

DEVELOPMENT APPLICATION

68-72 RAILWAY PARADE AND 2-2A, 4-10 OXFORD STREET, BURWOOD

DRAWING LIST

NAME	ISSUE	SCALE	CONTENT
		@A1	
		50% REDUCTION @A3	
DA 00	B	1:1000	COVER PAGE, CONTEXT PLAN
DA 01	A	1:200	SITE ANALYSIS DIAGRAM
DA 02	B	1:200	SITE/ROOF PLAN
DA 03	B	1:200	BASEMENT 02 & 03 PLANS
DA 04	B	1:200	BASEMENT 01 & GROUND FLOOR PLAN
DA 05	B	1:200	TYPICAL LEVEL 01-03 & 04-05
DA 06	B	1:200	TYPICAL LEVEL 06-07 & 08-09
DA 07	B	1:200	NORTH & WEST ELEVATION
DA 08	B	1:200	SOUTH & EAST ELEVATION
DA 09	B	1:200	SECTIONS AA & BB
DA 10A	B	NTS	CALCULATIONS 1
DA 10B	B	NTS	CALCULATIONS 2
DA 11	B	NTS	CROSS VENTILATION DIAGRAMS
DA 12	B	NTS	SOLAR ACCESS DIAGRAMS
DA 13	B	1:500	SHADOW DIAGRAMS
DA 14	B	NTS	SCHEDULE OF FINISHES
DA 15	B	1:1000	NOTIFICATION PLANS



CONTEXT PLAN 1:1000

Thermal Load & NatHERS Spec			
Unit no.	Heating load MJ/m2/yr	Cooling load MJ/m2/yr	Star Rating
G1	42	25	5.3
G2	45	28	4.7
G3	38	26	5.2
G4	44	16	5.4
G5	38	16	5.9
G6	40	20	5.5
G7	43	22	5.4
101	34	19	6
102	35	13	6.3
103	36	15	6.2
104	35	14	6.3
105	37	26	6.1
106	42	20	5.9
107	36	26	5.6
108	39	18	5.9
109	35	22	6
110	38	17	6.2
111	44	25	6.5
U201	34	20	6
U202	35	15	6.3
U203	36	14	6.2
U204	35	16	6.1
U205	37	23	6.1
U206	42	20	5.9
U207	36	23	5.5
U208	39	19	5.9
U209	35	21	6
U210	39	17	6.2
U211	44	21	6.5
U301	35	20	6
U302	36	13	6.4
U303	37	15	6.4
U304	36	16	6.4
U305	38	26	6.2
U306	43	22	6
U307	37	28	5.7
U308	40	18	6
U309	36	22	6.1
U310	40	18	6.3
U311	44	25	6.6
U401	35	21	6.1
U402	36	16	6.4
U403	37	18	6.4
U404	36	17	6.4
U405	38	27	6.2
U406	43	22	6
U407	37	28	5.7
U408	40	20	6
U409	36	23	6.1
U410	40	18	6.3
U411	44	29	6.6
U501	35	21	6.1
U502	36	16	6.4
U503	37	17	6.4
U504	36	14	6.4
U505	38	26	6.2
U506	43	20	6
U507	37	27	5.7
U508	40	18	6
U509	36	22	6.1
U510	40	18	6.3
U511	44	28	6.6
U601	36	23	6
U602	37	16	6.3
U603	38	17	6.3
U604	37	16	6.3
U605	39	27	6.1
U606	43	22	5.9
U607	38	26	5.6
U608	41	20	6
U609	37	23	6
U610	41	18	6.2
U611	44	26	6.5
U701	40	24	5.8
U702	37	20	5.9
U703	40	26	5
U704	35	25	5.3
U705	43	17	5.9
U706	43	28	4.6
U707	44	24	4.7
U708	43	15	5.3
U709	45	28	4.1
U710	38	22	5.2
U711	40	25	5
Total (B4)	3259	1754	499.7

BASIC COMMITMENTS SUMMARY NOTES (TO BE READ IN CONJUNCTION WITH BASIC CERTIFICATE)			
Assessor # BDAV13/1521	BASIC Certificate # 852190M_02	Assessor's Certificate # 15211049	
Assessor's name: Ved Baheti	m: 0421 835 876	e: ved@outsourcedeas.com.au	
No hot water recirculation required.			
WATERS	Fixtures	All shower heads	All toilets
	Rating	Star<4.5 Star<4.5, Star<4.5, Star<4.5	3 star
	Appliances	Dishwasher	Cloth Washer
	Rating	Not specified	Not specified
Common area	Taps	All toilets	Common Kitchen taps
	3 star	na	na
	Common bath rms	3 star	na
Alternate water source	Type	Size	Roof area connected
	---	---	Connections
ENERGY	Hot water	Type	Rating
	Mech. Ventilation	System	Operation Control
Bath	Indiv. fan, ducted to facade or roof	Manual Switch On/Off	Manual Switch On/Off
	L'vry Indiv. fan, ducted to facade or roof	Manual Switch On/Off	Manual Switch On/Off
Cooling System	Type	Living areas	Bed rooms
	EEER 2.5 - 3.0	EEER 2.5 - 3.0	EEER 2.5 - 3.0
Heating System	Type	Living areas	Bed rooms
	1 Phase Air conditioning, Zoned	EEER 2.5 - 3.0	EEER 2.5 - 3.0
Artificial Lighting	Primary type of artificial lighting	Fluorescent or light emitting diode (LED)	Fluorescent or light emitting diode (LED)
	No. of Bed rms	Each Kitchen, Bath / Toilet	L'dry & Hallway
Not Dedicated	All	Yes	Yes
	Indoor private Cloth Line	Not Required	Not Required
Others	Outdoor or sheltered common Cloth Line	Not Required	Not Required
	Well ventilated Fridge space	Yes	Yes
Appliances	Dishwasher	Cloth Dryer	Refrigerator
	Rating	3 star	2 star
Central System	Type	Service Levels	Lighting
	Lifts	Clearance Traction With VVVF Motor	As nominated below
Common areas	Ventilation System	Ventilation Efficiency measure	Primary type of artificial lighting
	Basement Car parking	carbon monoxide monitor + 2-speed fan	daylight sensor and motion sensor
Garbage room	ventilation exhaust only	compact fluorescent	motion sensor
	Ground floor lobby	No Mech. Ventilation	compact fluorescent
Lobby-1 Lobby	No Mech. Ventilation	compact fluorescent	daylight sensor and motion sensor
	Lobby-2 Lobby	No Mech. Ventilation	compact fluorescent
Lobby-3 Lobby	No Mech. Ventilation	compact fluorescent	daylight sensor and motion sensor
	Lobby-4 Lobby	No Mech. Ventilation	compact fluorescent
Lobby-5 Lobby	No Mech. Ventilation	compact fluorescent	daylight sensor and motion sensor
	Lobby-6 Lobby	No Mech. Ventilation	compact fluorescent
Lobby-7 Lobby	No Mech. Ventilation	compact fluorescent	daylight sensor and motion sensor
	Lifts	No Mech. Ventilation	LED
THERMAL	No per thermal simulation carried out by assessor	Under assessor's stamped drawings with NatHERS Commitments for Wall Insulation, Ceiling Insulation, Glazing details etc.	

Thermal Load & NatHERS Spec			
Block-B			
G01	45	29	5.2
G02	43	15	5.6
G03	42	16	5.7
G04	33	25	5.1
G05	36	27	5.4
101	25	17	6.8
102	32	18	6.5
103	36	20	6.3
104	27	15	6.8
105	42	26	5.7
201	25	18	6.8
202	32	19	6.5
203	36	22	6.3
204	27	15	6.8
205	42	27	5.7
301	26	18	6.8
302	33	18	6.5
303	37	12	6.3
304	28	16	6.8
305	43	27	5.7
401	26	19	6.8
402	33	19	6.5
403	37	13	6.3
404	28	17	6.8
405	43	28	5.7
501	26	26	6.8
502	33	26	6.5
503	37	15	6.3
504	28	14	6.8
505	43	26	5.7
601	27	17	6.7
602	34	18	6.4
603	38	11	6.2
604	29	15	6.7
605	44	27	5.6
701	38	22	5.1
702	40	25	4.9
703	39	23	5
704	45	27	4.2
705	44	28	4.7
Total (40)	1404	816	243.0

Bld-A	3259	1754	492.0
Bld-B	1404	816	243.0
Total (124)	4663	2570	735.0
Average	37.6	20.7	5.9
Ceiling Insulation: R2.0 for Units with direct roof above			
Floor Type/ Insulation: Concrete / None			
External wall Insulation: R1.0			
Roof type / colour			
Suspended Concrete: Medium colour SA 0.475 - 0.7			
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			

SUBJECT SITE AREA	3413 m2		
ZONE:	R1 GENERAL RESIDENTIAL		
CURRENT HEIGHT LIMIT	26 m		BURWOOD LEP 2012
CURRENT MAX. FSR	3 :1	10239 m2	BURWOOD LEP 2012

Setbacks			
Front	3 - 6 m		
Side	2.9 m	(Approved DA setback)	
Rear	4.5 - 6 m		

	REQUIRED		PROPOSED DA SUBMISSION 18/9/17		PROPOSED COUNCIL AMENDMENTS 24/4/19	
	FSR	COS (min. Dimension 6m)	Deep Soil	Landscape	Adaptable	Accessible Parking 1 per dwelling + 2 visitor
	3:1	10239 m2	3.00 :1	10238 m2	1327 m2	39%
	25%	853 m2	1136 m2	33%	518 m2	15.2%
	7%	239 m2	246 m2	7.2%	2108 m2	62%
	25%	853 m2	1121 m2	33%		
	10%	12 units				
		14 car parking spaces				

YIELD GFA		SUBJECT SITE							
	USE	NO. OF STOREYS	1BED	2BED	3BED	UNITS PER FLOOR	TOTAL UNITS	RETAIL (M2)	TOTAL GFA PER LEVEL (M2)
GF	RESIDENTIAL/RETAIL	1	6	4	2	12	12	80	1089
LEVEL 01 - 03	RESIDENTIAL	3	4	11	1	16	48		1325
LEVEL 04 - 05	RESIDENTIAL	2	6	9	1	16	32		1254
LEVEL 06 - 07	RESIDENTIAL	2	4	6	1	11	22		881
LEVEL 08 - 09	RESIDENTIAL	2	1	3	1	5	10		452
TOTALS		10	40	73	11	124			5001
UNIT MIX			32.3%	58.9%	8.9%				10238
									3.00 :1
									includes 12 adaptable units

CAR PARKING				
	NO. OF UNITS	MIN PARKING REQUIRED PER DWELLING/SQM	REQUIRED SPACES	PROVIDED SPACES
1 BEDROOM	40	1	40	31
2 BEDROOM	73	1	73	79
3 BEDROOM	11	2	22	22
1 VISITOR SPACE PER 5 APARTMENTS	124	0.2	24.8	25
TOTALS			160	163

**Energy Rating**

Certificate Number 15211049

☐ single-dwelling rating

☒ multi-unit development (attach listing of ratings)

heating **5.9** stars

cooling **37.6** MJ/m²

Recessed downlights confirmation ☐ Rated with ☒ Rated without

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

Assessor Signature  Date 26/04/2018



 **Energy Rating**

Certificate Number 15211049

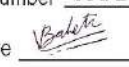
☐ single-dwelling rating

☒ multi-unit development (attach listing of ratings)
If selected, data specified is the average across the entire development

heating **5.9** stars
cooling **37.6** MJ/m²
20.7 MJ/m²

Recessed downlights confirmation: ☐ Rated with ☒ Rated without

Assessor Name/Number **Ved Baheti VIC/BD4V/13/1521**

Assessor Signature  Date 26/04/2018

KEY

 PEDESTRIAN ENTRY

 VEHICLE ENTRY

 SITE FALL

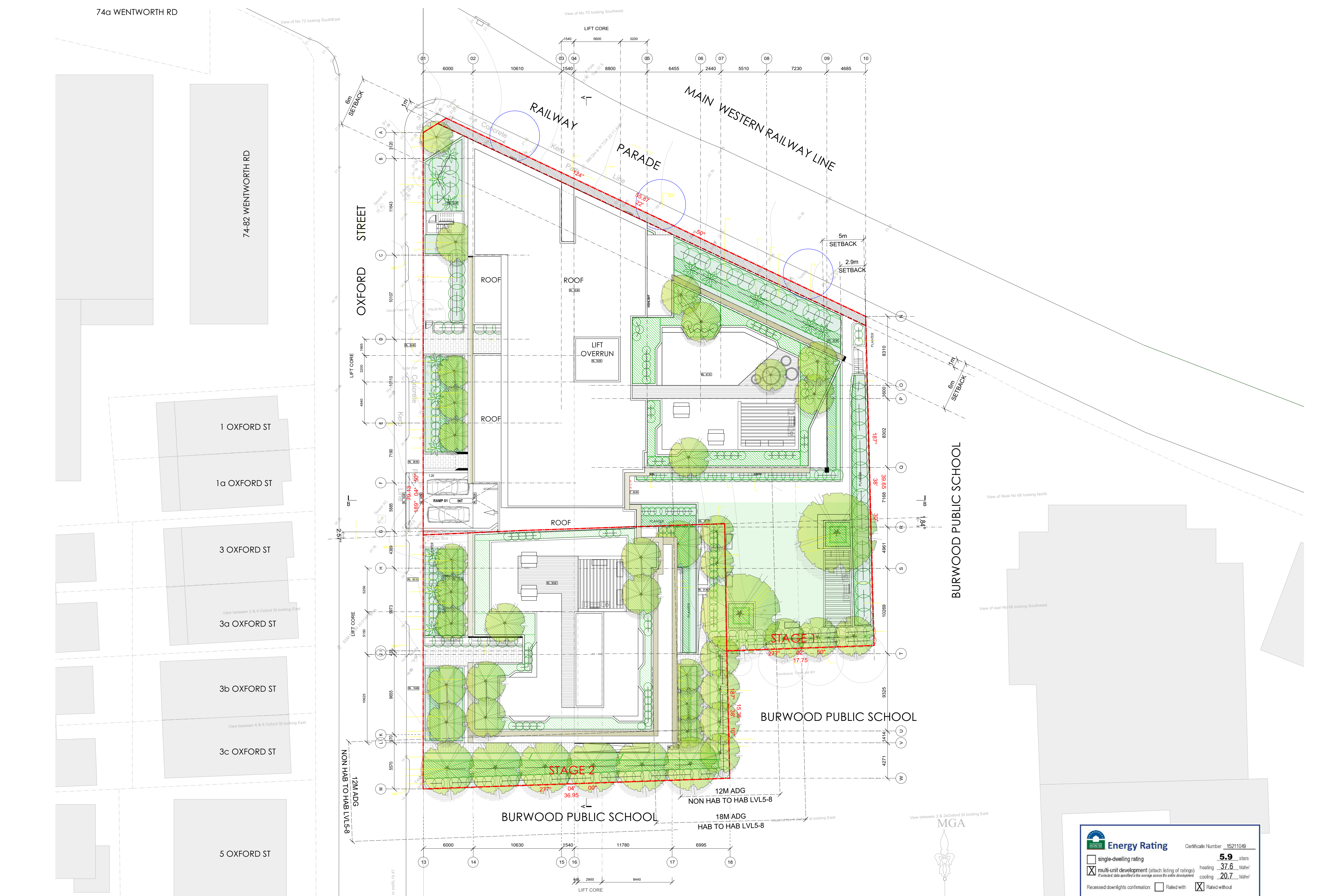
 WINDS

 OUTLOOK

 PROPOSED BUILT FORM

 COMMUNAL OPEN SPACE

 PRIVACY PLANTING



	Energy Rating	Certificate Number	15211049
☐ single-dwelling rating			5.9 stars
☒ multi-unit development (attach listing of ratings)	heating	37.6	MJ/m ²
If selected, data specified is the average across the entire development	cooling	20.7	MJ/m ²
Recessed downlights confirmation		☐ Rated with	☒ Rated without
Assessor Name/Number		Ved Baheti VIC/BD4V13/1521	
Assessor Signature 		Date 26/04/2018	





Energy Rating Certificate Number 15211049

Single-dwelling rating: 5.9 stars

Multi-unit development (attach listing of ratings): heating 37.6 MJ/m², cooling 20.7 MJ/m²

Recessed downlights confirmation: ☐ Rated with, ☒ Rated without

Assessor Name/Number: Ved Baheti VIC/BD4V/13/1521

Assessor Signature: [Signature] Date: 26/04/2018



BASEMENT 01

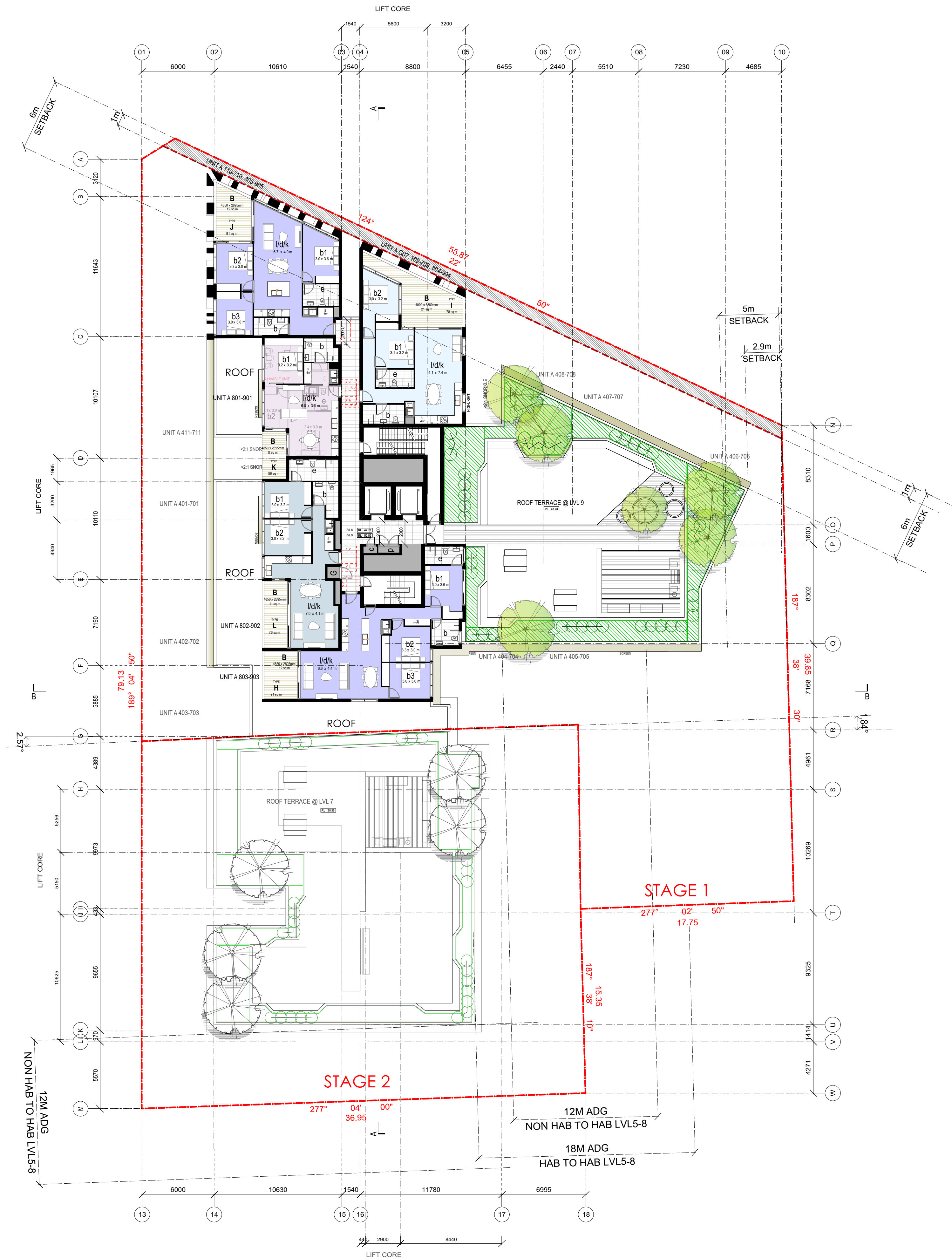
GROUND FLOOR

TYPICAL LEVEL 02 - 04 PLAN

TYPICAL LEVEL 05 - 06 PLAN



TYPICAL LEVEL 07 - 08 PLAN



TYPICAL LEVEL 09 - 10 PLAN



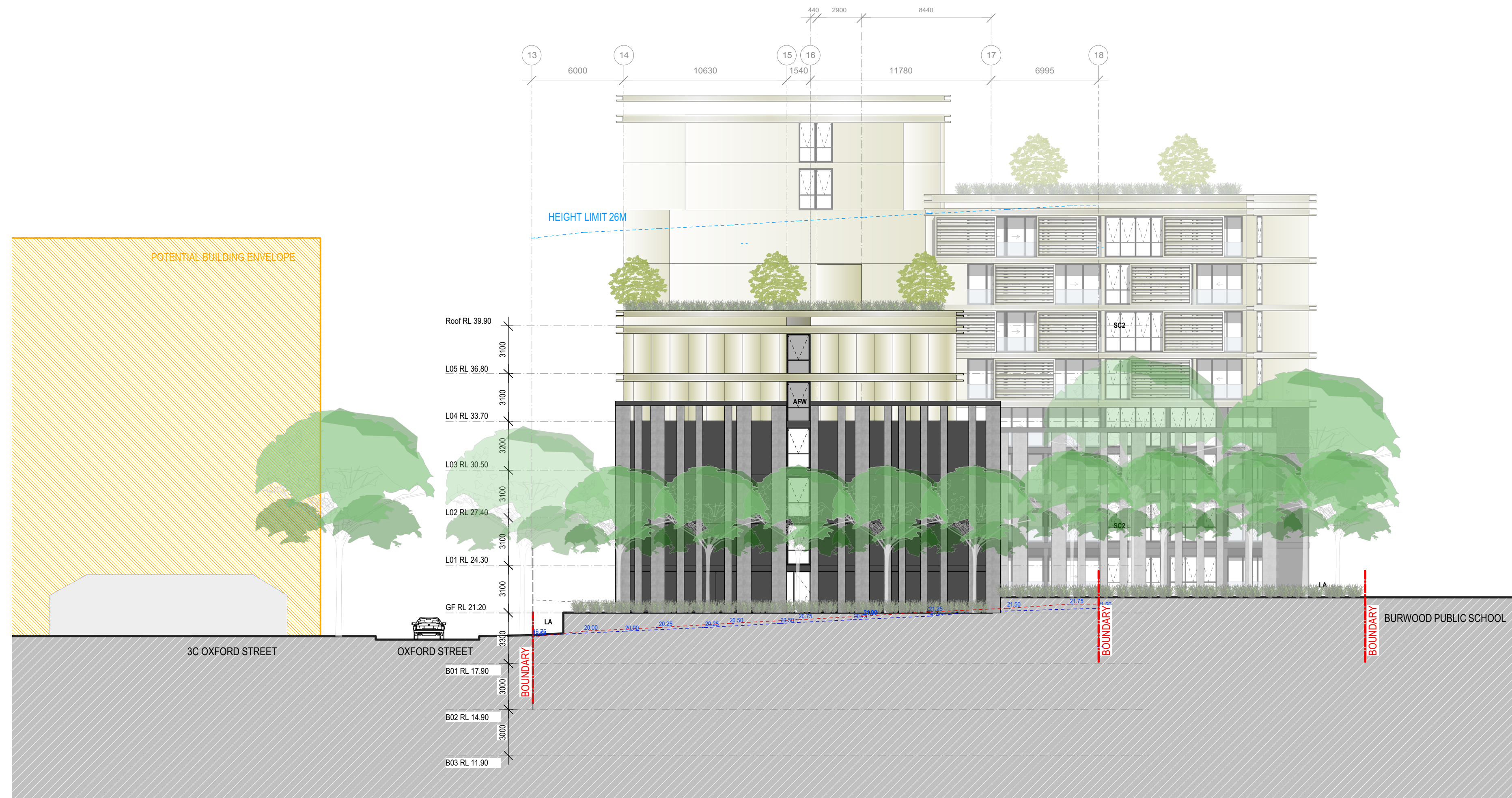
NORTH ELEVATION



WEST ELEVATION

FINISHES SCHEDULE	
MF1	EXTERNAL FINISH IN ALUCOBOND ANODIZED LOOK C31 OR SIMILAR
MF2	EXTERNAL FINISH IN ALUCOBOND SUNRISE SILVER METALLIC OR SIMILAR
P1	BLACK PAINT FINISH
SC1	EXTERNAL HORIZONTAL ADJUSTABLE SCREEN TO MATCH MF1
CR	CONCRETE FINISH
LA	ALL LANDSCAPING TO LANDSCAPE ARCHITECT'S DETAILS
WINDOWS AND DOORS	
AFW	ALL WINDOW, SPANDREL DOOR FRAMES IN ALUMINIUM TO MATCH 'MF1'
GB	GLASS BALUSTRADE

	Energy Rating	Certificate Number 15211049
☐ single-dwelling rating	5.9 stars	
☒ multi-unit development (attach listing of ratings)	heating 37.6 MJ/m ²	
	cooling 20.7 MJ/m ²	
Recessed downlights confirmation: ☐ Rated with ☒ Rated without		
Assessor Name/Number Ved Baheti VIC/BDAY/13/1521		
Assessor Signature		Date 26/04/2018



SOUTH ELEVATION



EAST ELEVATION

Energy Rating Certificate Number 15211049

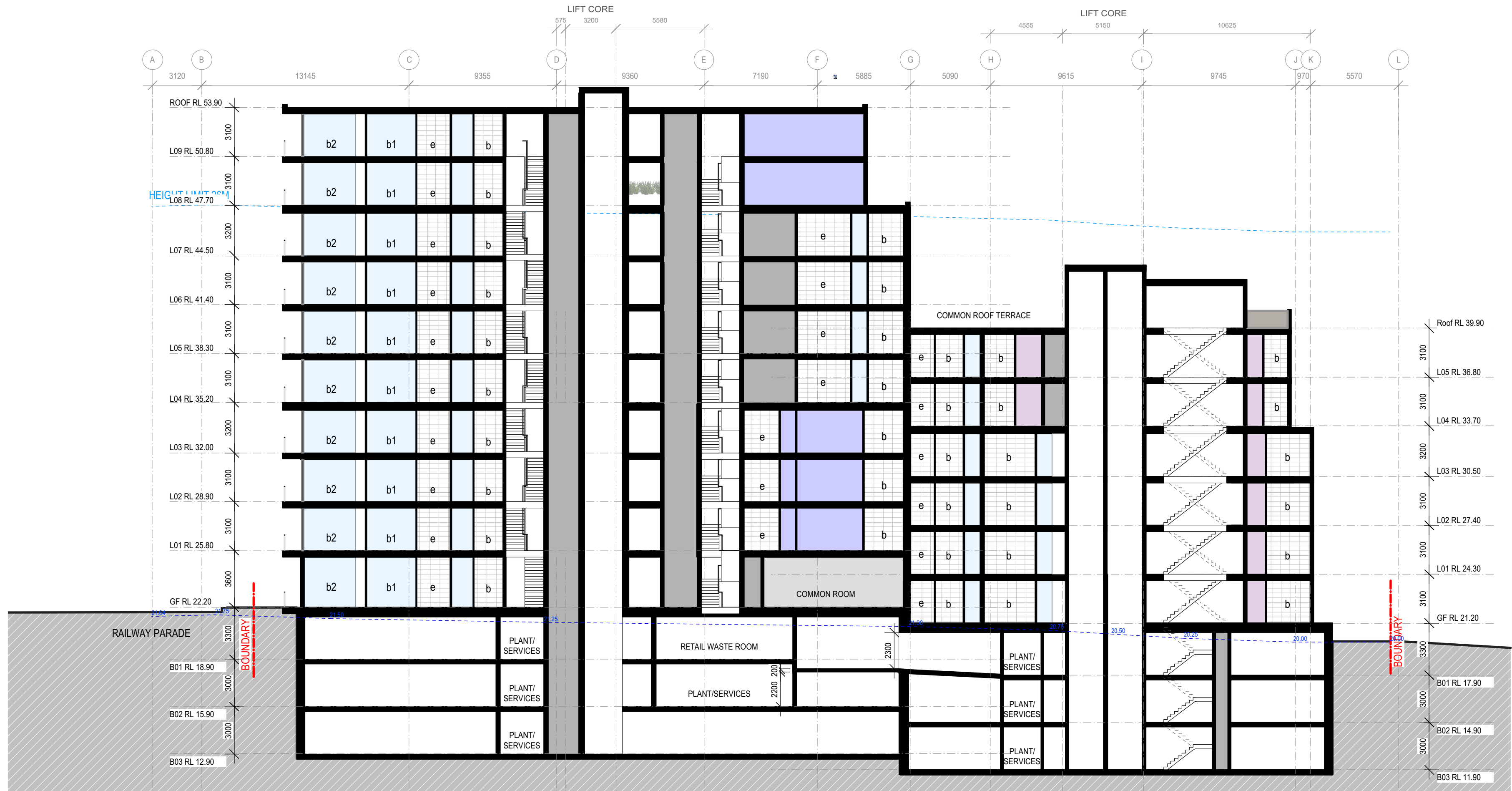
☐ single-dwelling rating **5.9** stars

☒ multi-unit development (attach listing of ratings) heating **37.6** MJ/m² cooling **20.7** MJ/m²

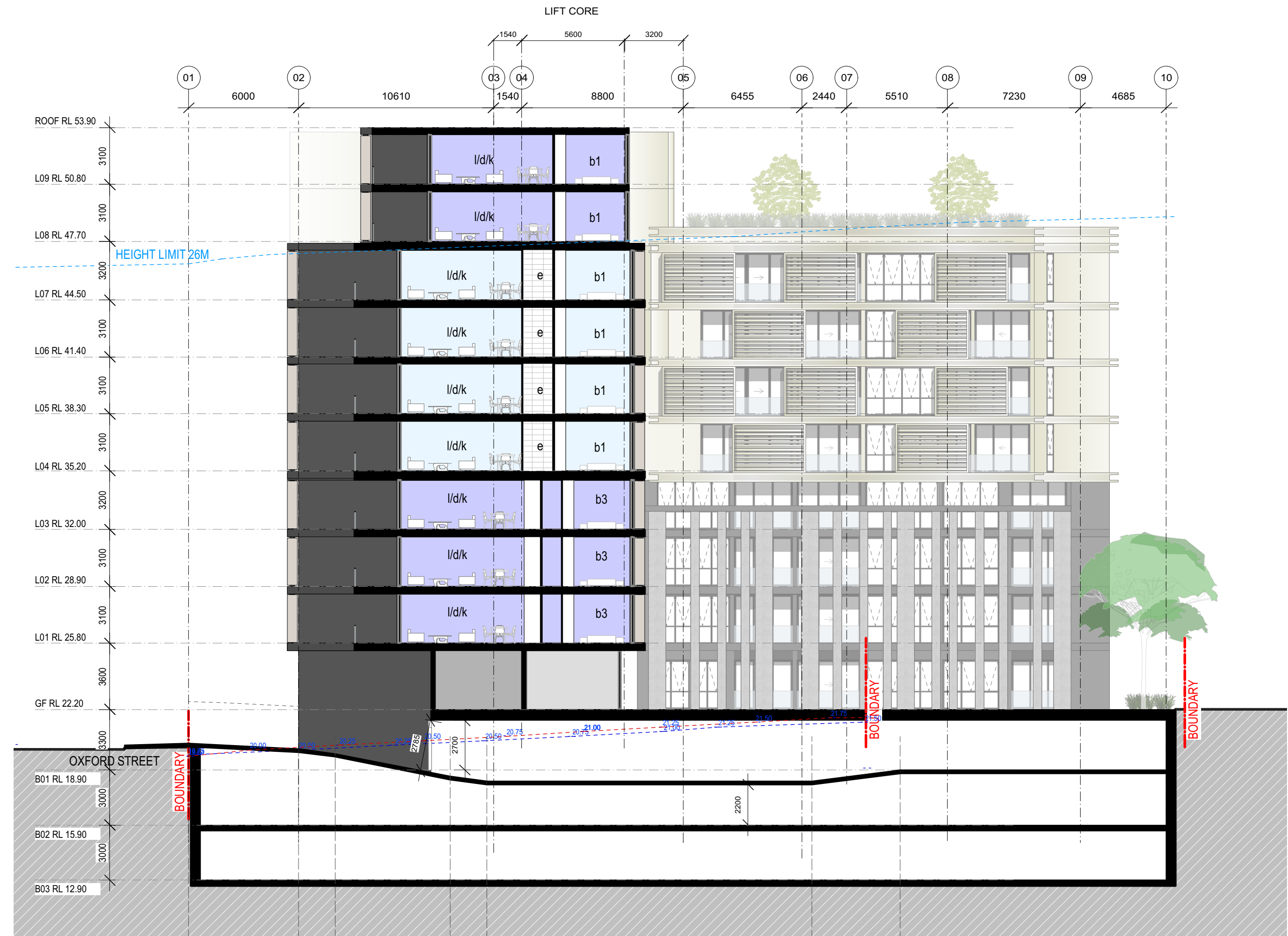
Recessed downlights confirmation: ☐ Rated with ☒ Rated without

Assessor Name/number Ved Baheti VIC/BD4V13/1521

Assessor Signature *Ved Baheti* Date 26/04/2018

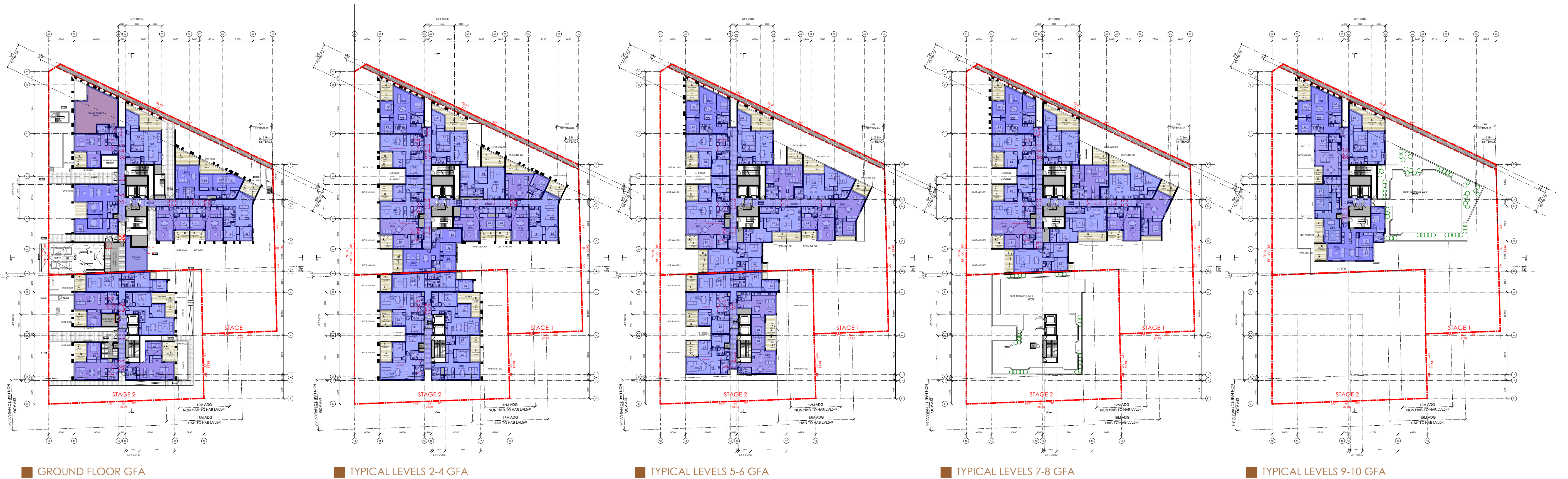


SECTION A



SECTION B

Energy Rating		Certificate Number	15211049
☐ single-dwelling rating		5.9	stars
☒ multi-unit development (attach listing of ratings)		heating	37.6 MJ/m ²
If selected, data specified is the average across the entire development		cooling	20.7 MJ/m ²
Recessed downlights confirmation		☐ Rated with	☒ Rated without
Assessor Name/Number		Ved Baheti VIC/BDAY/13/1521	
Assessor Signature		Date 26/04/2018	



SUBJECT SITE AREA	3413 m ²		
ZONE:	R1 GENERAL RESIDENTIAL		
CURRENT HEIGHT LIMIT	26 m		BURWOOD LEP 2012
CURRENT MAX. FSR	3 :1	10239 m ²	BURWOOD LEP 2012
Setbacks			
Front	3 - 6 m		
Side	2.9 m	(Approved DA setback)	
Rear	4.5 - 6 m		
FSR	3:1	10239 m ²	REQUIRED
COS (min. Dimension 6m)	25%	853 m ²	PROPOSED DA SUBMISSION 18/9/17
Deep Soil	7%	239 m ²	PROPOSED COUNCIL AMENDMENTS 24/4/19
Landscape	25%	853 m ²	
Adaptable	10%	12 units	
Accessible Parking 1 per dwelling + 2 visitor		14 car parking spaces	
YIELD GFA			
	USE	NO. OF STOREYS	1BED
			2BED
			3BED
			UNITS PER FLOOR
			TOTAL UNITS
			RETAIL (M2)
			TOTAL GFA PER LEVEL (M2)
			TOTAL GFA (M2)
			FSR
GF	RESIDENTIAL/RETAIL	1	6
LEVEL 01 - 03	RESIDENTIAL	3	4
LEVEL 04 - 05	RESIDENTIAL	2	6
LEVEL 06 - 07	RESIDENTIAL	2	4
LEVEL 08 - 09	RESIDENTIAL	2	1
TOTALS		10	40
UNIT MIX			32.3%

Energy Rating Certificate Number 15211049

single-dwelling rating **5.9** stars

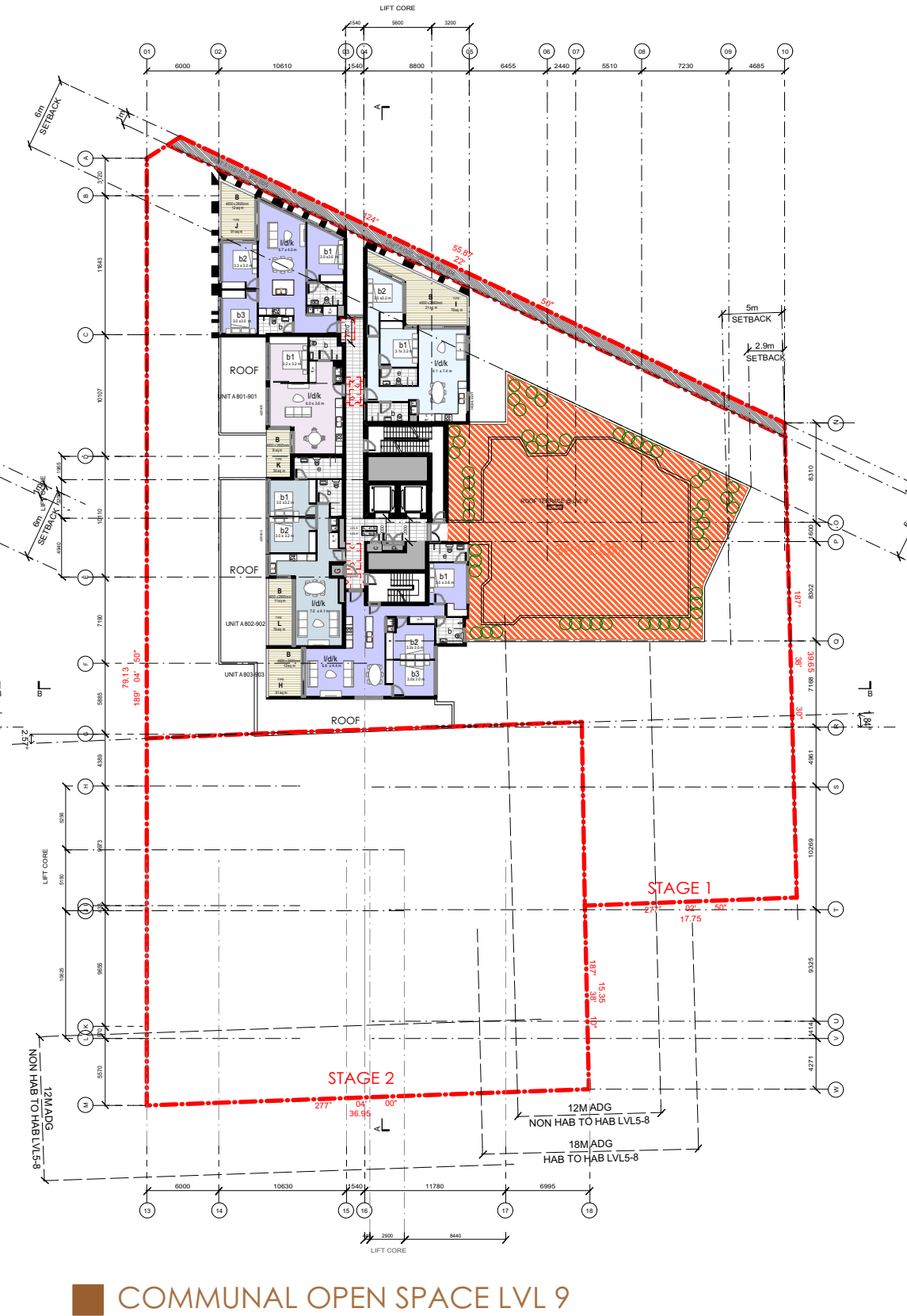
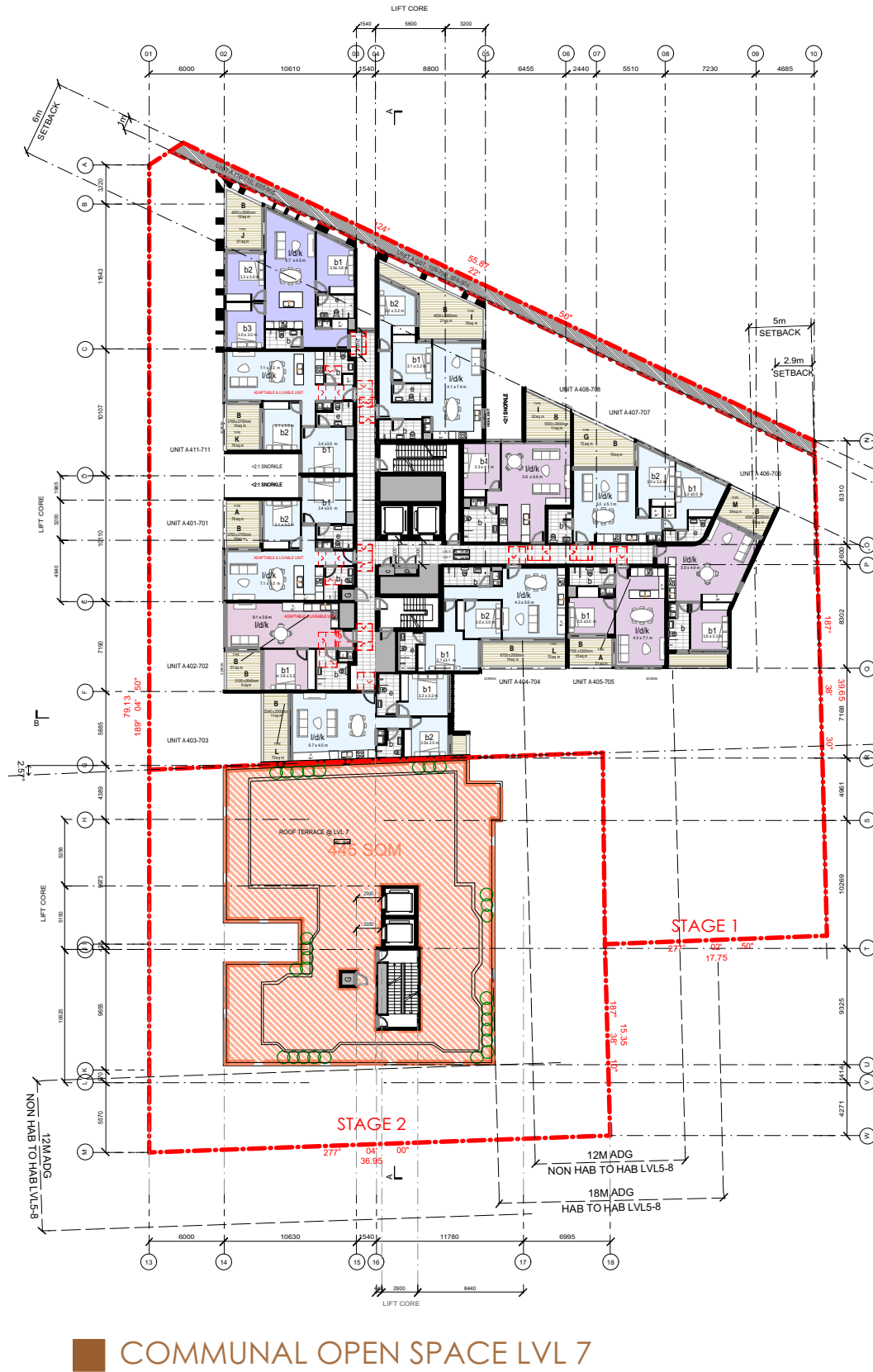
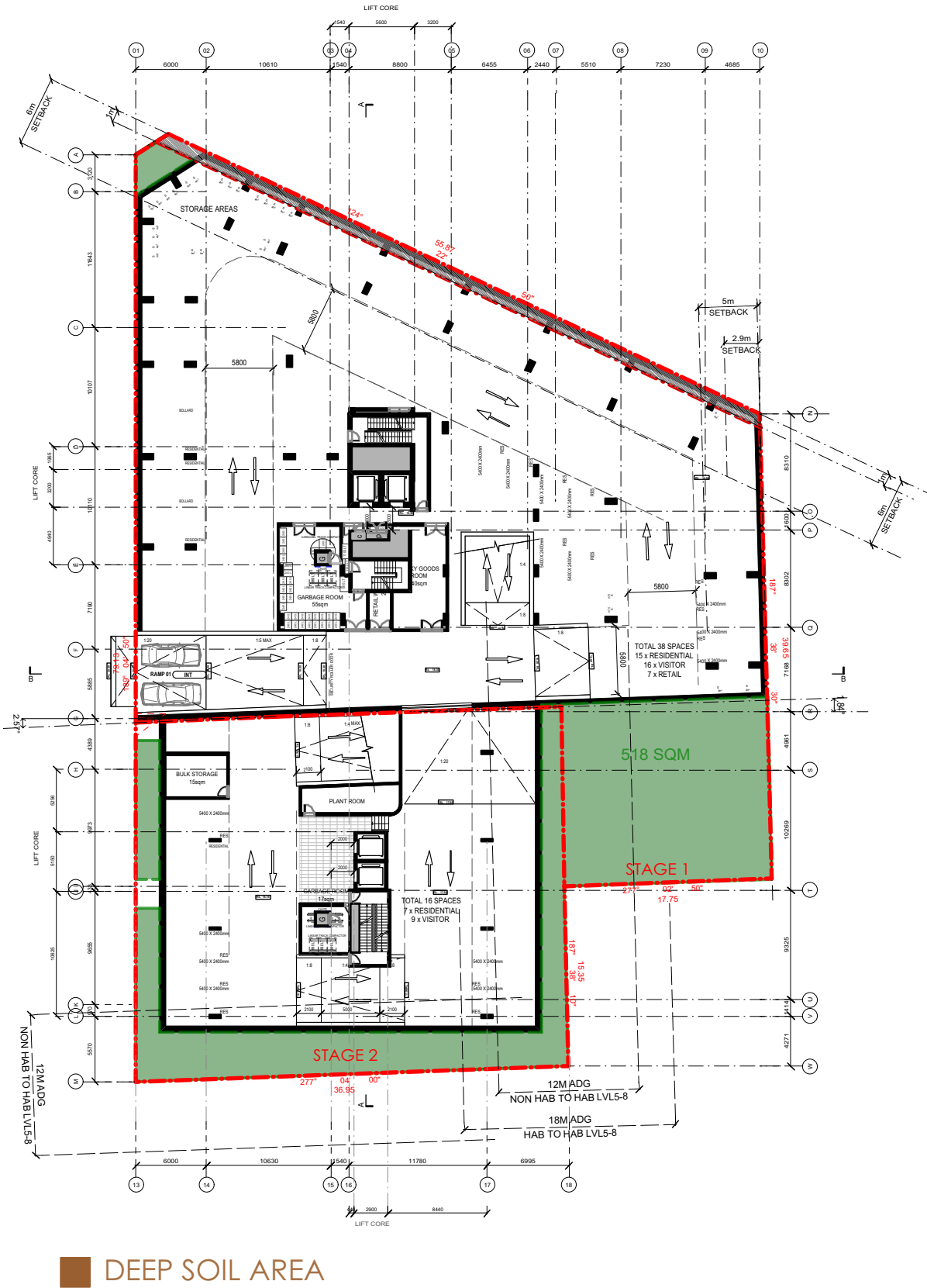
multi-unit development (attach listing of ratings) heating **37.6** MJ/m²

cooling **20.7** MJ/m²

Recessed downlights confirmation ☐ Rated with ☒ Rated without

Assessor Name/Number Ved Baheti VIC/BD4V/13/1521

Assessor Signature *Ved Baheti* Date 26/04/2018



SUBJECT SITE AREA		3413 m2			
ZONE:		R1 GENERAL RESIDENTIAL			
CURRENT HEIGHT LIMIT		26 m		BURWOOD LEP 2012	
CURRENT MAX. FSR		3 :1		10239 m2 BURWOOD LEP 2012	
Setbacks					
Front		3 - 6 m			
Side		2.9 m (Approved DA setback)			
Rear		4.5 - 6 m			
		REQUIRED		PROPOSED DA SUBMISSION 18/9/17	
FSR		3:1 10239 m2		3.00 :1 10238 m2	
COS (min. Dimension 6m)		25% 853 m2		1136 m2 33% 1327 m2 39%	
Deep Soil		7% 239 m2		246 m2 7.2% 518 m2 15.2%	
Landscape		25% 853 m2		1121 m2 33% 2108 m2 62%	
Adaptable		10% 12 units			
Accessible Parking 1 per dwelling + 2 visitor		14 car parking spaces			
YIELD GFA		SUBJECT SITE			
	USE	NO. OF STOREYS	1BED	2BED	3BED
					UNITS PER FLOOR
					TOTAL UNITS
					RETAIL (M2)
					TOTAL GFA PER LEVEL (M2)
					TOTAL GFA (M2)
					FSR
GF	RESIDENTIAL/RETAIL	1	6	4	2
LEVEL 01 - 03	RESIDENTIAL	3	4	11	1
LEVEL 04 - 05	RESIDENTIAL	2	6	9	1
LEVEL 06 - 07	RESIDENTIAL	2	4	6	1
LEVEL 08 - 09	RESIDENTIAL	2	1	3	1

**Energy Rating**

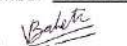
Certificate Number 15211049

☐ single-dwelling rating

☒ multi-unit development (attach listing of ratings)

Recessed downlights confirmation ☐ Rated with ☒ Rated without

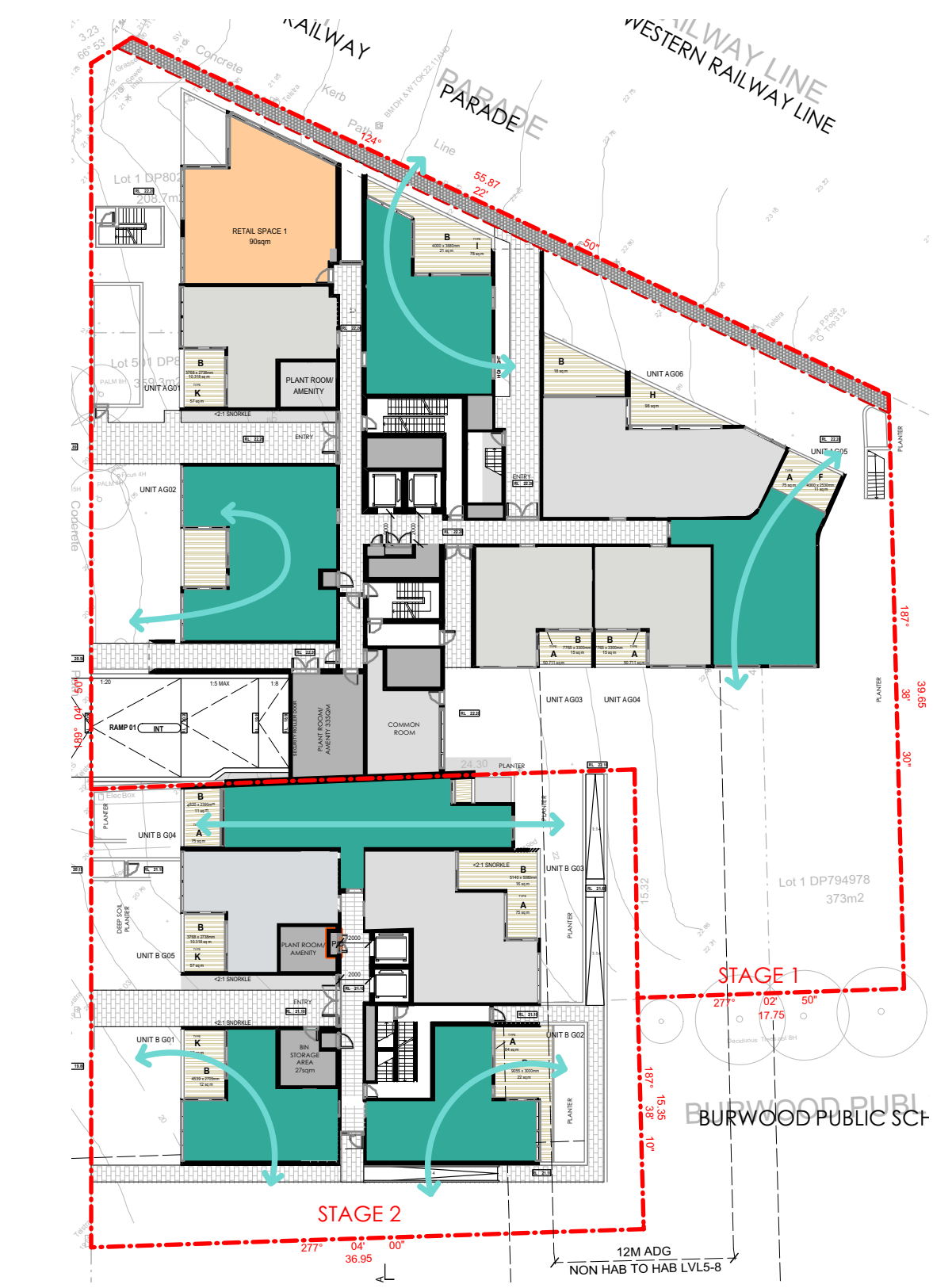
Assessor Name/Number Ved Baheti VIC/BD4V/13/1521

Assessor Signature  Date 26/04/2018

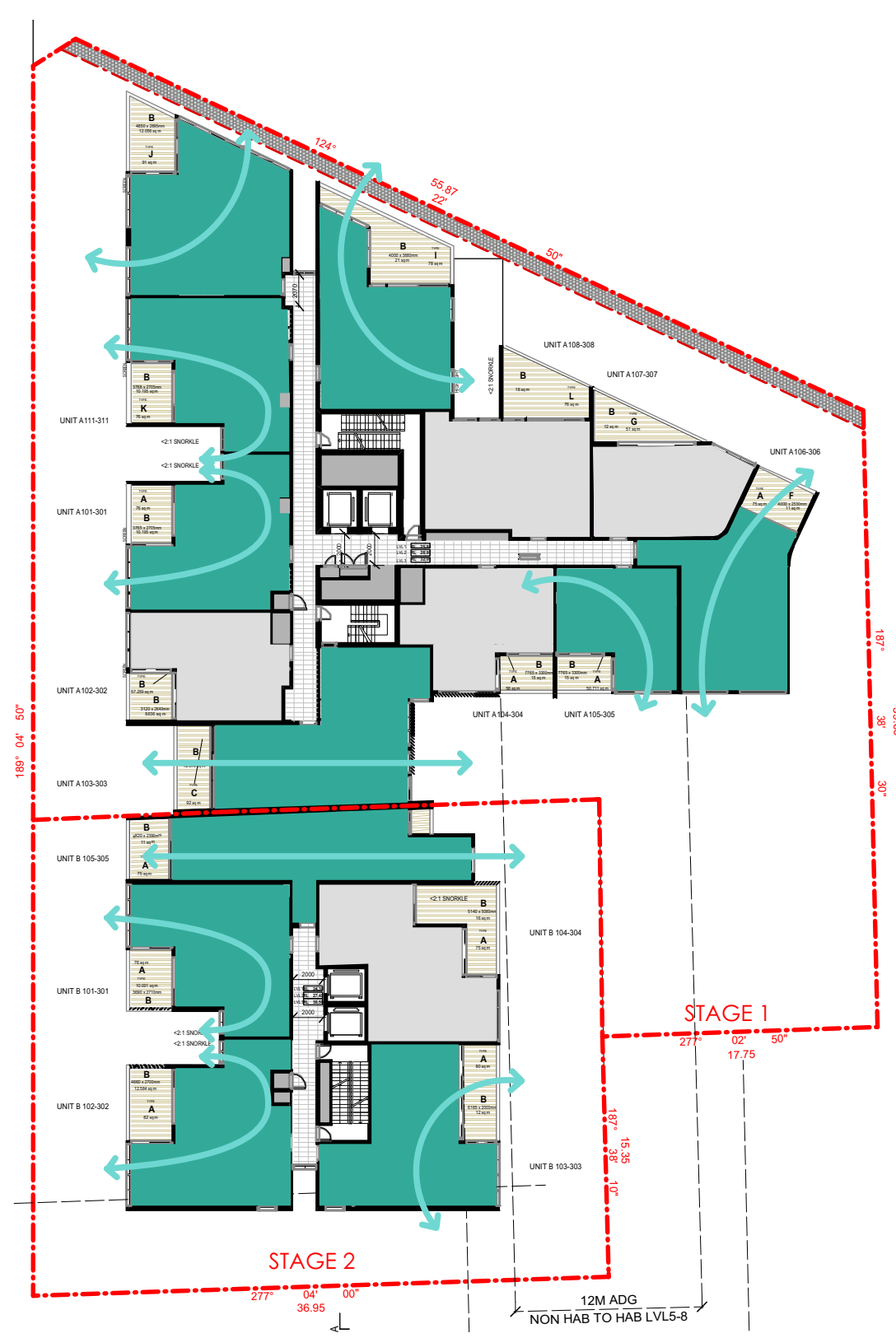
5.9 stars

heating 37.6 MJ/m²

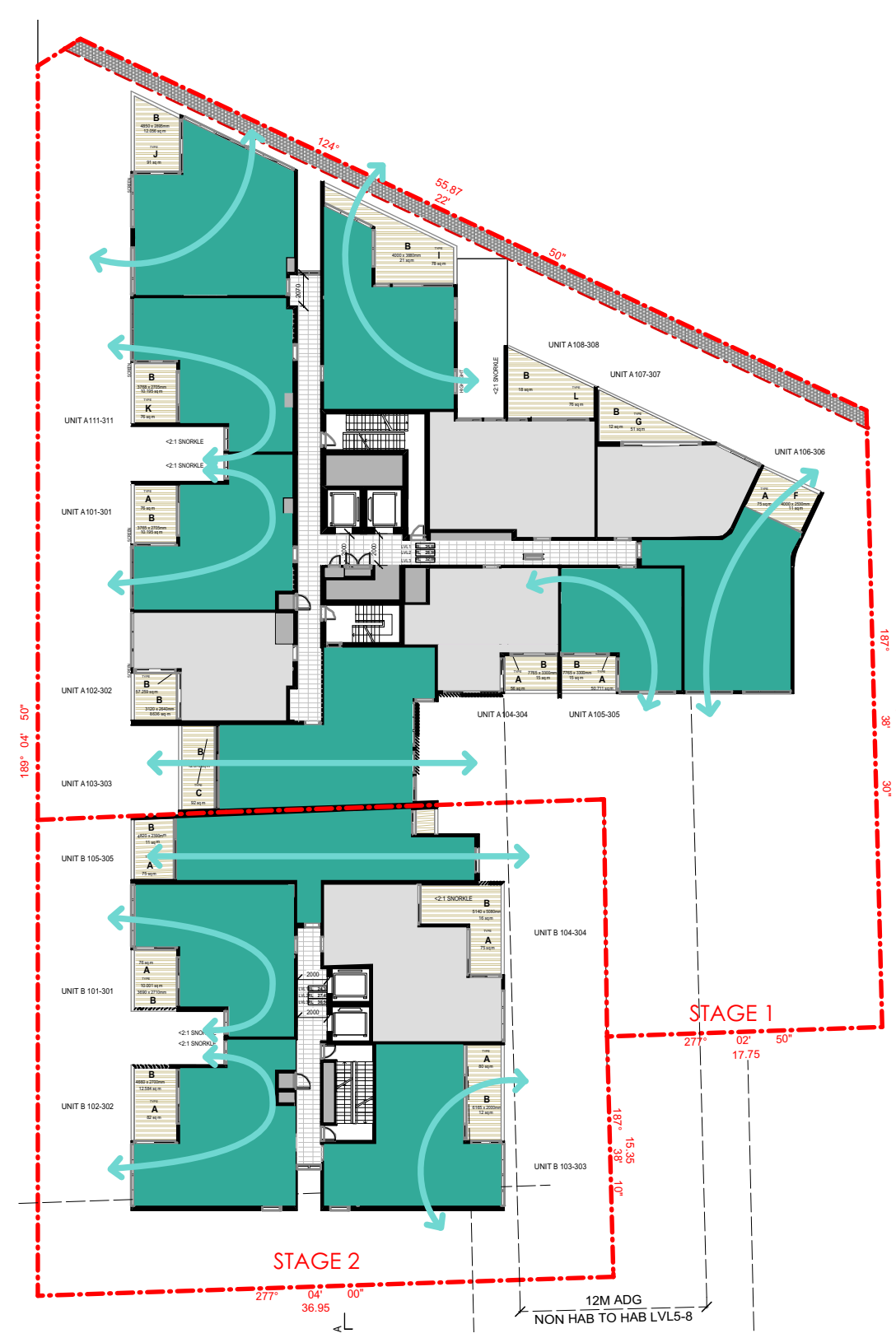
cooling 20.7 MJ/m²



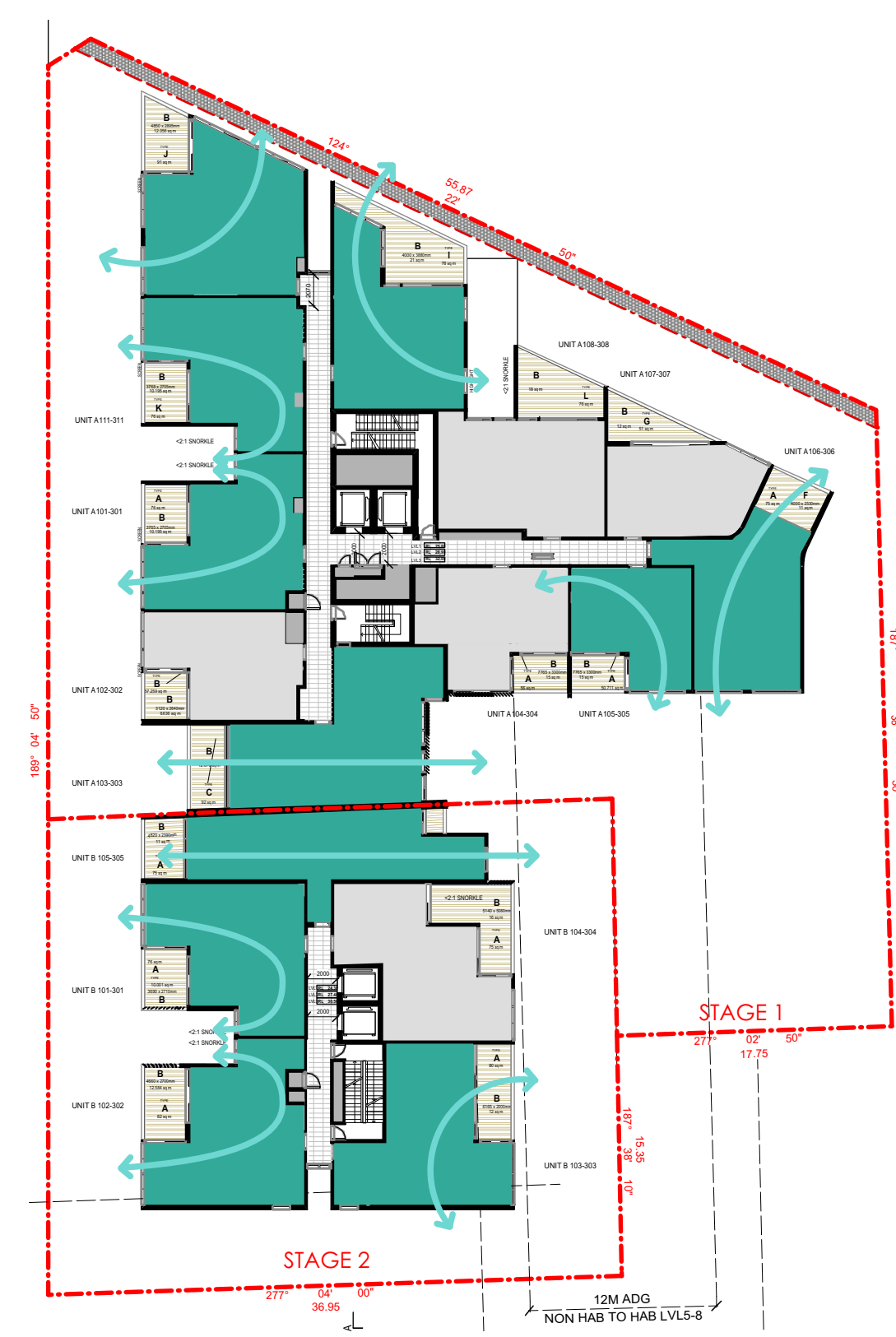
GROUND FLOOR



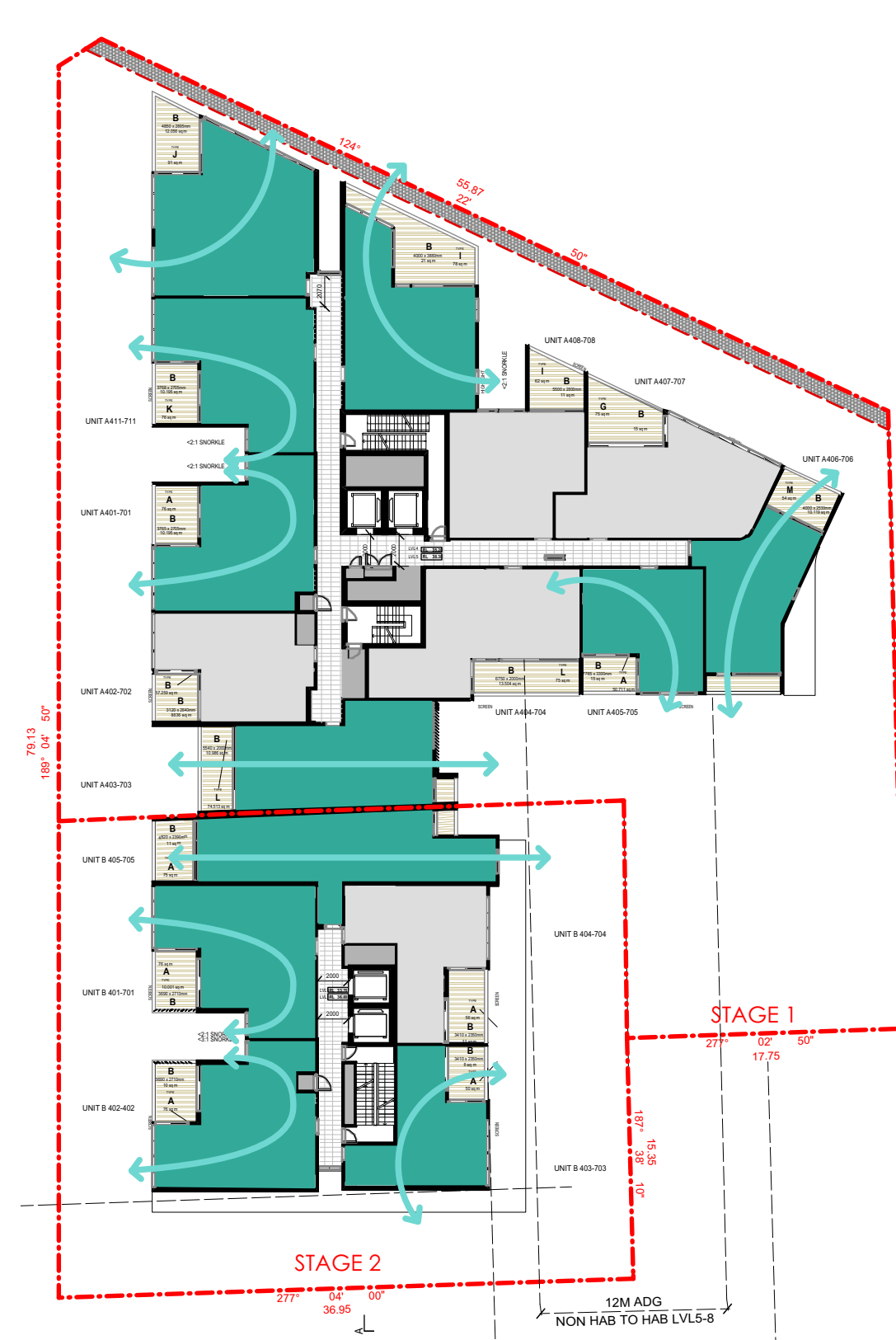
LEVEL 01



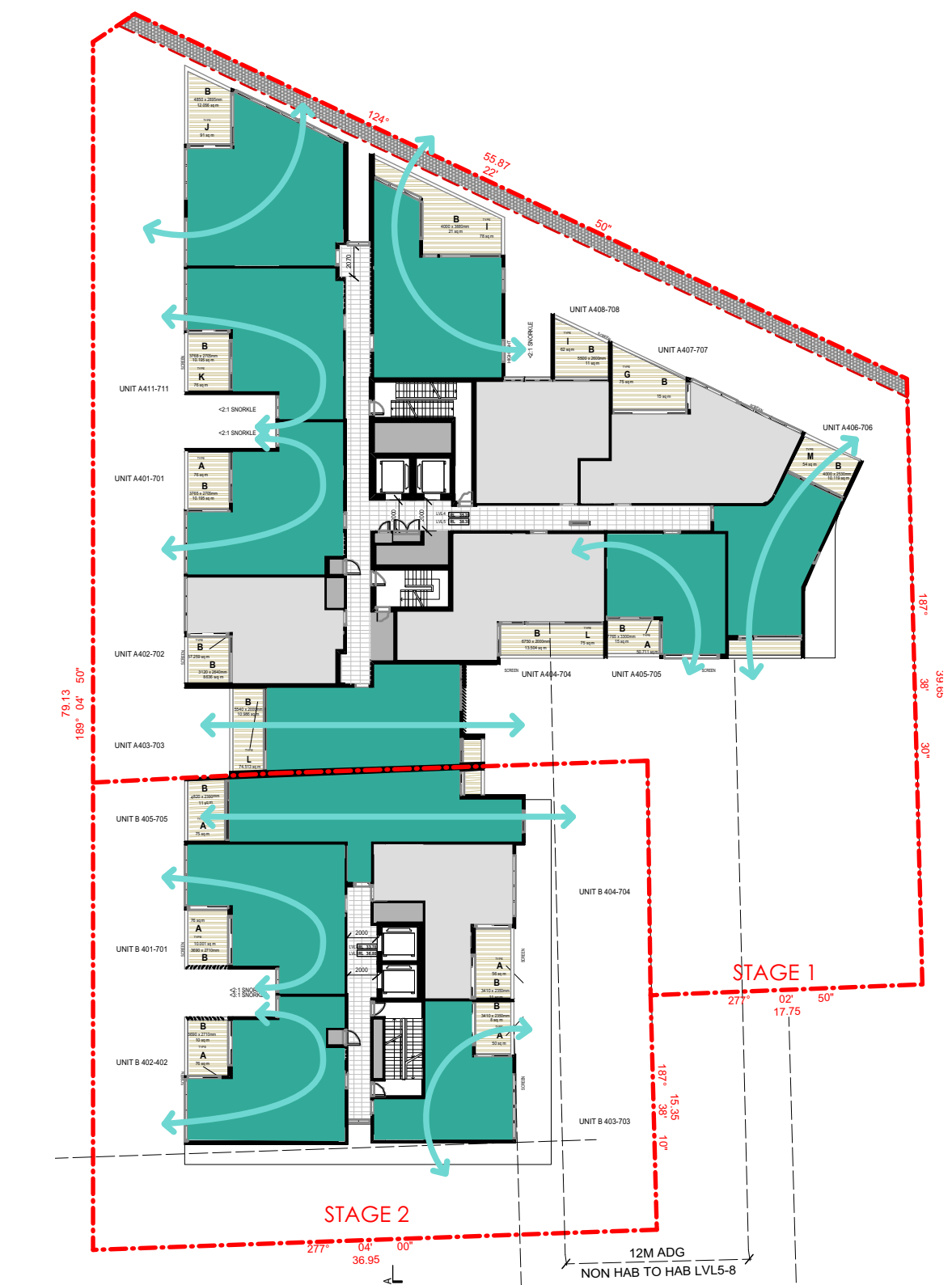
LEVEL 02



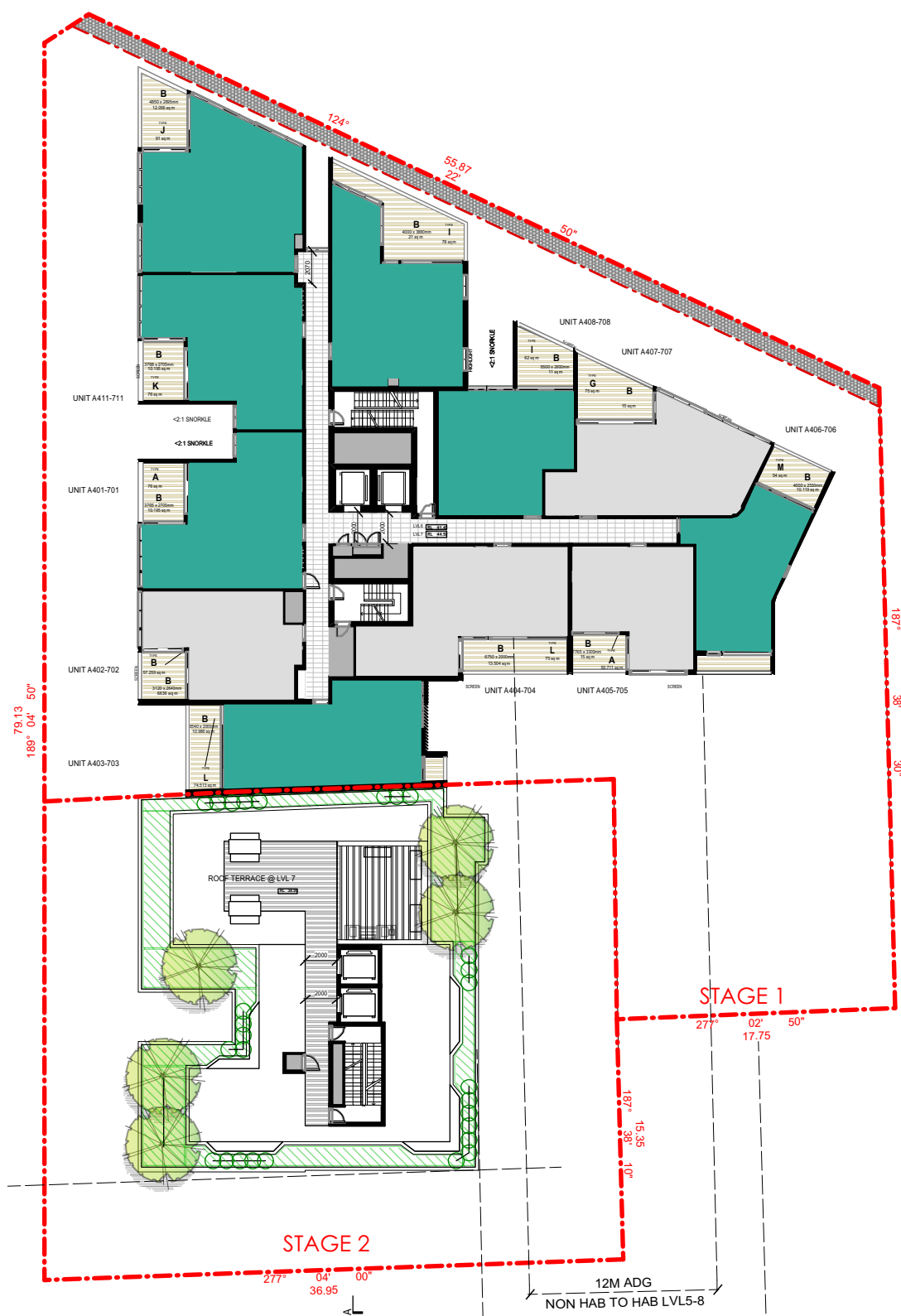
LEVEL 03



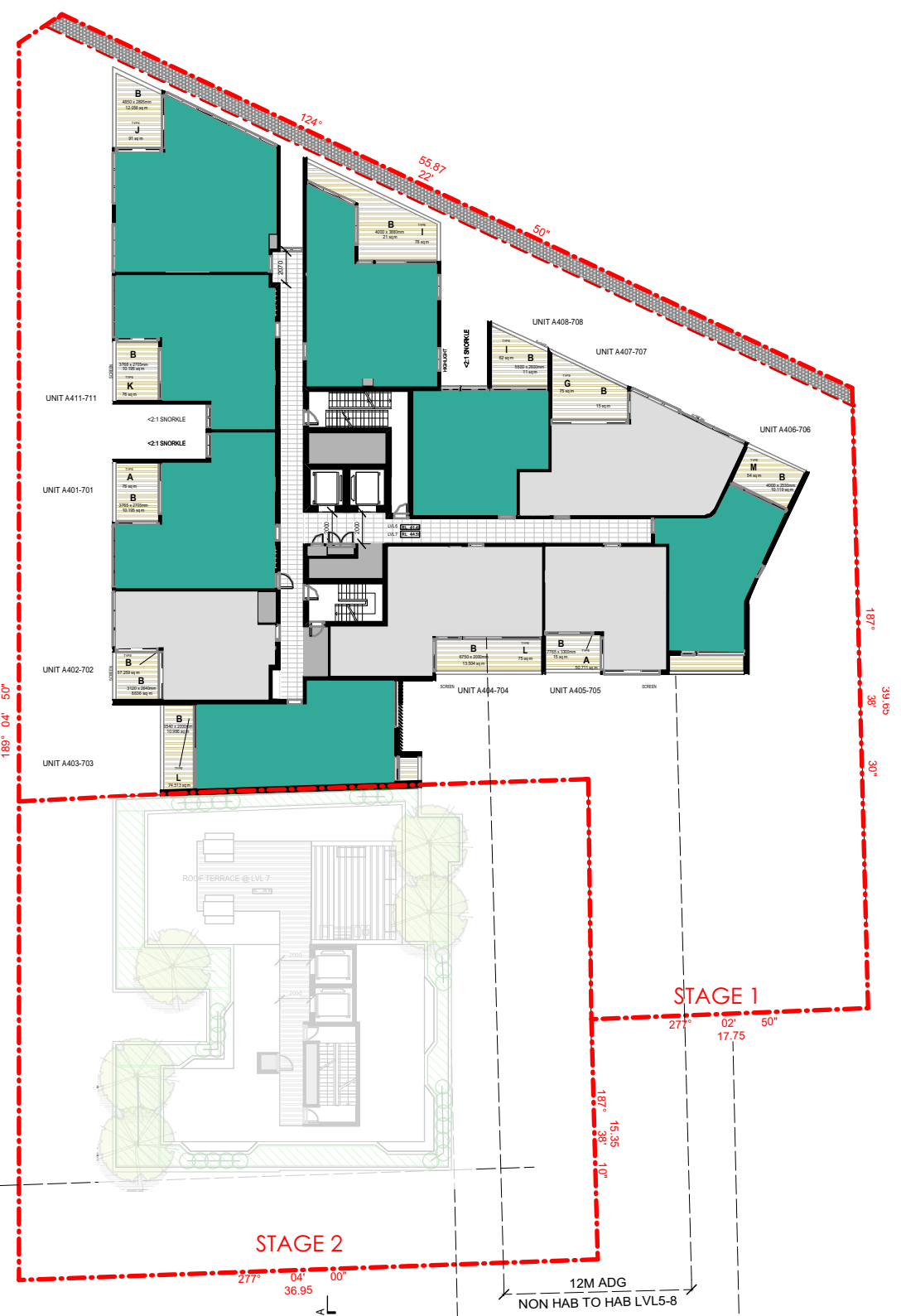
LEVEL 04



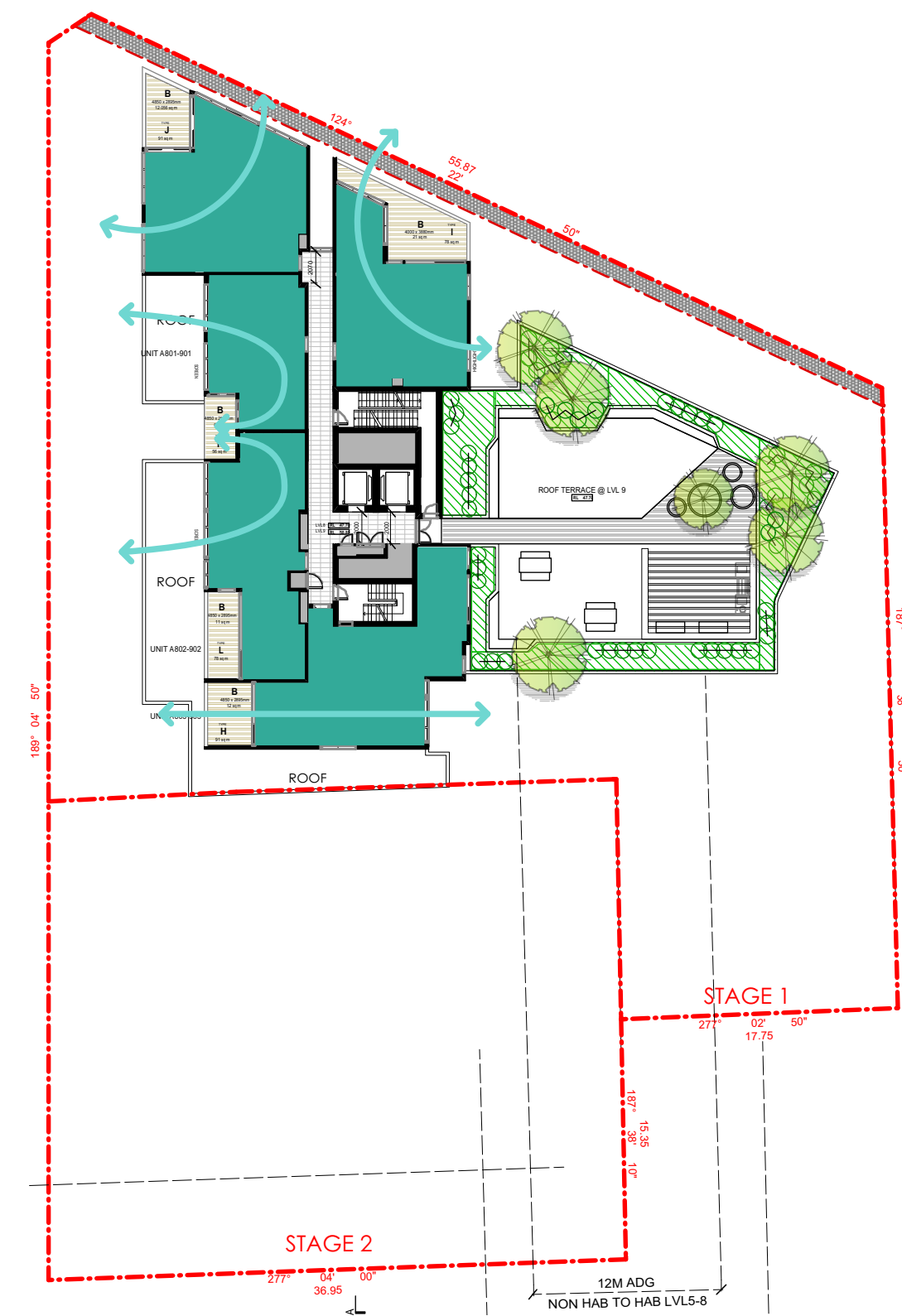
LEVEL 05



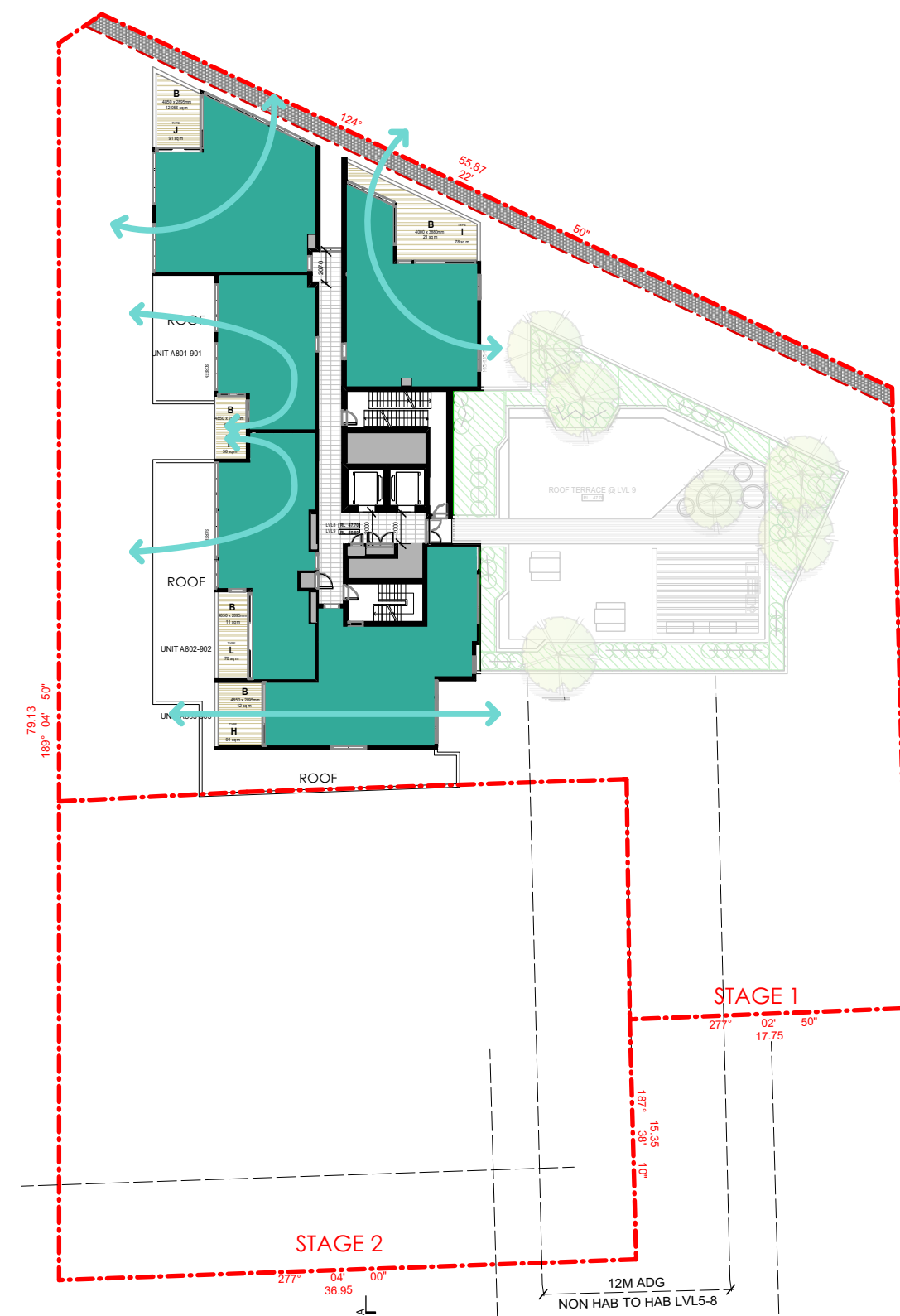
LEVEL 06



LEVEL 07



LEVEL 08



LEVEL 09

Energy Rating Certificate Number 15211049

5.9 stars

Single-dwelling rating

Multi-unit development (attach listing of ratings)

heating 37.6 MJ/m²

cooling 20.7 MJ/m²

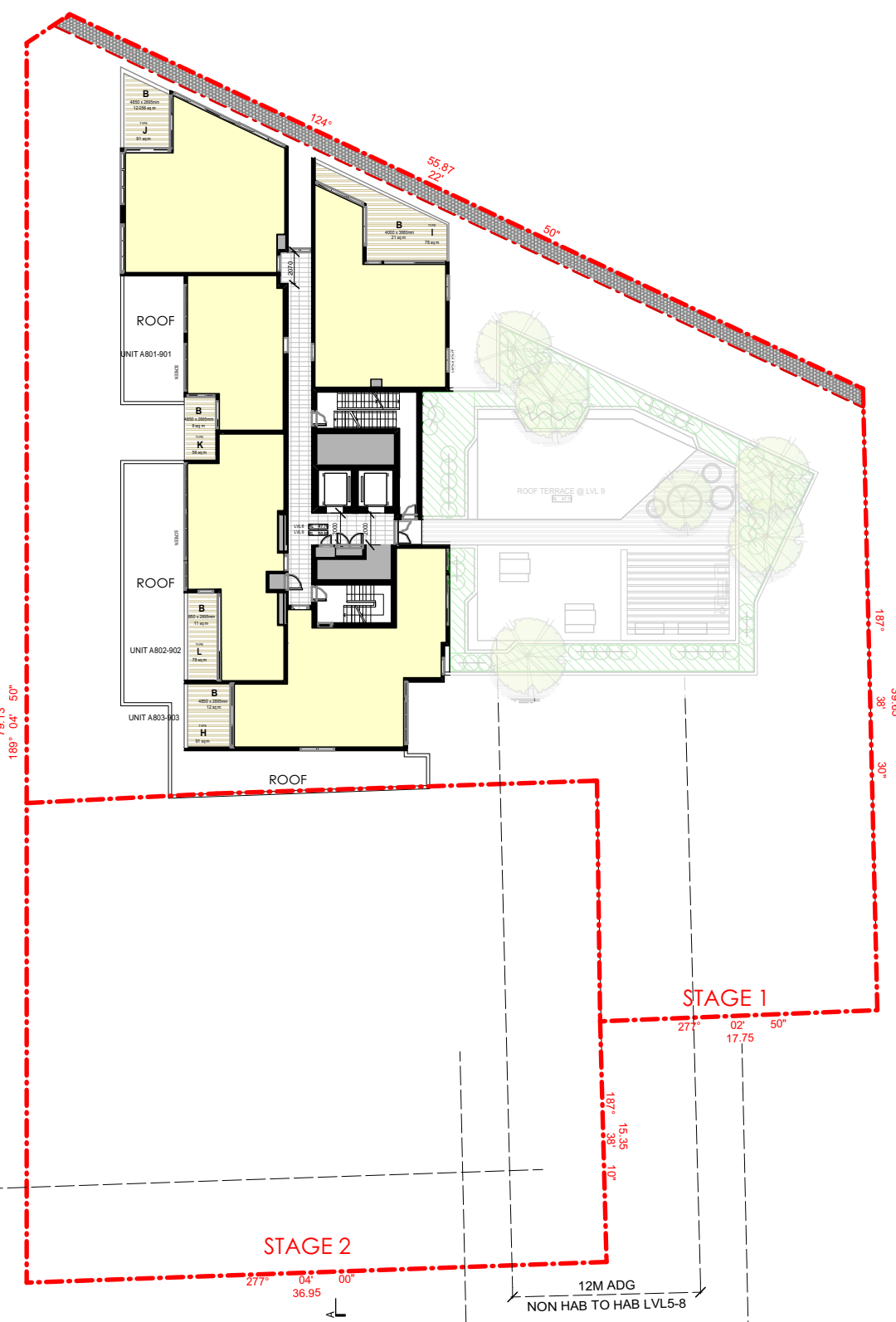
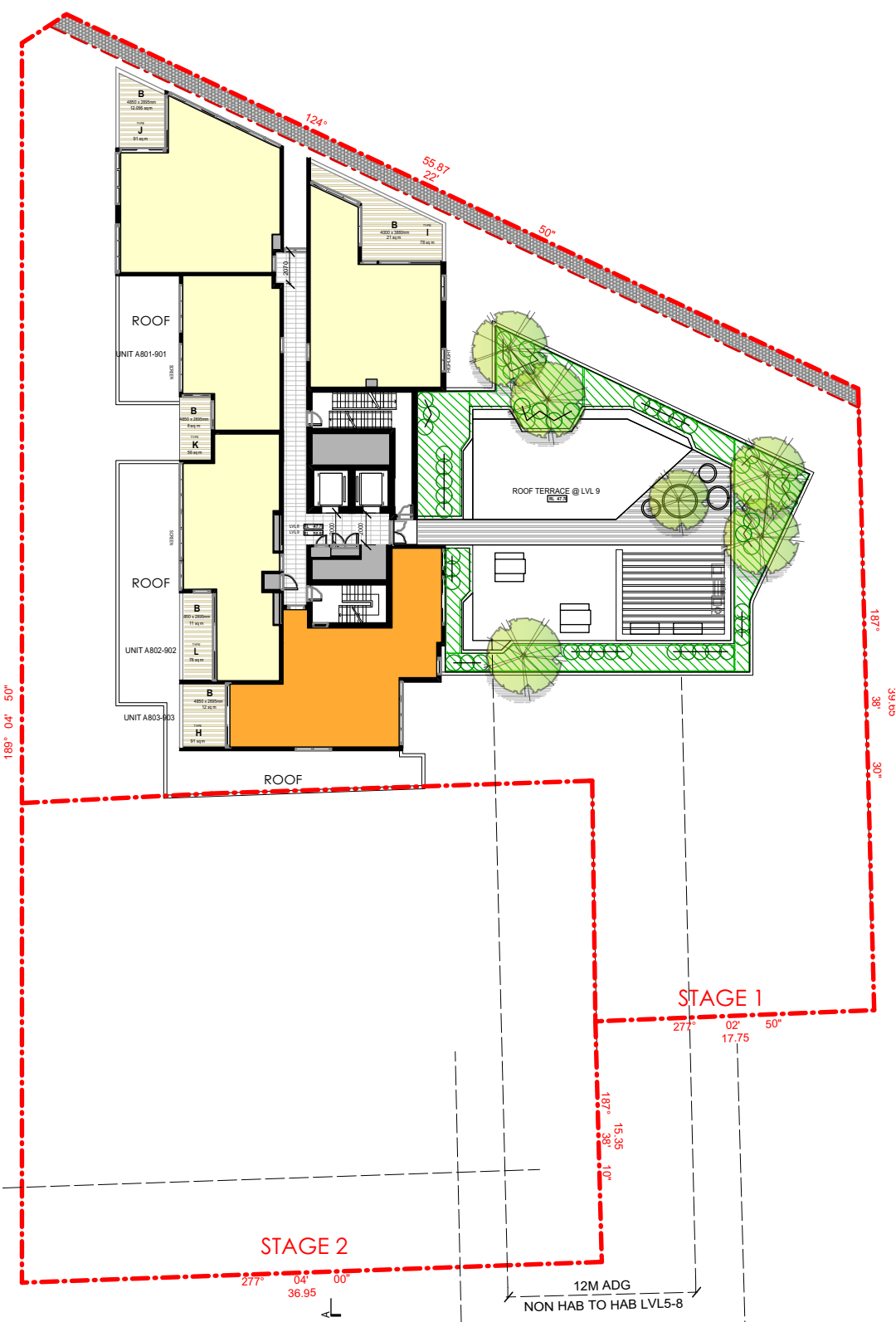
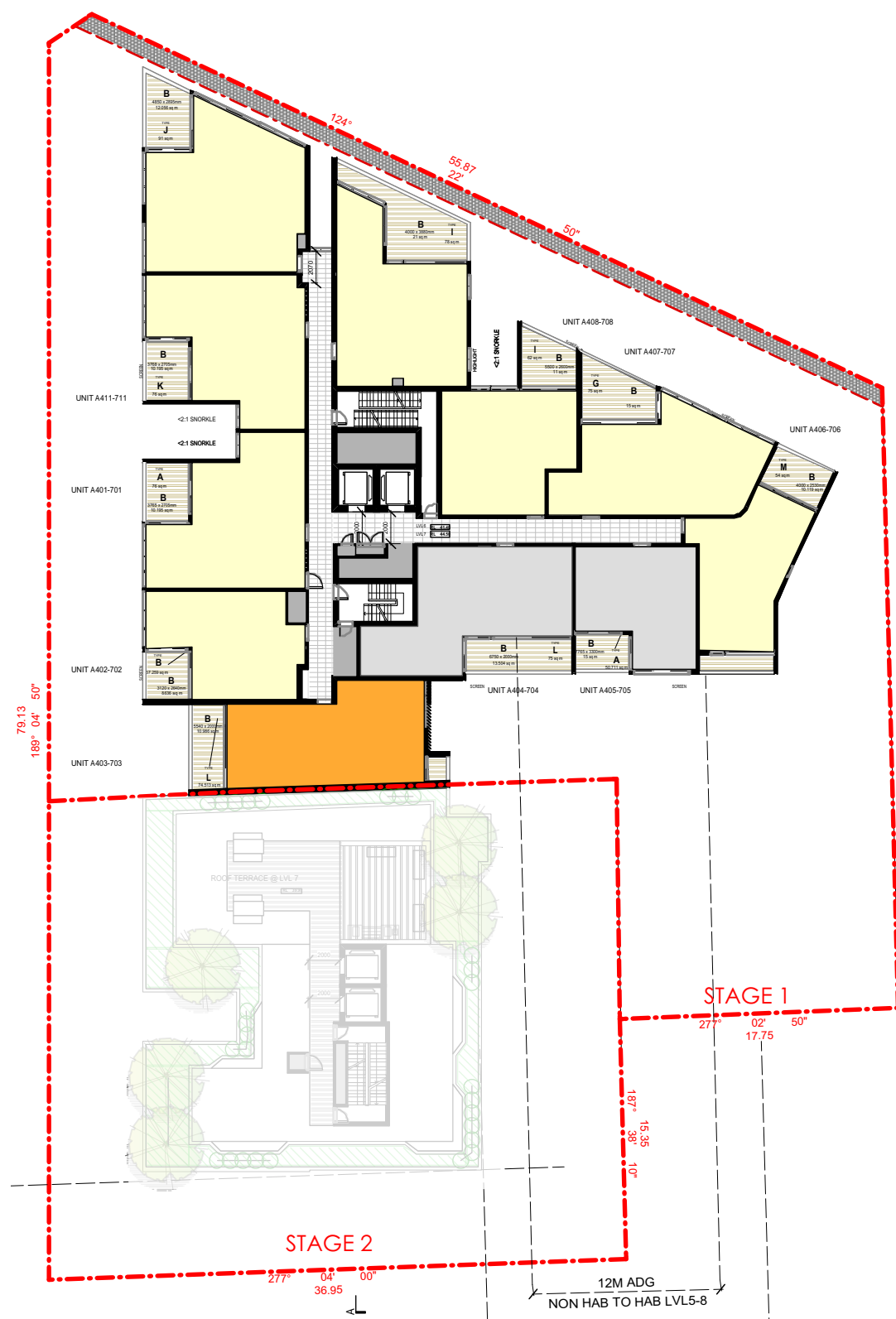
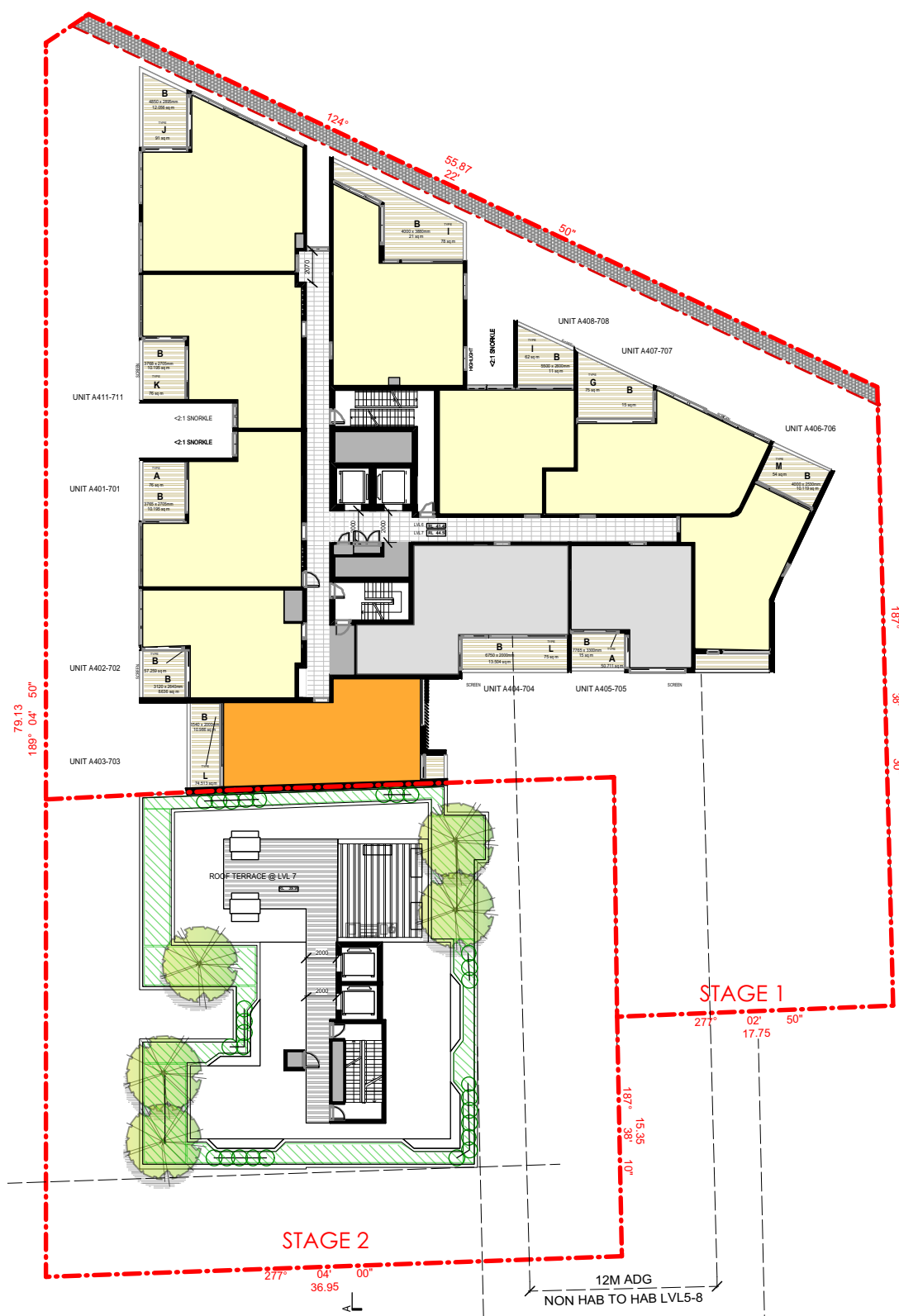
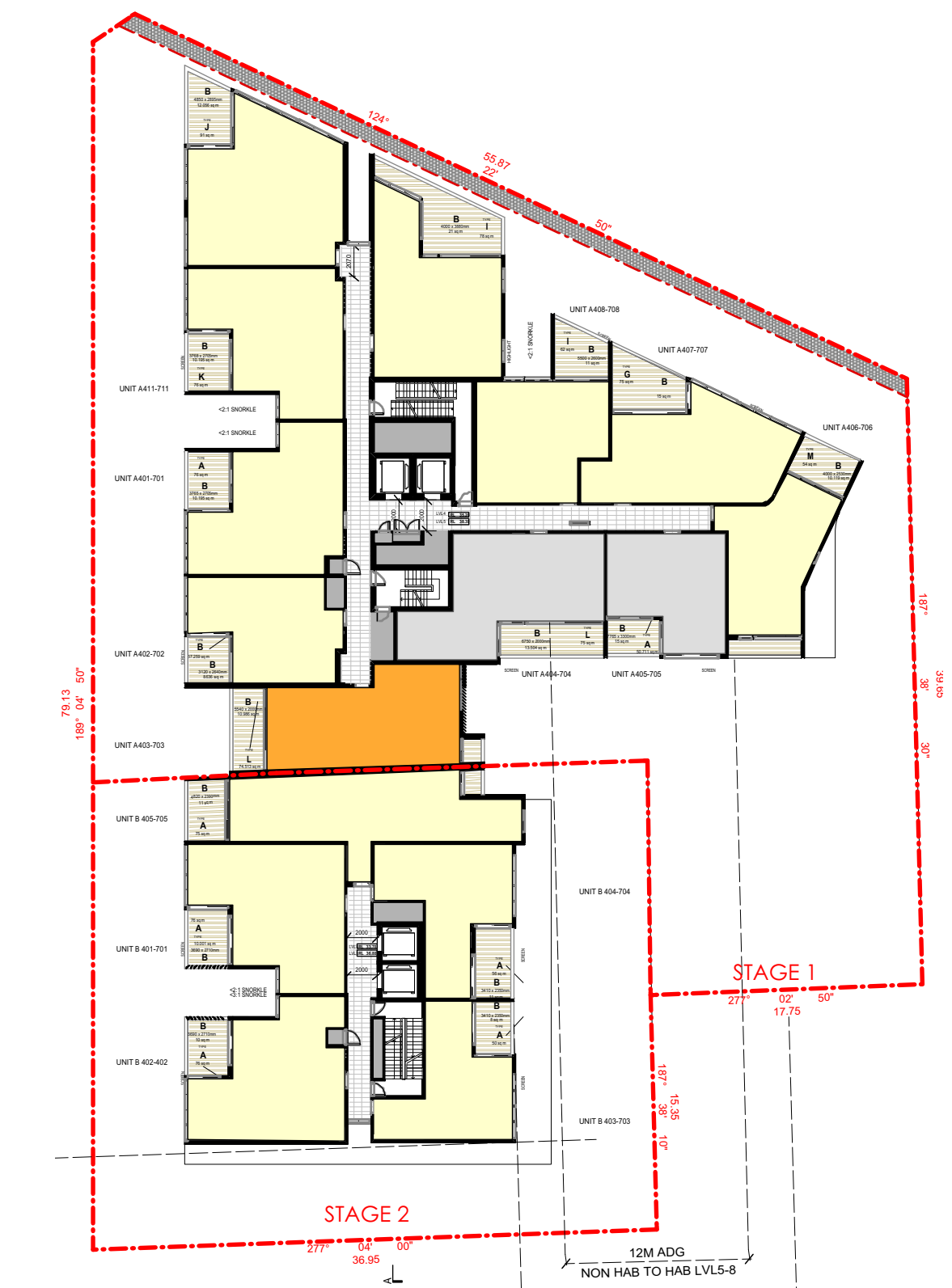
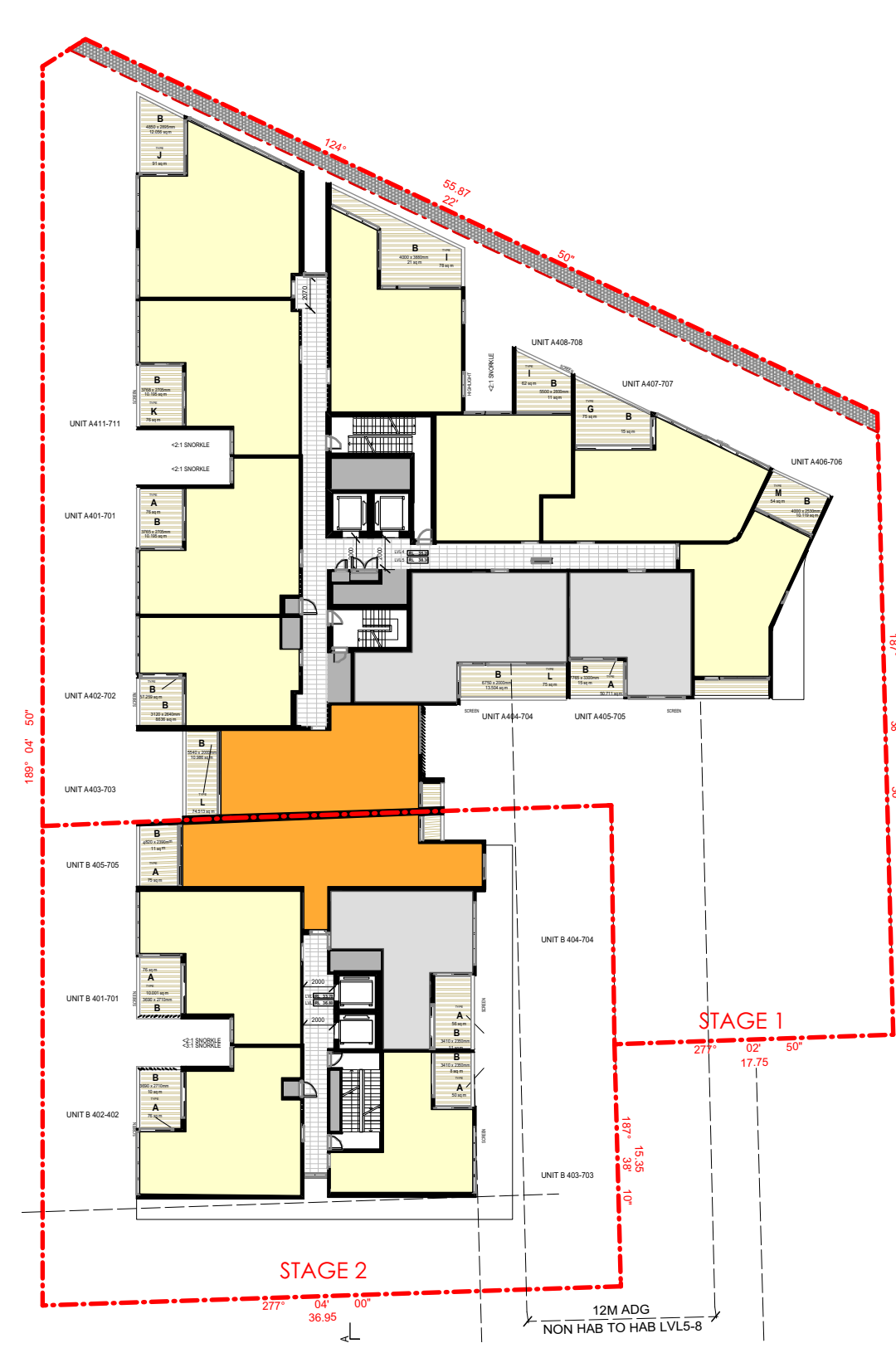
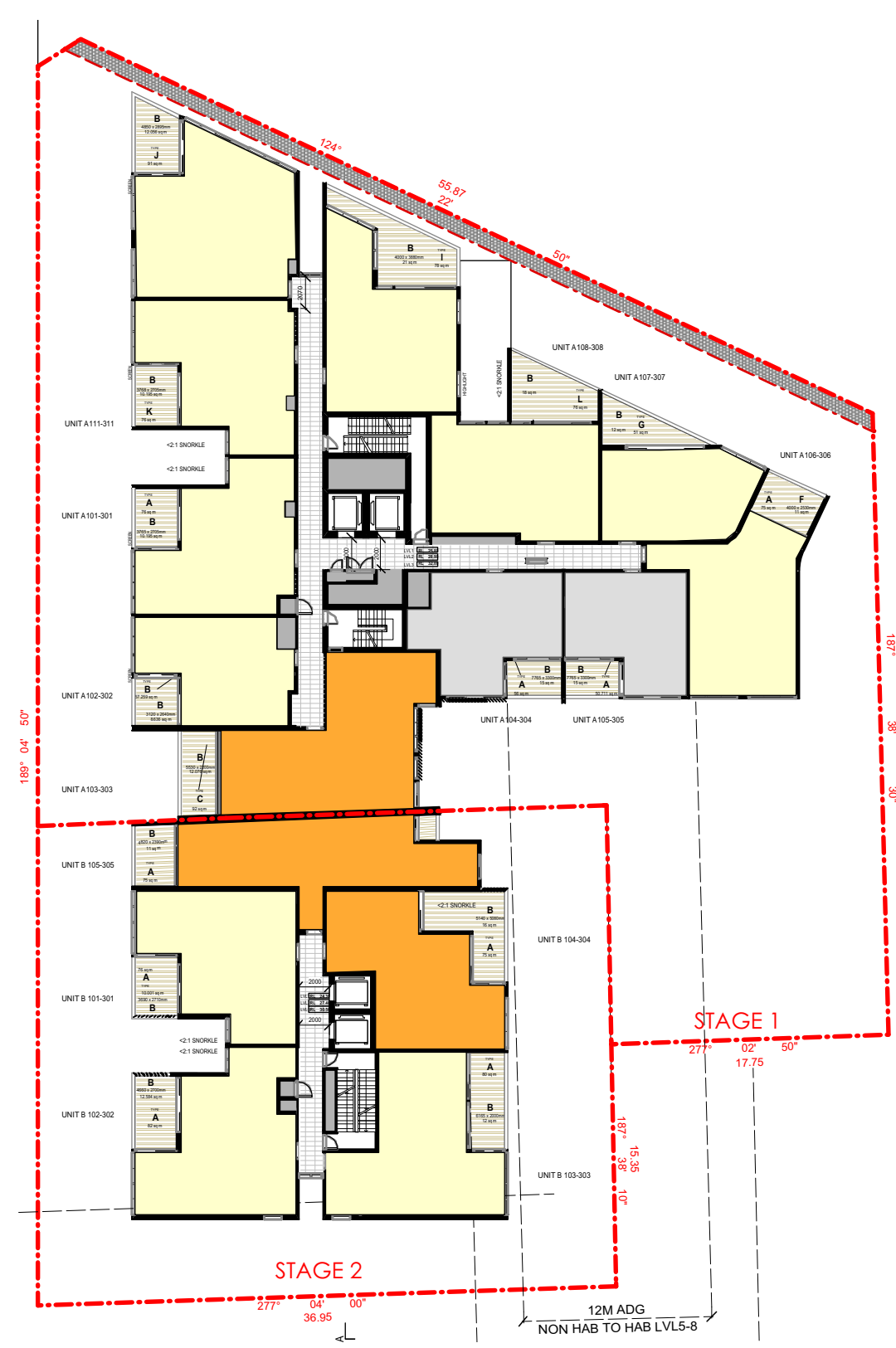
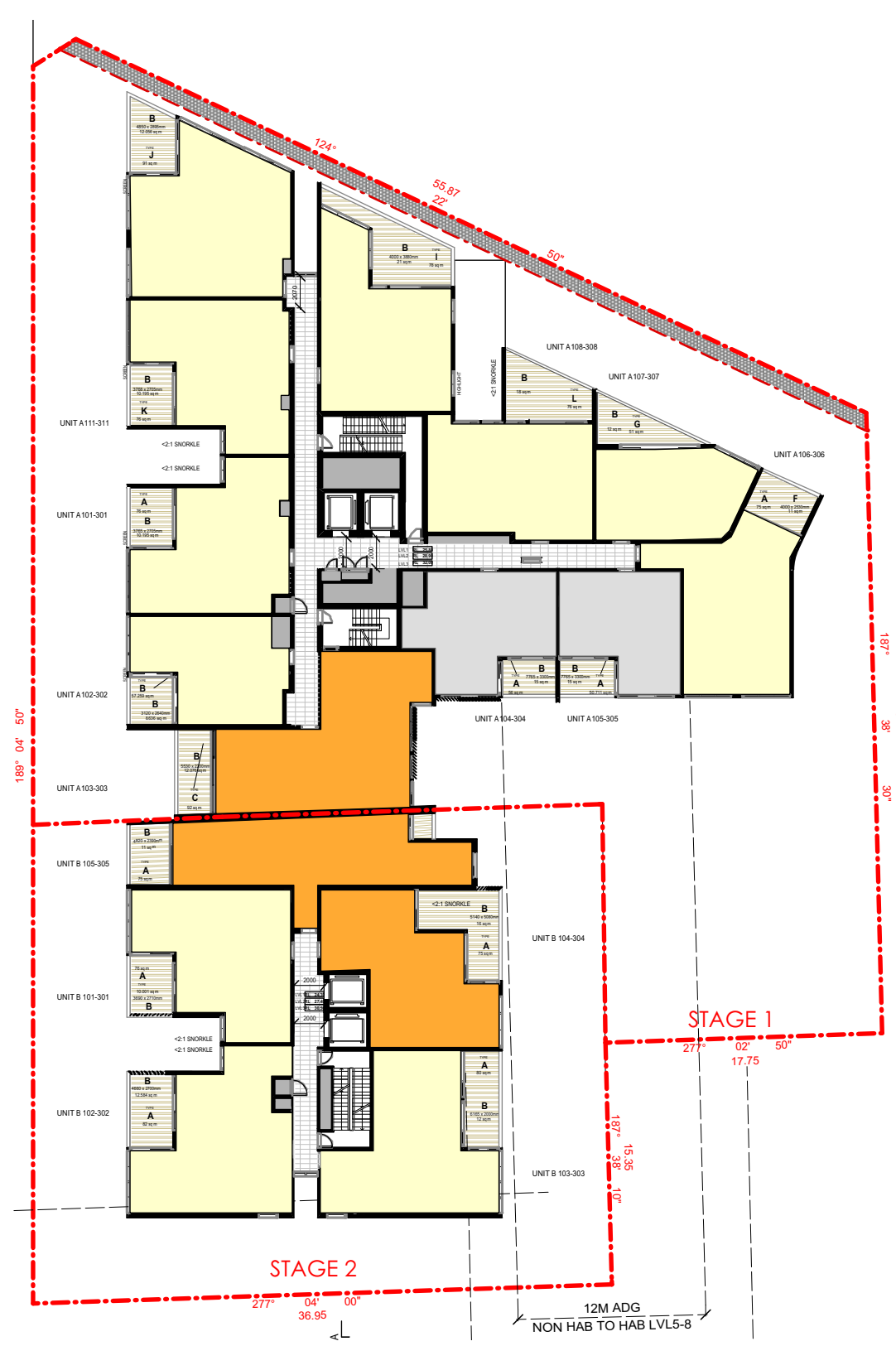
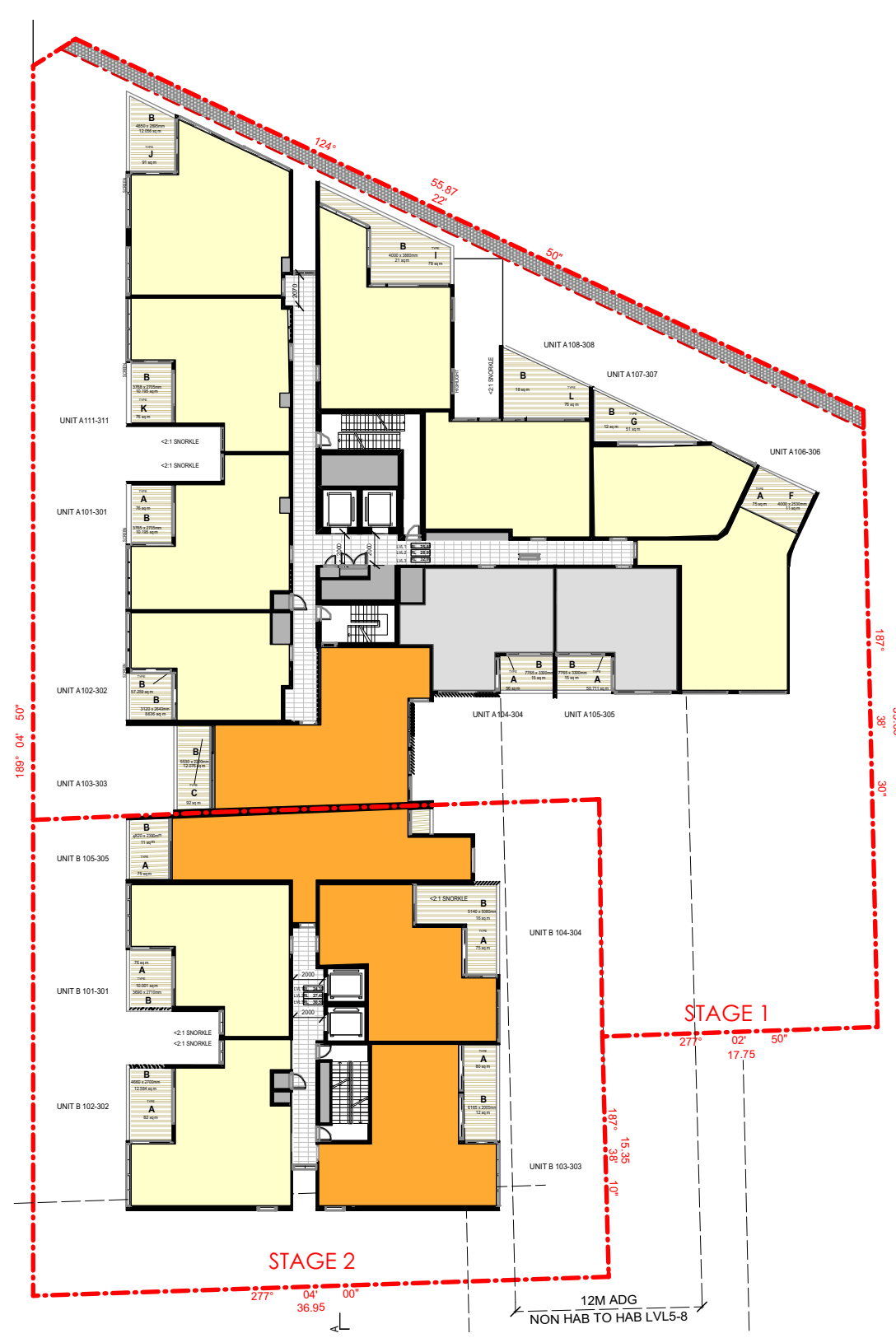
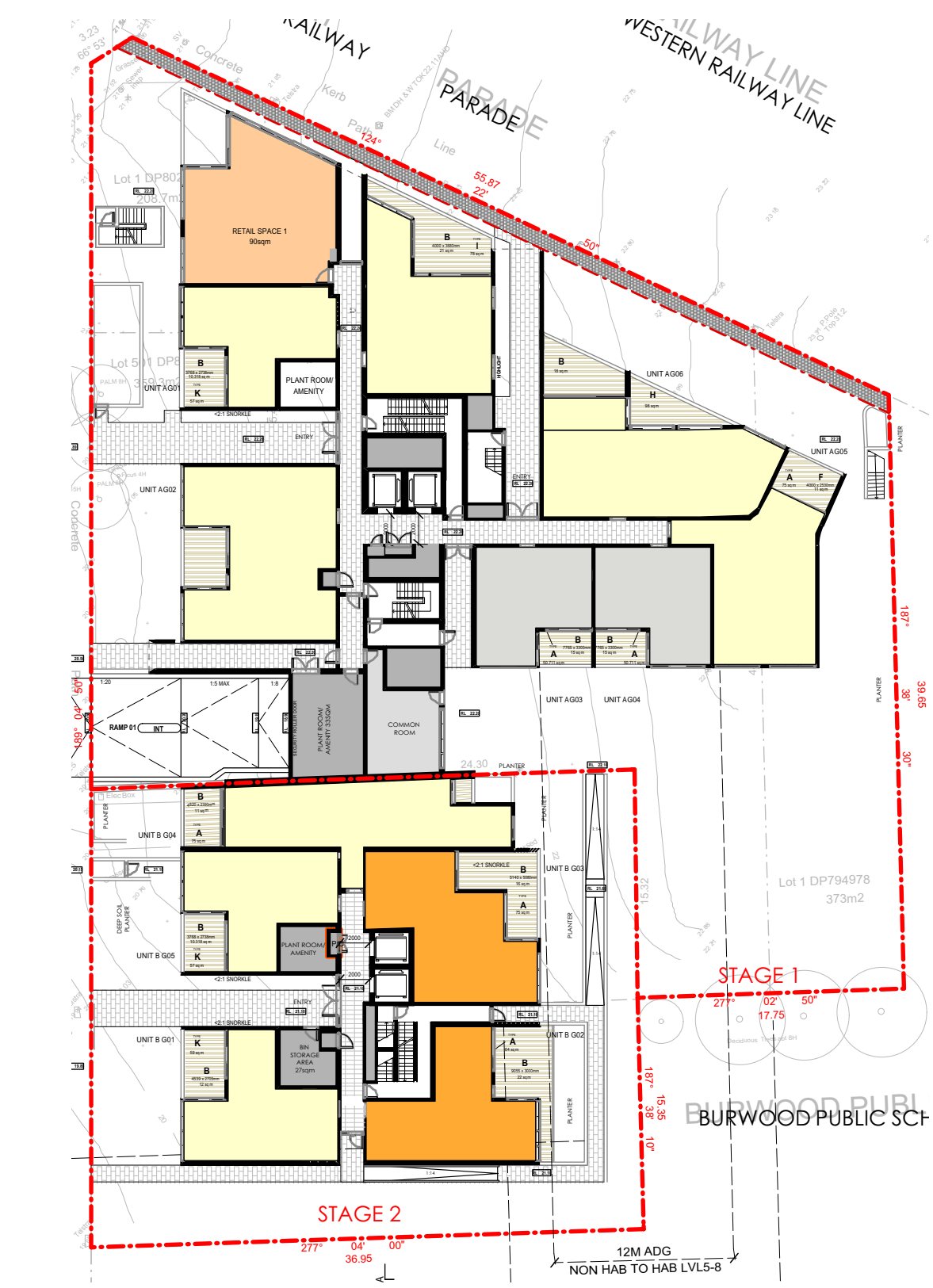
Recessed downlights confirmation: ☐ Rated with ☒ Rated without

Assessor Name/number Ved Baheti VIC/BD4V/13/1521

Assessor Signature Date 26/04/2018

UNITS WITH CROSS VENTILATION

CROSS VENTILATION	SUBJECT SITE				
	NO. OF STOREYS	UNITS PER FLOOR	TOTAL UNITS	CROSS VENT PER FLOOR	CROSS VENT TOTAL
LEVEL GF	1	12	12	6	6
LEVEL 01-03	3	16	48	11	33
LEVEL 04-05	2	16	32	11	22
LEVEL 06-07	2	11	22	7	14
LEVEL 08-09	2	5	10	4	8
TOTALS	10		124		83
					67%



- UNITS WITH ≥ 2 HOURS SOLAR ACCESS
- UNITS WITH < 2 HOURS SOLAR ACCESS
- UNITS WITH 0 HOURS SOLAR ACCESS

SOLAR ACCESS		SUBJECT SITE				
	NO. OF STORIES	UNITS PER FLOOR	TOTAL UNITS	> 2 H SOLAR ACCESS PER FLOOR	0 to 2H SOLAR ACCESS	UNITS WITH NO SOLAR
LEVEL 0F	1	12	12	7	3	2
LEVEL 01	1	16	16	10	4	2
LEVEL 02	1	16	16	11	3	2
LEVEL 03	1	16	16	11	3	2
LEVEL 04	1	16	16	11	2	3
LEVEL 05	1	16	16	13	1	2
LEVEL 06	1	11	11	8	1	2
LEVEL 07	1	11	11	8	1	2
LEVEL 08	1	5	5	4	1	0
LEVEL 09	1	5	5	5	0	0
TOTALS	10	124	88	71%	14%	

Energy Rating

Certificate Number: 15211049

☐ single-dwelling rating

☒ multi-unit development (attach listing of ratings)

Rating: **5.9** stars

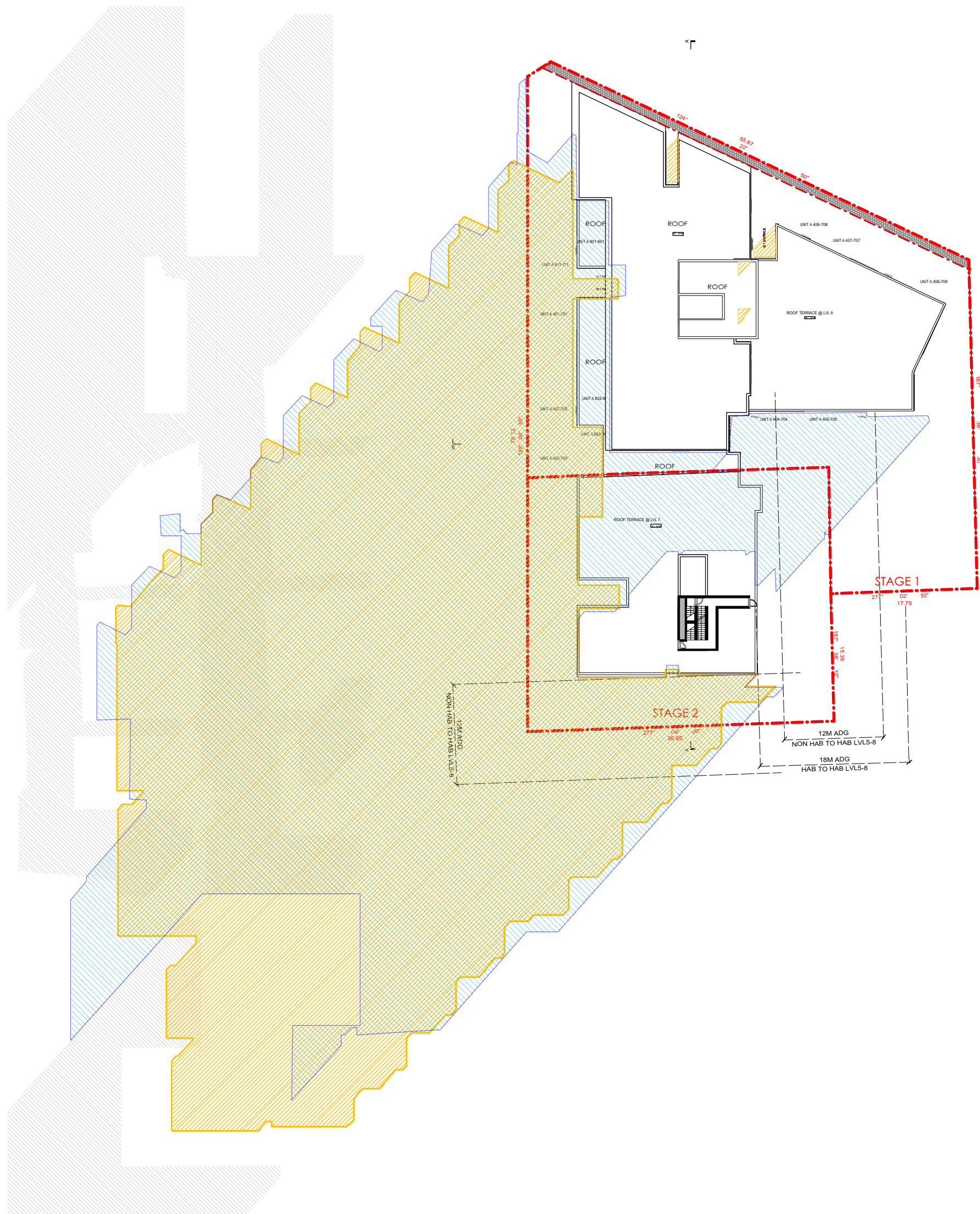
heating: 37.6 MJ/m²

cooling: 20.7 MJ/m²

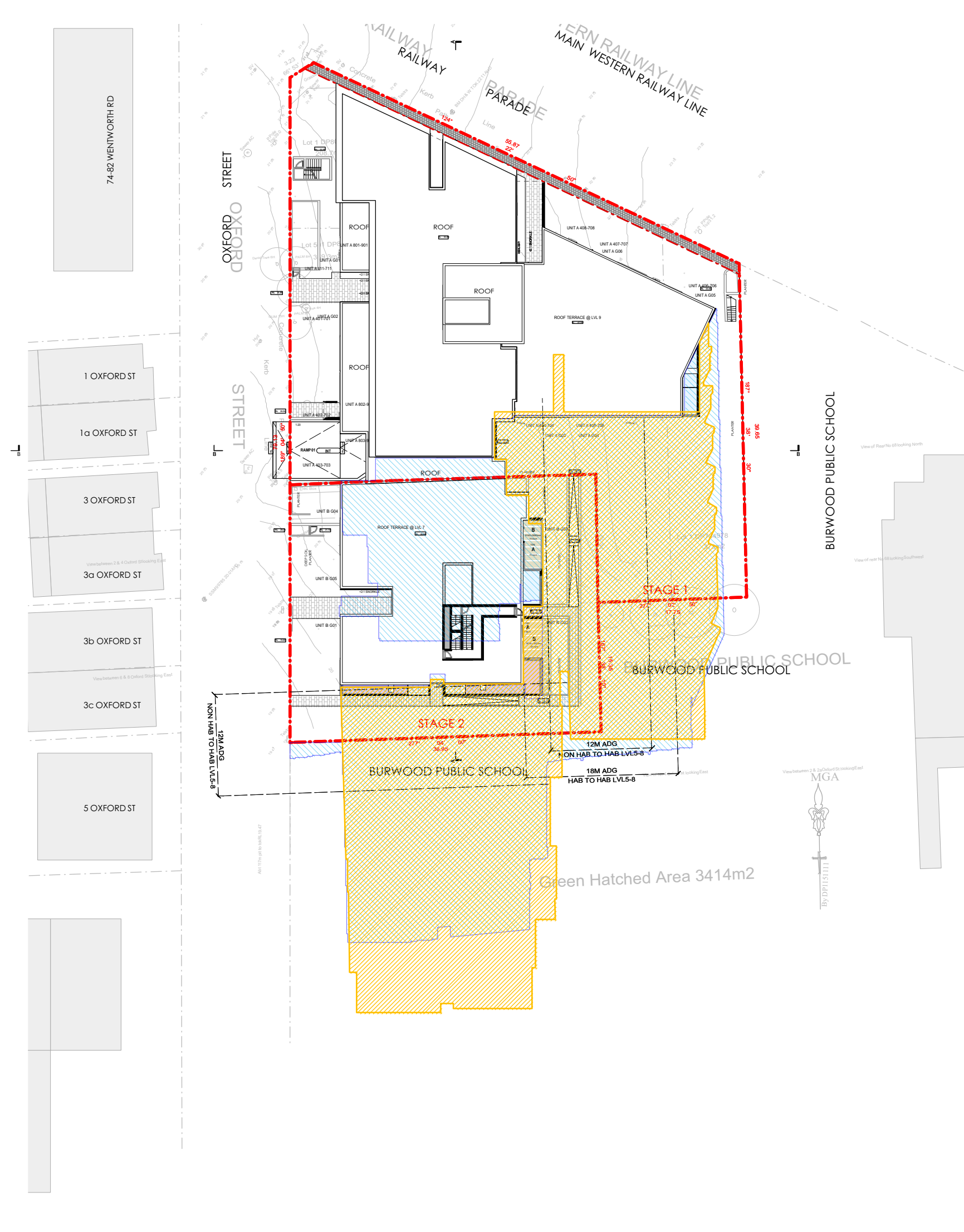
Recessed downlights confirmation: ☐ Rated with ☒ Rated without

Assessor Name/Number: Ved Baheti VIC/BDV13/1521

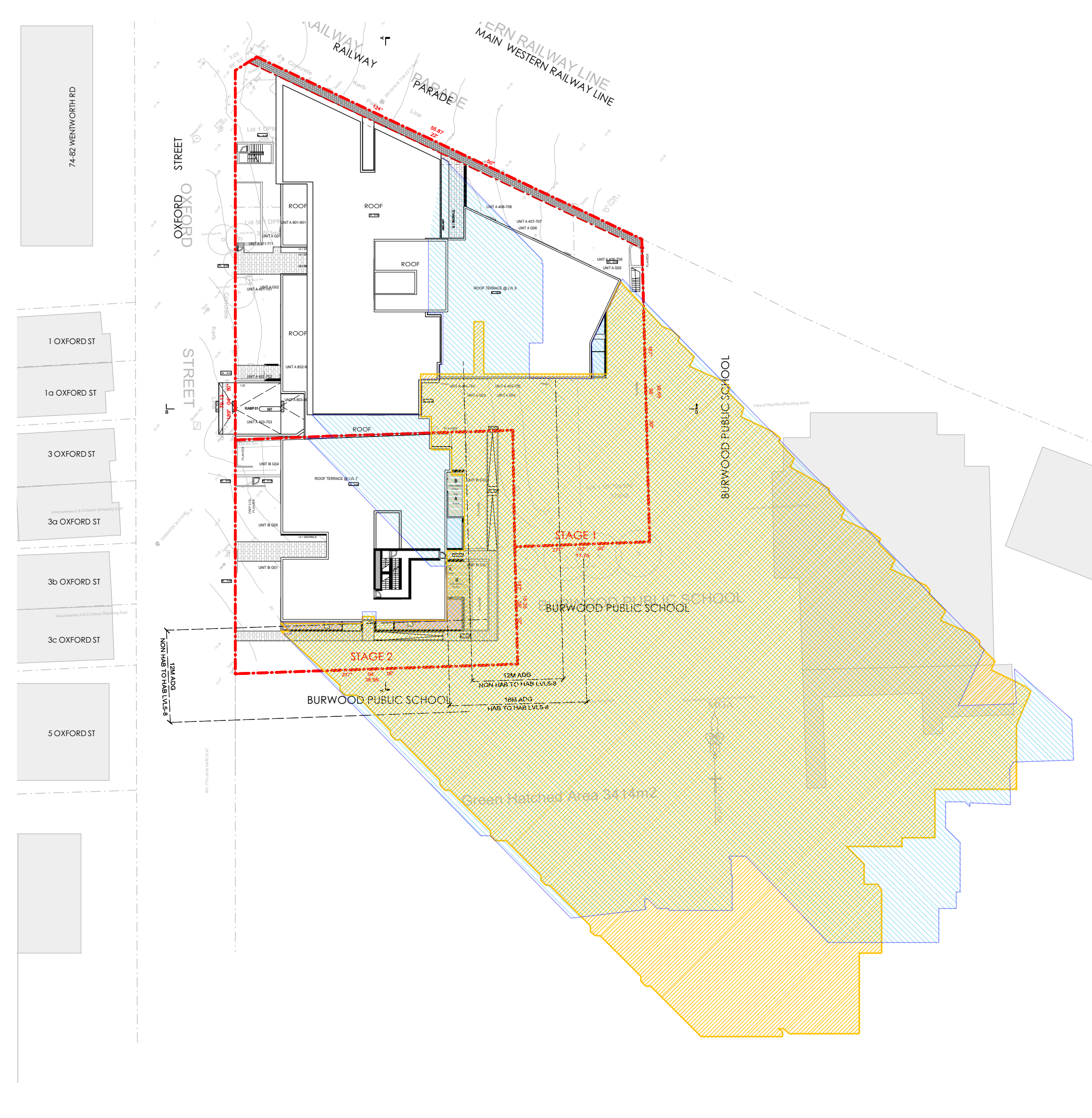
Assessor Signature: [Signature] Date: 26/04/2018



21/06 09:00



21/06 12:00



21/06 15:00

METHOD USED
SKETCHUP 2017
RENDERING CAD SOFTWARE

shadow cast by DA submission
22 09 2017

shadow cast by amended DA
24 04 2018

**Energy Rating**

Certificate Number 15211049

☐ single-dwelling rating

☒ multi-unit development (attach listing of ratings)
If selected, data specified is the average across the entire development

heating 37.6 MJ/m²

cooling 20.7 MJ/m²

Recessed downlights confirmation ☐ Rated with ☒ Rated without

Assessor Name/Number Ved Baheti VIC/BD4W/13/1521

Assessor Signature  Date 26/04/2018