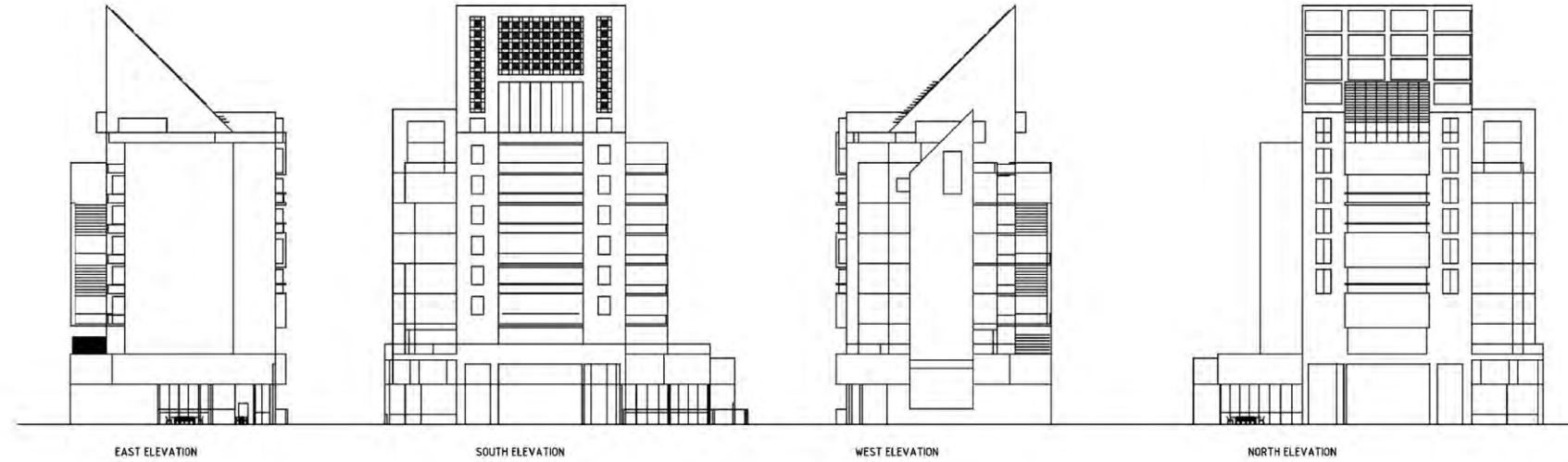


GATEWAY TO CHATSWOOD

S & S Malik Architects



Gateway to Chatswood

The project began with a careful planning study that looked at the site, defined user needs, and identified environmental goals. After analyzing the site location, solar angles, prevailing wind direction, potential views, and traffic circulation, this project presented both great opportunities and challenges. The building form is to play a chief role as a terrific positive from both an aesthetic and functional perspective. The project is a mix of commercial units at the lower floors and residential units on top.

Albert Avenue is on the boundary line between two different planning zones, Chatswood business zone on the north side and residential zoning on the south. Building height in the two adjacent zones is noticeably different. The project is located at the edge of the residential zone and council was prepared to be lenient in applying height controls with the aim of achieving community desire of a building that expresses a gateway to Chatswood. This provided the freedom to sculpt the building in a way that achieves community expectations and meets the demands of protecting the environment and reducing carbon emission.

Expressive of gateway to Chatswood

A 45° sloped roof balanced the height difference between the two planning zones by way of contrast in direction and generating visual attraction towards Chatswood (See street elevation below)

The council welcomed the opportunity to use a prominent building to demonstrate the importance of introducing energy efficient measures

Energy efficiency and reducing carbon emission

The concept of a sloped roof had the potential of achieving the demands of protecting the environment and reducing carbon emission in the following methods:

a) Natural Ventilation

Prevailing wind in the locality is mostly from south east and south west, the high level funnel shaped space at the highest point of the building is utilized as a wind catcher facing south and directing the wind down in the building towards the units at the lower levels, while the top floors are cross ventilated directly from south to north

b) Solar energy

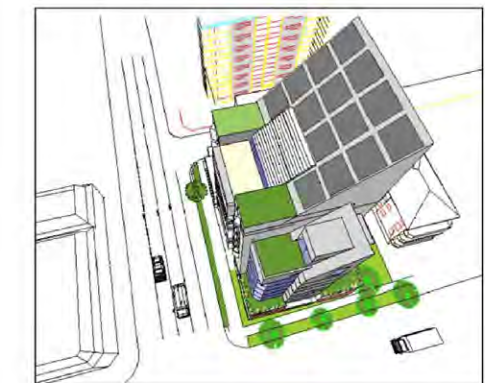
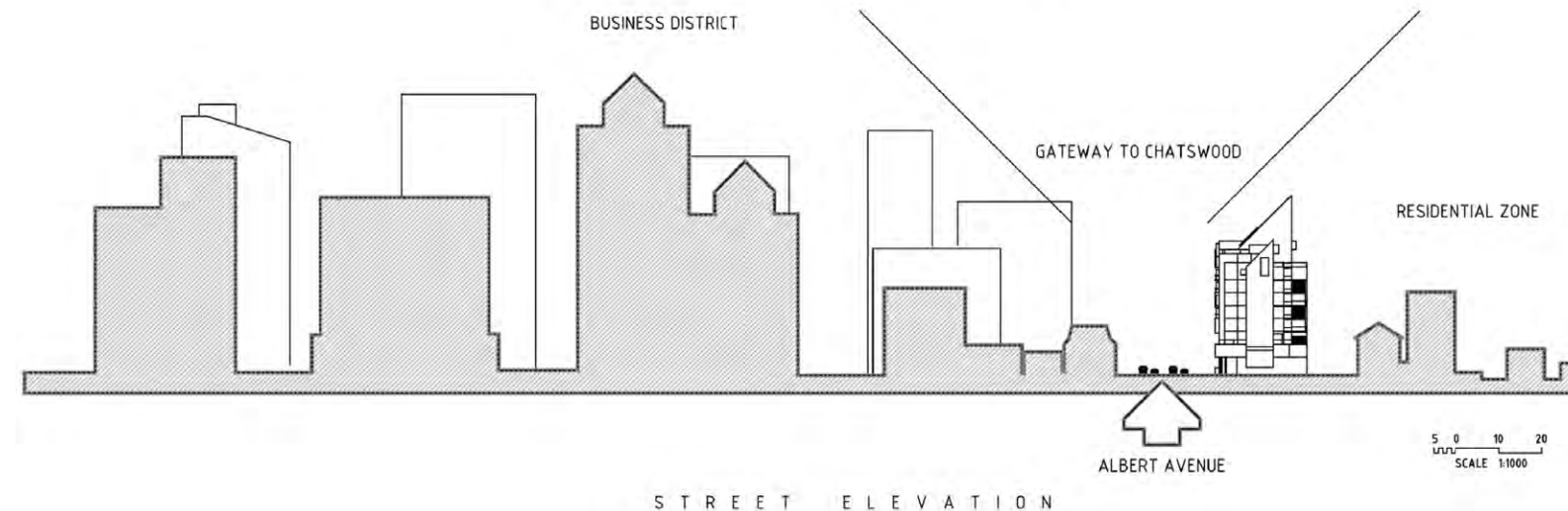
A sloped roof facing north is most efficient in harnessing sun energy through photovoltaic panels in addition to solar hot water panels. In winter the sun angle is most suitable with the 45° angled roof for Sydney latitude (34° South)

c) Insulation

The roof includes ventilated cavity for insulation between roof and the wind catcher

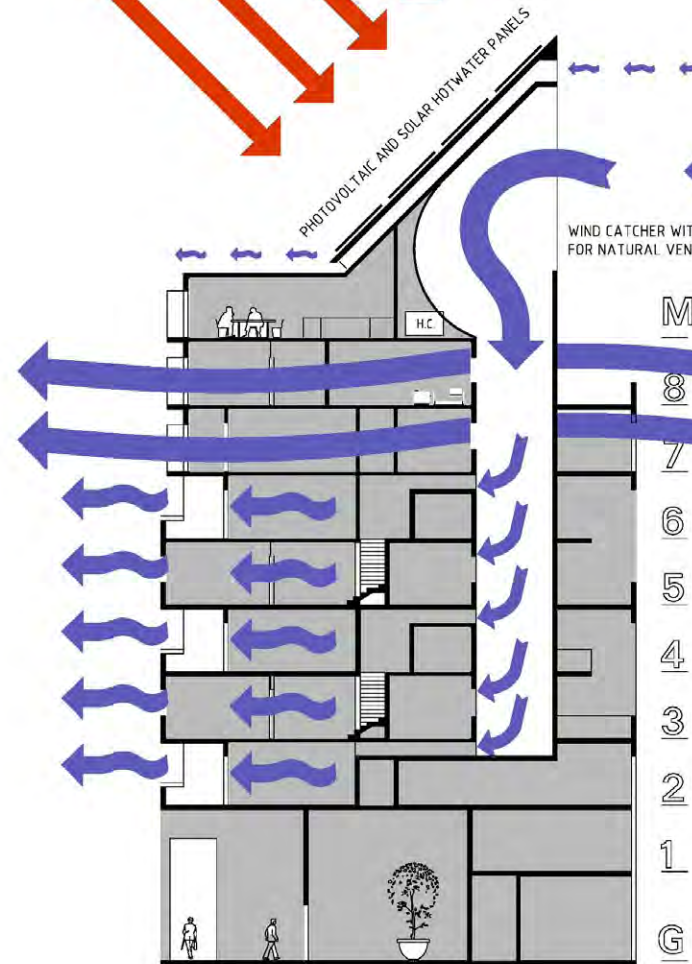
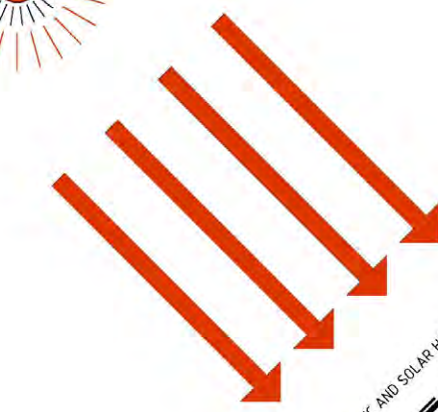
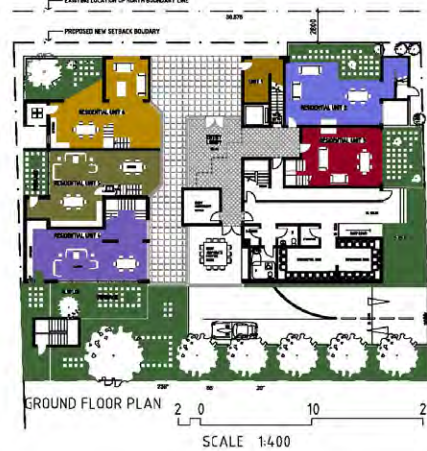
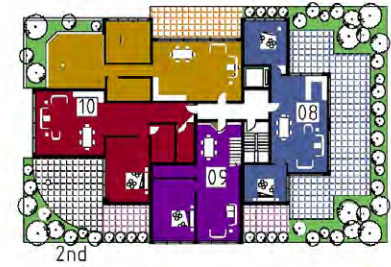
Green areas

Chatswood CBD lacks areas of natural plantation. Car parking for the project is sufficiently provided in the two storey basement under the building to allow for green areas at ground level in addition to providing green areas on all available roofs and terraces



GATEWAY TO CHATSWOOD

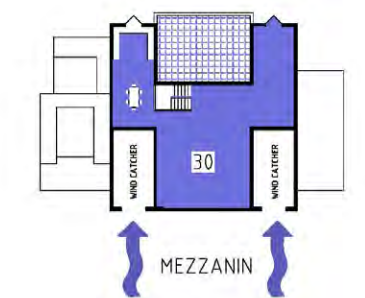
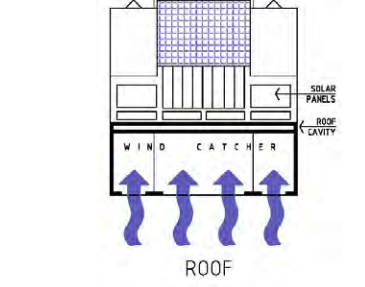
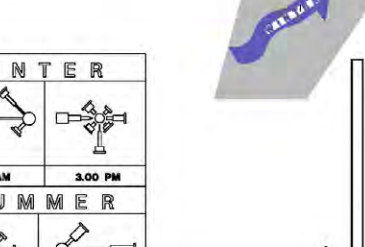
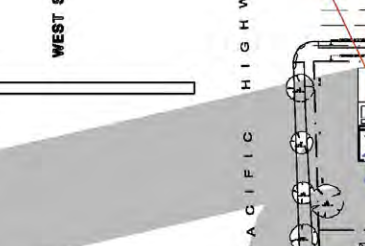
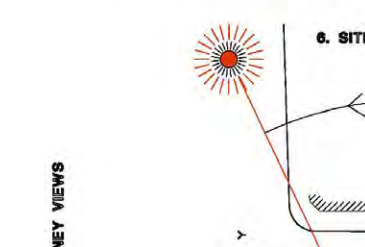
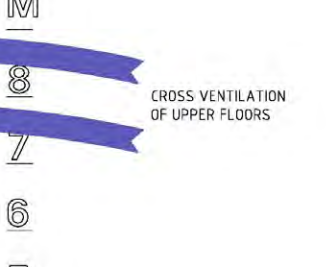
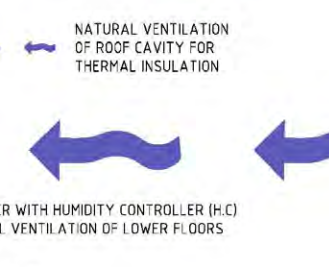
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TWO STORY UNITS ARE CROSSED OVER FOR CROSS VENTILATION

5th

SCALE 1:200



SOUTHERN PREVAILING WIND

WIND CATCHER WITH HUMIDITY CONTROLLER (H.C) FOR NATURAL VENTILATION OF LOWER FLOORS

CROSS VENTILATION OF UPPER FLOORS

WEST SYDNEY VIEWS

PACIFIC HIGHWAY

ALBERT AVENUE

ROOF

LAND FALL

CITY VIEWS

