Mill Redevelopment: Reducing Impact - Enhancing Value

NJIT
New Jersey Institute of Technology
THE EDGE IN KNOWLEDGE
Technical Assistance for Brownfields
Natural Resource Considerations

Wetlands
Protected Species
Stormwater
Flooding
Energy
Zoning
Wetlands

• No person shall excavate, remove, fill, dredge or construct any structures in or on any bank, flat, marsh, or swamp in and adjacent to any waters of the state without a permit from the department.

• An area that is inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal conditions does support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

New Hampshire
Department of Environmental Services
Protected Species

- 40 listed threatened or endangered animals in New Hampshire

New Hampshire Fish and Game

- 386 Rare plants

New Hampshire Division of Forests and Lands
Scribner’s Mill
Harrison, ME
Stormwater

• Permits required for discharges to water bodies

• “Construction General Permit” for construction projects that disturb $\geq 1$ acre of land
Low-Impact Development
Pennichuck Square
Merrimack, NH
Winnipesaukee River
Tilton, NH

• Former Pillsbury Textile Mill

ORW Landscape Architects and Planners
Flooding

- Understand flood risk: floodsmart.com
- Acquire Insurance
- Comply with community floodplain regulations
Zoning

Former Stinson Cannery
Bath, ME
Former Maine cannery site in Bath up for sale

The Associated Press
Posted Sept. 29, 2010, at 8:52 a.m.

BATH, Maine — The site of a former seafood cannery on the Kennebec River in Bath is up for sale.

The 5.6-acre property is owned by Bruce Poliquin, an unsuccessful candidate for the Maine Republican Party’s gubernatorial nomination.

The former Stinson Seafood cannery is on the market for $2.5 million.

The Portland Press Herald says the decision means Poliquin has given up on a plan to convert the site into a mixed-use development with condominiums, a restaurant, shops and a marina.

**But the city of Bath refused to rezone the area to accommodate Poliquin’s proposed development.**

The vacant cannery building was destroyed by a May 2006 arson fire.
• Weatherization
• Natural Gas
• Central Heating Systems
• Alternative energy
Whitin Mill
Whitinsville, MA

Saco Island
Saco, ME
July 21, 2010

Saco finds turbine is a turn for the worse
The city wants the company's former CEO to make amends for the underperforming unit.

By Beth Quimby bquimby@mainetoday.com
Staff Writer

The Saco City Council wants to meet with the head of the company that sold the city a wind turbine before deciding what to do about the broken structure.

The turbine, which cost $207,000, including $77,000 for the installation, went into operation in February 2008. It was supposed to generate 90,000 kilowatt hours - $12,600 worth - of electricity annually for 10 years, according to the city's contract with Entegrity Wind Systems of Prince Edward Island. But it never came close.

The turbine produced 16,000 kilowatt hours during its first 18 months, then broke down several months ago.

The council decided Monday night to meet with James Heath, the former chief executive officer of Entegrity, which was declared bankrupt by a Canadian court in October. Heath had offered at one point to buy the turbine back for $130,000.
• **Green roofs**
Low-Impact Reuse
Cottonmill Mushroom Farms
Former Park Dale Cotton Mill
Landis, NC
• 500 pounds per week of oyster and shitake mushrooms

• Grown using sawdust, straw and plastic bags
Adventure Sports
Moran Power Plant
Burlington, VT
• Prototype in Kinlochleven, Scottish Highlands
• Developed by Ice Factor®
• Former aluminum smelter
• Climbing walls, rink, gym, high wire adventure

• Up to 138,000 visits annually
Hydroponic Farming

Village Farms, Buffalo, NY

- Former electrical substation next to steel mill and tank farm
• Tomato production on 18-acre facility
Battlefront Paintball
Hubbard, Ohio
- Site of gunpowder mill built in the 1800s
- Explosion in 1954, buildings left in ruins
- Constructed in 2005
Park and Museum
Mills District
Minneapolis, MN
• Former flour mill remains preserved in waterfront park

• “World’s largest flour mill” preserved for museum
Art and Film Studios
Battersea Power Station, London, England

- Aliens
- Children of Men
- Dark Night
- Full Metal Jacket
Emscher Park
Ruhr Valley, Germany
Gasometer, Duisburg (left)
The Thyssen-Krupp gas tank now serves as a scuba diving training tank, one of the many strategies for recreational re-purposing, which Latz + Partner developed for the Duisburg North Landscape Park.

Gasometer, Oberhausen (opposite page)
The gasometer in Oberhausen once held nothing but wastegas from iron and steel-making. Since its 1984 restoration however, it has held installations such as 'The Wall' (Christo and Jean Claude), 'The Bat' (Hannes Obermoser Football Association), 'Has Angels for the Millennium' (Bill Viola) and several others.
Closing

Understand challenges early.

- Natural resource assessment
- Cultural and archaeological Evaluation
- Zoning requirements
- Flood risk
- Energy efficiency

Meet with regulators. Engage the community.

Seek creative solutions to reduce impact and add value.