

HOSPITAL

Spaulding Rehabilitation Hospital

300 First Ave, Charlestown

RESILIENCY

SLR, Resilient Infrastructure

SUSTAINABILITY

Green Building, Carbon Reduction

Team:

Owner: The Spaulding Rehabilitation Network

Architect: Perkins+Will, Boston and Chicago

MEP: Thompson Consulting Engineers

Sustainable Engineering: Buro Happold

Landscape: Copley Wolff Design Group

Status: Completed



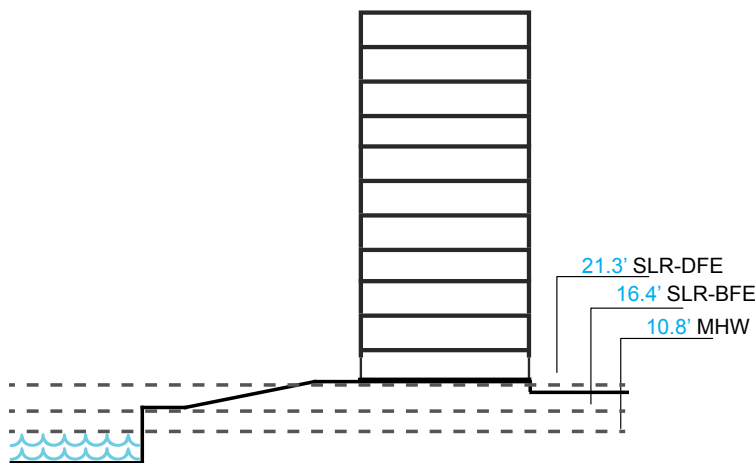
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Sea Level Rise

Caring for patients in critical condition helped the Spaulding team to prioritize building resiliency and occupant wellbeing. The ground floor has been elevated to the greatest extent possible with respect to surrounding streets and is 42" above the current 100-year flood elevation and 30" above the 500-year flood elevation. All patient and treatment rooms are located above the first floor and critical building systems are located on the roof. An accessible entry canopy will allow emergency egress at the second floor during a flood event. Patient room Keyed operable windows can be opened for fresh air ventilation if mechanical systems interruptions.



Mayor Thomas M. Menino Park

Resilient Infrastructure

Outdoor gardens surrounding the building provide waterfront views and respite space for patients while elegantly weaving in hardened landscape features designed to reduce potential wave action and flotsam impacts during a coastal flood event.

Green Building

LEED V2 Gold Certification

Point: 44/69

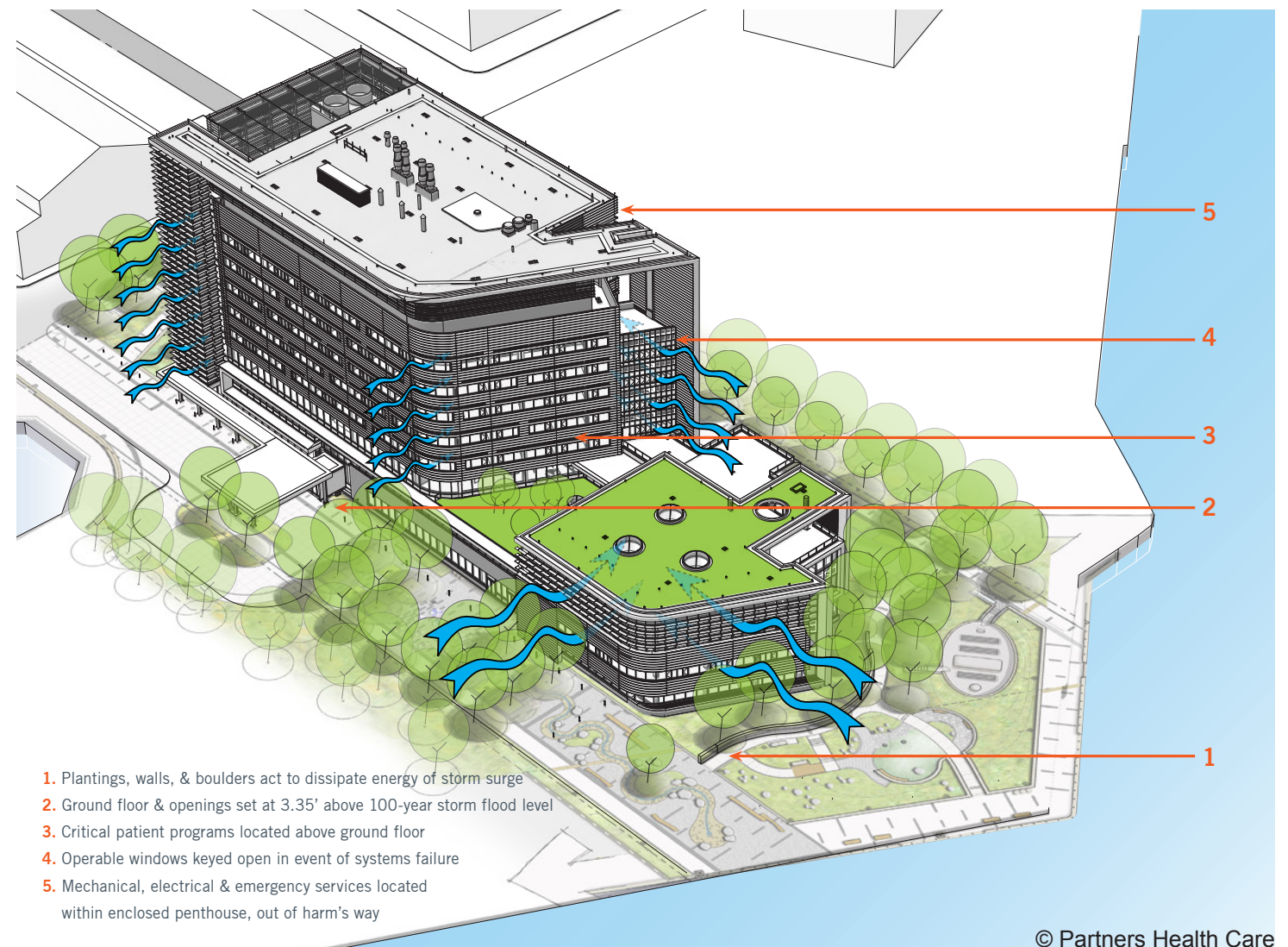
A high performance envelope with triple-glazed windows and exterior shading devices provides optimal thermal performance. The building is designed to maximize "free daylighting" in patient rooms and open office spaces. The gymnasium and social spaces are naturally ventilated via operable windows that turn off the HVAC system when the windows are open helping patients build stamina through exercising in ambient conditions.



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Carbon Reduction

All of the building systems and equipment are highly energy efficient and, with an onsite Combined Heat and Power system, translates into dramatically lower carbon emissions. With an Energy Use Intensity of 150 (kBtu/sf/yr), Spaulding is 25% below the specialty hospital average EUI of 206.7 (kBtu/sf/yr). After 6 years of operation, the hospital continues to improve its energy performance and further reduce greenhouse gas emissions.



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