

Building Green Homes in Urban Communities

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PROJECT DESCRIPTION

The Litehouse Demonstration Homes project is building homes on reclaimed vacant lots in low- to moderate-income neighborhoods throughout Montgomery County, Ohio. The homes feature state-of-the-art, energy-efficient technology and Low Impact Design (LID) practices. Stormwater best management practices, such as rain gardens, pervious parking areas, rooftop collection systems, and green roofs are included at the homesites.

Partners

The Miami Conservancy District partnered with the Litehouse Development Group whose mission is to create a responsible approach to home building, delivering an affordable, energy-efficient, sustainable home concept to the market. The group is working with the City of Dayton, City of Kettering, and City of West Carrollton—which are donating the lots—and CountyCorp.

Benefits

Energy efficiency and sustainability make the Litehouse a green, eco-friendly home. The use of zero-VOC paint, natural flooring and a whole-house ventilation system improve indoor air quality. Additionally, care has been taken during the construction process to ensure less waste material is sent to the landfill.

Building on in-fill sites and previously developed property uses the existing infrastructure (i.e., sewers and water supply), avoiding sprawl and development on environmentally sensitive sites (i.e., farmland and wooded areas). Native species have been selected for the landscaping minimizing the demand for irrigation and the need for harmful pesticides.

Water conservation strategies are employed in the interior and exterior of the Litehouse houses. Water-efficient faucets, low-flow showerheads and dual-flush toilets all contribute to decreased consumption. Outside, a rain harvesting system



Nearly complete, state-of-the-art, energy efficient Litehouse Demonstration Home in West Carrollton.

captures rainwater that can be used to water the lawn or garden. Also, permeable pavement and drought resistant native plants are used to control soil erosion and runoff that would otherwise end up in the municipal storm sewers.

Water Quality Results

Pre- and post-water quality conditions are monitored to determine impacts to local rivers and streams. As of the completion of this brochure, post-construction water-quality monitoring had not begun. Contact The Miami Conservancy District for final results for this project.

Concept drawing of the Litehouse Demonstration project in downtown Dayton near Fifth Third Field.



Above: Modular components of the downtown Dayton Litehouse project are pre-built then assembled onsite, helping to reduce wasted construction materials sent to the landfill.

