



## **EVEN THE DIRT GOT RECYCLED**

Main Street Landing in its excavation process of the site removed a tremendous amount of soils. This material was reused to help upgrade the existing Burlington Bike Path.





## **HISTORIC DESIGN**

Main Street Landing created a building that is durable and long lasting.

- We used stone and brick with a copper roof.
- We used Pella Windows with high performance glazing to minimize energy use and to improve utilization of daylight. Main Street Landing's windows open to allow for fresh air.





## **ENVIRONMENTAL PRINCIPLES**

Main Street Landing's environmental principles are more stringent than the U. S. Building Council's LEED criteria.

We also use hard surfaces wherever possible for our flooring. When carpet is required, we install enhancer back carpet because there is no off-gassing.

We consistently use no-voc products unless they are unavailable in a no-voc. In that instance, we always stay within LEED criteria.





## **MINDFUL DISPOSAL**

Main Street Landing insured that all materials brought on to the construction site were properly used and disposed of.

After the use of these products everything was disposed of properly so that no pollution sources entered the land fills or the storm water system.





## **BREATHE EASY**

Under LEED's Minimum Indoor Air Quality Performance and Increased Ventilation, Main Street Landing's building meets and exceeds the ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers) Code 62.1-2004 for Ventilation/Fresh Air by more than 30%.

The use of heat recovery where appropriate minimizes the additional energy consumption associated with higher ventilation rates. This increases the building's energy efficiency and occupant health.





## **RECYCLED BUILDING MATERIALS**

Main Street Landing gave priority to building materials with high post consumer and post industrial recycled content. Regional materials (Vermont) used to construct the building were 10% extracted, processed, and manufactured locally.





## **CONSTRUCTION WASTE RECYCLING**

Main Street Landing diverted over 80% of construction waste to recycling during our construction of this project. This saved valuable landfill space, and also provided this waste to be transformed into recycled products.





## **ELECTRIC METERS**

All building tenants have separate electric meters. This allows them to monitor their own electrical use which they pay for, so ultimately, they will conserve their energy use.





## **PRINCIPLES**

Main Street Landing was one of the earliest developers in the country that utilized social and environmental principles to guide their projects.

Our social and environmental principles were developed in the 1980s. These principles guide all of our design, pre-construction, construction, tenant fit up, and maintenance projects





## **LOCAL BUILDING MATERIALS**

Main Street Landing purchased a majority of all building materials within a 500 mile radius of Vermont.

These products were manufactured and distributed within 500 miles which helps reduce transportation costs, pollution, energy usage, carbon emissions, and supports whenever possible our local economy.





## THE SKINNY PANCAKE

In every choice they make, the Skinny Pancake asks “how can we minimize our environmental impact?”

During the build out of their restaurant, they sought to use reclaimed material whenever possible. On a daily basis, they source their food from the local economy whenever possible. Folks who call ahead for a take-out order will leave with compostable boxes, forks & knives. And if customers choose to dine in but cannot finish their food, Skinny Pancake makes sure those food scraps find their way to the **Intervale Compost**. They even host a networking meet-up called “Green Drinks” on the last Tuesday of every month!

Visit [www.skinnypancake.com](http://www.skinnypancake.com) to learn more!





## **HEATING AND COOLING SYSTEM**

The design of the building's core mechanical equipment allows for a variety of occupancies in the building (office, retail, restaurant, and performing arts), effectively cooling and heating different locations in the building at the same time.

The chiller and cooling tower were chosen primarily on their part-load energy ratings (since maximum occupancy is not a common occurrence). The fans and pumps are provided with variable speed drives for maximum energy savings. Air handlers have economizer capabilities allowing outside air to cool larger spaces (rather than running the chiller system). There is a water-side economizer, allowing energy fan savings at the cooling tower by not running the cooling tower fans since outside air effectively cools the water loop temperature.





## **EFFICIENCY MONITORED**

For this project, Main Street Landing hired an energy commissioning agent. This person spent their time verifying that all the building's mechanical systems were installed and operating as designed.

Main Street Landing plans to have their building commissioned on an annual basis to insure the maximum efficiency of all systems.





## **TENANT COMFORT AND EFFICIENCY**

Controls systems are of utmost importance for this project.

Automated controls not only provide for energy efficiency, but also allow for monitoring and continuing examination of the systems as a whole. The mechanical contractor installed the system controls and worked closely with Main Street Landing to provide a user-friendly, maintainable system designed for longevity. Automated Logic Controls were installed, with the local distributor and factory — trained personnel located within five miles of the building. Main Street Landing is able to monitor and adjust all building controls through their DDC system on their office computer throughout the day, making adjustments as needed.





## **EFFICIENT LIGHTING**

The indoor lighting is designed to meet strict energy requirements. Motion and Daylight Sensors are used throughout the building.





## **EFFICIENT BOILERS**

Main Street Landing installed two gas-fired Buderus boilers that are over 94% efficient.

Modulating burners will allow the boilers to stage on and save gas, again through the building's controls system. Main heating piping is located in strategic locations for various tenant requirements, as necessary.

The main intent is to utilize a variable air volume box for each zone as required by tenant, which allows tempered air to flow to that zone on a scheduled basis through the controls system.





## **NON-TOXIC CLEANING PROGRAM**

Main Street Landing has a cleaning policy that insures that all products used in the building are “green seal” certified and non-toxic.





## **CLEAN BUILDING MATERIALS**

The construction air quality management plan insured that during construction all materials used had very low, if any, off gassing of toxic fumes.

This was done through the specification of all construction materials that were used, for instance: Adhesives, sealants, paints, coatings, carpet systems, composite woods, etc.

All HVAC ducts were sealed daily to prevent any dust particles from entering the system. When the project was swept clean at the end of the day, we used a “sweeping compound” which virtually eliminates any dust floating in the air.





## **OZONE PROTECTION**

Main Street Landing obtained the fundamental refrigerant management credit from LEED which means there are no CFC-based refrigerants used in the building's mechanical system. CFCs are “chlorofluorocarbons” which have been implicated in the accelerated depletion of the ozone in the Earth's stratosphere.





## **ENERGY CONSERVATION**

Through the design of the building's envelope, insulation, windows, HVAC, lighting, and other systems to maximize energy performance, Main Street Landing achieved a 14.2% better performance than a building designed to meet stringent ASHRAE 90.1-2004 energy regulations.





## **WATER CONSERVATION**

Billions of gallons of water are used annually to flush toilets in the United States.

Main Street Landing installed waterless urinals in their men's restrooms. These help mitigate consumption of natural resources, and the construction of new infrastructure to treat and transmit potable water and wastewater. These waterless urinals lower utility charges, improve rest room hygiene, and decrease fixture maintenance.

Our urinals save one to five gallons of water with each use.





## **COOL SPACE**

Main Street Landing's building is designed with an economizer system that provides free cooling anytime the outdoor temperature is below the required system supply temperature.

If any inside spaces need to cool down, this system will bring cooler outside air into these spaces. This reduces our energy usage and costs.





## **INDOOR POLLUTION REDUCTION**

Main Street Landing designed and installed entryway metal grates and walk-off mats. The outdoor entryway grates are designed to keep outdoor grit, grime, and dirt particles from entering the building. The indoor walk-off mats provide additional protection.

Both are important in our effort to insure the best indoor air quality possible.





## **TEAM APPROACH**

Main Street Landing created the team approach to design, development and construction by bringing together the architect, engineers, and contractors to produce the best possible project and to maintain our strict budget for construction in order to provide commercial space for local companies at an affordable rate.





## **INNOVATING DESIGN**

Main Street Landing created public space to support the arts and mixed-use development. Thirty percent is common area, and this does not include the performing arts space.

By melding together performing arts and commercial, we have insured that thousands of people every year, not just our tenants, enjoy this building.





## **HISTORIC WATERFRONT**

Main Street Landing created a 600-image power point show on the History of Burlington's Waterfront.

This show is projected on the back wall of the main lobby off of Lake Street. The images change every ten seconds and provide the viewer with an opportunity to learn about the history of our Waterfront.

On the 2nd floor there are sixty framed photographs taken from the slide show and mounted in a photo gallery. Each photograph identifies its place in history.

Main Street Landing believes that the history of a place is what protects the heart and soul of our present experience and future hopes and dreams.





## SEVENTH GENERATION

The Seventh Generation offices occupy more than 30,000 square feet of LEED gold certified space.

- This downtown location encourages employees to walk, bicycle, carpool or use public transportation.
- During construction, 50% of the waste was recycled, reducing the amount of garbage taken to landfills. More than 50% of the materials used were manufactured within 500 miles. More than 90% of the wood used was harvested from the Forest Stewardship Council. Low emitting and non-toxic materials were used to enhance air quality.
- An efficient lighting system reduces electrical use by 25%.

Visit [www.seventhgeneration.com](http://www.seventhgeneration.com) to learn more about other social and environmental considerations of this project.





## SPECIAL FEATURES:

- Main Street Landing is dog friendly. Our tenants can bring their dogs to work as long as the dogs behave.
- Coin-operated low-flow showers are provided in Main Street Landing's bathrooms for tenant use.
- Main Street Landing was involved in the development of the Cycle the City Bike Loop which originates at the Union Station.
- Main Street Landing is committed to and working hard to bring passenger rail back to Burlington's Waterfront.
- Main Street Landing manages the performing arts center and allows our tenants the use of these spaces at the non-profit rate.
- The performance, meeting, conference, and event spaces are available for daily public rental.





## EXPANDED PUBLIC GREEN SPACE

Main Street Landing partnered with the City of Burlington to develop the Lake and College project up to and bordering the Battery Park Extension.

Main Street Landing secured funding through the State's Downtown Bill to pay for the City's share of the upgrade to Battery Park Extension.

With light-weight fill, shrubs, plants, flowers, trees, benches, bike racks, and new lighting, Main Street Landing also created an additional 18,000 square feet of parkland for people to enjoy. Included therein is an amphitheatre for outdoor performances.





## **A BEAUTIFUL VIEW FOR ALL**

Main Street Landing created view corridors so that folks on the East side can look directly through the building out to the West to view the lake and mountains. These view corridors also allow the public access from Battery Street down to the Waterfront.

Our projects are fully American Disabilities Act compliant.





## OUTDOOR AIR MONITORING

Main Street Landing installed Carbon Dioxide Sensors (CO<sub>2</sub> Sensors) which measure gaseous carbon dioxide levels of outdoor air delivery. This sensor monitors changes in CO<sub>2</sub> levels occurring as the result of human respiration.

The system monitors the flow of ventilation air, its temperature, humidity, and delivers an amount of air based on totals required throughout the day. Tenant's individual HVAC systems feed information back to the building's main ventilation air equipment, speeding up or slowing down flows (or raising and lowering temperatures) based on what is required. This saves energy costs and also insures healthy indoor air quality for the occupants.





## **PUBLIC SPACE AND THE ENVIRONMENT**

Main Street Landing redeveloped an urban blighted site.

While Burlington's Zoning Regulations would have allowed a building with 100% lot coverage, Main Street Landing designated over 25% of our land to vegetation and pedestrian friendly uses.





## **THRIVING ART COMMUNITY**

Main Street Landing feels strongly about supporting the local arts community.

We invest in local art and support local artists in both the visual and performing arts.

