

Renewing a Masterwork

Nevelson Chapel Sustainable Environmental Management System

A special goal of this project is to maintain the Chapel’s artistic and architectural integrity while providing the necessary mechanical components to preserve the space for the long-term in an efficient and affordable manner. Leadership support for this critical aspect of the project has been provided by the National Endowment for the Humanities Sustaining Cultural Heritage. Your support for this system will ensure that the exceptional work of restoring and conserving the artwork will live on for generations to come.

While protecting the sculpture elements, a carefully engineered process will take place to install the following fully integrated system.

New environmental and acoustical envelope

A chapel-zone environmental envelope will be created, including new insulated, glazed windows to replace the single-pane vertical and skylight units. This will increase energy efficiency, filter out ultraviolet light, and reduce street noise. Chapel and chapel office doors will be sealed to reduce air mixing and noise penetration.

Isolated HVAC/humidification system

Updated, energy-efficient HVAC system and controls will stabilize the fluctuating relative humidity and temperature with ASHRAE Control Class B (30 to 50%RH in winter, 40 to 60%RH in summer) target. Air supply and return will be relocated to eliminate the current vents that blow directly on the sculpture, thereby reducing physical stress to some surfaces.

Lighting system

Existing incandescent light fixtures, which are creating “hot spots” on some surfaces, will be removed and new energy-efficient LED light fixtures and controls introduced. Replacement lighting fixtures will have similar architectural qualities to the historic fixtures, will be placed in a grid pattern similar to the historic pattern, and will maintain a similar color temperature to the original.

Reconstruction

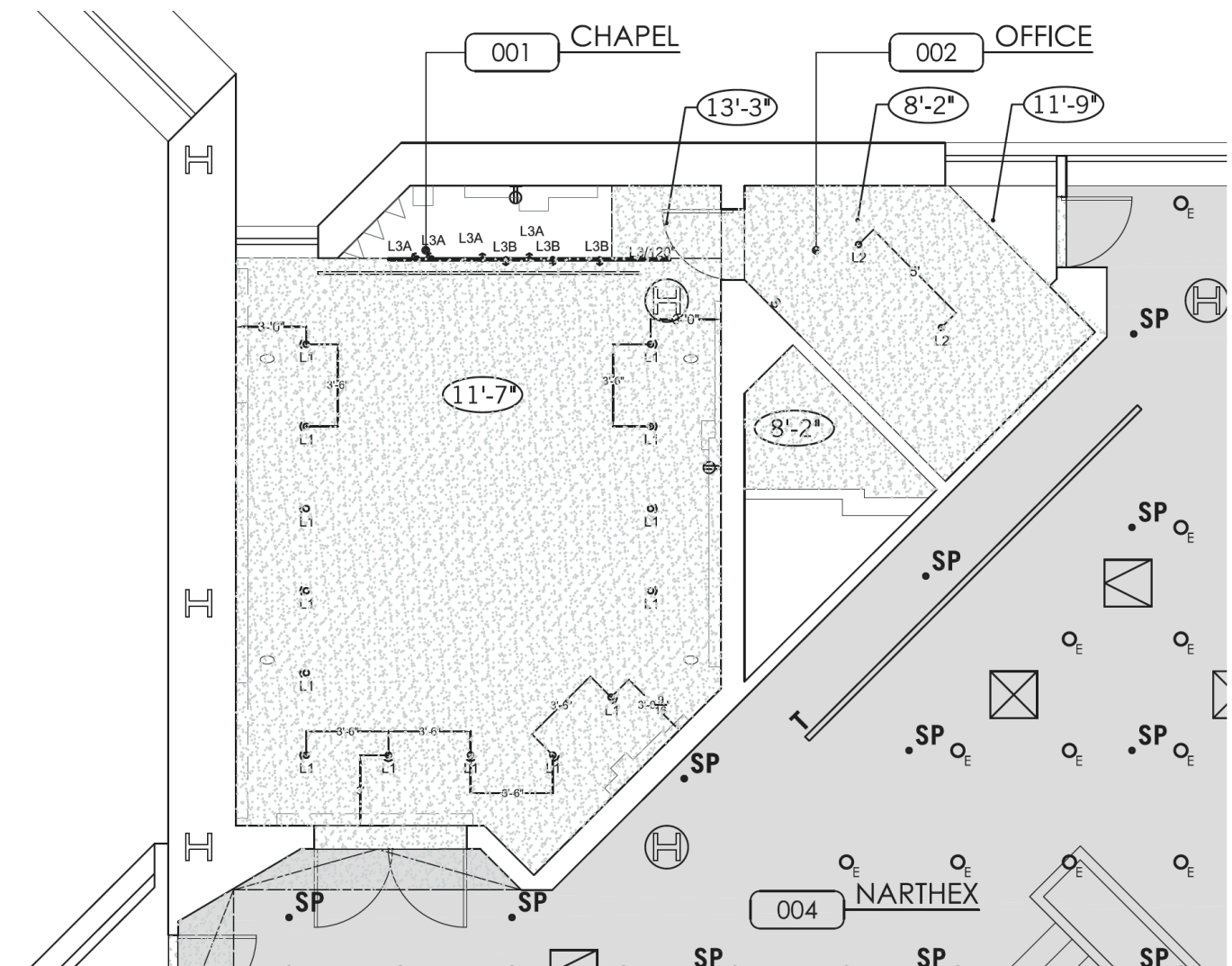
The fire suppression system will be regulated and the ceiling will be replaced. Chapel office millwork will be refurbished, chapel floor and baseboard will be refinished, and walls repainted.

Conditioning

Staff will be trained to operate the new system. An experienced commissioning agent will oversee system changes and recommissioning, monitor the air filtration system and damper and ductwork modifications, and balance and commission the new unit.

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humanities

ELECTRICAL SCHEMATIC



LIGHTING SCHEMATIC

