Assessor Certificate





Assessed and issued in accordance with the BASIX Thermal Comfort Protocol for the Simulation Method

21 May 2018 Date: **BSA File ref:** 13677 **Assessor** Name: **Gavin Chambers** Company: Building Sustainability Assessments Assessor #: BDAV/13/1491 Address: 7 William Street, HAMILTON NSW 2303 Phone: (02) 4962 3439 Email: enquiries@buildingsustainability.net.au Declaration of interest in the project design: None **Project** Address: 25 Clement Street

GLOUCESTER NSW 2422 Climate Zone: 28

Assessment

Affix assessor stamp BFRS Pro 4.3 Software:

Documentation

All details, upon which this assessment has been based, are included in the project documentation that has been stamped and signed by the Assessor issuing this certificate, as identified below:

Drawings used for this assessment:

(Title, Ref.#, Revision, Issue date, etc)

DEN-AD Design & Co Manns + Troup Job No. 200 09/05/2018

Thermal Performance Specification (copy on page 2)

Attached to the drawings and is on page: **DA61**



Certificate no.: Assessor Name: Accreditation no.: Certificate date: **Dwelling Address:** 25 Clement Street Gloucester, NSW 2422

www.nathers.gov.au





Thermal perf	ormance sn	ecifications	5	Cert	ificate #	0002760980	Page 1 of 3
Unit No.	Floor		Predict	Predict. loads (MJ/M²/y)			or Type and Area m²
Omit No.	Cond.	Uncond.	Heat	Cool	Rating	Buoix i io	or Type and Alou in
1	92	0	32	23	7.4		SOG: 92,
2	92	0	31	20	7.7		SOG: 92,
3	106	4	37	40	6.4		SOG: 110,
4	106	4	37	40	6.4		SOG: 110,
5	92	0	32	23	7.4		SOG: 92,
6	92	0	31	20	7.7		SOG: 92,
7	106	4	37	40	6.4		SOG: 110,
8	92	0	32	23	7.4		SOG: 92,
9	92	0	31	20	7.7		SOG: 92,
10	92	0	32	24	7.4		SOG: 92,
11	92	0	43	23	7.0		SOG: 92,
12	106	4	42	39	6.4		SOG: 110,
13	92	0	32	24	7.4		SOG: 92,
14	92	0	43	23	7.0		SOG: 92,
15	106	4	44	35	6.4		SOG: 110,



Certificate no.: Assessor Name: Accreditation no.: Certificate date: Dwelling Address:

25 Clement Street Gloucester, NSW 2422

www.nathers.gov.au

0002760980 **Gavin Chambers** VIC/BDAV/13/1491 21 May 2018



May 2018				erence: 13677
	ainability Assessments			2) 4962 3439
enquiries@bu	ildingsustainability.net.au		uildingsustaina	ibility.net.au
the Assessor Ce	Important Not ecification was used to achieve the rtificate and takes precedence over ruction elements are applied then	e thermal pe er any other	specification.	
The	rmal Performance Specification:	s (does no	ot apply to garag	e)
External Wall (Construction		Ac	ded Insulation
Brick Veneer				R2.0
Internal Wall C	onstruction		A	dded Insulatio
Plasterboard or	n studs		R2.0 to walls adja	
Plasterboard +	studs + shaft liner + studs + Plaste	erboard (pa	ty walls)	R2.0 + R2.0
Ceiling Constru	action		Ac	lded Insulation
Plasterboard		R3.5 to	ceilings adjacen	to roof space
Roof Construct	ion <i>Colour</i>		Ad	lded Insulation
Metal	Any		Foil -	R1.0 blanket
Floor Construc	tion Cover.	ina	Ac	lded Insulation
Concrete (Waffl				None
Windows	Glass and frame type	U Value	SHGC Range	Area sq m
ALM-001-01 A	Aluminium Type A Single clear	6.70	0.51 - 0.63	As drawn
ALM-002-01 A	Aluminium Type B Single clear	6.70	0.63 - 0.77	As drawr
	re awning windows, bifolds, casements			
J.	re double hung windows, sliding windo	ws & doors, i	fixed windows, stack	er doors, louvre
Skylights	Glass and frame type	U Va	lue SHGC	Area sq m
	lues are according to AFRC. Alterners SHGC is within the range specific		ts may be used if	the U value
External Windo	w Shading (eaves, ver	andahs, pe	rgolas, awnings ei	'c)
All shade eleme	nts modelled as drawn			
Ceiling Penetra	tions (downlights	, exhaust fa	nns, flues etc)	
No adjustment h	as been made for losses to insulat	tion arising	from ceiling penet	rations.

Assessor	Asse	ssor # E	3DAV/13	/1491	Issued:	21 May 2018		
Thermal perf	5	Cert	tificate #	0002760980		Page 3 of 3		
Unit No.	Floor	Areas		t. loads M²/y)	Star		Basix Floor Type a	nd Area m²
0111101	Cond.	Uncond.	Heat	Cool	Rating		_uoix i iooi i ypo u	
16	93	0	40	25	7.1		SOG: 93,	
17	93	0	37	25	7.2		SOG: 93,	
18	93	0	30	18	7.9		SOG: 93,	
19	93	0	30	18	7.9		SOG: 93,	
20	93	0	38	27	7.1		SOG: 93,	
21	116	0	38	34	6.8		SOG: 116,	
22	116	0	43	36	6.4		SOG: 116,	
23	92	0	24	24	7.9		SOG: 92,	
24	92	0	25	25	7.7		SOG: 92,	
25	116	0	47	35	6.3		SOG: 116,	
26	92	0	31	24	7.5		SOG: 92,	
27	92	0	37	23	7.4		SOG: 92,	
28	92	0	50	24	6.7		SOG: 92,	
www.nath	ers.gov.au W	ww.nathers.gov	/.au	(E) 20-74	<u> </u>			



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

Multi Dwelling

Certificate number: 928427M

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 06/10/2017 published by the Department. This document is available at www.basix.nsw.gov.au

Secretary

Date of issue: Monday, 21 May 2018

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



Project summary						
Project name	13677					
Street address	25 Clement Street Gloucester 2422					
Local Government Area	Mid-Coast Council					
Plan type and plan number	deposited 1227815					
Lot no.	40-41					
Section no.	-					
No. of residential flat buildings	0					
No. of units in residential flat buildings	0					
No. of multi-dwelling houses	28					
No. of single dwelling houses	0					
Project score						
Water	✓ 40 Target 40					
Thermal Comfort	✓ Pass Target Pass					
Energy	✓ 45 Target 45					

Certificate Prepared by



(ABN: 27 131 950 064)

Ph: 02 4962 3439

Email: enquiries@buildingsustainability.net.au

Revision of Certificates not lodged within 3 months of the date of issue will incur further BASIX issuing fees.

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Description of project

Project address	
Project name	13677
Street address	25 Clement Street Gloucester 2422
Local Government Area	Mid-Coast Council
Plan type and plan number	deposited 1227815
Lot no.	40-41
Section no.	-
Project type	
No. of residential flat buildings	0
No. of units in residential flat buildings	0
No. of multi-dwelling houses	28
No. of single dwelling houses	0
Site details	
Site area (m²)	24000
Roof area (m²)	5198
Non-residential floor area (m²)	0.0
Residential car spaces	92
Non-residential car spaces	0

Common area landscape					
Common area lawn (m²)	1000.0				
Common area garden (m²)	1000.0				
Area of indigenous or low water use species (m²)	0.0				
Assessor details					
Assessor number	BDAV/13/1491				
Certificate number	0002760980				
Climate zone	28				
Project score					
Water	✓ 40	Target 40			
Thermal Comfort	✓ Pass	Target Pass			
Energy	✓ 45	Target 45			

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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 (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
1	2	92.0	0.0	60.0	0.0
5	2	92.0	0.0	60.0	0.0
9	2	92.0	0.0	60.0	0.0
13	2	92.0	0.0	60.0	0.0
17	2	93.0	0.0	60.0	0.0
21	3	116.0	0.0	60.0	0.0
25	3	116.0	0.0	60.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & Iawn (m²)	Indigenous species (min area m²)
2	2	92.0	0.0	60.0	0.0
6	2	92.0	0.0	60.0	0.0
10	2	92.0	0.0	60.0	0.0
14	2	92.0	0.0	60.0	0.0
18	2	93.0	0.0	60.0	0.0
22	3	116.0	0.0	60.0	0.0
26	2	92.0	0.0	60.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
3	3	106.0	4.0	60.0	0.0
7	3	106.0	4.0	60.0	0.0
11	2	92.0	0.0	60.0	0.0
15	3	106.0	4.0	60.0	0.0
19	2	93.0	0.0	60.0	0.0
23	2	92.0	0.0	60.0	0.0
27	2	92.0	0.0	60.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & Iawn (m²)	Indigenous species (min area m²)
4	3	106.0	4.0	60.0	0.0
8	2	92.0	0.0	60.0	0.0
12	3	106.0	4.0	60.0	0.0
16	2	93.0	0.0	60.0	0.0
20	2	93.0	0.0	60.0	0.0
24	2	92.0	0.0	60.0	0.0
28	2	92.0	0.0	60.0	0.0

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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

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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 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.		~	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.		~	V
(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		•	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.		✓	V
(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.	V	~	
(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.	V	✓	
(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					Appliances Individual pool				Individual spa				
Dwelling no.	All shower- heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish- washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	3 star (> 7.5 but <= 9 L/min)	3 star	3 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			
All dwellings	individual water tank (no. 1)	Tank size (min) 3000.0 litres	To collect run-off from at least: 100.0 square metres of roof area; 0.0 square metres of impervious area; 0.0 square metres of garden and lawn area; and 0.0 square metres of planter box area.	yes	yes	yes	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.		~	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.		~	~

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(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(e) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Artificial lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that the "primary type of artificial lighting" for each such room in the dwelling is fluorescent lighting or light emitting diode (LED) lighting. If the term "dedicated" is specified for a particular room or area, then the light fittings in that room or area must only be capable of being used for fluorescent lighting or light emitting diode (LED) lighting.		~	~
(f) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Natural lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that each such room or area is fitted with a window and/or skylight.	~	~	V
(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		✓	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".		~	
(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.	V	~	~

	Hot water	Bathroom ventilation system		Kitchen vent	ilation system	Laundry ventilation system		
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control	
All dwellings	solar (electric boosted) 21 to 25 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	manual switch on/off	

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	Coo	ling	Hea	ting			Artificial	lighting			Natural lig	ghting
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/ toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitche
23, 24	1-phase airconditioning 4 Star	-	1-phase airconditioning 4 Star	-	2 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	yes
21, 22, 25	1-phase airconditioning 4 Star	-	1-phase airconditioning 4 Star	-	3 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	1	no
3, 4, 7, 12, 15	1-phase airconditioning 4 Star	-	1-phase airconditioning 4 Star	-	3 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	1	yes
16, 17, 18, 19, 20	1-phase airconditioning 4 Star	-	1-phase airconditioning 4 Star	-	2 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	1	yes
All other dwellings	1-phase airconditioning 4 Star	-	1-phase airconditioning 4 Star	-	2 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	1	no

	Individual p	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	-	-	-	-	electric cooktop & electric oven	-	yes	-	-	-	no	yes

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

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(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:	~	~	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.	V	~	V

		Thermal loads				
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)				
12	42.0	39.0				
15	44.0	35.0				
16	40.0	25.0				
17	37.0	25.0				
20	38.0	27.0				

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		Thermal loads
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
21	38.0	34.0
22	43.0	36.0
23	24.0	24.0
24	25.0	25.0
25	47.0	35.0
26	31.0	24.0
27	37.0	23.0
28	50.0	24.0
10, 13	32.0	24.0
11, 14	43.0	23.0
18, 19	30.0	18.0
1, 5, 8	32.0	23.0
2, 6, 9	31.0	20.0
All other dwellings	37.0	40.0

		Construction of floors and walls								
Dwelling no.	Concrete slab on ground(m²)	Suspended floor with open subfloor (m²)	Suspended floor with endclosed subfloor (m²)	Suspended floor above garage (m²)	Primarily rammed earth or mudbrick walls					
21,22,25	116	-	-	-	No					
3,4,7,12,15	110	-	-	-	No					
16,17,18,19,20	93	-	-	-	No					
All other dwellings	92	-	-	-	No					

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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.		~	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.	V	~	
(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	V

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

(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.	V	~	V

BASIX Planning & Environment www.basix.nsw.gov.au Version: 3.0 / DARWINIA_3_6_5 Certificate No.: 928427M Monday, 21 May 2018 page 12/13

Notes

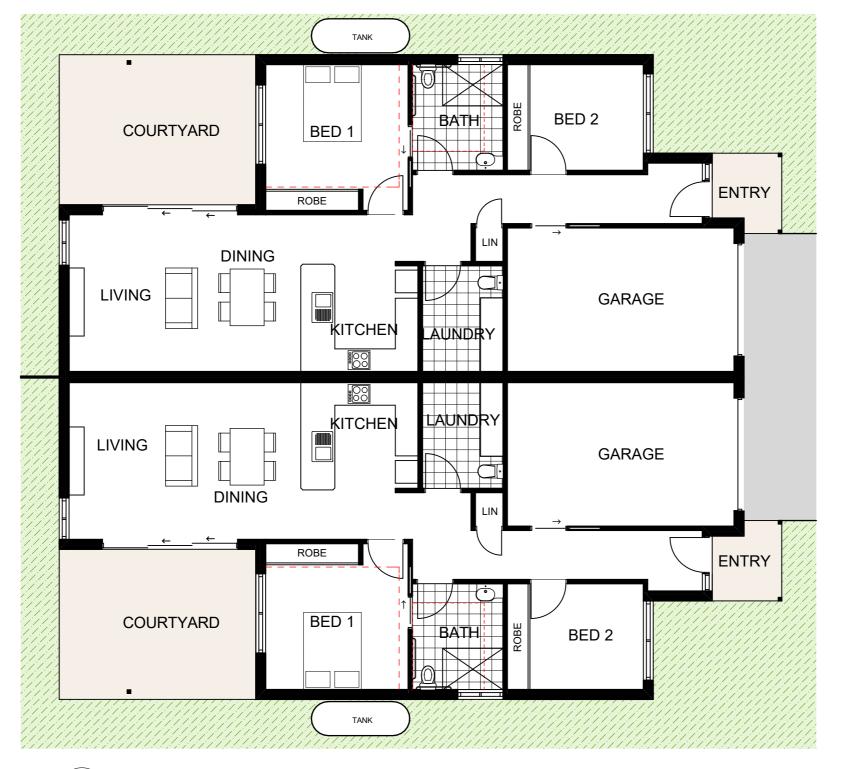
- 1. In these commitments, "applicant" means the person carrying out the development.
- 2. The applicant must identify each dwelling, building and common area listed in this certificate, on the plans accompanying any development application, and on the plans and specifications accompanying the application 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).

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ILU Floor Plan Type 1
SCALE 1:100 @ A3

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01 Issue for DA

or DA 9/05/2018



Certificate no.:
Assessor Name:
Accreditation no.:
Certificate date:
Dwelling Address:
25 Clement Street
Gloucester, NSW
2422

www.nathers.gov.au

Anglican Care

Gavin Chambers VIC/BDAV/13/1491 21 May 2018

0002760980



Anglican Care
Gloucester RACF Project
Drawing Title
ILU Type 1

Job Number Drawing Number Issue
200 DA41 01

DEN AD
DESIGN&



ILU Floor Plan Type 2
SCALE 1:100 @ A3

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01 Issue for DA

DA 9/05/2018



Certificate no.:
Assessor Name:
Accreditation no.:
Certificate date:
Dwelling Address:
25 Clement Street
Gloucester, NSW
2422

21 May 2018

Gavin Chambers

VIC/BDAV/13/1491

0002760980

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Client Anglican Care

Project

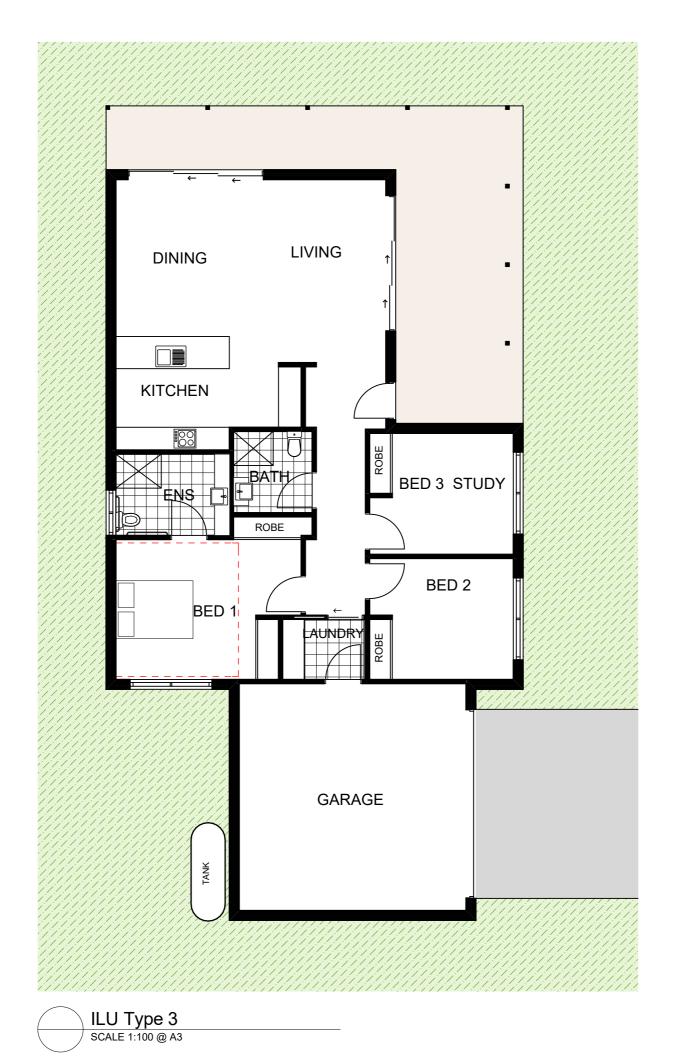
Anglican Care Gloucester RACF Project

ILU Type 2

Job Number Drawing N

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DESIGN&CO





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9/05/2018



Certificate no.: Assessor Name: Accreditation no.: Certificate date: Dwelling Address: 25 Clement Street Gloucester, NSW 2422

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Anglican Care

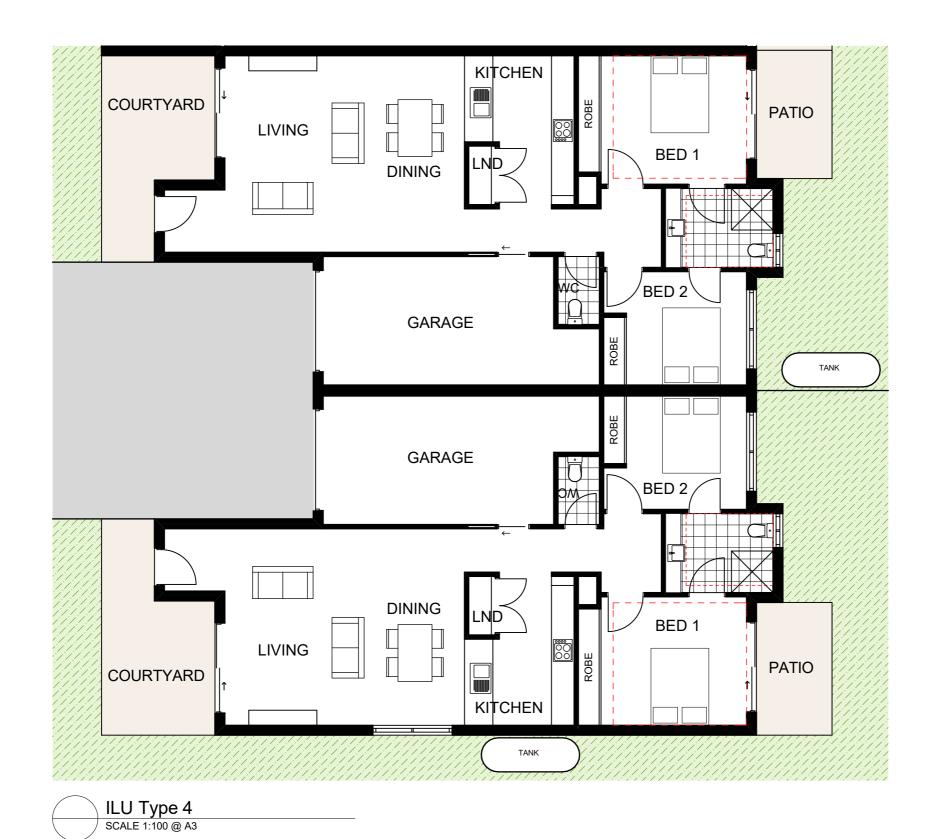
Project Anglican Care Gloucester RACF Project

Drawing Title ILU Type 3

Job Number

200 DA43 01





7.1 HOUSE

Certificate no.: Assessor Name: Accreditation no.: Certificate date: Dwelling Address:

25 Clement Street Gloucester, NSW 2422

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Anglican Care

Project

Anglican Care Gloucester RACF Project Drawing Title

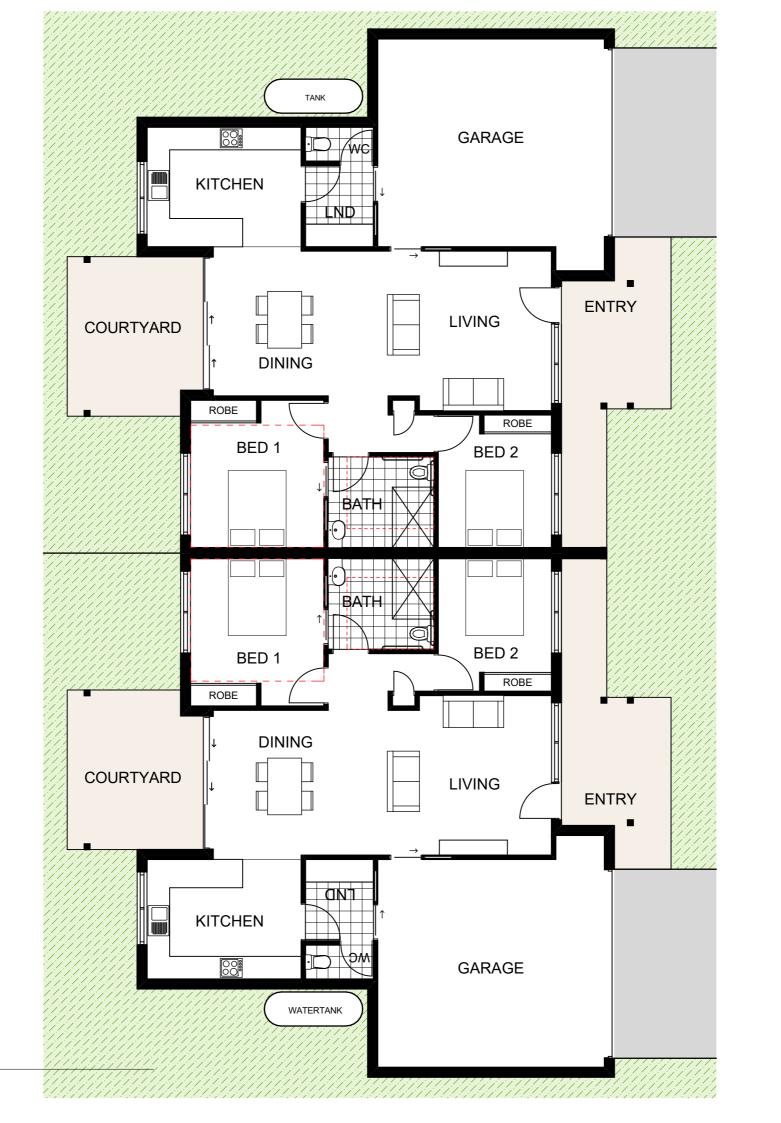
ILU Type 4

Job Number

DA44







ILU Type 5 SCALE 1:100 @ A3 The information contained in the document is copyright and may not be used or reproduced for any other project or purpose. Verify all dimensions and levels on site and report any discrepancies prior to the commencement of work.

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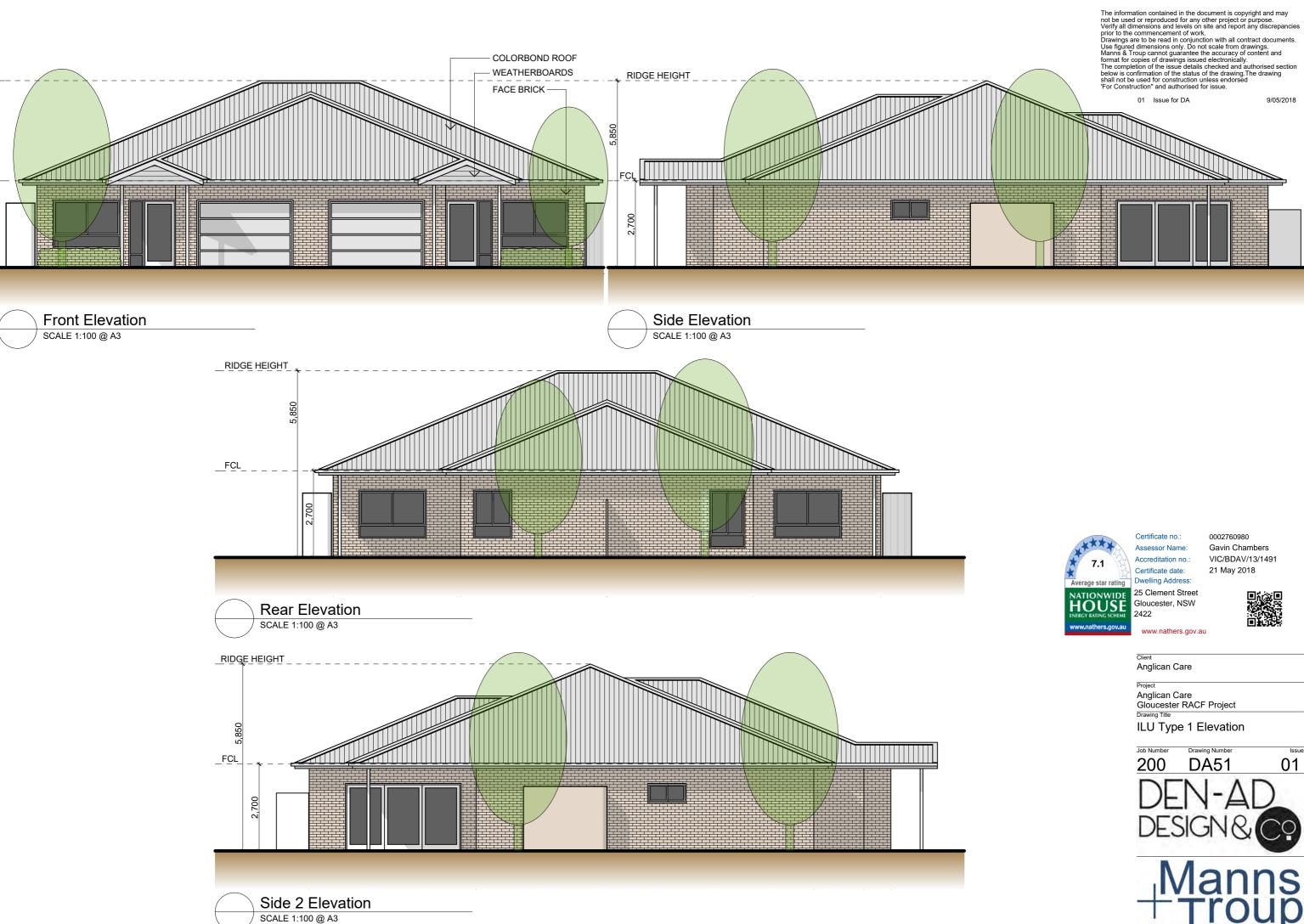
Gavin Chambers VIC/BDAV/13/1491 21 May 2018

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Anglican Care Project Anglican Care Gloucester RACF Project Drawing Title ILU Type 5 Job Number 200 DA45 01



9/05/2018

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01



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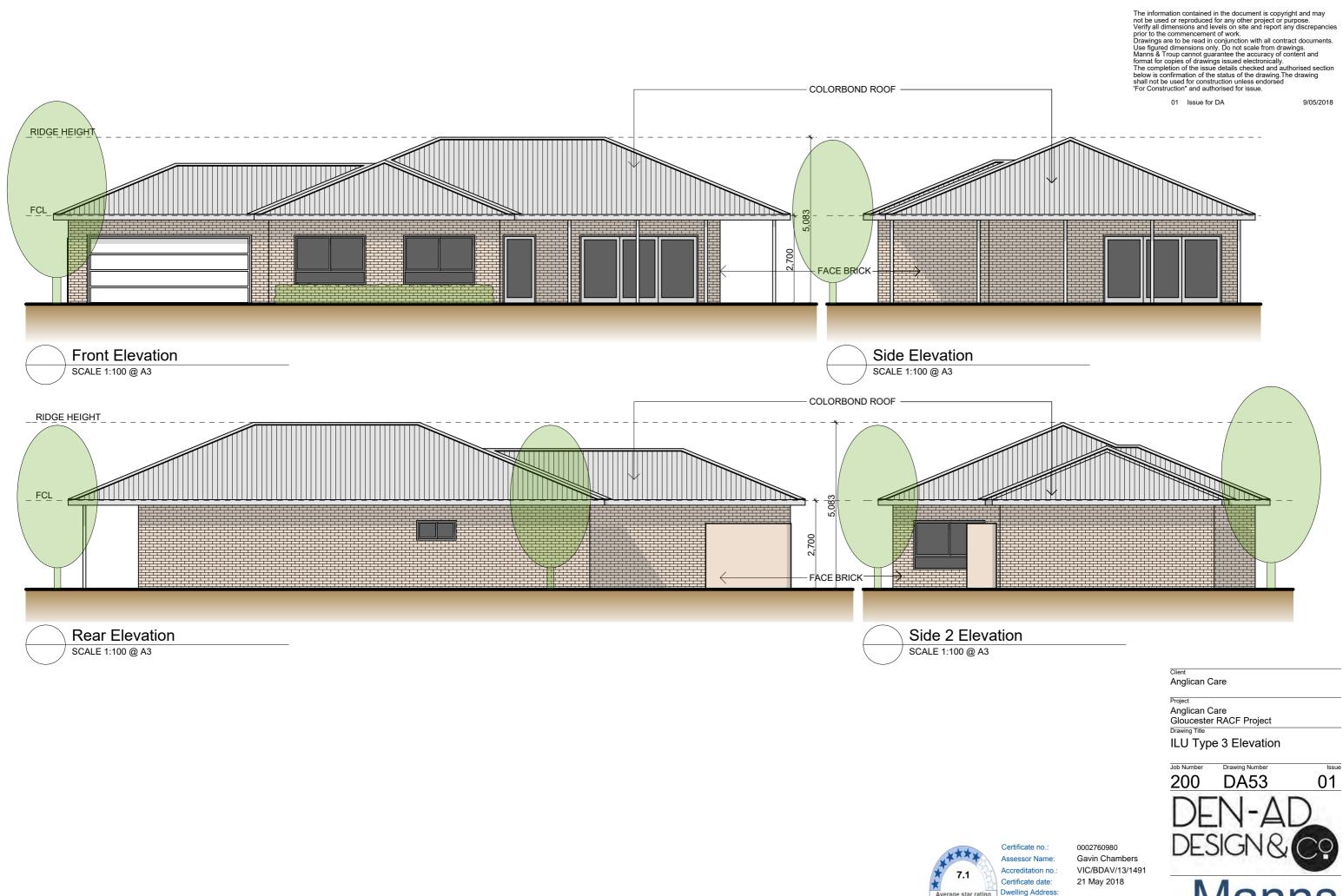


Project

Drawing Title

Anglican Care Gloucester RACF Project

ILU Type 2 Elevation



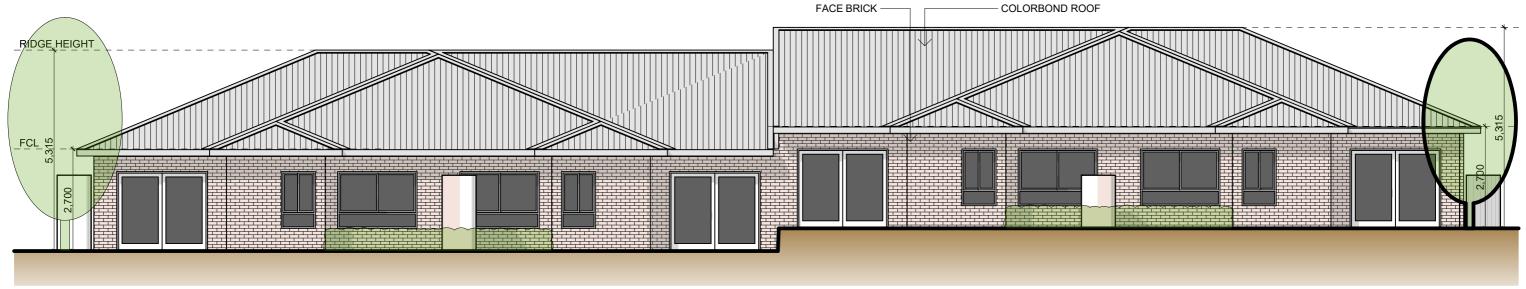


25 Clement Street

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HOUSE 25 Clement Street Gloucester, NSW 2422





COLORBOND ROOF

FACE BRICK

WEATHERBOARD CLADDING

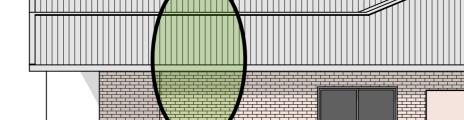




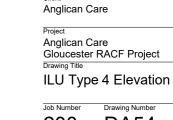
Certificate no.: 0002760980 Gavin Chambers Assessor Name: Certificate date: Dwelling Address:

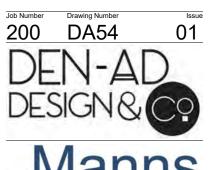


VIC/BDAV/13/1491 21 May 2018

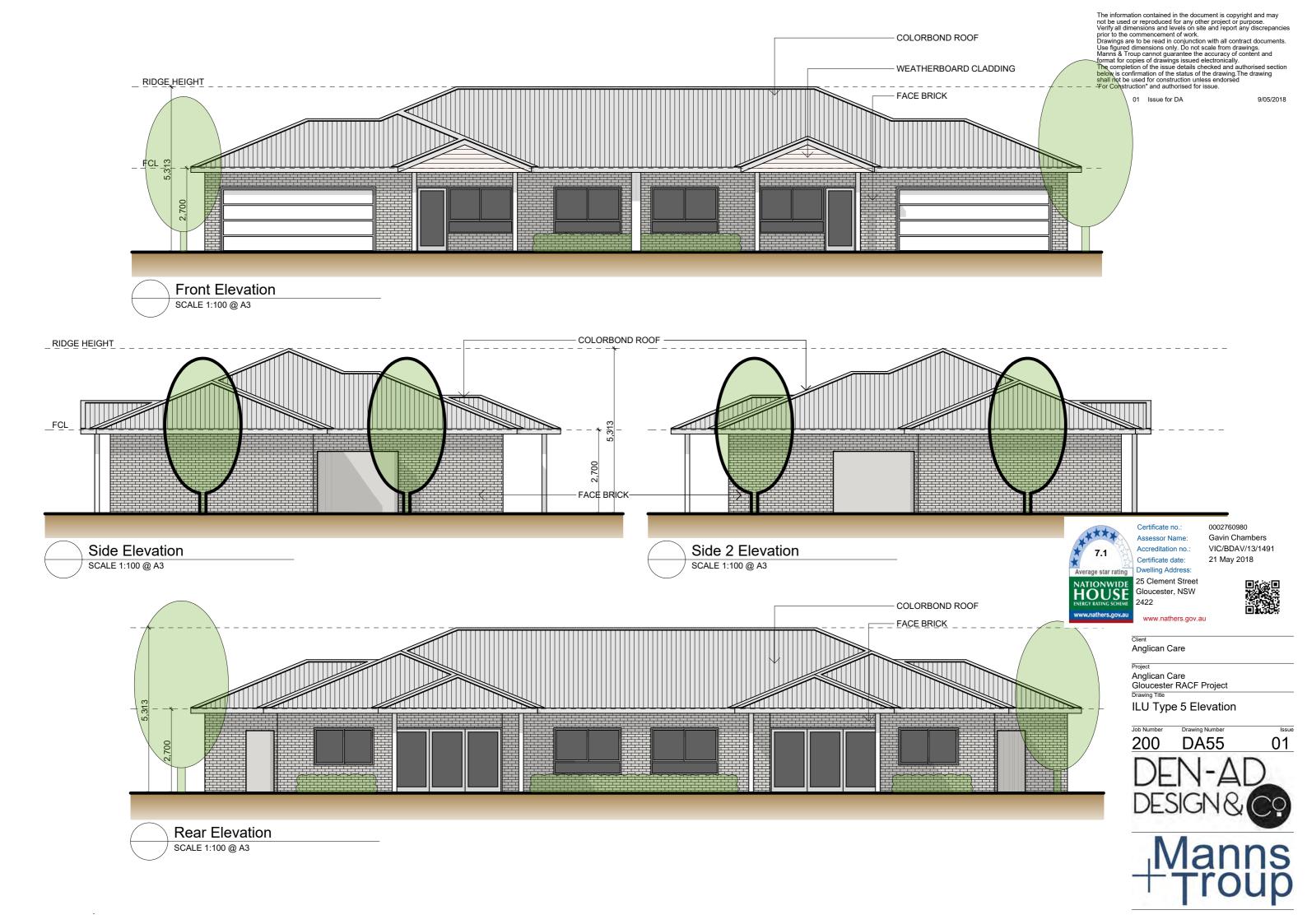










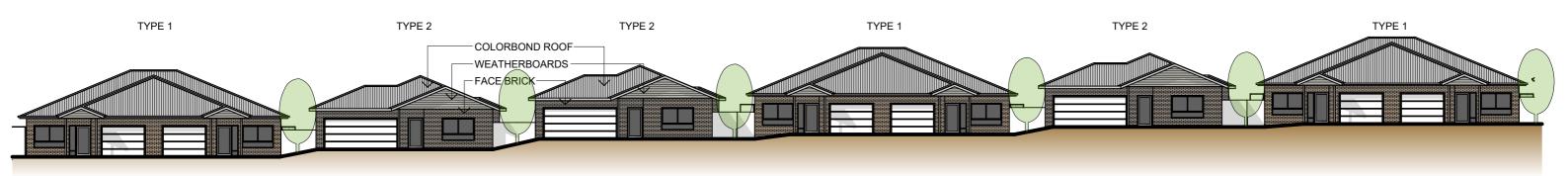


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North Elevation Units 1-9 SCALE 1:250 @ A3



South Elevation Units 1-10 SCALE 1:250 @ A3

Anglican Care

Project

Anglican Care
Gloucester RACF Project
Drawing Title

ILU Elevations

DA56

01

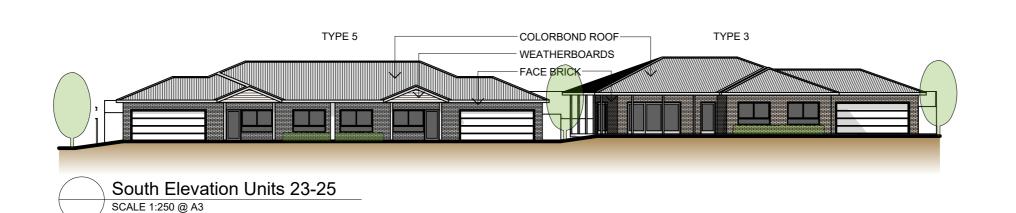




Gavin Chambers Accreditation no.: VIC/BDAV/13/1491 Certificate date: 21 May 2018 Dwelling Address: 25 Clement Street Gloucester, NSW www.nathers.gov.au

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South Elevation Units 16-21

SCALE 1:250 @ A3

SCALE 1:250 @ A3





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Average star rating

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0002760980 Gavin Chambers

VIC/BDAV/13/1491 21 May 2018

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ILU Elevations

DA57 01







SCALE 1:250 @ A3

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9/05/2018



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Anglican Care Project Anglican Care
Gloucester RACF Project
Drawing Title **ILU Elevations**

> DA58 200 01



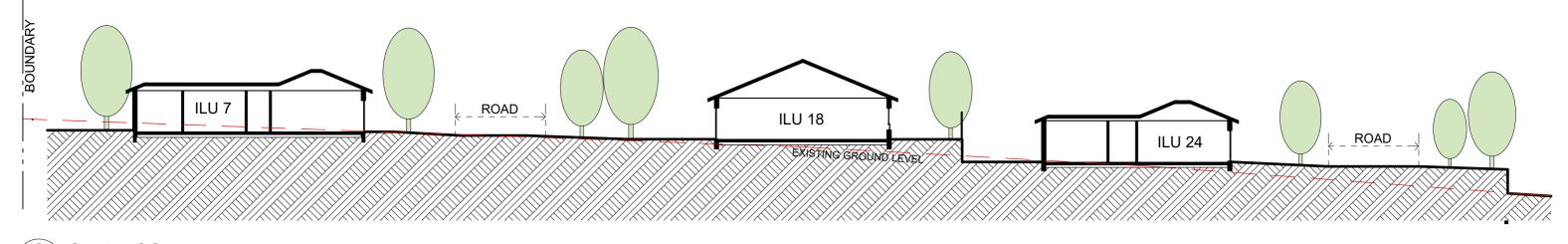
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9/05/2018

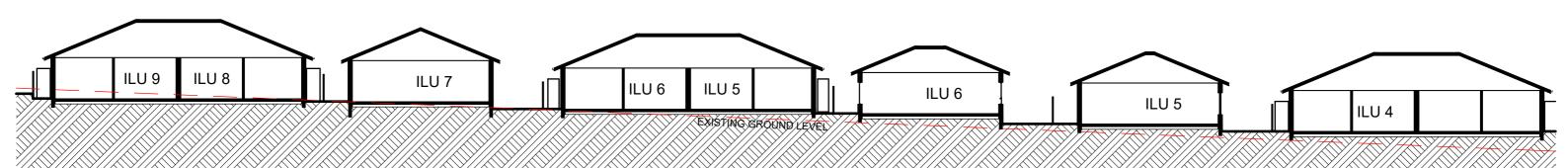


G Section GG
SCALE 1:250 @ A3

Section HH SCALE 1:250 @ A3

SCALE 1:250 @ A3

-



Certificate no.:

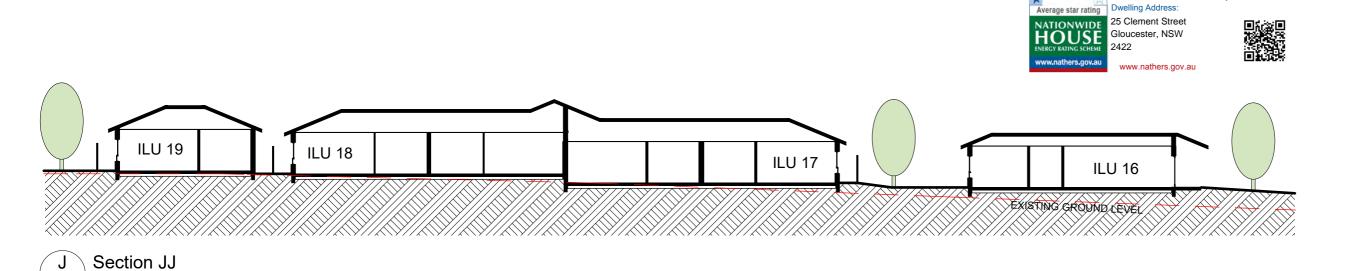
Assessor Name:

Accreditation no.: Certificate date:

0002760980 Gavin Chambers

21 May 2018

VIC/BDAV/13/1491

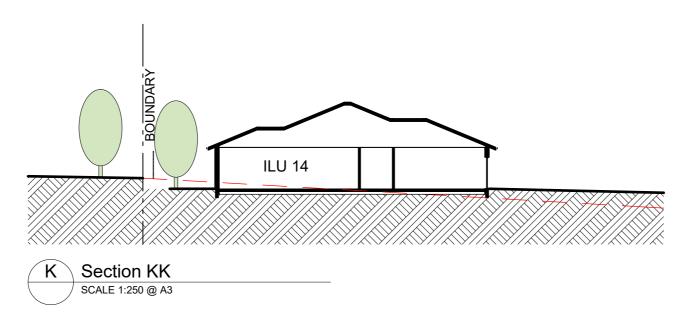


Anglican Care
Gloucester RACF Project
Drawing Title
ILU Sections

Job Number Drawing Number Issue
200 DA59 01

DEN-AD
DESIGN&

Anglican Care





Certificate no.: Assessor Name: Accreditation no.: Certificate date: Dwelling Address: 25 Clement Street Gloucester, NSW 2422

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9/05/2018

01 Issue for DA



Client Anglican Care Project Anglican Care Gloucester RACF Project

Drawing Title **ILU Sections**

Job Number

200 DA60 01



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		25 (Clemen	t Str	eet Glou	uceste	r				
SUMMA	RY OF I	BASI	IX CC	MI	MITM	ENT	S FO	R E	ACH	UNIT	
	mmary of th									ficate.	
R	efer to the C				ertificate o basix.n			delai	IS.		
WATER CO			11011310		D DUDIN.II	om.go.					
Fixtures	IVIIVII I IVIL	WI3									
3 Star Shows	er Heads		Ye	s							
3 Star Kitche	n / Basin	Taps	Yes 3 Star Toile					let	et Yes		
Alternative V	Vater										
Minimum Tank Size (L)			3000	С	ollected	d from	Roof	Area	(m2)	100	
Tank Connec	cted To:										
All Toilets			Laundry W/M Cold				Тар	p Yes			
One Outdoor Tap											
THERMAL C	OMFORT	COMN	NITME	NTS	- Refer	r to TF	PA Spe	ecific	ation	on plans	
ENERGY CO	MMITMEN	ITS									
Hot Water	Solar (El	Solar (Electric Boosted) 21 to 25 STCs									
Cooling	Living		1 Phase A/C						4	4 Star	
System	Bedroo	ms	N/A								
Heating	Living		1 Phase A/C						4 Star		
System	Bedroo	ms	N/A								
	1 x Bath		Fan ducted to exterior			Manual on/off					
Ventilation	Kitchen	1 011 00			cted to exterior			Manual on/off			
	Laundry							Manual on/off			
Natural	Window/Skylight in Kitchen							As Drawn			
Lighting	Window/Skylight in Bathrooms/Toilets							As Drawn			
Artificial		r of bedrooms					All .		icated	Yes	
Lighting	Number of Living/Dining			rooms		1	Dedicated		Yes		
(rooms to be primarily lit by	Kitchen					_	'es	Dedicated		Yes	
fluorescent or	All Bathrms/Tollets				_	'es	Dedicated		Yes		
LED lights)	Laundry						'es	Dedicated Dedicated		Yes	
		II Hallways				Y	'es	Ded	icated	Yes	
OTHER COM	MITMENT	S									
Outdoor cloth	11	_	Yes	-	entilate					Yes	

	May 2018		BSA Refe	rence: 13677						
UNIT	Building Sustainability Assessments			2) 4962 3439						
UNII	enquiries@buildingsustainability.net.au	www.b	uildingsustaina	bility.net.au						
ficate.	Important I									
	The following specification was used to achieve	The following specification was used to achieve the thermal performance values indicated on the Assessor Certificate and takes precedence over any other specification.								
	If different construction elements are applied th			Innner valid						
	Thermal Performance Specificati External Wall Construction	ions (does no		e) Ided Insulatio						
	Brick Veneer		Ad							
s	Blick verleer			R2.0						
	Internal Wall Construction		A	Ided Insulatio						
100	Plasterboard on studs		R2.0 to walls adjac							
	Plasterboard + studs + shaft liner + studs + Pla			R2.0 + R2.0						
es	Flasterboard + Studs + Stratt littlet + Studs + Fre	asicibuaiu (pai	ity walls)	R2.0 + R2.0						
	0-110		4	lded leed all						
on plans	Ceiling Construction Plasterboard	Ceiling Construction Added Insulation Plasterboard R3.5 to ceilings adjacent to roof space								
on plans	Roof Construction Colour	K3.5 II		to root space ded Insulation						
				R1.0 blanke						
01	Metal Any		FUII *	R I.U DIAIIKE						
Star	Floor Construction Co			Ided Insulatio						
		Covering As drawn								
Star	Concrete (Waffle Pod) As	s drawn		None						
al on/off	Windows Glass and frame type	U Value	SHGC Range	Area sq m						
al on/off	ALM-001-01 A Aluminium Type A Single clea	ar 6.70	0.51 - 0.63	As drawr						
al on/off	ALM-002-01 A Aluminium Type B Single clea	ar 6.70	0.63 - 0.77	As drawr						
)rawn	7,1									
)rawn	Type A windows are awning windows, bifolds, casem	ents, tilt 'n 'turn' i	windows, entry doors	, french doors						
Yes	Type B windows are double hung windows, sliding wi									
res			lue SHGC	Area sa n						
Yes	Skylights Glass and frame type	U Va								
	Skylights Glass and frame type	U Va	uc Srioc							
Yes				,						
Yes Yes	Skylights Glass and frame type U and SHGC values are according to AFRC. At is lower and the SHGC is within the range spe	Iternate produc		,						



Certificate no.: Assessor Name: Accreditation no.: Certificate date: Dwelling Address:

25 Clement Street Gloucester, NSW 2422

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0002760980 Gavin Chambers VIC/BDAV/13/1491 21 May 2018



Anglican Care

Anglican Care
Gloucester RACF Project
Drawing Title

ILU Perspective

200 DA61 01 DEN-AD
DESIGN& CO
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Troup

