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HMFH Architects achieves LEED Gold certification for 400,000 s/f Cambridge Rindge and Latin School renovation

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According to the City of Cambridge and HMFH Architects, Inc., the comprehensive renovation of the Cambridge Rindge and Latin School (CRLS) has earned LEED Gold certification from the U.S. Green Building Council. HMFH's design for the 400,000 s/f high school fulfills the city's ambitious sustainability goals through substantial reductions in energy consumption and water use, and significant increases in indoor environmental quality, natural ventilation and daylighting.

The sustainable design strategy for the three-building complex, which was originally constructed in 1932 and expanded in 1978, includes a chilled beam HVAC system - well-suited for incorporation in existing concrete frame buildings - and a rooftop photovoltaic array. These retrofits, coupled with high-efficiency lighting fixtures and daylighting contribute to the school's net energy savings, lowering the operating costs by more than \$335,000 annually, and reducing energy use by more than 1.3 million KWh of electricity and nearly 44,000 therms of natural gas.

Monitors in the lobby displaying real-time energy data and a small rooftop garden tie environmental stewardship to the curriculum and provide educational opportunities for the school's 1,800 students. Other visible features include low-flow fixtures that provide an annual savings of 1.3 million gallons of water, operable windows, and outdoor bike racks. Beneath the playground for the school's onsite daycare center, a rainwater collection tank stores runoff from the roof and is used to irrigate the landscaping, eliminating potable water use.

While achieving high points in the categories of Sustainable Sites, Energy and Atmosphere and Water Efficiency, the project was cited with exemplary performance for construction waste management by diverting 95% of waste from landfills back into the manufacturing process. The revitalization and refresh of classrooms and shared core spaces required careful selection of finishes including recycled and low-VOC materials, FSC-certified wood, and durable rubber flooring that requires no harsh cleaning chemicals, contributing to the overall indoor air quality to provide a healthy learning environment.

The renovated school, which shares its urban site with two other city-owned LEED Silver buildings - War Memorial Recreation Center and the Cambridge Public Library - completes the civic campus of sustainable buildings and aligns with the city's sustainability initiatives.

"As far as we know, less than 10 renovated school buildings nationwide have achieved LEED Gold, so we are especially proud," said Cambridge city manager Richard Rossi. "This project is a perfect example of what can be achieved with civic commitment and strong community support. It also validates and expands our city-wide efforts to manage all of our resources in the most sustainable way. The revitalization of CRLS represents an ongoing commitment to modernize our educational facilities, to promote the highest levels of learning and achievement for all students, and to reduce our community's carbon footprint."

Recognized for its experience in designing innovative and high performance learning environments, HMFH worked with the city of Cambridge to improve and reorganize the student and teaching facilities at CRLS. In addition to refreshing classrooms and corridors with new windows, flooring, and wall finishes, the renovation also enlivens common areas and provides clear circulation and more internal transparency. Technological enhancements were made to bring the library and classrooms to today's standards. The re-designed science core includes larger labs that accommodate teaching areas as well as space for experiments, and the theater is redesigned and equipped for live broadcasts.

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