BASIX Certificate

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

Alterations and Additions

Certificate number: A475210

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, 26, September 2022 To be valid, this certificate must be lodged within 3 months of the date of issue.



Planning, Industry & Environment

| Project address | |
|--------------------------------|--------------------------------------|
| Project name | Boyd Palm Beach Alts & Adds |
| Street address | 1015 Barrenjoey Road PALM BEACH 2108 |
| Local Government Area | Northern Beaches Council |
| Plan type and number | Deposited Plan 14682 |
| Lot number | 54 |
| | |
| Section number | |
| Section number Project type | |
| | Separate dwelling house |

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

Name / Company Name: Walter Barda Design

ABN (if applicable): 48 072 136 513

| 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 2450 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 49 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 and outdoor spa. | | \checkmark | \checkmark |
| Outdoor swimming pool | | | 1 |
| The swimming pool must be outdoors. | | ~ | \checkmark |
| The swimming pool must not have a capacity greater than 35 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: solar (electric boosted). | | \checkmark | \checkmark |
| Outdoor spa | 1 | L | |
| The spa must not have a capacity greater than 2.5 kilolitres. | \checkmark | ~ | \checkmark |
| The spa must have a spa cover. | | \checkmark | \checkmark |
| The applicant must install a spa pump timer. | | \checkmark | \checkmark |
| The applicant must install the following heating system for the outdoor spa that is part of this development: solar (electric boosted). | | \checkmark | \checkmark |

| Fixtures and systems | Show on DA Plans | Show on CC/CDC Plans & specs | Certifier Check |
|--|---------------------|---------------------------------------|--------------------|
| 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 | 1 | | |
| 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. | | \checkmark | ~ |
| 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 | ~ |
| 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 | | | | | |
| | l construction (floor(s), walls, and ceilings/roofs) tion is not required where the area of new constr where insulation already exists. | | ~ | ~ | ~ |
| Construction | Additional insulation required (R-value) | Other specifications | | | |
| suspended floor with open subfloor: concrete (R0.6). | R0.9 (down) (or R1.50 including construction) | | | | |
| suspended floor above garage: concrete (R0.6). | nil | | | | |
| external wall: framed (weatherboard, fibro, metal clad) | R1.30 (or R1.70 including construction) | | | | |
| raked ceiling, pitched/skillion roof: framed | ceiling: R1.74 (up), roof: foil backed blanket (75 mm) | medium (solar absorptance 0.475 - 0.70) | | | |
| flat ceiling, flat roof: framed | ceiling: R1.58 (up), roof: foil backed blanket (75 mm) | medium (solar absorptance 0.475 - 0.70) | | | |

| Glazing rec | quirements | | | _ | | | Show on DA Plans | Show on CC/CDC Plans & specs | Certifier Check |
|--|----------------|---|--------------------------|---------------------------|---|---|---------------------|---------------------------------------|--------------------|
| Windows ar | nd glazed do | oors | | | | | | I | 1 |
| 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 satisfie | ed in relatior | n to each window and glazed door: | | | \checkmark | ~ |
| 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. | | | | | | | ~ | ~ | ~ |
| Pergolas with | polycarbonate | e roof or si | milar tran | slucent mate | erial must have a shading coefficie | nt of less than 0.35. | | \checkmark | \checkmark |
| 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. | | | | | | | | \checkmark | ~ |
| 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. | | | | | | ~ | \checkmark | ~ | |
| Windows a | and glazed | doors g | lazing re | quireme | nts | | - | | |
| Window / doo no. | or Orientation | Area of glass inc. frame (m2) | Oversha Height (m) | dowing Distance (m) | Shading device | Frame and glass type | | | |
| W0.01 | NE | 4.2 | 1 | 1 | none | timber or uPVC, single Lo-Tsol low-e, (U-value: 3.7, SHGC: 0.36) | | | |
| W0.11 | NE | 4.2 | 0 | 0 | eave/verandah/pergola/balcony >=450 mm | timber or uPVC, single Lo-Tsol low-e, (U-value: 3.7, SHGC: 0.36) | | | |
| W0.02 | NW | 2.5 | 1 | 1 | none | timber or uPVC, single Lo-Tsol low-e, (U-value: 3.7, SHGC: 0.36) | | | |
| W0.12 | NW | 2.5 | 0 | 0 | eave/verandah/pergola/balcony | timber or uPVC, single Lo-Tsol low-e, | | | 1 |

| 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) | dowing Distance (m) | Shading device | Frame and glass type | | | |
| | | | | | >=450 mm | (U-value: 3.7, SHGC: 0.36) | | | |
| W0.03 | NW | 4.9 | 0 | 0 | eave/verandah/pergola/balcony >=450 mm | timber or uPVC, single Lo-Tsol low-e, (U-value: 3.7, SHGC: 0.36) | | | |
| W0.04 | NW | 4.9 | 0 | 0 | eave/verandah/pergola/balcony >=450 mm | timber or uPVC, single Lo-Tsol low-e, (U-value: 3.7, SHGC: 0.36) | | | |
| W0.05 | NW | 4.9 | 0 | 0 | eave/verandah/pergola/balcony >=450 mm | timber or uPVC, single Lo-Tsol low-e, (U-value: 3.7, SHGC: 0.36) | | | |
| W0.06 | SW | 1.94 | 3.35 | 8 | eave/verandah/pergola/balcony >=450 mm | timber or uPVC, single Lo-Tsol low-e, (U-value: 3.7, SHGC: 0.36) | | | |
| W0.07 | SW | 1.94 | 3.35 | 8 | eave/verandah/pergola/balcony >=450 mm | timber or uPVC, single Lo-Tsol low-e, (U-value: 3.7, SHGC: 0.36) | | | |
| W0.08 | NE | 1.94 | 6 | 10.5 | eave/verandah/pergola/balcony >=450 mm | timber or uPVC, single Lo-Tsol low-e, (U-value: 3.7, SHGC: 0.36) | | | |
| W0.09 | NE | 1.94 | 6 | 10.5 | eave/verandah/pergola/balcony >=450 mm | timber or uPVC, single Lo-Tsol low-e, (U-value: 3.7, SHGC: 0.36) | | | |
| W0.10 | NE | 1.94 | 6 | 10.5 | eave/verandah/pergola/balcony >=450 mm | timber or uPVC, single Lo-Tsol low-e, (U-value: 3.7, SHGC: 0.36) | | | |

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.