



nerej

Preservation of the historic woodwork in the Mass. State House Senate Chamber - by Susan Muckle

February 15, 2019 - Construction Design & Engineering

Susan Muckle,
M&A Architectural Preservation

The Mass. State House has been perched atop Beacon Hill since 1798. For almost 100 years it dominated the landscape of Boston. So much so, that in 1858 Oliver Wendell Holmes wrote, “The State-House is the hub of the solar system.” Of course, throughout the years, restoration has been required to maintain this iconic building. In the past 25 years, M&A Architectural Preservation has been proud to be part of numerous preservation projects at the State House, so we were very pleased to be invited back.

And after six long years of design work by one of Massachusetts’ premier architectural firms, the Senate restoration project was offered by the Mass. Division of Capital Planning for public construction bids. M&A was selected for all the carpentry scope, including the restoration of the entire interior of the chamber and dome, all of the furniture, and all of the doors and millwork, and support for accessibility upgrades.

One of the most challenging parts of the restoration was the removal of 1,544 wooden rustication panels which form the distinctive paneled wall system of the Chamber. M&A designed a nomenclature to record the location of each panel so that they all could be returned to the exact same spot after restoration. To ensure that all the individual panels would line up perfectly around the room, we marked story poles for all the key dimensions and lasered the space as well. Once the panels were carefully removed from the surrounding crown moldings and chair rail, each was labeled permanently with a small brass tag. The panels were then wrapped, palleted and sent off-site where they were stripped of as many as 20 layers of paint, right down to the white casein ‘milk’ paint applied at the original construction.

There were surprises at every turn: many panels had been plastered over to cover the gaps between them, some panels had been caulked, and almost all had their horizontal edges crudely sliced off to remove a delicate wood detail which gave the panels the appearance of a mortar bead. There were numerous cracks and breaks in the panels, mostly hidden by paint, but M&A managed

to save 98% of them, much better than originally anticipated by the design team. The restoration, done in M&A's shop, took several months of work before the restored panels could be painted, packaged up and taken back to the site for installation in their original positions.

Because of the unique nature of the paneling, conservators and curators required M&A to provide extensive photographic documentation and detailed reporting. Each panel has been photographed in situ prior to removal, front and back after removal, after paint stripping, and after restoration, and a final report on the condition and repairs required for each panel were submitted to the Commonwealth for its archive.

Above the paneled walls are an elaborate set of galleries with paneling, balustrades, and decorative pilasters, columns and crown moldings, most of which had over the years become cracked or damaged from wear and tear, and in one case the column bases of a balustrade were replaced with metal. M&A managed to fill the larger vertical cracks in pilasters and columns with very long, narrow Dutchmen, which are wood patches filling the gaps left by time, age and the movement of the wood. Wherever components were damaged beyond repair, we made replicas. For smaller cracks and gaps, we were able to use epoxy fillers to simulate a perfect surface and hide the blemishes.

Above the galleries, surrounding the base of the dome, there are ornate wood panels with carved wood decorations that represent the 360 degrees of the circle. All these elements were carefully replicated or restored by M&A. Higher up in the dome, the 36 round interior windows were beyond restoration. Not only had their decorative wood grilles failed, but the window frames themselves required replacement. The decorative "snowflake" patterned grilles were replicated in metal, and M&A fabricated and installed new round frames for the grilles. The new windows hold new HVAC and lighting elements.

M&A was also in charge of removing the State Seal and the Grand Eagle's gilded 16-foot wide banner from high on the walls of the chamber. These were carefully removed and meticulously crated then shipped off to a conservator. After gilding and painting, they were returned to the Chamber for M&A to rehang.

Restoration and refinishing of all the historic furniture, including the rostrum and the two huge semi-circles of the senators' desks, was also within M&A's sphere of responsibility. Removal and return of the huge curved desks was a major logistical feat, as each of the six sections had to be wrapped and carefully hand-carried down the grand staircase by a crew of eight movers in a solemn procession, followed by a sigh of relief from all present when these treasured items were safely in their place.

To round out our scope of work, M&A was responsible for all the millwork and casework for the adjacent support spaces for the Senate, repairs to some of the historic doors, and replication of the historic chamber leather doors to match existing.

M&A has been privileged to work many times at the State House, from the restoration of the House Chamber in 1992 to the restoration of the dome, and then restoration of all the windows. It was an

honor to have contributed to this important project; the interior restoration of the Senate Chamber is the jewel in the crown of this beloved building.

Sue Muckle is the president of M&A Architectural Preservation, Lawrence, Mass.

New England Real Estate Journal - 17 Accord Park Drive #207, Norwell MA 02061 - (781) 878-4540