

## News Release

### FOR IMMEDIATE RELEASE

Contact: Ken Higa  
Lord, Aeck & Sargent  
404-253-6732  
[khiga@lasarchitect.com](mailto:khiga@lasarchitect.com)  
or  
Ann Kohut  
Kohut Communications Consulting  
770-913-9747  
[annielk@bellsouth.net](mailto:annielk@bellsouth.net)

**Gwinnett County Educational Center – A Working Model of Sustainable Design –  
Now Open for K-12 Students and Adults**  
*Building Design Targets LEED Gold,  
Projected to Use 75% Less Potable Water and 35% Less Energy*

BUFORD, Ga., Jan. 3, 2007 – When Gwinnett County, Georgia, sought an architecture firm to design its first “green” building – an educational center envisioned to be a working model of ecologically sustainable design – it launched a nationwide search. In the end, the County selected Lord, Aeck & Sargent, a firm whose Atlanta office is less than 40 miles away.

The end result of the search – the Gwinnett Environmental & Heritage Center (GEHC) – opened last year. It was developed through a collaboration of the Gwinnett County Board of Commissioners, the Gwinnett County Public School System, the University of Georgia (UGA) and the Gwinnett Environmental & Heritage Center Foundation. The GEHC teaches about the importance of water, and its programs and interactive exhibits – designed for K-12 and adult audiences – explore the impact that water has had on our history and everyday lives as well as the water management challenges we face in the future.

- more -

The Center's \$16.6 million building and site construction budget was funded from Gwinnett County's 2001 and 2005 Special Purpose Local Option Sales Tax. The Gwinnett County School System and UGA also provided funding resources for education staff and exhibits. The Center has established a not-for-profit foundation – the Gwinnett Environmental & Heritage Center Foundation – to raise funding for educational opportunities and exhibit programming.

**Building design will save water and energy, targets LEED gold**

The design of the two-story, 59,000-square-foot facility utilizes locally and regionally harvested materials and features a wide array of water- and energy-saving strategies and products. Projected to use 75 percent less potable water and 35 percent less energy than a conventional building of the same size, the building is targeted for LEED<sup>1</sup> gold-level certification from the U.S. Green Building Council.

"It's been an outstanding experience for the Lord, Aeck & Sargent team to have been involved with a government building that embodies the principles of water conservation and education not just through its programs, but through its very design," said John Starr, AIA and Lord, Aeck & Sargent project principal in charge.

"At the beginning of our design process, we looked at the 233-acre site with the owner and landscape architect to identify a project site that would minimize the need for grading and that would maintain most of the existing tree canopy for shading," Starr continued. "We chose a site with a dry ravine, and the building took its form in part from this site. The building spans the ravine, but more important, the ravine became a cascading water feature that draws non-potable reuse water from the nearby Gwinnett County wastewater treatment facility and uses it to provide air conditioning. Non-potable reuse water is also used for irrigation and flushing toilets."

“The architects captured what we were after from their first rendering,” said Steve Cannon, GEHC executive director. “We wanted features that would illustrate to the development community that you can have a beautiful building with ecologically sound options that – although they may cost more initially – will save money in the long term. Lord, Aeck & Sargent’s sustainable design experience and innovative ‘green’ design ideas made them our architecture firm of choice.”

### **Architectural design incorporates native materials, ‘green’ design strategies**

Starr noted that the GEHC architecture is a working study of resource management, incorporating native materials and linking the building into the landscape. The design itself consists of:

- two building wings joined by a bridge that spans the ravine;
- a 40,000-square-foot vegetated roof structure that floats above a continuous band of windows;
- a series of adjacent linear gable structures running east to west;
- exposed Southern Yellow Pine trusses spaced every four feet, supporting the roof;
- 8-foot-deep, flat exterior overhangs on the north and south for high window shading;
- natural lighting provided by strategically located clerestory windows;
- release louvers to allow fresh air to circulate through the building’s mechanical system when outside temperatures are favorable; and
- salvaged granite from nearby Elberton, Georgia cladding the building.

In addition to the cascading water feature, the building’s extensive green roof – the largest sloped green roofing system in the United States<sup>2</sup> – is the other most important water- and energy-saving strategy. The roof provides numerous advantages over conventional roofing

systems, including: reducing and improving quality of storm water runoff; mitigating the heat island effect; and providing a natural habitat for insects and other wildlife. Planted with six species of drought-resistant flowering sedum, the vegetation will need no irrigation once the plants are established.

### **What's housed inside and outside the building**

The GEHC blends indoor and outdoor classroom space; exterior landscapes and exhibits; a museum-like collection of permanent and rotating displays; and interactive learning opportunities. Exhibits, designed by Van Sickle & Rolleri in collaboration with Gwinnett County teachers, meet the requirements of the Academic Knowledge and Skills (AKS) curriculum of Gwinnett County's K-12 school system.

The main floor includes an orientation theater called the Blue Planet, where visitors learn from a state-of-the-art film produced especially for the Center about the formation and cycle of water and how it's a resource that must be managed; Discover H<sub>2</sub>O, a room with several hands-on science exhibits; a teaching laboratory for school field trips; other permanent and rotating exhibit space; a library; a lecture hall for community use; a multi-media conference room; a research/resource area; a dining/vending area; a catering kitchen; administrative office space; and a gift shop.

The lower level houses three classrooms; additional offices; storage and mechanical space; and shell space for future expansion.

Outside the building, the native landscaped area features walkways and parking lots that utilize pervious paving, allowing water to seep into the ground instead of running off into storm drains. Excess storm water flows into vegetated bio-swales and constructed mini-wetlands to help contain onsite surface runoff.

The entire 233-acre site features a creek, constructed wetlands, a forest amphitheater, council rings for small groups, two covered pavilions, granite rock outcroppings, diverse native plant communities and green space with 10 miles of trails for passive recreational activities such as hiking, biking and jogging.

### **Project team**

- Gwinnett County, Georgia, owner
- Lord, Aeck & Sargent (Atlanta), architect
- The Jaeger Co. (Gainesville, Ga. and Athens, Ga.), landscape architect
- Juneau Construction (Atlanta), general contractor
- Uzun & Case (Atlanta), structural engineer
- Newcomb & Boyd (Atlanta), MEP/FP engineer
- RMI/ENSAR Built Environment Team (Snowmass, Colo.), energy consultant
- Lose & Associates (Lawrenceville, Ga.), civil engineer
- Van Sickle & Roller (Medford, N.J.), exhibit designer
- Waveguide Consulting (Atlanta), AV and acoustics consultant
- Huie Design (Atlanta), signage consultant

### **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. Lord, Aeck & Sargent has offices in Ann Arbor, Michigan; Atlanta; and Chapel Hill, North Carolina. For more information, visit the firm at [www.lordaecksargent.com](http://www.lordaecksargent.com).

###

<sup>1</sup> The LEED (Leadership in Energy and Environmental Design) Green Building Rating System® is a voluntary, consensus-based national standard for developing high-performance, sustainable buildings. Members of the U.S. Green Building Council representing all segments of the building industry developed LEED and continue to contribute to its evolution. For more information, visit <http://www.usgbc.org>.

<sup>2</sup>the greenroof projects database: <http://www.greenroofs.com/projects>

NOTE TO EDITORS: For further information about the Gwinnett Environmental & Heritage Center, see accompanying press materials including:

1. Gwinnett Environmental & Heritage Center “Green” Design Strategies
2. Facts About the Sloped Green Roof at the Gwinnett Environmental & Heritage Center
3. The Sloped Green Roof at the Gwinnett Environmental & Heritage Center – Construction Overview