Transforming Dana

Staying in Place/Expanding In Place

SNRE kept its prime location at the heart of the campus by expanding Dana by more than 25% - an "umbrella" of steel framing was erected in the central courtyard, providing additional space on four existing floors and adding a partial fifth floor suspended over the existing building.

Transforming Daylight: Courtyard into Atrium

The open courtyard was converted into an enclosed Atrium with skylight - lab and computer spaces needing reduced glare are clustered around the Atrium where appropriate indirect-daylight filters in.

"The Greenest Building is One That is Already Built"

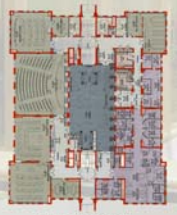
Conserving Material & Cultural Resources

Harvesting Material Resources

Deconstructing existing materials reclaimed valuable materials for re-use - harvested roof framing yielded 11,000 board-feet of old-growth pine sued for furniture and architectural features like the Atrium balcony railing.

Capturing Embodied Energy

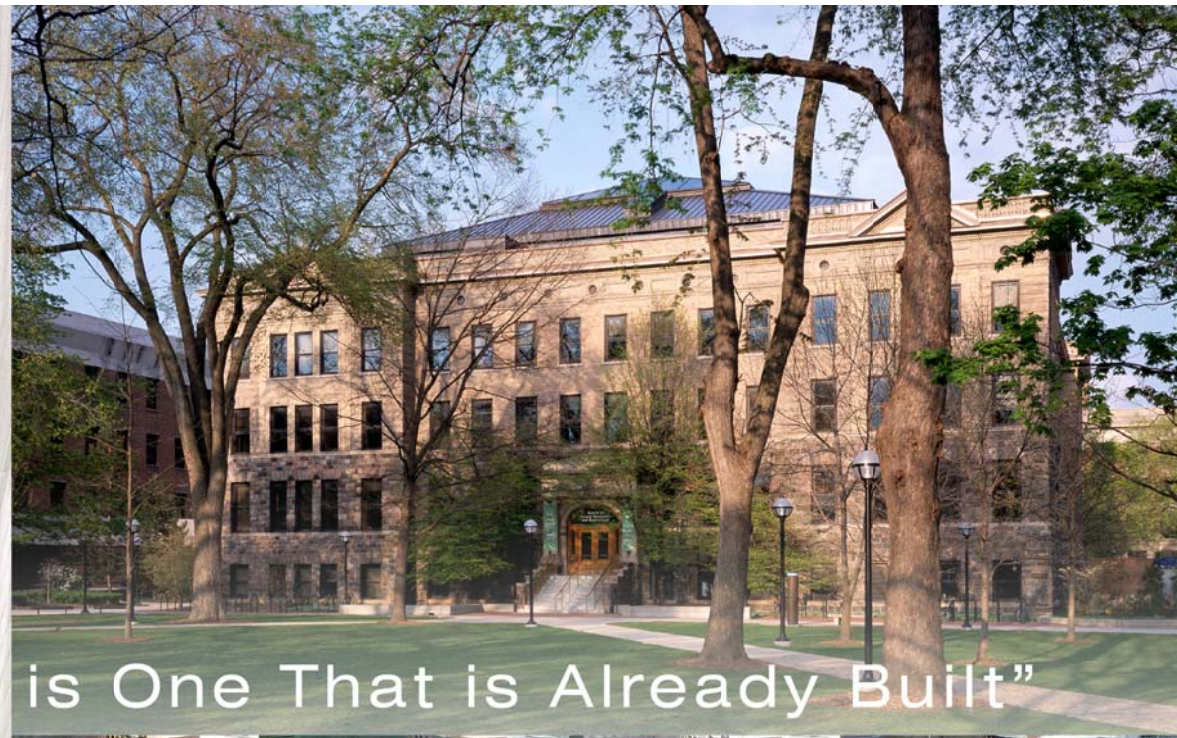
Conserving 100% of existing masonry walls captured the equivalent of 135 tanker trucks of embodied energy - more than 60 times the energy conserved by upgrading the energy-consuming systems.



Existing Walls

Embodied Energy

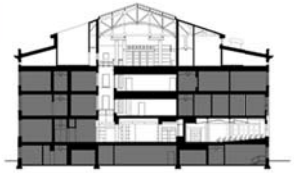
Energy Conserved by HVAC



Greening of Dana

School of Natural Resources & Environment (SNRE)

QUINN EVANS | ARCHITECTS
in association with
William McDonough + Partners
University of Michigan



Green Technologies as Preservation Strategies

Radiant Panel Cooling
Designed to leverage the physical properties of water, Dana is cooled using ceiling panels that "radiate" cooling - most spaces do not required suspensed ceilings, restorings Dana's high ceilings and tall windows.

Green Materials
Industrial ecology is a focus of study at SNRE. Dana is a laboratory for green materials - incorporating materials that are: salvaged, recycled, contain recycled content, natural, rapidly renewable, certified sustainable wood, from local sources and that contain low or no VOC's

Photovoltaic Panels
On roof areas that are not visible from the protected view of the historic campus, 2 arrays of photovoltaics panels demonstrate renewable energy technologies.

Water Efficiency
Water ecology is a focus of study at SNRE. Dana is a laboratory for water conserving technologies: water efficient landscaping requirees no irrigation, low-flow fixtures, proximity sensors on faucets, waterless urinals & composting toilets.