

CREATING SUSTAINABLE COMMUNITIES

A GUIDE FOR DEVELOPERS AND COMMUNITIES

BUILDING REUSE AND ADAPTIVE REUSE

Existing buildings offer opportunities for adaptive reuse and community redevelopment. *Adaptive reuse* is the process of adapting old structures for new purposes. When the original use of a structure changes or is no longer required, as with older buildings from the Industrial Revolution, architects have the opportunity to change the primary function of the structure, while often retaining some of the existing architectural details that make the building unique. An old factory may become an apartment building or a rundown church may find new life as a restaurant. New Jersey's cities offer many opportunities to reuse existing buildings as is illustrated in the three examples noted below.

The adaptive reuse of existing buildings saves energy and resources. The reuse of an existing structure and shell reduces the need to manufacture and construct the building with new materials thus reducing the need for additional natural resources and the energy required to make them. Depending on the integrity of the building to be reused, economic savings may also be achieved in masonry, site work, concrete and carpentry.

Adaptive reuse involves the reconditioning of the existing structure to modern day requirements. This will require an analysis and potential clean up of hazardous materials such as asbestos or lead. Green design techniques and technologies can be incorporated to update the building's performance and to create a healthy space in which to live and work.

A neighborhood's personality is sometimes defined by its buildings. The adaptive reuse of buildings can help to anchor a neighborhood and community leading to a social and economic revitalization.

EXAMPLES OF GREEN ADAPTIVE REUSE IN NEW JERSEY

St. Phillips Academy, Newark: The School is housed in a pre-existing 55,000-square foot, four story factory erected in 1920. Seventy five percent of the existing shell and structure of the factory was reused, including the red-brick façade and the interior support timbers.
www.stphilipsacademy.org/index.cfm?section=giving&fuse=greenschool



West Side Village, Newark: Reconstruction of a vacant commercial building to create 63 apartments and demolition of a commercial structure to build 66 new units. Some of the green features included high efficiency furnaces (94%), ultra high efficiency (93%) central water heating, high levels of insulation and high efficiency fiberglass windows.

Schroeder Lofts, Jersey City: Located in Jersey City's historic Hamilton Park neighborhood this former hospital (Saint Frances) has been turned into loft condominiums with a number of green features, including bamboo flooring, low VOC paint and high-efficiency central heat and air.
www.schroederlofts.com/building.htm

APPLICABLE NEW JERSEY GOAL

The State Development and Redevelopment Plan provides a balance between growth and conservation by designating planning areas that share common conditions with regard to development and environmental features. Areas designated for growth include Metropolitan Planning areas (Planning Area 1), Suburban Planning Areas (Planning Area 2) and Designated Centers in any planning area. The adaptive reuse of buildings in these areas is consistent with the State Plan. www.nj.gov/dca/osg/plan/index.shtml



SUGGESTED ACTIONS AND STRATEGIES

- Evaluate the building's structural integrity and skin, functional suitability, code compliance, historic and cultural significance and adaptability.
- Evaluate if components of existing buildings or facilities, such as windows or metal door frames, can be incorporated in any new construction. Ensure that the windows and doors meet the new facility's security and energy requirements.
- Upgrade outdated components with new components that can enhance energy efficiency, water efficiency and indoor environmental quality.

STATE TECHNICAL/FINANCIAL ASSISTANCE

Historic Preservation Certified Local Government Grants (CLG)

The New Jersey Department of Environmental Protection, Natural & Historic Resources, Historic Preservation Office (HPO) offers Certified Local Government (CLG) Historic Preservation Fund grants for eligible historic preservation activities. Contact: George Chidley - Historic Preservation Office, www.nj.gov/dep/hpo/, (609) 984-6017, george.chidley@dep.state.nj.us.

New Jersey Redevelopment Authority (NJRA) Financing

The NJRA offers customized project financing for urban redevelopment initiatives. Resources include funds for pre-development, site acquisition, and business and non-profit redevelopment project support. Financing in the form of loans, loan guarantees, bond financing, and equity investments. www.njra.us/njra/site/default.asp, (609) 292-3739

NJ Clean Energy Program – Smart Start Buildings Program

New Jersey SmartStart Buildings® is a statewide energy efficiency program administered by the New Jersey Board of Public Utilities' Office of Clean Energy and delivered by the Commercial Industrial Market Manager, TRC Energy Services. Financial incentives, technical assistance, and other services are available to qualified commercial, industrial, institutional, government or agricultural customers in the state who are planning to construct, expand, renovate, or remodel a facility, or to replace electric or gas equipment. www.njcleanenergy.com

NJ Brownfields Redevelopment Resource Kit helps anyone interested in redeveloping brownfields to learn about State financial incentives and other resources available to them, as well as navigate the associated regulatory processes and legal requirements. www.state.nj.us/dca/osg/docs/brownfieldsresourcekit.pdf

FURTHER INFORMATION

US Green Building Council's LEED for New Construction and Renovations, Version 2.2, October 1985. Materials & Resources. www.usgbc.org/

Adaptive Reuse: Uncovering Hidden Assets and Obstacles Article
www.greenerbuildings.com/tool_detail.cfm?LinkAdvID=64809

Whole Building Design Guide - www.wbdg.org/design/env_preferable_products.php

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