

# WINTERGREEN

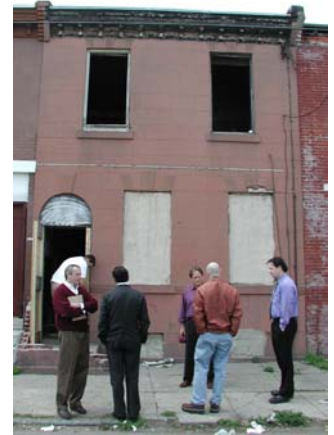
A monthly update on Steven Winter Associates, Inc.'s work in the realm of Energy Efficient, Sustainable, and High-Performance Buildings

Volume 3, Issue 12

June 2002

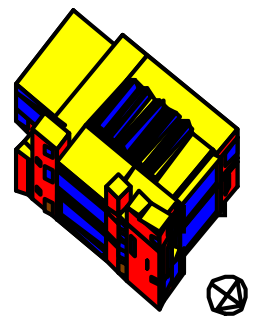
## *Greening Habitat Rehabs With Help From HUD*

**Habitat for Humanity International** has built a sterling reputation in helping to provide low-cost housing to those willing to donate “sweat equity” to make their own American dream of homeownership a reality. Now Habitat and Steven Winter Associates, Inc. (SWA) are teaming up to make those houses green, too. Working together with support from the **US Department of Housing and Urban Development’s (HUD) Partnership for Advancing Technology in Housing (PATH)** program, SWA will assist Habitat to design, construct, evaluate, and showcase rehabilitated low-cost housing that meets its goals and those of PATH. Particular emphasis will be placed on energy efficient, sustainable, and durable homes that are “volunteer-friendly” to construct. SWA will be working with two to four mid-Atlantic Habitat affiliates, such as South Philadelphia and Baltimore (photo), playing a key role in strategic planning and completing architectural and engineering designs and specifications as needed. SWA will also prepare construction documents suitable for cost estimates, secure bids, and help gain code approvals. Each Habitat affiliate will manage the rehab housing project, with SWA support. Once complete, SWA will test and evaluate selected dwelling units in terms of HVAC performance and energy conservation. Among the PATH technologies and other environmentally friendly building materials and systems being considered are OVE framing, engineered wood, hydro-air heating systems, home automation systems, and ENERGY STAR appliances, as well as energy- and resource-efficient construction practices.



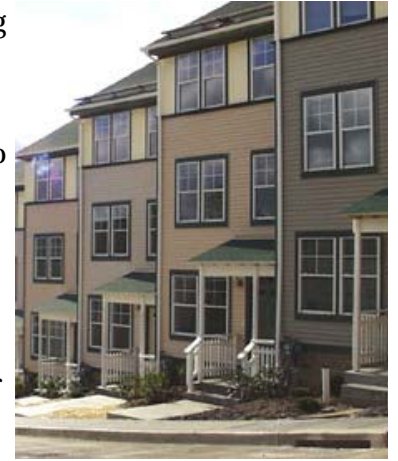
## *A Sustainable Library Grows in Brooklyn*

The design goal for the Kensington Branch Library in Brooklyn, New York is for it to maximize thermal and visual comfort, convenience, and the well-being of staff and visitors, while serving as an environmental educational center. SWA is working with the **New York City Department of Design and Construction (DDC)** and the **New York State Energy Research & Development Authority (NYSERDA)** to assist in the design of the library, with **Sen Architects** (which recently won a Design Excellence award from the NYC Arts Commission). Energy performance goals are stringent. Energy consumption (BTUs per square foot per year) should be at least 30% lower than current codes call for. Annual operating costs should be 40% lower, and lighting energy use should be cut in half through a combination of switching, circuiting, and automatic controls (such as occupancy sensors and daylight dimming). Passive and active features include a large exposure of north-facing glazing and a central atrium to provide tempered daylighting in public areas, while an open-loop type water-to-water geothermal heat pump system will satisfy the relatively small heating and cooling loads of the building’s three constant volume air handlers. Kensington is on track for a LEED Certified Rating.



## ***Saving Energy (and a Bundle) in Pittsburgh***

Pittsburgh is taking a big step forward in making housing more affordable through energy conservation, and SWA is helping. **The Housing Authority of the City of Pittsburgh (HACP)** is working with **Custom Energy** (a private company) to launch an energy plan designed to cut energy consumption and save HACP more than \$4 million in energy costs over the next decade. SWA and the **National Center for Appropriate Technology** served as technical advisor and consultant on this initiative. SWA is evaluating a comprehensive energy audit of eight public housing communities by Custom Energy. The energy plan includes lighting retrofits, water conservation measures, installation of radiator control valves, boiler controls, and domestic hot water temperature controls. All totaled, these measures will increase the efficiency of energy operations, while saving energy and utility consumption and improving tenant comfort. "This project will create a unique balance between tenant comfort and energy efficiency cost savings for our communities," said Keith Kinard, Executive Director of HACP. "The result is a classic win/win for the Housing Authority and our tenants. In essence this project is financed by the anticipated cost savings resulting in a net no-cost opportunity that benefits everyone involved." Implementing the energy plan without the use of capital funds played a major role in the selection of energy efficient technologies geared toward making the communities more environmentally friendly. SWA's experience and insight gave HACP the ability to determine the appropriate measures to undertake to both serve the needs of its residents and implement an energy conservation plan.



## ***LEEDing By Example***



If you're an architect or designer you've no doubt heard of the **U.S. Green Building Council's LEED™** program. The "Leadership in Energy and Environmental Design" program was developed by USGBC to provide a consistent rating system for commercial, institutional, and high-rise residential buildings to gauge their "greenness." According to USGBC, it is a voluntary, consensus-based, market driven program that evaluates environmental performance from a "whole building" perspective over the building's life cycle. Last year, USGBC instituted a LEED™ certification program to test an individual's knowledge of LEED™ and green building in order to recognize green building specialists. To date, six SWA staff members have become LEED™ certified: Adrian Tuluca, John Amatruda, Jose Higgins, Andrew Zumwalt-Hathaway, Smita Chandra (above), and Bambi Tran. What do SWA's LEED™ -certified professionals provide? In addition to helping our clients achieve LEED™ -rated buildings (we've provided LEED™ evaluations and supporting energy/environmental services on over a dozen projects in the past two years). SWA currently has more than 16 LEED™-certification projects currently on the boards. SWA also assists design teams in assembling LEED™ documentation for final project submissions. Other LEED services include commissioning and writing construction waste-management and construction-IAQ management plans. As part of SWA's LEED™ services, SWA performs building energy analysis using DOE 2.1E simulation software.



For more information  
visit the SWA Website:  
[www.swinter.com](http://www.swinter.com)

*WinterGREEN* is published monthly by Steven Winter Associates, Inc., 50 Washington Street, Norwalk, CT 06854. SWA is solely responsible for content and cost of publication. If you prefer to receive WinterGREEN by email, or for further information contact Michael J. Crosbie at SWA, phone 203-857-0200 ext. 210, fax 203-852-0741, e-mail: [mcrosbie@swinter.com](mailto:mcrosbie@swinter.com). Visit us at [www.swinter.com](http://www.swinter.com).