

## VDOT Implements Shared Approach to Risk Management

The \$134-million Gilmerton Bascule Bridge Replacement project in Chesapeake, Va., will replace the existing double-leaf bascule bridge that was constructed in 1938 with a vertical-lift span over the southern branch of the Elizabeth River. The bridge replacement is slated for completion in early 2014.

To expedite the project, the Virginia Dept. of Transportation (VDOT) implemented a hybrid project risk-management program. The concept is similar to an integrated project-delivery system but incorporates the concepts into a public-project scenario. This takes the project a step beyond traditional partnering by focusing on risk management as a team challenge. “We see the program as an issues-focused form of partnering that takes a proactive approach to problem resolution,” says Jim Holtje, P.E., the project manager with PCL. “This streamlining effort becomes a big advantage by turning around quick responses to problems.”

Holtje explains that the system requires that the team and the owners have conversations to be prepared for any event. “No one wants to think that there could be a major claim on your project; but there is significant value in discussing how this sort of situation would be resolved before it potentially happens,” he says.

Since it is impossible to foresee each circumstance that might arise during a project, adaptation and flexibility are essential to making the system work. Talking through obstacles that



The new 1,908-ft, four-lane bridge will have a vertical clearance of 35 ft in the closed position, compared to the existing 11-ft clearance.

materialize during design and construction allows the team to find creative solutions that minimize risk.

“Joint project risk management has allowed us to expedite resolution to significant issues on the project,” says Holtje. “This program worked and we believe that other DOTs should certainly consider this program to determine if it makes sense for them.” ■

## Virginia’s Tallest Segmental Box Bridge Under Construction

Phase I of the U.S. 460 Connector project in Breaks, Va., is under way and scheduled for completion in the summer of 2014. Bizzack Construction LLC is the general contractor. CJ Mahan Construction Co. has teamed up with VSL and Doka USA to provide the formwork and traveler system on this design-build project. “This will be the tallest bridge in Virginia when it’s complete,” says Todd Solar, senior account manager with Doka. The \$113-million, balanced-cantilever concrete bridge will be 1,733 ft long and 250 ft tall. The project includes 15,340 sq ft of pre-assembled Top 50 formwork that builds four sets of traveler forms. The segmental boxes vary in depth from 31 ft at the pier table to 12 ft, 6 in. at the mid-span of the bridge.



This complex twin-segmental box bridge will reach over 1,700 ft in length and reach a height of 250 ft. The bridge includes 15,340 sq ft of pre-assembled Top 50 formwork that builds four sets of traveler forms.

The Virginia Dept. of Transportation (VDOT) initiated Phase 1 of the U.S. 460 Connector project to provide needed improvements to the Coalfields Expressway infrastructure system. The intent is to provide local and regional connectivity improvement and stimulate economic development.

A major challenge is that the pier table was designed with three horizontal construction joints that included the initial base slab with an 8-ft-tall wall pour for lift 1, elevated support for lift 2 and a drive deck with inverted wall pour for lift 3. Doka designed the lift 2 formwork to be supported with an overhead gantry-style system to hang the formwork so that the base slab and walls could be placed in the same pour. ■



TOP PHOTO COURTESY OF PCL; BOTTOM PHOTOS COURTESY OF DOKA