

□ Turning the brick veneer on the upper level inside-out created a distinctive appearance with energy benefits.

Inside built out to save energy

TO find a solution to a problem, sometimes you have to turn an idea upside down.

Or, as was the case with Perth architect Gary Baverstock, inside out.

Mr Baverstock, an expert in developing homes to suit the climate, designed this Fremantle house to reflect the style of the suburb and a comfortable living environment.

The house, by Nirvana Homes in association with Mr Baverstock, was built on a narrow block previously occupied by a small weatherboard dwelling.

It's unique because the upper level of reverse brick veneer is supported by a conventional double brick cavity wall.

The top storey's outer walls are timber framed with weatherboards of western red cedar. Reflective foil was fixed behind the weatherboard and the treated pine frame, and between the internal wall and the frame, a continuous layer of polystyrene insulation was installed.

"The use of brick inside and a suspended concrete slab for the upper floor had a purpose," Mr Baverstock said.

Apart from good acoustic separation between rooms, it

provided the correct amount of thermal mass for a climate-sensitive design.

"The use of both timber and a mass material created a superior wall thermally, from an insulation viewpoint and a position of good thermal storage."

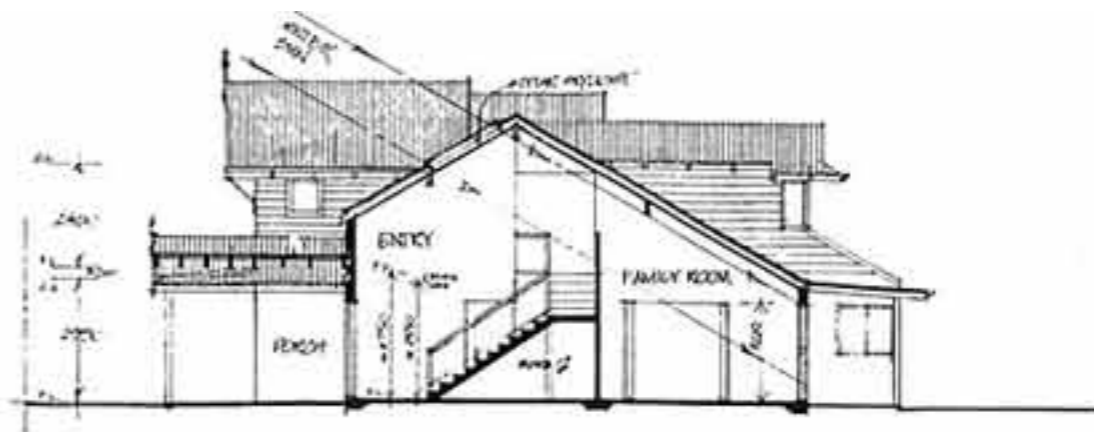
The extensive northerly glass was incorporated to ensure good exposure to the winter sun and a large easterly window was added near the kitchen to enhance collection of the morning sun to the rear living area.

Special slatted pergolas were designed to control the summer sun.

"The beauty of timber was chosen to suit the architecture of the locality," Mr Baverstock said.

"Previously, a timber-framed home of some heritage value had been removed so it was felt that the replacement had to recreate the aesthetics offered by the street."

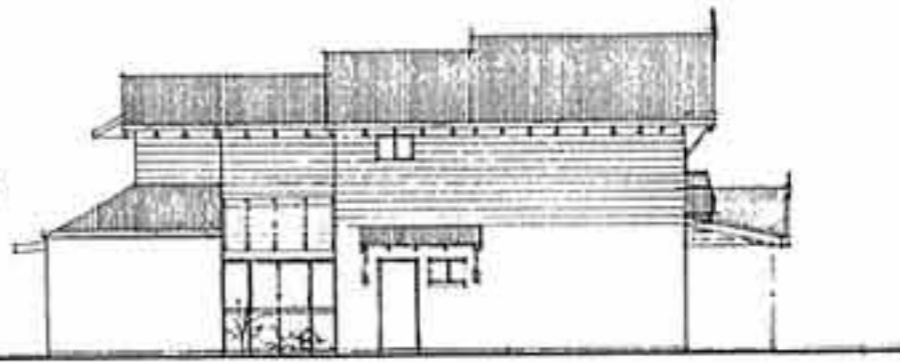
The house is up to five degrees warmer in winter and 10 degrees cooler in summer. It offers some answers on how to help the environment by lowering energy consumption — NEIL DOWLING.



SECTION A-A



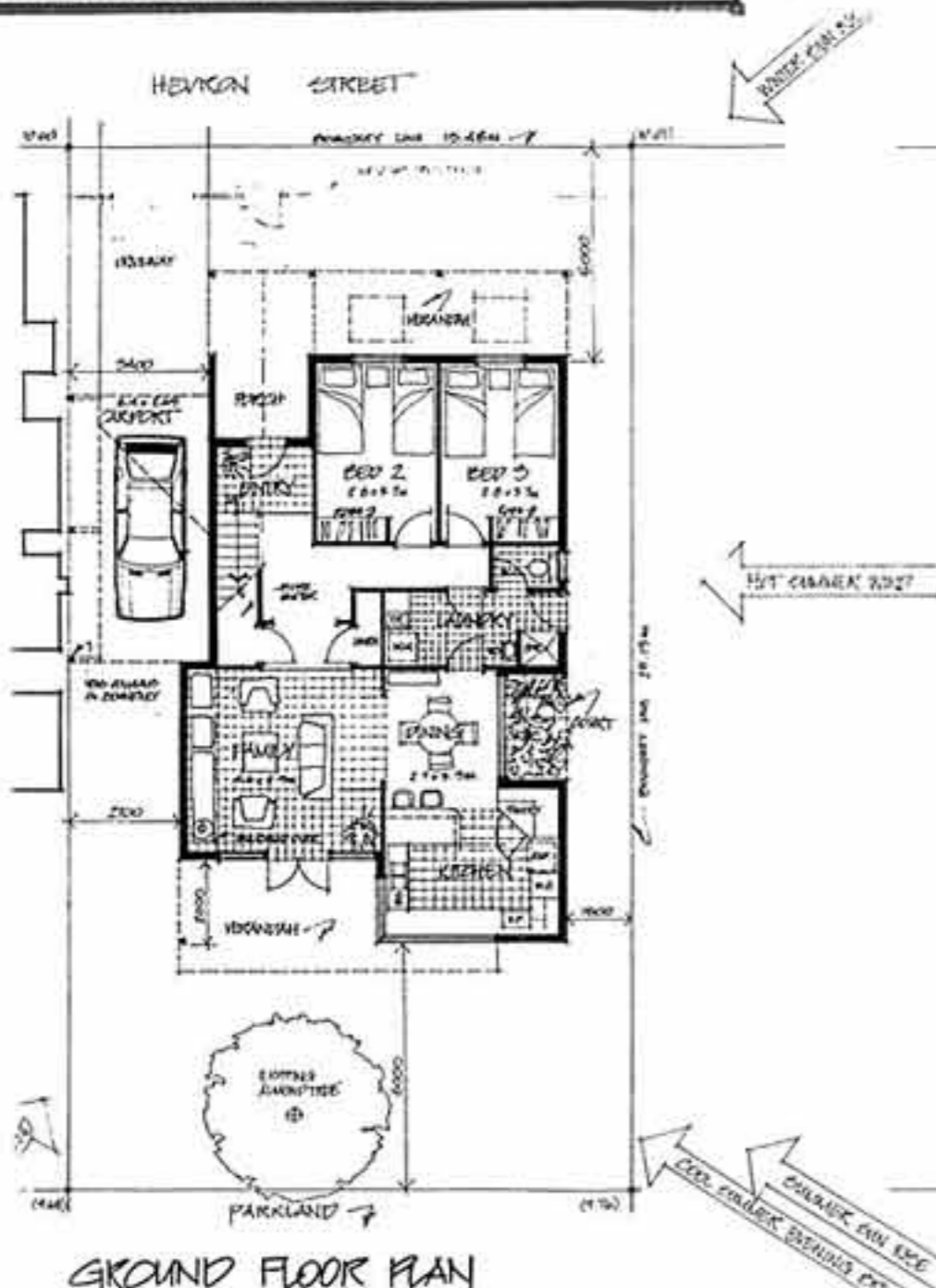
NORTH ELEVATION



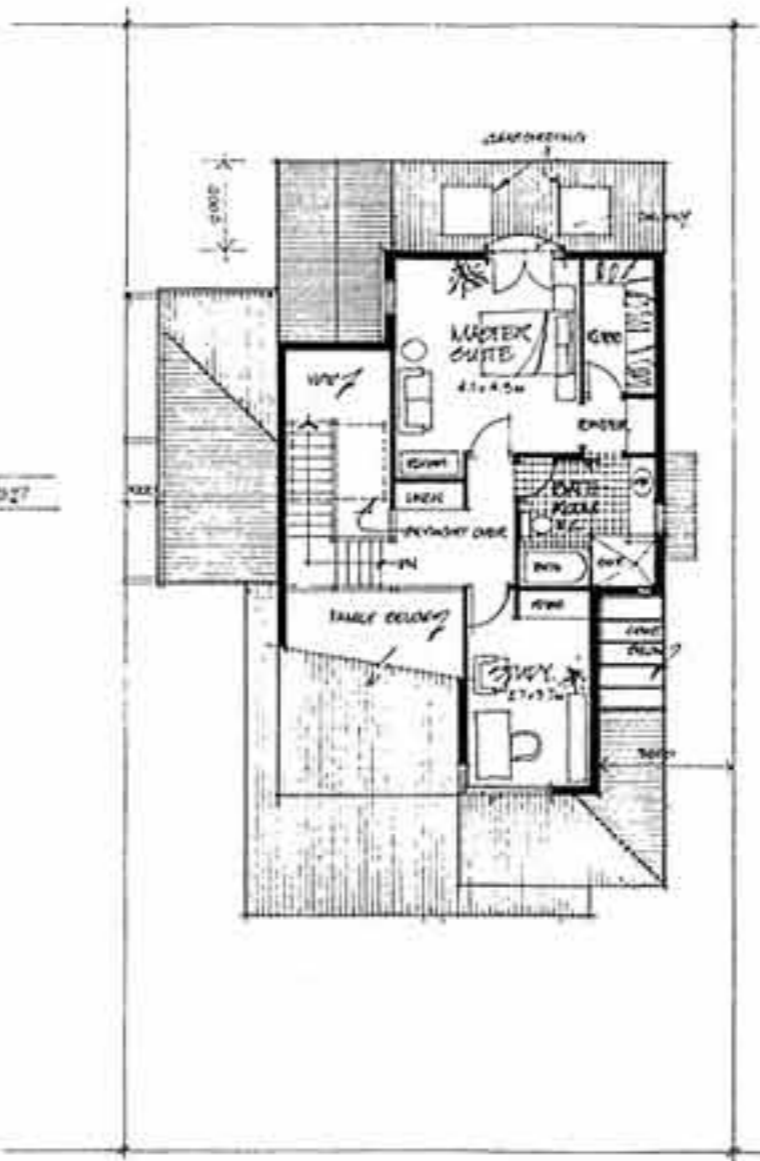
EAST ELEVATION



SOUTH ELEVATION



GROUND FLOOR PLAN



FIRST FLOOR PLAN

HEVRON ST