

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

## Multi Dwelling

Certificate number: 1132917M\_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

BASIX

Date of issue: Friday, 20 August 2021

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



Project summary	
Project name	4309 Elanora Shoptop Housing - Grant_02
Street address	51 Kalang Road Elanora 2101
Local Government Area	Northern Beaches Council
Plan type and plan number	deposited 528120
Lot no.	2
Section no.	-
No. of residential flat buildings	1
No. of units in residential flat buildings	5
No. of multi-dwelling houses	0
No. of single dwelling houses	0
Project score	
Water	✓ 41 Target 40
Thermal Comfort	✓ Pass Target Pass
Energy	✓ 35 Target 35

### **Certificate Prepared by**

Name / Company Name: Victor Lin & Associates Pty Ltd

ABN (if applicable): 34097383821



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# **Description of project**

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Project address	
Project name	4309 Elanora Shoptop Housing - Grant_02
Street address	51 Kalang Road Elanora 2101
Local Government Area	Northern Beaches Council
Plan type and plan number	deposited 528120
Lot no.	2
Section no.	-
Project type	
No. of residential flat buildings	1
No. of units in residential flat buildings	5
No. of multi-dwelling houses	0
No. of single dwelling houses	0
Site details	
Site area (m²)	661.7
Roof area (m²)	219
Non-residential floor area (m²)	197.0
Residential car spaces	7
Non-residential car spaces	7

Common area landscape	
Common area lawn (m²)	141.5
Common area garden (m²)	0.0
Area of indigenous or low water use species (m²)	-
Assessor details	
Assessor number	DMN/19/1894
Certificate number	0005753880
Climate zone	56
Ceiling fan in at least one bedroom	No
Ceiling fan in at least one living room or other conditioned area	No
Project score	
Water	✓ 41 Target 40
Thermal Comfort	✓ Pass Target Pass
Energy	✓ 35 Target 35

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## **Description of project**

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

### Residential flat buildings - Building1, 5 dwellings, 4 storeys above ground

Dwelling no.	No. of hedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
1.1	1	44.0	7.0	0.0	-

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Dwelling no.	No. of hedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
1.2	1	55.0	8.0	0.0	-

Dwelling no.	No. of hedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & Iawn (m²)	Indigenous species (min area m²)
1.3	3	89.0	5.0	0.0	-

Dwelling no.	No. of hedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & Iawn (m²)	Indigenous species (min area m²)
2.1	2	76.0	5.0	0.0	-

Dwelling no.	No. of hedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
2.2	2	57.0	5.0	0.0	-

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## **Description of project**

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

### Common areas of unit building - Building1

Common area	Floor area (m²)
Car park area	382.0
Garbage room	12.0
Ground floor lobby	39.0

Common area	Floor area (m²)
Lift car (No.1)	-
Plant room	11.0
Hallway/lobby	44.0

Common area	Floor area (m²)
Lift motor room	5.0
Cleaner	3.5

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## **Schedule of BASIX commitments**

- 1. Commitments for Residential flat buildings Building1
  - (a) Dwellings
    - (i) Water
    - (ii) Energy
    - (iii) Thermal Comfort
  - (b) Common areas and central systems/facilities
    - (i) Water
    - (ii) Energy
- 2. Commitments for multi-dwelling houses
- 3. Commitments for single dwelling houses
- 4. Commitments for common areas and central systems/facilities for the development (non-building specific)
  - (i) Water
  - (ii) Energy

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### **Schedule of BASIX commitments**

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

### 1. Commitments for Residential flat buildings - Building1

#### (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.		~	V
(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		<b>✓</b>	V
(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.		<b>✓</b>	-
(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.	~	<b>✓</b>	
(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.	~	~	~

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	Fixtures			Appli	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	2.5 star	3 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.		•	V
(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.		~	~

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(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;		<b>✓</b>		
(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		•	V	
(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 ven	tilation system	Kitchen venti	lation system	Laundry ventilation system		
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control	
All dwellings	gas storage 5 star	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	

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	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 Iaundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
1.2	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)	1	1	yes	yes	yes	yes	0	yes
1.3	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)	1	1	yes	yes	yes	yes	1	no
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)	1	1	yes	yes	yes	yes	0	no

	Individual po	ool	Individual s	ра			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	3.5 star	no	3.5 star	3 star	4 star	yes	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.			

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(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case.	~		
(e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.		~	
(f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		~	~
(g) Where there is an in-slab heating or cooling system, the applicant must:	~	~	V
(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.	J		_

		Thermal loads						
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)						
1.1	12.7	17.9						
1.2	37.3	29.5						
1.3	30.9	25.0						
2.1	44.8	27.4						
All other dwellings	36.7	28.4						

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### (b) Common areas and central systems/facilities

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(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.		~	V
(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.		~	V
(f) The applicant must ensure that the central cooling system for a cooling tower is configured as specified in the table.		~	V

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	no common facility	4 star	4 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.	~	~	~

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	Common area	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	ventilation (supply + exhaust)	carbon monoxide monitor + 2-speed fan	fluorescent	zoned switching with motion sensor	No		
Lift car (No.1)	-	-	compact fluorescent	connected to lift call button	No		
Lift motor room	no mechanical ventilation	-	fluorescent	manual on / manual off	No		
Garbage room	ventilation exhaust only	-	fluorescent	motion sensors	No		
Plant room	ventilation supply only	thermostatically controlled	fluorescent	manual on / manual off	No		
Cleaner	ventilation exhaust only	interlocked to light	fluorescent	manual on / manual off	No		
Ground floor lobby	no mechanical ventilation	-	fluorescent	time clock and motion sensors	No		
Hallway/lobby	no mechanical ventilation	-	fluorescent	time clock and motion sensors	No		

Central energy systems	Туре	Specification
Lift (No. 1)	gearless traction with V V V F motor	Number of levels (including basement): 4

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

#### (b) Common areas and central systems/facilities

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(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.		<b>✓</b>	
(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.		<b>~</b>	~

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	no common facility	4 star	4 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.	~	~	~

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#### **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

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- 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 fulfillment it is required to monitor in relation to the building or part, has been fulfilled).

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## **Assessor Construction Summary**

Project: Address: 51 Kalang Road Elanora heights NSW 2101

Applicant: Steve Djogo

Contact: Name: James Grant

Contact: james@fgarch.com.au

Assessor: Name: Ailin Zhang Company: Victor Lin & Associates

Address: PO Box 5080. Sth Turramurra. 2074 Number: BDAV/19/1894

Contact: 0412-988088 Email: ailin@linassociates.com.au

Ext. Walls: Construction Insulation Colour **Details** AFS wall system R1.5 Med As per plans **Details** Int. Walls: Construction Plasterboard None As per plans AFS party wall system None Party walls Floors: Construction Insulation **Details** Concrete None Carpet, Tiles Ceilings: Construction Insulation **Details** 

Suspended Plasterboard R3.0 Under all roofs & external ceiling with balcony above

Roof: Colour Construction Insulation As per plans Concrete None Med Uw/SHGCw Windows: **Product ID Glass** Frame Window types Single Low E 5.60 / 0.36 Awning windows

> Double Low Solar Low E or

equivalent 4.90 / 0.33 See table below

5.60 / 0.41

(indicated as 'L') Double High Solar Low E or

equivalent 4.30 / 0.53 See table below

(indicated as 'H')

Skylights: Product ID Glass Frame Uw/SHGCw Details

N/A

**Certification Number:** 

Other:OrientationTerrainWeathersealsClimate ZoneRecessed Downlights15SuburbanYes56YES - SEALED TYPE ONLY<br/>100mm LED at 1 per 5 sqm of ceiling space

Overshadowing Details: Other Project Building

Assessment: Drawings: 51 Kalang Road Elanora heights NSW dwgs as stamped

File Ref: 4309A Software: BERS Pro 4.4

0005753880 Date: 07-March-2021

			Insula	tion Summary (ref	fer also to table ab	ove)		
Unit No.	Floor Insulation	Wall Insulation R1.5	Ceiling Insulation R3.0	Double Low E	Single Low E		SEALED Recessed Downlight	Sealed exhaust vents
1.1		Х			All (L)		х	Х
1.2		Х	Х	All (L)			Х	Х
1.3		X	Χ		All (L)		Х	Х
2.1		Х	Х	All L)			Х	Х
2.2		X	X	All (H)			Х	X

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Fixed, double hung and sliding windows and doors

# Nationwide House Energy Rating Scheme — Class 2 summary NatHERS Certificate No. 0005753880

Generated on 08 Mar 2021 using BERS Pro v4.4.0.1 (3.21)

### **Property**

Address 51 Kalang Road, Elanora heights

, NSW , 2101

Lot/DP 2/528120

NatHERS climate zone 56

## 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=RAwRbifEV. When using either link, ensure you are visiting hstar.com.au

## Summary of all dwellings

Certificate number and link	Unit Number	Heating load (MJ/m²/p.a.)	Cooling load (MJ/m²/p.a.)	Total load (MJ/m <sup>2</sup> /p.a.)	Star rating
0005753876	\	12.7	17.9	30.6	7.7
0005753595	1.2	37.3	29.5	66.8	4.9
0005753561	1.3	30.9	25	55.9	5.7
0005753603	2.1	44.8	27.4	72.2	4.7
0005753579	2.2	36.7	28.4	65.1	5.1
O A Av	verage	32.48	25.64	58.12	5.62

#### **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.





### **Explanatory Notes**

#### About this report

This summary rating is the average rating of all NCC Class 2 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).

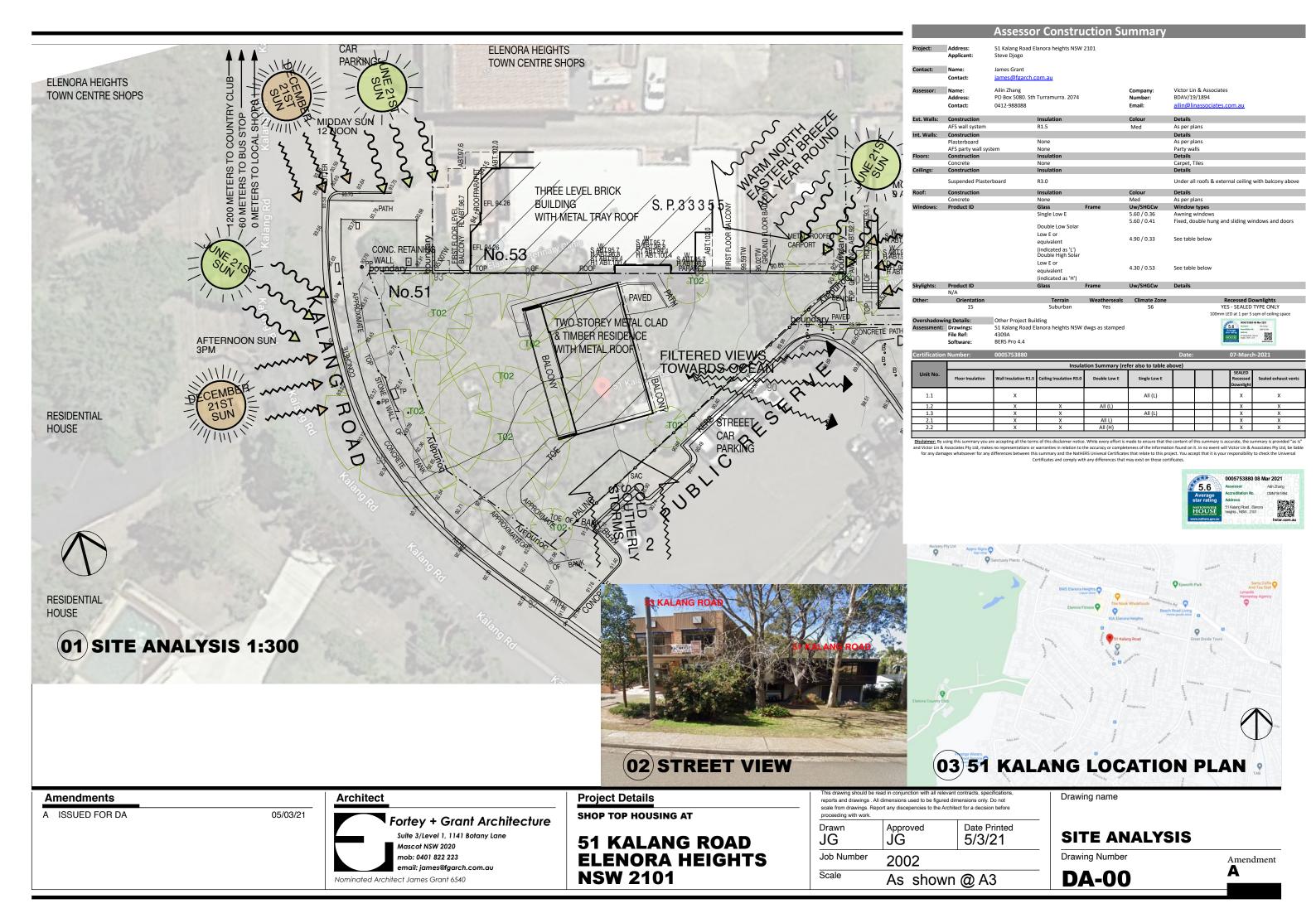
#### **Accredited Assessors**

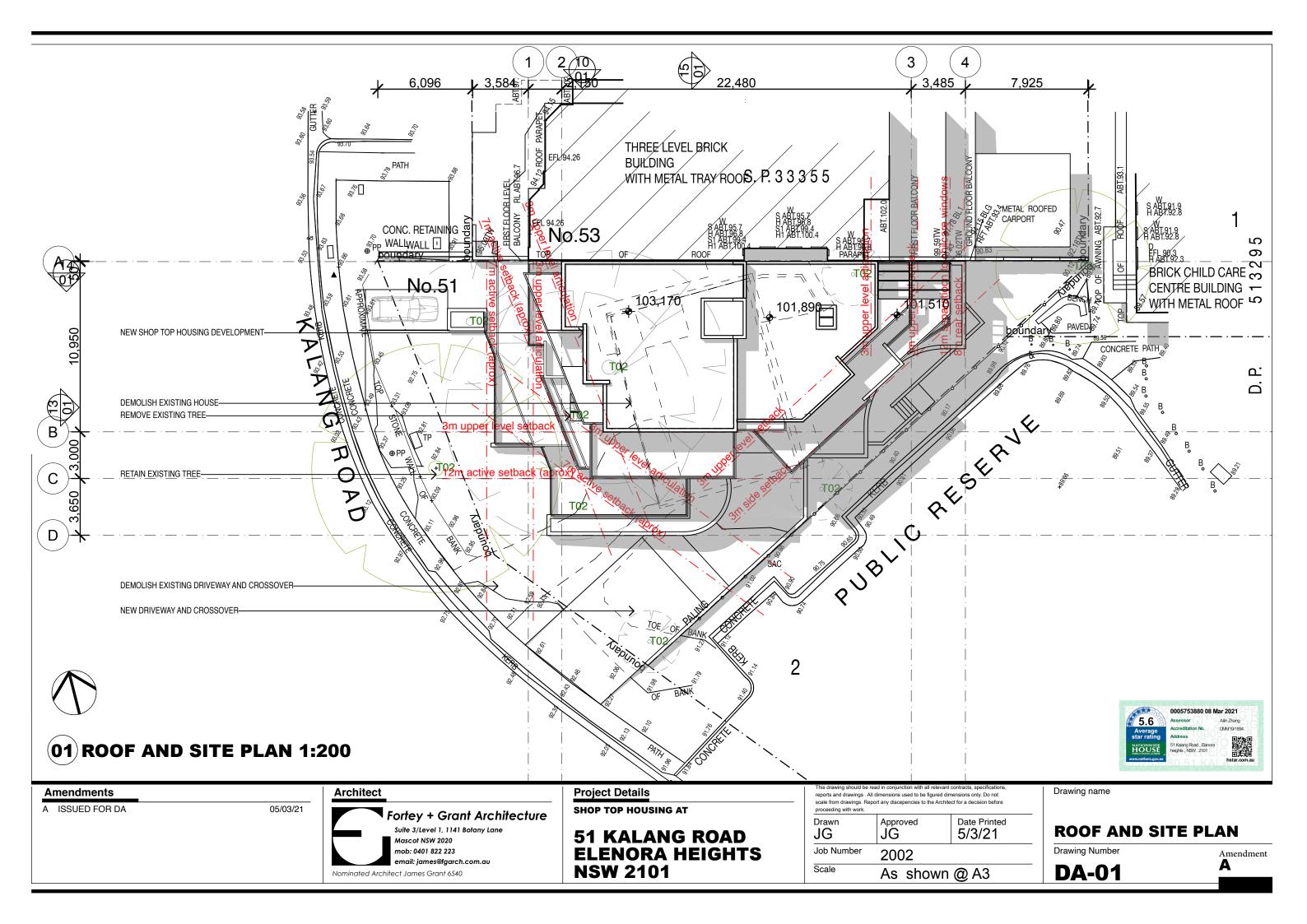
To ensure the NatHERS Certificate is of a high quality, always use an accredited or licenced assessor. NatHERS accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO). AAOs have specific quality assurance processes in place, and continuing professional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

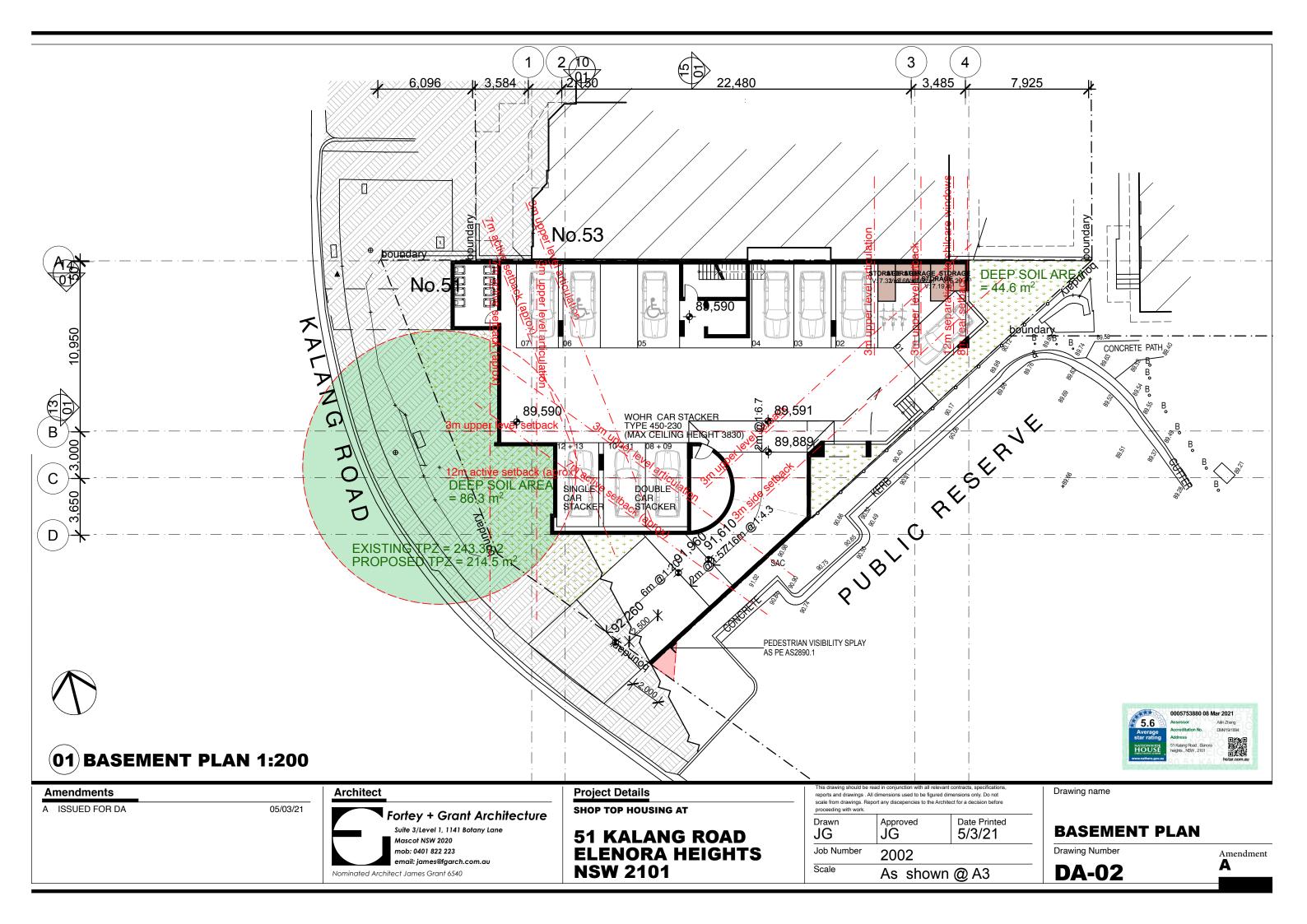
Any questions or concerns about this report should be directed to the assessor in the first instance. If the assessor is unable to address these questions or concerns, the AAO specified on the front of this certificate should be contacted.

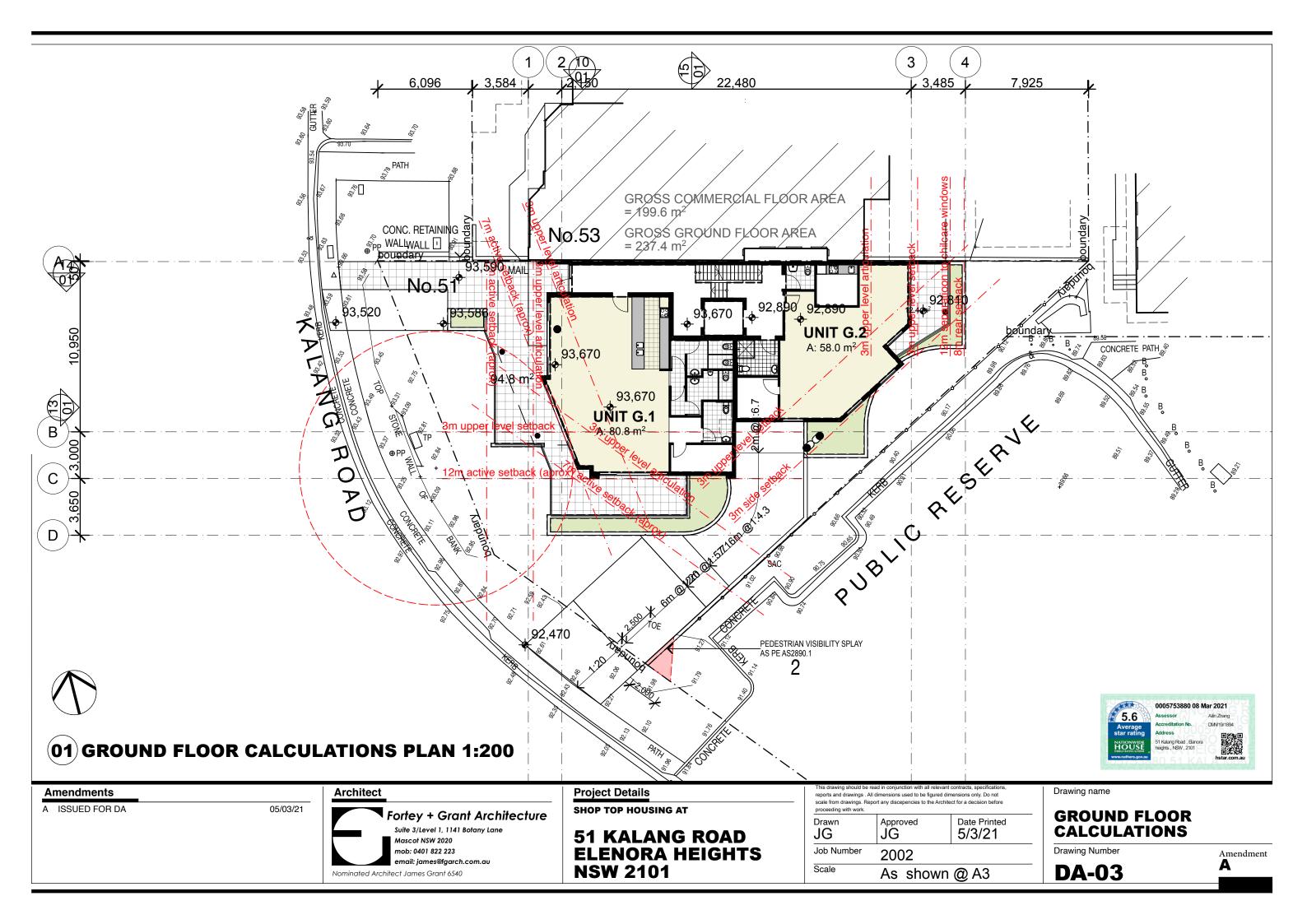
#### Disclaimer

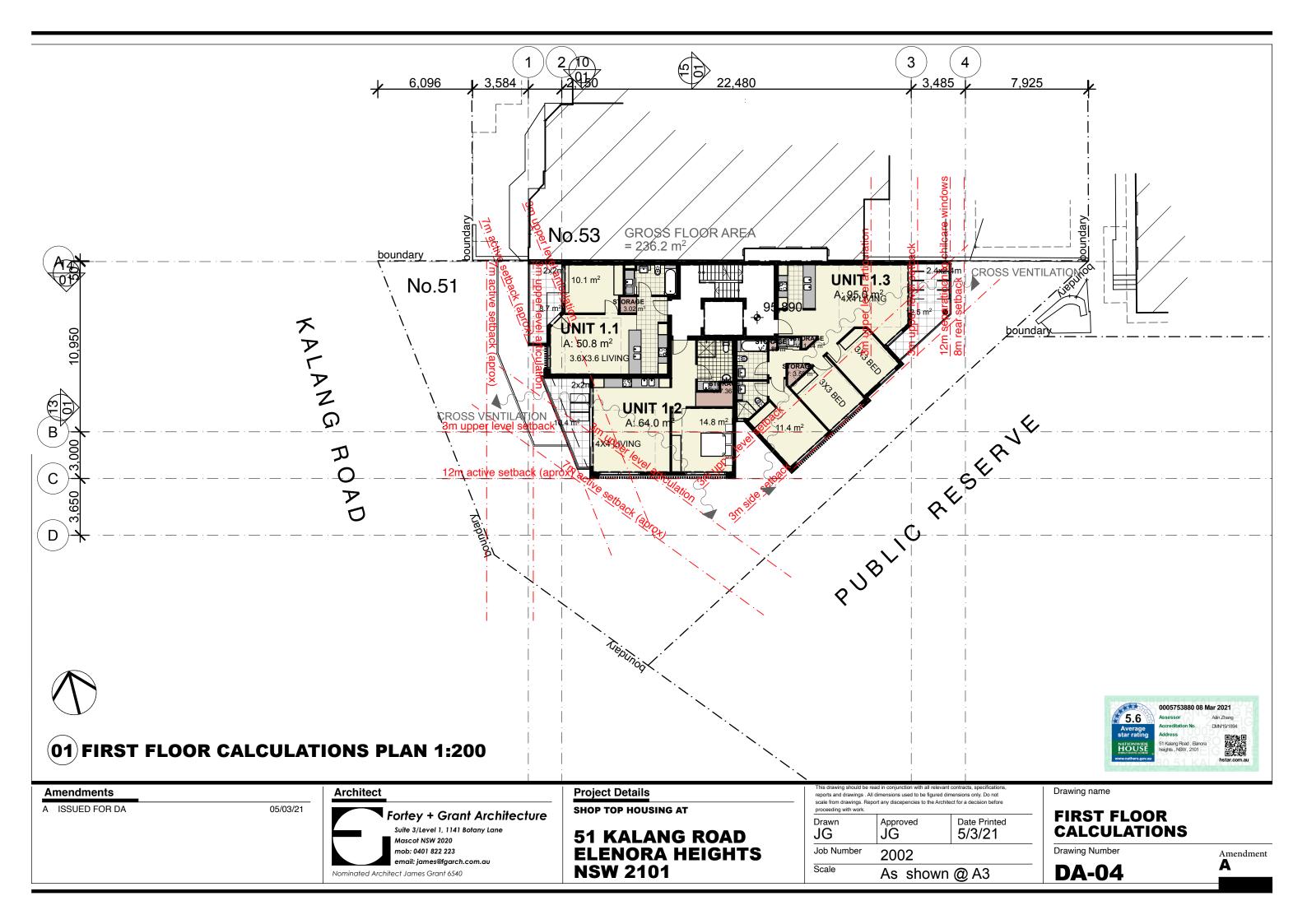
The format of the NatHERS Certificate was developed by the NatHERS Administrator. However the content, input and creation of the NatHERS Certificate is by the assessor. It is the responsibility of the assessor who prepared this certificate to use NatHERS accredited software correctly and follow the NatHERS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

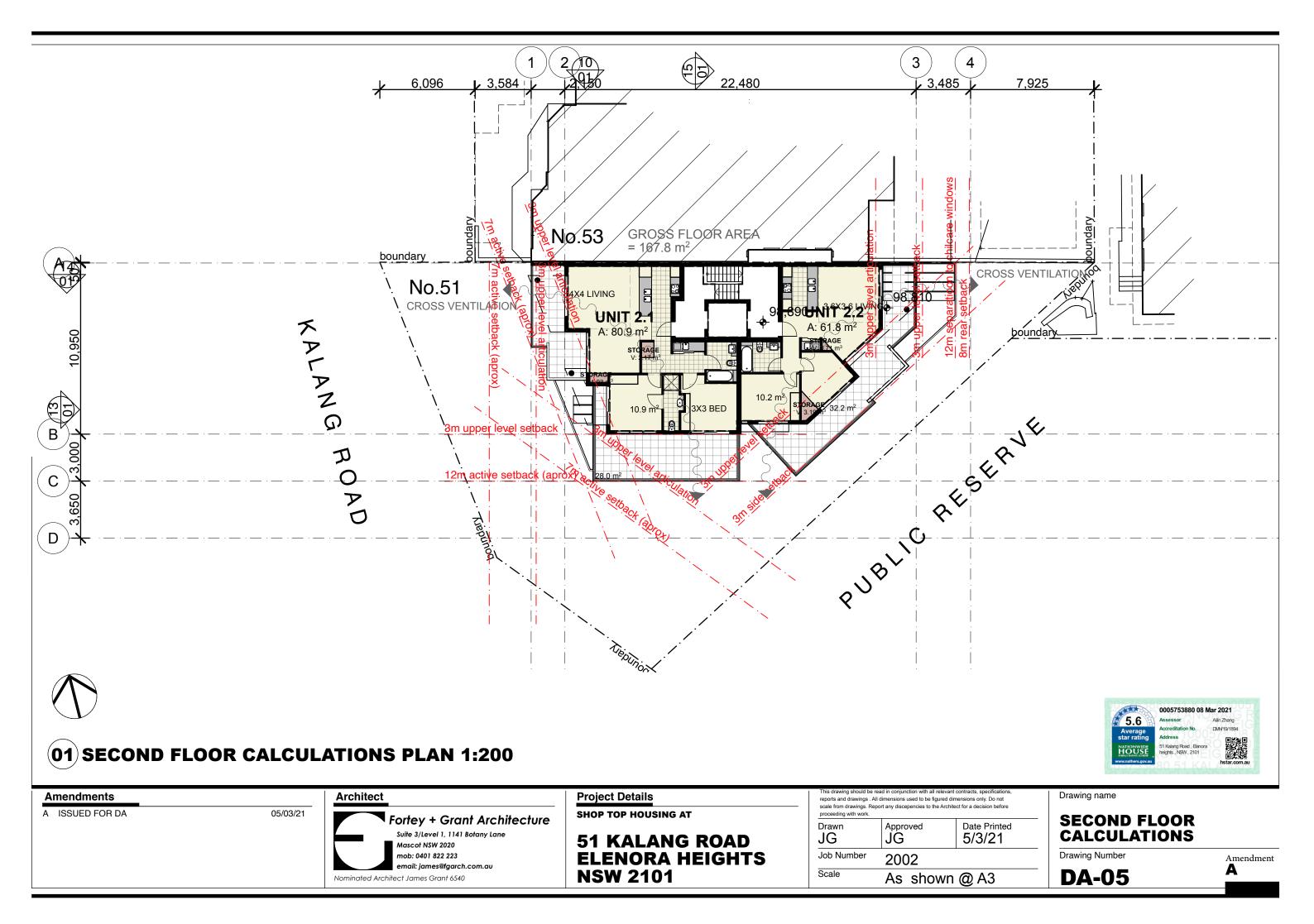


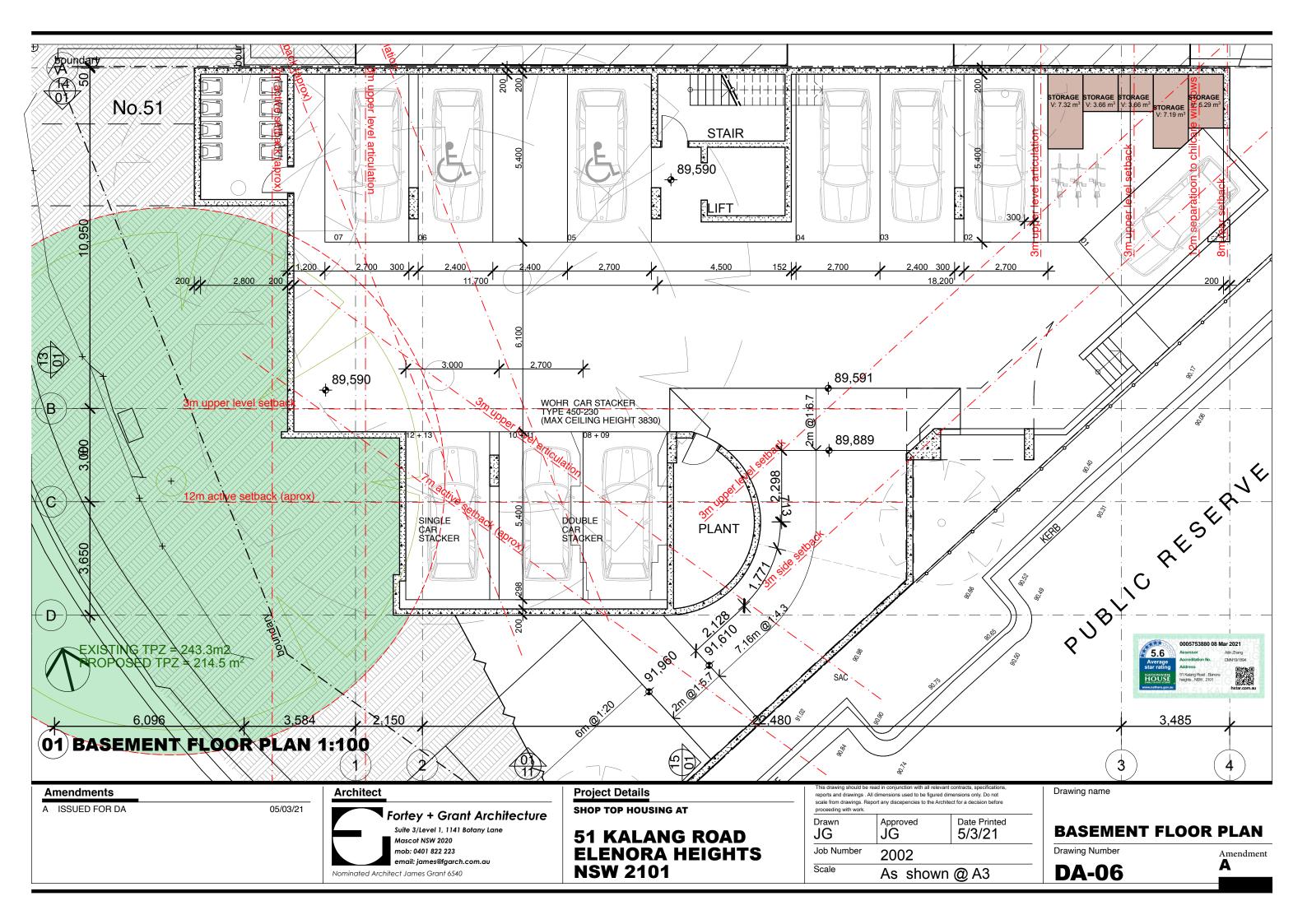


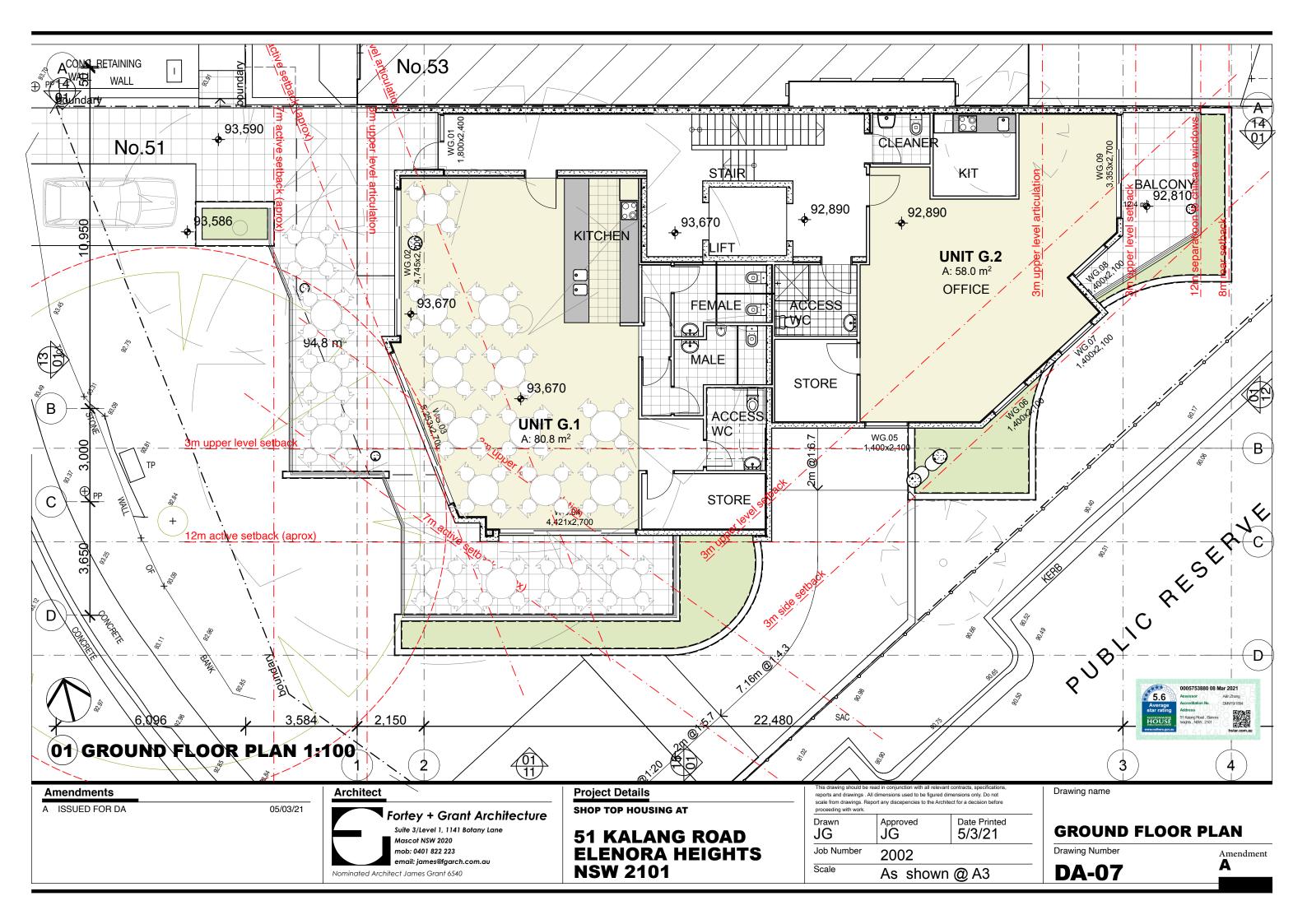


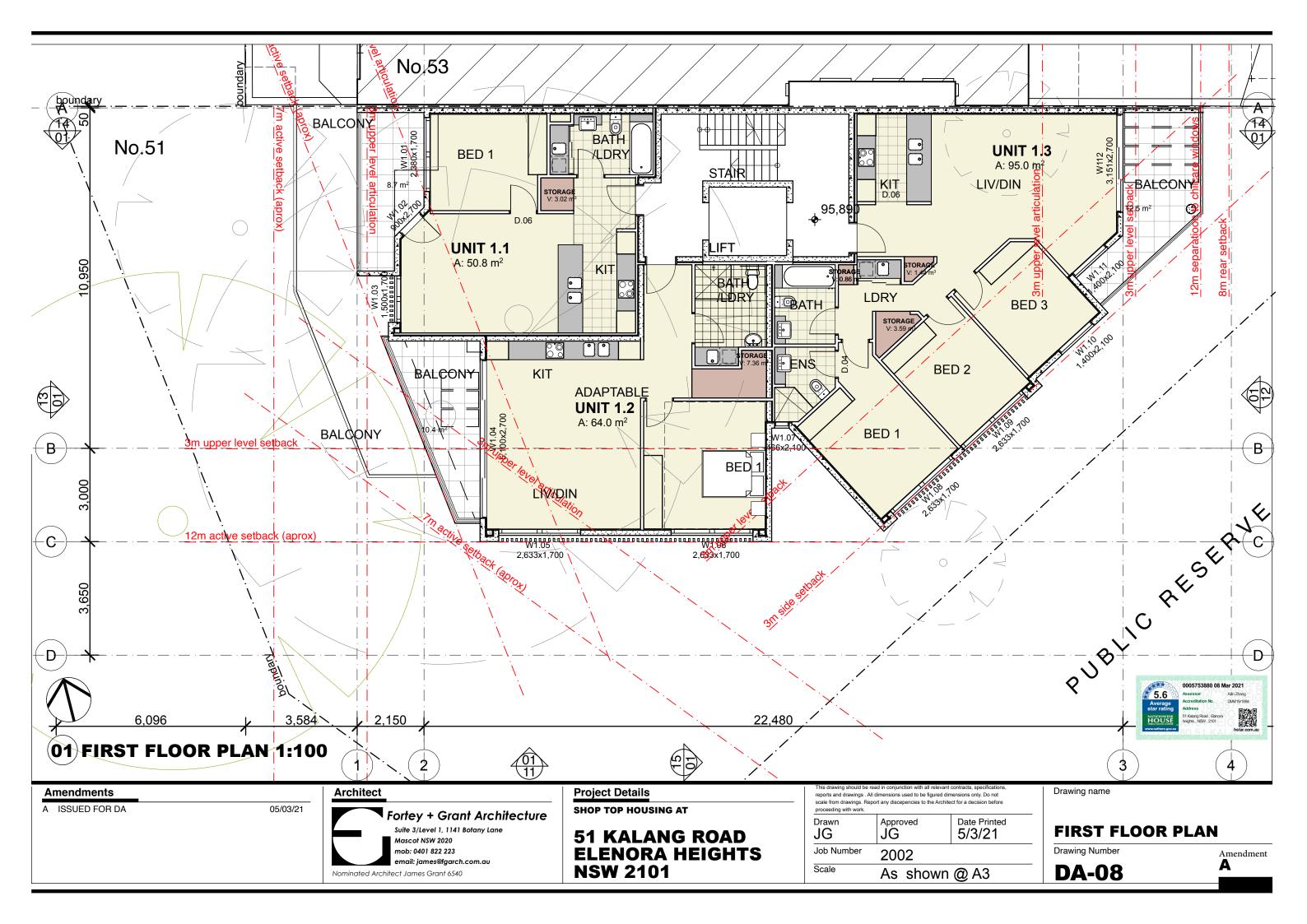


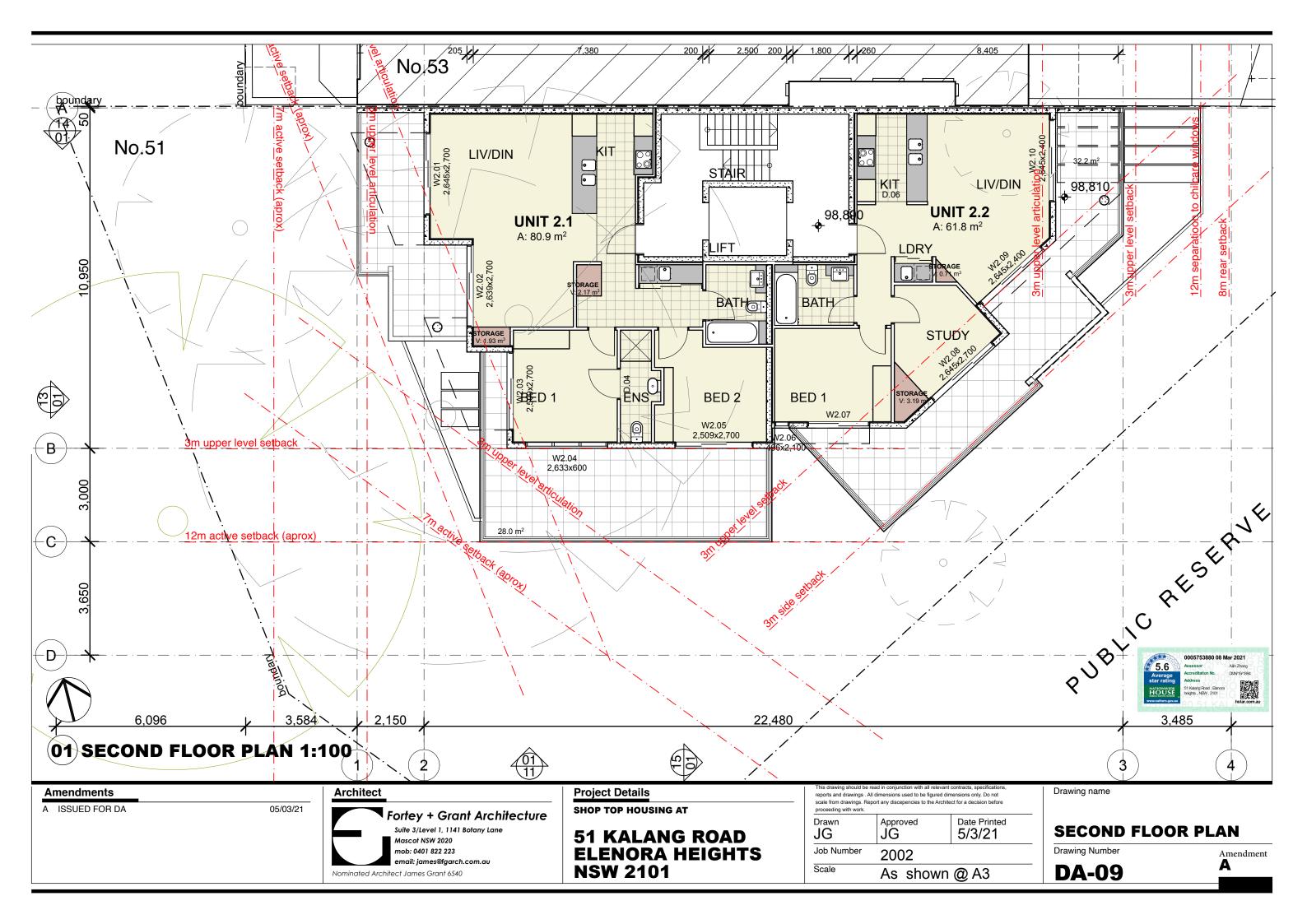


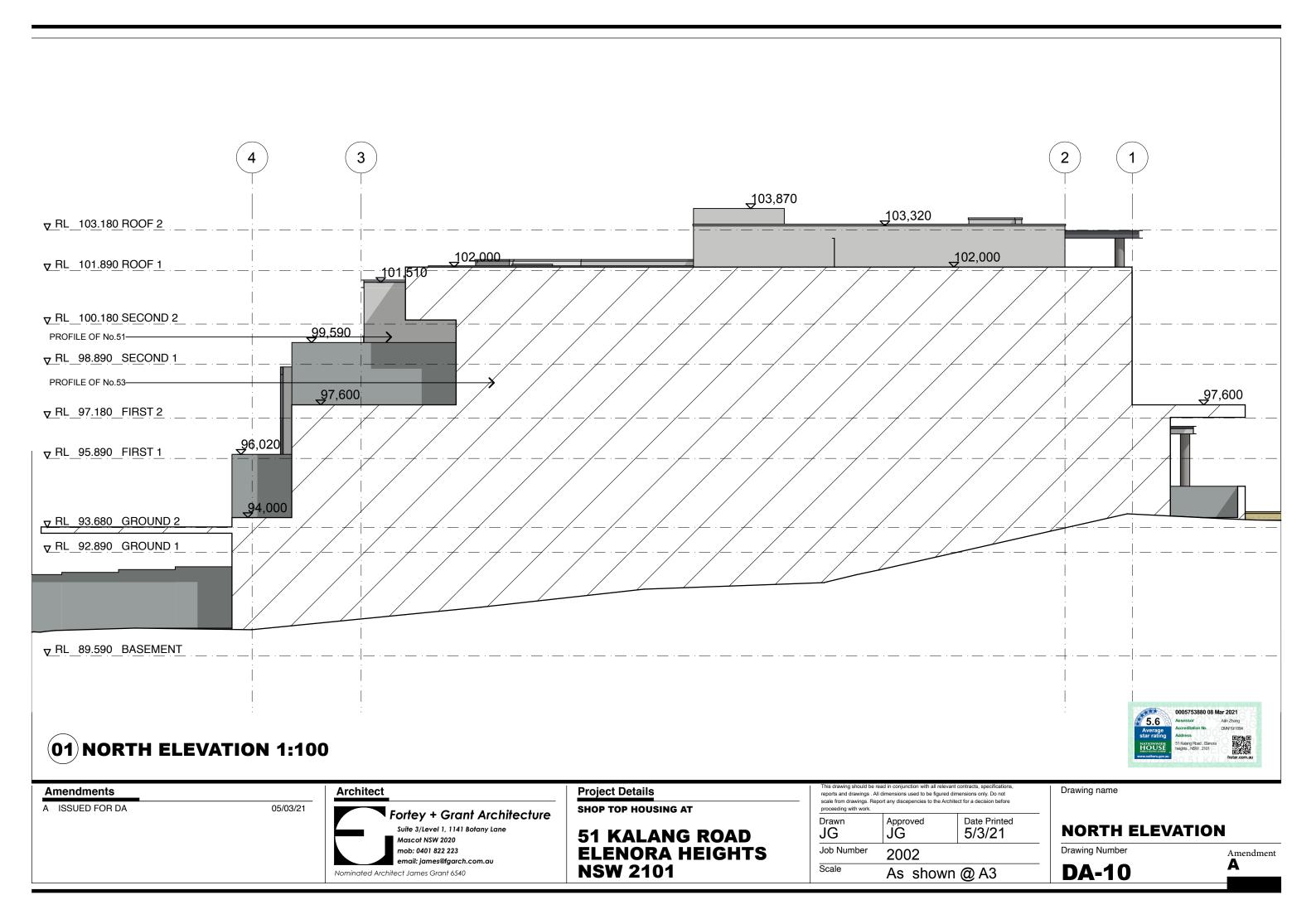
















1	0005753880 08 N	lar 2021
5.6	Assessor	Ailin Zhang
Average	Accreditation No.	DMN'19/1894
star rating	Address	<b>同名製画</b>
NATIONWIDE HOUSE INTRCY EATING SCHEME	51 Kalang Road , Banora heights , NSW , 2101	
www.nathers.gov.au		hstar.com.au

Amendments	Archi	tect
A ISSUED FOR DA	05/03/21 Nominate	Fortey + Grant Architecture Suite 3/Level 1, 1141 Botany Lane Mascot NSW 2020 mob: 0401 822 223 email: james@fgarch.com.au ed Architect James Grant 6540

Project Details
SHOP TOP HOUSING AT

51 KALANG ROAD
ELENORA HEIGHTS
NSW 2101

	Il dimensions used to be figure port any discepencies to the A	
Drawn <b>JG</b>	Approved JG	Date Printed 5/3/21
Job Number	2002	
Scale	As show	n @ A3

Drawing name

## **SOUTH ELEVATION**

Drawing Number

**DA-11** 

Amendment **A** 



# 01 EAST ELEVATION 1:100

A TON	0005753880 08 N	lar 2021
5.6	Assessor	Ailin Zhang
Average	Accreditation No.	DMN'19/1894
star rating	Address	mean
NATIONWIDE	51 Kalang Road , Banora	
HOUSE INTRGY RATING SCHEME	heights , NSW , 2101	
www.nathers.gov.au		hstar.com.

Amendments	Architect
A ISSUED FOR DA	Fortey + Grant Architecture Suite 3/Level 1, 1141 Botany Lane Mascot NSW 2020 mob: 0401 822 223 email: james@fgarch.com.au  Nominated Architect James Grant 6540

Project Details
SHOP TOP HOUSING AT

51 KALANG ROAD
ELENORA HEIGHTS
NSW 2101

	dimensions used to be figured din ort any discepencies to the Archite		
Drawn JG	Approved JG	Date Printed 5/3/21	
Job Number	2002		
Scale	As shown @ A3		

Drawing name

## **EAST ELEVATION**

Drawing Number





\_<del>∇</del> RL \_89.590 BASEMENT



Architect
Fortey + Grant Architecture Suite 3/Level 1, 1141 Botany Lane Mascot NSW 2020 mob: 0401 822 223 email: james@fgarch.com.au  Nominated Architect James Grant 6540
3/2

**Project Details** SHOP TOP HOUSING AT **51 KALANG ROAD ELENORA HEIGHTS NSW 2101** 

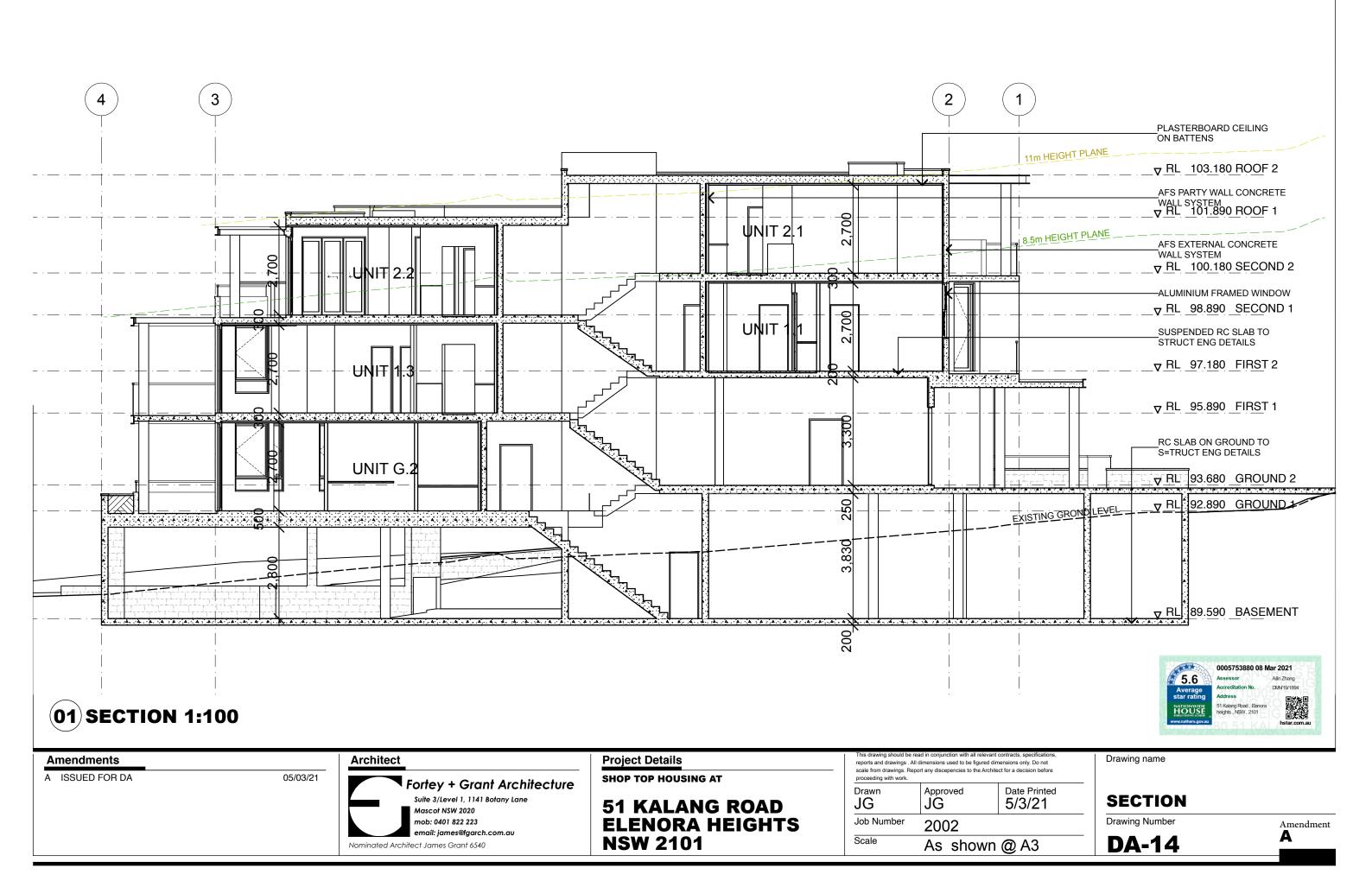
reports and drawings. All dimensions used to be figured dimensions only. Do not scale from drawings. Report any discepencies to the Architect for a decision before proceeding with work.				
Drawn JG	Approved JG	Date Printed 5/3/21		
Job Number	2002			
Scale	As shown @ A3			

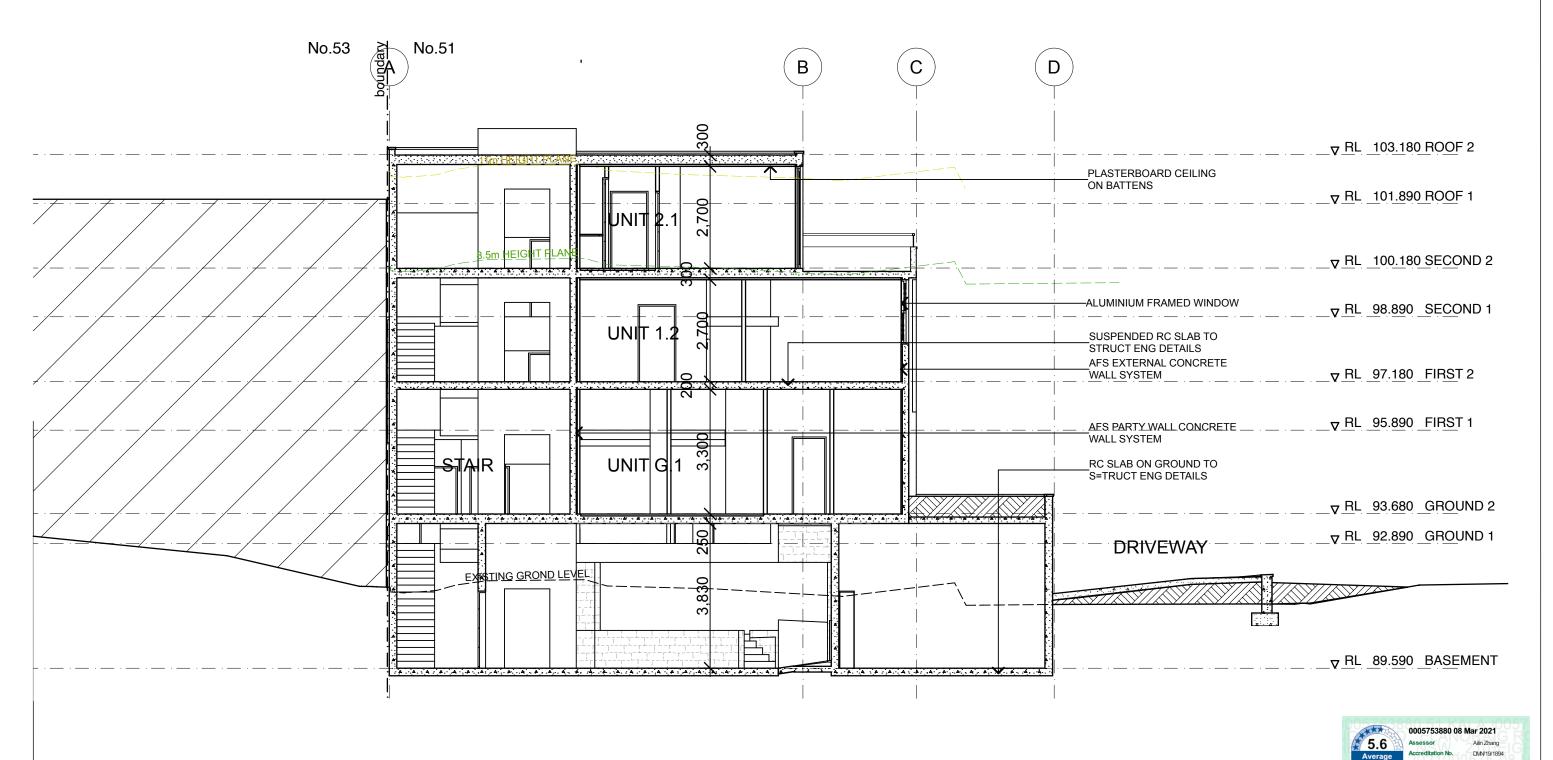
Drawing name

## **WEST ELEVATION**

Drawing Number

Amendment Α **DA-13** 





(01) SECTION 1:100

Amendments

A ISSUED FOR DA

Architect 05/03/21 Fortey + Grant Architecture Suite 3/Level 1, 1141 Botany Lane Mascot NSW 2020 mob: 0401 822 223 email: james@fgarch.com.au Nominated Architect James Grant 6540

**Project Details** SHOP TOP HOUSING AT

**51 KALANG ROAD ELENORA HEIGHTS NSW 2101** 

reports and drawings. All dimensions used to be figured dimensions only. Do not scale from drawings. Report any discepencies to the Architect for a decision before proceeding with work.

Drawn JG	Approved JG	Date Printed 5/3/21	
Job Number	2002		
Scale	As shown @ A3		

Drawing name

**SECTION** 

Drawing Number

Amendment Α **DA-15** 

### **CALCULATIONS**

SITE AREA 661.7m2 SITE ZONE

D5 ELENORA HEIGHTS LOCALITY

PROPOSED GROSS FLOOR AREA 641.8m2

ALLOWABLE FSR **NOT APPLICABLE** PROPOSED COMMERCIAL GROSS FLOOR AREA 195.9m2 (30%) ALLOWABLE FSR **NOT APPLICABLE** ALLOWABLE DEEP SOIL 174m2 min (15%)

**DEEP SOIL AREA** 130.9m2 ALLOWABLE LANDSCAPE AREA

PROPOSED LANDSCAPE AREA ALLOWABLE SITE COVERAGE

PROPOSED SITE COVERAGE

REQUIRED ACCESSIBLE UNITS

PROPOSED ACCESSIBLE UNITS

REQUIRED ADAPTABLE UNITS

PROPOSED ADAPTABLE UNITS

 $132.3m2 (20\%) \text{ or } 5 \times 35 = 175m2$ 

176.8m2

693m2 (60%)

566.1m2 (excludes balconies)

1 UNITS

1 UNITS (20%)

2 - 1 = 1 UNITS (30%)

1 UNITS

PITTWATER LEP 2014 (Map 13) LAND ZONED B2 LOCAL CENTRE

NO MIN LOT SIZE

HEIGHT OF BUILDINGS 11m (map 13A)

FLOOR SPACE RATIO - NONE ACID SULPHATE SOIL CLASS 5

NO LAND RESERVATIONS AND ACQUISITIONS

**NOT A HERITAGE ITEM** 

NOT NEAR A HERITAGE ITEM

NOT IN A CONSERVATION AREA

NOT IN THE FORESHORE BUILDING LINE

NO ADDITIONAL PERMITTED USES

**NO BIODIVERSITY** 

NOT FORESHORE EFFECTED NO GEOTECHNICAL HAZARD

NOT URBAN RELEASE LAND

### **SEPP 65**

TOTAL NO OF UNITS = 5 Resideintial Units + 2 Commercial Units

25% UNITS WITH EXTERNAL KITCHENS = 2 2 SUPPLIED (20%)

70% UNITS WITH 3 HOURS SUN = 4

(4 out of 5 units get 2 hours sun)

60% UNITS WITH CROSS VENTILATION = 3 4 SUPPLIED 10% SINGLE ASPECT UNITS FACING SOUTH = 1 0 SUPPLIED

#### **UNIT YIELD**

2 x COMERCIAL UNITS (TOTAL 138.7m2)

3 x 1 BED UINTS

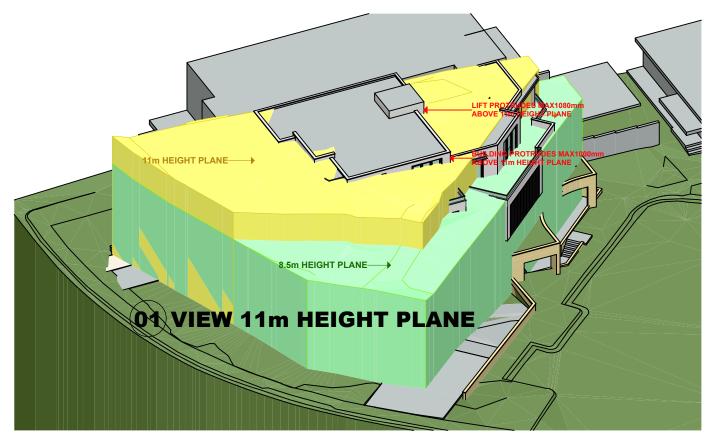
1 x 2 BED UNITS

1 x 3 BED UNITS

## **CAR PARKING (Council requirements)**

1 SPACE REQUIRED 1 bed units 3 2 bed units 2 SPACES REQUIRED 3 bed units 2 SPACES REQUIRED **VISITOR SPACES** 1 SPACE PER 3 UNITS REQUIRED 1.7 CAFE 1 SPACE PER 30m2 3 **VISITOR SPACES** 1 SPACE PER 3 UNITS REQUIRED 2

**BICYCLE PARKING** 1 SPACE/3 DWELLINGS + 1 VISITOR SPACE /12 DWELLINGS



41 SHOWN 6 SHOWN

Scale

## 0005753880 08 Mar 2021 5.6

#### **Amendments**

A ISSUED FOR DA

05/03/21

Fortey + Grant Architecture Suite 3/Level 1, 1141 Botany Lane Mascot NSW 2020 mob: 0401 822 223 mail: james@fgarch.com.au Nominated Architect James Grant 6540

Architect

4 SUPPLIED

**Project Details** 

**SHOP TOP HOUSING AT** 

**51 KALANG ROAD ELENORA HEIGHTS NSW 2101** 

reports and drawings . All dimensions used to be figured dimensions only. Do not scale from drawings. Report any discepencies to the Architect for a decision before

proceeding with work. Date Printed Drawn Approved JG JG 5/3/21 Job Number 2002

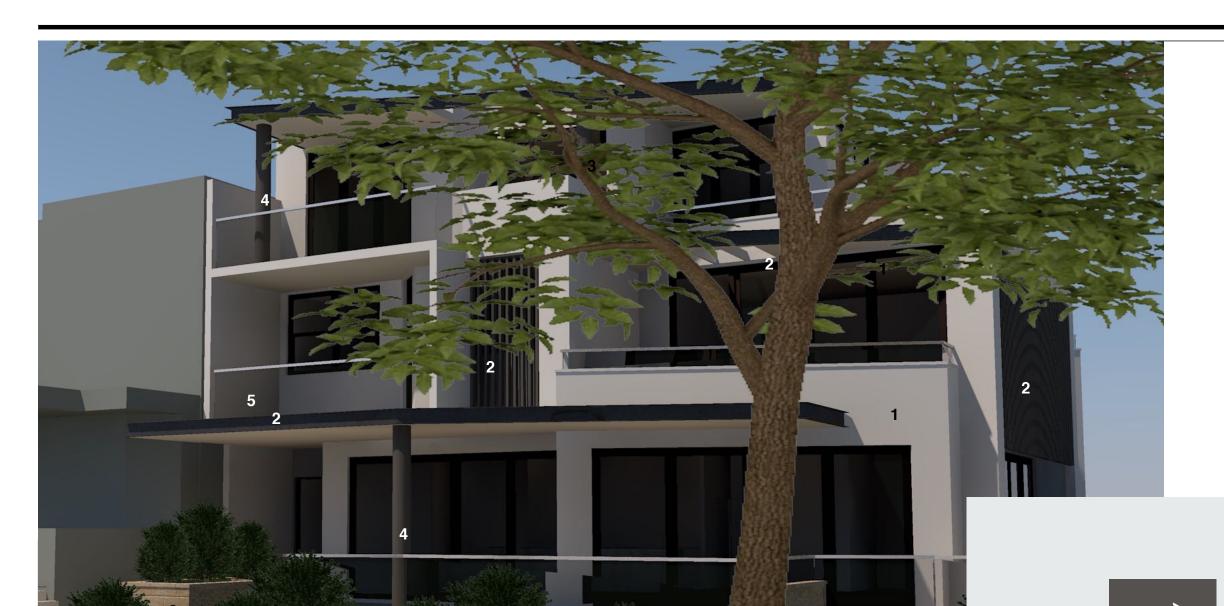
As shown @ A3

Drawing name

### **HEIGHT PLANE AND CALCULATIONS**

Drawing Number

Amendment Α



(01) MATERIALS VIEW

1 - DULUX **LEXICON** 

2 - METALWORK COLORBOND WOODLAND GREY

4 - COLUMNS **COLORBOND** WALLABY



**5 - GLASS HANDRAILS** 

Amendments

A ISSUED FOR DA

05/03/21

Architect

Fortey + Grant Architecture Suite 3/Level 1, 1141 Botany Lane Mascot NSW 2020 mob: 0401 822 223 email: james@fgarch.com.au

Nominated Architect James Grant 6540

**Project Details** 

SHOP TOP HOUSING AT

**51 KALANG ROAD** ELENORA HEIGHTS NSW 2101

3 - SANDSTONE CLADING

ms unawing snound be read in conjunction with all relevant contracts, specifications reports and drawings. All dimensions used to be figured dimensions only. Do not scale from drawings. Report any discepencies to the Architect for a decision before proceeding with work.

Drawn Date Printed JG ĴĜ 5/3/21 Job Number 2002

As shown @ A3

Drawing name

**MATERIALS AND FINISHES SCHEDULE** 

Drawing Number

Amendment Α



Amendments
A ISSUED FOR DA

05/03/21

Architect



Project Details
SHOP TOP HOUSING AT

**51 KALANG ROAD** ELENORA HEIGHTS NSW 2101

Drawn Date Printed 5/3/21 Approved **JG** JG Job Number

2002 As shown @ A3 Drawing name

## **PHOTOMONTAGE**

Drawing Number





Suite 3/Level 1, 1141 Botany Lane Mascot NSW 2020 mob: 0401 822 223 email: james@fgarch.com.au Nominated Architect James Grant 6540

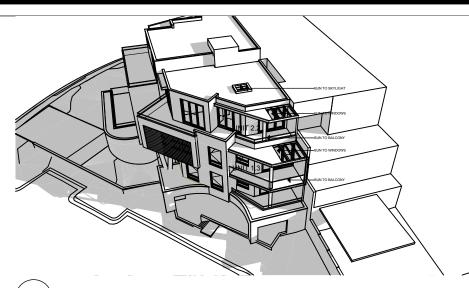
**51 KALANG ROAD ELENORA HEIGHTS NSW 2101** 

JG ĴĠ 5/3/21 Job Number 2002 Scale As shown @ A3

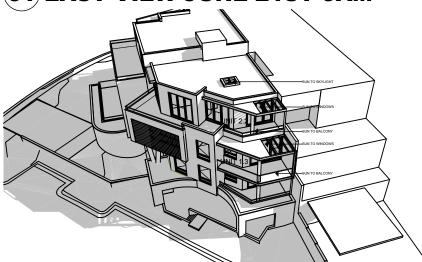
# **DIAGRAMS**

Drawing Number

Amendment Α



(01) EAST VIEW JUNE 21ST 9AM



(02) EAST VIEW JUNE 21ST 10AM



(04) EAST VIEW JUNE 21ST 12NOON

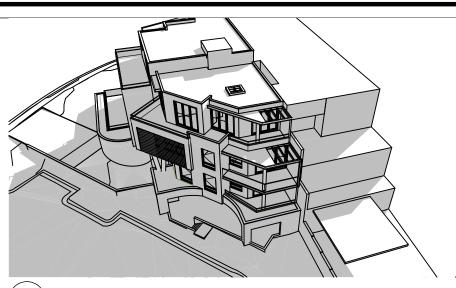
**UNIT 1.3 BALCONY - 1 HOUR SUN** LIVING - 1 HOUR SUN

UNIT 2.2 BALCONY - 3 HOURS SUN LIVING - 6 HOURS SUN

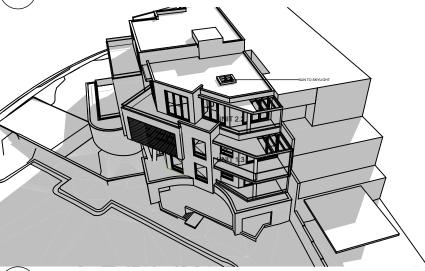


Job Number

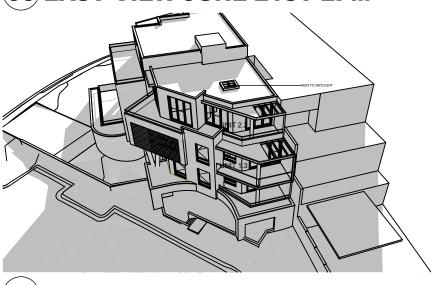
Scale



(05) EAST VIEW JUNE 21ST 1PM



(06) EAST VIEW JUNE 21ST 2PM



(07) EAST VIEW JUNE 21ST 3PM

#### **Amendments**

A ISSUED FOR DA

05/03/21

Architect

Fortey + Grant Architecture Mascot NSW 2020

Suite 3/Level 1, 1141 Botany Lane mob: 0401 822 223 email: james@fgarch.com.au Nominated Architect James Grant 6540

**Project Details** 

**SHOP TOP HOUSING AT** 

**51 KALANG ROAD ELENORA HEIGHTS NSW 2101** 

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Date Printed Drawn Approved JG JG 5/3/21

2002

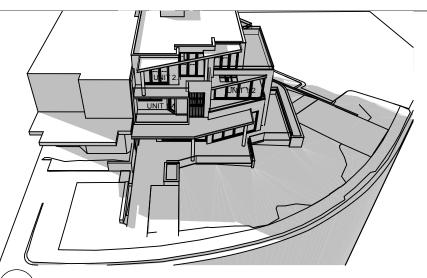
As shown @ A3

Drawing name

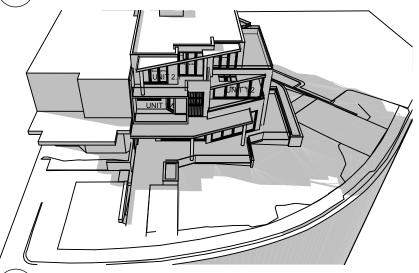
**EAST SHADOW VIEWS** 21ST JUNE

Drawing Number

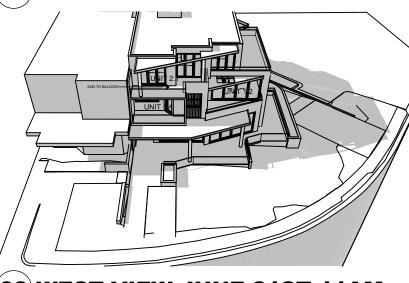




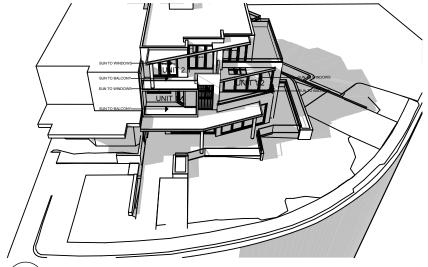
## (01) WEST VIEW JUNE 21ST 9AM



## (02) WEST VIEW JUNE 21ST 10AM



(03) WEST VIEW JUNE 21ST 11AM



## (04) WEST VIEW JUNE 21ST 12NOON

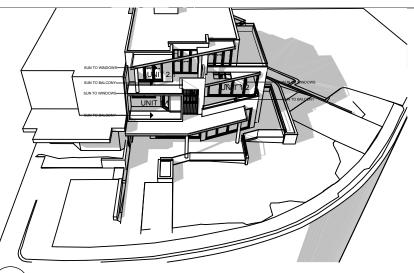
**UNIT 1.1 BALCONY - 3 HOURS SUN** LIVING - 3 HOURS SUN

**UNIT 1.2 BALCONY - 3 HOURS SUN** LIVING - 3 HOURS SUN

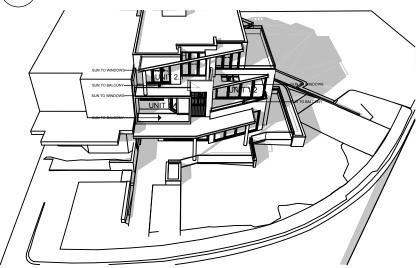
UNIT 2.1 **BALCONY - 4 HOURS SUN** LIVING - 3 HOURS SUN



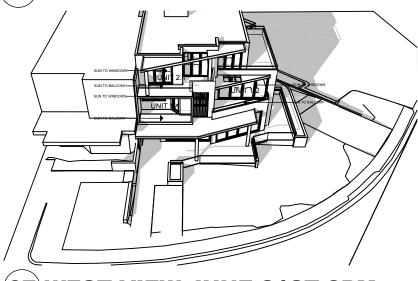
Scale



## (05) WEST VIEW JUNE 21ST 1PM



## (06) WEST VIEW JUNE 21ST 2PM



(07) WEST VIEW JUNE 21ST 3PM

#### **Amendments**

A ISSUED FOR DA

05/03/21

**Architect** 

Fortey + Grant Architecture Suite 3/Level 1, 1141 Botany Lane Mascot NSW 2020 mob: 0401 822 223 email: james@fgarch.com.au

Nominated Architect James Grant 6540

**Project Details** 

**SHOP TOP HOUSING AT** 

**51 KALANG ROAD ELENORA HEIGHTS NSW 2101** 

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Drawn Date Printed Approved JG JG 5/3/21 Job Number 2002

As shown @ A3

Drawing name

**WEST SHADOW VIEWS** 21ST JUNE

Drawing Number

