

Key cracks repaired in SR 520 Pontoon W

Local News

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SEATTLE, Wash. - Repairs to Pontoon W have been completed at a drydock location on Harbor Island, ensuring that cracks are sealed, the pontoon is watertight and the new State Route 520 bridge will meet its 75-year design life. This is the second of two pontoons repaired in drydock, while two remaining pontoons from Cycle 1 will be repaired on Lake Washington. The [pontoon was floated out of the drydock](#) on Tuesday afternoon Sept. 10. "We're very pleased with the results of the repairs implemented on pontoons T and W in drydock," said Dave Becher, Washington State Department of Transportation construction manager for the SR 520 Floating Bridge and Landings Project. "We have ensured the watertightness of these pontoons by using epoxy injection, transverse post-tensioning, and applying carbon fiber wrap—all repairs endorsed by our expert review panel." A video that shows and explains the repairs made to Pontoon W is [available on YouTube](#). Before returning to Lake Washington, however, contractor Kiewit/General/Mason, a Joint Venture (KGM) towed the pontoon to the Manson Construction Company facility on the Duwamish River to remove six round concrete columns built on the pontoon last fall. A total of 10 round columns and two box columns were built atop Pontoon W to support the future highway.

In December 2012, KGM determined one column needed to be replaced because the rebar cage inside the pontoon shifted slightly during the concrete pour. Since the first column was replaced, additional tests have shown that six other columns have the same construction issue. The remaining three columns have been approved through the quality assurance process and meet all contract requirements. Since the contractor is responsible for the column repair and all associated costs, WSDOT gave KGM an opportunity to evaluate and propose potential repairs. KGM has determined that the best way to ensure that the columns meet all contract and quality requirements is to remove and replace these six columns. KGM spokesman Tom Janssen said, "Kiewit/General/Mason is committed to the quality of the SR 520 Floating Bridge, and it is our responsibility to correct this issue. Our quality program identified this issue and reported it to WSDOT. After additional testing and analysis, we determined that removing and replacing these six columns will help ensure the highest quality construction. The testing of other columns has ensured that they meet our strict standards and the specifications of the contract." "No taxpayer money will be spent on the column repairs, and no additional time will be added to the floating bridge schedule," said Becher. "KGM will pay for the column removal and replacement since this was a construction-related problem." Over the next three to four weeks, KGM crews working at the Manson construction facility will carefully remove the six, 58-foot-tall round concrete columns. The columns then will be reconstructed either in the Manson facility or on Lake Washington, depending on equipment availability. The removed columns will be dismantled and the concrete and steel rebar will be recycled. Pontoon W is one of four Cycle 1 pontoons to undergo repairs due to a WSDOT design error. The design error has been corrected by modifications in all pontoons built after Cycle 1. Pontoon T was repaired in Portland and towed back to Lake Washington in August. Crews will begin repairs on pontoons U and V in a coffer cell on Lake Washington later this year. Pontoon W is one of two cross pontoons that form the endpoints of the new floating bridge. It ultimately will be positioned

at the easternmost end of the bridge, near the Medina shore. The other cross pontoon – Pontoon A – is currently located at the east end of the lake where its box and round columns are being added. Pontoon A will eventually form the westernmost end of the bridge between Madison Park and Laurelhurst. As of September 2013, 32 of 77 pontoons for the new floating bridge are now complete, with additional cycles due from Tacoma and Aberdeen this fall. More details are available on the [SR 520 Pontoon and Floating Bridge Progress Web page](#). More information about the SR 520 Bridge Replacement and HOV Program can be found at www.wsdot.wa.gov/projects/sr520bridge.