



BASIX Compliance Report

Abel Tasman Village - Building E

222 Waldron Road Chester Hill 2162

Project No.	P00238
Revision	04
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Client	Centurion Project Management

E-LAB Consulting

Where science and engineering inspire design.

Document QA and Revisions

ISSUE	DATE	COMMENTS	ENGINEER	REVIEWER
1	07/06/2024	For Review	NA/ZM	GB
2	13/06/2024	For Information	NA/ZM	GB
3	13/11/2024	DA Issue	GB	GB
4	07/11/2025	For SSDA Application	NA	NA
5				

Confidentiality:

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Disclaimer:

The building's energy and water performance are computed using the online BASIX tool and an energy model developed for thermal comfort and provides only an estimation and potential performance of the building. This cannot be used alone to determine performance in actual practice as they are based on the idealised version of the building which does not and cannot fully consider all the complexities of the building's maintenance and operation.

Authorised by:

Engineering Lab NSW Pty Ltd



Guljit Bates | Associate

Sustainability

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1 EXECUTIVE SUMMARY

This report has been prepared to outline the BASIX compliance for the Abel Tasman Village – Building E located at 222 Waldron Road Chester Hill, 2162. The client is aiming to deliver a premium quality, sustainability-focussed outcome for the project, with a strong emphasis on holistic performance, user-experience, quality, health, and wellbeing.

The intent of this report is to outline the results of BASIX assessment; and details of how each section is independently meeting minimum legislated BASIX benchmarks using various sustainability opportunities the development is considering for BASIX certification. The minimum compliance requirements are per the below:

AREA	MINIMUM COMPLIANCE REQUIREMENT	PROJECT SCORE
Energy	61%	61%
Water	40%	40%
Thermal Comfort	Pass	Pass
Material Index	No Target	-100

Percentages stated for Energy and Water are the percentage improvement upon the NSW average dwelling's consumption.

This report has found that based on the design of Abel Tasman Village Building E and the inputs provided to BASIX, the proposal complies with the requirements of BASIX. The information and performance required to achieve this is contained within this report.



2 INTRODUCTION

2.1 PROJECT DESCRIPTION

The proposed development of Abel Tasman Village, situated at 222 Waldron Road, Chester Hill NSW 2162, comprises two residential buildings (A & E) and residential accommodation (B). This report focuses on Building E and its compliance with BASIX requirements. Building E is designed to include:

- Four levels of residential area, featuring 25 apartment units of varying sizes and bedroom configurations, each with associated balconies.
- A shared basement level within the development, providing car parking and other associated amenities.

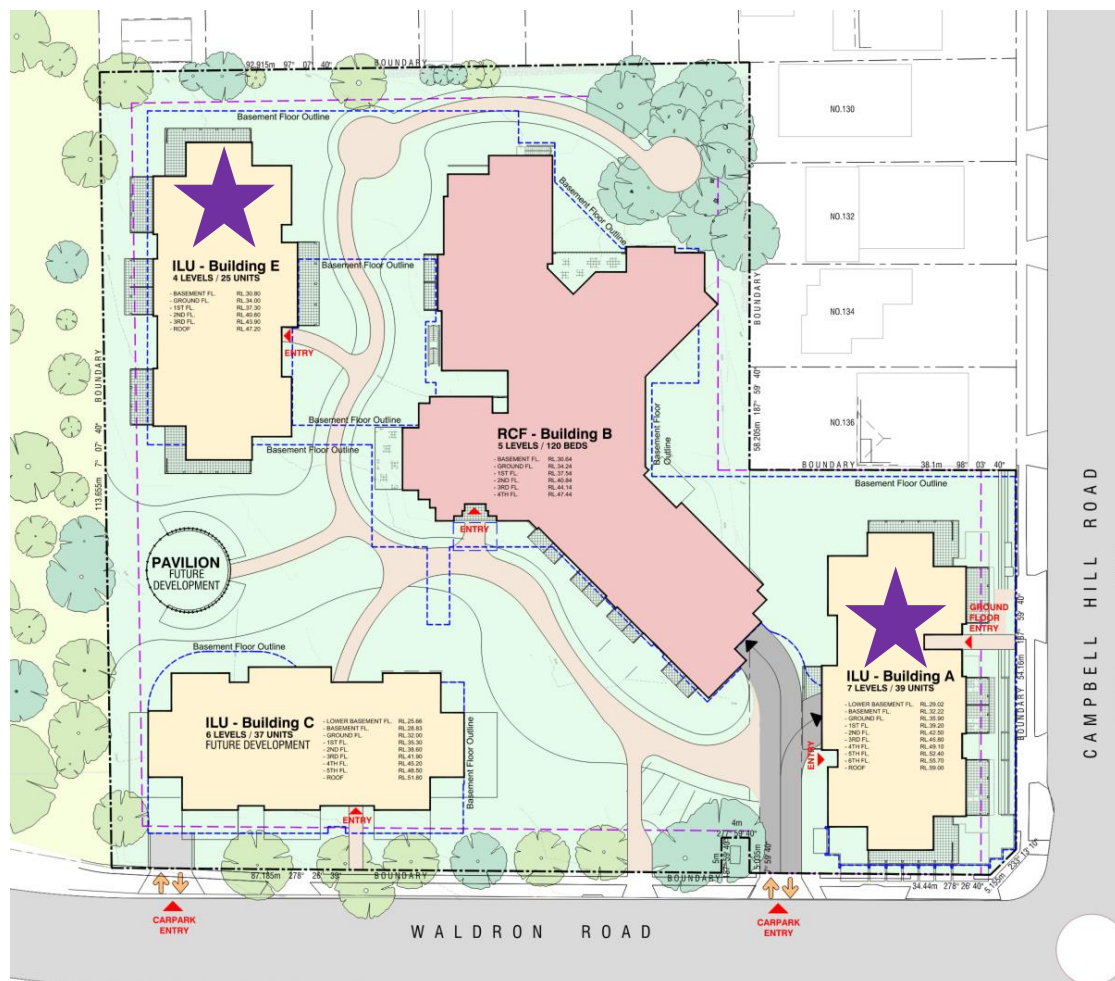


Figure 1: Site Location (Source: Centurion Group)

2.2 SITE LOCATION

The Abel Tasman Village development is located within the City of Canterbury - Bankstown Council. The site is bounded by Waldron Road and Campbell Hill Road while to the north and east of the site exists other suburban spaces and residential homes. The immediate site of the development borders an open field used for sporting and recreation.

Figure 1 below is an image of the site in context of its location.

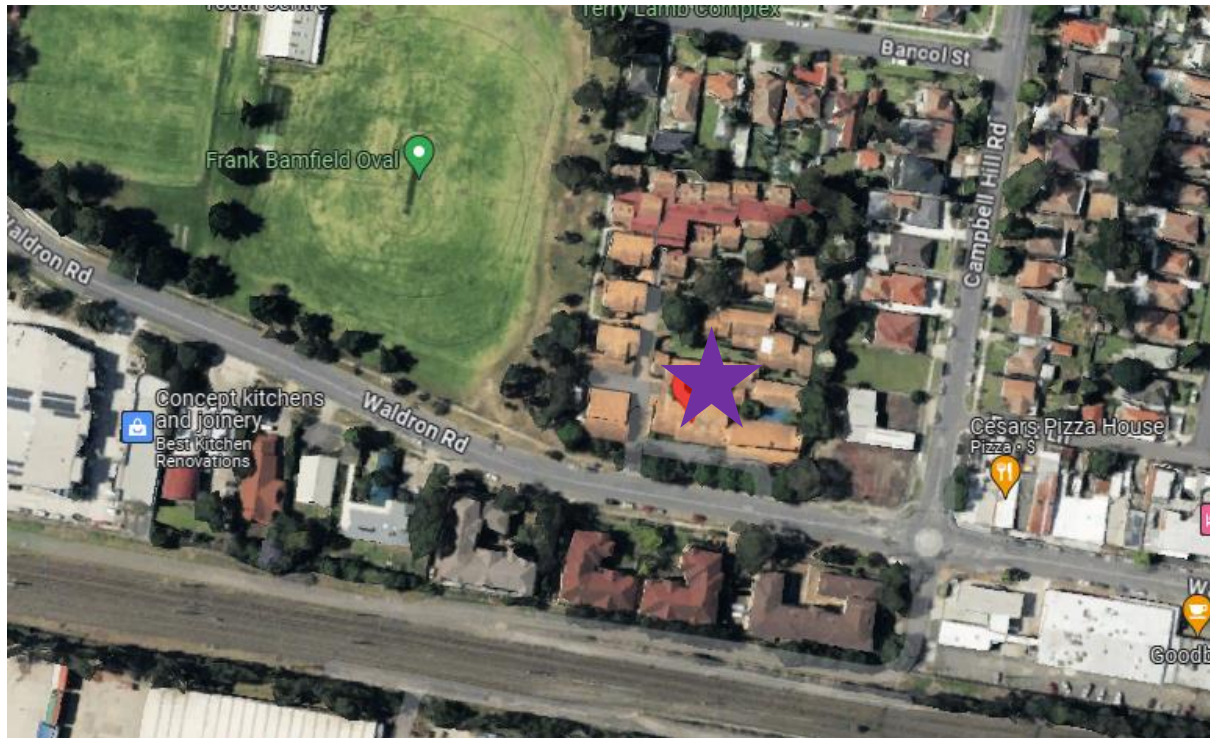


Figure 2: Site Location (Source: Google map)

2.3 DESIGN DOCUMENTATION

This assessment is based on the DA drawing package by Boffa Robertson Group dated 17/10/2024

The following drawings were referred to for the assessment:

2108/A1 - DRAWINGS

DWG NO.	DRAWING TITLE	SCALE
2108/A1DA00	COVER PAGE	N.T.S
2108/A1DA01	SITE PLAN	1:500
2108/A1DA02	DEMOLITION PLAN	1:250
2108/A1DA03	LOWER BASEMENT FLOOR PLAN - OVERALL	1:250
2108/A1DA04	BASEMENT FLOOR PLAN - OVERALL	1:250
2108/A1DA05	GROUND FLOOR PLAN - OVERALL	1:250
2108/A1DA06	FIRST FLOOR PLAN - OVERALL	1:250
2108/A1DA07	SECOND FLOOR PLAN - OVERALL	1:250
2108/A1DA08	THIRD FLOOR PLAN - OVERALL	1:250
2108/A1DA09	FOURTH FLOOR PLAN - OVERALL	1:250
2108/A1DA10	FIFTH FLOOR PLAN - OVERALL	1:250
2108/A1DA11	SIXTH FLOOR PLAN - OVERALL	1:250
2108/A1DA12	NOT USED	
2108/A1DA13	ROOF PLAN - OVERALL	1:250
2108/A1DA14	OVERALL ELEVATIONS 1	1:250
2108/A1DA15	OVERALL ELEVATIONS 2	1:250
2108/A1DA16	OVERALL SECTIONS 1	1:250
2108/A1DA17	OVERALL SECTIONS 2	1:250
2108/A1DA18	BUILDING A - BASEMENT FLOOR PLAN	1:100
2108/A1DA19	BUILDING A - GROUND FLOOR PLAN	1:100
2108/A1DA20	BUILDING A - FIRST FLOOR PLAN	1:100
2108/A1DA21	BUILDING A - TYPICAL SECOND - FIFTH FLOOR PLAN	1:100
2108/A1DA22	BUILDING A - SIXTH FLOOR PLAN	1:100
2108/A1DA23	BUILDING A - SEVENTH FLOOR PLAN	1:100
2108/A1DA24	BUILDING A - ROOF PLAN	1:100
2108/A1DA25	BUILDING A - ELEVATIONS	1:200
2108/A1DA26	BUILDING A - SECTIONS	1:200
2108/A1DA27	BUILDING B - BASEMENT FLOOR PLAN - NORTH 1	1:100
2108/A1DA28	BUILDING B - BASEMENT FLOOR PLAN - NORTH 2	1:100
2108/A1DA29	BUILDING B - BASEMENT FLOOR PLAN - SOUTH	1:100
2108/A1DA30	BUILDING B - GROUND FLOOR PLAN - NORTH	1:100
2108/A1DA31	BUILDING B - GROUND FLOOR PLAN - SOUTH	1:100
2108/A1DA32	BUILDING B - FIRST FLOOR PLAN - NORTH	1:100
2108/A1DA33	BUILDING B - FIRST FLOOR PLAN - SOUTH	1:100
2108/A1DA34	BUILDING B - TYPICAL SECOND - THIRD FLOOR PLAN - NORTH	1:100
2108/A1DA35	BUILDING B - TYPICAL SECOND - THIRD FLOOR PLAN - SOUTH	1:100
2108/A1DA36	BUILDING B - FOURTH FLOOR PLAN - NORTH	1:100
2108/A1DA37	BUILDING B - FOURTH FLOOR PLAN - SOUTH	1:100
2108/A1DA38	BUILDING B - ROOF PLAN - NORTH	1:100
2108/A1DA39	BUILDING B - ROOF PLAN - SOUTH	1:100
2108/A1DA40	BUILDING B - ELEVATIONS 1	1:200
2108/A1DA41	BUILDING B - ELEVATIONS 2	1:200
2108/A1DA42	BUILDING B - SECTIONS	1:200
2108/A1DA43	BUILDING E - GROUND FLOOR PLAN	1:100
2108/A1DA44	BUILDING E - TYPICAL FIRST - THIRD FLOOR PLANS	1:100
2108/A1DA45	BUILDING E - FOURTH FLOOR & ROOF PLAN	1:100
2108/A1DA46	BUILDING E - ELEVATIONS	1:200
2108/A1DA47	BUILDING E - SECTIONS	1:200
2108/A1DA48	BUILDING B - TYPICAL BEDROOM & ENSUITE LAYOUT 1 - 1 BED - TYPE 1	1:20
2108/A1DA49	BUILDING B - TYPICAL BEDROOM & ENSUITE LAYOUT 2 - 1 BED - TYPE 2	1:20
2108/A1DA50	BUILDING B - TYPICAL BEDROOM & ENSUITE LAYOUT 3 - 1 BED - TYPE 3	1:20
2108/A1DA51	BUILDING B - TYPICAL BEDROOM & ENSUITE LAYOUT 4 - 1 BED - TYPE 4	1:20
2108/A1DA52	BUILDING B - TYPICAL BEDROOM & ENSUITE LAYOUT 5 - 2 BED - TYPE 1	1:20
2108/A1DA53	BUILDING B - TYPICAL BEDROOM & ENSUITE LAYOUT 6 - ENSUITE - TYPE 1 & 2	1:20
2108/A1DA54	BUILDING B - TYPICAL BEDROOM & ENSUITE LAYOUT 7 - ENSUITE - TYPE 3 & 4	1:20

2108/A3 - DRAWINGS

DWG NO.	DRAWING TITLE	SCALE
2108/A3DA00	COVER PAGE	N.T.S
2108/A3DA01	SITE ANALYSIS - EXISTING CONTEXT	N.T.S
2108/A3DA03	SITE ANALYSIS - SITE CONSTRAINT & OPPORTUNITIES 1	N.T.S
2108/A3DA04	SITE ANALYSIS - SITE CONSTRAINT & OPPORTUNITIES 2	N.T.S
2108/A3DA05	SITE ANALYSIS - ZONING, FSR & HEIGHT CONTROL	N.T.S
2108/A3DA06	MASTERPLAN	1:600
2108/A3DA07	APARTMENT/RCF MIX & PARKING - LOWER BASEMENT FLOOR	1:600
2108/A3DA08	APARTMENT/RCF MIX & PARKING - BASEMENT FLOOR	1:600
2108/A3DA09	APARTMENT/RCF MIX & PARKING - GROUND FLOOR	1:600
2108/A3DA10	APARTMENT/RCF MIX & PARKING - FIRST FLOOR	1:600
2108/A3DA11	APARTMENT/RCF MIX & PARKING - SECOND FLOOR	1:600
2108/A3DA12	APARTMENT/RCF MIX & PARKING - THIRD FLOOR	1:600
2108/A3DA13	APARTMENT/RCF MIX & PARKING - FOURTH FLOOR	1:600
2108/A3DA14	APARTMENT/RCF MIX & PARKING - FIFTH FLOOR	1:600
2108/A3DA15	APARTMENT/RCF MIX & PARKING - SIXTH FLOOR	1:600
2108/A3DA16	FSR & GROSS FLOOR AREA DIAGRAM - LOWER BASEMENT FL	1:600
2108/A3DA17	FSR & GROSS FLOOR AREA DIAGRAM - BASEMENT FL	1:600
2108/A3DA18	FSR & GROSS FLOOR AREA DIAGRAM - GROUND FL	1:600
2108/A3DA19	FSR & GROSS FLOOR AREA DIAGRAM - FIRST FL	1:600
2108/A3DA20	FSR & GROSS FLOOR AREA DIAGRAM - SECOND FL	1:600
2108/A3DA21	FSR & GROSS FLOOR AREA DIAGRAM - THIRD FL	1:600
2108/A3DA22	FSR & GROSS FLOOR AREA DIAGRAM - FOURTH FL	1:600
2108/A3DA23	FSR & GROSS FLOOR AREA DIAGRAM - FIFTH FL	1:600
2108/A3DA24	FSR & GROSS FLOOR AREA DIAGRAM - SIXTH FL	1:600
2108/A3DA25	ADG SOLAR COMPLIANCE - GROUND FLOOR - THIRD FLOOR	N.T.S
2108/A3DA26	ADG SOLAR COMPLIANCE - FOURTH FLOOR - SIXTH FLOOR	N.T.S
2108/A3DA27	ADG VENTILATION COMPLIANCE - GROUND FL - THIRD FL	N.T.S
2108/A3DA28	ADG VENTILATION COMPLIANCE - FOURTH FL - SIXTH FL	N.T.S
2108/A3DA29	ADG OTHER COMPLIANCE	N.T.S
2108/A3DA30	BUILDING INTERFACE DRAWING 1	1:100
2108/A3DA31	BUILDING INTERFACE DRAWING 2	1:100
2108/A3DA32	BUILDING INTERFACE DRAWING 3	1:100
2108/A3DA33	STREETSCAPE ELEVATIONS	1:500
2108/A3DA34	SECTIONS 1 & 2	1:500
2108/A3DA35	SECTIONS 3 & 4	1:500
2108/A3DA36	SECTION 5	1:500
2108/A3DA37	LANDSCAPE PLAN & DEEP SOIL	1:600
2108/A3DA38	BOUNDARY SETBACK & DISTANCES BETWEEN BUILDINGS	1:600
2108/A3DA39	STAGING PLAN 1	N.T.S
2108/A3DA40	STAGING PLAN 2	N.T.S
2108/A3DA41	SHADOW - MARCH 20TH - 9AM & 10AM	N.T.S
2108/A3DA42	SHADOW - MARCH 20TH - 11AM & 12PM	N.T.S
2108/A3DA43	SHADOW - MARCH 20TH - 1PM & 2PM	N.T.S
2108/A3DA44	SHADOW - MARCH 20TH - 3PM	N.T.S
2108/A3DA45	SHADOW - JUNE 21ST - 9AM & 10AM	N.T.S
2108/A3DA46	SHADOW - JUNE 21ST - 11AM & 12PM	N.T.S
2108/A3DA47	SHADOW - JUNE 21ST - 1PM & 2PM	N.T.S
2108/A3DA48	SHADOW - JUNE 21ST - 3PM	N.T.S
2108/A3DA49	SHADOW - SEPTEMBER 30TH - 9AM & 10AM	N.T.S
2108/A3DA50	SHADOW - SEPTEMBER 30TH - 11AM & 12PM	N.T.S
2108/A3DA51	SHADOW - SEPTEMBER 30TH - 1PM & 2PM	N.T.S
2108/A3DA52	SHADOW - SEPTEMBER 30TH - 3PM	N.T.S
2108/A3DA53	SHADOW - DECEMBER 21ST - 9AM & 10AM	N.T.S
2108/A3DA54	SHADOW - DECEMBER 21ST - 11AM & 12PM	N.T.S
2108/A3DA55	SHADOW - DECEMBER 21ST - 1PM & 2PM	N.T.S
2108/A3DA56	SHADOW - DECEMBER 21ST - 3PM	N.T.S
2108/A3DA57	SUN EYE VIEW 8AM - 11AM	N.T.S
2108/A3DA58	SUN EYE VIEW 12PM - 3PM	N.T.S
2108/A3DA59	SUN EYE VIEW 4PM	N.T.S
2108/A3DA60	EXTERIOR FINISHES SCHEDULE & MATERIALS BOARD	N.T.S
2108/A3DA61	PERSPECTIVE 1	N.T.S
2108/A3DA62	PERSPECTIVE 2	N.T.S
2108/A3DA63	PERSPECTIVE 3	N.T.S
2108/A3DA64	PERSPECTIVE 4	N.T.S
2108/A3DA65	PERSPECTIVE 5	N.T.S
2108/A3DA66	PERSPECTIVE 6	N.T.S

3 BASIX COMPLIANCE

3.1 OVERVIEW

BASIX Compliance is the minimum sustainability performance requirement in the state of NSW. It serves as the only pathway for compliance to demonstrate compliance with the National Construction Code, Part J.

E-LAB Consulting have completed modelling of all sections of the BASIX assessment; Water, Thermal Comfort and Energy for the Abel Tasman Village – Building E located at 222 Waldron Road Chester Hill, 2162.

The BASIX outcome achieved for Building E is based on the assumptions listed in the report and information provided to the date are as follows:

AREA	MINIMUM COMPLIANCE REQUIREMENT	PROJECT SCORE
Energy	61%	61%
Water	40%	40%
Thermal Comfort	Pass	Pass
Material Index	No Target	-100

3.2 BASIX CERTIFICATION DETAILS

PROJECT SUMMARY	
Project Name	Abel Tasman Village Building E
Local Government Area	City of Canterbury-Bankstown Council
Plan Type	Deposited Plan
Plan No.	11/-/DP827703
No. of Residential Buildings	1 Buildings
Total Number of Units & Townhouses	25
Project Type	Residential flat buildings
BASIX Certificate No.	1751352M_03

3.3 ENERGY MODELLING SOFTWARE

Simulation method in BASIX has been used to show the thermal comfort compliance. For energy simulations, FirstRate5 (Version 5.5.5) has been used which is approved under Thermal comfort protocol of BASIX since October 2023. This method does not guarantee or warrantee the performance in practical world as it only considers a simplified and idealistic building.



3.4 BASIX ENERGY

The following minimum standards will be required to comply with the BASIX targets for the project.

DESIGN ELEMENT	COMPLIANCE CRITERIA
Domestic hot water systems	Centralised electric heat pump – air-sourced with minimum R1.0 insulation to internal and external pipework. Min COP 3.5 – 4.0
Cooking	Electric cooktop & electric oven
Mechanical heating and cooling	Reverse cycle air-conditioning (1-Phase ducted) for all units living areas. Minimum EER ratings – Cooling 3.0-3.5, Heating 3.5-4.0.
Apartment ventilation	Bathroom: individual fan, ducted to façade or roof – Interlocked to light with timer off Laundry: individual fan, open to façade – Manual on/off Kitchen range hood: Individual fan, open to façade – Manual on/off
Common area ventilation	Tower E Fire Stairs: No mechanical ventilation system. Tower E Lobby + Lift Corridors: No mechanical ventilation. Basement Carpark: Ventilation (supply and exhaust) with CO monitor and VSD fan. Basement Garbage Room: Ventilation (exhaust only). Basement Storage Areas: Ventilation (supply only) with time clocks or BMS controls.
Apartment artificial lighting	LED throughout with dedicated fittings
Common area artificial lighting	All Fire Stairs: LED with motion sensors. All Lobby and Lift Corridors: LED with motion sensors. All Lifts: LED connected to lift call button. Basement Carpark: LED with zoned switching and motion sensors. Basement Storage Areas and Garbage Room: LED with motion sensors.
Appliances in Apartments (minimum Energy Star rating)	Dishwashers: Minimum 4.5 Star Energy Rated (To all apartments) Clothes Dryers: Minimum 2.0 Star Energy Rated (To all apartments)
Photovoltaic Array	Minimum 4kW peak PV (minimum 9 Solar Panels @ 450W)
Building Management System (BMS)	No
Vertical transport	All Lifts: gearless traction with VVVF motor.



3.5 BASIX THERMAL COMFORT

The following minimum standards are required to comply with the BASIX Thermal Comfort requirements for the project.

DESIGN ELEMENT	COMPLIANCE CRITERIA
Glazed Doors / Windows	The following glazed elements are used throughout for apartment units on Ground Level, Level 1 and Level 2: <u>Fixed, Double Hung and Sliding Windows</u> Total System U-Value = 4.60 (equal to or less than) Total System SHGC = 0.47 (+/- 10%) The following glazed elements are used throughout for apartment units on Level 3: <u>Fixed, Double Hung and Sliding Windows</u> Total System U-Value = 3.55 (equal to or less than) Total System SHGC = 0.40 (+/- 10%) Operability – max available while meeting window safety device requirements defined in the BCA. Note – all glazing systems are whole of system, including glazing and frame systems.
External Solid Walls	Added R2.5 bulk insulation for all apartment external walls. Minimum nominal 20mm unventilated non-reflective airgap. No thermal break required for the metal stud frame for thermal bridging controls. Refer to Appendix C insulation markups for locations of insulation and additional details. Medium or light colour
Walls to Internal Corridors or Non-Conditioned Zones:	Added R1.8 bulk insulation for all internal walls between apartment unit and non-conditioned enclosed internal zones. No thermal break required for the metal stud frame for thermal bridging controls. Refer to Appendix C insulation markups for locations of insulation and additional details.
Exposed Roofs/Balconies (Over conditioned spaces)	Added R4.0 soffit slab insulation to apartments concrete slab roofs. Refer to Appendix C insulation markups for locations of insulation and additional details. Medium or light colour.
Suspended Floor Slabs (Enclosed floor levels between conditioned and internal non-conditioned spaces and open to outside)	Added R2.5 soffit slab insulation to underside of suspended concrete slabs. Refer to Appendix C insulation markups for locations of insulation and additional details.
Floors Covering	Carpet in Bedrooms, Timber in Living/Dining Rooms. Tile in Kitchen/Bathrooms.



3.6 BASIX WATER

The following minimum standards are required to comply with the BASIX Water Targets for the project.

DESIGN ELEMENT	COMPLIANCE CRITERIA
Fixtures	Showers: Minimum 4 Star (>6 but <= 7.5 L/min) WELS Rated Toilets: Minimum 4 Star WELS Rated Bathroom Taps: Minimum 6 Star WELS Rated Kitchen Sink Taps: Minimum 6 Star WELS Rated
Fixtures within common areas	Toilets: Minimum 4 Star WELS Rated Taps: Minimum 5 Star WELS Rated
Fittings/Appliances within units	Clothes Washer: not specified Dishwasher: Minimum 5.0 Star WELS Rated (To all apartments)
Fire Sprinkler Water Test	All Fire sprinkler systems test water contained in a closed system so that fire sprinkler test water is contained within the fire sprinkler system for re-use, rather than disposed.
Outdoor Swimming Pool	N/A
Alternative Water	Minimum 3,000L Rainwater tank is required to collect rainwater from Building E roof area with catchment area of not less than 400 m ² . The rainwater collected shall be reused for ground and roof common landscape and lawn area irrigation.

APPENDIX A NATHERS GROUP CERTIFICATE



Nationwide House Energy Rating Scheme®

Class 2 Summary

NatHERS® Certificate No. MC2NG2O7K8

Generated on 4 Jun 2024 using FirstRate5 v5.5.5

Property

Address 222 Waldron Road & 138 Campbell Hill Road,
Chester Hill, NSW, 2162

Lot/DP

NatHERS Climate Zone 56



Accredited assessor

Name E-LAB Consulting
Business name E-LAB Consulting
Email alex.kobler@e-lab.com.au
Phone 0447343451
Accreditation No. DMN/16/1751
Assessor Accrediting Organisation

Verification

To verify this certificate, scan the QR code or visit <https://www.fr5.com.au/QRCodeLanding?PublicId=MC2NG2O7K8&GrpCert=1>
When using either link, ensure you are visiting www.fr5.com.au.



National Construction Code (NCC) requirements

The NCC allows the use of NatHERS accredited software to comply with the energy efficiency requirements for houses (Class 1 buildings) and apartments (Class 2 sole-occupancy units and Class 4 parts of buildings). The applicable requirements for houses are detailed in Specification 42 of NCC Volume Two. For apartments the requirements are detailed in clauses J3D3 and J3D15 of NCC Volume One.

NCC 2022 includes enhanced thermal performance requirements for houses and apartments. It also includes a new whole-of-home annual energy use budget which applies to the major equipment in the home.

The NCC, and associated ABCB Standards and support material, can be accessed at www.abcb.gov.au.

Note, variations and additions to the NCC energy efficiency requirements may apply in some states and territories.

Thermal performance Star rating



Average Rating

**NATIONWIDE
HOUSE**
ENERGY RATING SCHEME®

The rating above is the
average of all dwellings in
this summary.

For more information on
your dwelling's rating see:
www.nathers.gov.au

NCC heating and cooling maximum loads MJ/m²/p.a.

Limits taken from ABCB Standard 2022

	Heating	Cooling
Modelled block average	11.8	14.9
Maximum allowable limit	N/A	N/A

Whole of Home performance rating

No Whole of Home
performance rating
conducted for this
summary certificate
or
not completed for all
dwellings

The rating above is the lowest of
all dwellings in this summary

Summary of all dwellings

Certificate number and link	Unit number	Heating load (load limit) [MJ/m²/p.a.]	Cooling load (load limit) [MJ/m²/p.a.]	Total load [MJ/m²/p.a.]	Star rating	Whole of Home Rating
5E6A82ZQNL	E001	10.5 (N/A)	15.2 (N/A)	25.7	7.4	NA
3GBH32LVEY	E002	6.1 (N/A)	15.2 (N/A)	21.3	7.9	NA



Summary of all dwellings

Certificate number and link	Unit number	Heating load (load limit) [MJ/m ² /p.a.]	Cooling load (load limit) [MJ/m ² /p.a.]	Total load [MJ/m ² /p.a.]	Star rating	Whole of Home Rating
3LPQGHTOLO	E003	5.0 (N/A)	9.2 (N/A)	14.2	8.7	NA
N9GTWTDUFU9	E004	14.6 (N/A)	11.0 (N/A)	25.6	7.4	NA
Q9C1NQSH8T	E005	17.3 (N/A)	9.6 (N/A)	26.9	7.3	NA
RCNEZTZP31	E006	26.3 (N/A)	10.6 (N/A)	36.9	6.1	NA
JLE9739SVJ	E007	11.2 (N/A)	6.1 (N/A)	17.3	8.4	NA
K1OX1WWU30	E011	8.7 (N/A)	20.3 (N/A)	29.0	7.1	NA
15EUMLGEZR	E012	3.8 (N/A)	17.1 (N/A)	20.9	8	NA
3RE64I1SY3	E013	4.7 (N/A)	15.7 (N/A)	20.4	8.1	NA
18FXHAS9CR	E014	6.9 (N/A)	17.5 (N/A)	24.4	7.6	NA
XAFT1GPPDH	E015	21.7 (N/A)	14.4 (N/A)	36.1	6.2	NA
WUP1M3XS3T	E016	7.3 (N/A)	10.0 (N/A)	17.3	8.4	NA
UVA9KI6NR9	E021	9.4 (N/A)	19.7 (N/A)	29.1	7.1	NA
KOF822LJZ2	E022	4.4 (N/A)	16.5 (N/A)	20.9	8	NA
JR9HMSLEJ4	E023	5.3 (N/A)	15.0 (N/A)	20.3	8.1	NA
R2345EI22N	E024	6.6 (N/A)	17.2 (N/A)	23.8	7.7	NA
ZUSW2SGVH1	E025	22.8 (N/A)	14.8 (N/A)	37.6	6	NA
NVSBCRUKCY	E026	7.8 (N/A)	10.4 (N/A)	18.2	8.3	NA
TSRLUGAQ5T	E031	14.6 (N/A)	19.2 (N/A)	33.8	6.5	NA
0UOVF7KHCM	E032	11.7 (N/A)	20.3 (N/A)	32.0	6.7	NA
7WUBAWVOQ5	E033	13.5 (N/A)	18.6 (N/A)	32.1	6.7	NA
ISXADGDGBW	E034	14.8 (N/A)	19.4 (N/A)	34.2	6.4	NA
SZ0YB3G66E	E035	26.8 (N/A)	16.4 (N/A)	43.2	5.6	NA
HNIZ067QL8	E036	13.2 (N/A)	12.8 (N/A)	26.0	7.4	NA

Explanatory notes

About this report

The thermal performance star rating in this Certificate is the average rating of all NCC Class 2 dwellings in an apartment block. The Whole of Home performance rating in this Certificate is the lowest rating for the apartment block. Individual unit ratings are listed in the 'Summary of all dwellings' section of this Certificate. (accessible via link).

NatHERS ratings use computer modelling to evaluate a home's energy efficiency and performance. They use localised climate data and standard assumptions on how people use their home to predict the energy loads and energy value*. The thermal performance star rating uses the home's building specifications, layout, orientation and fabric (i.e. walls, windows, floors, roofs and ceilings) to predict the heating and cooling energy loads. The Whole of Home performance rating uses information about the home's appliances and onsite energy production and storage to estimate the home's energy value*.

For more details about an individual dwelling's assessment, refer to the individual dwelling's NatHERS Certificate (accessible via link)

Accredited Assessors

For high quality NatHERS Certificates, always use an accredited or licenced assessor registered with an Assessor Accrediting Organisation (AAO). AAOs have strict quality assurance processes, and professional development requirements ensuring consistently high standards for assessments.

Non-accredited assessors (Raters) have no ongoing training requirements and are not quality assured.

Licensed assessors in the Australian Capital Territory (ACT) can produce assessments for regulatory purposes only, using endorsed software, as listed on the ACT licensing register

Any queries about this report should be directed to the assessor. If the assessor is unable to address questions or concerns, contact the AAO specified on the front of this certificate.

Disclaimer

The NatHERS Certificate format is developed by the NatHERS Administrator. However, the content in certificates is entered by the assessor. It is the assessor's responsibility to use NatHERS accredited software correctly and follow the NatHERS Technical Note to produce a NatHERS Certificate.

The predicted annual energy use, cost and greenhouse gas emissions in this NatHERS Certificate are an estimate based on an assessment of the dwelling's design by the assessor. It is not a prediction of actual energy use, cost or emissions. The information and ratings may be used to compare how other dwellings are likely to perform when used in a similar way.

Information presented in this report relies on a range of standard assumptions (both embedded in NatHERS accredited software and made by the assessor who prepared this report), including assumptions about occupancy, behaviour, appliance performance, indoor air temperature and local climate.

Not all assumptions made by the assessor while using the NatHERS accredited software tool are presented in this report and further details or data files may be available from the assessor

APPENDIX B BASIX CERTIFICATE



BASIX™ Certificate

Building Sustainability Index

www.planningportal.nsw.gov.au/development-and-assessment/basix

Multi Dwelling

Certificate number: 1751352M_05

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.planningportal.nsw.gov.au/definitions

Secretary

Date of issue: Friday, 07 November 2025

To be valid, this certificate must be submitted with a development application or lodged with a complying development certificate application within 3 months of the date of issue.



When submitting this BASIX certificate with a development application or complying development certificate application, it must be accompanied by NatHERS certificate MC2NG2O7K8.

Project summary

Project name	ABEL TASMAN VILLAGE Building E_05
Street address	222 WALDRON ROAD CHESTER HILL 2162
Local Government Area	CANTERBURY-BANKSTOWN
Plan type and plan number	Deposited Plan 827703
Lot No.	11
Section no.	-
No. of residential flat buildings	1
Residential flat buildings: no. of dwellings	25
Multi-dwelling housing: no. of dwellings	0
No. of single dwelling houses	0

Project score

Water	✓ 40	Target 40
Thermal Performance	✓ Pass	Target Pass
Energy	✓ 61	Target 61
Materials	✓ -100	Target n/a

Certificate Prepared by

Name / Company Name: E-LAB Consulting

ABN (if applicable): 84647520634

Description of project

Project address	
Project name	ABEL TASMAN VILLAGE Building E_05
Street address	222 WALDRON ROAD CHESTER HILL 2162
Local Government Area	CANTERBURY-BANKSTOWN
Plan type and plan number	Deposited Plan 827703
Lot No.	11
Section no.	-
Project type	
No. of residential flat buildings	1
Residential flat buildings: no. of dwellings	25
Multi-dwelling housing: no. of dwellings	0
No. of single dwelling houses	0
Site details	
Site area (m²)	2200
Roof area (m²)	400
Non-residential floor area (m²)	0
Residential car spaces	23
Non-residential car spaces	0

Common area landscape		
Common area lawn (m²)	1100	
Common area garden (m²)	180	
Area of indigenous or low water use species (m²)	0.00	
Assessor details and thermal loads		
Assessor number	DMN/16/1751	
Certificate number	MC2NG2O7K8	
Climate zone	56	
Project score		
Water	✓ 40	Target 40
Thermal Performance	✓ Pass	Target Pass
Energy	✓ 61	Target 61
Materials	✓ -100	Target n/a

Description of project

The tables below describe the dwellings and common areas within the project

Residential flat buildings - Building E, 25 dwellings, 4 storeys above ground

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
E001	2	104	0	0	0
E005	1	81	0	0	0
E012	2	100	0	0	0
E016	2	104	0	0	0
E024	2	97	0	0	0
E032	2	100	0	0	0
E036	2	104	0.00	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
E002	1	68	0	0	0
E006	2	104	0	0	0
E013	2	100	0	0	0
E021	2	104	0	0	0
E025	2	100	0	0	0.00
E033	2	100	0	0	0.00

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
E003	1	65	0	0	0.00
E007	2	96	0	0	0
E014	2	97	0	0	0
E022	2	100	0	0	0
E026	2	104	0	0	0
E034	2	97	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
E004	1	65	0	0	0
E011	2	104	0	0	0
E015	2	100	0	0	0
E023	2	100	0	0	0
E031	2	104	0	0	0
E035	2	100	0	0	0

Description of project

The tables below describe the dwellings and common areas within the project

Common areas of the development (non-building specific)

Common area	Floor area (m²)	Common area	Floor area (m²)	Common area	Floor area (m²)
Undercover car park area (No. 1)	3463.6	Garbage room (No. 1)	64	Storage area	170

Common areas of unit building - Building E

Common area	Floor area (m²)	Common area	Floor area (m²)	Common area	Floor area (m²)
Lift bank (No. 1)	-	Lobby+ Corridor	280	Firestairs	177.5

Schedule of BASIX commitments

1. Commitments for Residential flat buildings - Building E

(a) Buildings

(i) Materials

(b) Dwellings

(i) Water

(ii) Energy

(iii) Thermal Performance

(c) Common areas and central systems/facilities

(i) Water

(ii) Energy

2. Commitments for common areas and central systems/facilities for the development (non-building specific)

(a) Buildings 'Other'

(i) Materials

(b) Common areas and central systems/facilities

(i) Water

(ii) Energy

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.

1. Commitments for Residential flat buildings - Building E

(a) Buildings

(i) Materials	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Floor types", "External wall types", "Internal wall types", "Ceiling and roof types", "Frames" and "Glazing" tables below.			✓
(b) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all specifications included in the tables below.		✓	
(c) The applicant must construct the floors, walls, roof, ceiling and roof, windows, glazed doors and skylights of the development in accordance with the specifications listed in the tables below. In the case of glazing, a 5% variance from the area values listed in the "Frames" and "Glazing" tables is permitted.	✓	✓	✓
(d) The applicant must show through receipts that the materials purchased for construction are consistent with the specifications listed in the below tables.			✓

Floor types

Floor type	Area (m2)	Insulation	Low emissions option
suspended floor above garage, frame: suspended concrete slab	699.4	fibreglass batts or roll	-
floors above habitable rooms, frame: suspended concrete slab	2168.1	fibreglass batts or roll	-

External wall types

External wall type	Construction type	Area (m2)	Low emissions option	Insulation
External wall type 1	brick veneer, frame: light steel frame	3900	-	fibreglass batts or roll

Internal wall types			
Internal wall type	Construction type	Area (m2)	Insulation
Internal wall type 1	plasterboard, frame:light steel frame	8900	fibreglass batts or roll

Reinforcement concrete frames/columns		
Building has reinforced concrete frame/columns?	Volume (m³)	Low emissions option
no	-	-

Ceiling and roof types			
Ceiling and roof type	Area (m²)	Roof Insulation	Ceiling Insulation
concrete - plasterboard internal, frame: light steel frame	562	foil/sarking	fibreglass batts or roll

Glazing types			Frame types				
Single glazing (m²)	Double glazing (m²)	Triple glazing (m²)	Aluminium frames (m²)	Timber frames (m²)	uPVC frames (m²)	Steel frames (m²)	Composite frames (m²)
514.65	-	-	514.65	-	-	-	-

(b) Dwellings

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must plant indigenous or low water use species of vegetation throughout the area of land specified for the dwelling in the "Indigenous species" column of the table below, as private landscaping for that dwelling. (This area of indigenous vegetation is to be contained within the "Area of garden and lawn" for the dwelling specified in the "Description of Project" table).	✓	✓	
(c) If a rating is specified in the table below for a fixture or appliance to be installed in the dwelling, the applicant must ensure that each such fixture and appliance meets the rating specified for it.		✓	✓
(d) The applicant must install an on demand hot water recirculation system which regulates all hot water use throughout the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below.		✓	✓
(e) The applicant must install: (aa) a hot water diversion system to all showers, kitchen sinks and all basins in the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below; and (bb) a separate diversion tank (or tanks) connected to the hot water diversion systems of at least 100 litres. The applicant must connect the hot water diversion tank to all toilets in the dwelling.		✓ ✓	✓ ✓
(e) The applicant must not install a private swimming pool or spa for the dwelling, with a volume exceeding that specified for it in the table below.	✓	✓	
(f) If specified in the table, that pool or spa (or both) must have a pool cover or shading (or both).		✓	
(g) The pool or spa must be located as specified in the table.	✓	✓	
(h) The applicant must install, for the dwelling, each alternative water supply system, with the specified size, listed for that dwelling in the table below. Each system must be configured to collect run-off from the areas specified (excluding any area which supplies any other alternative water supply system), and to divert overflow as specified. Each system must be connected as specified.	✓	✓	✓

	Fixtures					Appliances		Individual pool				Individual spa		
Dwelling no.	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	4 star (> 6 but ≤ 7.5 L/min)	4 star	6 star	6 star	-	not specified	5 star	-	-	-	-	-	-	-

	Alternative water source							
Dwelling no.	Alternative water supply systems	Size	Configuration	Landscape connection	Toilet connection (s)	Laundry connection	Pool top-up	Spa top-up
All dwellings	No alternative water supply	-	-	-	-	-	-	-

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must install each hot water system specified for the dwelling in the table below, so that the dwelling's hot water is supplied by that system. If the table specifies a central hot water system for the dwelling, then the applicant must connect that central system to the dwelling, so that the dwelling's hot water is supplied by that central system.	✓	✓	✓
(c) The applicant must install, in each bathroom, kitchen and laundry of the dwelling, the ventilation system specified for that room in the table below. Each such ventilation system must have the operation control specified for it in the table.		✓	✓
(d) The applicant must install the cooling and heating system/s specified for the dwelling under the "Living areas" and "Bedroom areas" headings of the "Cooling" and "Heating" columns in the table below, in/for at least 1 living/bedroom area of the dwelling. If no cooling or heating system is specified in the table for "Living areas" or "Bedroom areas", then no systems may be installed in any such areas. If the term "zoned" is specified beside an air conditioning system, then the system must provide for day/night zoning between living areas and bedrooms.		✓	✓
(e) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Artificial lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that the "primary type of artificial lighting" for each such room in the dwelling is fluorescent lighting or light emitting diode (LED) lighting. If the term "dedicated" is specified for a particular room or area, then the light fittings in that room or area must only be capable of being used for fluorescent lighting or light emitting diode (LED) lighting.		✓	✓
(f) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Natural lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that each such room or area is fitted with a window and/or skylight.	✓	✓	✓
(g) This commitment applies if the applicant installs a water heating system for the dwelling's pool or spa. The applicant must: (aa) install the system specified for the pool in the "Individual Pool" column of the table below (or alternatively must not install any system for the pool). If specified, the applicant must install a timer, to control the pool's pump; and (bb) install the system specified for the spa in the "Individual Spa" column of the table below (or alternatively must not install any system for the spa). If specified, the applicant must install a timer to control the spa's pump.		✓ ✓	
(h) The applicant must install in the dwelling: (aa) the kitchen cook-top and oven specified for that dwelling in the "Appliances & other efficiency measures" column of the table below;		✓	

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(bb) each appliance for which a rating is specified for that dwelling in the "Appliances & other efficiency measures" column of the table, and ensure that the appliance has that minimum rating; and		✓	✓
(cc) any clothes drying line specified for the dwelling in the "Appliances & other efficiency measures" column of the table.		✓	
(i) If specified in the table, the applicant must carry out the development so that each refrigerator space in the dwelling is "well ventilated".		✓	

	Hot water	Bathroom ventilation system		Kitchen ventilation system		Laundry ventilation system	
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control
All dwellings	Central hot water system (No. 1)	individual fan, ducted to façade or roof	interlocked to light with timer off	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off

	Cooling		Heating		Natural lighting	
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bathrooms or toilets	Main kitchen
E001, E006, E011, E015, E021, E025, E031, E035	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.5 - 4.0	1-phase airconditioning - ducted / EER 3.5 - 4.0	0	yes
All other dwellings	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.5 - 4.0	1-phase airconditioning - ducted / EER 3.5 - 4.0	0	no

	Individual pool			Individual spa		Appliances other efficiency measures				
Dwelling no.	Pool heating system	Pool Pump	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Dishwasher	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
All dwellings	-	-	-	-	-	electric cooktop & electric oven	4.5 star	2 star	no	no

(iii) Thermal Performance	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) 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 a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol 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.	✓		
(e) 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.		✓	
(f) 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.		✓	✓
(g) Where there is an in-slab heating or cooling system, the applicant must: (aa) Install insulation with an R-value of not less than 1.0 around the vertical edges of the perimeter of the slab; or (bb) On a suspended floor, install insulation with an R-value of not less than 1.0 underneath the slab and around the vertical edges of the perimeter of the slab.	✓	✓	✓
(h) The applicant must construct the floors and walls of the development in accordance with the specifications listed in the table below.	✓	✓	✓
(i) 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.	✓		
(j) 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.		✓	

	Thermal loads		
Dwelling no.	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)	Area adjusted total load (in MJ/m ² /yr)
E001	10.5	15.2	25.700
E002	6.1	15.2	21.300
E003	5	9.2	14.200
E004	14.6	11	25.600

	Thermal loads		
Dwelling no.	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)	Area adjusted total load (in MJ/m ² /yr)
E005	17.3	9.6	26.900
E006	26.3	10.6	36.900
E007	11.2	6.1	17.300
E011	8.7	20.3	29.000
E012	3.8	17.1	20.900
E013	4.7	15.7	20.400
E014	6.9	17.5	24.400
E015	21.7	14.4	36.100
E016	7.3	10	17.300
E021	9.4	19.7	29.100
E022	4.4	16.5	20.900
E023	5.3	15	20.300
E024	6.6	17.2	23.800
E025	22.8	14.8	37.600
E026	7.8	10.4	18.200
E031	14.6	19.2	33.800
E032	11.7	20.3	32.000
E033	13.5	18.6	32.100
E034	14.8	19.4	34.200
E035	26.8	16.4	43.200
All other dwellings	13.2	12.8	26.000

(c) Common areas and central systems/facilities

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a showerhead, toilet, tap or clothes washer into a common area, then that item must meet the specifications listed for it in the table.		✓	✓
(b) The applicant must install (or ensure that the development is serviced by) the alternative water supply system(s) specified in the "Central systems" column of the table below. In each case, the system must be sized, be configured, and be connected, as specified in the table.	✓	✓	✓
(c) A swimming pool or spa listed in the table must not have a volume (in kLs) greater than that specified for the pool or spa in the table.	✓	✓	
(d) A pool or spa listed in the table must have a cover or shading if specified for the pool or spa in the table.		✓	
(e) The applicant must install each fire sprinkler system listed in the table so that the system is configured as specified in the table.		✓	✓
(f) The applicant must ensure that the central cooling system for a cooling tower is configured as specified in the table.		✓	✓

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	no common facility	4 star	5 star	no common laundry facility

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a ventilation system to service a common area specified in the table below, then that ventilation system must be of the type specified for that common area, and must meet the efficiency measure specified.		✓	✓
(b) In carrying out the development, the applicant must install, as the "primary type of artificial lighting" for each common area specified in the table below, the lighting specified for that common area. This lighting must meet the efficiency measure specified. The applicant must also install a centralised lighting control system or Building Management System (BMS) for the common area, where specified.		✓	✓
(c) The applicant must install the systems and fixtures specified in the "Central energy systems" column of the table below. In each case, the system or fixture must be of the type, and meet the specifications, listed for it in the table.	✓	✓	✓

	Common area ventilation system		Common area lighting		
Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/ BMS
Lift bank (No. 1)	-	-	light-emitting diode	connected to lift call button	no
Lobby+ Corridor	no mechanical ventilation	-	light-emitting diode	motion sensors	no
Firestairs	no mechanical ventilation	-	light-emitting diode	motion sensors	no

Central energy systems	Type	Specification
Lift bank (No. 1)	gearless traction with V V V F motor	Number of levels with apartments served by a lift: 4 number of levels from the bottom of the lift shaft to the top of the lift shaft: 6 number of lifts: 2 lift load capacity: >1500kg

2. Commitments for common areas and central systems/facilities for the development (non-building specific)

(a) Buildings 'Other'

(i) Materials	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Floor types", "External wall types", "Internal wall types", "Ceiling and roof types", "Frames" and "Glazing" tables below.			✓
(b) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all specifications included in the tables below.		✓	
(c) The applicant must construct the floors, walls, roof, ceiling and roof, windows, glazed doors and skylights of the development in accordance with the specifications listed in the tables below. In the case of glazing, a 5% variance from the area values listed in the "Frames" and "Glazing" tables is permitted.	✓	✓	✓
(d) The applicant must show through receipts that the materials purchased for construction are consistent with the specifications listed in the below tables.			✓

Floor types

Floor type	Area (m2)	Insulation	Low emissions option
garage floor, frame: concrete slab on ground	3697.60	-	none

External wall types

External wall type	Construction type	Area (m2)	Low emissions option	Insulation
External wall type 1	concrete block/ plasterboard,frame:light steel frame	5800.00	-	fibreglass batts or roll

Internal wall types

Internal wall type	Construction type	Area (m2)	Insulation
Internal wall type 1	plasterboard, frame:light steel frame	12000.00	-

Reinforcement concrete frames/columns

Building has reinforced concrete frame/columns?	Volume (m³)	Low emissions option
no	-	-

Ceiling and roof types

Ceiling and roof type	Area (m²)	Roof Insulation	Ceiling Insulation
concrete - plasterboard internal, frame: light steel frame	235	foil/sarking	fibreglass batts or roll

Glazing types**Frame types**

Single glazing (m²)	Double glazing (m²)	Triple glazing (m²)	Aluminium frames (m²)	Timber frames (m²)	uPVC frames (m²)	Steel frames (m²)	Composite frames (m²)
-	0	-	0	-	-	-	-

(b) Common areas and central systems/facilities

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a showerhead, toilet, tap or clothes washer into a common area, then that item must meet the specifications listed for it in the table.		✓	✓
(b) The applicant must install (or ensure that the development is serviced by) the alternative water supply system(s) specified in the "Central systems" column of the table below. In each case, the system must be sized, be configured, and be connected, as specified in the table.	✓	✓	✓
(c) A swimming pool or spa listed in the table must not have a volume (in kLs) greater than that specified for the pool or spa in the table.	✓	✓	
(d) A pool or spa listed in the table must have a cover or shading if specified for the pool or spa in the table.		✓	
(e) The applicant must install each fire sprinkler system listed in the table so that the system is configured as specified in the table.		✓	✓
(f) The applicant must ensure that the central cooling system for a cooling tower is configured as specified in the table.		✓	✓

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	no common facility	4 star	5 star	no common laundry facility

Central systems	Size	Configuration	Connection (to allow for...)
Central water tank - rainwater or stormwater (No. 1)	3000	To collect run-off from at least: - 400 square metres of roof area of buildings in the development - 0.00 square metres of impervious area in the development - 0.00 square metres of garden/lawn area in the development - 0.00 square metres of planter box area in the development (excluding, in each case, any area which drains to, or supplies, any other alternative water supply system).	- irrigation of 1134 square metres of common landscaped area on the site - car washing in 0 car washing bays on the site
Fire sprinkler system (No. 1)	-	So that fire sprinkler test water is contained within the fire sprinkler system for re-use, rather than disposed.	-

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a ventilation system to service a common area specified in the table below, then that ventilation system must be of the type specified for that common area, and must meet the efficiency measure specified.		✓	✓
(b) In carrying out the development, the applicant must install, as the "primary type of artificial lighting" for each common area specified in the table below, the lighting specified for that common area. This lighting must meet the efficiency measure specified. The applicant must also install a centralised lighting control system or Building Management System (BMS) for the common area, where specified.		✓	✓
(c) The applicant must install the systems and fixtures specified in the "Central energy systems" column of the table below. In each case, the system or fixture must be of the type, and meet the specifications, listed for it in the table.	✓	✓	✓

	Common area ventilation system		Common area lighting		
Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/ BMS
Undercover car park area (No. 1)	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	light-emitting diode	zoned switching with motion sensor	no
Garbage room (No. 1)	ventilation exhaust only	-	light-emitting diode	motion sensors	no
Storage area	ventilation supply only	time clock or BMS controlled	light-emitting diode	motion sensors	no

Central energy systems	Type	Specification
Central hot water system (No. 1)	electric heat pump – air sourced	Piping insulation (ringmain & supply risers): (a) Piping external to building: R1.0 (~38 mm); (b) Piping internal to building: R1.0 (~38 mm) (c) Unit Efficiency: 3.5 < COP ≤ 4.0
Alternative energy supply	Photovoltaic system	Rated electrical output (min): 4 peak kW
Other	-	-

Notes

1. In these commitments, "applicant" means the person carrying out the development.
2. The applicant must identify each dwelling, building and common area listed in this certificate, on the plans accompanying any development application, and on the plans and specifications accompanying the application for a construction certificate / complying development certificate, for the proposed development, using the same identifying letter or reference as is given to that dwelling, building or common area in this certificate.
3. This note applies if the proposed development involves the erection of a building for both residential and non-residential purposes (or the change of use of a building for both residential and non-residential purposes). Commitments in this certificate which are specified to apply to a "common area" of a building or the development, apply only to that part of the building or development to be used for residential purposes.
4. If this certificate lists a central system as a commitment for a dwelling or building, and that system will also service any other dwelling or building within the development, then that system need only be installed once (even if it is separately listed as a commitment for that other dwelling or building).
5. If a star or other rating is specified in a commitment, this is a minimum rating.
6. All alternative water systems to be installed under these commitments (if any), must be installed in accordance with the requirements of all applicable regulatory authorities. NOTE: NSW Health does not recommend that stormwater, recycled water or private dam water be used to irrigate edible plants which are consumed raw, or that rainwater be used for human consumption in areas with potable water supply.

Legend

1. 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).
2. 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.
3. Commitments identified with a "✔" in the "Certifier check" column must be certified by a certifying authority as having been fulfilled. (Note: a certifying authority must not issue an occupation certificate (either interim or final) for a building listed in this certificate, or for any part of such a building, unless it is satisfied that each of the commitments whose fulfilment it is required to monitor in relation to the building or part, has been fulfilled).

BASIX™ Certificate

Building Sustainability Index

www.planningportal.nsw.gov.au/development-and-assessment/basix

Multi Dwelling

Certificate number: 1751350M_04

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.planningportal.nsw.gov.au/definitions

Secretary

Date of issue: Thursday, 06 November 2025

To be valid, this certificate must be submitted with a development application or lodged with a complying development certificate application within 3 months of the date of issue.



When submitting this BASIX certificate with a development application or complying development certificate application, it must be accompanied by NatHERS certificate 5L9N1CGI23.

Project summary

Project name	ABEL TASMAN VILLAGE Building A_04
Street address	222 WALDRON ROAD CHESTER HILL 2162
Local Government Area	CANTERBURY-BANKSTOWN
Plan type and plan number	Deposited Plan 827703
Lot No.	11
Section no.	-
No. of residential flat buildings	1
Residential flat buildings: no. of dwellings	39
Multi-dwelling housing: no. of dwellings	0
No. of single dwelling houses	0

Project score

Water	✓ 40	Target 40
Thermal Performance	✓ Pass	Target Pass
Energy	✓ 65	Target 60
Materials	✓ -100	Target n/a

Certificate Prepared by

Name / Company Name: E-LAB Consulting

ABN (if applicable): 84647520634

Description of project

Project address	
Project name	ABEL TASMAN VILLAGE Building A_04
Street address	222 WALDRON ROAD CHESTER HILL 2162
Local Government Area	CANTERBURY-BANKSTOWN
Plan type and plan number	Deposited Plan 827703
Lot No.	11
Section no.	-
Project type	
No. of residential flat buildings	1
Residential flat buildings: no. of dwellings	39
Multi-dwelling housing: no. of dwellings	0
No. of single dwelling houses	0
Site details	
Site area (m²)	2187
Roof area (m²)	1059.02
Non-residential floor area (m²)	214.29
Residential car spaces	42
Non-residential car spaces	0

Common area landscape		
Common area lawn (m²)	603.4	
Common area garden (m²)	85	
Area of indigenous or low water use species (m²)	0	
Assessor details and thermal loads		
Assessor number	DMN/16/1751	
Certificate number	5L9N1CGI23	
Climate zone	56	
Project score		
Water	✔ 40	Target 40
Thermal Performance	✔ Pass	Target Pass
Energy	✔ 65	Target 60
Materials	✔ -100	Target n/a

Description of project

The tables below describe the dwellings and common areas within the project

Residential flat buildings - Building A, 39 dwellings, 8 storeys above ground

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
A001	2	104	0	0	0
A005	1	81	0	0	0
A012	2	100	0	0	0
A016	2	104	0	0	0
A024	2	97	0	0	0
A032	2	100	0	0	0
A036	2	104	0	0	0
A044	2	97	0	0	0
A052	1	68	0	0	0
A056	2	97	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
A002	1	68	0	0	0
A006	2	104	0	0	0
A013	2	100	0	0	0
A021	2	104	0	0	0
A025	2	100	0	0	0
A033	2	100	0	0	0
A041	2	104	0	0	0
A045	2	100	0	0	0
A053	2	100	0	0	0
A061	3	130	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
A003	1	65	0	0	0
A007	2	96	0	0	0
A014	2	97	0	0	0
A022	2	100	0	0	0
A026	2	104	0	0	0
A034	2	97	0	0	0
A042	2	100	0	0	0
A046	2	104	0	0	0
A054	1	68	0	0	0
A062	3	130	0	0.00	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
A004	1	65	0	0	0
A011	2	104	0	0	0
A015	2	100	0	0	0
A023	2	100	0	0	0
A031	2	104	0	0	0
A035	2	100	0	0	0
A043	2	100	0	0	0
A051	3	130	0	0	0
A055	3	131	0	0	0

Description of project

The tables below describe the dwellings and common areas within the project

Common areas of unit building - Building A

Common area	Floor area (m²)
Lift bank (No. 1)	-
Building A Corridor	472

Common area	Floor area (m²)
L6 common area	74

Common area	Floor area (m²)
Building A Firestair	225.6

Common areas of the development (non-building specific)

Common area	Floor area (m²)
Basement car park	1513
Basement Waste	44
Lower Basement Cold Water Pump	45.6

Common area	Floor area (m²)
Lower Basement Switch room	41
Basement Hot water	20.29
Storage	170

Common area	Floor area (m²)
Basement Sprinkler/ Hyd. Pump	49
Lower Basement Sprinkler/ Hyd. Pump	54.4
Basement Lift lobby	11.04

Schedule of BASIX commitments

1. Commitments for Residential flat buildings - Building A

(a) Buildings

(i) Materials

(b) Dwellings

(i) Water

(ii) Energy

(iii) Thermal Performance

(c) Common areas and central systems/facilities

(i) Water

(ii) Energy

2. Commitments for multi-dwelling housing

(a) Dwellings

(i) Water

(ii) Energy

(iii) Thermal Performance and Materials

3. Commitments for single dwelling houses

(a) Dwellings

(i) Water

(ii) Energy

(iii) Thermal Performance and Materials

4. Commitments for common areas and central systems/facilities for the development (non-building specific)

(a) Buildings 'Other'

(i) Materials

(b) Common areas and central systems/facilities

- (i) Water
- (ii) Energy

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.

1. Commitments for Residential flat buildings - Building A

(a) Buildings

(i) Materials	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Floor types", "External wall types", "Internal wall types", "Ceiling and roof types", "Frames" and "Glazing" tables below.			✓
(b) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all specifications included in the tables below.		✓	
(c) The applicant must construct the floors, walls, roof, ceiling and roof, windows, glazed doors and skylights of the development in accordance with the specifications listed in the tables below. In the case of glazing, a 5% variance from the area values listed in the "Frames" and "Glazing" tables is permitted.	✓	✓	✓
(d) The applicant must show through receipts that the materials purchased for construction are consistent with the specifications listed in the below tables.			✓

Floor types

Floor type	Area (m2)	Insulation	Low emissions option
floors above habitable rooms, frame: suspended concrete slab	3935.5	fibreglass batts or roll	-
suspended floor above garage, frame: suspended concrete slab	693.3	fibreglass batts or roll	-
concrete slab on ground, frame:	100	fibreglass batts or roll	30% cement substitute

External wall types

External wall type	Construction type	Area (m2)	Low emissions option	Insulation
External wall type 1	brick veneer, frame: light steel frame	5500	-	fibreglass batts or roll
External wall type 2	concrete block/ plasterboard, frame: light steel frame	500	-	fibreglass batts or roll

Internal wall types			
Internal wall type	Construction type	Area (m2)	Insulation
Internal wall type 1	plasterboard, frame:light steel frame	8900	fibreglass batts or roll

Reinforcement concrete frames/columns		
Building has reinforced concrete frame/columns?	Volume (m³)	Low emissions option
no	-	-

Ceiling and roof types			
Ceiling and roof type	Area (m²)	Roof Insulation	Ceiling Insulation
concrete - plasterboard internal, frame: light steel frame	1059.02	foil/sarking	fibreglass batts or roll

Glazing types			Frame types				
Single glazing (m²)	Double glazing (m²)	Triple glazing (m²)	Aluminium frames (m²)	Timber frames (m²)	uPVC frames (m²)	Steel frames (m²)	Composite frames (m²)
908	-	-	908	-	-	-	-

(b) Dwellings

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must plant indigenous or low water use species of vegetation throughout the area of land specified for the dwelling in the "Indigenous species" column of the table below, as private landscaping for that dwelling. (This area of indigenous vegetation is to be contained within the "Area of garden and lawn" for the dwelling specified in the "Description of Project" table).	✓	✓	
(c) If a rating is specified in the table below for a fixture or appliance to be installed in the dwelling, the applicant must ensure that each such fixture and appliance meets the rating specified for it.		✓	✓
(d) The applicant must install an on demand hot water recirculation system which regulates all hot water use throughout the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below.		✓	✓
(e) The applicant must install: (aa) a hot water diversion system to all showers, kitchen sinks and all basins in the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below; and (bb) a separate diversion tank (or tanks) connected to the hot water diversion systems of at least 100 litres. The applicant must connect the hot water diversion tank to all toilets in the dwelling.		✓ ✓	✓ ✓
(e) The applicant must not install a private swimming pool or spa for the dwelling, with a volume exceeding that specified for it in the table below.	✓	✓	
(f) If specified in the table, that pool or spa (or both) must have a pool cover or shading (or both).		✓	
(g) The pool or spa must be located as specified in the table.	✓	✓	
(h) The applicant must install, for the dwelling, each alternative water supply system, with the specified size, listed for that dwelling in the table below. Each system must be configured to collect run-off from the areas specified (excluding any area which supplies any other alternative water supply system), and to divert overflow as specified. Each system must be connected as specified.	✓	✓	✓

	Fixtures					Appliances		Individual pool				Individual spa		
Dwelling no.	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	4 star (> 6 but ≤ 7.5 L/min)	4 star	5 star	5 star	-	not specified	5 star	-	-	-	-	-	-	-

	Alternative water source							
Dwelling no.	Alternative water supply systems	Size	Configuration	Landscape connection	Toilet connection (s)	Laundry connection	Pool top-up	Spa top-up
All dwellings	No alternative water supply	-	-	-	-	-	-	-

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must install each hot water system specified for the dwelling in the table below, so that the dwelling's hot water is supplied by that system. If the table specifies a central hot water system for the dwelling, then the applicant must connect that central system to the dwelling, so that the dwelling's hot water is supplied by that central system.	✓	✓	✓
(c) The applicant must install, in each bathroom, kitchen and laundry of the dwelling, the ventilation system specified for that room in the table below. Each such ventilation system must have the operation control specified for it in the table.		✓	✓
(d) The applicant must install the cooling and heating system/s specified for the dwelling under the "Living areas" and "Bedroom areas" headings of the "Cooling" and "Heating" columns in the table below, in/for at least 1 living/bedroom area of the dwelling. If no cooling or heating system is specified in the table for "Living areas" or "Bedroom areas", then no systems may be installed in any such areas. If the term "zoned" is specified beside an air conditioning system, then the system must provide for day/night zoning between living areas and bedrooms.		✓	✓
(e) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Artificial lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that the "primary type of artificial lighting" for each such room in the dwelling is fluorescent lighting or light emitting diode (LED) lighting. If the term "dedicated" is specified for a particular room or area, then the light fittings in that room or area must only be capable of being used for fluorescent lighting or light emitting diode (LED) lighting.		✓	✓
(f) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Natural lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that each such room or area is fitted with a window and/or skylight.	✓	✓	✓
(g) This commitment applies if the applicant installs a water heating system for the dwelling's pool or spa. The applicant must: (aa) install the system specified for the pool in the "Individual Pool" column of the table below (or alternatively must not install any system for the pool). If specified, the applicant must install a timer, to control the pool's pump; and (bb) install the system specified for the spa in the "Individual Spa" column of the table below (or alternatively must not install any system for the spa). If specified, the applicant must install a timer to control the spa's pump.		✓ ✓	
(h) The applicant must install in the dwelling: (aa) the kitchen cook-top and oven specified for that dwelling in the "Appliances & other efficiency measures" column of the table below;		✓	

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(bb) each appliance for which a rating is specified for that dwelling in the "Appliances & other efficiency measures" column of the table, and ensure that the appliance has that minimum rating; and (cc) any clothes drying line specified for the dwelling in the "Appliances & other efficiency measures" column of the table.		✓ ✓	✓
(i) If specified in the table, the applicant must carry out the development so that each refrigerator space in the dwelling is "well ventilated".		✓	

	Hot water	Bathroom ventilation system		Kitchen ventilation system		Laundry ventilation system	
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control
All dwellings	Central hot water system (No. 1)	individual fan, ducted to façade or roof	interlocked to light with timer off	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off

	Cooling		Heating		Natural lighting	
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bathrooms or toilets	Main kitchen
A001, A006, A011, A016, A021, A026, A036, A041, A046, A061, A062	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.5 - 4.0	1-phase airconditioning - ducted / EER 3.5 - 4.0	0	yes
All other dwellings	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.0 - 3.5	1-phase airconditioning - ducted / EER 3.5 - 4.0	1-phase airconditioning - ducted / EER 3.5 - 4.0	0	no

	Individual pool			Individual spa		Appliances other efficiency measures				
Dwelling no.	Pool heating system	Pool Pump	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Dishwasher	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
All dwellings	-	-	-	-	-	electric cooktop & electric oven	4.5 star	2 star	no	no

(iii) Thermal Performance	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) 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 a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol 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.	✓		
(e) 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.		✓	
(f) 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.		✓	✓
(g) Where there is an in-slab heating or cooling system, the applicant must: (aa) Install insulation with an R-value of not less than 1.0 around the vertical edges of the perimeter of the slab; or (bb) On a suspended floor, install insulation with an R-value of not less than 1.0 underneath the slab and around the vertical edges of the perimeter of the slab.	✓	✓	✓
(h) The applicant must construct the floors and walls of the development in accordance with the specifications listed in the table below.	✓	✓	✓
(i) 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.	✓		
(j) 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.		✓	

	Thermal loads		
Dwelling no.	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)	Area adjusted total load (in MJ/m ² /yr)
A001	20.30	13.5	33.800
A002	15.5	7.9	23.400
A003	7.1	9	16.100
A004	9	11.4	20.400

	Thermal loads		
Dwelling no.	Area adjusted heating load (in MJ/m²/yr)	Area adjusted cooling load (in MJ/m²/yr)	Area adjusted total load (in MJ/m²/yr)
A005	27.6	8.4	36.000
A006	14.7	8.4	23.100
A007	18.6	8.2	26.800
A011	16.1	14.1	30.200
A012	10.6	12	22.600
A013	17	13.1	30.100
A014	12.3	11.7	24.000
A015	11.9	10.2	22.100
A016	12.5	10.5	23.000
A021	20.6	12.5	33.100
A023	22	10.3	32.300
A025	15.2	9.4	24.600
A026	13.7	9.2	22.900
A031	21.8	12.30	34.100
A033	23.1	10	33.100
A035	13	12.5	25.500
A036	11.1	9.6	20.700
A041	22.9	12.6	35.500
A043	23.8	9.8	33.600
A045	13.7	12.7	26.400
A046	11	9.5	20.500
A051	21.2	11.8	33.000
A052	7.6	7.7	15.300
A053	22.9	9	31.900
A054	7.6	7.6	15.200
A055	21.5	12.5	34.000
A056	18	12	30.000
A061	22.1	14.4	36.500
A062	22.10	14.4	36.500
A022, A024	14.6	9.2	23.800
A032, A034	15.5	8.7	24.200

	Thermal loads		
Dwelling no.	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)	Area adjusted total load (in MJ/m ² /yr)
All other dwellings	16.2	8.6	24.800

(c) Common areas and central systems/facilities

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a showerhead, toilet, tap or clothes washer into a common area, then that item must meet the specifications listed for it in the table.		✓	✓
(b) The applicant must install (or ensure that the development is serviced by) the alternative water supply system(s) specified in the "Central systems" column of the table below. In each case, the system must be sized, be configured, and be connected, as specified in the table.	✓	✓	✓
(c) A swimming pool or spa listed in the table must not have a volume (in kLs) greater than that specified for the pool or spa in the table.	✓	✓	
(d) A pool or spa listed in the table must have a cover or shading if specified for the pool or spa in the table.		✓	
(e) The applicant must install each fire sprinkler system listed in the table so that the system is configured as specified in the table.		✓	✓
(f) The applicant must ensure that the central cooling system for a cooling tower is configured as specified in the table.		✓	✓

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	no common facility	4 star	5 star	no common laundry facility

Central systems	Size	Configuration	Connection (to allow for...)
Fire sprinkler system (No. 2)	-	So that fire sprinkler test water is contained within the fire sprinkler system for re-use, rather than disposed.	-

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a ventilation system to service a common area specified in the table below, then that ventilation system must be of the type specified for that common area, and must meet the efficiency measure specified.		✓	✓
(b) In carrying out the development, the applicant must install, as the "primary type of artificial lighting" for each common area specified in the table below, the lighting specified for that common area. This lighting must meet the efficiency measure specified. The applicant must also install a centralised lighting control system or Building Management System (BMS) for the common area, where specified.		✓	✓
(c) The applicant must install the systems and fixtures specified in the "Central energy systems" column of the table below. In each case, the system or fixture must be of the type, and meet the specifications, listed for it in the table.	✓	✓	✓

	Common area ventilation system		Common area lighting		
Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/ BMS
Lift bank (No. 1)	-	-	light-emitting diode	connected to lift call button	no
L6 common area	air conditioning system	time clock or BMS controlled	light-emitting diode	time clock and motion sensors	no
Building A Firestair	no mechanical ventilation	-	light-emitting diode	motion sensors	no
Building A Corridor	no mechanical ventilation	-	light-emitting diode	motion sensors	no

Central energy systems	Type	Specification
Lift bank (No. 1)	gearless traction with V V V F motor and regenerative drive	Number of levels with apartments served by a lift: 7 number of levels from the bottom of the lift shaft to the top of the lift shaft: 8 number of lifts: 2 lift load capacity: >1500kg

2. Commitments for multi-dwelling housing

(a) Dwellings

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must plant indigenous or low water use species of vegetation throughout the area of land specified for the dwelling in the "Indigenous species" column of the table below, as private landscaping for that dwelling. (This area of indigenous vegetation is to be contained within the "Area of garden and lawn" for the dwelling specified in the "Description of Project" table).	✓	✓	
(c) If a rating is specified in the table below for a fixture or appliance to be installed in the dwelling, the applicant must ensure that each such fixture and appliance meets the rating specified for it.		✓	✓
(d) The applicant must install an on demand hot water recirculation system which regulates all hot water use throughout the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below.		✓	✓
(e) The applicant must install: (aa) a hot water diversion system to all showers, kitchen sinks and all basins in the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below; and (bb) a separate diversion tank (or tanks) connected to the hot water diversion systems of at least 100 litres. The applicant must connect the hot water diversion tank to all toilets in the dwelling.		✓ ✓	✓ ✓
(e) The applicant must not install a private swimming pool or spa for the dwelling, with a volume exceeding that specified for it in the table below.	✓	✓	
(f) If specified in the table, that pool or spa (or both) must have a pool cover or shading (or both).		✓	
(g) The pool or spa must be located as specified in the table.	✓	✓	
(h) The applicant must install, for the dwelling, each alternative water supply system, with the specified size, listed for that dwelling in the table below. Each system must be configured to collect run-off from the areas specified (excluding any area which supplies any other alternative water supply system), and to divert overflow as specified. Each system must be connected as specified.	✓	✓	✓
(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must install each hot water system specified for the dwelling in the table below, so that the dwelling's hot water is supplied by that system. If the table specifies a central hot water system for the dwelling, then the applicant must connect that central system to the dwelling, so that the dwelling's hot water is supplied by that central system.	✓	✓	✓
(c) The applicant must install, in each bathroom, kitchen and laundry of the dwelling, the ventilation system specified for that room in the table below. Each such ventilation system must have the operation control specified for it in the table.		✓	✓

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(d) The applicant must install the cooling and heating system/s specified for the dwelling under the "Living areas" and "Bedroom areas" headings of the "Cooling" and "Heating" columns in the table below, in/for at least 1 living/bedroom area of the dwelling. If no cooling or heating system is specified in the table for "Living areas" or "Bedroom areas", then no systems may be installed in any such areas. If the term "zoned" is specified beside an air conditioning system, then the system must provide for day/night zoning between living areas and bedrooms.		✓	✓
(e) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Artificial lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that the "primary type of artificial lighting" for each such room in the dwelling is fluorescent lighting or light emitting diode (LED) lighting. If the term "dedicated" is specified for a particular room or area, then the light fittings in that room or area must only be capable of being used for fluorescent lighting or light emitting diode (LED) lighting.		✓	✓
(f) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Natural lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that each such room or area is fitted with a window and/or skylight.	✓	✓	✓
(g) This commitment applies if the applicant installs a water heating system for the dwelling's pool or spa. The applicant must: (aa) install the system specified for the pool in the "Individual Pool" column of the table below (or alternatively must not install any system for the pool). If specified, the applicant must install a timer, to control the pool's pump; and (bb) install the system specified for the spa in the "Individual Spa" column of the table below (or alternatively must not install any system for the spa). If specified, the applicant must install a timer to control the spa's pump.		✓ ✓	
(h) The applicant must install in the dwelling: (aa) the kitchen cook-top and oven specified for that dwelling in the "Appliances & other efficiency measures" column of the table below; (bb) each appliance for which a rating is specified for that dwelling in the "Appliances & other efficiency measures" column of the table, and ensure that the appliance has that minimum rating; and (cc) any clothes drying line specified for the dwelling in the "Appliances & other efficiency measures" column of the table.		✓ ✓ ✓	✓
(i) If specified in the table, the applicant must carry out the development so that each refrigerator space in the dwelling is "well ventilated".		✓	
(iii) Thermal Performance and Materials	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) 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 a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			

(iii) Thermal Performance and Materials	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol 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.	✓		
(e) 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.		✓	
(f) 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.		✓	✓
(g) Where there is an in-slab heating or cooling system, the applicant must: (aa) Install insulation with an R-value of not less than 1.0 around the vertical edges of the perimeter of the slab; or (bb) On a suspended floor, install insulation with an R-value of not less than 1.0 underneath the slab and around the vertical edges of the perimeter of the slab.	✓	✓	✓
(h) The applicant must construct the floors and walls of the development in accordance with the specifications listed in the table below.	✓	✓	✓
(i) 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.	✓		
(j) 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.		✓	

3. Commitments for single dwelling houses

(a) Dwellings

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must plant indigenous or low water use species of vegetation throughout the area of land specified for the dwelling in the "Indigenous species" column of the table below, as private landscaping for that dwelling. (This area of indigenous vegetation is to be contained within the "Area of garden and lawn" for the dwelling specified in the "Description of Project" table).	✓	✓	
(c) If a rating is specified in the table below for a fixture or appliance to be installed in the dwelling, the applicant must ensure that each such fixture and appliance meets the rating specified for it.		✓	✓
(d) The applicant must install an on demand hot water recirculation system which regulates all hot water use throughout the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below.		✓	✓
(e) The applicant must install: (aa) a hot water diversion system to all showers, kitchen sinks and all basins in the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below; and (bb) a separate diversion tank (or tanks) connected to the hot water diversion systems of at least 100 litres. The applicant must connect the hot water diversion tank to all toilets in the dwelling.		✓ ✓	✓ ✓
(e) The applicant must not install a private swimming pool or spa for the dwelling, with a volume exceeding that specified for it in the table below.	✓	✓	
(f) If specified in the table, that pool or spa (or both) must have a pool cover or shading (or both).		✓	
(g) The pool or spa must be located as specified in the table.	✓	✓	
(h) The applicant must install, for the dwelling, each alternative water supply system, with the specified size, listed for that dwelling in the table below. Each system must be configured to collect run-off from the areas specified (excluding any area which supplies any other alternative water supply system), and to divert overflow as specified. Each system must be connected as specified.	✓	✓	✓
(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must install each hot water system specified for the dwelling in the table below, so that the dwelling's hot water is supplied by that system. If the table specifies a central hot water system for the dwelling, then the applicant must connect that central system to the dwelling, so that the dwelling's hot water is supplied by that central system.	✓	✓	✓
(c) The applicant must install, in each bathroom, kitchen and laundry of the dwelling, the ventilation system specified for that room in the table below. Each such ventilation system must have the operation control specified for it in the table.		✓	✓

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(d) The applicant must install the cooling and heating system/s specified for the dwelling under the "Living areas" and "Bedroom areas" headings of the "Cooling" and "Heating" columns in the table below, in/for at least 1 living/bedroom area of the dwelling. If no cooling or heating system is specified in the table for "Living areas" or "Bedroom areas", then no systems may be installed in any such areas. If the term "zoned" is specified beside an air conditioning system, then the system must provide for day/night zoning between living areas and bedrooms.			
(e) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Artificial lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that the "primary type of artificial lighting" for each such room in the dwelling is fluorescent lighting or light emitting diode (LED) lighting. If the term "dedicated" is specified for a particular room or area, then the light fittings in that room or area must only be capable of being used for fluorescent lighting or light emitting diode (LED) lighting.			
(f) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Natural lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that each such room or area is fitted with a window and/or skylight.			
(g) This commitment applies if the applicant installs a water heating system for the dwelling's pool or spa. The applicant must: (aa) install the system specified for the pool in the "Individual Pool" column of the table below (or alternatively must not install any system for the pool). If specified, the applicant must install a timer, to control the pool's pump; and (bb) install the system specified for the spa in the "Individual Spa" column of the table below (or alternatively must not install any system for the spa). If specified, the applicant must install a timer to control the spa's pump.		 	
(h) The applicant must install in the dwelling: (aa) the kitchen cook-top and oven specified for that dwelling in the "Appliances & other efficiency measures" column of the table below; (bb) each appliance for which a rating is specified for that dwelling in the "Appliances & other efficiency measures" column of the table, and ensure that the appliance has that minimum rating; and (cc) any clothes drying line specified for the dwelling in the "Appliances & other efficiency measures" column of the table.		  	
(i) If specified in the table, the applicant must carry out the development so that each refrigerator space in the dwelling is "well ventilated".			
(iii) Thermal Performance and Materials	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) 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 a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			

(iii) Thermal Performance and Materials	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol 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.	✓		
(e) 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.		✓	
(f) 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.		✓	✓
(g) Where there is an in-slab heating or cooling system, the applicant must: (aa) Install insulation with an R-value of not less than 1.0 around the vertical edges of the perimeter of the slab; or (bb) On a suspended floor, install insulation with an R-value of not less than 1.0 underneath the slab and around the vertical edges of the perimeter of the slab.	✓	✓	✓
(h) The applicant must construct the floors and walls of the development in accordance with the specifications listed in the table below.	✓	✓	✓
(i) 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.	✓		
(j) 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.		✓	

4. Commitments for common areas and central systems/facilities for the development (non-building specific)

(a) Buildings 'Other'

(i) Materials	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Floor types", "External wall types", "Internal wall types", "Ceiling and roof types", "Frames" and "Glazing" tables below.			✓
(b) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all specifications included in the tables below.		✓	
(c) The applicant must construct the floors, walls, roof, ceiling and roof, windows, glazed doors and skylights of the development in accordance with the specifications listed in the tables below. In the case of glazing, a 5% variance from the area values listed in the "Frames" and "Glazing" tables is permitted.	✓	✓	✓
(d) The applicant must show through receipts that the materials purchased for construction are consistent with the specifications listed in the below tables.			✓

Floor types

Floor type	Area (m2)	Insulation	Low emissions option
garage floor, frame: concrete slab on ground	1739.33	-	-
suspended floor above garage, frame: suspended concrete slab	209	fibreglass batts or roll	-

External wall types

External wall type	Construction type	Area (m2)	Low emissions option	Insulation
External wall type 1	AAC external, brick internal, frame: light steel frame	3500	-	-
External wall type 2	concrete block/ plasterboard, frame: light steel frame	1000	-	fibreglass batts or roll

Internal wall types

Internal wall type	Construction type	Area (m2)	Insulation
Internal wall type 1	plasterboard, frame: light steel frame	12000	-

Reinforcement concrete frames/columns		
Building has reinforced concrete frame/columns?	Volume (m³)	Low emissions option
no	-	-

Ceiling and roof types			
Ceiling and roof type	Area (m²)	Roof Insulation	Ceiling Insulation
concrete - plasterboard internal, frame: light steel frame	214.29	foil/sarking	fibreglass batts or roll

Glazing types			Frame types				
Single glazing (m²)	Double glazing (m²)	Triple glazing (m²)	Aluminium frames (m²)	Timber frames (m²)	uPVC frames (m²)	Steel frames (m²)	Composite frames (m²)
62	-	-	62	-	-	-	-

(b) Common areas and central systems/facilities

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a showerhead, toilet, tap or clothes washer into a common area, then that item must meet the specifications listed for it in the table.		✓	✓
(b) The applicant must install (or ensure that the development is serviced by) the alternative water supply system(s) specified in the "Central systems" column of the table below. In each case, the system must be sized, be configured, and be connected, as specified in the table.	✓	✓	✓
(c) A swimming pool or spa listed in the table must not have a volume (in kLs) greater than that specified for the pool or spa in the table.	✓	✓	
(d) A pool or spa listed in the table must have a cover or shading if specified for the pool or spa in the table.		✓	
(e) The applicant must install each fire sprinkler system listed in the table so that the system is configured as specified in the table.		✓	✓
(f) The applicant must ensure that the central cooling system for a cooling tower is configured as specified in the table.		✓	✓

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	no common facility	4 star	5 star	no common laundry facility

Central systems	Size	Configuration	Connection (to allow for...)
Central water tank - rainwater or stormwater (No. 1)	2000	To collect run-off from at least: - 1000.00 square metres of roof area of buildings in the development - 0 square metres of impervious area in the development - 0 square metres of garden/lawn area in the development - 0 square metres of planter box area in the development (excluding, in each case, any area which drains to, or supplies, any other alternative water supply system).	- irrigation of 603.4 square metres of common landscaped area on the site - car washing in 0 car washing bays on the site
Fire sprinkler system (No. 1)	-	So that fire sprinkler test water is contained within the fire sprinkler system for re-use, rather than disposed.	-

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a ventilation system to service a common area specified in the table below, then that ventilation system must be of the type specified for that common area, and must meet the efficiency measure specified.		✓	✓
(b) In carrying out the development, the applicant must install, as the "primary type of artificial lighting" for each common area specified in the table below, the lighting specified for that common area. This lighting must meet the efficiency measure specified. The applicant must also install a centralised lighting control system or Building Management System (BMS) for the common area, where specified.		✓	✓
(c) The applicant must install the systems and fixtures specified in the "Central energy systems" column of the table below. In each case, the system or fixture must be of the type, and meet the specifications, listed for it in the table.	✓	✓	✓

	Common area ventilation system		Common area lighting		
Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/ BMS
Basement car park	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	light-emitting diode	motion sensors	no
Lower Basement Switch room	ventilation supply only	thermostatically controlled	light-emitting diode	motion sensors	no
Basement Sprinkler/ Hyd. Pump	ventilation supply only	thermostatically controlled	light-emitting diode	motion sensors	no
Basement Waste	ventilation exhaust only	none i.e., continuous	light-emitting diode	motion sensors	no
Basement Hot water	ventilation exhaust only	thermostatically controlled	light-emitting diode	motion sensors	no
Lower Basement Sprinkler/ Hyd. Pump	ventilation supply only	interlocked to light	light-emitting diode	motion sensors	no
Lower Basement Cold Water Pump	ventilation supply only	interlocked to light	light-emitting diode	motion sensors	no
Storage	no mechanical ventilation	-	light-emitting diode	motion sensors	no
Basement Lift lobby	no mechanical ventilation	-	light-emitting diode	time clock and motion sensors	no

Central energy systems	Type	Specification
Central hot water system (No. 1)	electric heat pump – air sourced	Piping insulation (ringmain & supply risers): (a) Piping external to building: R1.0 (~38 mm); (b) Piping internal to building: R1.0 (~38 mm) (c) Unit Efficiency: $3.5 < \text{COP} \leq 4.0$
Alternative energy supply	Photovoltaic system	Rated electrical output (min): 0 peak kW
Other	-	-

Notes

1. In these commitments, "applicant" means the person carrying out the development.
2. The applicant must identify each dwelling, building and common area listed in this certificate, on the plans accompanying any development application, and on the plans and specifications accompanying the application for a construction certificate / complying development certificate, for the proposed development, using the same identifying letter or reference as is given to that dwelling, building or common area in this certificate.
3. This note applies if the proposed development involves the erection of a building for both residential and non-residential purposes (or the change of use of a building for both residential and non-residential purposes). Commitments in this certificate which are specified to apply to a "common area" of a building or the development, apply only to that part of the building or development to be used for residential purposes.
4. If this certificate lists a central system as a commitment for a dwelling or building, and that system will also service any other dwelling or building within the development, then that system need only be installed once (even if it is separately listed as a commitment for that other dwelling or building).
5. If a star or other rating is specified in a commitment, this is a minimum rating.
6. All alternative water systems to be installed under these commitments (if any), must be installed in accordance with the requirements of all applicable regulatory authorities. NOTE: NSW Health does not recommend that stormwater, recycled water or private dam water be used to irrigate edible plants which are consumed raw, or that rainwater be used for human consumption in areas with potable water supply.

Legend

1. 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).
2. 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.
3. Commitments identified with a "✔" in the "Certifier check" column must be certified by a certifying authority as having been fulfilled. (Note: a certifying authority must not issue an occupation certificate (either interim or final) for a building listed in this certificate, or for any part of such a building, unless it is satisfied that each of the commitments whose fulfilment it is required to monitor in relation to the building or part, has been fulfilled).

APPENDIX C INSULATION MARKUPS

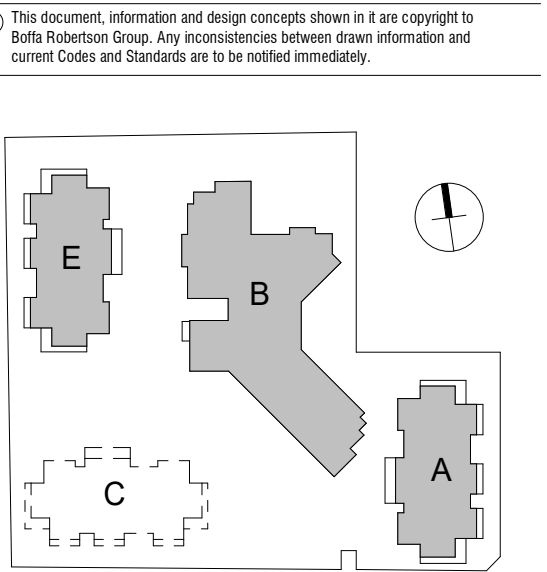


Insulation Mark-ups

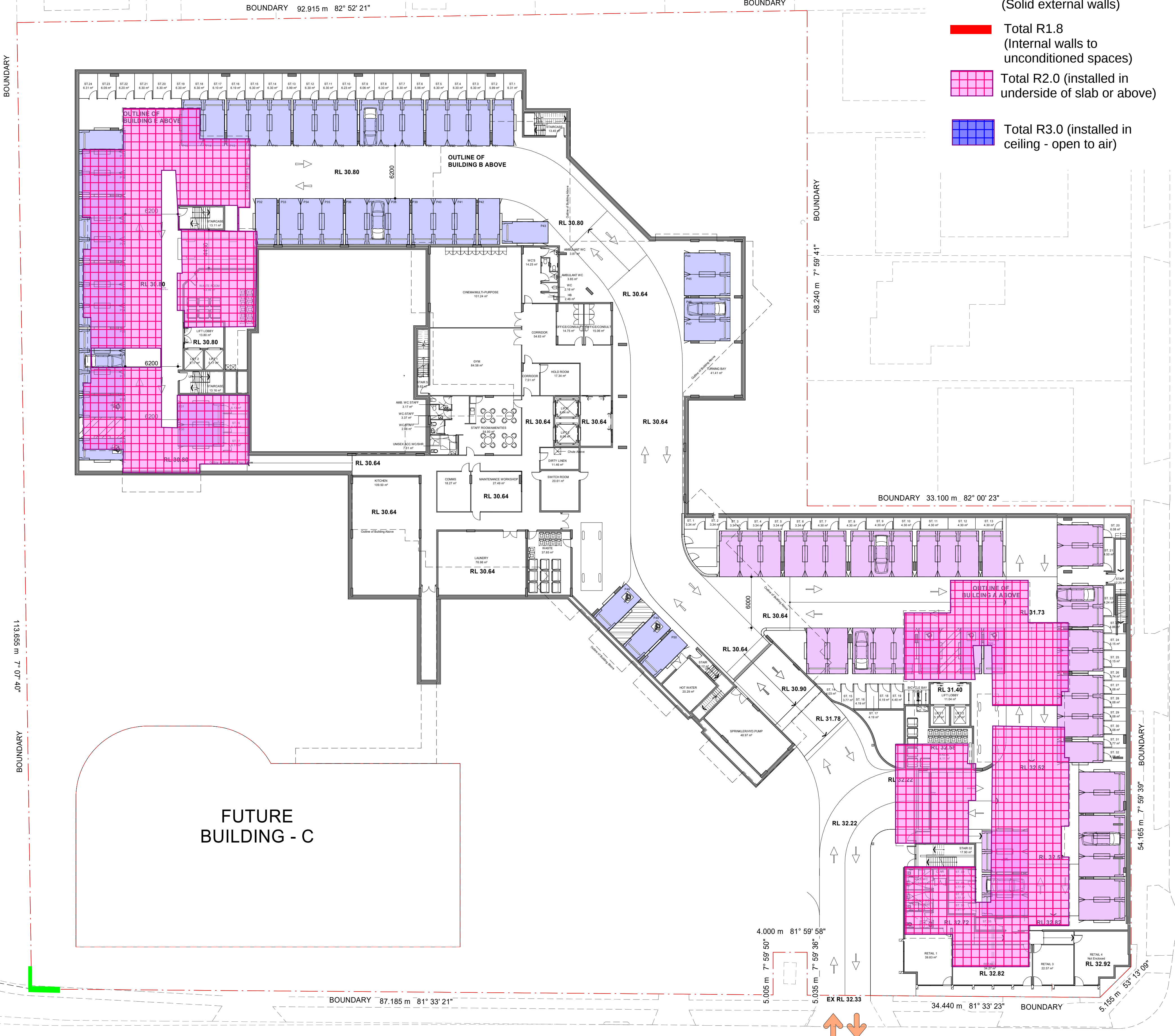
- LEGEND
- Total R2.5 (Solid external walls)
 - Total R1.8 (Internal walls to unconditioned spaces)
 - Total R2.0 (installed in underside of slab or above)
 - Total R3.0 (installed in ceiling - open to air)



Abel Tasman
NA | P00983
04/04/2024
Rev 01

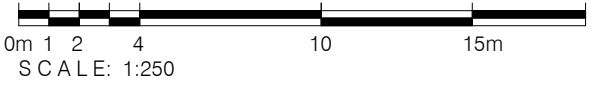


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CAMPBELL HILL ROAD

WALDRON ROAD



C	DA Issue	09.02.24
B	Preliminary Issue	04.09.23
No.	Amendment	Date

Project
ATV REDEVELOPMENT
222 Waldron Road & 138 Campbell Hill Road, Chester Hill

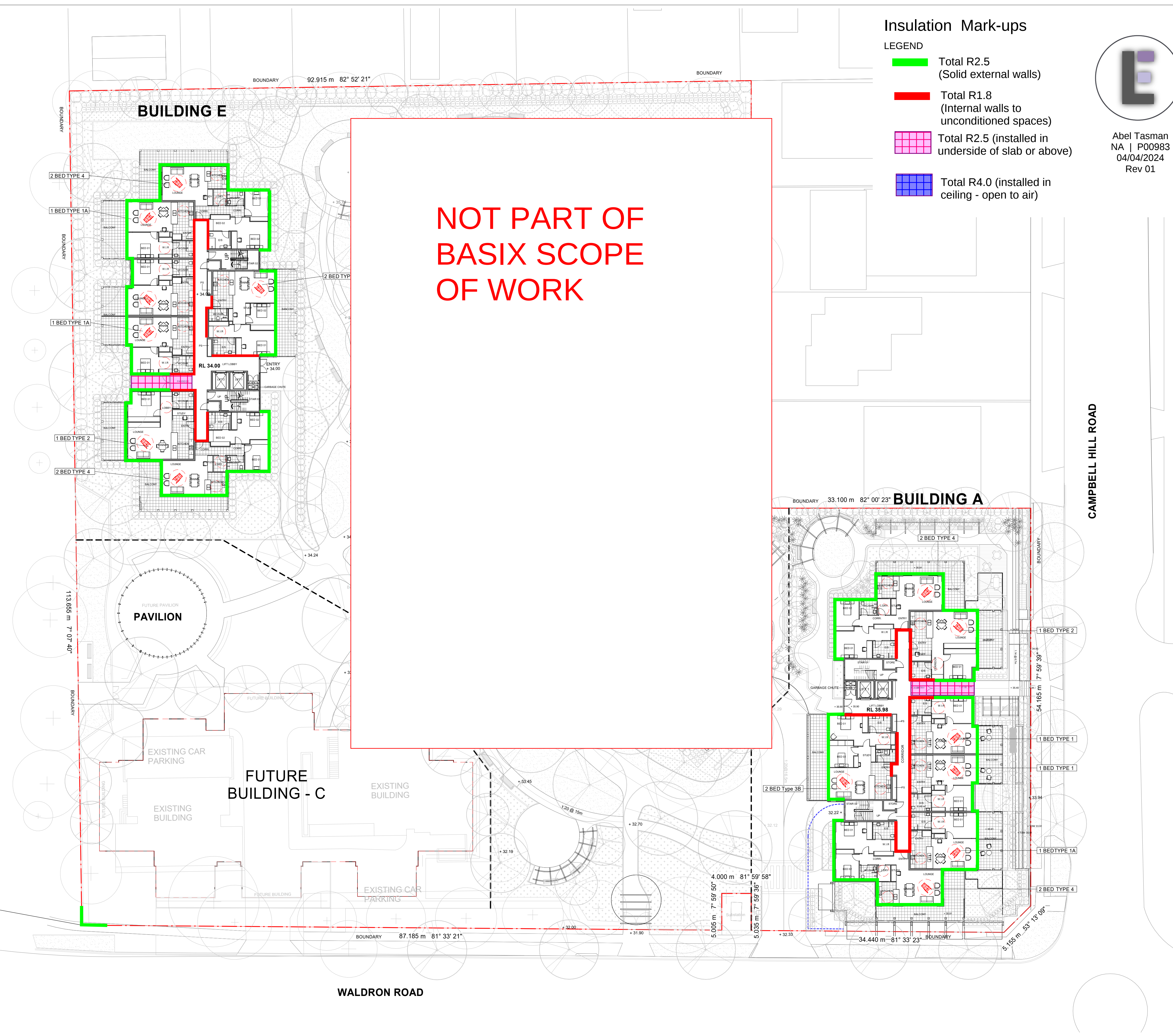
Drawing
BASEMENT FLOOR PLAN - OVERALL

CENTURIUM GROUP
YOUR TRUSTED ADVISOR

Abel Tasman Village
A Culture of Care

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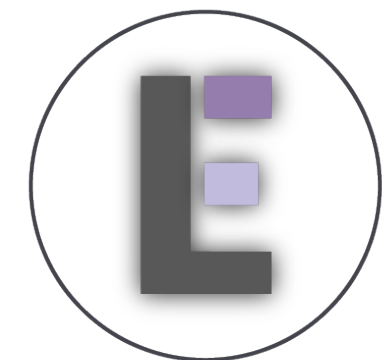
Date	March 2022	Job No.	: Drawing
Scale	1 : 250 @ A1		
Drawn	RS		2108/A1DA04
Amendment	C		



Insulation Mark-ups

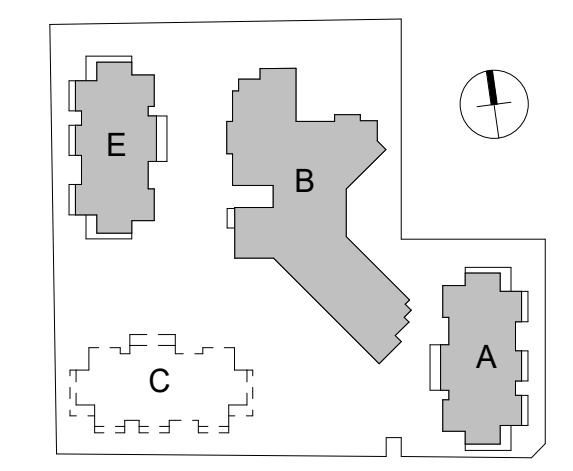
LEGEND

- Total R2.5 (Solid external walls)
- Total R1.8 (Internal walls to unconditioned spaces)
- Total R2.5 (installed in underside of slab or above)
- Total R4.0 (installed in ceiling - open to air)



Abel Tasman
NA | P00983
04/04/2024
Rev 01

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0m 1 2 4 10 15m
SCALE: 1:250

C	DA Issue	09.02.24
B	Preliminary Issue	04.09.23
No.	Amendment	Date

Project
ATV REDEVELOPMENT
222 Waldron Road & 138 Campbell Hill Road, Chester Hill

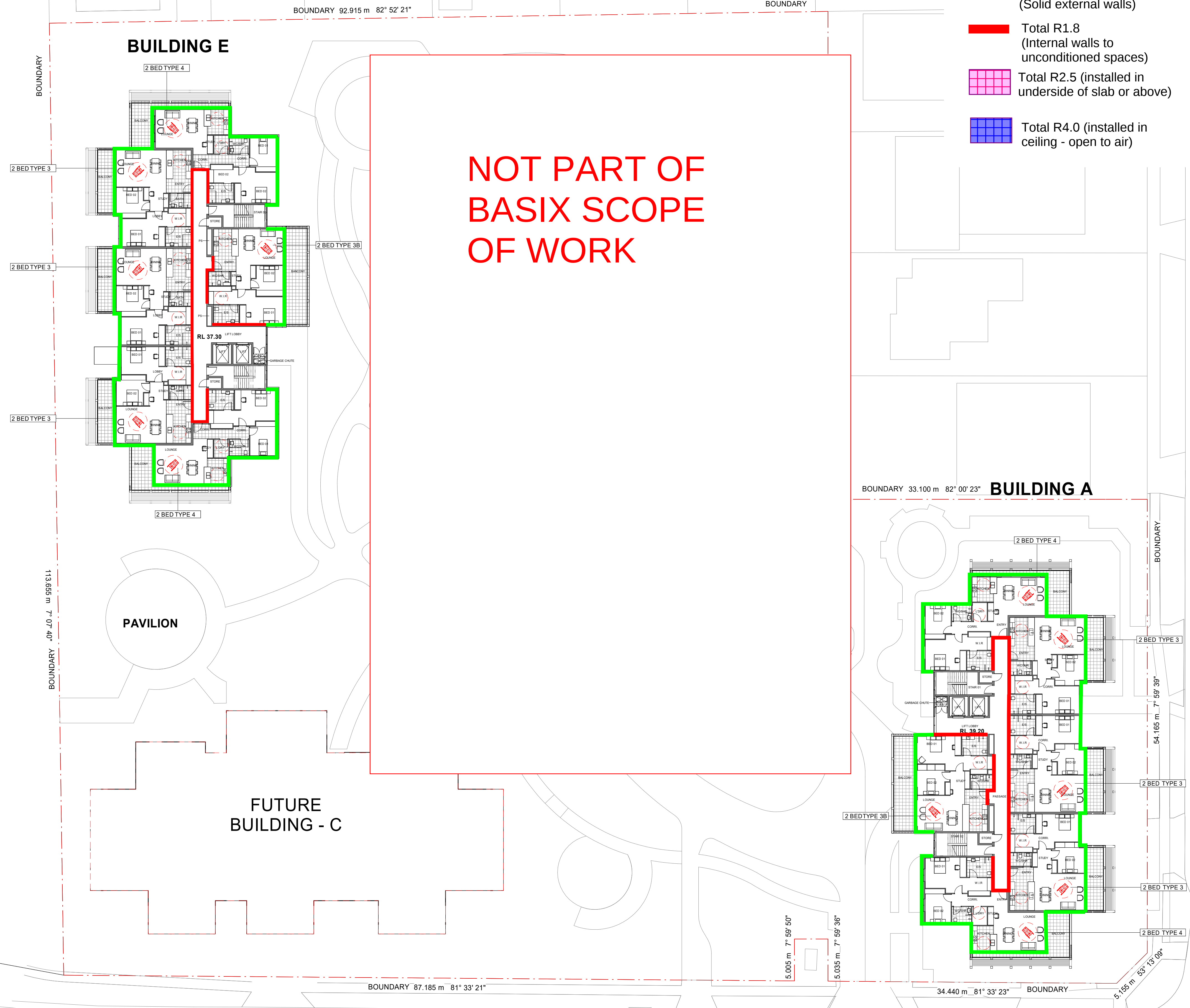
Drawing
GROUND FLOOR PLAN - OVERALL

CENTURION GROUP
YOUR TRUSTED ADVISOR

Abel Tasman Village
A Culture of Care

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Date	March 2022	Job No.	: Drawing
Scale	1 : 250 @ A1		
Drawn	RS		2108/A1DA05
Amendment	C		

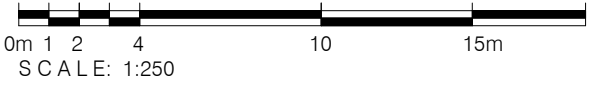
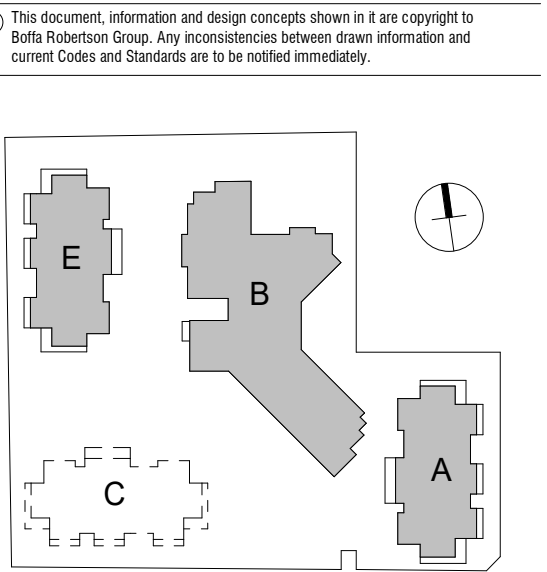


Insulation Mark-ups

- LEGEND
- Total R2.5 (Solid external walls)
 - Total R1.8 (Internal walls to unconditioned spaces)
 - Total R2.5 (installed in underside of slab or above)
 - Total R4.0 (installed in ceiling - open to air)



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04/04/2024
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C	DA Issue	09.02.24
B	Preliminary Issue	04.09.23
No.	Amendment	Date

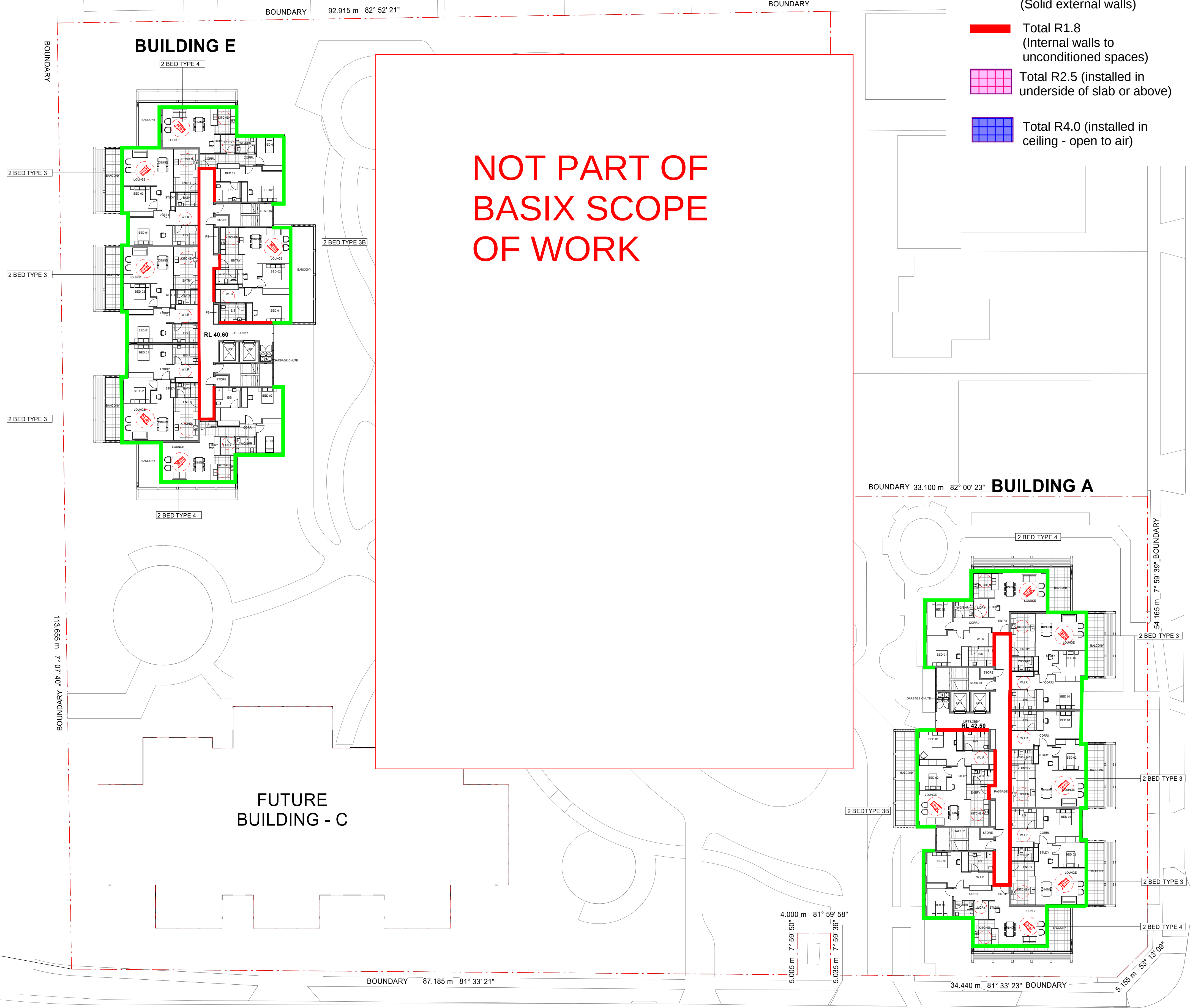
Project
ATV REDEVELOPMENT
222 Waldron Road & 138 Campbell Hill Road, Chester Hill

Drawing
FIRST FLOOR PLAN - OVERALL



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Date	March 2022	Job No.	: Drawing
Scale	1 : 250 @ A1		
Drawn	RS		2108/A1DA06
Amendment	C		

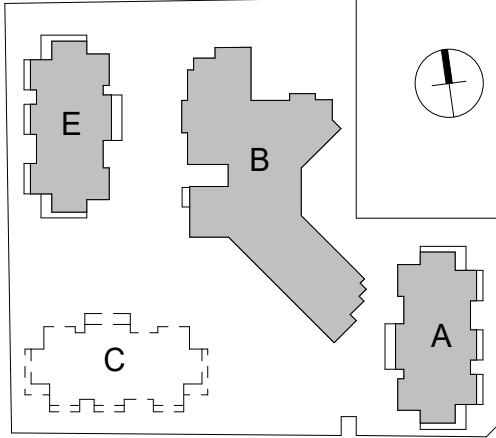


Insulation Mark-ups

- LEGEND
- Total R2.5 (Solid external walls)
 - Total R1.8 (Internal walls to unconditioned spaces)
 - Total R2.5 (installed in underside of slab or above)
 - Total R4.0 (installed in ceiling - open to air)



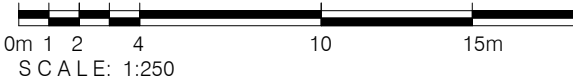
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CAMPBELL HILL ROAD

WALDRON ROAD

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C	DA Issue	09.02.24
B	Preliminary Issue	04.09.23
No.	Amendment	Date

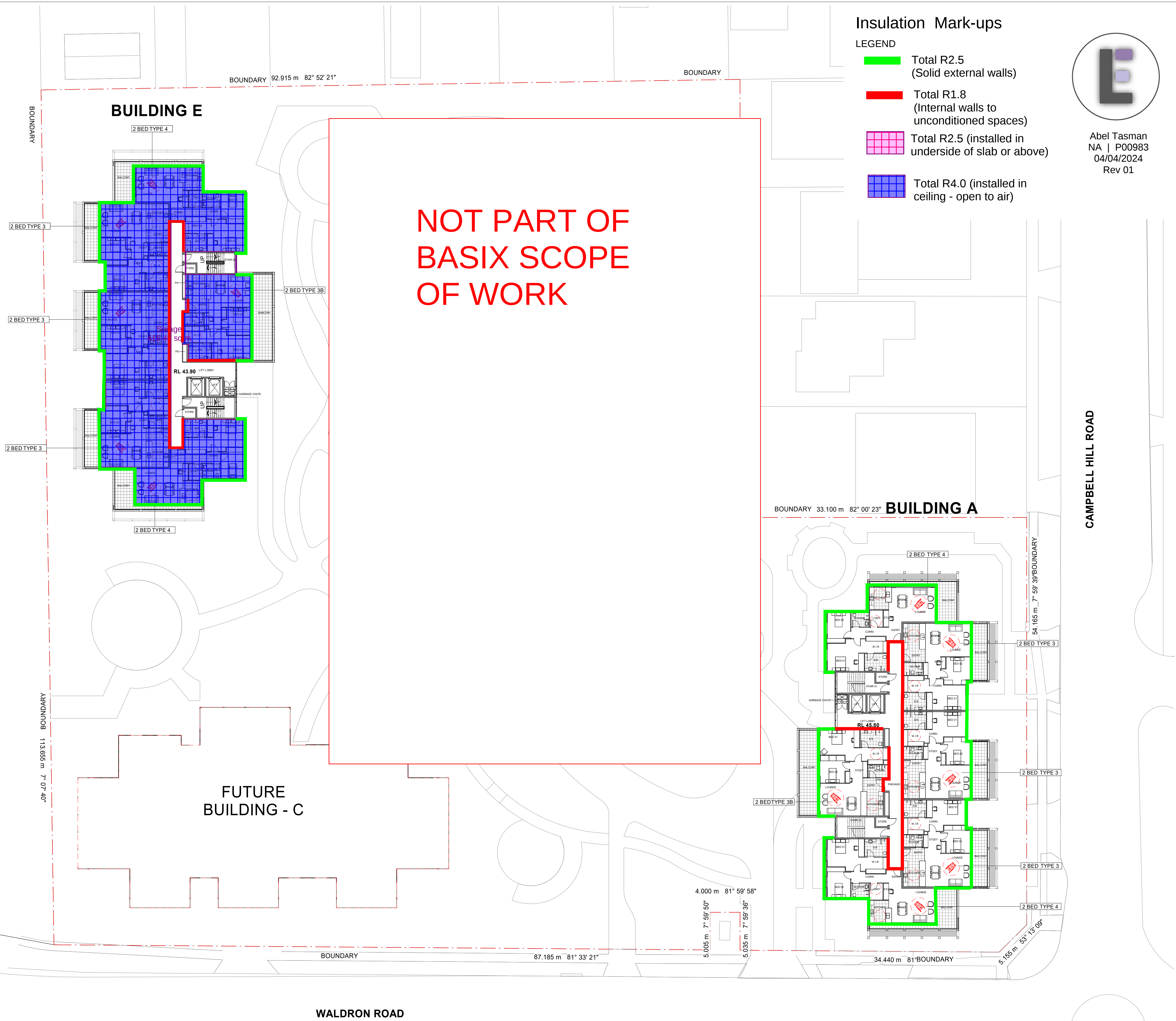
Project
ATV REDEVELOPMENT
222 Waldron Road & 138 Campbell Hill Road, Chester Hill

Drawing
SECOND FLOOR PLAN - OVERALL



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Date	March 2022	Job No.	: Drawing
Scale	1 : 250 @ A1		
Drawn	RS		2108/A1DA07
Amendment	C		

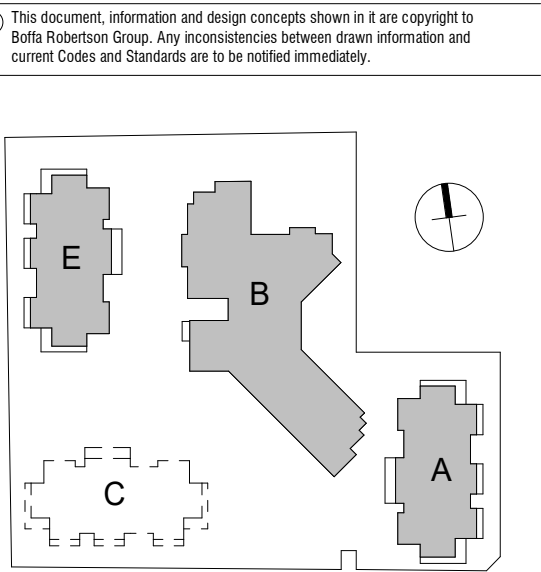


Insulation Mark-ups

- LEGEND
- Total R2.5 (Solid external walls)
 - Total R1.8 (Internal walls to unconditioned spaces)
 - Total R2.5 (installed in underside of slab or above)
 - Total R4.0 (installed in ceiling - open to air)



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0m 1 2 4 10 15m
SCALE: 1:250

C	DA Issue	09.02.24
B	Preliminary Issue	04.09.23
No.	Amendment	Date

Project
ATV REDEVELOPMENT
222 Waldron Road & 138 Campbell Hill Road, Chester Hill

Drawing
THIRD FLOOR PLAN - OVERALL

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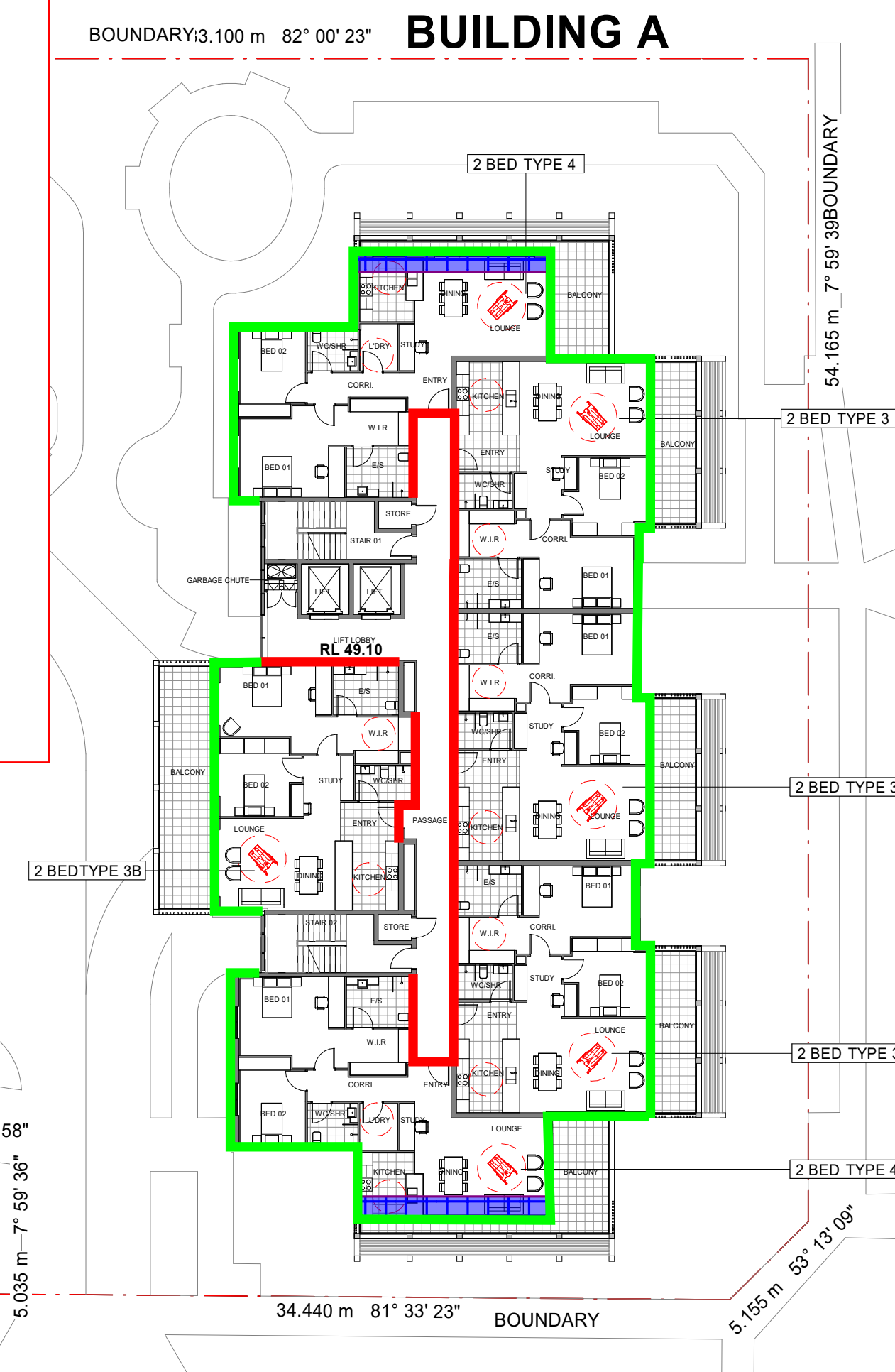
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Tel: (02) 9406 7000
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Date	March 2022	Job No.	: Drawing
Scale	1 : 250 @ A1		
Drawn	RS		2108/A1DA08
Amendment	C		

LEGEND

- 

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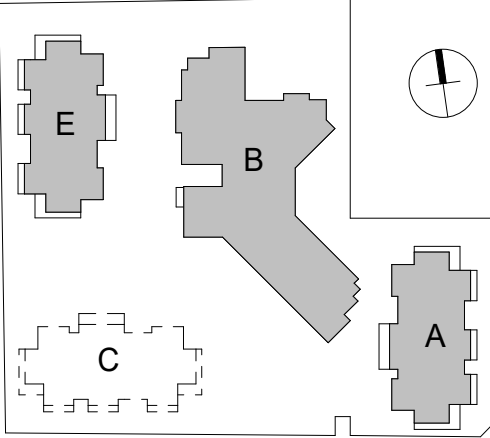
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	Amendment	C		

Insulation Mark-ups

- LEGEND
- Total R2.5 (Solid external walls)
 - Total R1.8 (Internal walls to unconditioned spaces)
 - Total R2.5 (installed in underside of slab or above)
 - Total R4.0 (installed in ceiling - open to air)



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SCALE: 1:250

C	DA Issue	09.02.24
B	Preliminary Issue	04.09.23
No.	Amendment	Date

Project
ATV REDEVELOPMENT
222 Waldron Road & 138 Campbell Hill Road, Chester Hill

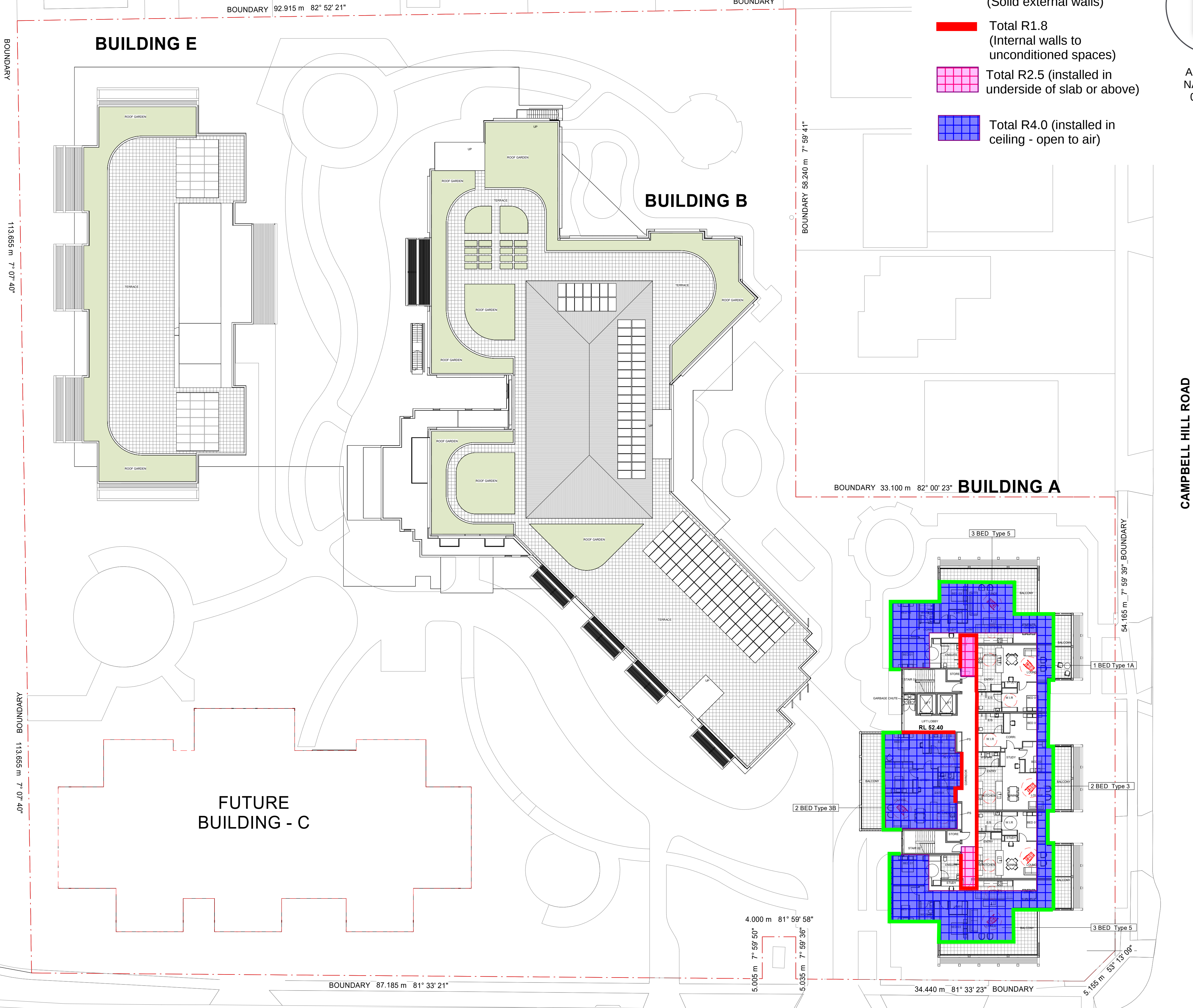
Drawing
FIFTH FLOOR PLAN - OVERALL

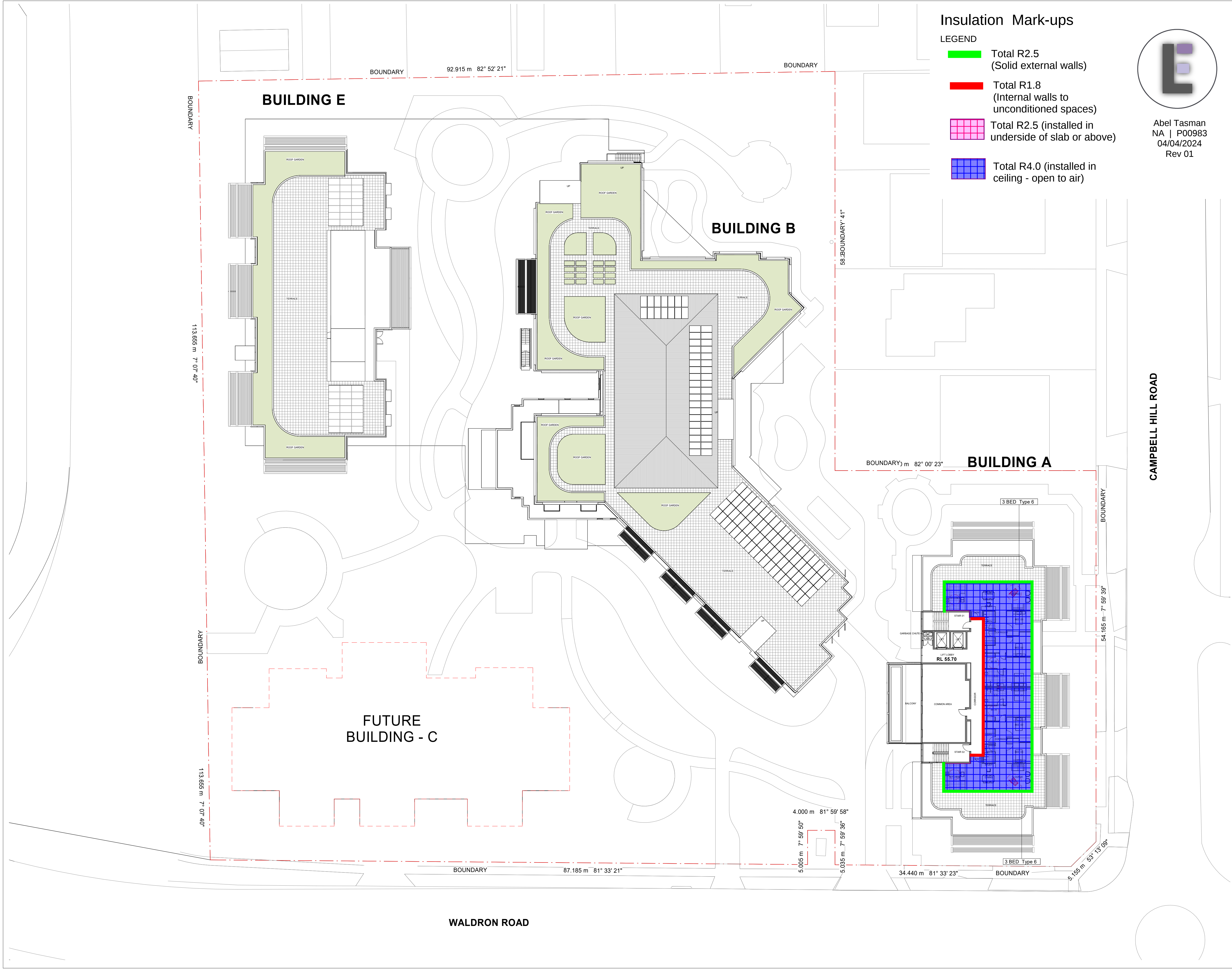
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Date	March 2022	Job No.	: Drawing
Scale	1 : 250 @ A1		
Drawn	RS		2108/A1DA10
Amendment	C		



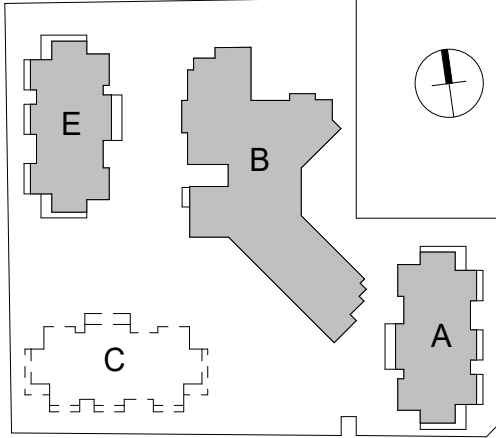


Insulation Mark-ups

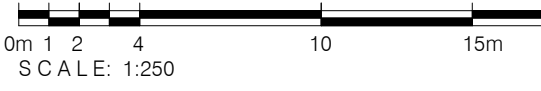
- LEGEND
- Total R2.5 (Solid external walls)
 - Total R1.8 (Internal walls to unconditioned spaces)
 - Total R2.5 (installed in underside of slab or above)
 - Total R4.0 (installed in ceiling - open to air)



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C	DA Issue	09.02.24
B	Preliminary Issue	04.09.23
No.	Amendment	Date

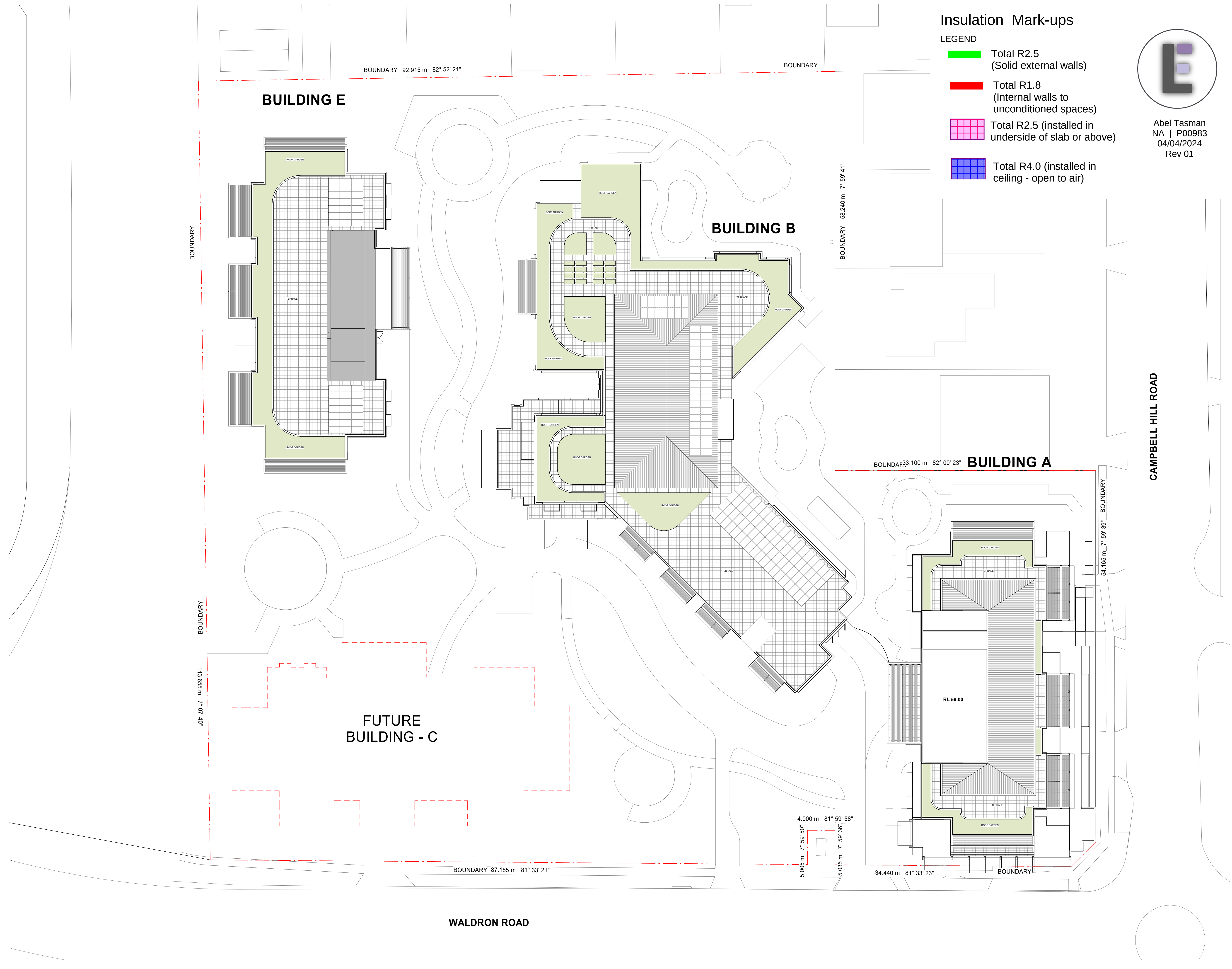
Project
ATV REDEVELOPMENT
222 Waldron Road & 138 Campbell Hill Road, Chester Hill

Drawing
SIXTH FLOOR PLAN - OVERALL



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Date	March 2022	Job No.	: Drawing
Scale	1 : 250 @ A1		
Drawn	RS		2108/A1DA11
Amendment	C		

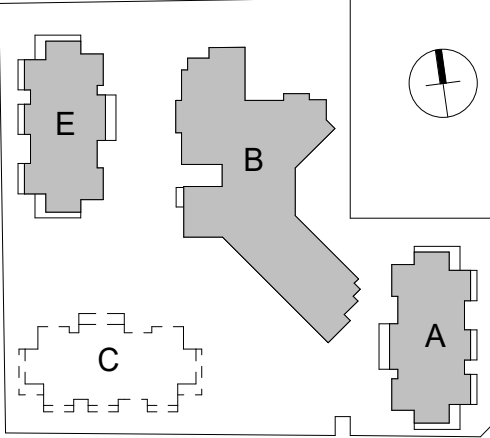


Insulation Mark-ups

- LEGEND
- Total R2.5 (Solid external walls)
 - Total R1.8 (Internal walls to unconditioned spaces)
 - Total R2.5 (installed in underside of slab or above)
 - Total R4.0 (installed in ceiling - open to air)



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0m 1 2 4 10 15m
SCALE: 1:250

C	DA Issue	09.02.24
B	Preliminary Issue	04.09.23
No.	Amendment	Date

Project
ATV REDEVELOPMENT
222 Waldron Road & 138 Campbell Hill Road, Chester Hill

Drawing
ROOF PLAN - OVERALL

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Date	March 2022	Job No.	: Drawing
Scale	1 : 250 @ A1		
Drawn	RS		2108/A1DA13
Amendment	C		

