KERIKERI POST & BEAM HOUSE

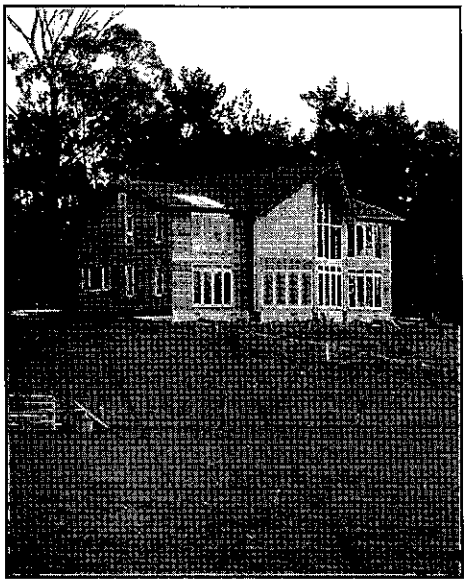
Architecture by Adrian Taylor
McIntosh Timber Laminates – Glulam System

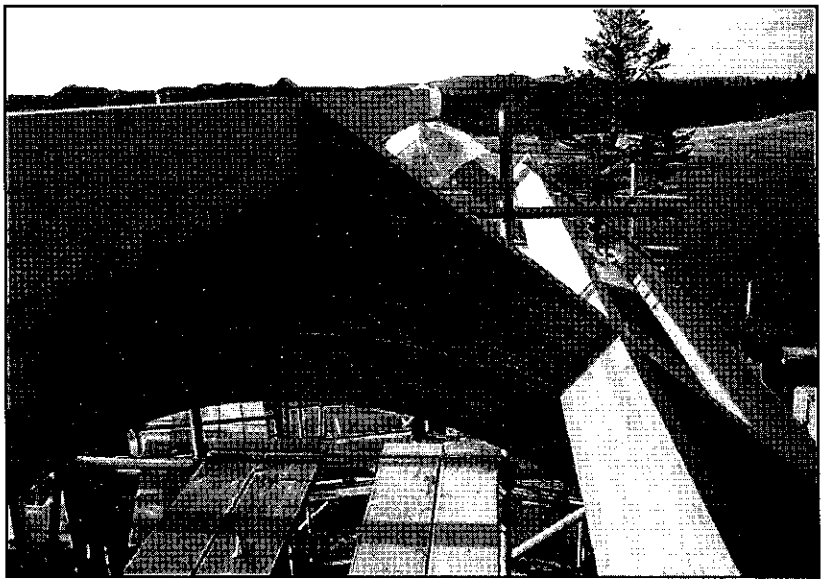
The inspiration for the design was the traditional English timber framed building – in particular the large open spaces of barn buildings. The stub beam & flitch plate connection design was arrived at in discussion with the structural engineer. A traditional pegged mortice & tenon was ruled out as not strong enough given that we were using the portal action of the completed frame to brace the structure (in part). The system gave a strong connection and made the assembly of the frame on site simpler.

Page 21 – The name of the author was not evident from the text. The author was Adrian Taylor, Architect and the project was his own house.

Front Elevation

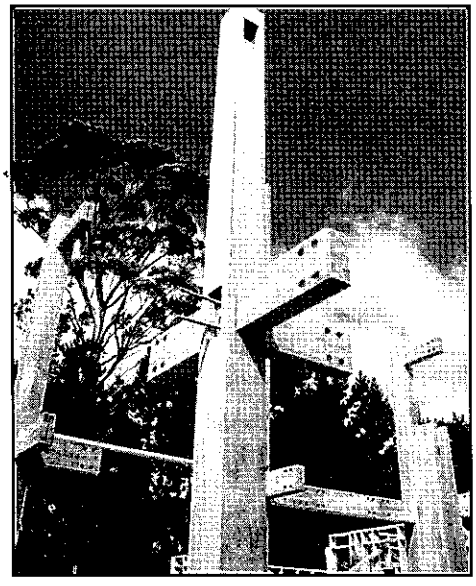
The almost finished exterior – balconies & decks still to be built

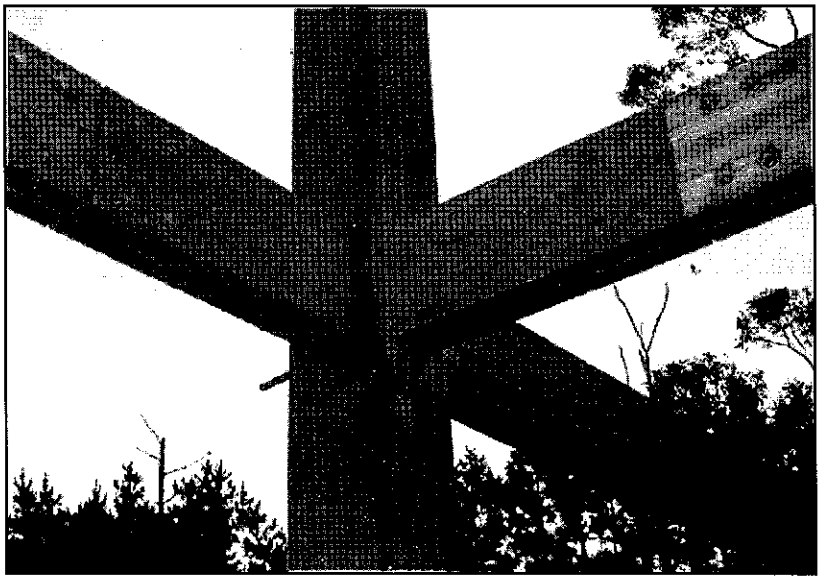




Glulam Truss

A close-up of the Glulam truss during construction with the ridge beam and underpurlins housed in The glulam truss above the central row of posts is to keep the view through the double height living area as open as possible. I had contemplated a king post truss but this option – arrived at in conjunction with the structural engineer – provided a more open view and better suited the contemporary style of the frame. This shows the double post arrangement where the prow window projects from the front of the building. The decision to direct glaze the returns was made during construction. To the left of the double post - at ground floor will be double doors between lounge & family living areas – at first floor will be wall.





Beam connections

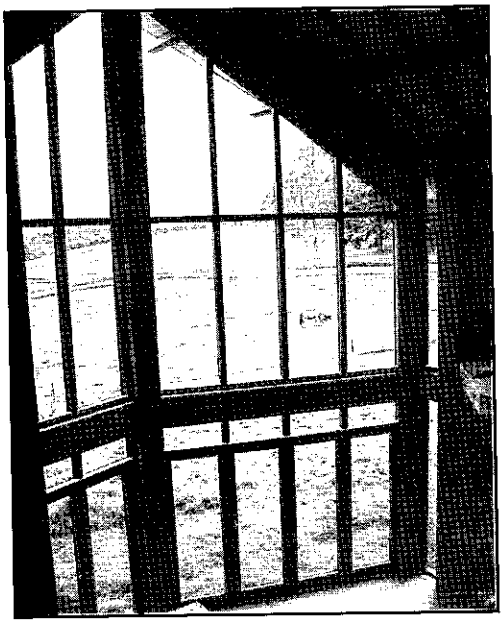
Again in the early stages of construction showing the flitch plate joints and stub beams in more detail.

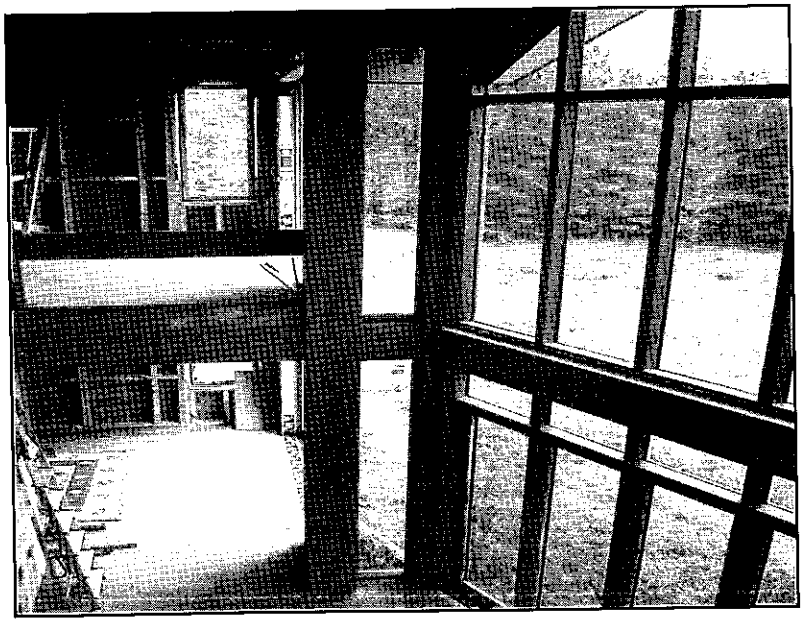
Truss inside

This one is taken from within the double height living space showing the beams at first floor floor level and the cantlievered gallery outside the master bedroom .At ground floor level it shows the open plan dining room & kitchen areas.

Masonry wall

Taken from within the double height living space showing the beams at first floor floor level and the cantlievered gallery outside the master bedroom. At ground floor level it shows the open plan dining room & kitchen areas. The concrete block masonry wall is there as a brace panel – needed in spite of the bracing achieved from the portal effect of the post & beam structure. The original scheme had posts at the external corners and at the mid point of the gable ends with beams between, but these were omitted as a cost saving exercise.





Prow

The internal view of the double height prow window to the open plan living area.

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