

BASIX[®]Certificate

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

Multi Dwelling

Certificate number: 1186100M_02

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

Secretary

Date of issue: Thursday, 14 October 2021

To be valid, this certificate must be lodged within 3 months of the date of issue.



Planning,
Industry &
Environment



Project summary

Project name	4328A Stafford Kingswood - Billyard_02
Street address	82-84 Stafford Street Kingswood 2747
Local Government Area	Penrith City Council
Plan type and plan number	deposited 30611
Lot no.	G&H
Section no.	-
No. of residential flat buildings	0
No. of units in residential flat buildings	0
No. of multi-dwelling houses	10
No. of single dwelling houses	0

Project score

Water	✓ 40	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 52	Target 50

Certificate Prepared by

Name / Company Name: Lin & Associates Pty Ltd

ABN (if applicable): 34097383821

Description of project

Project address

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No. of single dwelling houses	0

Site details

Site area (m²)	1745
Roof area (m²)	924
Non-residential floor area (m²)	-
Residential car spaces	0
Non-residential car spaces	-




Common area landscape

Common area lawn (m²)	30.0
Common area garden (m²)	100.0
Area of indigenous or low water use species (m²)	100.0

Assessor details

Assessor number	DMN/19/1894
Certificate number	0005787640
Climate zone	28
Ceiling fan in at least one bedroom	No
Ceiling fan in at least one living room or other conditioned area	No

Project score

Water	 40	Target 40
Thermal Comfort	 Pass	Target Pass
Energy	 52	Target 50

Description of project

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

Multi-dwelling houses

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)
1	3	87.0	3.0	33.6	10.0
6	4 or more bedrooms	130.0	5.0	107.6	20.0

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)
2	4 or more bedrooms	117.0	3.0	26.6	10.0
7	4 or more bedrooms	120.0	7.0	33.0	10.0

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)
3	4 or more bedrooms	118.0	6.0	40.0	10.0
8	4 or more bedrooms	113.0	6.0	41.0	10.0

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)
4	4 or more bedrooms	123.0	7.0	28.9	10.0
9	4 or more bedrooms	116.0	3.0	26.4	10.0

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)
5	4 or more bedrooms	133.0	5.0	105.3	20.0
10	3	89.0	3.0	35.0	10.0

No common areas specified.

Schedule of BASIX commitments

1. Commitments for multi-dwelling houses

(a) Dwellings

- (i) Water
- (ii) Energy
- (iii) Thermal Comfort

2. Commitments for single dwelling houses

3. 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 multi-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.	✓	✓	✓

	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	4 star	5 star	no	-	-	-	-	-	-	-	-	-

	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	central water tank (no. 1)	See central systems	See central systems	yes	no	no	no	no
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".		✓	
(j) The applicant must install the photovoltaic system specified for the dwelling under the "Photovoltaic system" heading of the "Alternative energy" column of the table below, and connect the system to that dwelling's electrical system.	✓	✓	✓

	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	electric heat pump - air sourced 31 to 35 STCs	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	interlocked to light

Dwelling no.	Cooling		Heating		Artificial lighting						Natural lighting	
	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
2, 9	1-phase airconditioning EER 3.0 - 3.5 (zoned)	1-phase airconditioning EER 3.0 - 3.5 (zoned)	1-phase airconditioning EER 3.5 - 4.0 (zoned)	1-phase airconditioning EER 3.5 - 4.0 (zoned)	4	2	yes	yes	yes	yes	1	no
3, 4	1-phase airconditioning EER 3.0 - 3.5 (zoned)	1-phase airconditioning EER 3.0 - 3.5 (zoned)	1-phase airconditioning EER 3.5 - 4.0 (zoned)	1-phase airconditioning EER 3.5 - 4.0 (zoned)	4	2	yes	yes	yes	yes	2	no
5, 6	1-phase airconditioning EER 3.0 - 3.5 (zoned)	1-phase airconditioning EER 3.0 - 3.5 (zoned)	1-phase airconditioning EER 3.5 - 4.0 (zoned)	1-phase airconditioning EER 3.5 - 4.0 (zoned)	4	2	yes	yes	yes	yes	3	yes
7, 8	1-phase airconditioning EER 3.0 - 3.5 (zoned)	1-phase airconditioning EER 3.0 - 3.5 (zoned)	1-phase airconditioning EER 3.5 - 4.0 (zoned)	1-phase airconditioning EER 3.5 - 4.0 (zoned)	4	2	yes	yes	yes	yes	2	yes
All other dwellings	1-phase airconditioning EER 3.0 - 3.5 (zoned)	1-phase airconditioning EER 3.0 - 3.5 (zoned)	1-phase airconditioning EER 3.5 - 4.0 (zoned)	1-phase airconditioning EER 3.5 - 4.0 (zoned)	3	2	yes	yes	yes	yes	1	yes

Dwelling no.	Individual pool		Individual spa		Appliances & other efficiency measures							
	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	-	-	-	no	yes

	Alternative energy
Dwelling no.	Photovoltaic system (min rated electrical output in peak kW)
All dwellings	-

(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: <p>(aa) Install insulation with an R-value of not less than 1.0 around the vertical edges of the perimeter of the slab; or</p> <p>(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.</p>	✓	✓	✓
(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/m ² /yr)	Area adjusted cooling load (in mJ/m ² /yr)
1	51.2	35.5
2	52.9	30.9
3	55.4	33.8
4	54.8	36.0
5	52.9	34.0
6	53.3	32.1
7	54.1	37.9
8	55.6	36.3
9	53.5	31.6
All other dwellings	48.4	36.8

	Construction of floors and walls				
Dwelling no.	Concrete slab on ground(m ²)	Suspended floor with open subfloor (m ²)	Suspended floor with enclosed subfloor (m ²)	Suspended floor above garage (m ²)	Primarily rammed earth or mudbrick walls
1, 10	43	-	-	17	No
2, 9	39	-	-	17	No
3, 8	48	-	-	17	No
4, 7	49	-	-	17	No
All other dwellings	55	-	-	23	No

3. 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	no common facility	no common facility	no common laundry facility

Central systems	Size	Configuration	Connection (to allow for...)
Central water tank - rainwater or stormwater (No. 1)	10000.0	To collect run-off from at least: - 450.0 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 100.0 square metres of common landscaped area on the site

(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.	✓	✓	✓

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).

NatHERS Certification Summary

Project:

Address:

Applicant:

82-84 Stafford Street Kingswood NSW 2747

Josef Usnik and Daniel Paci

Client:

Name:

Contact:

Noel Billyard

noel@nfbillyard.com

Assessor:

Name:

Address:

Contact:

Ailin Zhang

PO Box 5080. Sth Turramurra. 2074

0412-988088

Company:

Number:

Email:

Lin & Associates

DMN/19/1894

ailin@linassociates.com.au

Ext. Walls:

Construction

Insulation

Colour

Details

Brick Veneer

R2.0

Med

Ground floor and first floor

Cavity panel

R2.5

See table below

R2.0

Level 3

R2.5

See table below

Int. Walls:

Construction

Insulation

Details

Plasterboard

None

As per plans

R2.0

Walls adjacent to garage

Floors:

Construction

Insulation

Details

Concrete Slab

None

Carpet, Tiles

Timber

None

As per plans

R2.0

Floor above garage

Ceilings:

Construction

Insulation

Details

Suspended plasterboard

R4.0

Under roofs as per table below

Roof:

Construction

Insulation

Colour

Details

Metal

Foil

Med

As per plans

Windows:

Product ID

Glass

Frame

Uw/SHGCw

Window types

Generic

Single Clear

Aluminium

6.70 / 0.70

All fixed and sliding windows & doors

Single Low E

5.40 / 0.58

See table below

Double Low E (or equivalent)

4.30 / 0.53

D4 & D28

Skylights:

Product ID

Glass

Frame

Uw/SHGCw

Details

Generic

Single Clear

Timber/Aluminium

Other:

Orientation

Terrain

Weatherseals

Recessed Downlights

280

Suburban

Yes

YES

100mm LED at 1 per 5 sqm of ceiling space

Overshadowing Details:

Other Project Building

Assessment: Drawings:

82-84 Stafford Street Kingswood dwgs as stamped

File Ref:

4328A .01

Software:

BERS Pro 4.4

Climate Zone:

28

Certification Number:

0005787640

Date:

14/10/2021

0005787640 14 Oct 2021

Assessor Ailin Zhang

Accreditation No. DMN/19/1894

Address 82-84 Stafford Street , Kingswood , NSW , 2747



hstar.com.au

Unit No.	Insulation Summary (refer also to table above)							
	ExtWall Insulation R2.0	Ceiling Insulation R4.0 + Roof Foil	Internal walls adjacent to garage R2.0	Floor above garage R2.0	Single Low E	Double Low E	SEALED Recessed Downlights ONLY	Sealed exhaust vents
Unit 1	X	X	X	X			X	X
Unit 2	X	X	X	X			X	X
Unit 3	R2.5	X	X	X	All except D4	D4	X	X
Unit 4	X	X	X	X			X	X
Unit 5	R2.5	X	X	X	All except bedrooms & wet areas		X	X
Unit 6	R2.5	X	X	X	All in lounge/dining/ kitchen		X	X
Unit 7	X	X	X	X			X	X
Unit 8	R2.5	X	X	X	All except D28	D28	X	X
Unit 9	X	X	X	X			X	X
Unit 10	X	X	X	X			X	X

Disclaimer: By using this summary you are accepting all the terms of this disclaimer notice. While every effort is made to ensure that the content of this summary is accurate, the summary is provided “as is” and Victor Lin & Associates Pty Ltd, makes no representations or warranties in relation to the accuracy or completeness of the information found on it. In no event will Victor Lin & Associates Pty Ltd, be laible for any damages whatsoever for any differences between this summary and the NatHERS Univesal Certificates that relate to this project. You accept that it is your responsibility to check the Universal Certificates and comply with any differences that may exist on those certificates.

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Version: 1, Version Date: 08/12/2021

Victor Lin & Associates
4328A.01 Stafford Kingswood Billyard Assessor Summary

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Nationwide House Energy Rating Scheme — Multiple Class1-dwelling summary NatHERS Certificate No. 0005787640

Generated on 14 Oct 2021 using BERS Pro v4.4.0.6 (3.21)

Property

Address 82-84 Stafford Street ,
Kingswood , NSW , 2747

Lot/DP GH/30611

NatHERS climate zone 28

Accredited assessor



Ailin Zhang

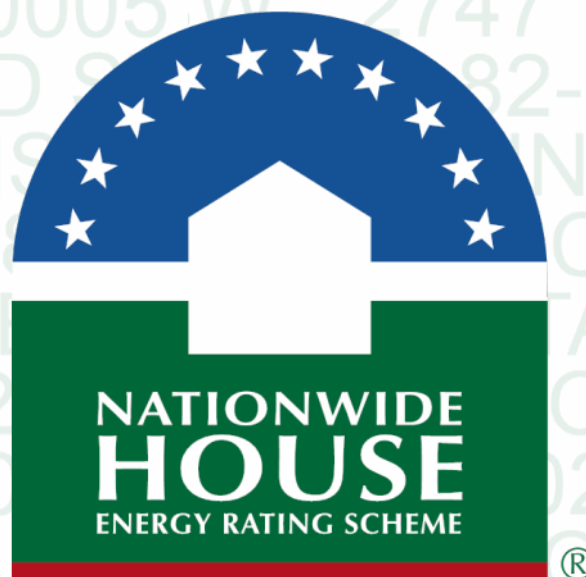
Victor Lin Associates Pty Ltd

ailin@linassociates.com.au

1800884199

Accreditation No. DMN/19/1894

Assessor Accrediting Organisation Design Matters
National



Verification



To verify this certificate, scan the QR code or visit hstar.com.au/QR/Generate?p=OnBBOFnTR.
When using either link, ensure you are visiting hstar.com.au

Summary of all dwellings

Certificate number and link	Unit Number	Heating load (MJ/m ² /p.a.)	Cooling load (MJ/m ² /p.a.)	Total load (MJ/m ² /p.a.)	Star rating
0005787627-01	Unit 1	51.2	35.5	86.6	6
0005787635-01	Unit 2	52.9	30.9	83.9	6.2
0005787593-01	Unit 3	55.4	33.8	89.2	5.9
0005787569-01	Unit 4	54.8	36	90.8	5.8
0005787619-01	Unit 5	52.9	34	87	6

Continued Over

National Construction Code (NCC) requirements

The NCC's requirements for NatHERS-rated buildings are detailed in 3.12.0(a)(i) and 3.12.5 of the NCC Volume Two. For apartments the requirements are detailed in J0.2 and J5 to J8 of the NCC Volume One.

In NCC 2019, these requirements include minimum star ratings and separate heating and cooling load limits that need to be met by buildings and apartments through the NatHERS assessment. Requirements additional to the NatHERS assessment that must also be satisfied include, but are not limited to: insulation installation methods, thermal breaks, building sealing, water heating and pumping, and artificial lighting requirements. The NCC and NatHERS Heating and Cooling Load Limits (Australian Building Codes Board Standard) are available at www.abcb.gov.au.

State and territory variations and additions to the NCC may also apply.

Summary of all dwellings (continued)

Certificate number and link	Unit Number	Heating load (MJ/m ² /p.a.)	Cooling load (MJ/m ² /p.a.)	Total load (MJ/m ² /p.a.)	Star rating
0005787585-01	Unit 6	53.3	32.1	85.3	6.1
0005787551-01	Unit 7	54.1	37.9	92	5.8
0005787601-01	Unit 8	55.6	36.3	91.9	5.8
0005787577-01	Unit 9	53.5	31.6	85	6.1
0005787544-01	Unit 10	48.4	36.8	85.2	6.1

Explanatory Notes

About this report

This is a summary of NCC Class 1 dwellings in a development. The individual dwellings' ratings are a comprehensive, dynamic computer modelling evaluation of a home, using the floorplans, elevations and specifications to estimate the energy load. It addresses the building layout, orientation and fabric (i.e. walls, windows, floors, roofs and ceilings), but does not cover the water or energy use of appliances, or energy production of solar panels. For more details about an individual dwelling's assessment, refer to the individual dwelling's NatHERS Certificate (accessible via link).

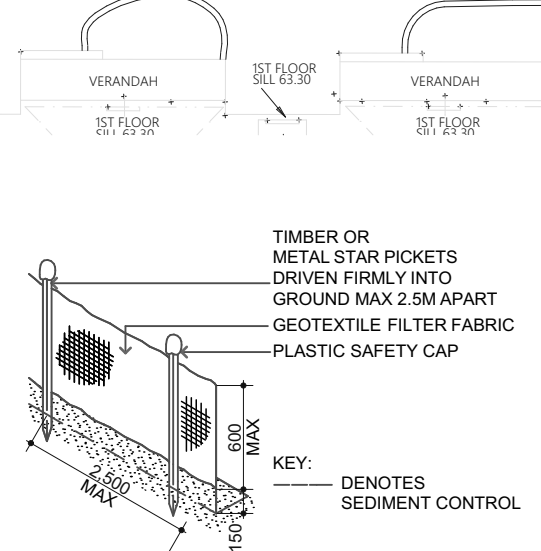
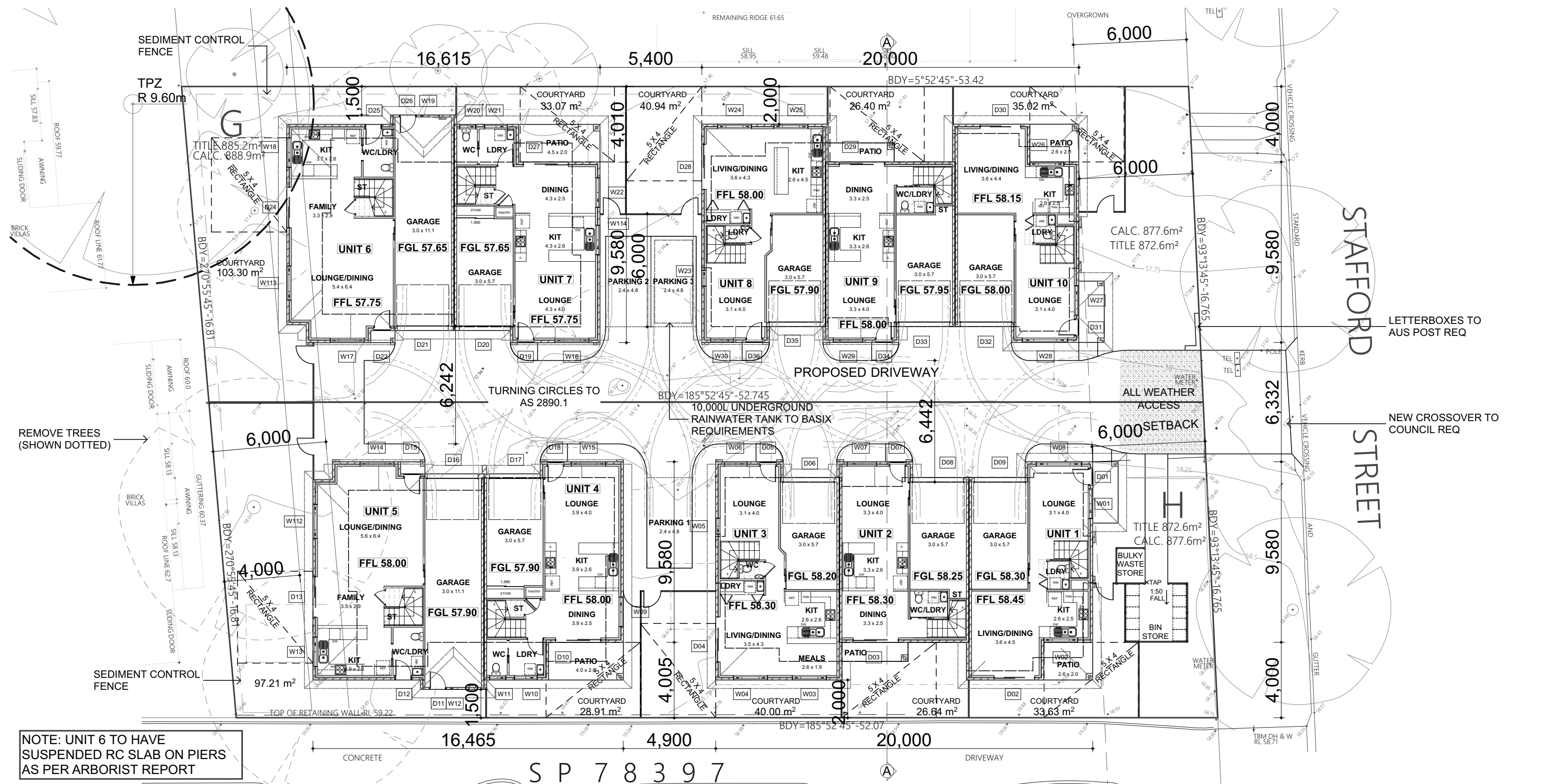
Accredited Assessors

To ensure the NatHERS Certificate is of a high quality, always use an accredited or licenced assessor. NatHERS accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO). AAOs have specific quality assurance processes in place, and continuing professional development requirements, to maintain a high and consistent standard of assessments across the country.

Any questions or concerns about this report should be directed to the assessor in the first instance. If the assessor is unable to address these questions or concerns, the AAO specified on the front of this certificate should be contacted.

Disclaimer

The format of the NatHERS Certificate was developed by the NatHERS Administrator. However the content, input and creation of the NatHERS Certificate is by the assessor. It is the responsibility of the assessor who prepared this certificate to use NatHERS accredited software correctly and follow the NatHERS Technical Notes to produce a NatHERS Certificate.



SITE CALCULATIONS

SITE AREA		1745.2m²	UNIT 4	LIVING	149.15m²	UNIT 8	LIVING	137.37m²
				GARAGE	20.04m²		GARAGE	18.01m²
				VER'H	7.95m²		TOTAL	155.38m²
FLOOR AREAS				TOTAL	177.14m²			
UNITS 1 & 10	LIVING	108.18m²	UNIT 5	LIVING	161.85m²	WSUD CALCULATION:		
	GARAGE	18.59m²		GARAGE	35.98m²	ROOF	909.54m²	
	VER'H	9.59m²		VER'H	0.83m²	DRIVEWAY	288.94m²	
	TOTAL	136.36m²		TOTAL	198.66m²	PERMEABLE	546.72m²	
UNITS 2 & 9	LIVING	18.03m²	UNIT 6	LIVING	154.27m²	TOTAL		
	GARAGE	19.09m²		GARAGE	35.98m²	LANDSCAPE		
	VER'H	3.53m²		VER'H	0.83m²	NEED (30%)		
	TOTAL	160.65m²		TOTAL	191.08m²	ACTUAL (38.80%)		
UNIT 3	LIVING	139.16m²	UNIT 7	LIVING	144.61m²	DEEP SOIL ZONE		
	GARAGE	18.01m²		GARAGE	20.04m²	NEED (15%)		
	TOTAL	157.17m²		VER'H	8.61m²	ACTUAL (24.05%)		
				TOTAL	173.26m²			

0005787640 14 Oct 2021
Assessor Ailin Zhang
Accreditation No. DMV19/1894
Address
82-84 Stafford Street
Kingswood, NSW, 2747

hstar.com.au


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82-84 STAFFORD STREET,
KINGSWOOD
CLIENT: MR JOSEF USNIK
N. F. BILLYARD P/L
PO BOX 4327, NORTH CURL CURL NSW 2099
Ph 0414 597 913

06/09/21 SCALE 1:200 A3 SHEET
SITE PLAN/ GROUND FLOOR LEVEL 1367 SK01

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NatHERS Certification Summary

Project:	Address:	82-84 Stafford Street Kingswood NSW 2747		
	Applicant:	Josef Usnik and Daniel Paci		
Client:	Name:	Noel Billyard		
	Contact:	noel@nbillyard.com		
Assessor:	Name:	Alin Zhang	Company:	Lin & Associates
	Address:	PO Box 5080, Sth Turramurra, 2074	Number:	DMN/19/1894
	Contact:	0412-988088	Email:	alin@linassociates.com.au
Ext. Walls:	Construction	Insulation	Colour	Details
	Brick Veneer	R2.0	Med	Ground floor and first floor
		R2.5		See table below
	Cavity panel	R2.0		Level 3
		R2.5		See table below
Int. Walls:	Construction	Insulation		Details
	Plasterboard	None		As per plans
		R2.0		Walls adjacent to garage
Floors:	Construction	Insulation		Details
	Concrete Slab	None		Carpet, Tiles
	Timber	None		As per plans
		R2.0		Floor above garage
Ceilings:	Construction	Insulation		Details
	Suspended plasterboard	R4.0		Under roofs as per table below
Roof:	Construction	Insulation	Colour	Details
	Metal	Foil	Med	As per plans
	Product ID	Glass	Uw/SHGCw	Window types
Windows:	Generic	Single Clear	Aluminium	All fixed and sliding windows & doors
		Double Low E	5.40/ 0.58	See table below
		(or equivalent)	4.30/ 0.53	D4 & D28
Skylights:	Product ID	Glass	Frame	Details
	Generic	Single Clear	Uw/SHGCw	
Other:	Orientation	Terrain	Weatherseals	
	280	Suburban	Yes	
Overshadowing Details:	Other Project Building			
Assessment:	82-84 Stafford Street Kingswood dwgs as stamped			
	Drawings:	4328A.01		
	File Ref:	BERS Pro 4.4		
	Software:	BERS Pro 4.4		
	Climate Zone:	28		
Recessed Downlights				
100mm LED at 1 per 5 sqm of ceiling space				
Yes				



82STAFFORD

14 Oct 2021

Assessor: Alin Zhang

Inspector: Joe Usnik

Inspector: Daniel Paci

Inspector: Noel Billyard

Inspector: Alin Zhang

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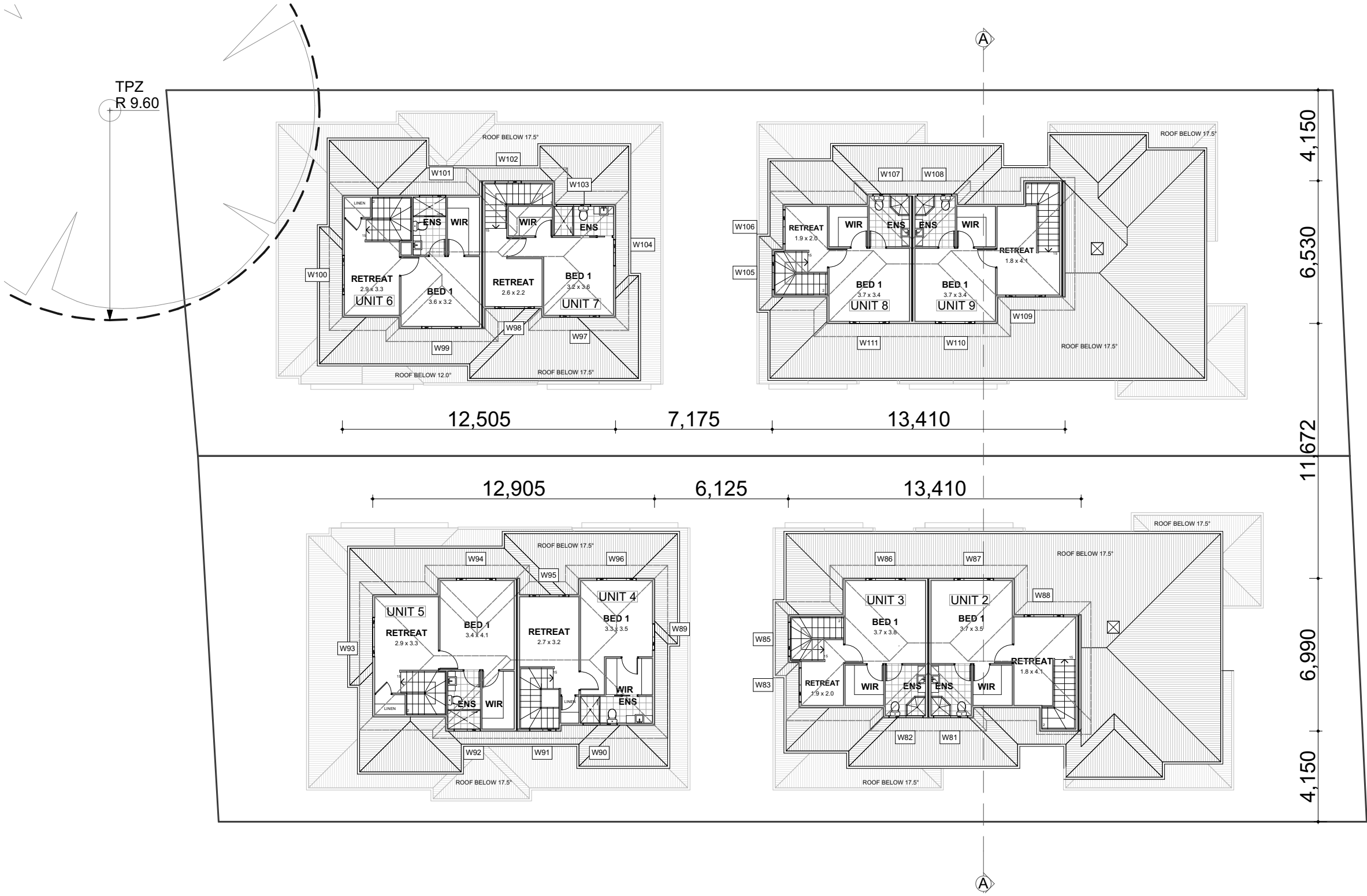
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STAFFORD STREET



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Assessor Ailin Zhang

Accreditation No. DNV19/1894

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Kingswood , NSW , 2747



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PROPOSED SEPP 2009 DEVELOPMENT AT
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KINGSWOOD
CLIENT: MR JOSEF USNIK
N. F. BILLYARD P/L
PO BOX 4327, NORTH CURL CURL NSW 2099
Ph 0414 597 913

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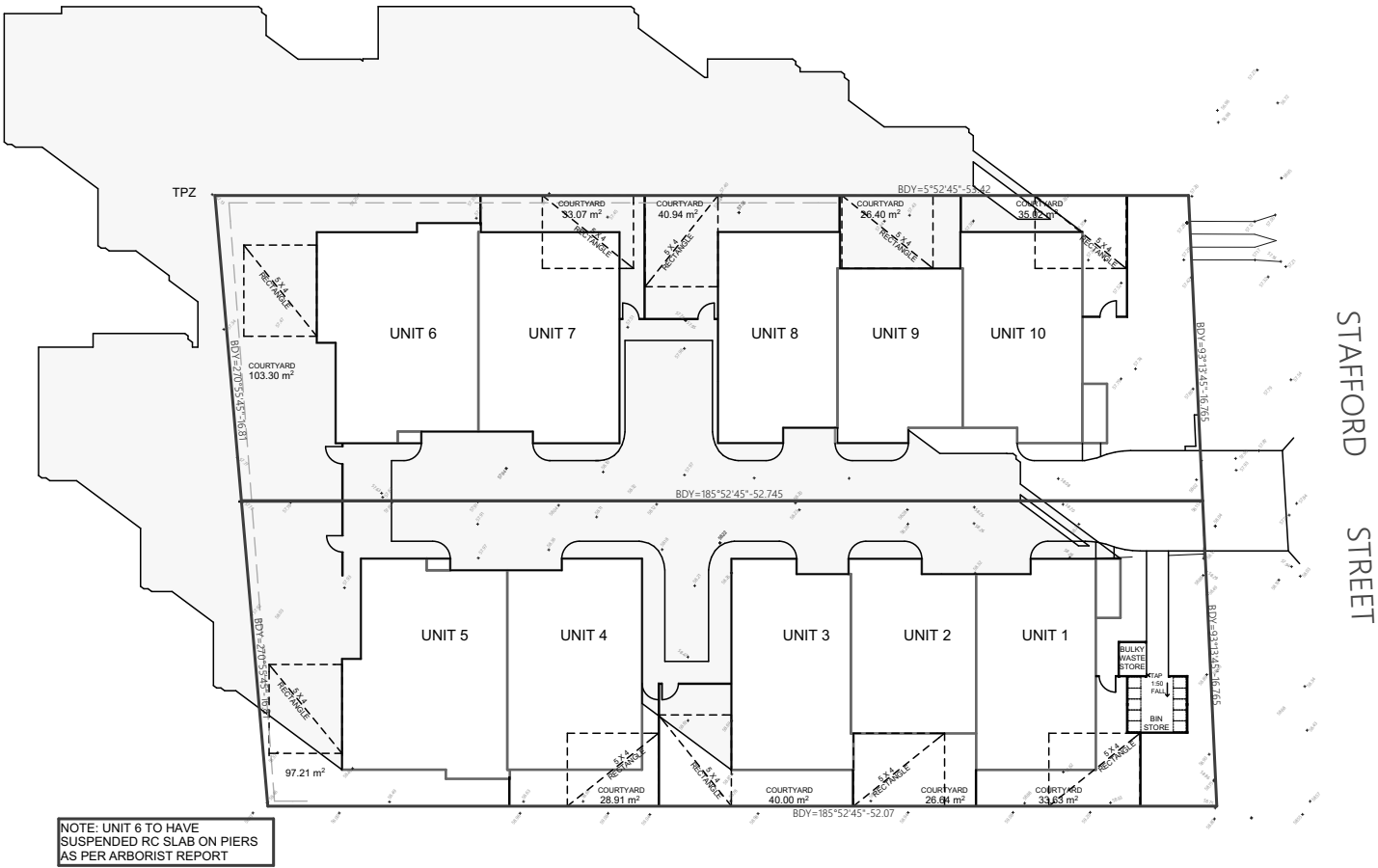
LEVEL 2 FLOOR PLAN 1367 SK04



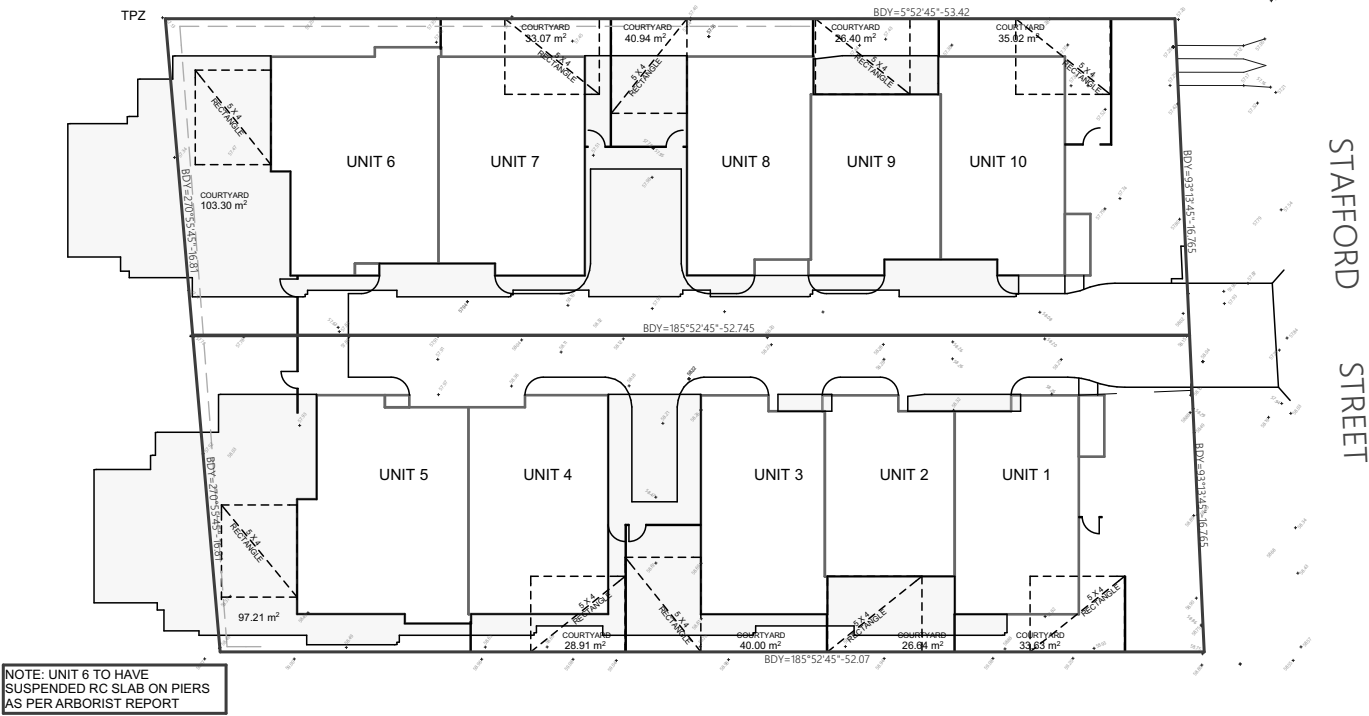
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Assessor: Ailin Zhang
Accreditation No. DMN19/1894
Address: 82-84 Stafford Street, Kingswood, NSW, 2747
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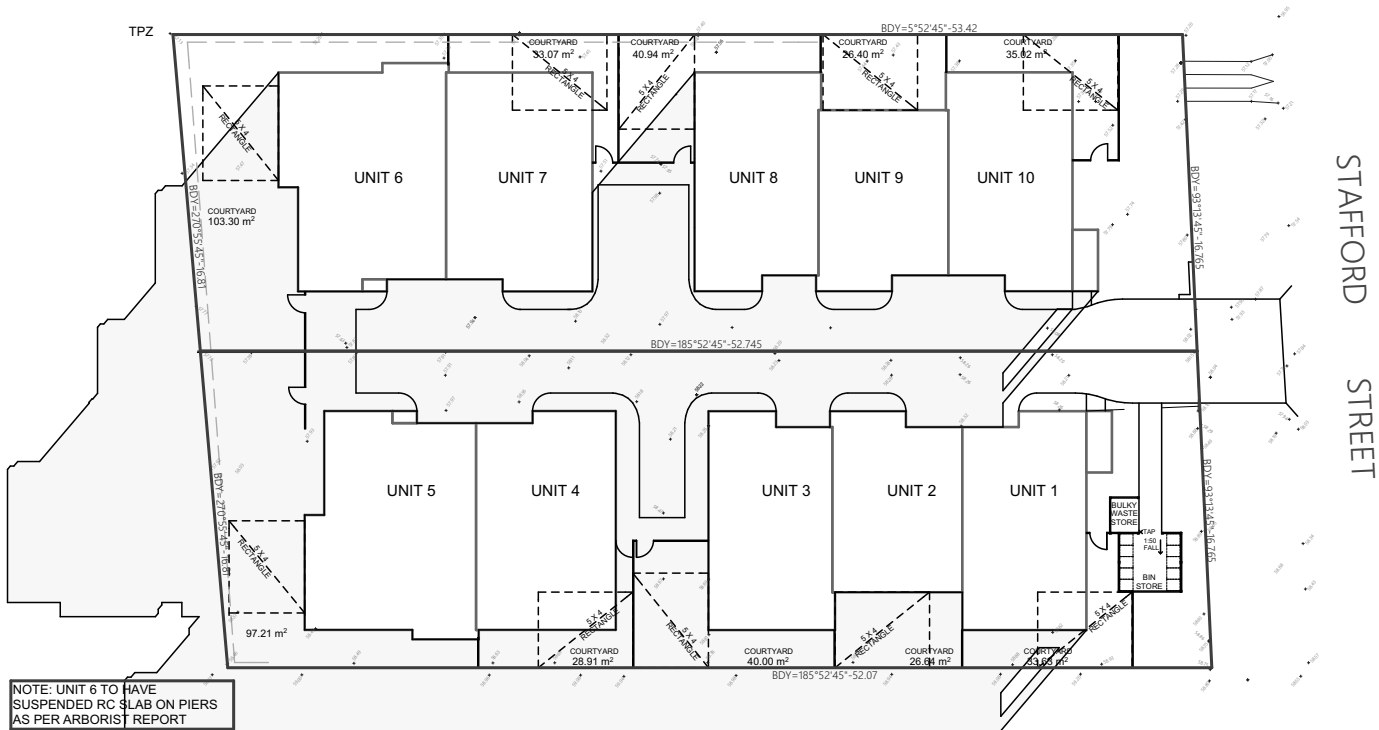
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SHADOW DIAGRAMS
9AM



SHADOW DIAGRAMS
12 NOON



SHADOW DIAGRAMS
3PM





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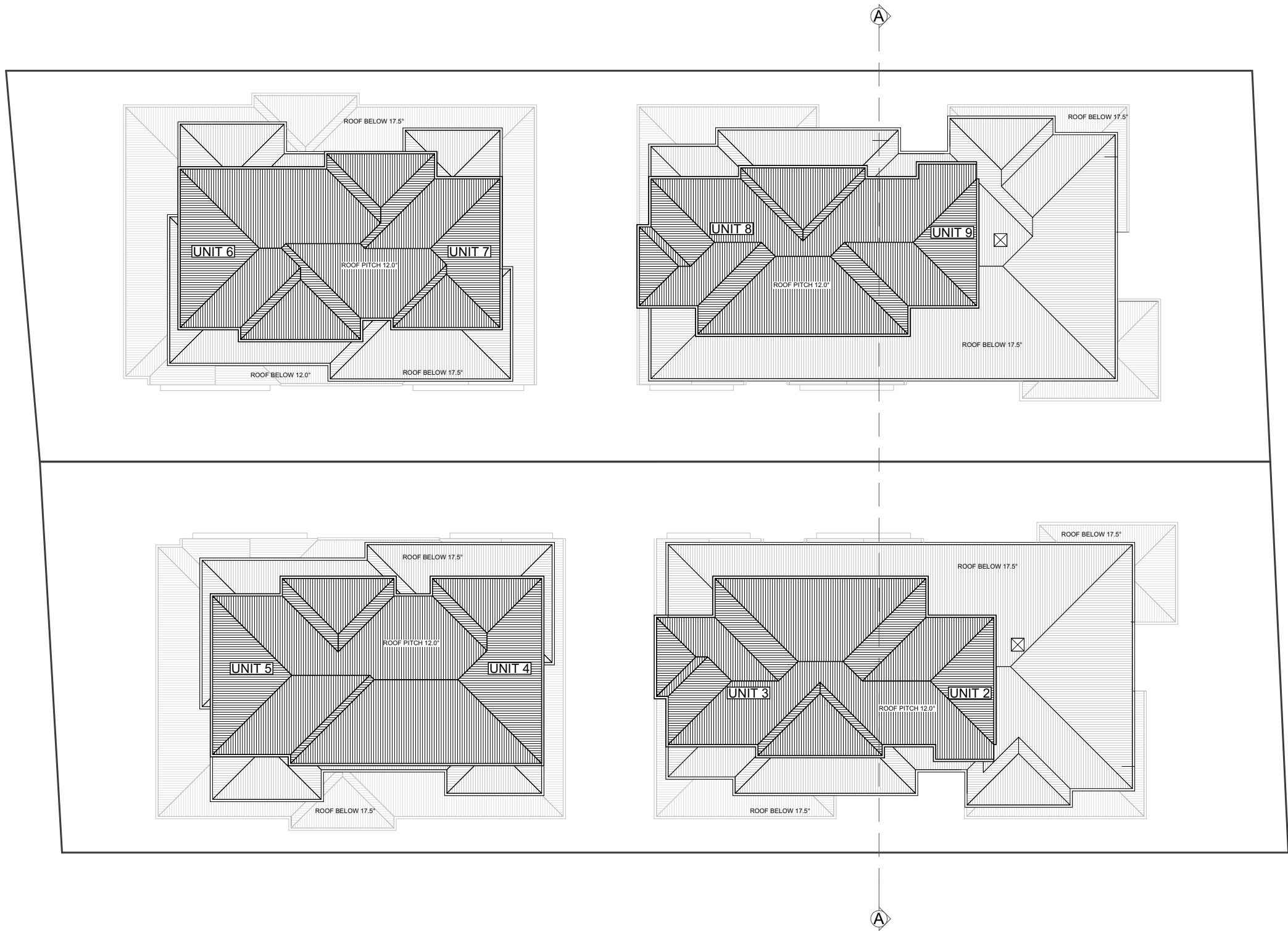


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OVERALL ROOF PLAN 1367 SK08