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The Boston Blobe

Metro

Crews begin dismantling Longfellow Bridge 'salt and pepper shakers'

By Martine Powers | GLOBE STAFF MARCH 08, 2014



DAVID L. RYAN/GLOBE STAFF

Workers (above) secured the cap of a bridge tower Friday before it was lifted off.

One granite block at a time, two of the "salt and pepper shaker" towers on the Longfellow Bridge are slowly vanishing from the skyline, so the historic structures can be repaired and reinforced, catalogued and labeled, and, finally, put back together.

Over the next four to six weeks, crews working on the restoration of the bridge that straddles the Charles River will painstakingly remove each of the 529 blocks in each tower, some weighing as much as three tons, for cleaning and repair.

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When the bridge was completed in 1907, the four towers were deemed the crowning achievement in what was described as "undoubtedly one of the handsomest and most imposing [bridges] to be seen in America today."

"Most of the other bridges in Boston consist simply of the merest 'construction,' in which anything like ornamentation has been wholly neglected," according to a 1902 Globe article on the Longfellow's design.

The towers bear the seals of Boston and Cambridge, feature an ornate carving of the prow of a viking ship, and cost \$100,000 each to build.

But over time, the granite blocks have settled, making the towers less stable. Crews will reconstruct them with stainless steel rods that will prevent them from shifting in the future. The blocks will also be cleaned, and any cracks or fractures will be repaired. As each is restored, they will be kept on wood pallets covered with plastic tarpaulins until the towers are ready to be reassembled later this year.

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Graphic: Refurbishing the towers



DAVID L RYAN/GLOBE STAFF A large mounted crane lifted the cap from the tower.

The process requires removing the blocks "in a careful

and meticulous fashion," state Department of Transportation spokesman Mike Verseckes said. Some of the blocks may be broken or could break if they are lifted improperly.

After they are refurbished, each will be returned to its exact spot. For help with that, officials went straight to the source: the original blueprints from the early 1900s. Those drawings were used to create two-dimensional computer models, which show the tower in cross-section, level by level. Staff also adopted the numbering system used by the original engineers, and they plan to affix a label to each piece of stone, attached by painter's tape. Each stone will be documented, photographed, assessed for its condition, and tracked as it goes through the process of removal, restoration, and reassembly.

They will also write a more permanent marking on each stone, along with a "this way up" arrow that ensures that construction crews do not install the blocks upside down.

Crews will dismantle and reassemble the towers on the upstream side of the river first and will tackle the towers closer to Boston Harbor next year.

On Thursday, the work crews sent an icebreaker out onto the Charles to clear a path, then floated a barge-mounted crane to the upstream side of the bridge, anchoring it next to the tower closest to the Cambridge side. Then they removed the very top of the tower — the salt dispenser, if you will — and used the crane to transfer it to the barge.

The towers will be dismantled down to the sidewalk level. The granite blocks lower than the bridge deck will be cleaned and refurbished in place.

The bridge repair project began last summer and is expected to take three years to complete. In the meantime, car traffic from Boston to Cambridge has been detoured.

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