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GREEN BUILDING & DESIGN
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GREEN MUSEUMS SERIES

EXHIBITION

PART I: LIGHT, P. 48

2020 GATEWAY

Sending a message to all of Sacramento, Bannon Investors's new office building reached higher standards than it intended—a testament to constant collaboration

developer

Bannon Investors

architect

LPAS Architecture + Design

general contractor

Harbison-Mahony-Higgins Builders

property manager

Colliers International

location

Sacramento, CA

certification

LEED Gold

square feet

345,000

completion

2009

website

2020gateway.com



With an operating mantra of “build green now or pay later,” it’s fitting that Bannon Investors has developed Sacramento’s first privately funded, LEED Gold-certified office building: 2020 Gateway. Located along Interstate 5, the 12-story, 345,000-square-foot structure intends to make a statement about sustainability to those traveling in and out of Sacramento. “The message is that doing a green building makes sense from an economic standpoint,” says Scott Nichols, secretary and CFO of Bannon Investors. “Mandatory green building is the future.” Follow us as we go inside 2020 Gateway’s most outstanding features:

- 1/ A model of 2020 Gateway's building site.
- 2/ The high-rise office tower set out to achieve LEED Silver but became the first privately funded LEED-CS Gold building in Sacramento.
- 3/ A mechanical rendering from above.
- 4/ These photovoltaic panels double as shading devices, helping the building exceed California's Title 24 Energy Standards by 19%.
- 5/ Due to award-winning interior design, indoor air quality is equivalent to hi-tech clean rooms.

design/

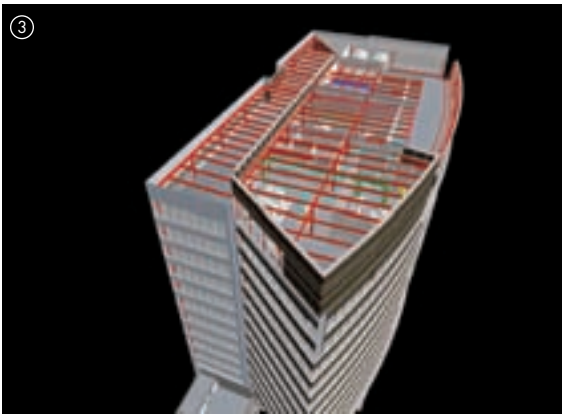
During its initial design, the goal for 2020 Gateway was to achieve LEED Silver certification; however continuous collaboration throughout the design process—between Bannon, the project architect, and the general contractor—helped it reach Gold certification with only a half-percent increase in total project costs.

“We approached all the designs on a cost basis,” says Curtis Owyang, vice president of LPAS Architecture + Design, the project architect. He adds that the skin, curtain wall, and glass of the building’s exterior was developed early in the design. “Because the contractor was there with us we could bounce ideas off each other,” he says. The collaboration also resulted in only two change orders during construction.

interior/

Featuring all-wood cherry paneling and primarily LED lighting, the interior core of the building makes use of a number of recycled materials. The interior finishes throughout the build contain recycled product, and the bathroom countertops are made of aluminum shavings that were previously industrial waste products. And all the building’s carpeting contains recycled content and is VOC free, as are the paints and adhesives.

Seventy-five percent of the building’s interior spaces have access to natural daylight and views. The air-filtration system is equivalent to hospital standards, creating an extremely healthy environment for those working inside. According to Owyang, standard office air filters have an efficiency of plus or minus 35 percent. The filters within 2020 Gateway have an efficiency of 85–90 percent.



ALL PHOTOS: Swain Photo.

water/

One of the more significant green-building features of 2020 Gateway is its 14 acres of landscaping, which require no potable water. Instead, 100 percent of the irrigation water is recycled from the HVAC system.

“Part of achieving that success—no potable water used—was to look closely at the landscape palette,” says Bannon’s Nichols, who notes the landscape design also incorporates basins that filter storm-water runoff. Dual-flush toilets and waterless urinals were installed throughout the building, as were additional water-saving elements.

Because the building is a high-rise, Bannon was required to install an on-site water tank. During the design phase it was decided to enlarge the tank from 9,000 gallons to 14,000 gallons. Collaborating with the contractor and local jurisdictions, Bannon quickly received the proper permits and approvals for this larger tank. When the building is fully leased, the landscaping and interior water-saving features will conserve 5.7 million gallons of water annually—equivalent to the annual water usage of 185 homes.

energy/

Designed to provide 5 percent of the building’s total power—when fully leased—photovoltaic panels are located throughout the parking lot and double as shade devices. The photovoltaic panels will create 187 kilowatt-hours of electricity per year, which equates to 46,000 tons of carbon, Nichols says.

The building’s energy use will be 19 percent better than California’s Title 24 standard, which represents 86,646 fewer tons of carbon dioxide that would have otherwise entered the atmosphere every year.

In total, 71.6 percent of the electricity for the building’s core and shell will be produced from wind, solar, and geothermal power.

future/

In the near future, once the demand for commercial office space has increased again, Bannon plans to build a mirror image of 2020 Gateway on the other side of Interstate 5, directly across from the current tower. At that point, Sacramento will have not one new green icon, but two. —by Erik Pisor

A MESSAGE FROM LPAS ARCHITECTURE + DESIGN
 With a 32-year history, LPAS Architecture + Design is leader in the design of sustainable and LEED projects and has 27 LEED projects certified or pending certification. The firm is responsible for a number of LEED milestones including the design and completion of the first privately funded LEED-certified building in Northern California (DPR/ABD Office Headquarters) and the first privately funded LEED-certified highrise in Northern California (2020 Gateway).
www.lpasdesign.com

LEED Innovation: 100% of the irrigation water for the entire 14-acre site is recycled water from the HVAC cooling towers saving 5.7 million gallons annually.

2020 Gateway Tower
 Sacramento, California

First privately funded LEED high-rise in N. California.

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