Pontoon Repairs Complete in Aberdeen, More Work Needed

Local News

Posted by: David Haviland

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Aberdeen, WA - Repairs have been successfully implemented on four pontoons under construction in Aberdeen for the new State Route 520 floating bridge, the Washington State Department of Transportation said today. The repairs included removing concrete, adding reinforcing steel rebar and pouring new concrete on sections where the concrete cracked and flaked after post-tensioning, a process where high-tension steel tendons are stretched through the pontoon to strengthen it. However, Suanne Pelley with WSDOT tells KBKW cracks developed in new areas of one pontoon last week following post-tensioning. To help analyze the cause of this new cracking, repair options and the repairs made to date, WSDOT convened a peer review panel of industry experts this week. These pontoons must be safe and functional for 75 or more years, nn any big project like this, there are issues that arise and refinements that are made. We welcome the expertise of our panel as we address the things we’ve encountered and look forward to successfully building the new SR 520 floating bridge. - Transportation Secretary Paula Hammond

Hammond said the panel will review the design and construction of the pontoons and the repairs made to date. It will also consider additional repairs that may be necessary and possible design or construction changes for future pontoon cycles. While some cracking in concrete is expected, Hammond said WSDOT will ensure the cracks are repaired, as well as minimized in future cycles. The review panel began its work Monday, with interim findings expected during the week of July 9. Panel participants have backgrounds in structural analysis, pre-stressed concrete and steel design, risk assessment and long-span bridges under seismic conditions. Individual panel members have worked on projects internationally, in the United States and in Washington state, including the Interstate 90 and Hood Canal floating bridges and the Tacoma Narrows Bridge.Panel members are Neil M. Hawkins, Ph.D., Dist. M. ASCE, Professor Emeritus, University of Illinois, and former chair of the civil engineering department, University of Washington; Tom Sherman, specialist in floating bridge design and construction, TES Enterprises; and John H. Clark, P.E., Ph. D., a consultant in long-span bridges and heavy structures. The panel is chaired by John Reilly, P.E., C.P. Eng., with experience in management, risk assessment and pre-stressed concrete.“WSDOT and our contractor, Kiewit-General, are committed to high quality in these pontoons so that they will form the foundation for the world’s longest floating bridge and serve the public well for many decades to come,” said SR 520 Program Director Julie Meredith.Altogether, 77 pontoons are needed for the new SR 520 floating bridge: 21 longitudinal pontoons, each 360 feet long, that form the backbone of the bridge; two cross pontoons, each 240 feet long, that create the ends of the floating bridge; and 54 supplemental pontoons, each 98 feet long, that provide stability and flotation. In Aberdeen, Kiewit-General is building 33 pontoons: all the longitudinal and cross pontoons, plus 10 supplemental pontoons. In Tacoma, contractor Kiewit/General/Manson is building the remaining 44 supplemental pontoons. Post-tensioning is required on all the longitudinal and cross pontoons. WSDOT and the contractor team are targeting July or August to float completed pontoons from Aberdeen, depending on the extent of repairs required and favorable tides. Pontoon assembly is slated to begin on Lake Washington this summer. Other floating bridge construction work continues on pontoons in Tacoma, anchors in Kenmore and bridge supports on the east side of Lake

Washington in Medina.More information about the pontoon construction project is at www.wsdot.wa.gov/Projects/SR520/Pontoons.htm.