# R-2000 Homes In Vancouver Tomorrow

**BRITISH COLUMBIA** 

### More of the Good Things We Have Today

Healthy indoor air quality with good ventilation and high performance equipment

Energy efficient & durable building envelope - windows, walls ...

Passive Solar Design & Flexible Design

Aging in place design & Multi-generation co-housing

Healthy, low maintenance, low life-cycle cost material

Integration with consumer education

Ground source heat pumps with Prewiring for Net-Zero Energy

Free-cooling for summer

Rainwater collection and management

Low-impact landscaping design

#### In Tomorrow's R-2000 Homes

We will see all of the above, plus

Variety of design to support sustainable lifestyles

Bountiful rain gardens

Different types of porous paving material

Grey water reuse

More choices of renewable material

Fluent integration with consumer education

R-2000 serving as demonstration for Built-Green Homes

### Rain gardens soak up urban storm water pollution

"Properly designed rain gardens can effectively trap and retain up to 99 percent of common pollutants in urban storm runoff, potentially improving water quality and promoting the conversion of some pollutants into less harmful compounds", according to new research published in the 2006 Feb. 15 issue of the American Chemical Society journal, Environmental Science and Technology.

http://cleanwater.uwex.edu/pubs/raingarden/rgmanual.pdf

Rain Gardens are:

affordable, easy-to-design, pleasing to look at

are designed to replicate the natural water cycle that existed before roads and other

impervious surfaces were constructed significantly reduced concentrations of nitrates, ammonias, phosphorous and other

pollutants reaching storm drains can be tweaked with a permanent wet zone to convert harmful nitrates into nitrogen gas

For more information about designing and constructing rain gardens, visit http://cleanwater.uwex.edu/pubs/raingarden/rgmanual.pdf

*More of* ..... Main floor powder rooms designed to be readily convertible to Accessible Shower Rooms to facilitate aging in place and the caring of elderly family members





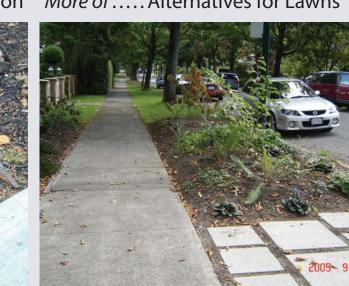
More of ..... Bamboo Flooring-harvesting of bamboo once every 4-5 years instead of cutting down trees.





More of ....

Use of material recycled from demolition *More of* ..... Alternatives for Lawns



More of ..... Boulevard Gardens



http://www.raingardens.org/Create\_A\_Garden.php

Grass Pavers at vehicle access



More of ..... Boulevard Gardens & Waterwise Gardening

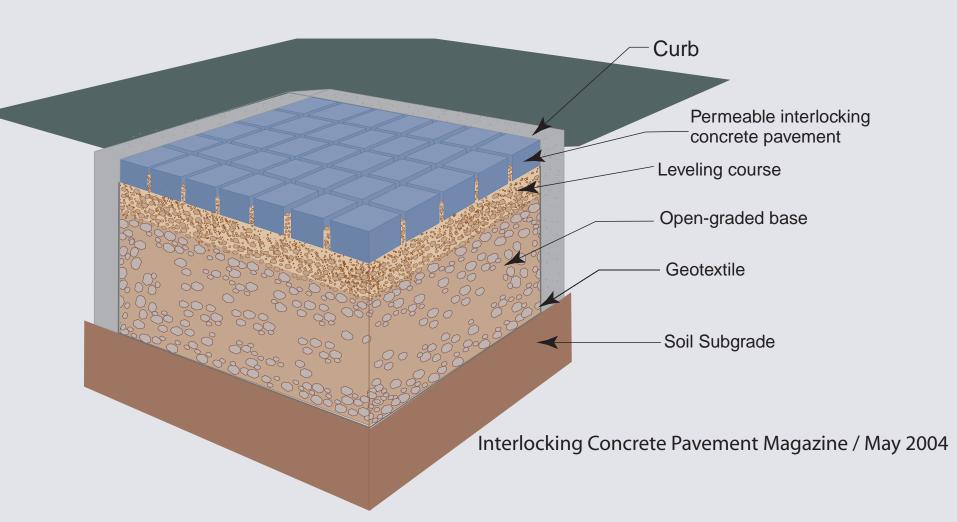
Design-Build Contractor: WISA Healthy Homes

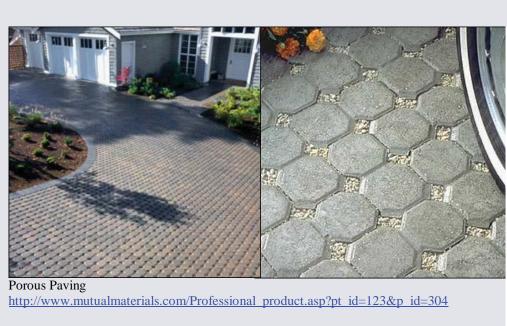


Richard Kadulski Architect

**Richard Stevenson Associates** 

## An R-2000 Home in First Shaughnessy









## R-2000 Retrofits in Vancouver - designed, evaluated, built, tested and certified R-2000

