



NEW ECOLOGY, INC.

Case Study: Cabot Street Apartments Combining Green New Construction and Retrofits

Green Highlights:

- Transit -oriented
- Integrated Design Charrette
- Energy Star Homes
- LEED for Homes
- High Efficiency Condensing Boilers
- Photovoltaics
- High Efficiency Lighting
- Healthy Flooring
- Low Flow water fixtures
- Low VOC Paints and Adhesives
- Energy Star Appliances
- Resident Education

In August of 2006, New Ecology Inc. joined forces with the Beverly Affordable Housing Coalition to revitalize an underutilized site in downtown Beverly, MA. With the help of an impressive fundraising effort, the team was able to design 32 new units of SRO (single resident occupancy) green affordable housing in addition to the retrofit of 11 existing onsite units. The 32 new construction units will replace the old Mayflower Hotel, currently a neighborhood eyesore, with much-needed sustainable rental housing units. The totally paved site will also be altered to include a low intensity, native landscaped area to mitigate stormwater onsite. The project is located in Beverly's central business district within walking distance of trains, banks, shops, churches, entertainment, and other community services. The site is also walkable to public transportation including bus service and a commuter rail service to Boston.

NEI began the process by facilitating the project team through an integrated design charrette, to cohesively begin thinking about how features could be best incorporated into the building program. NEI was also tasked with performing a utility analysis and building assessment of the

existing 11 SRO unit building, in order to make recommendations for green retrofits. The project, slated to be completed in the fall of 2009, is going through both the Energy Star Homes Program and also aims to earn a silver certification through the LEED for Homes rating system. Because the project has a non-profit developer USGBC has agreed to



waive LEED registration fees. Additionally NEI is applying for a \$3,000 grant from the Home Depot Foundation to cover additional certification costs. A Green Communities grant for \$44,000 helped fund the charrette, new construction greening, and the green improvements in the existing building. The project was also awarded a \$570,000 grant for a photovoltaic system from Mass Housing/MTC.

The project will include an array of innovative

green features, intended to create a healthy indoor environment for residents, sustainable operating costs to ensure the continued viability of the project, and minimal environmental impact. Innovative features targeted at decreasing the project's energy use include a high efficiency condensing boiler, an Energy Star certified lighting package, Energy Star certified windows, and cellulose insulation. The common electric load will be supported by the Photovoltaic array, which has been designed to include some solar awnings on the building's façade. Indoor air quality will be protected through the use of healthy flooring choices, such as linoleum and ceramic tile, and low VOC paints, adhesives and sealants.

Significant to the project's continued success is the plan for a strong resident and community education program, which outlines the building's green features and will include tours and seminars. The team is also looking at including a solar feedback meter to educate residents about the potential of renewable, clean energy use.