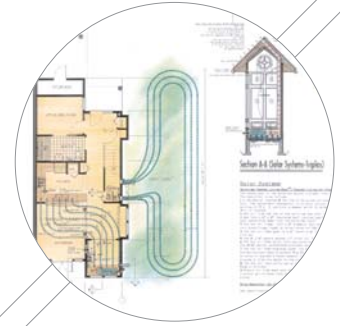


# Building A Sustainable Future



## SUSTAINABLE ENVIRONMENTAL DESIGN FEATURES

### Environmentally Responsible LOW IMPACT ON THE ENVIRONMENT

- Uses clean, pollution free renewable energy sources
- Solar, wind and geo thermal systems conserve energy and resources
- Uses building products that require less energy to manufacture and recycled materials
- Local lumber from ISO and SFI certified sustainably managed forests
- Efficient site planning results in smaller building footprint
- Uses existing parcelled and serviced land
- Balanced environmental carrying capacity
- Energy efficient systems result in fewer greenhouse gas emissions
- Water efficient plumbing
- Rain water collection systems for irrigation and water closets
- Hard surface areas minimized - drives, sidewalk, patios

### Community Oriented REFLECT NEEDS OF THE COMMUNITY

- FlexHousing™ design provides safe, comfortable housing for Elders, growing families and disabled
- Accessible main floors c/w bedroom for disabled, Elders
- Integrated community design process with extensive participation
- Traditional design elements in architecture and landscaping reflect community's culture and heritage
- Self construction process
- Local trade and local supplier participation
- Seabird Island First Nation members trained to build housing, supporting local economy
- Variety of housing types: townhouse, duplex, single family

### Healthy for Occupants HEALTHY HOUSING™ PRINCIPLES, ACCESSIBLE

- Non-toxic building materials, including several new products: non off-gassing roofing membrane, synthetic recycled plastic sill plates and synthetic strapping (alternate to pressure treated wood)
- New mould-resistant drywall
- New formaldehyde-free insulation
- Low-emission paints
- Engineered hardwood, polished concrete and tile floors reduce off-gassing
- Cabinets and shelves made from materials that do not emit formaldehyde or other harmful vapours
- Lead-free faucets
- High efficiency fans help prevent moisture build-up and mould growth
- Rainscreen technology handles moisture and helps prevents mould growth
- Natural daylighting

## HARNESSING SUN, WIND, EARTH ENERGIES

### Energy Efficient Buildings and Systems POWERED BY SUN, WIND AND EARTH

- Homes oriented to the south to take advantage of sun's energy
- Solar energy preheats water
- Metal roofs provide solar heat
- Solariums retain heat (passive solar), offer year-round gardening
- Earth Tubes™ preheat/cool incoming outside air
- Air tubes circulate hot air from roof and solarium to under slab
- Heat is constantly recycled throughout the house
- Radiant floor heating system eliminates need for a standard furnace
- Wind generators supply supplemental power
- Well insulated building envelope
- Energy-efficient appliances, lighting fixtures, windows and doors

### Cost Effective AFFORDABLE TO CONSTRUCT, OPERATE AND MAINTAIN

- Higher density buildings (townhouse, duplex in addition to single family) reduce overall building, land and infrastructure costs
- Standard construction practices (2" x 6" wood frame, trusses, slab-on-grade)
- FlexHousing™ design reduces future renovation costs
- Low maintenance costs due to durable materials and finishes and ability of community to do most repairs
- Lower heating and electricity costs due to energy efficiency; solar orientation of homes will reduce annual heating costs

### Durable and Resource Efficient QUALITY, LONG-LASTING BUILDING MATERIALS

- Homes have longer lifecycle than previous typical homes
- Durable building materials (metal roofing, rough-cut cedar siding, logs, concrete and wood flooring, wood counters)
- Multi-functional elements: concrete finished floor stores heat
- Metal roof provides long-lasting protection and solar heat. Solariums for growing, living and heating. Earth tubes pre-condition air, both heating and cooling
- Water-efficient plumbing fixtures (low-flow toilets)
- Modular construction reduces construction waste
- Recycled building materials (plastic lumber for sill plates and strapping, refinished telephone/power poles for interiors, carports and carvings, recycled steel in metal roofs, high recycle content insulation)
- Indigenous building materials (gravel, wood, logs, river rock)
- Use of local suppliers supports local economy
- Drought-tolerant plantings require less irrigation
- Increased housing density and a variety of housing types maximize land use
- seven units use only four standard-size lots
- Units can be easily converted to provide more housing units without using more land



THE SEABIRD ISLAND  
SUSTAINABLE COMMUNITY DEMONSTRATION PROJECT  
INTRODUCES NEW ENVIRONMENTALLY RESPONSIVE, HEALTHY AND  
ENERGY EFFICIENT CONSTRUCTION METHODS AND PRODUCTS TO FIRST  
NATIONS, RESIDENTIAL BUILDERS AND COMMUNITIES ACROSS CANADA.

THE HOMES ARE DESIGNED TO BENEFIT FROM SOLAR,  
WIND AND EARTH ENERGY.



*As the elders remind us, "we did not inherit the earth from our ancestors, we are borrowing it from our children."*

