

DEVELOPMENT APPLICATION

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Window Schedule

ID	WIN.01	WIN.02	WIN.03	WIN.04	WIN.05	WIN.06	WIN.07	WIN.08	WIN.09
Glass Type	Obscure	Clear	Obscure	Obscure	Obscure	Clear	Obscure	Clear	Obscure
Window Type	Louvre	Louvre	Louvre	Louvre	Louvre	Louvre	Awning	Sliding	Awning
Quantity	1	1	1	1	1	1	2	4	1
Wallhole Dimensions W x H	5,764×2,900	6,064×900	2,550×2,600	1,500×2,600	2,117×2,600	3,315×900	1,200×900	3,000×900	800×900
Sill height	100	1,800	549	100	100	1,800	1,500	1,500	1,500
Head height	3,000	2,700	3,149	2,700	2,700	2,700	2,400	2,400	2,400
Glazed area in sqm	16.72	5.46	6.63	3.90	5.50	2.98	1.08	2.70	0.72
2D Symbol									
2D Elevation									

Door Schedule

ID	D.01	D.02	DR.05	GD.01	PD.01	SD.01	SD.01	SD.02	SD.03
Quantity	1	7	1	1	1	1	1	1	1
Wallhole Dimension W x H	1,000×2,700	900×2,700	800×2,700	5,200×2,900	1,500×2,700	900×2,700	900×2,700	1,000×2,700	6,000×2,700
Sill height	0	0	0	0	0	0	0	0	0
Head height	2,700	2,700	2,700	2,900	2,700	2,700	2,700	2,700	2,700
2D Symbol									
2D Elevation									

BASIX Commitment

BASIX[®] Certificate

Building Sustainability Index www.basix.nsw.gov.au





Single Dwelling

Certificate number: 13745485

This certificate confirms that the proposed development will meet the NSW government's requirements for sustainability, if it is built in accordance with the commitments set out below. Terms used in this certificate, or in the commitments, have the meaning given by the document entitled "BASIX Definitions" dated 10/09/2020 published by the Department. This document is available at www.basix.nsw.gov.au

Secretary
Date of issue: Wednesday, 01 November 2023
To be valid, this certificate must be lodged within 3 months of the date of issue.



Project summary		
Project name	Lot B - 17 Haig Ave, Georges Hall	
Street address	17 HAIG AVENUE GEORGES HALL 2198	
Local Government Area	Canterbury-Bankstown Council	
Plan type and plan number	Deposited Plan DP8855	
Lot no.	17	
Section no.	E	
Project type	dwelling house (detached)	
No. of bedrooms	5	
Project score		
Water	 44	Target 40
Thermal Performance	 Pass	Target Pass
Energy	 74	Target 72
Materials	 -32	Target n/a

Certificate Prepared by		
Name / Company Name:	Greenworld Architectural Drafting	
ABN (if applicable):	70203970543	

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Thermal Performance and Materials commitments			Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Simulation Method					
Assessor details and thermal loads					
The applicant must attach the certificate referred to under "Assessor Details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for an occupation certificate for the proposed development.					
The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.					
The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX certificate, including the Cooling and Heating loads shown on the front page of this certificate and the "Construction" and "Glazing" tables below.					
The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Assessor Certificate requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor to certify that this is the case. The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.					
The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.					
The applicant must show on the plans accompanying the development application for the proposed development, the locations of ceiling fans set out in the Assessor Certificate. The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), the locations of ceiling fans set out in the Assessor Certificate.					

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Energy Commitments			Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Hot water					
The applicant must install the following hot water system in the development, or a system with a higher energy rating: electric heat pump with a performance of 31 to 35 STCs or better.					
Cooling system					
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 living area: 1-phase airconditioning - ducted; Energy rating: EER 3.0 - 3.5					
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 bedroom: 1-phase airconditioning - ducted; Energy rating: EER 3.0 - 3.5					
Heating system					
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 living area: 1-phase airconditioning - ducted; Energy rating: EER 3.0 - 3.5					
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 bedroom: 1-phase airconditioning - ducted; Energy rating: EER 3.0 - 3.5					
Ventilation					
The applicant must install the following exhaust systems in the development:					
At least 1 Bathroom: individual fan, ducted to facade or roof; Operation control: manual switch on/off					
Kitchen: individual fan, ducted to facade or roof; Operation control: manual switch on/off					
Laundry: individual fan, ducted to facade or roof; Operation control: manual switch on/off					
Artificial lighting					
The applicant must ensure that a minimum of 80% of light fixtures are fitted with fluorescent, compact fluorescent, or light-emitting-diode (LED) lamps.					
Natural lighting					
The applicant must install a window and/or skylight in the kitchen of the dwelling for natural lighting.					

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Description of project

Project address	
Project name	Lot B - 17 Haig Ave, Georges Hall
Street address	17 HAIG AVENUE GEORGES HALL 2198
Local Government Area	Canterbury-Bankstown Council
Plan type and plan number	Deposited Plan DP8855
Lot no.	17
Section no.	E
Project type	
Project type	dwelling house (detached)
No. of bedrooms	5
Site details	
Site area (m²)	501
Roof area (m²)	264
Conditioned floor area (m²)	241.0
Unconditioned floor area (m²)	8.0
Total area of garden and lawn (m²)	163
Roof area of the existing dwelling (m²)	0

Assessor details and thermal loads		
Assessor number	DMN/16/1763	
Certificate number	0009033820	
Climate zone	56	
Area adjusted cooling load (MJ/ m²-year)	14	
Area adjusted heating load (MJ/ m²-year)	16	
Project score		
Water	✔ 44	Target 40
Thermal Performance	✔ Pass	Target Pass
Energy	✔ 74	Target 72
Materials	✔ -32	Target n/a

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Thermal Performance and Materials commitments			Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Construction					
The applicant must construct the floors, walls, roofs, ceilings and glazing of the dwelling in accordance with the specifications listed in the tables below.					
The applicant must show through receipts that the materials purchased for construction are consistent with the specifications listed in the tables below.					
Construction					
		Area - m²	Insulation		
floor - concrete slab on ground, waffle pod slab.		139	none		
floor - suspended floor above open subfloor, particle board; frame: timber - H2 treated softwood.		50	fibreglass batts or roll		
floor - above habitable rooms or mezzanine, particle board; frame: timber - H2 treated softwood.		66	none		
garage floor - concrete slab on ground, waffle pod slab.		36.5	none		
external wall: brick veneer; frame: timber - H2 treated softwood.		all external walls	fibreglass batts or roll+ foil/sarking		
external garage wall: brick veneer; frame: please select.		1	fibreglass batts or roll+ foil/sarking		
internal wall: plasterboard; frame: timber - untreated softwood.		159	none		
ceiling and roof - flat ceiling / flat roof, framed - metal roof, timber - H2 treated softwood.		264	ceiling: fibreglass batts or roll; roof: foil/sarking.		

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Energy Commitments			Show on DA plans	Show on CC/CDC plans & specs	Certifier check
The applicant must install a window and/or skylight in 1 bathroom(s)/toilet(s) in the development for natural lighting.					
Other					
The applicant must install a gas cooktop & electric oven in the kitchen of the dwelling.					
The applicant must install a fixed outdoor clothes drying line as part of the development.					

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Schedule of BASIX commitments

The commitments set out below regulate how the proposed development is to be carried out. It is a condition of any development consent granted, or complying development certificate issued, for the proposed development, that BASIX commitments be complied with.

Water Commitments			Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Fixtures					
The applicant must install showerheads with a minimum rating of 4 star (> 4.5 but <= 6 L/min plus spray force and/or coverage tests) in all showers in the development.					
The applicant must install a toilet flushing system with a minimum rating of 4 star in each toilet in the development.					
The applicant must install taps with a minimum rating of 3 star in the kitchen in the development.					
The applicant must install basin taps with a minimum rating of 3 star in each bathroom in the development.					
Alternative water					
Rainwater tank					
The applicant must install a rainwater tank of at least 2000 litres on the site. This rainwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities.					
The applicant must configure the rainwater tank to collect rain runoff from at least 264 square metres of the roof area of the development (excluding the area of the roof which drains to any stormwater tank or private dam).					
The applicant must connect the rainwater tank to:					
• the cold water tap that supplies each clothes washer in the development					
• at least one outdoor tap in the development (Note: NSW Health does not recommend that rainwater be used for human consumption in areas with potable water supply.)					

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Thermal Performance and Materials commitments			Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Glazing					
The applicant must install windows, glazed doors and skylights as described in the table below, in accordance with the specifications listed in the table.					
Frames		Maximum area - m2			
aluminium		0			
timber		0			
uPVC		71.1			
steel		0			
composite		0			
Glazing		Maximum area - m2			
single		0			
double		71.1			
triple		0			

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Legend	
In these commitments, "applicant" means the person carrying out the development.	
Commitments identified with a ✔ in the "Show on DA plans" column must be shown on the plans accompanying the development application for the proposed development (if a development application is to be lodged for the proposed development).	
Commitments identified with a ✔ in the "Show on CC/CDC plans and specs" column must be shown in the plans and specifications accompanying the application for a construction certificate / complying development certificate for the proposed development.	
Commitments identified with a ✔ in the "Certifier check" column must be certified by a certifying authority as having been fulfilled, before a final occupation certificate (either interim or final) for the development may be issued.	

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NatHERs Specification

Floor Slabs:

-Concrete Ground Floor - 225 Waffle Pod.

-Timber First Floor - R3.0 Floor insulation to areas over outside air

Exterior Walls:

-Brick Veneer with Foil +R2.7 batts in cavity (with air gap) to plasterboard lining

-Interior Garage walls:

-Insulated with R2.7 batts in cavity to plasterboard

lining

-Garage Door:

-Metal with R1.0 insulation

-All external wall materials modelled with colour finishes as per stamped plans

Glazing:

-PVC Framed double glazing: to all glazing

-Type A (U-Value: 3.0, SHGC: 0.48)

-Type B (U-Value: 3.0, SHGC: 0.56)

U-Value & SHGC are combined glass and frame figures.

*Frame and glass types are a guide only

*U-values specified are a minimum (lower is better)

*SHGC to be within +/-5%

Ceiling:

-R5.0 ceiling insulation to all ceilings to metal roof

-R3.0 ceiling insulation throughout garage ceiling

-Modelled with sealed: LED downlights & wet area exhaust fans

-Main:

-1x1400mm ceiling fan to kitchen/dining area

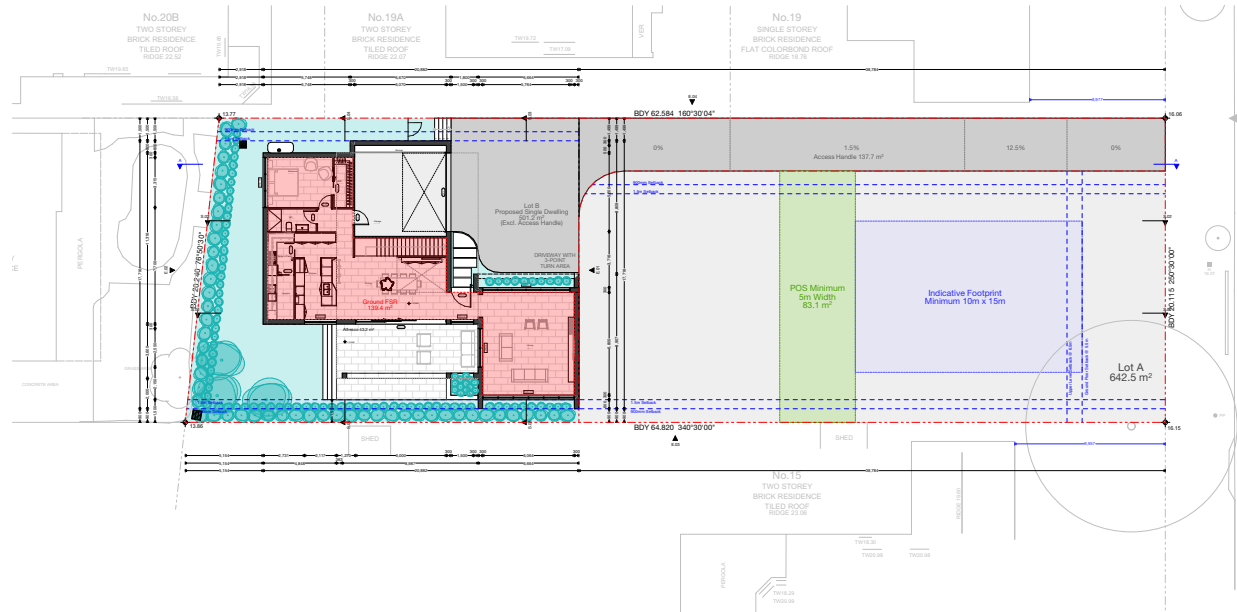
-1x1400mm ceiling fan to living area

-1x1400mm ceiling fan to each bedroom

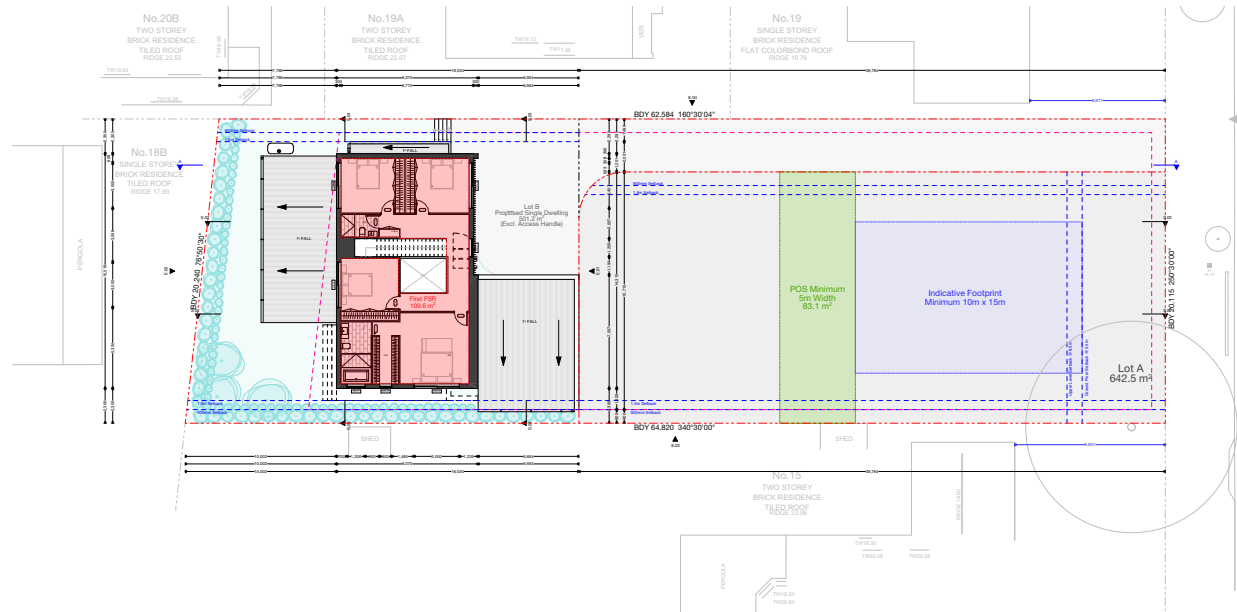
Roof:

-Metal roof with "Anticon 90" glasswool/foil under (or similar R2.0 rated product), modelled with light colour finishes, and as unventilated

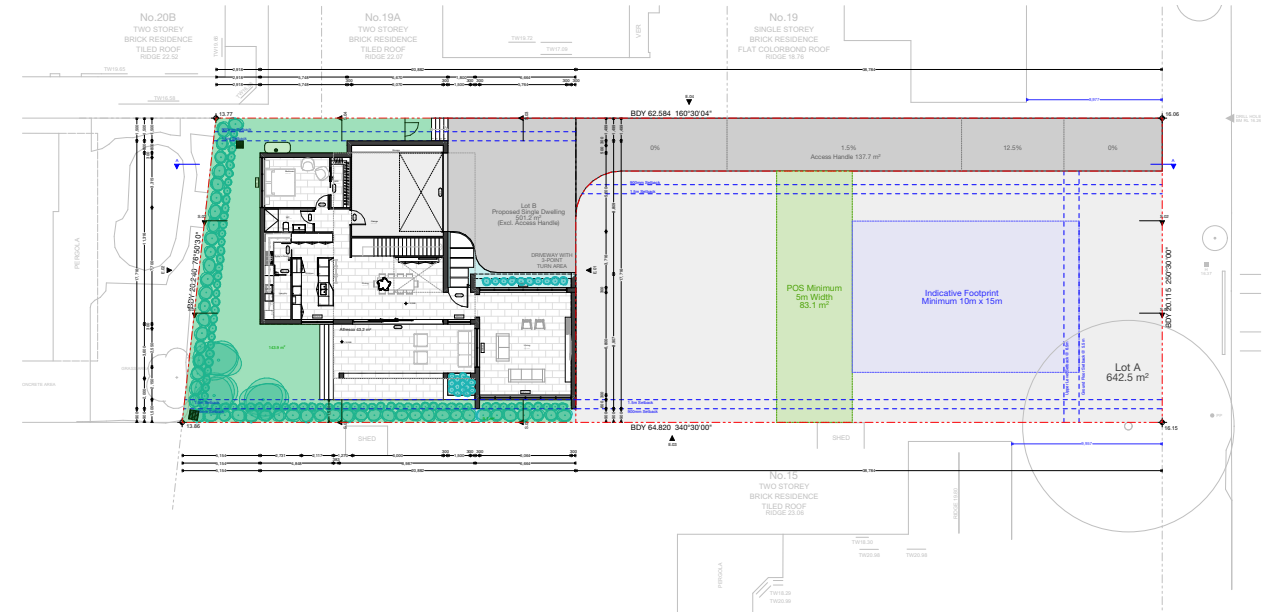
Please refer to NatHERs individual certificates for further details.



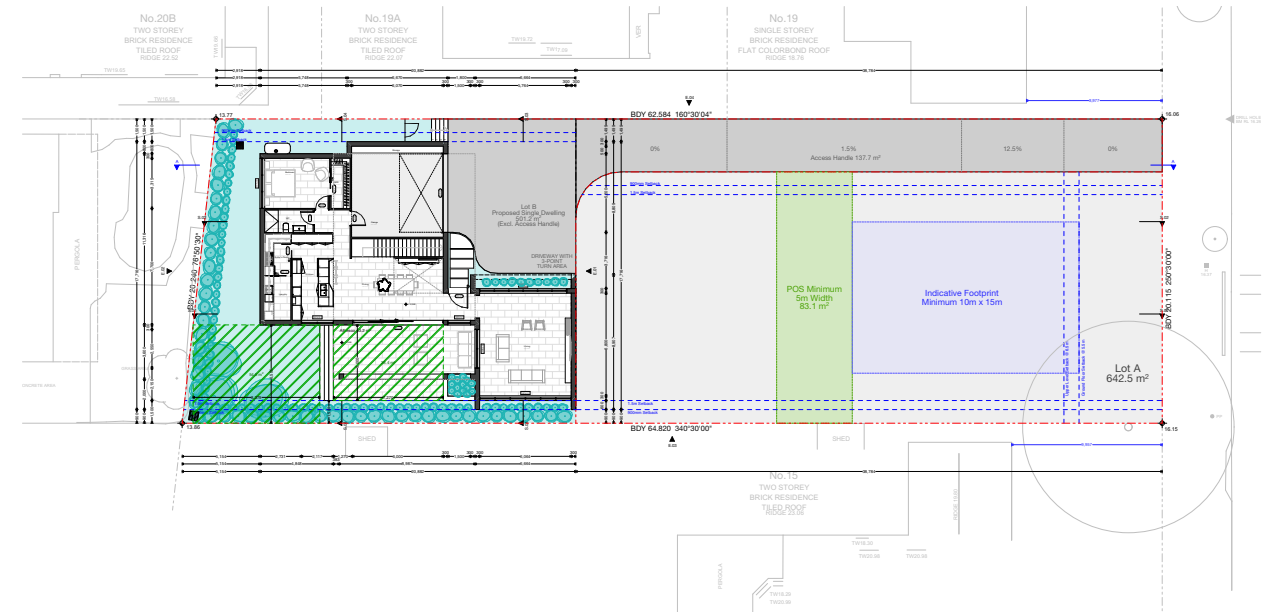
1 GROUND FFL FSR
1:500



2 FIRST FFL FSR
1:500

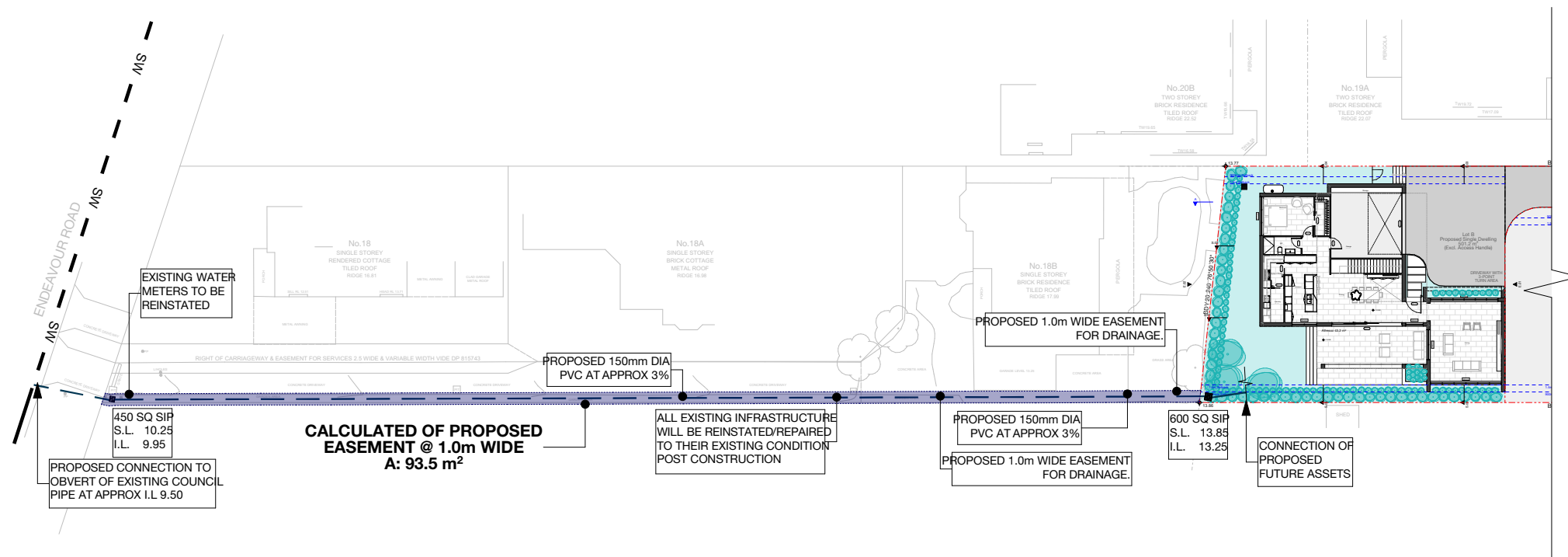


3 GROUND FFL LANDSCAPE
1:500



4 GROUND FFL POS
1:500

FSR COMPUTATIONS			LANDSCAPE COMPUTATIONS			POS COMPUTATIONS		
SITE AREA	LOT B	501.2m²	SITE AREA	LOT B	501.2m²	SITE AREA	LOT B	501.2m²
PERMITTED			MINIMUM REQUIRED			MINIMUM REQUIRED		
PROPOSED	0.50:1 (50%)	250.6m²	LANDSCAPE	AREA FORWARD BUILDING LINE		POS		80m²
Ground Floor	139.4m²		PROPOSED			PROPOSED		
First Floor	109.8m²		Landscape	SQM Overall	153m²	Private Open Space	SQM	91m²
				%	31%			
				SQM Front Setback	N/A			
				%	N/A			
TOTAL	SQM	249m²						



- PROPOSED STORMWATER EASEMENT DESIGNED BY NY CIVIL ENGINEERING
- REFER TO STORMWATER MANAGEMENT PLAN FOR ENGINEER DETAILS AND SPECIFICATIONS