BASIX Certificate

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

Alterations and Additions

Certificate number: A429076

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

Secretarv

Date of issue: Monday, 30, August 2021 To be valid, this certificate must be lodged within 3 months of the date of issue.



Planning, Industry & Environment

| Draiget name | |
|---------------------------------|--|
| Project name | Formica Crown Rd |
| Street address | 7 Crown Road Queenscliff 2095 |
| Local Government Area | Northern Beaches Council |
| Plan type and number | Deposited Plan 514296 |
| Lot number | 2 |
| 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). |
| | Local Government Area Plan type and number Lot number Section number Project type Dwelling type Type of alteration and |

Certificate Prepared by (please complete before submitting to Council or PCA)

Name / Company Name: Bradley Dorn

ABN (if applicable): N/A

| 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 1126 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 100 square metres of roof area. | | \checkmark | \checkmark |
| The applicant must connect the rainwater tank to a tap located within 10 metres of the edge of the pool. | | \checkmark | \checkmark |
| Outdoor swimming pool | | | |
| The swimming pool must be outdoors. | \checkmark | ~ | \checkmark |
| The swimming pool must not have a capacity greater than 45 kilolitres. | \checkmark | \checkmark | \checkmark |
| The swimming pool must have a pool cover. | | \checkmark | \checkmark |
| The applicant must install a pool pump timer for the swimming pool. | | \checkmark | \checkmark |
| The applicant must install the following heating system for the swimming pool that is part of this development: gas. | | \checkmark | \checkmark |

| 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. | \checkmark | \checkmark | ~ |
| 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. | | \checkmark | \checkmark |
| 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. | | \checkmark | |

| Construction | | | Show on DA Plans | Show on CC/CDC Plans & specs | Certifier Check |
|--|---|--|---------------------|---------------------------------------|--------------------|
| Insulation requirements | | | | | |
| The applicant must construct the new or altered the table below, except that a) additional insulat is not required for parts of altered construction v | l construction (floor(s), walls, and ceilings/roofs) tion is not required where the area of new constr where insulation already exists. | in accordance with the specifications listed in ruction is less than 2m2, b) insulation specified | ~ | ~ | ~ |
| Construction | Additional insulation required (R-value) | Other specifications | | | |
| concrete slab on ground floor. | nil | | | | |
| suspended floor with open subfloor: concrete (R0.6). | R0.9 (down) (or R1.50 including construction) | | | | |
| suspended floor with enclosed subfloor: concrete (R0.6). | R0.70 (down) (or R1.30 including construction) | | | | |
| external wall: concrete block/plasterboard | R1.18 (or R1.70 including construction) | | | | |
| external wall: cavity brick | nil | | | | |
| internal wall shared with garage: cavity brick wall (R0.67) | nil | | | | |
| raked ceiling, pitched/skillion roof: framed | ceiling: R1.24 (up), roof: foil backed blanket (100 mm) | medium (solar absorptance 0.475 - 0.70) | | | |
| flat ceiling, flat roof: concrete/plasterboard internal | ceiling: R0.25 (up), roof: 50 mm foil backed polystyrene board | light (solar absorptance < 0.475) | | | |

| Glazing | requirements | | | | | | Show on DA Plans | Show on CC/CDC Plans & specs | Certifier Check |
|--------------------------|--|--|-----------------------------|-----------------------------|---|--|---------------------|---------------------------------------|--------------------|
| Windows | and glazed o | doors | | | | | 1 | | - |
| | | | | | nading devices, in accordance with r each window and glazed door. | the specifications listed in the table below. | ~ | | ~ |
| The follow | ving requirement | s must also | o be satisfi | ed in relatior | n to each window and glazed door: | | | \checkmark | ~ |
| have a U-v must be ca | value and a Sola alculated in acco | ar Heat Ga ordance wit | in Coefficie th National | ent (SHGC) r Fenestratio | no greater than that listed in the tabl | ar glazing, or toned/air gap/clear glazing must le below. Total system U-values and SHGCs s. The description is provided for information | | ~ | ~ |
| | 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. | | | | | | | ~ | ~ |
| Pergolas v | Pergolas with polycarbonate roof or similar translucent material must have a shading coefficient of less than 0.35. | | | | | | | \checkmark | \checkmark |
| External lo | ouvres and blind | ls must fully | / shade the | e window or | glazed door beside which they are | situated when fully drawn or closed. | | \checkmark | \checkmark |
| | | | | | e window or glazed door above white ons must not be more than 50 mm. | ch they are situated, unless the pergola also | | \checkmark | ~ |
| Window | s and glazed | d doors g | glazing r | equireme | nts | | | | |
| Window / no. | door Orientatio | on Area of glass inc. frame (m2) | Oversha Height (m) | dowing Distance (m) | Shading device | Frame and glass type | | | |
| W1 | NW | 2 | 0 | 0 | eave/verandah/pergola/balcony >=900 mm | standard aluminium, clear/air gap/clear, (U-value: 5.34, SHGC: 0.67) | | | |
| W2 | N | 5.9 | 0 | 0 | external louvre/blind (fixed) | standard aluminium, clear/air gap/clear, (U-value: 5.34, SHGC: 0.67) | | | |
| W3 | E | 5.7 | 0 | 0 | external louvre/blind (fixed) | standard aluminium, clear/air gap/clear, (U-value: 5.34, SHGC: 0.67) | | | |
| W4 | NW | 3.6 | 0 | 0 | external louvre/blind (fixed) | standard aluminium, clear/air gap/clear, (U-value: 5.34, SHGC: 0.67) | | | |

| Glazing requ | irements | | | | | | Show on DA Plans | Show on CC/CDC Plans & specs | Certifier Check |
|---------------|-------------|--------------------------------|---------------|-----------------|---|---|---------------------|---------------------------------------|--------------------|
| Window / door | Orientation | Area of | Oversha | adowing | Shading device | Frame and glass type | | | |
| no. | | glass inc. frame (m2) | Height (m) | Distance (m) | | | | | |
| W5 | N | 12 | 0 | 0 | external louvre/blind (fixed) | standard aluminium, clear/air gap/clear, (U-value: 5.34, SHGC: 0.67) | | | |
| W6 | SE | 9 | 0 | 0 | external louvre/blind (fixed) | standard aluminium, clear/air gap/clear, (U-value: 5.34, SHGC: 0.67) | | | |
| W7 | W | 6.1 | 0 | 0 | eave/verandah/pergola/balcony >=900 mm | standard aluminium, clear/air gap/clear, (U-value: 5.34, SHGC: 0.67) | | | |
| W8 | NW | 3 | 0 | 0 | external louvre/blind (fixed) | standard aluminium, clear/air gap/clear, (U-value: 5.34, SHGC: 0.67) | | | |
| W9 | NW | 4 | 0 | 0 | external louvre/blind (fixed) | standard aluminium, clear/air gap/clear, (U-value: 5.34, SHGC: 0.67) | | | |
| W10 | W | 1 | 0 | 0 | external louvre/blind (fixed) | standard aluminium, clear/air gap/clear, (U-value: 5.34, SHGC: 0.67) | | | |
| W11 | NW | 2 | 0 | 0 | external louvre/blind (fixed) | standard aluminium, clear/air gap/clear, (U-value: 5.34, SHGC: 0.67) | | | |
| W12 | NE | 14.5 | 0 | 0 | eave/verandah/pergola/balcony >=900 mm | standard aluminium, clear/air gap/clear, (U-value: 5.34, SHGC: 0.67) | | | |
| W13 | E | 14.8 | 0 | 0 | eave/verandah/pergola/balcony >=900 mm | standard aluminium, clear/air gap/clear, (U-value: 5.34, SHGC: 0.67) | | | |
| W14 | E | 9.4 | 0 | 0 | eave/verandah/pergola/balcony >=900 mm | standard aluminium, clear/air gap/clear, (U-value: 5.34, SHGC: 0.67) | | | |
| W15 | SE | 4.8 | 0 | 0 | eave/verandah/pergola/balcony >=600 mm | standard aluminium, clear/air gap/clear, (U-value: 5.34, SHGC: 0.67) | | | |
| W16 | NW | 2 | 0 | 0 | eave/verandah/pergola/balcony >=750 mm | standard aluminium, clear/air gap/clear, (U-value: 5.34, SHGC: 0.67) | | | |
| W17 | Ν | 5.7 | 0 | 0 | eave/verandah/pergola/balcony >=900 mm | standard aluminium, clear/air gap/clear, (U-value: 5.34, SHGC: 0.67) | | | |

| Glazing requ | irements | | | | | | Show on DA Plans | Show on CC/CDC Plans & specs | Certifier Check |
|----------------------|-------------|---|--------------------------|----------------------------|---|---|---------------------|---------------------------------------|--------------------|
| Window / door no. | Orientation | Area of glass inc. frame (m2) | Oversha Height (m) | adowing Distance (m) | Shading device | Frame and glass type | | | |
| W18 | W | 3.4 | 0 | 0 | eave/verandah/pergola/balcony >=900 mm | standard aluminium, clear/air gap/clear, (U-value: 5.34, SHGC: 0.67) | | | |
| W19 | N | 1.5 | 0 | 0 | eave/verandah/pergola/balcony >=900 mm | standard aluminium, clear/air gap/clear, (U-value: 5.34, SHGC: 0.67) | | | |
| W20 | E | 16.8 | 0 | 0 | eave/verandah/pergola/balcony >=900 mm | standard aluminium, clear/air gap/clear, (U-value: 5.34, SHGC: 0.67) | | | |
| W21 | E | 6.4 | 0 | 0 | eave/verandah/pergola/balcony >=900 mm | standard aluminium, clear/air gap/clear, (U-value: 5.34, SHGC: 0.67) | | | |
| W22 | SE | 4.8 | 0 | 0 | eave/verandah/pergola/balcony >=900 mm | standard aluminium, clear/air gap/clear, (U-value: 5.34, SHGC: 0.67) | | | |
| W23 | E | 2.8 | 0 | 0 | eave/verandah/pergola/balcony >=900 mm | standard aluminium, clear/air gap/clear, (U-value: 5.34, SHGC: 0.67) | | | |
| W24 | SW | 2.1 | 0 | 0 | none | standard aluminium, clear/air gap/clear, (U-value: 5.34, SHGC: 0.67) | | | |
| W25 | SW | 2.1 | 0 | 0 | none | standard aluminium, clear/air gap/clear, (U-value: 5.34, SHGC: 0.67) | | | |
| W26 | NW | 3.3 | 0 | 0 | external louvre/blind (fixed) | standard aluminium, clear/air gap/clear, (U-value: 5.34, SHGC: 0.67) | | | |
| W27 | N | 3.3 | 0 | 0 | eave/verandah/pergola/balcony >=900 mm | standard aluminium, clear/air gap/clear, (U-value: 5.34, SHGC: 0.67) | | | |
| W28 | E | 8.4 | 0 | 0 | eave/verandah/pergola/balcony >=900 mm | standard aluminium, clear/air gap/clear, (U-value: 5.34, SHGC: 0.67) | | | |
| W29 | E | 16.8 | 0 | 0 | eave/verandah/pergola/balcony >=900 mm | standard aluminium, clear/air gap/clear, (U-value: 5.34, SHGC: 0.67) | | | |
| W30 | E | 1.6 | 0 | 0 | eave/verandah/pergola/balcony >=900 mm | standard aluminium, clear/air gap/clear, (U-value: 5.34, SHGC: 0.67) | | | |

| Glazing requ | irements | | | | | | Show on DA Plans | Show on CC/CDC Plans & specs | Certifier Check |
|-------------------------------------|-----------------|---|--------------------------|----------------------------|---|---|---------------------|---------------------------------------|--------------------|
| Window / door no. | Orientation | Area of glass inc. frame (m2) | Oversha Height (m) | adowing Distance (m) | Shading device | Frame and glass type | | | |
| W31 | NE | 5 | 0 | 0 | eave/verandah/pergola/balcony >=900 mm | standard aluminium, clear/air gap/clear, (U-value: 5.34, SHGC: 0.67) | | | |
| W32 | NE | 7 | 0 | 0 | eave/verandah/pergola/balcony >=900 mm | standard aluminium, clear/air gap/clear, (U-value: 5.34, SHGC: 0.67) | | | |
| Skylights | | | | | | | | | |
| The applicant m | nust install th | e skylights | s in accor | dance with th | ne specifications listed in the table | e below. | \checkmark | \checkmark | \checkmark |
| The following re | equirements i | must also | be satisfi | ed in relation | to each skylight: | | | \checkmark | \checkmark |
| Each skylight m the table below. | | tch the de | scription | , or, have a L | I-value and a Solar Heat Gain Co | efficient (SHGC) no greater than that listed in | | \checkmark | ~ |
| Skylights gla | azing requ | uirement | ts | | | | | | |
| Skylight numbe | | glazing | Shading | device | Frame ar | nd glass type | | | |
| S1 | 0.8 | | no shad | ing | | w-E internal/argon fill/clear external, (or 2.5, SHGC: 0.456) | | | |
| S2 | 1.5 | | no shad | ing | | w-E internal/argon fill/clear external, (or 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.