BREATHE
medium density housing
design and build competition
Christchurch 2013
Breathing new life into our central cities

Breathe - The new urban village project, Whakaaturanga Kāinga Nohoanga

Verney Ryan
Building a Better NZ conference – September 2014

Beacon

Creating homes and neighbourhoods that work well into the future and don’t cost the Earth

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Vision

To create an exemplar central city neighbourhood displaying medium density homes, based on sustainable design principles, to inspire and shape modern urban living in Christchurch
Perceptions and Fear

- cramped
- leaky
- body corporate
- poor quality
- poor amenity
- grey / soulless
- noisy
- no privacy
- parking woes
- unaffordable
- loss of lifestyle
- no pets
IN EVERY DIFFICULTY
YOU CAN FIND AN OPPORTUNITY
Demolitions Central Christchurch July 2012
106,000 ideas
Two Stage Design Competition

Stage 1 – Concept Design
Master plan and site concepts
October to December 2012

Stage 2: Detailed Design
Detailed designs
March to November 2013

Commence Build 2014 onwards
Select winning design & development consortia
Design Principles

Liveable
Affordable
Viable
Sustainable
Resilient
Innovative
Sense of place
Deliverable

Triangle Swindon, UK
Toolkit for change

- Beacon worked with MBIE and CCC to catalyse and facilitate the competition
- Developed toolkit based on experience
- Designed to assist organisations interested in pursuing similar design and build
- Developed to inspire and catalyse other demonstrations
Main toolkit areas

- Value Case – benefits of Design and Build
- Framing the Vision
- Partnerships and Sponsors
- Developing the Brief
- Running the competition
- Judging and Process
- From ideas to Demonstration
- Further resources
Key Lessons Learned

- Vision is key
- Land is Central
- Judging is Tricky
- Development is Complex
- Demonstration Delivers Change
- Ideas are Opportunities
Project drawing from Anselmi Attiani Associated Architects, Holloway Builders. Courtesy of Breathe - The New Urban Village project.
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Project drawing from ZEDFACTORY, ZEDPROJECTS, UNITED KINGDOM
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Project drawing from HALLION DESIGN LTD, ALL DESIGN LTD AND INFRATIL INFRASTRUCTURE PROPERTY LTD, NEW ZEALAND AND UNITED KINGDOM Courtesy of Breathe - The New Urban Village project
Heat will be provided by a central biomass boiler located in the energy centre heating either woodchips or wood pellets. Heat is transferred to dwellings via a related heat exchange to wet central heating systems using underfloor heating and radiators. This high temperature wet heating system will be compatible with the future Christchurch district heating network, whilst retained as back up in peak demand periods. Wood pellets are manufactured in New Zealand from managed forestry.

Central waste sorting system chutes linked to central storage units

A series of living roofs on upper levels are incorporated to create a mixture of low growing native plants and selected species positioned to create the notion of a naturally occurring landscape.

Twin cell water cylinders within each home and will provide approximately 60 to 70% of domestic hot water.

Community app enables monitoring of energy use on smart phone, with community noticeboard to organise group events.

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Partners

[Logo images of various partners, including Christchurch City Council, Ministry of Business, Innovation & Employment, Te Rūnanga o Ngāi Tahu, New Zealand Institute of Architects, CERA, Canterbury Earthquake Recovery Authority, New Zealand Institute of Landscape Architects, Energy Efficiency and Conservation Authority, and others.]
