



# The Green Engineer, LLP

## Sustainable Design Consulting

### City Hall Annex City of Cambridge Cambridge, Massachusetts

The \$7.5 million renovation and restoration of the Cambridge City Hall Annex demonstrates that green buildings do not have to be new structures. This building, initially constructed in 1871, reopened in February 2004 as the city's first LEED certified municipal building, and at the time of opening, the oldest building to achieve LEED certification.

The building reached its Gold rating by using green design strategies and materials including: low-e operable windows, daylight dimming lighting, high efficiency ground source heat pumps, low emitting materials, and a photovoltaic array on the roof.



HKT Architects, Inc./Dan Gair, Blind Dog Photo

Christopher Schaffner, PE, Principal of The Green Engineer, LLP, worked on this project before founding The Green Engineer, and was responsible for:

- Mechanical design engineering and energy modeling; the HVAC system design combines water-to-water ground source heat pumps with a VAV air distribution system. Meeting rooms use the displacement ventilation concept with heat recovery on air systems;
- Conducting a feasibility study of renewable energy systems used to help obtain state funding for the roof's 26kW photo-voltaic array;
- LEED coaching for the design and construction team to familiarize the project team with its rating system and requirements.

Client: City of Cambridge  
Architect: HKT Architects, Inc.  
LEED v2 Certified Gold