



# nerej

## **Thornton Tomasetti and Consigli's Bigelow Lab. for Ocean Sciences earns LEED Platinum**

February 21, 2013 - Green Buildings

Bigelow Laboratory for Ocean Sciences, which opened a 60,000 s/f science and education campus on the waterfront last month, has achieved confirmation of LEED Platinum status.

The campus consists of three interconnected science and education buildings, along with a shorefront facility and dock. These three buildings or wings respectively are: 1) the Walter and Helen Norton Center for Blue Biotechnology, 2) the Center for Ocean Biogeochemistry and Climate Change, and 3) The Center for Ocean Health. This marks the first time that all of Bigelow's science operations have been housed within a single building complex. The \$31.8 million Phase 1 campus project was made possible by a combination of State and Federal grants, private financing, and private donations.

The campus is the first scientific research laboratory to achieve LEED Platinum status in Maine, and one of only seven in the New England area. Only three other businesses in Maine - Hannaford Augusta, TD Bank Call Center, and the Bosarge Family Education Center at Coastal Botanical Gardens - have achieved LEED Platinum certification.

A key feature of the campus is the building's daylighting design. The solar orientation of the three research wings, combined with open courtyards between each wing, helps to maximize natural light in the building creating an energy efficient work environment. Elements such as window shading, daylight responsive lighting controls and dimmable ballasts lowered the power requirements for lighting and allowed nearly all interior spaces to take full advantage of natural light and views of Bigelow's coastal campus.

Year round energy recovery and other high-efficiency equipment provide an outstanding 54% energy cost savings over a conventional design. High-pressure, low-flow water fixtures achieve a 45% reduction in water use, while 66 photovoltaic panels, installed on the roof of the building, provide 19.21 kW of CO<sub>2</sub>-free energy.

The campus and Phase 1 building design were achieved through a collaborative design effort between the Bigelow Laboratory leadership and an integrated design and construction team that included:

WBRC, architects/engineers; Perkins+Will, design architects; Terrence J. DeWan & Assoc., landscape architects and planners; Thornton Tomasetti, sustainability and LEED consultant; and Consigli Construction Co.

Bigelow Laboratory was founded in 1974 by the late Dr. Charles Yentsch and his wife Dr. Clarice Yentsch. It is internationally renowned as an independent, non-profit center for global ocean research, ocean science education, and technology transfer. Recognized as a leader in Maine's emerging innovation economy, the Laboratory's research ranges from microbial oceanography to the large-scale ocean processes that drive global environmental conditions. In October, the Maine

State Council of the Society for Human Resources Management announced that Bigelow Laboratory, which currently employs 70 people, ranked ninth among 32 organizations in its category as one of the Best Places to Work in Maine in 2012.

WBRC Architects/Engineers is one of the largest and most experienced architecture, engineering, and planning firms in Maine. Founded in 1902, WBRC has an extensive portfolio of projects across all sectors, including education, nonprofit, municipal, commercial, healthcare, and research. The firm employs over 60 people in Bangor and Portland, Maine, and Sarasota, Fla. In addition to the firm's large number of LEED Accredited Professionals, WBRC is also the first A/E firm in Maine to commit to AIA's pledge to be carbon neutral by 2030. Bigelow Laboratory is the firm's second LEED Platinum project.

Perkins+Will brings their passion for 'designing for science' together with the knowledge they've gained planning and designing major science, education and healthcare buildings for institutional, governmental and commercial clients across the country and overseas. To each project they bring a unique understanding of their client's objectives and an appreciation of how to utilize a structured design process to energize the client organization. This ensures the creation of high-performance buildings that enable productive and sustainable research and education communities within them.

TJD&A is a professional landscape architectural and planning firm in Yarmouth, Maine dedicated to approaching land use opportunities with creativity, environmental sensitivity, and an awareness of client needs. The firm has worked with Bigelow Laboratory for over 10 years selecting a site and preparing a campus plan that balances functionality and shoreline access with sensitivity to the unique natural resources of this dramatic site on the Damariscotta River. TJD&A led the design team in site design, local, state and federal permitting, and landscape planning.

Thornton Tomasetti is a leader in engineering design, investigation and analysis serving clients worldwide on projects of all sizes and complexity. With practices in building structure, building skin, building performance, construction support services, property loss consulting and building sustainability, Thornton Tomasetti addresses the full life cycle of a structure. We have supported clients working in more than 50 countries, with projects that include the tallest buildings and longest spans to the restoration of prized historic properties. Founded in 1956, today Thornton Tomasetti comprises more than 700 engineering, architectural and support professionals who collaborate from offices across the U.S. and in Asia-Pacific, Europe and the Middle East.

Named the #1 Best Place to Work in Maine in a statewide independent employee survey, Consigli is a full-service construction manager and general contractor serving academic, healthcare, institutional, life sciences, corporate, landmark restoration and federal clients throughout New England and New York State. A leader in sustainable construction practices, Consigli is consistently ranked in the national Top 100 Green Contractors by Engineering News-Record Magazine. With offices in Maine, Massachusetts, Connecticut and New York, Consigli has also been recognized as one of the best places to work in Massachusetts and Connecticut.