



Middlesex Municipal
Day
April 26, 2017

MIDDLESEX CENTRE



**2012-2017
Strategic
Plan**

Promoting
environmental
initiatives

Middlesex Centre will become an environmentally sustainable green community that diminishes its impact on local surroundings.

Green Builder Recognition Program



Green Builder Recognition Program

How to encourage 'Green Building' ...

- Financial rewards??
 - DC Reductions?...no
 - Building Permit Fees Discounts?...no
- Public Recognition

Green Builder Recognition Program

Accumulate Points from Sustainable and Efficient
Technologies and Materials

- Points awarded by categories:
 - Sustainable Construction Techniques
 - Energy Conservation
 - Water Conservation
 - Indoor/Outdoor Air Quality
 - Waste Management Initiatives
 - Additional Items

Green Builder Recognition Program

Point Summary Checklists



Sustainability Checklist Residential Building / Development

Project Location: _____
 Applicant Name: _____

SUSTAINABLE CONSTRUCTION TECHNIQUES

	Points	Score	Details
LEED	25		
Built Green, Green Globe, or Other (provide details)	25		
			Subtotal (25 Total Points)

ENERGY CONSERVATION

	Points	Score	Details
Will LED lighting installed in entire unit	2		
Will "smart grid" technology be installed or implemented (remote sensor techniques)	2		
Will the building be "solar ready"	3		
Will PV solar panels installed onsite	2		
Will a hot water recovery system be installed (ex. Powerpipe)	2		
Will a "Green Roof" be installed	2		
Will a tree be planted on south or west side of building to provide shading of building	2		
Will extra-large (24"+) overhangs be constructed on the south or west side of building for shading	2		
Will window awnings be constructed to increase shading	2		
Will window energy efficiency be increased to exceed current energy requirements	2		
Will insulation values be increased to exceed current energy requirements	2		
			Subtotal (25 total points)

WATER CONSERVATION

	Points	Score	Details
Will a onsite leaching pit be installed	2		
Will a grey water system for recycling water within the building be used	3		
Will building or property be equipped with rain water harvesting techniques	3		
Will pre-heating water technology be installed	2		
Will pervious concrete be utilized in building process to control storm water	2		
Will Xeriscaping or drought resistant landscaping be done	2		
			Subtotal (18 total points)

INDOOR / OUTDOOR AIR QUALITY

	Points	Score	Details
Will a green driveway be installed (nurf blocks)	2		
Will a rear yard tree be planted	2		
Will a HRV / ERV be installed	2		
Will enhanced outdoor ventilation be installed in the building	2		
Will low VOC's materials be installed / used in the building (paints, carpet stains, sealers, etc)	2		
Will there be any additional garage pollution protection (operable window in garage to exterior)	2		
			Subtotal (12 points total)

SUSTAINABLE CONSTRUCTION METHODS

	Points	Score	Details
Will ICF construction be used (3 points per level)	3		
Will geothermal renewable energy source be installed	2		
Will lumber used for construction come from a sustainably harvested source	2		
			Subtotal (9 points total)

WASTE MANAGEMENT INITIATIVES

	Points	Score	Details
Will construction material be recycled or diverted from landfill?	2		
Will any reclaimed materials be used onsite as part of building process?	2		
Will separation of waste at source be practiced on site? (will non-recycled material be separated from recycled material)	2		
			Subtotal (6 points)

ADDITIONAL DETAILS / ITEMS

	Points	Score	Details
			Subtotal

Date Received: _____
 Applicant Name: _____
 Signature: _____

Approver: _____ Date: _____
 Comments: _____

Sustainable Construction Techniques

- Automatic 25 points if applied for a recognized program such as:
 - LEED
 - Green Globe
 - Built Green
 - Energy Star
 - Other



Examples of Energy Conservation

- Exceed Insulation Req.
- Exceed Window Req. + tint
- Solar Panel ready or Installed
- Electric Car Charging Station Rough-in



Examples of Energy Conservation, cont.

- Insulating Concrete Form Foundation
- LED Lighting
- Shade Tree on West Face



Examples of Energy Conservation, cont.

- Solar Tube Lighting
- Drain Water Heat Recovery



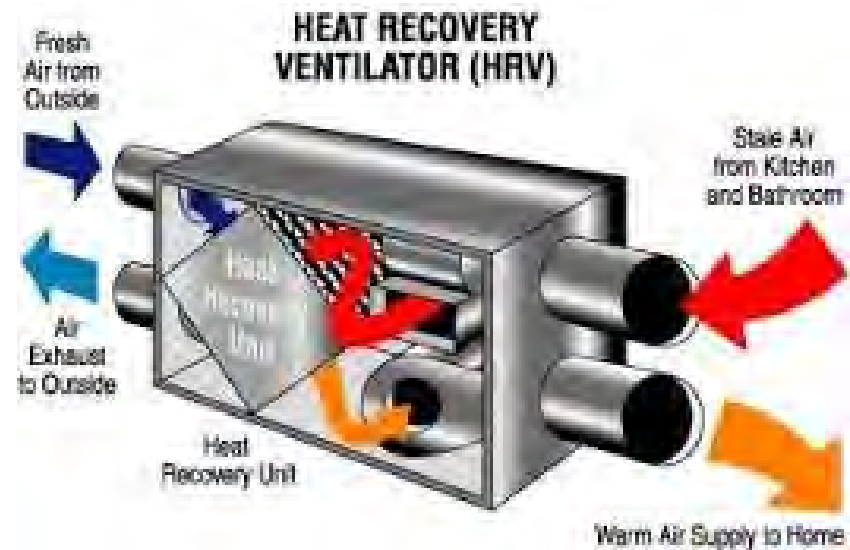
Water Conservation

- Onsite leaching pit
- Greywater Recycling
- Pervious Concrete
- Rainwater Harvesting
- Preheating Hot Water
- Tankless Water Heater



Indoor/Outdoor Air Quality

- Exterior Window in Garage to reduce pollution and allow natural light
- Low VOC Materials indoors (ie: Paints, Carpeting, Stains)
- Rear Yard Tree
- HRV



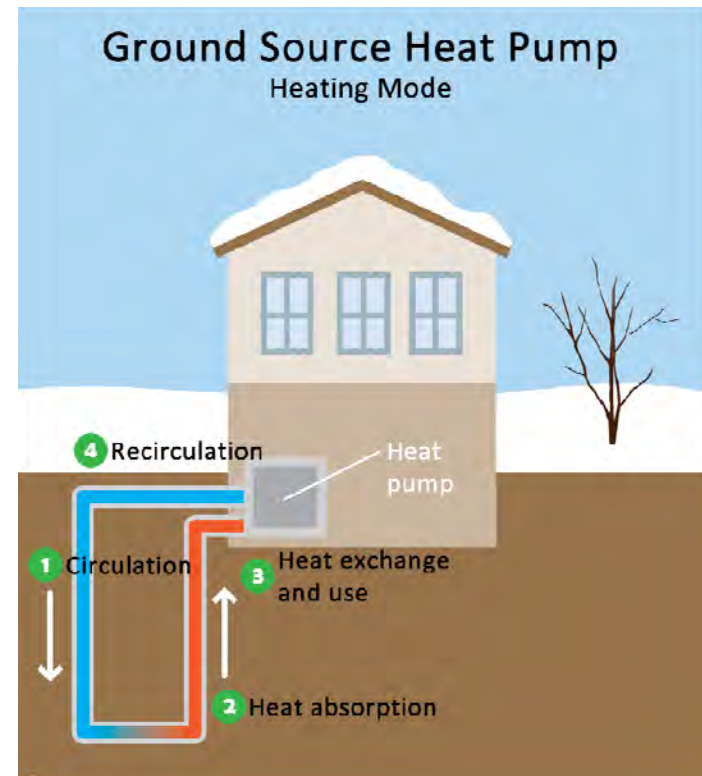
Sustainable Construction Methods

- Structurally Insulated Panels
- Use of reclaimed materials such as barn wood beams or bricks



Sustainable Construction Methods

- Lumber Sustainably Harvested
- Geothermal



Waste Management Initiatives

- Separation of Wastes
- Recycling and diverting from landfill



Green Builder Recognition Program

- Annual Recognition:
 - Green Builder Recognition at year's end
 - Website update
 - Green page
 - Green Links
 - Builders who've built green



2016 Recipients



 **Wall to Wall
Construction**

 **Riverstone
Design &
Build**

 **Sifton
Properties Ltd**