitted in accordance with the provisions of the National Building Regulations and Building Standards Act, 1977 (Act No. 103 of 1977) and the relevant provisions of the Cape Town Building Regulations, 2015.

2. Careful consideration is to be given to the use of materials that reduce the risk from fires.

3. Where possible storm water run off is to be managed by collection and storage of stormwater from roofs and hard standing areas. This can be used for garden irrigation or recycling.

4. Discharge of direct stormwater into the road or FOS is to be limited, and all stormwater should be directed through a detention pond or French drain soak-away type drainage system.

5. Measures to limit erosion of disturbed or unvegetated slopes from water run-off must be considered in the design both temporary and permanent stormwater disposal.

6. Ramps, ladders and solar panels must be used as combined tank and panels on roof not allowed. The panels will be mounted on roof of major forms only.

7. The Lesekoppe Design Review Committee, Cape Town, has reviewed the application and has approved the design of the building and the landscape design.

8. The Lesekoppe Design Review Committee, Cape Town, has approved the design of the building and the landscape design.

9. No Vibracore fences permitted.

10. No ducting may be visible on any walls.

11. Sewer and vent pipes to be concealed in vertical ducting within the wall plane of the building.

12. Air conditioning condenser units to be installed at ground level, and screened within a 1.2m height taken above the ground floor finished floor level. Window mounted units will not be permitted. Only wall units within 1.2m height taken above the ground floor finished floor level will be allowed.

13. House numbers will be no larger than 75mm high and 60mm wide.

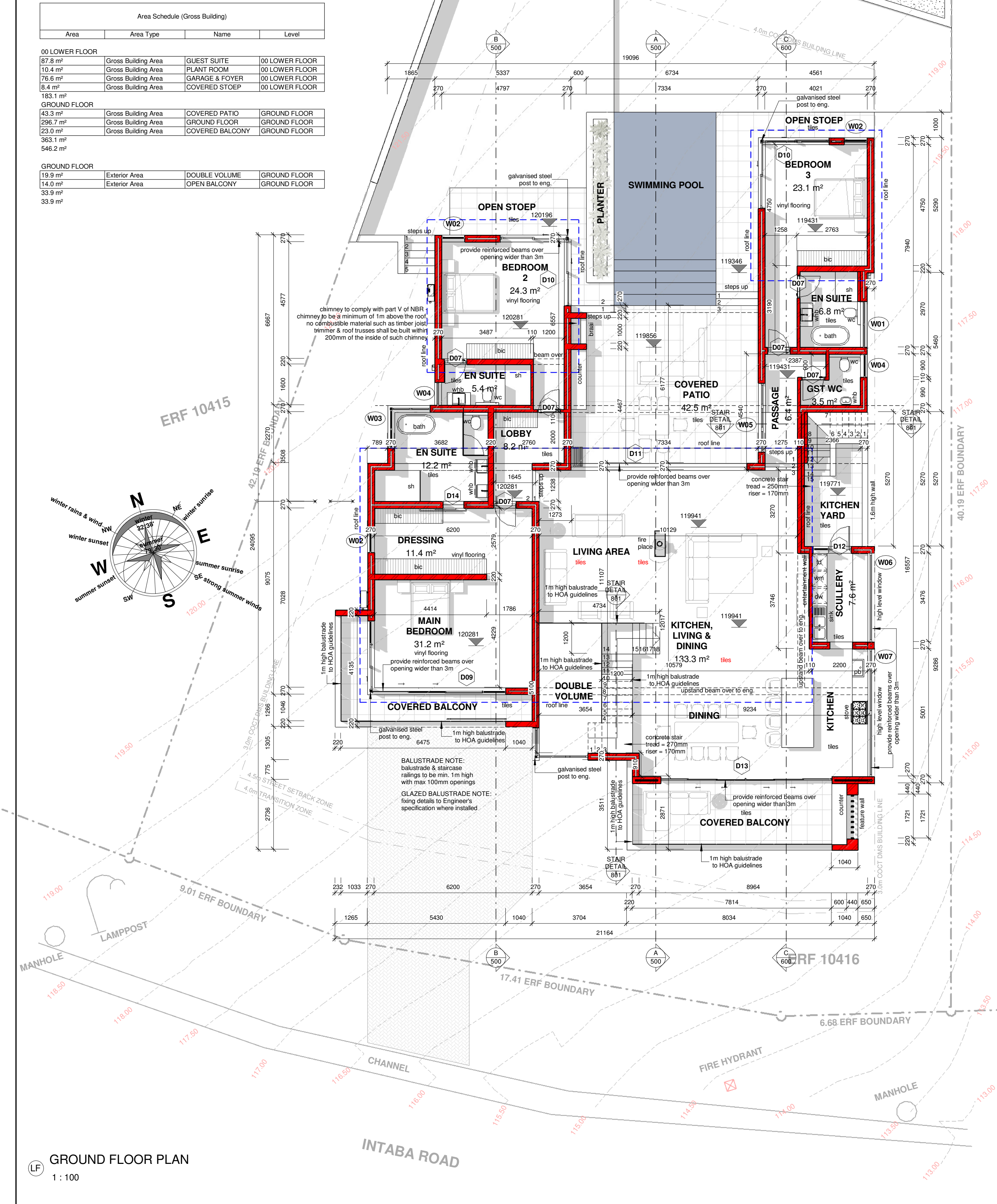
14. Clotheslines and Refuse bins must be screened or in concealed service court.

15. No external pole mounted street lamps will be allowed. Landscape lights must be discreet and not higher than 900mm. External recessed ceiling mounted low voltage down lighters may be used at verandahs. Note: these must be flush mounted with verandah soffit.

Area Schedule (Gross Building)

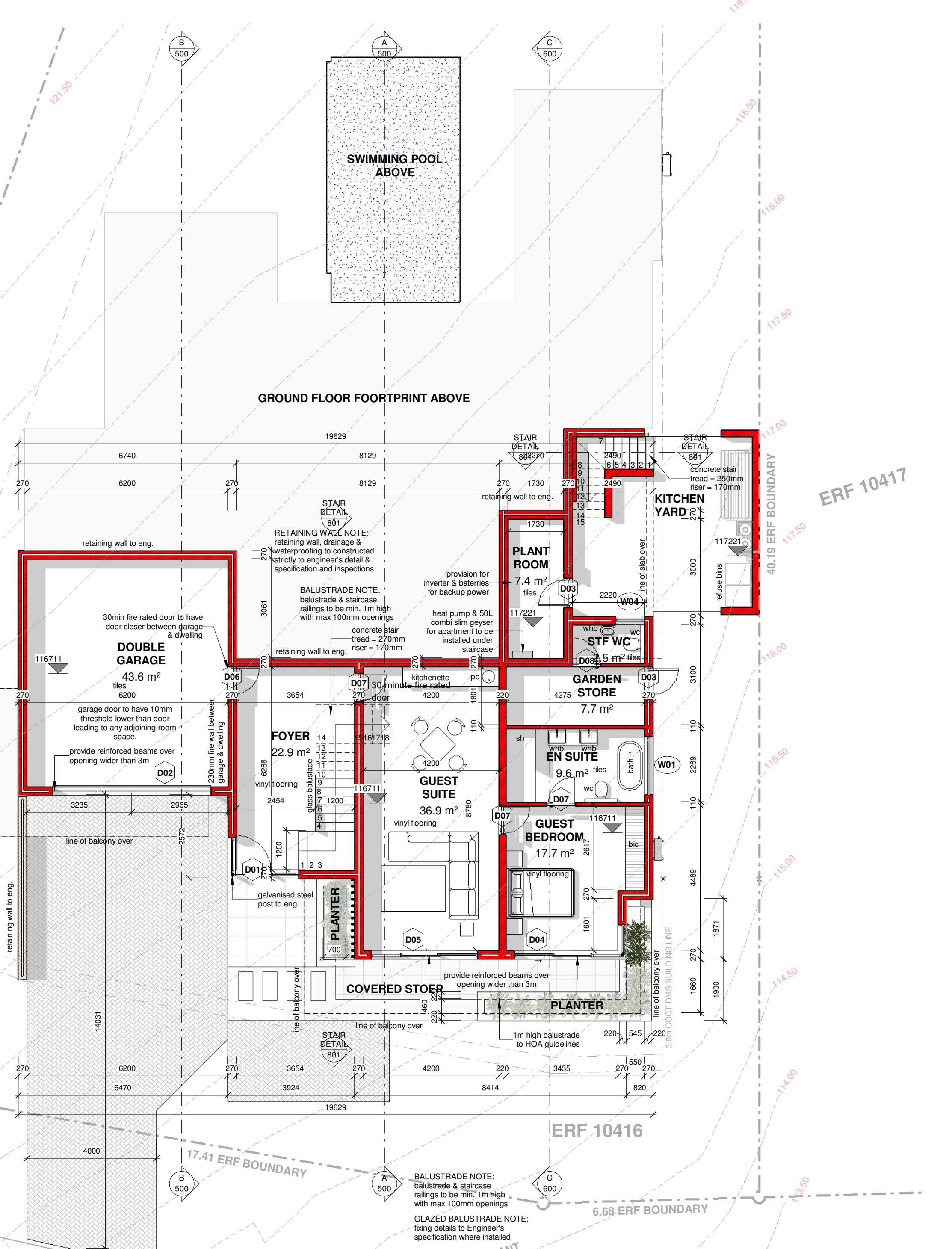
Area	Area Type	Name	Level
00 LOWER FLOOR	Gross Building Area	GUEST SUITE	00 LOWER FLOOR
97.8 m²	Gross Building Area	PLANT ROOM	00 LOWER FLOOR
10.4 m²	Gross Building Area	GARAGE & FOYER	00 LOWER FLOOR
76.6 m²	Gross Building Area	COVERED STOEP	00 LOWER FLOOR
183.1 m²	Gross Building Area	COVERED PATIO	GROUND FLOOR
43.3 m²	Gross Building Area	GROUND FLOOR	GROUND FLOOR
296.7 m²	Gross Building Area	COVERED BALCONY	GROUND FLOOR
363.1 m²	Gross Building Area	COVERED BALCONY	GROUND FLOOR
546.2 m²	Gross Building Area	COVERED BALCONY	GROUND FLOOR

Area	Area Type	Name	Level
19.9 m²	Exterior Area	DOUBLE VOLUME	GROUND FLOOR
14.0 m²	Exterior Area	OPEN BALCONY	GROUND FLOOR
33.9 m²	Exterior Area	OPEN BALCONY	GROUND FLOOR
33.9 m²	Exterior Area	OPEN BALCONY	GROUND FLOOR



1 LOWER FLOOR PLAN
1 : 100

AREA SCHEDULE		DRAWING LIST	
ERF SIZE	1085.0m²	24-2744 - 100/400 - SITE PLAN & ROOF PLAN	
GARAGE, FOYER & PLANT ROOM	87.0m²	24-2744 - 200/300 - GROUND FLOOR & FIRST FLOOR PLANS	
GUEST SUITE	87.8m²	24-2744 - 500 - SECTIONS	
COVERED STOEP @ GUEST SUITE	8.4m²	24-2744 - 600 - ELEVATIONS	
TOTAL LOWER FLOOR AREA	183.1m²	24-2744 - 800 - DOOR SCHEDULE	
GROUND FLOOR AREA	296.7m²	24-2744 - 801 - WINDOW SCHEDULE SCHEDULE	
COVERED BALCONIES	66.3m²	24-2744 - 901 - LANDSCAPING LAYOUT	
TOTAL GROUND FLOOR AREA	363.1m²	24-2744 - 902 - GROUND FLOOR SERVICES	
TOTAL RESIDENCE	546.2m²	24-2744 - 903 - LOWER FLOOR SERVICES	
		PERMISSIBLE	ACTUAL
COVERAGE 296.7/1085.0	40%	27.3%	
F.A.R		0.50	



HOUSE HAGLEYS

PROJেক / PROJECT

NEW RESIDENCE
FOR HAGLEYS DEVELOPMENT
ON ERF 10416 HOUTBAY

KLIENT / CLIENT

HAGLEYS DEVELOPMENT

MARIETTE BARNARD ARCHITECTS

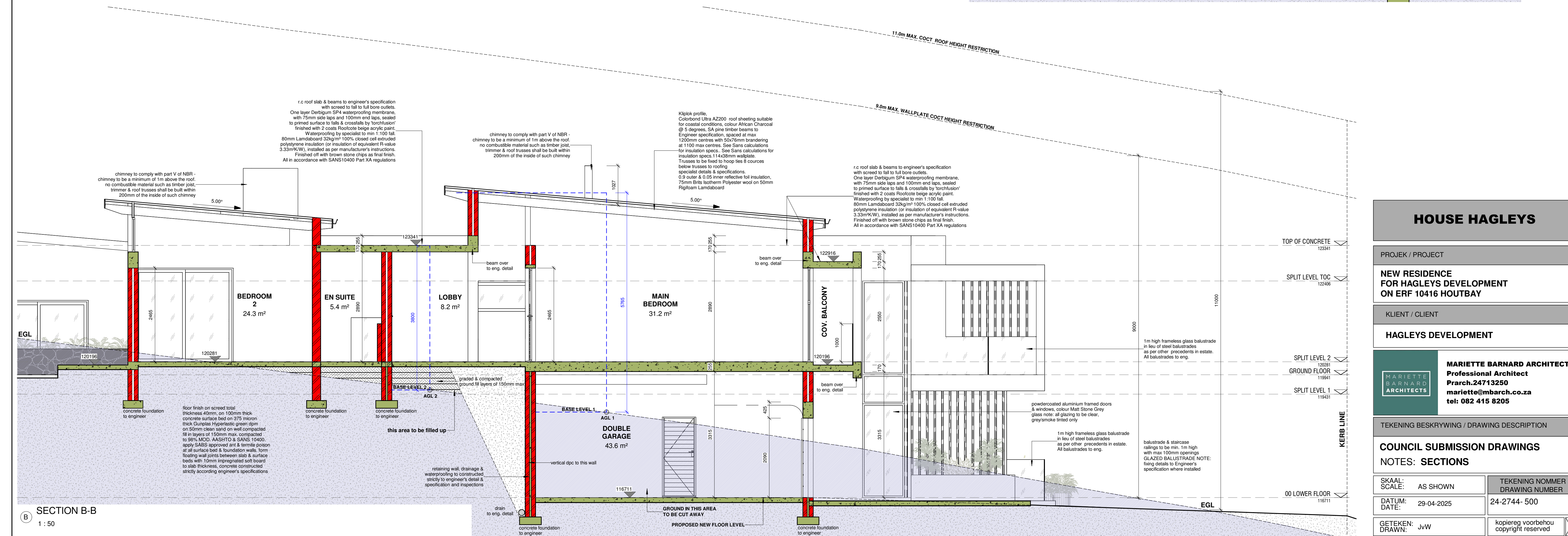
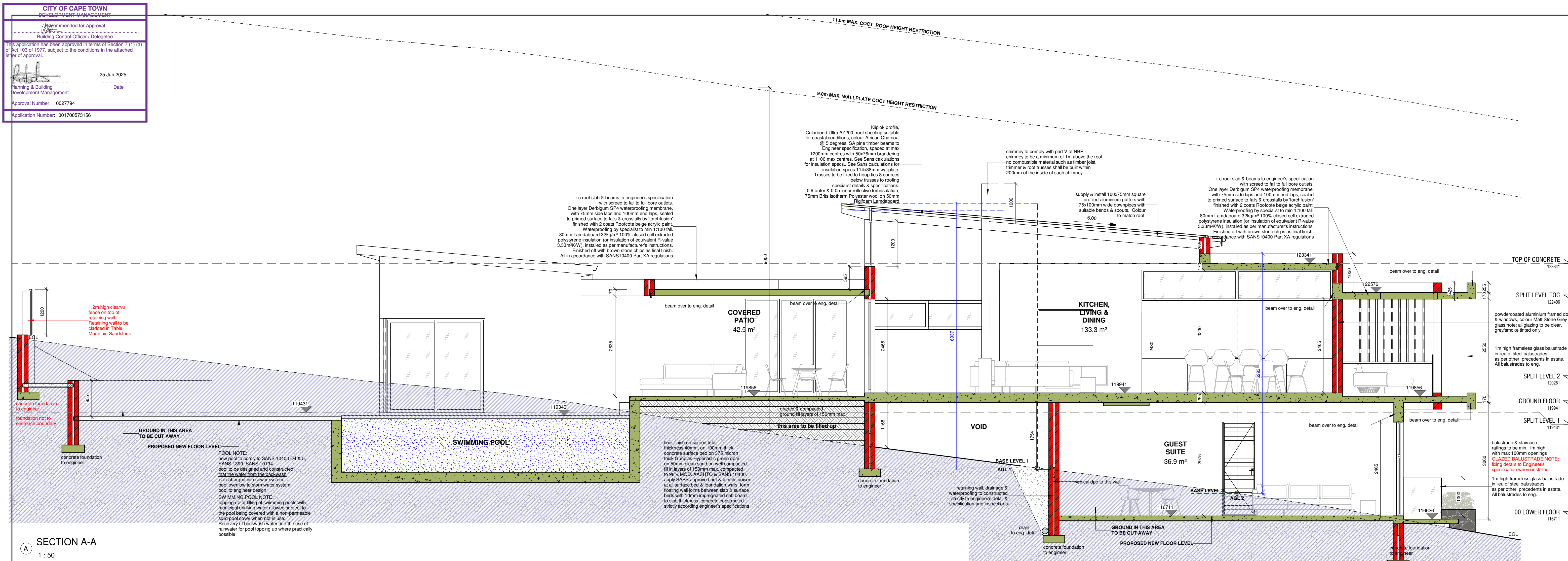
MARIETTE BARNARD ARCHITECTS
Professional Architect
Prarch.24713250
mariette@mbarch.co.za
tel: 082 415 8205

TEKENING BESKRYWING / DRAWING DESCRIPTION

COUNCIL SUBMISSION DRAWINGS

NOTES: GROUND & FIRST FLOOR PLANS

SKAAL: SCALE:	AS SHOWN	TEKENING NOMMER DRAWING NUMBER	
DATUM: DATE:	29-04-2025	24-2744 - 200/300	
GETEKEN: DRAWN:	JvW	kopiereg voorbehou copyright reserved	



HOUSE HAGLEYS

PROJEK / PROJECT

NEW RESIDENCE FOR HAGLEYS DEVELOPMENT ON ERF 10416 HOUTBAY

KLIENT / CLIENT

HAGLEYS DEVELOPMENT

MARIETTE BARNARD ARCHITECTS
Professional Architect
Prarch.24713250
mariette@mbarch.co.za
tel: 082 415 8205

TEKENING BESKRYWING / DRAWING DESCRIPTION

COUNCIL SUBMISSION DRAWINGS

NOTES: SECTIONS

SKAAL:
SCALE: AS SHOWN

DATUM: 29-04-2025
DATE:

GETEKEN: JvW
DRAWN:

TEKENING M
DRAWING M

24-2744- 500

kopiereg voorbeho
copyright reserved

CITY OF CAPE TOWN

DEVELOPMENT MANAGEMENT

Recommended for Approval

Building Control Officer / Delegetee

This application has been approved in terms of Section 7 (1) (a) of the 103 of 1977, subject to the conditions in the attached letter of approval.

25 Jun 2025

Date

Planning & Building Development Management

Approval Number: 002794

Application Number: 001700573156

SECTION C-C
1 : 50

EAST ELEVATION
1 : 100

NORTH ELEVATION
1 : 100

WEST ELEVATION
1 : 100

HOUSE HAGLEYS

PROJECT / PROJECT

NEW RESIDENCE
FOR HAGLEYS DEVELOPMENT
ON ERF 10416 HOUTBAY

CLIENT / CLIENT

HAGLEYS DEVELOPMENT

MARIETTE BARNARD ARCHITECTS

Professional Architect
Prarch.24713250
mariette@mbarch.co.za
tel: 082 415 8205

TEKENING BESKRYWING / DRAWING DESCRIPTION

COUNCIL SUBMISSION DRAWINGS

NOTES: ELEVATIONS & SECTION C-C

SKAAL: AS SHOWN

TEKENING NOMMER: 24-2744- 600

DATUM: 29-04-2025

DATE: 29-04-2025

GETEKEN: JvW

DRAWN: kopiëring voorbehou copyright reserved

PROJECT:	ERF 10416 Houtbay Lower floor			
ZONE:	4			
	Climatic Zone Factor:	Net Floor Area:	otal fenestration	Percentage
Conductance (Cu):	1,4	155,1	37,79	0,24
Conductance (Cu):				
	Height (m):	Width (m):	No. of:	Area (A) (m²):
W01	0,9	1,8	1	1,62
W02	2,4	0,9	0	0,00
W03	0,9	3,075	0	0,00
W04	0,9	0,9	1	0,81
W05	2,4	2,7	0	0,00
W06	0,8	3,467	0	0,00
W07	0,8	5	0	0,00
W08	0,9	4,2	0	0,00
W09	1,2	8,8	0	0,00
W10	0,9	4,97	0	0,00
D1	5,6	3,1	1	17,36
D4	2,4	4,2	1	10,08
D5	2,4	3,3	1	7,92
D9	2,4	7,9	0	0,00
D10	2,4	5,2	0	0,00
D11	2,4	6,8	0	0,00
D12	2,4	0,9	0	0,00
D13	2,4	6,7	0	0,00
				37,79
TOTAL:				

PROJECT:	ERF 10416 Houtbay Ground floor			
ZONE:	4			
	Climatic Zone Factor:	Net Floor Area:	total fenestration	Percentage
Conductance (Cu):	1,4	287,4	123,03	0,42
Conductance (Cu):				
	Height (m):	Width (m):	No. of:	Area (A) (m ²):
W01	0,9	1,8	1	1,62
W02	2,4	0,9	3	6,48
W03	0,9	3,075	1	2,77
W04	0,9	0,9	2	1,62
W05	2,4	2,7	1	6,48
W06	0,8	3,467	1	2,77
W07	0,8	5	1	4,00
W08	0,9	4,2	1	3,78
W09	1,2	8,8	1	10,56
W10	0,9	4,97	1	4,47
D1	5,6	3,1	0	0,00
D4	2,4	4,2	0	0,00
D5	2,4	3,3	0	0,00
D9	2,4	7,9	1	18,96
D10	2,4	5,2	2	24,96
D11	2,4	6,8	1	16,32
D12	2,4	0,9	1	2,16
D13	2,4	6,7	1	16,08
				123,03
TOTAL:				

HOUSE HAGLEYS

HOUSE HAGLEYS	
PROJEK / PROJECT	
NEW RESIDENCE FOR HAGLEYS DEVELOPMENT ON ERF 10416 HOUTBAY	
KLIENT / CLIENT	
HAGLEYS DEVELOPMENT	
	MARIETTE BARNARD ARCHIT Professional Architect Prarch.24713250 mariette@mbarch.co.za tel: 082 415 8205
TEKENING BESKRYWING / DRAWING DESCRIPTION	
COUNCIL SUBMISSION DRAWINGS	
NOTES: DOOR SCHEDULE	
SKAAL: SCALE: AS SHOWN	TEKENING NOMM DRAWING NUMBER: 24-2744 - 800
DATUM: DATE: 29-04-2025	
GETEKEN: DRAWN: JwW	kopiereg voorbehou copyright reserved

CITY OF CAPE TOWN
DEVELOPMENT MANAGEMENT

Recommended for Approval

Building Control Officer (Drawing)

Approved for Submission

Approved for Construction

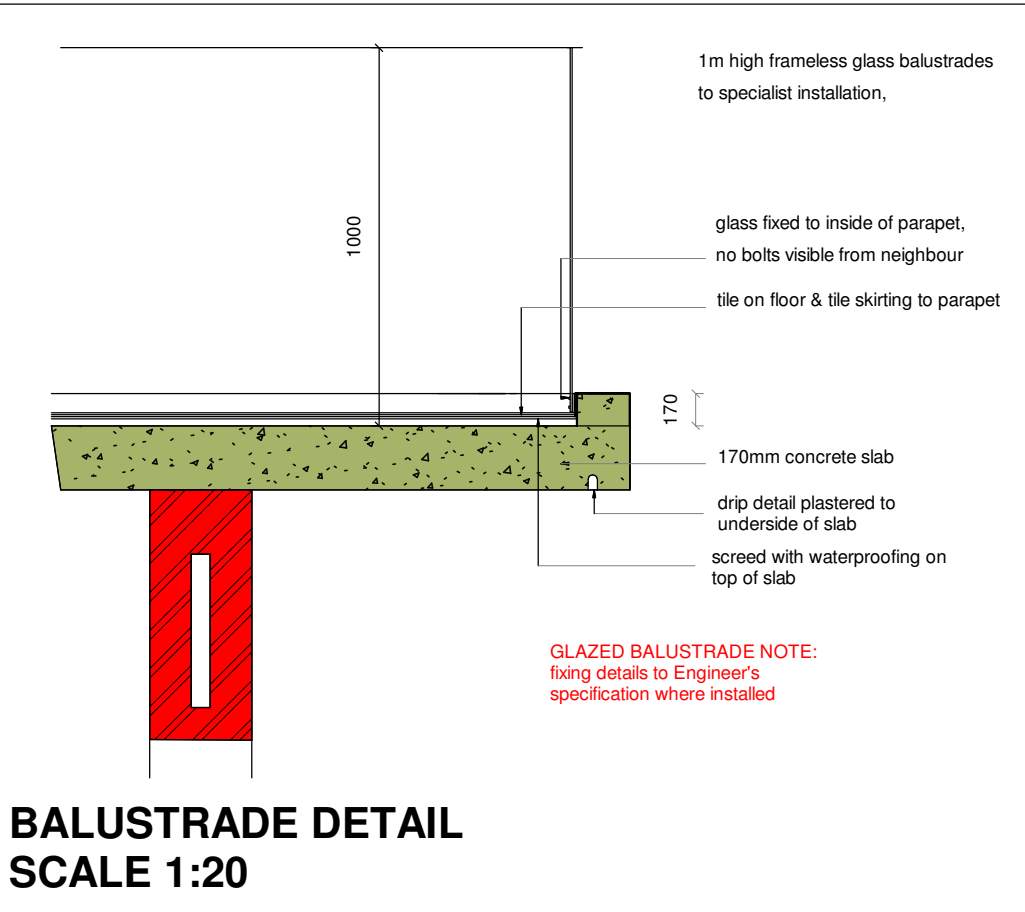
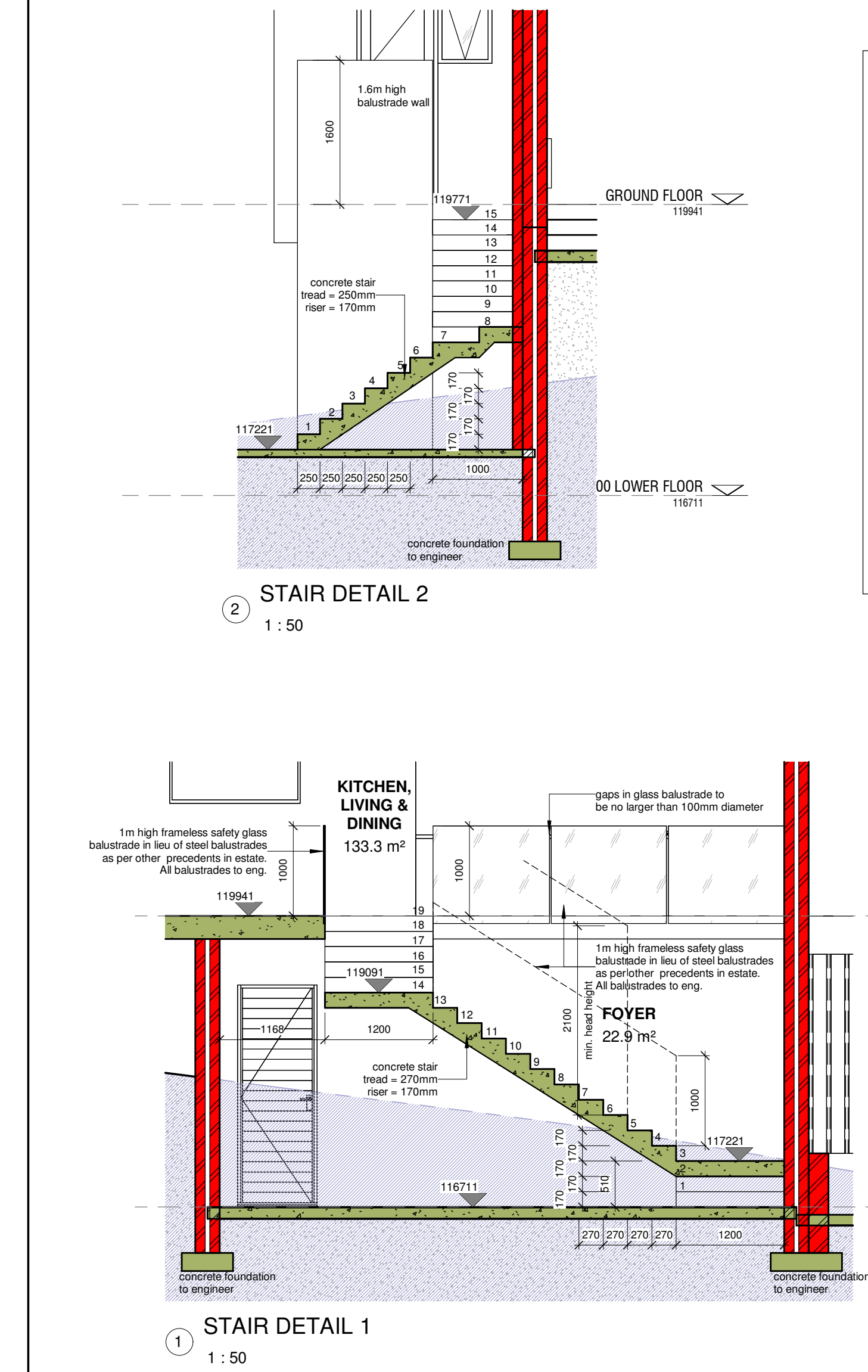
This application has been approved in terms of Section 7 (1) (a) of the National Building Regulations and Building Standards Act of 1977, subject to the conditions in the attached letter of approval.

Planning & Building Development Management

Approval Number: 0027794

Application Number: 001700573156

WINDOW SCHEDULE		WINDOWS SEEN FROM OUTSIDE OR OTHERWISE SPECIFIED		NOTE: ALL WINDOW OPENERS TO BE 100MM ABOVE FFL FOR SAFETY & ALL GLAZING TO BE CHECKED AND CERTIFIED BY GLAZING SPECIALIST & CLIENT TO SIGN-OFF DESIGN & COLOUR BEFORE MANUFACTURING POWDERCOATED ALUMINIUM FRAMED DOORS & WINDOWS, COLOUR CHARCOAL GLASS NOTE: ALL GLAZING TO BE CLEAR, GREY/SMOKE TINTED ONLY	
W01		total - 2		W02	
W03		total - 1		W04	
W05		total - 1		W06	
W07		total - 1		W08 HIGH LEVEL WINDOW ABOVE BEDROOM 3	
W09 HIGH LEVEL WINDOW ABOVE LIVING AREA		total - 1		W10 HIGH LEVEL WINDOW ABOVE BEDROOM 2	



External wall calculation according to SANS 10400 Part XA
Required CR-Value : 80 CRh
Double skin masonry with 50mm air cavity: 60 CRh
Plastered and rendered internally: 20 CRh
Plastered and rendered externally: 20 CRh
Total: 100 CRh
Energy usage and Orientation
The orientation and shading will comply with SANS204 or specified by a rational design by a competent person

CONSTRUCTION NOTES:		
Public Safety - SANS 10400 Part D - Any change in level greater than 800mm shall be protected with a wall, balustrade or barrier railing at a min. height of 1m. - Any site with a swimming pool shall be provided with a wall or fence by the owner to restrict access from any street or public space or any adjoining site, other than through a gate that is self-closing and self-latching with provision for locking. Such wall or fence must be min 1.2m high and have opening smaller than 100mm. - The construction of such a gate or fence must comply with the requirements of SANS1390 - It is the responsibility of the OWNER of the site to control access to any swimming pool. Failing to comply with the regulations shall deem the owner guilty of an offence.	Public Safety - SANS 10400 Part D - Corrugated or br profile sheeting of any material must be laid at a min angle of 11 degrees with min. 250mm overlaps or as specified by architect - Any flat roof with no hips or valleys under 11 degrees pitch must be long span sheets laid in accordance with manufacturers specs with overlapping to manufactures spec - A 15mm x 10mm drip must be provided 50mm from edge of all concrete roofs - A 75mm corner fillet must be cast into all concrete roofs with upstand beams/parapet walls - All kind of truss elements, purlins, battens and all bracing to be in accordance with SANS 10400part L - All ceiling bracing/ battens to be installed as per SANS2001-C12 - No part of roof assembly made of combustible material shall pass through a fire separating element. This includes garages and diving walls	General construction notes - Roofs - All roofs rafters or beams must be fixed with 1.6mm thick x 30mm wide galvanised steel straps min. 600mm into walls - Rafter or beams built into wall must be wrapped with dpc. - Solid unit/brick construction - Brickwork must be provided at the following places: - Every 4th course or no less than 425mm apart - In the bottom 2 courses immediately above floor slab - In every course above all lintols to extend 600mm beyond openings and for min 5 courses above opening - Hollow unit/brick construction - Brickwork must be provided at the following places: - Every 3rd course or no less than 400mm apart - In the bottom 2 courses immediately above floor slab - In every course above all lintols to extend 600mm beyond openings and for min 5 courses above opening - Columns and Beams - Provide reinforced beams over openings wider than 3000mm. - Opening less than 3000mm to have pre-cast concrete lintols - Reinforced concrete columns and beams to engineer - DPC - Stepped dpc to be provided to all external walls - Supply vertical dpc to all level changes - Retaining walls with agricultural drains and waterproofing detail to engineer - Plumbing - Plumbing installation to comply with local authority requirements and SANS 10400 part P - Plumbing to be enclosed system of 110mm dia. uPVC pipes at min. 1.60 fall. - All vent pipes to be 50mm dia. uPVC pipes - All heights pertaining to drainage to be checked and confirmed on site prior to installation - All bends to have min. 900mm inside radius - All drains below building to be encased in concrete - Plaster - All walls to be plastered in accordance with minimum manufactures standards (eg PPC Portland Cement or similar, SABS approved) - Paint - All walls to be painted in accordance with min. manufactures standards (eg Dulux or similar SABS approved)
Excavations - SANS 10400 Part G - No foundation may be deeper than 3m without the design of a competent person - The slope of cutting in permanent excavations shall not be steeper than 1:2, except on rock where it may be vertical - Any excavation shall be sloped so that the water does not pond within 3m of toe of cutting - Surface water must be diverted to prevent erosion from running down the cut. - Where any excavation may cause movement, damage or any conditions on the adjacent sites to change the necessary precautions must be taken to prevent such.	Stairs - SANS 10400 Part M - The headroom at any point above stair must be 2.1m high (any discrepancies must be reported to the architect before commencement of the staircase) - Min landing widths must be 900mm by the width of the staircase - No flight of stairs to have a vertical rise greater than 3m between landings - The rise of any step must not be greater than 200mm - The tread of any step must not be less than 250mm - The variation in the height of the treads may not be more than 6mm - Any flight of steps containing more than 3 risers shall have protection on both sides provided by a secure wall, balustrade or railing that complies with SANS 10400 - All balustrade 1.0m above floor level and shall not contain any opening that will permit the passage of a 100mm dia. ball	
Floors - SANS 10400 Part J - Timber floors - All timber used in the erection of a building shall be preservative treated in accordance with SANS 10005 - Concrete floors (Surface bed) - Must have a min thickness of 75mm with a MPa of 15 - Must be reinforced with min 5mm thick steel mesh with min 50mm coverage - Must have a min compacted sand bedding of 50mm thickness on top of hardcore fill to create a smooth finish for damp proof membrane - Should not have a level difference of more than 4mm - Must have a damp proof membrane underneath of min 250micron thick - Damp proof membrane must overlap at joints by min 200mm - Penetration through damp proof membrane or pipes through damp proof membrane shall be taped with a pressure sensitive adhesive tape approved by manufacturer for such use - Hardcore fill - Underneath all concrete floor there must be a layer of min 150mm thick hardcore fill with the following requirements: - Must contain little or no organic material - Excludes stones with a average diameter larger than 75mm - Must not contain any clay lumps or large amounts of clay - Filling - Filling shall be moistened before compaction so that a handful squeezed in the hand is firm, but does not show signs of moisture - Filling shall be placed in uncompacted layers not exceeding 100mm in respect to hand compaction and 150mm in respect of mechanical means - Each layer must be well compacted before additional fill material is added	Glazing - SANS 10400 Part N - All glazing needs to be installed into a frame as per SANS 2001-CG1 - All glazing must comply with parts 1 to 5 of SANS 50572 - Frames to receive glazing shall comply with the requirements of SANS 727 or SANS 1553-2 - All glazing thickness must be determined and specified by a competent glazing specialist and must comply with SANS 10137 - Bathroom glass to architects specification - All glazing used for balustrades to be safety glazing (thickness as per specialist) - All glazing in excess of 1sq.m and closer than 500mm to floor fins to be safety glazing (thickness as per specialist) - All glazing used in doors and sidelights to be safety glazing (thickness as per specialist) - Where transparent glazing is used and is not likely to be apparent to, or suspected by any person approaching it, such glazing shall bear markings that shall render it apparent to such a person - All safety glazing materials shall be permanently marked in such a manner that the markings are visible in individual panes after installation - All glazing used in shopfront closer than 2.1m from finished floor level to be safety glazing - Any glazing within 1.8m of pitch line of stairs to be safety glazing (thickness as per specialist) - All glazing used in internal partitions closer than 2.1m from finished floor level to be safety glazing	Lighting & Ventilation - SANS 10400 Part O - Any habitable room or room containing a toilet, wash basin, shower or bath must have a window with an area including frame of min 10% of the floor area of such a room with min 2% of the floor area to be able to open - Any habitable room, toilet, work room, sauna or refuse room that is not naturally ventilated, to have an artificially ventilated system as per specialist. Such ventilation system must remain on for a period after use to ensure that no moisture build up. - Any room that has means of natural ventilation and needs to be mechanically ventilated containing a toilet, bath, shower, wash basin or urinal shall be mechanically ventilated with fresh air from outside of building at a rate of min 25liters per second or min 10 air changes per hour. Stale air must be ducted to outside and shall not be ducted into a habitable room or any space that is not naturally ventilated. Such system shall be connected to a detection sensor to activate the system and not to a on/off switch. Walls - SANS 10400 Part K - There must be a min. brickwork of 400mm above all openings - Mortar must be min class II (BMPa) and comply with requirements of SANS2001-CM1 - Foundations walls must not be thinner than the walls they support - Height of foundations walls must not exceed 1.5m - Castles must not be less than 50mm or more than 100mm. Galvanised wall ties to have a galvanizing of 750g/sq.m - Within 30m radius from coast line all galvanising must be grade2 - Vertical joints shall be provided where there is a storey height change in the height of the external walling and where setbacks produce return on plan of less than 800mm (such joint must be present in the plaster finish) - The max. length of a free end wall or wall without a return into a vertical control joint can be 18m - With hollow core units immediately adjacent to the openings shall be reinforced with a single Y10 bar that extends from floor to the top of the lintol and must be filled with 25MPa's fill concrete - All joints must be sealed with a SABS and SANS approved sealant that is UV resistant, waterproof and flexible. Such joints must be between 10 and 12mm done as set out in SANS part K - All external cavity walls must have a stepped barrier between the outside and inside skin with fall to outside with vertical openings not less than 600mm apart

Fenestration Calculations in accordance with Table 4 of SANS 10400 Part XA			
Climate zone: 4 Nett floor area of building envelope (NFA): Lower floor layout = 155.1sqm Fenestration Allowed: 20% of NFA = 31.02sqm Actual: 37.79sqm Total fenestration for this floor = < 35%, thus fenestration elements to have minimum performance of 5.20mPK U-value Glazing for lower floor specified to have a U-value of 5.20mPK or similar			
Climate zone: 4 Nett floor area of building envelope (NFA): Ground floor layout = 287.4sqm Fenestration Allowed: 20% of NFA = 57.48sqm Actual: 103.03sqm Total fenestration for this floor = < 45%, thus fenestration elements to have minimum performance of 2.60mPK U-value Glazing for lower floor specified to have a U-value of 2.60mPK or similar			
WINDOW & DOOR NOTES - All architectural details and specifications to the fenestration calculations to comply with SANS10400 Part X (Energy sufficiency), Part T (fire) and Part N (Glazing) AIR LEAKAGE TO WINDOWS & DOORS - Air leakage shall not exceed: Operable fenestration area at max of 2L/s/m2 fixed glazing/fenestration area at max. 0.306 L/s/m2 Swing door & sliding doors fenestration area at max. 5L/s/m2			
SHGC factor:0.13	442.50sqm x 0.13 = 57.53		
	Max. value	Actual value	
SHGC	57.53	51.20	

PROJECT:	ERF 10416 Houtbay Lower floor			
ZONE:	4			
	Climate Zone Factor:	Net Floor Area:	total fenestration	Percentage
Conductance (Cu):	1.4	155.1	37.79	0.24
Conductance (Cu):	Height (m):	Width (m):	No. of:	Area (A) (m²):
W01	0.9	1.8	1	1.62
W02	2.4	0.9	0	0.00
W03	0.9	3.075	0	0.00
W04	0.9	0.9	1	0.81
W05	2.4	2.7	0	0.00
W06	0.8	3.467	0	0.00
W07	0.8	5	0	0.00
W08	0.9	4.2	0	0.00
W09	1.2	8.8	0	0.00
W10	0.9	4.97	0	0.00
D1	5.6	3.1	1	17.36
D4	2.4	4.2	1	10.08
D5	2.4	3.3	1	7.92
D9	2.4	7.9	0	0.00
D10	2.4	5.2	0	0.00
D11	2.4	6.8	0	0.00
D12	2.4	0.9	0	0.00
D13	2.4	6.7	0	0.00
				37.79
TOTAL:				

Solution: Glazing for lower floor specified to have U-value of 5,2 K/sqm K or similar

PROJECT:	ERF 10416 Houtbay Ground floor			
ZONE:	4			
	Climate Zone Factor:	Net Floor Area:	total fenestration	Percentage
Conductance (Cu):	1.4	287.4	123.03	0.42
Conductance (Cu):	Height (m):	Width (m):	No. of:	Area (A) (m²):
W01	0.9	1.8	1	1.62
W02	2.4	0.9	3	6.48
W03	0.9	3.075	1	2.77
W04	0.9	0.9	2	1.62
W05	2.4	2.7	1	6.48
W06	0.8	3.467	1	2.77
W07	0.8	5	1	4.00
W08	0.9	4.2	1	3.78
W09	1.2	8.8	1	10.56
W10	0.9	4.97	1	4.47
D1	5.6	3.1	0	0.00
D4	2.4	4.2	0	0.00
D5	2.4	3.3	0	0.00
D9	2.4	7.9	1	18.96
D10	2.4	5.2	2	24.96
D11	2.4	6.8	1	16.32
D12	2.4	0.9	1	2.16
D13	2.4	6.7	1	16.08
				123.03
TOTAL:				

Solution: Glazing for lower floor specified to have U-value of 2,6 K/sqm K or similar

HOUSE HAGLEYS

PROJEK / PROJECT

NEW RESIDENCE
FOR HAGLEYS DEVELOPMENT
ON ERF 10416 HOUTBAY

KLIENT / CLIENT

HAGLEYS DEVELOPMENT



MARIETTE BARNARD ARCHITECTS
Professional Architect
Prarch.24713250
mariette@mbarch.co.za
tel: 082 415 8205

TEKENING BESKRYWING / DRAWING DESCRIPTION

COUNCIL SUBMISSION DRAWINGS

NOTES: WINDOW SCHEDULE

SKAAL: SCALE:	AS SHOWN	TEKENING NOMMER: DRAWING NUMBER	
DATUM: DATE:	29-04-2025	24-2744- 801	
GETEKEN: DRAWN:	JvW	kopiereg voorbehou copyright reserved	

It remains the responsibility of the home owner to adhere to all the stipulations in the Architectural guidelines

CITY OF CAPE TOWN

DEVELOPMENT MANAGEMENT

Recommended for Approval

Building Control Officer / Delegetee

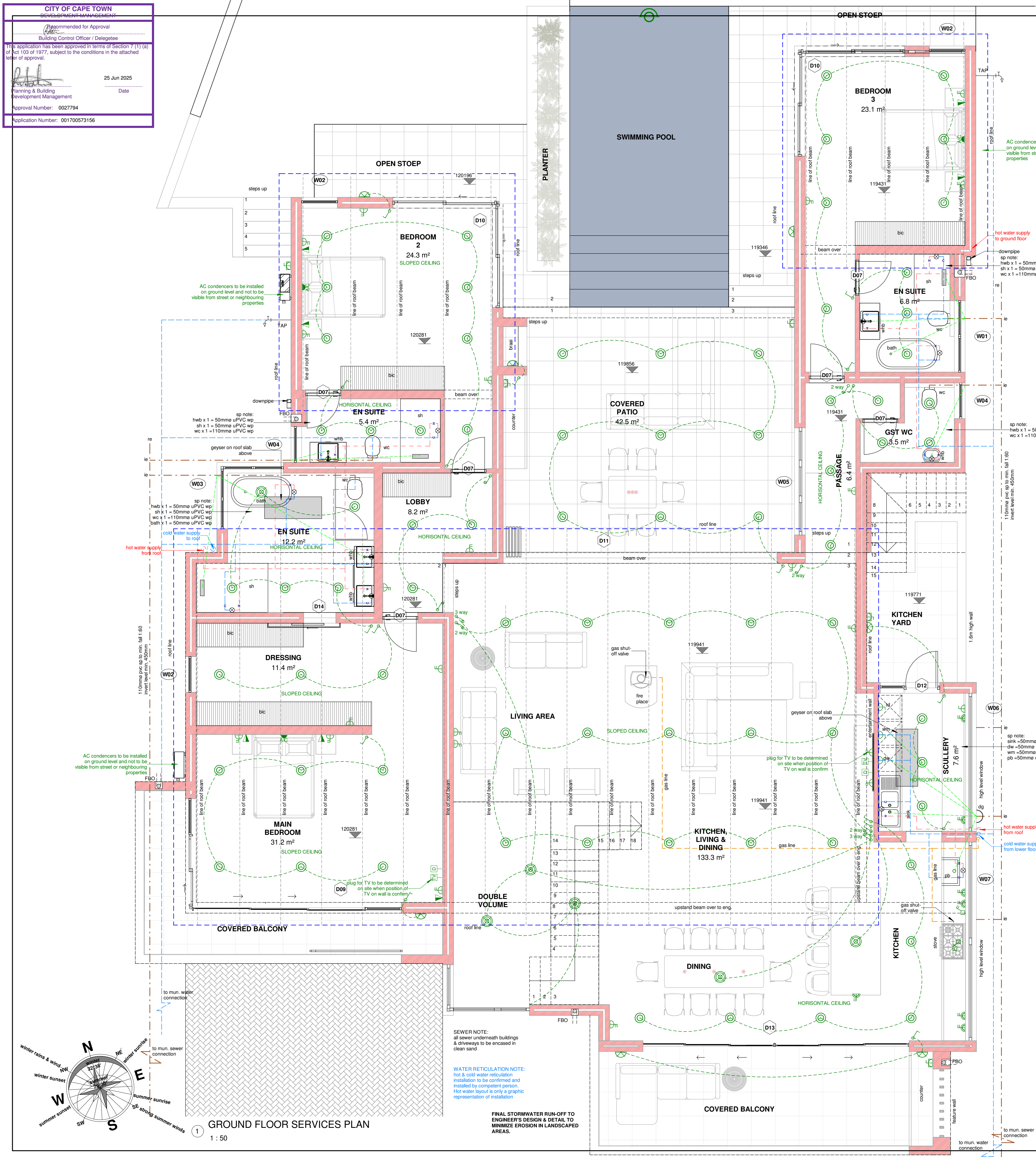
This application has been approved in terms of Section 7 (1) (a) of Act 103 of 1977, subject to the conditions in the attached letter of approval.

25 Jun 2025

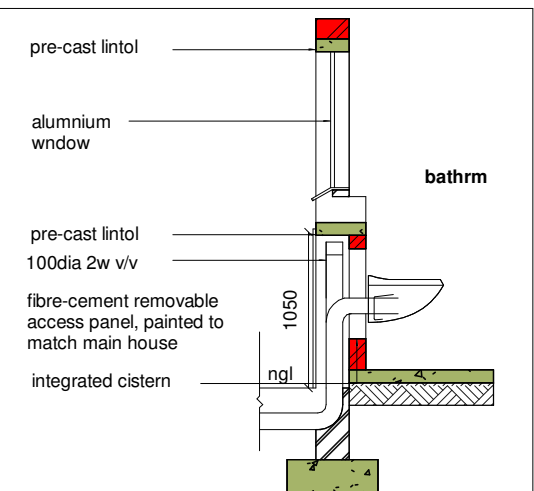
Planning & Building Development Management

Approval Number: 0027794

Application Number: 001700573156



Theoretical annual energy consumption calculation according to SANS10400 Part XA	
Energy Demand (Occupancy = H4)	
Maximum allowed per Table 12: SANS204: 5W/sqm	
Total floor area: 546.2sqm	
Allowed for this dwelling: 2731.0W/sqm	
Actual:	
Total used in this dwelling:700W	
700W is less than 2731.0W or	
546.2sqm/ 2731.0W = 0.2W/sqm which is less than 5W/sqm	
Energy consumption: (Occupancy = H4)	
Maximum allowed: 5kWh/sqm per annum	
Total floor area: 546.2sqm	
Allowed per Table 12: SANS204: 5 kWh/sqm.a	
Allowed on this house: 2731.0 kWh.a	
Used: (all lights)	
Assumed lamp usage: 5 hours per day(17h00-22h00)	
52 weeks x 7 days x 5 hours: 1820 hours per annum (h.a)	
Lamps= 700W or 0.700kW	
0.700kW x 1820 h.a = 1274.00 kWh.a which is less than 2731.0 kWh.a	



INTERNAL DUCT DETAIL
SCALE: 1:50

THERMAL INSULATION NOTES (AS PER SANS10252-1)	HOT WATER SUPPLY NOTES (AS PER SANS10400- X2)
a. Pipes, fittings and components shall, when necessary, be protected against freezing. The insulation provided shall be appropriate to the minimum temperatures that can be expected in that geographical area. b. All exposed pipes to and from the hot water cylinders and central heating system shall be insulated with pipe insulation with a thermal resistance (R-value) measuring unit (m²·K/W) in accordance with Table 10, meaning R-value of 1,00 for a 15mm thick pipe. c. Insulation shall: 1. be protected against the effects of weathers and sunlight 2. be able to stand the temperatures within the piping, and 3. achieve the minimum total R-value given in Table 10. d. Insulation of vessels, tanks and piping containing cooling water shall be protected by a vapour barrier on the outside of the insulation e. The piping insulation requirements do not apply to space heating water piping. 1. located within the space being heated where the piping is to provide the heating to that space or; 2. encased within a concrete floor slab or in masonry; f. After thermal insulation material has been installed the outer surface of any insulation material shall be made as smooth as possible to minimise the within 1m of the connection to the heating or cooling system. NOTE that roughness increases the effective surface area of insulation material and consequently heat losses and moisture increase of the thermal conductivity of the material	In order to comply with functional regulation XA2, contained in part XA of the National Building Regulations, the following guidance is provided: a. The volume of the annual hot water requirements shall be calculated in accordance with Table 2 and 5 of SANS 10252-1:2012 and b. If solar heating systems are used it shall comply with SANS1307, SANS10106, SANS10254 and SANS 10252-2 and based on the performance determined in accordance with provision of SANS 6122-2 and SANS6211-1. Hot water usage shall be minimised and the system maintained in accordance with the requirements given in SANS 10252-1. c. Requirements for water installations in buildings shall be in accordance with SANS10252-1 and SANS 10254 d. All new hot water pipes less than 80mm to have a r-value of 1 and hot water pipes larger than 80mm to have a r-value of 1.5. e. Thermal insulation, if any, shall be installed in accordance with the manufacturers instructions. HOT WATER VESSEL (GEYSER) a. Hot water vessel tanks shall be insulated with a material that achieves a minimum R-value of 2. Plumber to install isover 100mm (2 x 50mm) thick non-combustible, lightweight Glasswool foil faced geyser insulation blanket, size 9507 x 1200mm with edges sealed with bonding tape including 15x20mm Glasswool Snap-on pipe insulation on hot and cold water pipes, all installed in accordance with manufacturer's recommendations

ELECTRICAL LEGEND			
	recessed downlighter		hob & oven connection and isolator
	uplight in planters		light switch centre 1300mm above ffl
	ceiling surface mounted light		2 way/3 way light switch 1300mm above ffl
	pendant light		dimmer switch 1300mm above ffl
	external watertight wall mounted light with daylight bulbs		extractor & isolator
	internal wall light		telephone, internet point & reception device
	low voltage decorative pendant above counter		T.V. point with double plug - both at 1500mm above ffl
	double fluorescent light fitting		Door Bell
	pool light		remote control plug for garage door
	track light		distribution board
	external waterproof plug		USB point at plug
	single floor level plug centre 250mm above ufl		AC Plug Point
	double floor level plug centre 250mm above ufl		heated towel rail
	single counter level plug centre 1100mm above ufl		Shaving Plug Point
	double counter level plug centre 1100mm above ufl		Ceiling Fan

TOTAL WATTS IN BUILDING (interior only)			
FITTING	WATTS	QUANTITY	TOTAL watts
	4w	96	384w
	28w	5	140w
	4w	14	56w
	36w	1	36w
	14w	5	70w
	14w	1	14w
TOTAL			700w

WATER RETICULATION LEGEND	
	Tap (external)
	Mixer (single manual controls, single lever)
	Cold water pipe
	Hot water pipe

Calculations for hot water supply according to SANS 10400 Part XA		
Volume of annual hot water heating requirements: Population calculation:		
Bedrooms: 4x	People per bedroom: 2	Total: 8
Hot water calculation		
Demand: 50l/person/day	Storage volume: 2x150lunits & 50l combi slim	Heater power: 3 kw/unit
50x8=400 l/day	400l/350l=1.1 unit	3kwx1.1=3.3kw/day
Thus: 1204.5kW/Year		
Water heating to 2 x 150l geysers & 50l combi slim geyser to be supplied by heat pump and to supply 50% of annual hot water demand in terms of part XA of SANS 10400. Check with manufacturer subject to: SANS1307, SANS 10106, SANS 6211-1, SANS 6211-2 SANS 10254 and 10252-1. Geysers are to be wrapped in insulation blanket with an R-value to satisfy Part XA of SANS 10400. Where applicable, solar & heat pump installations are to be by specialists. All exposed hot water pipes <80mm a must be insulated with a material that has a minimum R-value of 1.00		
PLUMBING Installation to comply with local authority requirements and SANS 10400. All toilets to be Dual flush cistem with a 3ltr and 6ltr flush. Taps to have maximum flow rate of 6ltr/minute. Shower heads a maximum flow rate of 7ltr/min. There is to be demand or metering taps at wash hand basin.		

HOUSE HAGLEYS

PROJEK / PROJECT

NEW RESIDENCE
FOR HAGLEYS DEVELOPMENT
ON ERF 10416 HOUTBAY

KLIJNT / CLIENT

HAGLEYS DEVELOPMENT

MARIETTE BARNARD ARCHITECTS

MARIETTE BARNARD ARCHITECTS
Professional Architect
Prarch.24713250
mariette@mbarch.co.za
tel: 082 415 8205

TEKENING BESKRYWING / DRAWING DESCRIPTION

COUNCIL SUBMISSION DRAWINGS
NOTES: ELECTRICAL LAYOUTS

SKAAL: AS SHOWN

TEKENING NOMMER: 24-2744- 902

DATUM: 29-04-2025

GETEKEN: JvW

TEKENING NOMMER: 24-2744- 902

kopiereg voorbehou
copyright reserved

GROUND FLOOR SERVICES PLAN
1 : 50

SEWER NOTE:
all sewer underneath buildings & driveways to be encased in clean sand

WATER RETICULATION NOTE:
hot & cold water reticulation installation to be confirmed and installed by competent person. Hot water layout is only a graphic representation of installation

FINAL STORMWATER RUN-OFF TO ENGINEER'S DESIGN & DETAIL TO MINIMIZE EROSION IN LANDSCAPED AREAS.

CITY OF CAPE TOWN
DEVELOPMENT-MANAGEMENT

Recommended for Approval

Building Control Officer / Delegetee

This application has been approved in terms of Section 7 (1) (a) of Act 103 of 1977, subject to the conditions in the attached letter of approval.

25 Jun 2025

Date

Planning & Building Development Management

Approval Number: 0027794

Application Number: 001700573156

GAS NOTES:

- Low pressure installation
- 15mm Copper pipes (class 1 or higher) to be used
- Copper fittings to be used
- All buried pipes to be enclosed in protective sleeve
- With pipelines that are buried, the backfill shall incorporate an approved means (like chevron tape halfway between the surface and the pipe) to identify the existence of the pipe
- Above ground piping allowed if protected from direct sunlight
- Copper pipes shall be protected from corrosion in an approved manner
- Copper pipes in concrete shall be embedded 50mm from the surface of the concrete slab and the top of the pipe
- No mechanical joints to be installed pipes that are embedded in floor slabs or walls
- 9kg DCP fire extinguisher to be installed
- gas bottle min. 1m away from window & door opening (SANS 10087)
- gas bottle to be min. 2m away from guiley & manhole (SANS 10087)
- gas bottle to be min. 3m underneath window opening (SANS 10087)

GENERAL NOTES: GAS INSTALLATION

The installation must be installed in compliance with SANS 10400, 10087:1

At least 1 9kg dry chemical powder BC type fire extinguisher must be provided per installation.

SABS approved symbolic signs:

NO OPEN FIRES

NO UNAUTHORIZED PERSON

NO LITTERING AT CAGE - SIGNS MUST BE PROVIDED

Gas cage must be provided with locks for protection.

No cylinders are allowed to be stored outside an approved LPG cage.

LPG signs to be displayed on front of the entrance of the primes.

Should have adequate ventilation

A test certificate must be provided by the installer.

All electrical cables must be a minimum of 150mm below any gas pipes, except electric cables in appliances.

Gas piping shall not be used as an earth for electrical circuits.

All buried steel pipes must be corrosion protected in any approved manner. Schedule 40 steel pipes and wrought fittings which comply with SANS 62-1 must be used.

All underground pipes must be placed a minimum of 50mm below the top of the concrete surface bed.

Pipes that are to be embedded in concrete must be tested before completion of the applicable floor.

Pipe lines to be tested prior to completion of the installation.

Kitchens must be adequately ventilated by the use of at least one airtick in an external wall.

A test certificate must be provided before any product is supplied.

Gas supply line must be tamper proof.

The user must ensure that appliances, components of a system be inspected at regular intervals not exceeding 5 years.

All hoses used on outdoor installations must be replaced after 5 years.

The fire department must be informed at least 2 working days in advance before any work of the installation.

General:

Application for a certificate of registration must be applied for to the fire department, on completion of the installation before any product (LPG) is supplied.

This installation is subject to Local Authority approval.

All mandatory fire equipment to be present and maintained.

Area around main shut off point to be kept clear of any combustible materials

Gas pipelines to be installed and pressure tested by registered gas installer.

ALL PIPEWORK ABOVE GROUND LEVEL TO BE CLASS 16 IN GALVANISED IRON

FIREWALLS UP TO ROOF COVERING

Calculations for hot water supply according to SANS 10400 Part XA		
Volume of annual hot water heating requirements: Population calculation:		
Bedrooms:	People per bedroom:	Total:
4x	2	8
Hot water calculation		
Demand:	Storage volume:	Heater power:
50l/person/day	2x150l/units x 50l combi slim	3 kw/unit
50x6=400 l/day	400l/350=1.1 unit	3kwx1.1=3.3kw/day
Thus:1204.5kW/Year		
Water heating to 2 x 150l geysers, & 50l combi slim geyser to be supplied by heat pump and to supply 50% of annual hot water demand in terms of part XA of SANS 10400. Check with manufacturer subject to: SANS1307, SANS 10106, SANS 6211-1, SANS 6211-2 SANS 10254 and 10255-1		
Geysers are to be wrapped in insulation blanket with an R-value to satisfy Part XA of SANS 10400.		
Where applicable, solar & heat pump installations are to be by specialists.		
All exposed hot water pipes <80mm o must be insulated with a material that has a minimum R-value of 1.00		
PLUMBING		
Installation to comply with local authority requirements and SANS 10400. All toilets to be Dual flush cistern with a 30 and 60 flush. Taps to have maximum flow rate of 6ltr/minute. Shower heads a maximum flow rate of 7ltr/min. There is to be demand or metering taps at wash hand basin.		

WATER RETICULATION LEGEND	
	Tap (external)
	Mixer (single manual controls, single lever)
	Cold water pipe
	Hot water pipe

LOWER FLOOR SERVICES PLAN
1:50

TOTAL WATTS IN BUILDING (interior only)			
FITTING	WATTS	QUANTITY	TOTAL watts
recessed downlighter	4w	96	384w
pendant light	28w	5	140w
external watertight wall mounted light with daylight bulbs	4w	14	56w
double fluorescent light fitting	36w	1	36w
uplight in planters	14w	5	70w
pool light	14w	1	14w
TOTAL			700w

ELECTRICAL LEGEND			
	recessed downlighter		hob & oven connection and isolator
	uplight in planters		light switch centre 1300mm above flt
	ceiling surface mounted light		2 way/3 way light switch 1300mm above flt
	pendant light		dimmer switch 1300mm above flt
	external watertight wall mounted light with daylight bulbs		extractor & isolator
	internal wall light		telephone, internet point & reception device
	low voltage decorative pendant above counter		T.V. point with double plug - both at 1550mm above flt
	double fluorescent light fitting		Door Bell
	pool light		remote control plug for garage door
	track light		distribution board
	external waterproof plug		USB point at plug
	single floor level plug centre 250mm above ufl		AC Plug Point
	double floor level plug centre 250mm above ufl		heated towel rail
	single counter level plug centre 1100mm above ufl		Shaving Plug Point
	double counter level plug centre 1100mm above ufl		Ceiling Fan

Theoretical annual energy consumption calculation according to SANS10400 Part XA	
Energy Demand (Occupancy = H4)	
Maximum allowed per Table 12- Sans204: 5W/sqm	
Total floor area: 546.2sqm	
Allowed for this dwelling: 2731.0W/sqm	
Actual:	
Total used in this dwelling:700W	
700W is less than 2731.0W or 546.2sqm/ 2731.0W = 0.2W/sqm which is less than 5W/sqm	
Energy consumption: (Occupancy = H4)	
Maximum allowed: 5kWh/sqm per annum	
Total floor area: 546.2sqm	
Allowed per Table 12- Sans204: 5 kWh/sqm.a	
Allowed on this house: 2731.0 kWh/a	
Used: (all lights)	
Assumed lamp usage: 5 hours per day(17h00-22h00)	
52 weeks x 7 days x 5 hours: 1820 hours per annum (h.a)	
Lamps= 700W or 0.700kW	
0.700kW x 1820 h.a = 1274.0 kWh/a which is less than 2731.0 kWh/a	

SEWER NOTES:

Sewerage layout to comply with SANS 10400 PART P

CE: Clearing eye, glazed earthenware pipe with cast iron cover. Encased in 150mm concrete surround.

IE: Inspection eye. Standard pipe with glazed earthenware cover, sealed with Bitumen.

Waste pipes. SABS approved galvanised mild steel with dia. as indicated. Soil vent valve vacuum relief function. Nominal size 110mm in compliance with SABS code 1535:1991.

Note: All work to be done in accordance with local authority's specification. Refilling trenches. Refill with clean dry soil & ram down thoroughly, level with existing level.

Concrete tie IE cover. 450x450mm loose concrete4 ties over IE's passing beneath concrete apron. Ties must be marked distinctly & must be removable for inspection purposes.

Concrete castings. All vented clay pipes under walls, foundations & paving must be encased in 150mm-200mm. 6-3:1 concrete.

Couplings vitrified clay pipes - SABS approved. Vitro-Helpseive Polypropylene couplings.

Drainage test. A final drainage test will be executed to the approval of the owner & Arch. professional.

All drainage pipes closer than 900mm from building or strip foundations to be encased in 150mm - 200mm concrete.

Strip foundations over drains to be reinforced.

All waste fittings fitted with seal traps.

No bends or junctions under building.

All hwb's, sinks, troughs to be fitted with S or P traps.

110mm dia UPVC sewer pipe

50mm dia UPVC water pipe

ADDITIONAL NOTES:

All sewer pipes to be sealed as per manufacturer's specifications.

Sewer to be tested and certified by a registered plumber.

All waste & sewer pipes to be laid to a min 1:50 gradient and to start at min 450mm below ground level at any point.

Please note:

All ducts to have a cavity of 250 x 300mm, for easy accessibility, in which pipes will be concealed

All trenches, and building works must be done in such a manner so that there will minimum damage to current vegetation.

THERMAL INSULATION NOTES (AS PER SANS10252-1)	HOT WATER SUPPLY NOTES (AS PER SANS10400- XZ)
a. Pipes, fittings and components shall, when necessary, be protected against freezing. The insulation provided shall be appropriate to the minimum temperatures that can be expected in that geographical area. b. All exposed pipes to and from the hot water cylinders and central heating system shall be insulated with insulation having a thermal resistance (R-value) measuring unit (m2- K/W) in accordance with Table 10, meaning R-value of 1.00 for a 15mm thick pipe. c. Insulation shall: 1. be protected against the effects of weathers and sunlight 2. be able to stand the temperatures within the piping, and 3. achieve the minimum total R-value given in Table 10. d. Insulation of vessels, tanks and piping containing cooling water shall be protected by a vapour barrier on the outside of the insulation e. The piping insulation requirements do not apply to space heating water piping. f. Located within the space being heated where the piping is to provide the heating to that space or 2. encased within a concrete floor slab or in masonry, such piping shall comply with this part of SANS10252. f. After thermal insulation material has been installed the outer surface of any insulation material shall be made as smooth as possible to minimise the within 1m of the connection to the heating or cooling system.	In order to comply with functional regulation XA2, contained in part XA of the National Building Regulations, the following guidance is provided: a. The volume of the annual hot water requirements shall be calculated in accordance with Table 2 and 5 of SANS 10252-1:2012 and b. If solar heating systems are used it shall comply with SANS1307, SANS10106, SANS10254 and SANS 10252-2 and based on the performance determined in accordance with provision of SANS 6122-2 and SANS6211-1. Hot water usage shall be minimised and the system shall be installed in accordance with the requirements given in SANS 10252-1. c. Requirements for water installations in buildings shall be in accordance with SANS10252-1 and SANS 10254 d. All new hot water pipes less than 80mm to have a r-value of 1 e. All hot water pipes larger than 80mm to have a r-value of 1.5. f. Thermal insulation, if any, shall be installed in accordance with the manufacturers instructions.
HOT WATER VESSEL (GEYSER)	a. Hot water vessel tanks shall be insulated with a material that achieves a minimum R-value of 2. Plumber to install thermal 100mm (2 x 50mm) thick non-combustible, lightweight glasswool foil faced geyser insulation blanket, size 3507 x 1200mm with edges sealed with binding tape including 15x200mm Glasswool Snap-on pipe insulation on hot and cold water pipes, all installed in accordance with manufacturer's recommendations