

*THE HOMER BUILDING:
CONSTRUCTING A HISTORICAL PAST
WITH A SUSTAINABLE FUTURE*



Danielle Jones ▪ EVNS 664-660 ▪ October 20, 2010 ▪ Green Building Project

The Homer Building

- ▣ Located at 601 13th Street, NW, Washington DC
- ▣ 12- story mix-use commercial building delivered in 1990
- ▣ 421,084 sf of trophy class office and retail space
- ▣ Three below grade parking levels
- ▣ Client amenities include a rooftop terrace and fitness center
- ▣ Energy Star Certified annually since 2007
- ▣ Submitted for LEED EB:OM Gold

Historical Landmark

- ▣ Originally developed in 1913
- ▣ “Chicago School” Neoclassical style
- ▣ Four-story department store
- ▣ Landmarked in 1987



“Represents some of the finest design work that was going on in the nation at the turn of the [20th] century.” (Washington Post, 1988)

Redeveloping the Homer Building

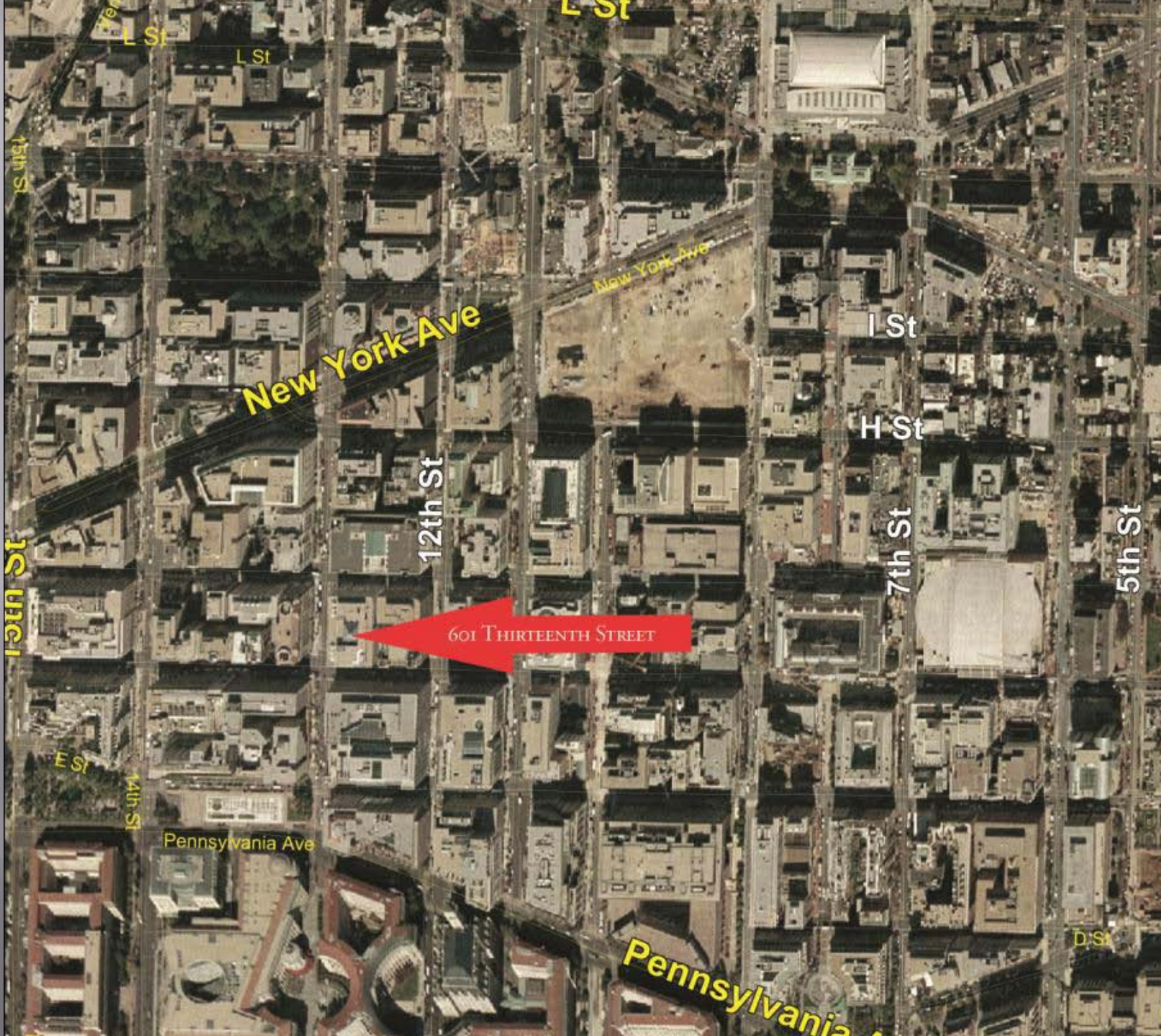
- ▣ Pennsylvania Corridor Resurgence in 1970s
- ▣ Redevelopment began in 1988
- ▣ Preserved the historical façade
- ▣ Excavating five stories below-grade
- ▣ Gutting outdated interiors
- ▣ “Raise the Roof” - add an additional eight stories

Redevelopment Challenges

- ▣ Strict historical preservation requirements
- ▣ Zoning codes demanding street-level retail
- ▣ Digging around the DC Metro
- ▣ Asbestos “curse”

Sustainable Site

- ▣ Located directly above DC's Metro Center
 - 62% of building occupants utilize public transportation for their daily commute
- ▣ Building Zipcar
- ▣ 3 blocks from the White House and the National Mall
- ▣ 20,000 sf rooftop terrace
 - Native flora in rooftop planters
- ▣ Unable to retrofit for storm water management system
- ▣ Reduced light pollution
 - 80% of offices on motion sensors
 - Exterior up-lighting on time sensors



New York Ave

12th St

601 THIRTEENTH STREET

I St

H St

7th St

5th St

Pennsylvania Ave

Pennsylvania Ave

D St

L St

L St

L St

13th St

13th St

E St

14th St

Water Efficiency

- ▣ Faucets have been replaced with hands-free fixtures
 - Retrofitted with low-flow aerators
- ▣ Original design included high-end restroom fixtures/porcelain
 - Have since been retrofitted with low-flow flush valves
- ▣ The cooling tower installed during the original development was designed to code
 - Utilizes non-potable rain water which is treated onsite

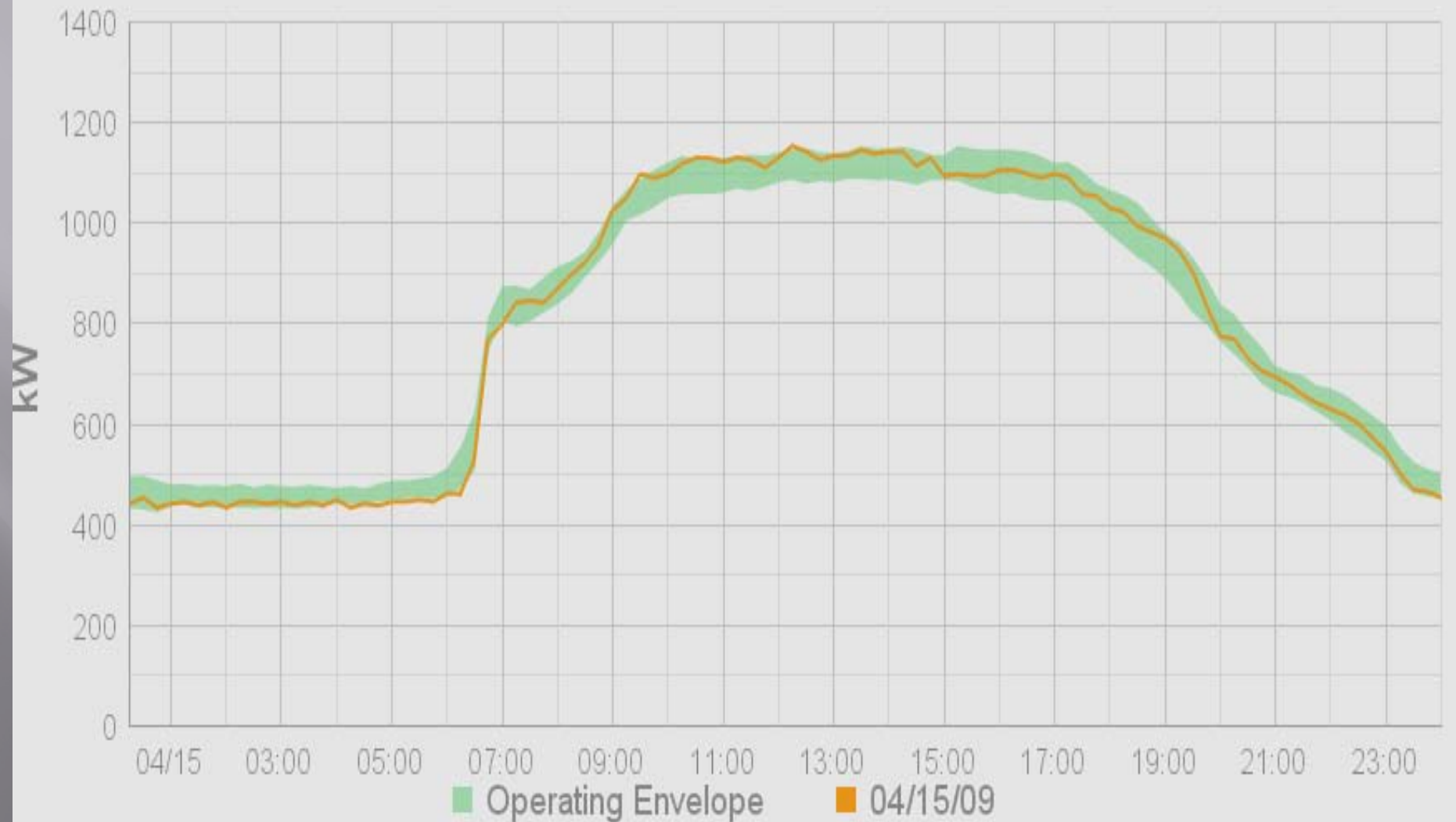
Energy and Atmosphere

- ▣ Energy-efficient heat pump mechanical system
 - Individual occupant control
 - Dial-in weekend and after hours automatic HVAC request system
- ▣ Reduce energy consumption by 5% annually for the past decade
- ▣ “Energy is the single largest controllable operating expense in a commercial building. Energy consumption also creates the highest carbon output for a building. It is something we focus on every single day. Even though Homer’s age is a challenge, we continue to maintain and operate the building as it was designed to be... comfortable and efficient.”

MACH Energy Management

- ▣ MACH Asset Manager is a web-based tool used to measure, manage and control electric consumption and costs.
- ▣ A special PEPCO meter is installed that sends 15 minute interval energy readings.
- ▣ Measurements can be quantified in hourly, daily, weekly, monthly or yearly increments.

MACH Energy



Materials and Resources

- ▣ Utilize single stream recycling
- ▣ Developing “Homer’s List”
- ▣ Starting in 2010- All tenant construction must follow LEED-CI standards
- ▣ Challenging section for a multi-tenant building

Indoor Environmental Quality

- ▣ Sky-lit 12-story atrium allows for an
 - efficient layout which provides the typical floor with approximately 50 percent windowed offices
 - the balance of space on the floor being no more than 20 feet from a window



Innovation

- Focus on Client and Investor relations and education
- Quarterly office managers meetings
- Educational handouts and gifts
- Celebrating “Green Week” in conjunction with Earth Day



Conclusion

- ▣ “When you strip away the rhetoric, preservation is simply having the good sense to hold on to things that are well designed, that link us with our past in a meaningful way, and that have plenty of good use left in them.”
(Moe, 2008)
- ▣ The Homer Building is a natural example of how historical preservation, refined design and discreet operations can create an energy efficient, sustainable building that is also beautiful and aesthetically interesting.