

Sustainable Design

In order to reduce, and in many cases eliminate negative environmental impact, the Milltown Commons development will follow "green" or sustainable building practices where technically and economically feasible. These building and design strategies are not only good for the natural environment but also have beneficial effects on the economy, health and productivity. The long term effects of these measures can also reduce building operating costs and improve building marketability.

The following potential design strategies are based on the LEED (Leadership in Energy and Environmental Design) Green Building Rating System. The extent to which these strategies are applied will be determined on a phase by phase and building by building basis unless otherwise dictated by applicable ordinances and codes.

- Construction Activity Pollution Prevention.
Control soil erosion, waterway sedimentation and airborne dust generation.
- Provide Public Transportation Access
Coordinate with regional transit authority for potential bus service within site and provide bus stop(s) and shelters.
- Provide Bicycle Storage
Provide bicycle racks and/or bicycle storage areas for 5% or more of all building users.
- Encourage Alternative Transportation
Provide preferred parking for low emitting and fuel efficient vehicles with plug-in stanchions for electric vehicle recharging.
- Limit Parking Capacity to Reduce Land Development Impact
Size the parking capacity not to exceed the minimum local zoning requirements. Additional strategies to be considered: Designated parking for vanpools, ride boards and shuttle service.
- Minimize Site Disturbance
Establish clearly marked construction boundaries to minimize disturbance to existing site and restore previously degraded areas to their natural state.
- Maximize Open Space
Exceed the minimum zoning open space requirements.
- Provide Stormwater Design Quality Control
Implement a stormwater management plan that limits the disruption of natural hydrology by limiting impervious surfaces, increasing on site filtration and reducing pollution from stormwater runoff. Additional strategies to be considered: Reuse of stormwater volumes generated for non-potable uses such as irrigation, toilet and urinal flushing and custodial uses.
- Minimize Heat Islands
Provide abundant planting of shade trees along hardscape areas. Provide some paved areas with a high solar reflectance index. Use roofing materials with a high solar reflectance index. While this is difficult to achieve on sloped roofs that reflect the character of the traditional new england village it can more readily be achieved on flat roofs not exposed to view.

Additional strategies to be considered: Open grid pavement systems.

- Reduce Light Pollution
Exterior: Use site lighting criteria that maintain safe light levels and avoid off-site lighting and night sky pollution.
Interior: Provide occupancy sensors, and automatic shut offs for non-emergency lighting.
- Reduce Generation of Wastewater and Potable Water Demand.
Use water conserving fixtures (toilets, urinals, faucets).
- Provide Fundamental Commissioning of Building Energy Systems.
Provide verification that each building's energy related systems are installed and performing as designed.
- Meet Minimum Energy Performance
New buildings will meet or exceed the minimum level of energy efficiency as established by ASHRAE/IESNA Standard 90.1-2004.
- Zero use of CFC-Based Refrigerants in New Building HVAC&R Systems
- Use on Site Renewable Energy
Strategies to be considered include solar (photovoltaic panels) and geothermal systems. Note: Although proposed building orientation for the project is primarily driven by the village concept and existing site features, preliminary roof designs have taken into consideration solar orientation.
- Use Green Power
Investigate opportunities for grid source renewable energy contracts.
- Encourage Recycling
Provide areas in new buildings for the collection, separation and storage of recycled materials.
- Manage Construction Waste.
Recycle and/or salvage construction waste where possible.
- Establish Minimum Indoor Air Quality Performance of all New Buildings
- Use Construction Products with Recycled Content
- Use Regional Construction Materials
- Use Renewable Construction Materials
- Use Low Emitting (VOC) Construction Materials
- Provide High Level of Individual Controlability of Lighting and HVAC Systems
- Provide Daylight and Views into Regularly Occupied Areas of New Buildings

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