

# dune dwellings

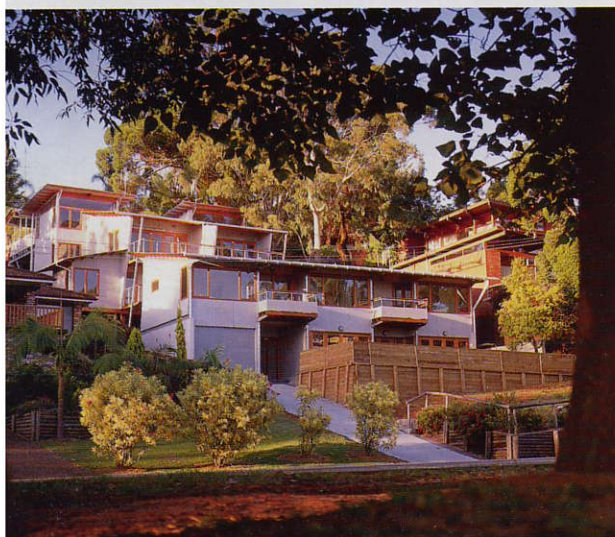
THIS TRIO OF CHIC BEACH HOUSES HAS BEEN DESIGNED TO SIT LIGHTLY ON THE SAND. JAMES RAY, JEFFREY M. ROSENTHAL, AND SHANE BLUE HAVE DEFIED LOCAL TRADITION BY BUILDING DWELLINGS THAT



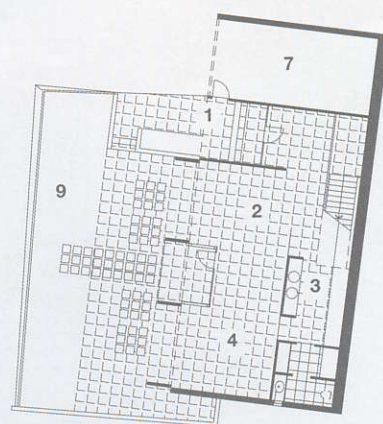
**NORTH FACING SLOPE OF A LARGE SAND DUNE. ARCHITECTS RACHAEL BOURNE  
HARMONISE SENSITIVELY WITH THE NATURAL ENVIRONMENT.**



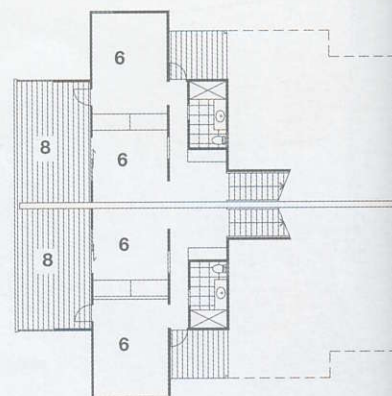




- 1 Entry
- 2 Living
- 3 Kitchen
- 4 Dining
- 5 Void
- 6 Bedroom
- 7 Garage/carport
- 8 Deck
- 9 Paved courtyard



Lower level







CLOCKWISE FROM TOP LEFT: The paved courtyard at the front of the foremost building; the walkway linking the bedrooms in the front dwelling; a bathroom in one of the rear dwellings; a kitchen in one of the rear houses; street view of the project.

**IT IS AN IRONY WHICH OCCURS** time and time again in regional areas. The natural environment is world class – unspoilt, rugged, beautiful – while the built environment is diametrically opposite. Uninspiring and intrusive, the buildings seem sadly at odds with the local climate and lifestyle: the houses blot an otherwise perfect landscape.

Architects Shane Blue and Rachael Bourne faced just this situation when they won the brief to design three houses overlooking a popular family beach in northern New South Wales. In the area, the existing dwellings are typically poorly planned with high levels of inadequately shaded thermal mass. Unwieldy and expensive concrete footings hold up heavy brick walls, and the over-scaled houses sit clumsily on what is essentially a series of large sand dunes.

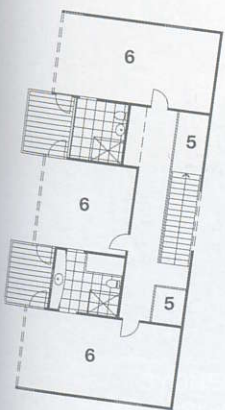
From the outset, Shane and Rachael consciously designed contrary to the established local style and fortunately the clients shared their ambition to achieve environmentally-sensitive design solutions. Factors considered were low life cycle cost of materials, solar passive heating, passive ventilation, retention of all storm water and minimisation of the overall impact of the project on the sandy site, which rises steeply from front to rear.

“The underlying principle for these buildings was appropriateness to site,” says Shane. “Our approach was to use an existing cut, made for a previous shack, and nestle a building in at the front of the site, while stepping the rear buildings down the slope utilising access from the top of the block.”

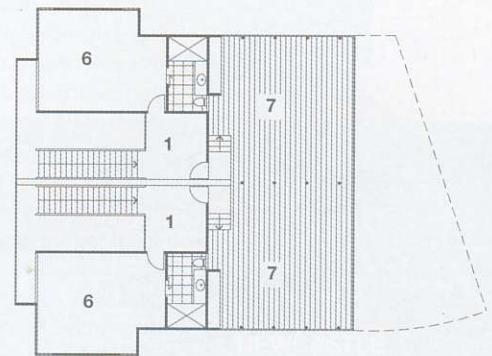
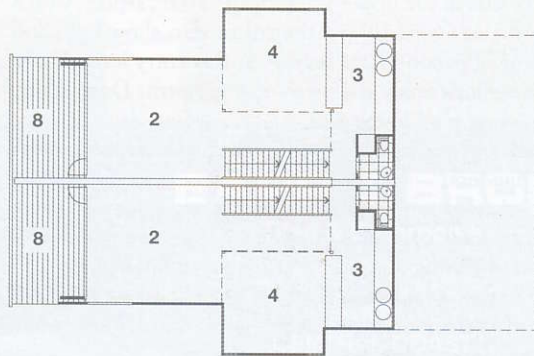
The three dwellings – a detached house at the front and a pair of residences at the back – have been designed to resonate aesthetically with the surrounding natural environment. Durable fibre cement sheeting, left in its raw state, combines with Colorbond feature panels and western red cedar windows and doors to create a rustic exterior needing little maintenance. The forms of the buildings have been broken down using decks and layering. Skillion roofs cascade down the site, emphasising the natural slope and reducing the overall bulk of the construction, while the simple, limited palette of materials creates a consistency between buildings.

The front dwelling has a corefilled cavity block wall to first level and a stud wall construction above, with the main floor and roof structure exposed galvanised steel. The rear dwellings are supported on driven timber piles, which were by far the most economical foundation method and caused minimum impact on the site, with loadbearing stud walls. The adjoining carport is suspended several metres above the ground to allow access from the rear street.

Inside, the living spaces have been designed for maximum flexibility and minimum care, with service zones to the south and living areas to the north. The lower house is a simple two-storey pavilion with ground level living areas opening onto a large north facing paved area, made private by a low level screen wall. The upstairs bathroom and bedrooms are accessed



Middle level



Upper level, rear dwellings only



#### ARCHITECT

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#### PRACTICE PROFILE

Currently a four person practice, mainly residential, some commercial projects

#### BUILDER

WR & RD McBean

#### CONSULTANTS

Engineer Stephen Savage  
Landscaping Stutchbury  
and Pape Interiors  
Bourne + Blue Architecture

#### PRODUCTS

**Roofing** Colorbond 'Gull Grey'; polyester insulation batts; reflective sarking **External walls** Colorbond 'Gull Grey' **Internal walls** Plasterboard; poplar plywood ceilings **Windows** Stegbar, oil finished western red cedar **Doors** Western red cedar; Stegbar bi-fold system for large openings **Flooring** Coloured Textipave concrete tiles; sisal carpet, brushbox t & g timber flooring **Kitchen** Abay round sinks; St George appliances **Bathroom** Caroma vanity basins; Fowler Ezyclean bathware **Heating/cooling** Wide eave overhangs **External elements** Textipave paving

#### TIME SCHEDULE

Design 12 months  
Construction 12 months

#### PHOTOGRAPHY

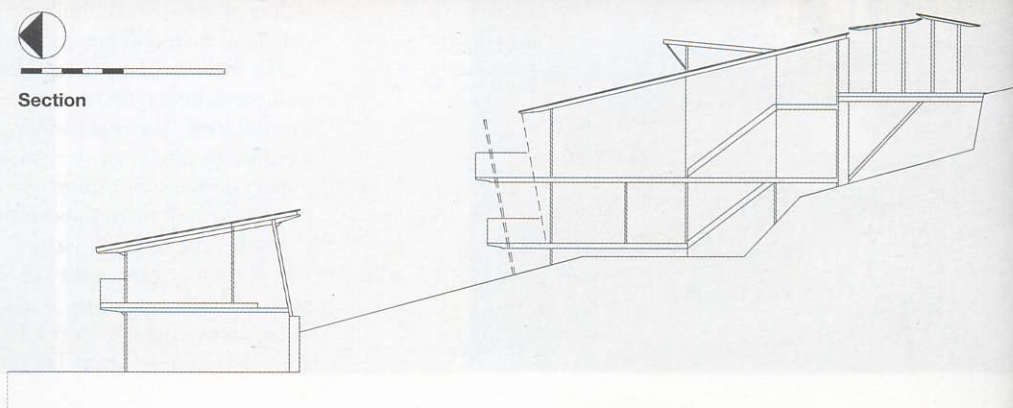
Gavin Blue

**THIS PAGE, LEFT:** The galvanised grate flooring to the rear carports allows light to filter through to the garden below.

**RIGHT:** Detail of balconies, rear building.



Section



via a stair along the south side of the house, which also doubles as a void illuminated by clerestory windows. A walkway with nautical stainless steel balustrades links the bedrooms.

The rear houses are accessed at the upper level through the carport, which has galvanised grate flooring and a partly translucent roof to allow light and water access to the planting at ground level below. At this entry level, 'look-out' bedrooms in both dwellings enjoy the views to the north. Downstairs, the middle level features open plan living with a north facing deck and the lower level offers bedroom space, adaptable to different needs by using movable wardrobes as room dividers.

With all the buildings oriented to the north, the decks and generous eaves are designed for maximum solar control so that the houses are sunny and warm in winter and shaded during summer. Particular attention has been paid to creating adequate cross ventilation. The lightweight structure of all the dwellings allows rapid cooling at night using simple ventilation, while retaining heat during winter via insulated walls and ceilings.

This project has set a new standard for sympathetic design and construction in the area. The sensitively orchestrated cluster of buildings contrasts tellingly with the neighboring concrete boxes, plonked clumsily on the dunes! **H**