

# WHEN DEVELOPERS L.E.E.D.

## Liberty Property Trust's extraordinarily green work environments

BY LESLIE MCKERNS

According to U.S. Census Bureau projections, two-thirds of all Americans will live in the southern and western United States by 2030 with 30 percent in just three states—California, Florida and Texas. One development company, Liberty Property Trust, a \$7.0 billion dollar real estate investment trust, is taking these statistics seriously and responding by making green and sustainable development the foundation for their company.

With four Florida offices and multiple locations throughout the U.S. and the U.K., Liberty Property Trust's mission is to enhance people's lives through extraordinary work environments.

The Plaza at PPL Center, developed by Liberty Property Trust, is one of the largest, as well as one of the first, commercial office buildings to achieve a Leadership in Energy

and Environmental Design (LEED) Gold rating by the U.S. Green Building Council (USGBC). Designed by Robert A.M. Stern Architects, and located in downtown Allentown, Pennsylvania, the 8-story, 250,000 square foot facility serves as the corporate headquarters for PPL Corporation's Energy Plus Division. It is a showcase of green and environmental features that save water and energy, minimize the impact on the environment and provide an inspiring and healthy workplace for PPL's 600 employees. Green features include:

- Extensive use of natural daylight, providing a direct window view for more than 90 percent of the office space and reducing the dependency on electric lighting.
- Two plant-filled winter gardens, providing a buffer from direct southern exposure and improving indoor air quality.



THE PLAZA AT PPL CENTER

- An efficient heating, ventilation and air conditioning system, using more than 30 percent less energy than conventional building standards. It includes an ice storage system that makes ice at night when electricity demand is low and uses the ice to help save cooling energy during peak daytime periods.
- Bicycle storage, showers and locker rooms for employees who bike to work.
- An advanced lighting control system, dimming the lights when there is natural daylight available and turning lights off in unoccupied areas.
- A vegetative roof, reducing runoff, energy consumption and extending the life of the roof.
- Water-conserving devices, saving at least 500,000 gallons of water per year.
- A large street plaza, increasing open space for downtown.
- Recycled materials used in construction and recycling of construction debris.
- Use of existing urban site infrastructure to allow access to public transportation.
- Electricity provided from renewable sources.
- Storm water runoff control features.

“Green design is the right thing to do for the environment; it benefits employers and employees by providing a healthier work environment,” said George Ledwith, Vice President of Development for Liberty Property Trust. Liberty Property’s green buildings provide a higher indoor air quality by using CO2 sensors, which monitor when additional fresh air should be brought into the air filtration system. Benefits of the clean fresh oxygen can include a healthier, more alert staff with less spread of virus and germ microbes.

“When you consider the overall costs associated with a building, the biggest operating expense is in the staffing; if you reduce absenteeism, you should see an increase in productivity,” said Ledwith.

Liberty Property Trust has several projects in South Florida in Boca Raton and Miramar that will achieve LEED certification. The projects are designed by Boca Raton’s Retsch, Lanao Caycedo Architects (RLC) a member of the USGBC with 4 LEED certified design professionals and an additional ten currently being certified. Additional services are provided by Orlando’s GreenTime, LLC.

A new Liberty Property Trust building, designed by RLC is scheduled to be the first privately held LEED certified project in Boca Raton. The 100,000 square foot Class A office building is on 19 acres in the Boca Colonnade complex at Yamato Road and Congress Avenue, Boca Raton, and will incorporate a nature preserve. The new project will achieve the Silver LEED accreditation. LEED accreditation is based on a point system. The highest level—Platinum—receives 52-69 points. Silver is 33-38 points as set by the Leadership in Energy and Environmental Design program of the USGBC.

“Our architectural firm became interested in green and sustainable design because of our increasing awareness of global density and our concern that this generation is not leaving anything for the next generation,” said Luis Lanao, RLC

principal. “The Boca Colonnade project is unusual in that it is a speculative office building, yet it is designed using sustainable and affordable LEED techniques,” he added.

“The project is located near mass transit (Tri Rail Station and bus line) and we will further encourage workers not to use cars by providing bike racks and shower and locker facilities. We’re reducing the amount of impervious surface affecting water runoff by having a parking deck instead of flat surface parking. The deck makes less of a ‘footprint’ on the site and also reduces the amount of heat reflection. The building is situated on the site near the nature preserve to make use of natural shade. Water will be drawn and recycled for irrigation from a nearby canal, and we will specify insulated glass and a reflective coating for the roof.

Inside we’re using increased natural lighting as opposed to fluorescent lighting and designing the building with flexible interior space so that sunlight can penetrate and all workers can benefit from the view.” Lanao said that we are lucky in Florida because the density is not yet such that we have to create islands on top of buildings as our only green vistas. “We will capture the natural landscape for shade, improve it by removing exotics, protect the landscape from foot traffic and use the preserve as a view to enhance the quality of life of the building’s inhabitants.”

RLC is also designing Liberty Center at Monarch Lakes, a 17.16-acre office park with two four-story, 110,000-square-foot structures built around a man-made lake. The project will also seek Silver LEED certification and will be the second South Florida green office project for Liberty and RLC. “We will create the lake, using the fill for the building and the lake for water retention, and we will use the water, treat it and re-cycle it back into the lake,” he added. He explained that sustainable design is both a point system, achievable with varying techniques, and a holistic approach as to how the building impacts the environment before and after construction.

“These are Class A office buildings yet despite the competitive nature of speculative office buildings, we are able to stay cost effective and incorporate sustainable techniques suitable for the tropics.”

High performance green buildings are designed, constructed and operated to provide greater environmental, economic, health and productivity performance than conventional buildings. Because developing a green building can represent a cost increase of five to ten percent, Ledwith said the key to getting more participation in LEED certified green building programs is in extending knowledge about the system and its benefits, including to interested city officials.

“In our speculative office buildings, we are not asking for a premium to offset our investment in green design,” said Ledwith. “Possibly, officials could help the developer offset the increase in costs by adopting an accelerated permit review process for green buildings.” If a building gets to market sooner, building costs are controlled and developers can begin to collect anticipated revenues in a timely fashion. ☑

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