

Project Profile

THE JBG COMPANIES

Renaissance Arlington



JBG Companies is an active investor, owner and developer in the Washington DC metropolitan area's real estate market - one of the most dynamic markets in the world. Their diverse portfolio encompasses millions of square feet of office, residential, hotel and retail projects, and includes many of the region's most distinguished properties. JBG's sustainability efforts are centered upon creating value through the strategic design, development and management of properties that result in energy efficiency, resource conservation, and waste reduction.

Facility Type:

Hotel Parking Garage

Products:

New LED wall packs; LED canopy fixtures and reduced wattage T8 fluorescent fixtures

Savings:

\$32,000 annually

Incentive:

\$36,500 from Dominion Utilities

Situation

JBG links sustainability to the core business of creating and preserving real estate values. The Renaissance Arlington Capital View, which opened in 2011, is a 300 room, full service hotel located in the heart of Crystal City's dining and business district in Arlington, Virginia. The hotel is Gold LEED-certified and boasts award winning architecture inspired by motion and enhanced light. An upgrade to the outdated lighting system in the property's parking garage would not only yield operating savings with a direct impact on real estate value, it would add to the significant environmental impact JBG deems a priority.

Solution

The energy efficient lighting project incorporated new LED canopy fixtures to replace more than 270 metal halide fixtures. Additionally, almost 100 four foot fluorescent fixtures were replaced with new reduced wattage T8 lamps and electronic ballasts. LED wall packs were installed on the parking ramps and the lighting for the entire garage facility was standardized to maximize energy savings and reduce maintenance costs. Careful design and planning was undertaken to account for the traditional challenges associated with a lighting retrofit in an indoor parking facility – insulated ceilings, mechanical rooms, ancillary spaces, loading docks and the need to work around the potential issues of reduced parking capacity during installation.

Both the design/audit and implementation phases were conducted by Eco Engineering.

Results

The project exceeded expectations with regard to reductions in annual monthly demand and consumption.

- Annual Demand Reductions Over 480 kW in the first year
- Annual Consumption Savings More than 350,000 kWh per year

• Reduced Billings

The lighting portion of the electricity bill was reduced by more than 70% after the upgrade. With the addition of cost avoidance from reduced lighting maintenance and repair expenses, the project generated more than \$32,000 in savings over the first year. Coupled with the incentives from local energy provider, Dominion Utilities, the entire project was able to achieve a projected payback period of four years, meeting all financial criteria established by JBG.