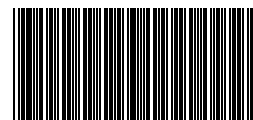




Filed: 8 June 2023 11:34 AM



D0001QB527

Expert Report

COURT DETAILS

Court	Land and Environment Court of NSW
Division	Class 1
Registry	Land and Environment Court Sydney
Case number	2023/00026455

TITLE OF PROCEEDINGS

First Applicant	Peter John Zembis
First Respondent	SUTHERLAND SHIRE COUNCIL ABN 52018204808

FILING DETAILS

Filed for	Peter John Zembis, Applicant 1
Legal representative	Jason Brian Hones
Legal representative reference	
Telephone	0299293031
Your reference	JBH:PC:22277

ATTACHMENT DETAILS

In accordance with Part 3 of the UCPR, this coversheet confirms that both the Lodge Document, along with any other documents listed below, were filed by the Court.

Expert Report (BASIX Certificate 20230606.pdf)

[attach.]

Description of project

BASIX®Certificate

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

Alterations and Additions

Certificate number: A441011_03

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 Alterations and Additions Definitions" dated 06/10/2017 published by the Department. This document is available at www.basix.nsw.gov.au

Secretary


















Date of issue: Tuesday, 06, June 2023

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

























Project address	
Project name	BOL015_03
Street address	421 Willarong Road CARINGBAH SOUTH 2229
Local Government Area	Sutherland Shire Council
Plan type and number	Deposited Plan 814354
Lot number	13
Section number	
Project type	
Dwelling type	Separate dwelling house
Type of alteration and addition	My renovation work is valued at \$50,000 or more, and includes a pool (and/or spa).

Certificate Prepared by (please complete before submitting to Council or PCA)
Name / Company Name: Thermal Performance
ABN (if applicable): 64 137 428 767

Pool and Spa	Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Rainwater tank			
The applicant must install a rainwater tank of at least 1990 litres on the site. This rainwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities.			
The applicant must configure the rainwater tank to collect rainwater runoff from at least 160 square metres of roof area.			
The applicant must connect the rainwater tank to a tap located within 10 metres of the edge of the pool.			
Outdoor swimming pool			
The swimming pool must be outdoors.			
The swimming pool must not have a capacity greater than 36 kilolitres.			
The applicant must install a pool pump timer for the swimming pool.			
The applicant must install the following heating system for the swimming pool that is part of this development: solar only.			

Fixtures and systems		Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Hot water				
The applicant must install the following hot water system in the development: gas instantaneous.		✓	✓	✓
Lighting				
The applicant must ensure a minimum of 40% of new or altered light fixtures are fitted with fluorescent, compact fluorescent, or light-emitting-diode (LED) lamps.			✓	✓
Fixtures				
The applicant must ensure new or altered showerheads have a flow rate no greater than 9 litres per minute or a 3 star water rating.			✓	✓
The applicant must ensure new or altered toilets have a flow rate no greater than 4 litres per average flush or a minimum 3 star water rating.			✓	✓
The applicant must ensure new or altered taps have a flow rate no greater than 9 litres per minute or minimum 3 star water rating.			✓	✓

Construction		Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Insulation requirements				
The applicant must construct the new or altered construction (floor(s), walls, and ceilings/roofs) in accordance with the specifications listed in the table below, except that a) additional insulation is not required where the area of new construction is less than 2m ² , b) insulation specified is not required for parts of altered construction where insulation already exists.				
Construction	Additional insulation required (R-value)	Other specifications		
concrete slab on ground floor.	nil			
floor above existing dwelling or building.	nil			
external wall: brick veneer	R1.16 (or R1.70 including construction)			
external wall: concrete block/plasterboard	R1.18 (or R1.70 including construction)			
external wall: framed (weatherboard, fibro, metal clad)	R1.30 (or R1.70 including construction)			
flat ceiling, pitched roof	ceiling: R1.45 (up), roof: foil backed blanket (55 mm)	medium (solar absorptance 0.475 - 0.70)		
flat ceiling, flat roof: framed	ceiling: R1.58 (up), roof: foil backed blanket (55 mm)	medium (solar absorptance 0.475 - 0.70)		

Glazing requirements		Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Windows and glazed doors				
The applicant must install the windows, glazed doors and shading devices, in accordance with the specifications listed in the table below. Relevant overshadowing specifications must be satisfied for each window and glazed door.				
The following requirements must also be satisfied in relation to each window and glazed door:				
Each window or glazed door with standard aluminium or timber frames and single clear or toned glass may either match the description, or, have a U-value and a Solar Heat Gain Coefficient (SHGC) no greater than that listed in the table below. Total system U-values and SHGCs must be calculated in accordance with National Fenestration Rating Council (NFRC) conditions.				
Each window or glazed door with improved frames, or pyrolytic low-e glass, or clear/air gap/clear glazing, or toned/air gap/clear glazing must have a U-value and a Solar Heat Gain Coefficient (SHGC) no greater than that listed in the table below. Total system U-values and SHGCs must be calculated in accordance with National Fenestration Rating Council (NFRC) conditions. The description is provided for information only. Alternative systems with complying U-value and SHGC may be substituted.				
For projections described in millimetres, the leading edge of each eave, pergola, verandah, balcony or awning must be no more than 500 mm above the head of the window or glazed door and no more than 2400 mm above the sill.				
For projections described as a ratio, the ratio of the projection from the wall to the height above the window or glazed door sill must be at least that shown in the table below.				
Pergolas with polycarbonate roof or similar translucent material must have a shading coefficient of less than 0.35.				
External louvres and blinds must fully shade the window or glazed door beside which they are situated when fully drawn or closed.				
Pergolas with fixed battens must have battens parallel to the window or glazed door above which they are situated, unless the pergola also shades a perpendicular window. The spacing between battens must not be more than 50 mm.				
Overshadowing buildings or vegetation must be of the height and distance from the centre and the base of the window and glazed door, as specified in the 'overshadowing' column in the table below.				
Windows and glazed doors glazing requirements				

Glazing requirements							Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Window / door no.	Orientation	Area of glass inc. frame (m2)	Overshadowing		Shading device	Frame and glass type			
			Height (m)	Distance (m)					
w21 LG	W	3.51	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
w22 LG	N	1.02	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
w49 LG	N	0.732	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
w23 LG	N	2.04	6	6	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
sd37 LG	W	14.04	9	6	eave/verandah/pergola/balcony >=600 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
w38 LG	W	4.8	9	6	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
w39 LG	W	7.99	9	4	eave/verandah/pergola/balcony >=600 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
w19 LG	E	5.38	4	4	none	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			
sd25 GF	W	10.99	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
sd26 GF	W	10.99	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
cnr40 GF	W	1.16	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
cnr40 GF	N	2.04	4.5	2.5	eave/verandah/pergola/balcony >=600 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
w24 GF	N	1.3	4.5	2.5	none	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			

Glazing requirements							Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Window / door no.	Orientation	Area of glass inc. frame (m2)	Overshadowing		Shading device	Frame and glass type			
			Height (m)	Distance (m)					
w44 GF	N	1.3	4.5	2.5	none	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			
w17 GF	E	5.78	4	5	external louvre/blind (fixed)	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			
w16 GF	E	4.34	4	5	external louvre/blind (fixed)	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			
w15 GF	E	4.34	4	3.5	none	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			
w33 GF	S	8.69	4.5	2	none	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
w35 GF	S	1.24	4.5	2	none	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
w36 GF	S	1.3	4.5	2	none	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
w46 FF	W	2.18	0	0	external louvre/blind (fixed)	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			
w48 FF	W	1.53	0	0	eave/verandah/pergola/balcony >=600 mm	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			
sd47 FF	W	9.03	0	0	eave/verandah/pergola/balcony >=600 mm	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			
w30 FF	N	2.18	0	0	projection/height above sill ratio >=0.23	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			
w31 FF	E	1.86	0	0	eave/verandah/pergola/balcony >=600 mm	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			
w18 FF	E	4.04	0	0	eave/verandah/pergola/balcony >=600 mm	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			

Glazing requirements							Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Window / door no.	Orientation	Area of glass inc. frame (m2)	Overshadowing		Shading device	Frame and glass type			
			Height (m)	Distance (m)					
w32 FF	S	0.88	0	0	eave/verandah/pergola/balcony >=600 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
Skylights									
The applicant must install the skylights in accordance with the specifications listed in the table below.									
The following requirements must also be satisfied in relation to each skylight:									
Each skylight may either match the description, or, have a U-value and a Solar Heat Gain Coefficient (SHGC) no greater than that listed in the table below.									
Skylights glazing requirements									
Skylight number	Area of glazing inc. frame (m2)	Shading device		Frame and glass type					
SL41	3.3	no shading		timber, low-E internal/argon fill/clear external, (or U-value: 2.5, SHGC: 0.456)					

Legend
In these commitments, "applicant" means the person carrying out the development.
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).
Commitments identified with a "✓" in the "Show on CC/CDC plans & specs" column must be shown in the plans and specifications accompanying the application for a construction certificate / complying development certificate for the proposed development.
Commitments identified with a "✓" in the "Certifier check" column must be certified by a certifying authority as having been fulfilled, before a final occupation certificate for the development may be issued.