

News Release

FOR IMMEDIATE RELEASE

Contact: Anne Taylor
Lord, Aeck & Sargent
404-253-6710
ataylor@lasarchitect.com
or
Ann Kohut
Kohut Communications Consulting
770-913-9747
annielk@bellsouth.net

Skidaway Institute of Oceanography Expands Scope of Research With New Building

Building Marries Plantation Era and Modern Architecture in an Environmentally Sensitive Return to Simple, Sustainable Practices

SKIDAWAY ISLAND, Ga. June 24, 2009 – Scientists at the Skidaway Institute of Oceanography earlier this month occupied a new facility that enables them to expand the scope of the Institute’s leading-edge research on marine and coastal systems. The \$5 million Marine and Coastal Science Research and Instructional Center (MCSRIC) provides high-quality laboratory space in a bright, open, airy and environmentally sensitive setting.

Targeting LEED Gold certification from the U.S. Green Building Council, the MCSRIC was designed by architecture firm Lord, Aeck & Sargent. The building is expected to be 31 percent more energy-efficient than a comparable building of a similar use and size constructed with conventional energy strategies, and to use 45 percent less water when compared with a baseline, or traditional building.

Marrying Plantation Era and Modern Architecture

The single-story, 11,000-square-foot MCSRIC sits on the Skidaway Institute’s 700-acre campus on the banks of the Skidaway River, 16 miles Southeast of Savannah, Georgia. The campus

- more -

was once home to a cattle plantation until 1968, when owner Robert C. Roebing donated the land to the State of Georgia for the establishment of a marine research facility. It includes 15 buildings that date back to the Roebing Plantation era (mid-1930s to 1968) as well as seven brick buildings constructed in the late '60s and thereafter.

“We asked Lord, Aeck & Sargent to marry two very different campus building styles and to create a functional design with high-quality, efficiently designed lab space that could be easily modified as the nature of our research changes,” said Jim Sanders, Skidaway Institute director. “I think they succeeded fantastically in meeting those goals and in creating a building that harkens back to plantation architecture but is also a modern facility designed first and foremost for research. And since we had a relatively small budget, beauty wasn’t really a goal, yet ultimately we ended up with a building that has beauty in its functionality.”

“The MCSRIC’s coastal design evokes the plantation vernacular, and in particular we took our design cues from the original Roebing building and the cattle barn. Mr. Roebing designed the round barn roof to allow natural light into the barn and to direct rainwater to a cistern for washing the cows. It inspired us: architectural beauty from farm frugality,” said Amy Leathers, a Lord, Aeck & Sargent senior associate who served as the project’s lead designer. The cattle barn now houses a combination of laboratory and storage space.

Leathers cited a number of MCSRIC design features drawn from the earlier structures, among them: clerestory windows, exposed trusses, an above-ground cistern, a traditionally southern haint blue ceiling, and green painted window frames.

“The MCSRIC’s design is a return to very simple, sustainable practices combined with high-tech lab, conference, office and collaboration space,” Leathers said.

Built just a few feet above the flood plain on a concrete slab, the building is clad in a combination of framed cement fiber board panels and lap siding that give the appearance of old siding but are durable and resistant to hurricanes, hail, insects, decay and wildfires.

A standing seam metal roof system made of pre-finished aluminum provides durability and a high-reflectivity finish for lowering heat gain. The exposed roof structure, visible above the clerestory and at the soffits, is made of wood.

Inside, the roof structure is exposed in the center of the building. Economical Southern yellow pine wood staple trusses are ganged up to give the rhythm of wood timbers. Clerestory windows let the heat rise, and three large ceiling fans help circulate air without having to re-cool it.

The building's organizing feature is a double-loaded corridor with the laboratories on one end and office functions on the other. The corridor's high clerestory runs the entire length of the building, allowing natural light deep into the building, and reducing the energy required for electric lighting. The building's simple, rectangular shape minimizes the building perimeter, which saves construction material needed and minimizes heat loss through the building envelope.

Building green saves money

"We not only had to build the MCSRIC, but now we have to operate it," the Institute's Sanders said. "Because the building was designed with energy reduction and ease of cleaning in mind, it will cost substantially less for us to operate over the next several decades."

Some of the MCSRIC's green building strategies and products include:

- Site orientation that enhances energy efficiency
- Permeable paths and paving around the building to reduce harmful surface runoff
- Natural daylight to about 90 percent of occupiable spaces, including open offices with direct views of the campus; the remaining 10 percent includes a clean room and a special laboratory, both of which are required to be darkened
- Solar water heating system

- Energy-efficient hydronic heating and cooling
- Occupancy sensor switching and energy-efficient lamps
- Outdoor 1,000-gallon cistern for capturing rainwater and morning dew from the roof as well as condensate from the air handling unit; the non-potable water is used by the researchers in their work
- Dual flush toilets, waterless urinal and low-flow fixtures and faucets
- Locally sourced building materials
- Recycled content materials
- Energy-efficient, insulated window units, filled with Argon gas, are laminated to protect occupants during a hurricane
- Low VOC adhesives and coverings
- Bicycle racks and changing rooms
- Preferred parking for hybrid and alternative fuel vehicles

Expanded research space

With the opening of the MCSRIC, Skidaway Institute has increased its square footage by about 10 percent and has expanded the scope of its research in several areas, including the development of new technologies associated with ocean observation systems; discovering the diversity of species and their interactions in the marine environment; and the assessment of factors affecting the environmental health and integrity of Georgia's coastal zone.

The building itself houses two chemistry laboratories, three general labs, one biology lab, one flow cytometry lab, one special lab and a clean room. It also includes a large conference room with kitchenette, an entry area that serves as an informal gathering area for researchers to collaborate, offices for the principal investigators as well as open office space, and a mechanical room. The above-ground cistern is located in an outdoor utility yard.

The project team

The MCSRIC project team included:

- Board of Regents of the University System of Georgia – owner
- Samson Oyegunle, project manager
- Lord, Aeck & Sargent (Atlanta office), architectural and laboratory design
- Nottingham, Brook & Pennington (Macon, Ga.), MEP/FP engineer
- Hussey, Gay, Bell & DeYoung (Savannah, Ga.), civil and structural engineer
- Choate Construction Co. (Savannah, Ga. Office), construction manager

About Lord, Aeck & Sargent

Lord, Aeck & Sargent is an award-winning architectural firm serving clients in scientific, academic, historic preservation, arts and cultural, and multi-family housing and mixed-use markets. The firm's core values are responsive design, technological expertise and exceptional service. In 2003, The Construction Specifications Institute awarded Lord, Aeck & Sargent its Environmental Sensitivity Award for showing exceptional devotion to the use of sustainable and environmentally friendly materials, and for striving to create functional, sensitive and healthy buildings for clients. In 2007, Lord, Aeck & Sargent was one of the first architecture firms to adopt The 2030 Challenge, an initiative whose ultimate goal is the design of carbon-neutral buildings, or buildings that use no fossil-fuel greenhouse gas-emitting energy to operate, by the year 2030. Lord, Aeck & Sargent has offices in Ann Arbor, Michigan; Atlanta, Georgia; and Chapel Hill, North Carolina. For more information, visit the firm at www.lordaecksargent.com.

About the Skidaway Institute of Oceanography

Founded in 1968, the Skidaway Institute of Oceanography is a multidisciplinary research institution within the University System of Georgia (USG), dedicated to advancing the understanding of coastal and marine environments. The Institute conducts leading edge research on marine and coastal systems, helps train tomorrow's marine scientists, serves as a gateway to marine environments, and integrates USG marine programs. Although not a degree-granting institution, the Institute's faculty members hold adjunct appointments at USG institutions, serving as mentors and advisors for undergraduate and graduate students. The Institute provides Georgia with a nationally and internationally recognized center of research, education and service excellence in marine science. For more information, visit the Institute at www.skio.usg.edu.

###