

BLUEPRINTS | CAMBRIDGE CITY HALL ANNEX

From old and moldy to clean green machine

Cambridge city employees who worked in the mold-infested building at Broadway and Inman Street are enjoying a much different, much healthier environment today, following a complete renovation of the 133-year-old building.

Built in 1871 as the Harvard elementary school, the building served students until 1942, when a renovation turned it into City Hall Annex.

In early 1999, mold infestation was discovered and city workers were hastily evacuated. As the city manager's office began planning for remediation, it became clear a complete renovation was necessary. The result is an efficient new workplace that preserves the best features of a historic building.

Beth Rubenstein, assistant city manager for community development, worked in the annex before the renovation and today has a bright corner office there.

"This was always a beautiful 19th century building on the outside, but the inside was not functional," she said. "The renovated space is light and airy, movement around the building is efficient, and the public meeting and gathering spaces exceed anything we had before."

Before the renovation, only perimeter offices had light and views. "Today, 90 percent of workers have exterior views," Hammer said. The designer achieved this by preserving the large windows and tall ceiling heights, then using glass for interior walls (partially etched for privacy). Some conference rooms have skylights, and "light wells" bring light down into third-floor corridors.

Carbon dioxide sensors throughout the building are part of the air-protection plan. Where possible, the architects specified furnishings, paint, and other materials that are low in volatile organic compounds, which can contribute to poor indoor air quality.

Historic preservation and sustainable design goals can conflict, but at the annex, they dovetailed. Architect Bill Hammer, president of HKT Architects in Somerville, said that's because historically driven improvements were confined to the exterior (such as the reconstruction of brick parapets) and a gut renovation provided a blank slate indoors. The architects relocated the main entrance from Inman Street to

Broadway, allowing them to create a commodious, two-story atrium that is the hub of the building, leading to offices and public spaces. This light-filled space has the accessible, civic feel that was lacking before.

The city procured a grant from the Renewable Energy Trust Fund of the Massachusetts Technology Collaborative. This helped pay for insulated windows, high-efficiency lighting, and a ground-source heat pump system for heating and cooling, eliminating the need for a furnace or boiler. It also supported photovoltaic solar panels for the roof, which generate electricity year-round, but more in summer.

"We encourage Cambridge businesses to build responsibly, including thinking about how facilities use resources, what kind of greenhouse gases they emit, and how they sit in their neighborhoods with regard to parking, transit, and other factors," said Deputy City Manager Rich Rossi. "This was a chance for us to walk the talk."

"We know this is a far healthier place to be," Rossi said. "We expect that a pleasant, well-lit working environment will contribute to higher productivity and lower absenteeism."

KIRA L. GOULD



GLOBE PHOTOS/LISA POOLE

The conference room at City Hall Annex is at the bottom of a 'well' with louvers to regulate light (top). Above is the new main entrance.

City Hall Annex

344 Broadway, Cambridge

Architects: HKT Architects, Somerville

Size: 33,216 square feet

Cost: \$7.1 million

Gee whiz details:

- The Cambridge Arts Council commissioned nationally recognized artist Mike Glier to paint murals throughout the historic building.
- Funding for the photovoltaic array on the roof was granted by the Massachusetts Technology Collaborative.
- The Energy Star rated roofs coated with material to minimize heat absorption, which will lower the demand for cooling.
- There is no furnace or boiler; a ground-source system, in three 1,500-foot wells, provides all heating and cooling.
- Daylight and occupancy sensors for interior lighting help to minimize electricity demand.