Appendix C. BASIX Certificate

BASIX® Certificate

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

Multi Dwelling

Certificate number: 446723M_10

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 18/09/2014 published by the Department. This document is available at www.basix.nsw.gov.au

This certificate is a revision of certificate number 446723M_03 lodged with the consent authority or certifier on 10 December 2012 with application MP08_0244 MOD 1.

It is the responsibility of the applicant to verify with the consent authority that the original, or any revised certificate, complies with the requirements of Schedule 1 Clause 2A, 4A or 6A of the Environmental Planning and Assessment Regulation 2000

Secretary
Date of issue: Monday, 31 October 2016
To be valid, this certificate must be lodged within 3 months of the date of issue.

NSW GOVERNMENT | Planning & Environment

Project summary	
Project name	Lindfield Mixed-use Development_10
Street address	23-41 Lindfield Avenue & 7, 11 Havilah Lane Avenue Lindfield 2070
Local Government Area	Ku-ring-gai Council
Plan type and plan number	deposited 1067930
Lot no.	101
Section no.	-
No. of residential flat buildings	2
No. of units in residential flat buildings	140
No. of multi-dwelling houses	0
No. of single dwelling houses	0

Project score		
Water	✔ 40	Target 40
Thermal Comfort	✔ Pass	Target Pass
Energy	✔ 20	Target 20

Certificate Prepared by
Name / Company Name: Cundall
ABN (if applicable): 16 104 924 370

Description of project

Project address	
Project name	Lindfield Mixed-use Development_10
Street address	23-41 Lindfield Avenue & 7, 11 Havilah Lane Avenue Lindfield 2070
Local Government Area	Ku-ring-gai Council
Plan type and plan number	deposited 1067930
Lot no.	101
Section no.	-
Project type	
No. of residential flat buildings	2
No. of units in residential flat buildings	140
No. of multi-dwelling houses	0
No. of single dwelling houses	0
Site details	
Site area (m²)	3974
Roof area (m²)	2580
Non-residential floor area (m²)	2679.2
Residential car spaces	179
Non-residential car spaces	76

Common area landscape		
Common area lawn (m²)	0.0	
Common area garden (m²)	450.0	
Area of indigenous or low water use species (m²)	0.0	
Assessor details		
Assessor number	VIC/BDAV/13/	
Certificate number	15210310	
Climate zone	56	
Project score		
Water	✔ 40	Target 40
Thermal Comfort	✔ Pass	Target Pass
Energy	✔ 20	Target 20

Description of project

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

Residential flat buildings - Havilah Lane, 61 dwellings, 7 storeys above ground

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
101B	3	125.0	0.0	0.0	0.0
106B	2	93.0	0.0	0.0	0.0
110B	1	53.0	0.0	0.0	0.0
201B	3	125.0	0.0	0.0	0.0
206B	2	93.0	0.0	0.0	0.0
210B	1	53.0	0.0	0.0	0.0
301B	3	124.0	0.0	0.0	0.0
306B	2	93.0	0.0	0.0	0.0
310B	1	53.0	0.0	0.0	0.0
501B	3	124.0	0.0	0.0	0.0
506B	1	62.0	0.0	0.0	0.0
510B	2	80.0	0.0	0.0	0.0
603B	2	79.0	0.0	0.0	0.0
608B	2	93.0	0.0	0.0	0.0
G01B	1	67.0	0.0	0.0	0.0
G06B	1	56.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
102B	1	66.0	0.0	0.0	0.0
107B	1	38.0	0.0	0.0	0.0
111B	1	78.0	0.0	0.0	0.0
202B	1	66.0	0.0	0.0	0.0
207B	1	62.0	0.0	0.0	0.0
211B	2	78.0	0.0	0.0	0.0
302B	1	66.0	0.0	0.0	0.0
307B	1	62.0	0.0	0.0	0.0
311B	2	79.0	0.0	0.0	0.0
502B	2	79.0	0.0	0.0	0.0
507B	2	85.0	0.0	0.0	0.0
511B	1	62.0	0.0	0.0	0.0
605B	2	93.0	0.0	0.0	0.0
609B	2	99.0	0.0	0.0	0.0
G02B	1	55.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
103B	1	66.0	0.0	0.0	0.0
108B	2	85.0	0.0	0.0	0.0
112B	1	58.0	0.0	0.0	0.0
203B	1	66.0	0.0	0.0	0.0
208B	2	85.0	0.0	0.0	0.0
212B	1	58.0	0.0	0.0	0.0
303B	1	66.0	0.0	0.0	0.0
308B	2	85.0	0.0	0.0	0.0
312B	1	58.0	0.0	0.0	0.0
503B	2	89.0	0.0	0.0	0.0
508B	2	93.0	0.0	0.0	0.0
601B	3	115.0	0.0	0.0	0.0
606B	1	62.0	0.0	0.0	0.0
610B	2	80.0	0.0	0.0	0.0
G03B	2	113.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
105B	1	53.0	0.0	0.0	0.0
109B	2	93.0	0.0	0.0	0.0
115B	1	38.0	0.0	0.0	0.0
205B	1	53.0	0.0	0.0	0.0
209B	2	93.0	0.0	0.0	0.0
215B	1	62.0	0.0	0.0	0.0
305B	1	53.0	0.0	0.0	0.0
309B	2	93.0	0.0	0.0	0.0
315B	1	62.0	0.0	0.0	0.0
505B	2	93.0	0.0	0.0	0.0
509B	2	99.0	0.0	0.0	0.0
602B	2	71.0	0.0	0.0	0.0
607B	2	85.0	0.0	0.0	0.0
611B	1	62.0	0.0	0.0	0.0
G05B	2	81.0	0.0	0.0	0.0

Residential flat buildings - Lindfield Ave, 79 dwellings, 8 storeys above ground

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
101	1	79.0	0.0	0.0	0.0
106	1	62.0	0.0	0.0	0.0
110	1	40.0	0.0	0.0	0.0
201	2	77.0	0.0	0.0	0.0
206	1	61.0	0.0	0.0	0.0
210	1	53.0	0.0	0.0	0.0
301	2	66.0	0.0	0.0	0.0
307	2	77.0	0.0	0.0	0.0
311	1	54.0	0.0	0.0	0.0
502	2	72.0	0.0	0.0	0.0
507	2	77.0	0.0	0.0	0.0
511	1	54.0	0.0	0.0	0.0
602	2	72.0	0.0	0.0	0.0
607	2	77.0	0.0	0.0	0.0
611	2	99.0	0.0	0.0	0.0
703	1	54.0	0.0	0.0	0.0
708	2	84.0	0.0	0.0	0.0
712	1	59.0	0.0	0.0	0.0
805	2	94.0	0.0	0.0	0.0
809	2	115.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
102	2	70.0	0.0	0.0	0.0
107	2	77.0	0.0	0.0	0.0
111	1	52.0	0.0	0.0	0.0
202	2	72.0	0.0	0.0	0.0
207	2	77.0	0.0	0.0	0.0
211	1	54.0	0.0	0.0	0.0
302	3	126.0	0.0	0.0	0.0
308	2	84.0	0.0	0.0	0.0
312	2	89.0	0.0	0.0	0.0
503	1	54.0	0.0	0.0	0.0
508	2	84.0	0.0	0.0	0.0
512	2	89.0	0.0	0.0	0.0
603	1	54.0	0.0	0.0	0.0
608	2	84.0	0.0	0.0	0.0
612	1	59.0	0.0	0.0	0.0
705	2	94.0	0.0	0.0	0.0
709	2	94.0	0.0	0.0	0.0
801	2	66.0	0.0	0.0	0.0
806	1	61.0	0.0	0.0	0.0
810	2	102.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
103	1	40.0	0.0	0.0	0.0
108	2	94.0	0.0	0.0	0.0
112	2	89.0	0.0	0.0	0.0
203	1	54.0	0.0	0.0	0.0
208	2	94.0	0.0	0.0	0.0
212	2	89.0	0.0	0.0	0.0
305	2	94.0	0.0	0.0	0.0
309	2	94.0	0.0	0.0	0.0
315	1	61.0	0.0	0.0	0.0
505	2	94.0	0.0	0.0	0.0
509	2	94.0	0.0	0.0	0.0
513	1	61.0	0.0	0.0	0.0
605	2	94.0	0.0	0.0	0.0
609	2	94.0	0.0	0.0	0.0
701	2	66.0	0.0	0.0	0.0
706	1	61.0	0.0	0.0	0.0
710	2	102.0	0.0	0.0	0.0
802	2	72.0	0.0	0.0	0.0
807	2	77.0	0.0	0.0	0.0
811	3	123.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
105	2	94.0	0.0	0.0	0.0
109	2	94.0	0.0	0.0	0.0
115	1	61.0	0.0	0.0	0.0
205	2	94.0	0.0	0.0	0.0
209	2	94.0	0.0	0.0	0.0
215	1	61.0	0.0	0.0	0.0
306	1	61.0	0.0	0.0	0.0
310	1	54.0	0.0	0.0	0.0
501	2	66.0	0.0	0.0	0.0
506	1	61.0	0.0	0.0	0.0
510	1	54.0	0.0	0.0	0.0
601	2	66.0	0.0	0.0	0.0
606	1	61.0	0.0	0.0	0.0
610	2	102.0	0.0	0.0	0.0
702	2	72.0	0.0	0.0	0.0
707	2	77.0	0.0	0.0	0.0
711	2	99.0	0.0	0.0	0.0
803	1	54.0	0.0	0.0	0.0
808	2	84.0	0.0	0.0	0.0

Description of project

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

Common areas of unit building - Havilah Lane

Common area	Floor area (m²)
Lift car (No. 1)	-
Ground floor lobby type Lower Ground	70.0

Common area	Floor area (m²)
Lift car (No. 2)	-
Hallway/lobby type Build B (lvl G - 5)	427.5

Common area	Floor area (m²)
Garbage room (residential floors B)	32.0

Common areas of unit building - Lindfield Ave

Common area	Floor area (m²)
Lift car (No. 3)	-
Ground floor lobby type Build A	84.0

Common area	Floor area (m²)
Lift car (No. 4)	-
Hallway/lobby type Build A (lvl 1 - 7)	534.7

Common area	Floor area (m²)
Garbage room (residential floors A)	44.8

Common areas of the development (non-building specific)

Common area	Floor area (m²)
Car park area B2	2263.5
Switch rooms	32.4
Plant or service room B1/2	183.1

Common area	Floor area (m²)
Car park area B1	2187.0
Garbage room B1	63.5
Plant or service room LowerGnd	66.9

Common area	Floor area (m²)
Car park area B3	2035.3
Garbage room LowerGrnd	59.3
Store rooms	81.4

Schedule of BASIX commitments

1. Commitments for Residential flat buildings - Havilah Lane
    - (a) Dwellings
        - (i) Water
        - (ii) Energy
        - (iii) Thermal Comfort
    - (b) Common areas and central systems/facilities
        - (i) Water
        - (ii) Energy

2. Commitments for Residential flat buildings - Lindfield Ave
    - (a) Dwellings
        - (i) Water
        - (ii) Energy
        - (iii) Thermal Comfort
    - (b) Common areas and central systems/facilities
        - (i) Water
        - (ii) Energy

3. Commitments for multi-dwelling houses

4. Commitments for single dwelling houses

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

(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.	✔	✔	✔

	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	3 star (> 6 but <= 7.5 L/min)	4 star	4 star	5 star	no	-	4 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
None	-	-	-	-	-	-	-	-

(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.		✔	✔

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(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".		✔	

	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 1	individual fan, ducted to façade or roof	interlocked to light	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off

	Cooling		Heating		Artificial lighting						Natural lighting	
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/ toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
101B, 201B, 301B, 501B, 601B, G03B	1-phase airconditioning 1.5 Star (new rating)	1-phase airconditioning 1.5 Star (new rating)	1-phase airconditioning 1.5 Star (new rating)	1-phase airconditioning 1.5 Star (new rating)	3 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	-
106B, 108B, 109B, 206B, 208B, 209B, 211B, 306B, 308B, 309B, 311B, 502B, 503B, 505B, 507B, 508B, 509B, 510B, 602B, 603B, 605B, 607B, 608B, 609B, 610B	1-phase airconditioning 1.5 Star (new rating)	1-phase airconditioning 1.5 Star (new rating)	1-phase airconditioning 1.5 Star (new rating)	1-phase airconditioning 1.5 Star (new rating)	2 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	-

	Cooling		Heating		Artificial lighting						Natural lighting	
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/ toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
102B, 103B, 105B, 107B, 110B, 111B, 112B, 115B, 202B, 203B, 205B, 207B, 210B, 212B, 215B, 302B, 303B, 305B, 307B, 310B, 312B, 315B, 506B, 511B, 606B, 611B, G01B, G02B, G05B, G06B	1-phase airconditioning 1.5 Star (new rating)	1-phase airconditioning 1.5 Star (new rating)	1-phase airconditioning 1.5 Star (new rating)	1-phase airconditioning 1.5 Star (new rating)	1 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	-

	Individual pool		Individual spa		Appliances & other efficiency measures							
Dwelling no.	Pool heating system	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Refrigerator	Well ventilated fridge space	Dishwasher	Clothes washer	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
All dwellings	-	-	-	-	gas cooktop & electric oven	-	no	3 star	-	2 star	no	no

(iii) Thermal Comfort	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.	✔	✔	✔

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
107B	50.0	26.0
207B	39.0	23.0
301B	23.0	30.0
302B	5.0	36.0
303B	5.0	35.0
307B	40.0	24.0
309B	23.0	22.0
310B	20.0	32.0
311B	36.0	33.0
312B	53.0	15.0
315B	55.0	40.0
501B	13.0	33.0
502B	8.0	33.0
503B	6.0	39.0
507B	40.0	22.0
509B	17.0	36.0
510B	42.0	28.0
511B	40.0	17.0
601B	25.0	23.0
602B	26.0	37.0
603B	17.0	41.0
605B	41.0	23.0
607B	58.0	25.0
608B	43.0	24.0
609B	30.0	39.0
610B	66.0	35.0
G02B	17.0	37.0

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
G03B	31.0	29.0
G05B	14.0	41.0
G06B	28.0	32.0
101B, 201B	22.0	29.0
105B, 205B	41.0	44.0
108B, 208B	38.0	28.0
110B, 210B	19.0	31.0
111B, 211B	35.0	32.0
112B, 212B	52.0	14.0
115B, 215B	53.0	39.0
305B, 505B	43.0	45.0
306B, 506B	24.0	22.0
308B, 508B	39.0	29.0
606B, 611B	59.0	15.0
106B, 109B, 206B, 209B	22.0	21.0
All other dwellings	3.0	35.0

(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

(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 car (No. 1)	-	-	compact fluorescent	connected to lift call button	No
Lift car (No. 2)	-	-	compact fluorescent	connected to lift call button	No
Garbage room (residential floors B)	ventilation exhaust only	-	fluorescent	motion sensors	Yes
Ground floor lobby type Lower Ground	ventilation supply only	time clock or BMS controlled	compact fluorescent	motion sensors	Yes
Hallway/lobby type Build B (lvl G - 5)	ventilation supply only	time clock or BMS controlled	compact fluorescent	zoned switching with motion sensor	Yes

Central energy systems	Type	Specification
Central hot water system (No. 1)	gas-fired boiler	Solar collector area (minimum, in square metres): 0.0 Piping insulation (ringmain & supply risers): (a) Piping external to building: R1.0 (~38 mm); (b) Piping internal to building: R1.0 (~38 mm)
Lift (No. 1)	gearless traction with V V V F motor	Number of levels (including basement): 9
Lift (No. 2)	gearless traction with V V V F motor	Number of levels (including basement): 8

2. Commitments for Residential flat buildings - Lindfield Ave

(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.	✔	✔	✔

	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	3 star (> 6 but <= 7.5 L/min)	4 star	4 star	5 star	no	-	4 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
None	-	-	-	-	-	-	-	-

(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.		✔	✔

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(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".		✔	

	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 1	individual fan, ducted to façade or roof	interlocked to light	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off

	Cooling		Heating		Artificial lighting						Natural lighting	
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/ toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
811	ceiling fans + 1-phase airconditioning 1.5 Star (new rating)	ceiling fans + 1-phase airconditioning 1.5 Star (new rating)	1-phase airconditioning 1.5 Star (new rating)	1-phase airconditioning 1.5 Star (new rating)	3 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	-
101, 108, 110, 115, 201, 210, 703, 706, 712, 801, 803, 806	ceiling fans + 1-phase airconditioning 1.5 Star (new rating)	ceiling fans + 1-phase airconditioning 1.5 Star (new rating)	1-phase airconditioning 1.5 Star (new rating)	1-phase airconditioning 1.5 Star (new rating)	1 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	-
109, 112, 209, 305, 308, 309, 312, 505, 508, 509, 512, 605, 608, 609, 610, 611	ceiling fans + 1-phase airconditioning 1.5 Star (new rating)	ceiling fans + 1-phase airconditioning 1.5 Star (new rating)	1-phase airconditioning 1.5 Star (new rating)	1-phase airconditioning 1.5 Star (new rating)	2 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	yes

	Cooling		Heating		Artificial lighting						Natural lighting	
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/ toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
103, 106, 111, 203, 206, 211, 215, 301, 306, 310, 311, 315, 501, 503, 506, 510, 511, 513, 601, 603, 606, 612, 701	ceiling fans + 1-phase airconditioning 1.5 Star (new rating)	ceiling fans + 1-phase airconditioning 1.5 Star (new rating)	1-phase airconditioning 1.5 Star (new rating)	1-phase airconditioning 1.5 Star (new rating)	1 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	yes

	Cooling		Heating		Artificial lighting						Natural lighting	
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/ toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
102, 105, 107, 202, 205, 207, 208, 212, 302, 307, 502, 507, 602, 607, 702, 705, 707, 708, 709, 710, 711, 802, 805, 807, 808, 809, 810	ceiling fans + 1-phase airconditioning 1.5 Star (new rating)	ceiling fans + 1-phase airconditioning 1.5 Star (new rating)	1-phase airconditioning 1.5 Star (new rating)	1-phase airconditioning 1.5 Star (new rating)	2 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	-

	Individual pool		Individual spa		Appliances & other efficiency measures							
Dwelling no.	Pool heating system	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Refrigerator	Well ventilated fridge space	Dishwasher	Clothes washer	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
All dwellings	-	-	-	-	gas cooktop & electric oven	-	no	3 star	-	2 star	no	no

(iii) Thermal Comfort	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.	✔	✔	✔

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
110	13.0	17.0
209	22.0	22.0
301	12.0	31.0
302	10.0	19.0
307	27.0	16.0
308	27.0	44.0
510	22.0	32.0
511	32.0	30.0
512	41.0	28.0
513	40.0	17.0
801	26.0	21.0
802	23.0	21.0
803	37.0	29.0
806	60.0	15.0
807	48.0	15.0
808	46.0	50.0
810	42.0	59.0
811	66.0	32.0
101, 201	26.0	37.0
102, 202	7.0	24.0
103, 203	41.0	44.0
107, 207	26.0	15.0
108, 208	28.0	33.0
210, 310	19.0	31.0
610, 710	33.0	58.0
611, 711	61.0	29.0
612, 712	48.0	30.0

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
805, 809	42.0	23.0
106, 206, 305	23.0	22.0
111, 211, 311	30.0	29.0
112, 212, 312	40.0	26.0
115, 215, 315	38.0	15.0
501, 601, 701	13.0	33.0
502, 602, 702	9.0	26.0
503, 603, 703	43.0	46.0
506, 606, 706	25.0	24.0
507, 607, 707	29.0	17.0
508, 608, 708	29.0	45.0
509, 609, 709	24.0	22.0
105, 109, 205, 309	22.0	21.0
All other dwellings	24.0	23.0

(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

(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 car (No. 3)	-	-	compact fluorescent	connected to lift call button	No
Lift car (No. 4)	-	-	compact fluorescent	connected to lift call button	No
Garbage room (residential floors A)	ventilation exhaust only	-	fluorescent	motion sensors	Yes
Ground floor lobby type Build A	ventilation supply only	time clock or BMS controlled	compact fluorescent	motion sensors	Yes
Hallway/lobby type Build A (lvl 1 - 7)	ventilation supply only	time clock or BMS controlled	compact fluorescent	zoned switching with motion sensor	Yes

Central energy systems	Type	Specification
Lift (No. 3)	gearless traction with V V V F motor	Number of levels (including basement): 11
Lift (No. 4)	gearless traction with V V V F motor	Number of levels (including basement): 11

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

(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)	32486.0	To collect run-off from at least: - 2035.0 square metres of roof area of buildings in the development - 0.0 square metres of impervious area in the development - 0.0 square metres of garden/lawn area in the development - 0.0 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 450.0 square metres of common landscaped area on the site - car washing in 1 car washing bays on the site

Central systems	Size	Configuration	Connection (to allow for...)
Reticulated alternative water supply	-	Installation of plumbing to make provision for connection to No scheme found reticulated alternative water supply.	
Fire sprinkler system (No. 1)	-	So that fire sprinkler test water is contained within the fire sprinkler system for re-use, rather than disposed.	-
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
Car park area B2	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	fluorescent	motion sensors	Yes
Car park area B1	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	fluorescent	motion sensors	Yes
Car park area B3	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	fluorescent	motion sensors	Yes
Switch rooms	ventilation exhaust only	none ie. continuous	fluorescent	motion sensors	Yes
Garbage room B1	ventilation exhaust only	-	fluorescent	motion sensors	Yes
Garbage room LowerGrnd	ventilation exhaust only	-	fluorescent	motion sensors	Yes
Plant or service room B1/2	ventilation exhaust only	none ie. continuous	fluorescent	motion sensors	Yes

	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**
Plant or service room LowerGnd	ventilation exhaust only	none ie. continuous	fluorescent	motion sensors	Yes
Store rooms	ventilation supply only	time clock or BMS controlled	fluorescent	motion sensors	Yes

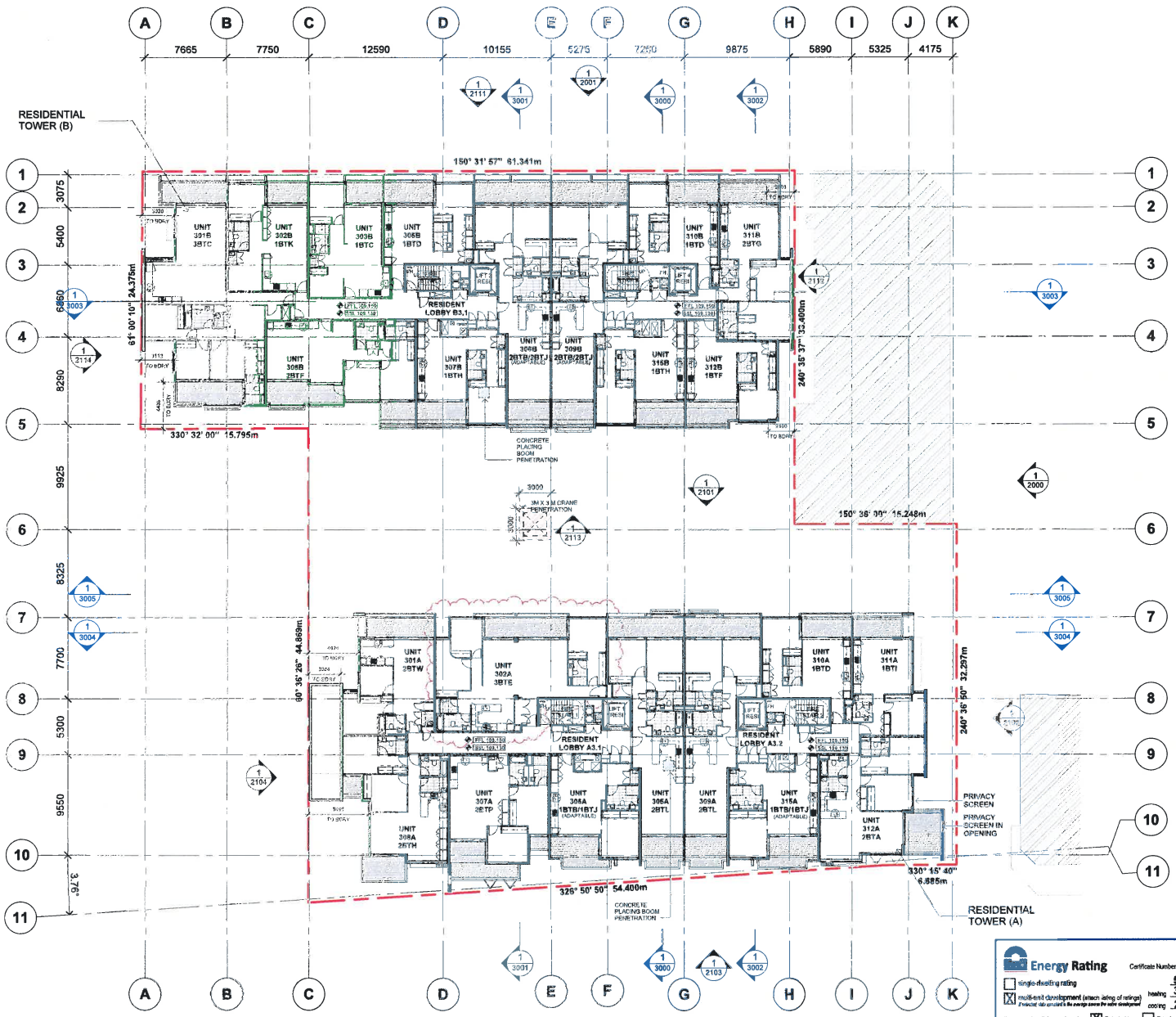
Notes

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 D. NatHERs Certified Drawings



Assessor Certificate # 15210310 Assessor # BDAV/13/1521

Thermal Load & NatHERS Spec			
Unit no.	Heating load MJ/m2/yr	Cooling load MJ/m2/yr	Star Rating
101A	26	37	5.2
102A	7	24	7.6
103A	41	44	4.1
105A	22	21	6.7
106A	23	22	6.7
107A	26	15	6.8
108A	28	33	5.3
109A	22	21	6.7
110A	13	17	7.6
111A	30	29	5.4
112A	40	26	4.9
115A	38	15	5.9
201A	26	37	5.2
202A	7	24	7.6
203A	41	44	4.1
205A	22	21	6.7
206A	23	22	6.7
207A	26	15	6.8
208A	28	33	5.3
209A	22	21	6.7
210A	19	31	6
211A	30	29	5.4
212A	40	26	4.9
215A	38	15	5.9
301A	12	31	7.4
302A	10	19	7.7
308A	Merged with Unit 302A		
305A	23	22	6.7
306A	24	23	6.7
307A	27	16	6.8
308A	27	44	4.7
309A	22	21	6.7
310A	19	31	6
311A	30	29	5.4
312A	40	26	4.9
315A	38	15	5.9
501A	13	33	7.3
502A	9	26	7.5
503A	43	46	4
505A	24	23	6.6
506A	25	24	6.6
507A	29	17	6.7
508A	29	45	4.6
509A	24	22	6.6
510A	22	32	5.9
511A	32	30	5.3
512A	41	28	4.8
515A	40	17	5.8
601A	13	33	7.3
602A	9	26	7.5
603A	43	46	4
605A	24	23	6.6
606A	25	24	6.6
607A	29	17	6.7
608A	29	45	4.6
609A	24	22	6.6
610A	33	58	4
611A	61	29	3.9
612A	48	30	4.6
701A	13	33	7.3
702A	9	26	7.5
703A	43	46	4
705A	24	23	6.6
706A	25	24	6.6
707A	29	17	6.7
708A	29	45	4.6
709A	24	22	6.6
710A	33	58	4
711A	61	29	3.9
712A	48	30	4.6
801A	26	21	6.3
802A	23	21	6.6
803A	37	29	4.9
805A	42	23	5.1
806A	60	15	4.5
807A	48	15	5.2
808A	46	50	3.6
809A	42	23	5.1
810A	42	59	3.6
811A	66	32	3.4
Total (79 units)	2349	2236	458.1

Ceiling Insulation: R2.0 Only for U21,U22, U5 &U6

External wall Insulation: BC: None

Roof type / colour
- Suspended Slab roof: Medium colour

All External Glazing:
ALM-002-01 A: Aluminium B SG Clear U=6.7 SHGC =0.70

All External door & window to be weather sealed

Eaves / shading as per drawings

Floor Insulation: R1.0 for Units with Elevated open floor below

External wall Type: Hebel Wall Sytem

External wall Insulation: R1.0

Roof type / colour
- Suspended Slab roof: Medium colour

All External Glazing:
ALM-002-01 A: Aluminium B SG Clear U=6.7 SHGC =0.70

All External door & window to be weather sealed

Eaves / shading as per drawings

Assessor Certificate # 15210314 Assessor # BDAV/13/1521

Thermal Load & NatHERS Spec			
Unit no.	Heating load MJ/m2/yr	Cooling load MJ/m2/yr	Star Rating
G01B	3	35	7.1
G02B	17	37	5.8
G03B	31	29	5.4
G05B	14	41	5.7
G06B	28	32	6.3
101B	22	29	5.9
102B	3	35	7.1
103B	3	35	7.1
105B	41	44	4.1
106B	22	21	6.7
107B	50	26	4.4
108B	38	28	5
109B	22	21	6.7
110B	19	31	6
111B	35	32	5.3
112B	52	14	5
115B	53	39	3.9
201B	22	29	5.9
202B	3	35	7.1
203B	3	35	7.1
205B	41	44	4.1
206B	22	21	6.7
207B	39	23	5.2
208B	38	28	5
209B	22	21	6.7
210B	19	31	6
211B	35	32	5.3
212B	52	14	5
215B	53	39	3.9
301B	23	30	5.9
302B	5	36	7.1
303B	5	35	7.1
305B	43	45	4.1
306B	24	22	6.7
307B	40	24	5.2
308B	39	29	5
309B	23	22	6.7
310B	20	32	6
311B	36	33	5.3
312B	53	15	5
315B	55	40	3.9
501B	13	33	7.3
502B	8	33	6.9
503B	6	39	6.4
505B	43	45	4.1
506B	24	22	6.7
507B	40	24	5.2
508B	39	29	5
509B	17	36	5.9
510B	42	28	4.8
511B	40	17	5.8
601B	25	23	6.3
602B	26	37	5.2
603B	17	41	5.5
605B	41	23	5.1
606B	59	15	4.6
607B	58	25	4.2
608B	43	24	5.1
609B	30	39	4.8
610B	66	35	3.3
611B	59	15	4.6
Total (61)	1864	1827	340.3

Ceiling Insulation: R2.0 Only for U21,U22, U5 &U6

External wall Insulation: BC: None

Roof type / colour
- Suspended Slab roof: Medium colour

All External Glazing:
ALM-002-01 A: Aluminium B SG Clear U=6.7 SHGC =0.70

All External door & window to be weather sealed

Eaves / shading as per drawings

Building	Total Units	Total Heating load	Total Cooling load	Average Star Ratings
Bld-A	79	2349	2236	458.1
Bld-B	61	1864	1827	340.3
Total	140	4213	4063	798.4
Average for project		30.09	29.02	5.7

S75W SUBMISSION - MOD 4

Energy Rating Certificate Number 15210310

☐ single-dwelling rating

☒ multi-unit development (attach listing of ratings) If selected, tick applicable to the average score for units' development

5.7 stars

heating 30.0 MJ/m²

cooling 29.0 MJ/m²

Processed drawings confirmation: ☒ Rated with ☐ Rated without

Assessor Name/Stamp Ved Baheti VIC/BDAV/13/1521

Assessor Signature Date 31/10/2016

Plot Date: 27/10/2016 11:35:43 AM

Cad File No: D:\michaelq\Documents\CA2924-CRN-M3-AR-Master_Model_R15_michaelq.rvt

Notes

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Rev	DESCRIPTION	By	Date
-	PRE-TENDER ISSUED FOR QS ONLY	MQ	14/09/2015
A	ISSUED FOR TENDER	MQ	18/09/2015
B	ISSUED FOR PCA & FIRE ENGINEER REVIEW	MQ	07/04/2016
1	ISSUED FOR AFC	MQ	06/06/2016
2	PARTY WALL LINING ADDED; GA NOTES REMOVED	MQ	22/06/2016
3	ISSUED FOR CONSTRUCTION CERTIFICATE 3	MQ	26/07/2016
4	UNIT 302A&303A AMALGAMATION, GARCP PLANS & CONCRETE PROFILE UPDATES	WT	27/10/2016

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Scale 1 : 200 @ A1

LINDFIELD MIXED-USE DEVELOPMENT
23-41 LINDFIELD AVE & 7, 11 HAVILAH LA
LINDFIELD NSW 2070

Drawn: MQ | Checked: DC | Date: 26/07/16

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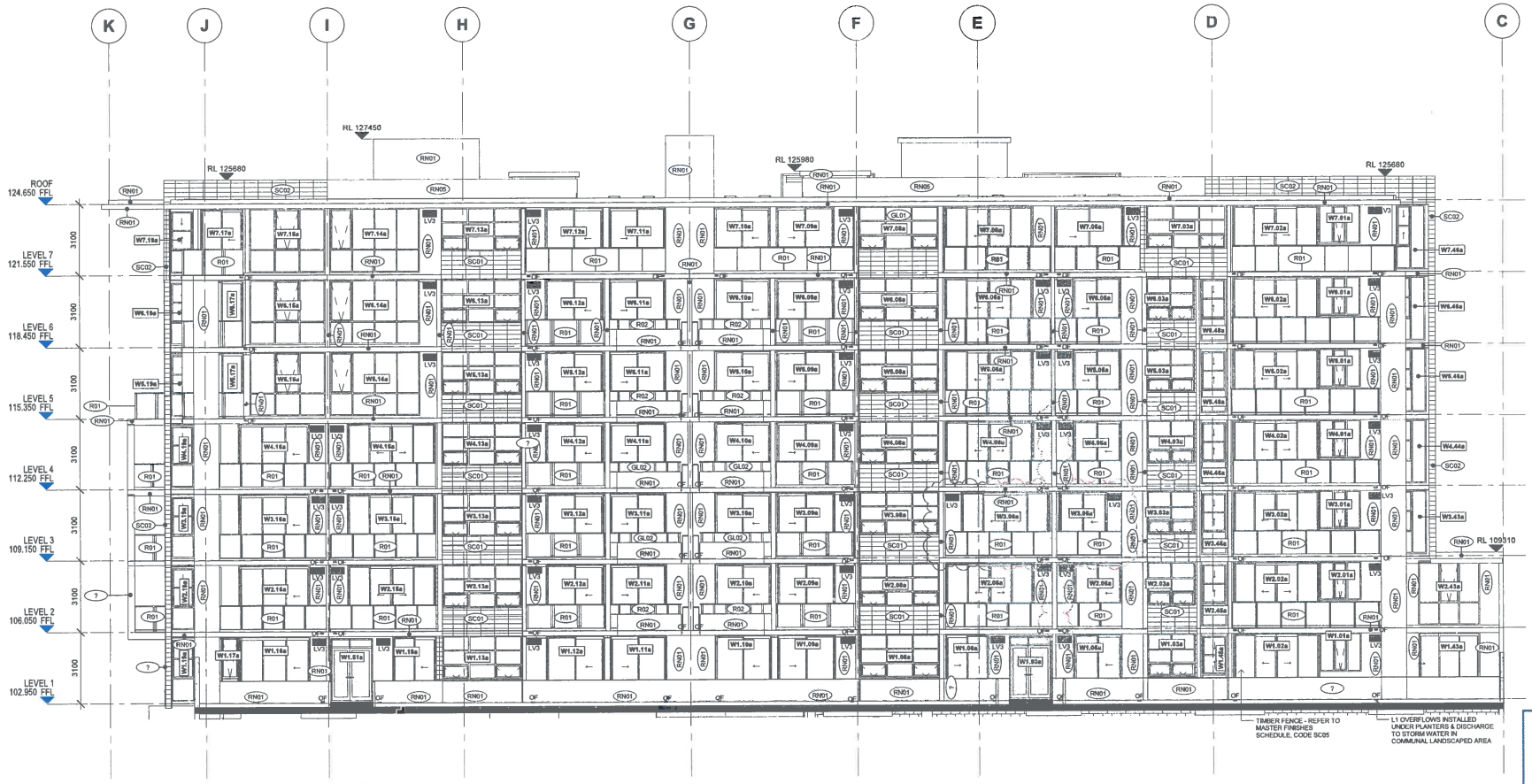
Drawing Title
LEVEL 3 FLOOR PLAN

FOR AFC ISSUE

CA 2924	ATDZ	1007	4
Project no.	Drawing Phase.	Drawing No.	Rev



1 / 2101 PODIUM & TOWER A - EAST ELEVATION
SCALE 1 : 100

ELEVATION NOTES:

GENERAL:

1. ALL WORKS ARE TO BE IN ACCORDANCE WITH THE ARCHITECTURAL SPECIFICATION.
2. BUILDER SHALL REFER TO MECHANICAL, ELECTRICAL , HYDRAULIC, STRUCTURAL AND CIVIL ENGINEERS DRAWINGS AT ALL TIMES.
3. THIS DRAWING MUST BE READ IN CONJUNCTION WITH THE STRUCTURAL ENGINEERS DOCUMENTATION.THE ARCHITECT IS TO BE NOTIFIED OF ANY DISCREPANCIES
4. PLANT ROOM EQUIPMENT,HOB,DRAINAGE LAYOUTS,PLINTH LOCATIONS & SIZES WHERE SHOWN ARE INDICATIVE ONLY & SUBJECT TO DETAILED CO-ORDINATION OD SUB CONTRACTORS SHOP DRAWINGS.
5. DRAINAGE TO TERRACES & ROOFS ARE TO BE CONFIRMED WITH HYDRAULIC CONTRACTOR.
6. ALL EXPANSION JOINTS TO BE CONFIRMED BY STRUCTURAL ENG.LOCATIONS TO BE APPROVED BY ARCHITECT.
7. ALL BALCONY OVER FLOWS ARE TO BE CONFIRMED BY SUB CONTRACTOR.
8. FOR DETAILED FINISHES REFER TO THE EXTERNAL FINISHES SCHEDULE
9. FINISHES REFLECT DESIGN AND MUST BE READ IN CONJUNCTION WITH ESD AND ACOUSTIC REPORTS FOR PERFORMANCE SPECIFICATION.
10. BALUSTRADES AND SUN SHADING DEVICES REFLECT DESIGN INTENT AND ARE SUBJECT TO CO-ORDINATION AND SELECTED MANUFACTURERS DETAILS AND SPECIFICATION
11. (EH) EXTRUDED HEAD ABOVE WINDOWS UNDER REVIEW REGARDING PRECAST REQUIREMENTS

LEGEND:

PAXX	MATERIAL/FINISH - REFER TO MASTER FINISHES SCHEDULE
WX.XX	WINDOW NUMBER - REFER TO SCHEDULE
XXX	BALUSTRADE / SUNSHADING TYPES
OF	BALCONY OVERFLOWS
LV3	WEATHERPROOFING LOUVRES

Energy Rating

Certificate Number 1518310

☐ single-dwelling rating

☒ multi-unit development (sitewide rating of ratings) *Excluded, size also affect the average score for entire development*

5.7 stars

heating 30.0 MJ/m²

cooling 29.0 MJ/m²

Recessed downlights confirmation: ☒ Rated with ☐ Rated without

Assessor Name/Number Ved Bahadi VIC/BDAV/13/1521

Assessor Signature Date 31/10/2015

NOTE:
SUNSHADING DEVICES HAVE BEEN REMOVED FROM ELEVATION FOR CLARITY. REFER TO SUNSHADING DEVICE ELEVATIONS FOR RELEVANT INFORMATION A2121 - A2134

S75W SUBMISSION - MOD 4

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Rev	DESCRIPTION	By	Date
-	PRE-TENDER ISSUED FOR QS ONLY	MQ	14/09/2015
A	ISSUED FOR TENDER	MQ	15/09/2015
B	ISSUED FOR PCA & FIRE ENGINEER REVIEW	MQ	07/04/2016
1	ISSUED FOR AFC	MQ	06/06/2016
2	DOORS & WINDOWS PACKAGE ISSUED FOR AFC	MQ	04/07/2016
3	ISSUED FOR CONSTRUCTION CERTIFICATE 3	MQ	26/07/2016
4	UNIT 302A&303A AMALGAMATION, GARCP PLANS & CONCRETE PROFILE UPDATES	WT	27/10/2016

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Scale 1 : 100 @ A1

0 1000 2000 3000 4000 5000 mm
SCALE 1:100 AT ORIGINAL SIZE

Project
LINDFIELD MIXED-USE DEVELOPMENT
23-41 LINDFIELD AVE & 7, 11 HAVILAH LA
LINDFIELD NSW 2070

Drawn: MQ | Checked: DC | Date: 26/07/16

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Drawing Title
PODIUM & TOWER A - EAST ELEVATION

FOR AFC ISSUE

Project no.	Drawing Phase.	Drawing No.	Rev
CA 2924	ATDZ	2101	4

Plot Date: 27/10/2016 12:22:20 PM

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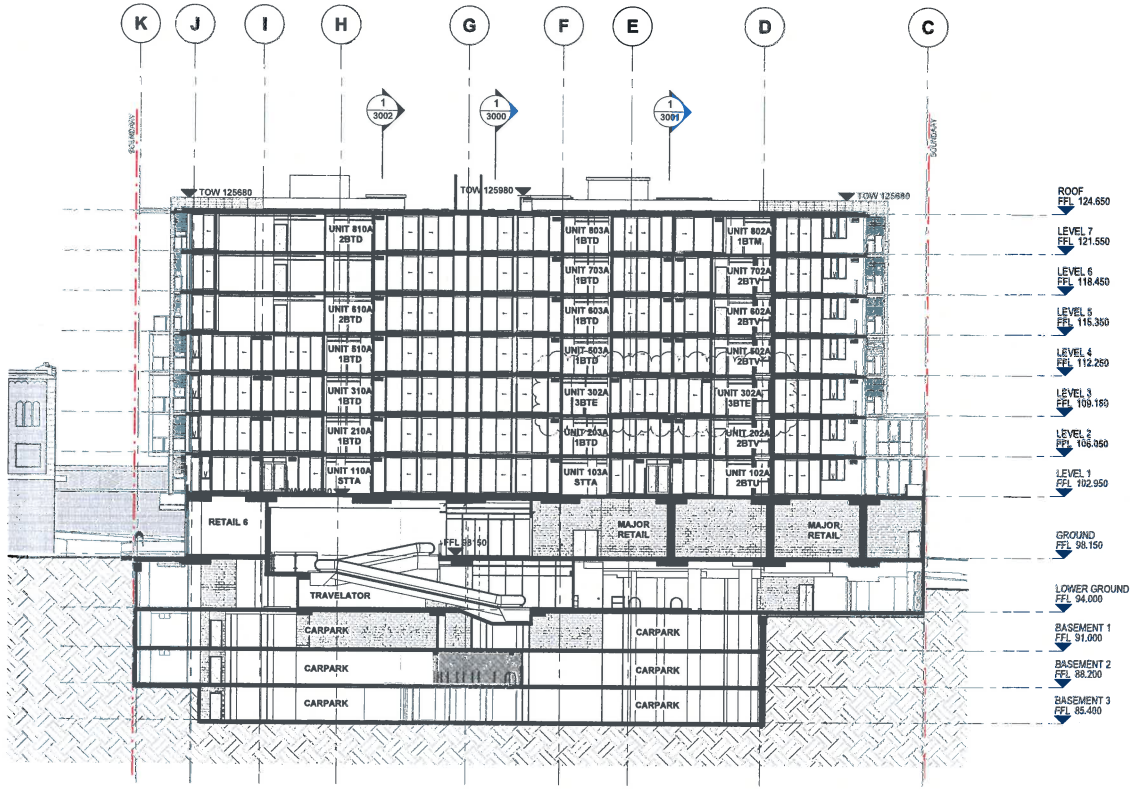

Energy Rating Certificate Number: [illegible]

☐ single-dwelling rating

☒ multi-unit development (attach listing of ratings) (attach data spreadsheet for average across the entire development)

heating 5.7 stars
heating 30.0 [illegible]
cooling 29.3 [illegible]

Received drawing/s confirmation: ☒ Rated with: ☐ Rated without

Assessor Name/Number: Ved Bahati VIC/BDAV/13/1521

Assessor Signature: [illegible] Date: [illegible]

S75W SUBMISSION - MOD 4

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Rev	DESCRIPTION	By	Date
-	PRE-TENDER ISSUED FOR QS ONLY	MQ	14/09/2015
A	ISSUED FOR TENDER	MQ	18/09/2015
B	ISSUED FOR FCA & FIRE ENGINEER REVIEW	MQ	07/04/2016
C	ISSUED FOR CONSTRUCTION CERTIFICATE 2	MQ	20/05/2016
1	ISSUED FOR AFC	MQ	10/06/2016
2	ISSUED FOR CONSTRUCTION CERTIFICATE 3	MQ	25/07/2016
3	UNIT 302A&303A AMALGAMATION, GARCP PLANS & CONCRETE PROFILE UPDATES	WT	27/10/2016

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Scale 1 : 200 @ A1

0 2000 4000 6000 8000 10000mm
SCALE 1:200 AT ORIGINAL SIZE

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Project
LINDFIELD MIXED-USE DEVELOPMENT
23-41 LINDFIELD AVE & 7, 11 HAVILAH LA
LINDFIELD NSW 2070

Drawn: MQ | Checked: DC | Date: 26/07/16

Drawing Title
OVERALL SECTION 5

FOR AFC ISSUE

Project no.	Drawing Phase.	Drawing No.	Rev
CA 2924	ATDZ	3004	3

Plot Date: 27/10/2016 11:37:50 AM

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