

Indian River Inlet Bridge Project

Delaware is building a new bridge over the Indian River Inlet - a 2,600 foot long cable stay bridge replacing the existing aging bridge. The bridge will span between concrete pylons on either side of the inlet and will increase the minimum vertical clearance from the existing 35 feet to 45 feet over the navigational portion of the inlet. It will have two 12-foot wide travel lanes, a 10-foot wide outside shoulder, a 4-foot wide inside shoulder in each direction and a 12-foot wide sidewalk on the east side of the bridge that will accommodate pedestrians and bicyclists. The new bridge is expected to be completed in late 2011 and will have a 100 year service life. Skanska USA is the design-build contractor for the project.

Why do we need a new bridge?

Severe scouring in the inlet has taken place over the years. That means that rapid currents in the inlet have scoured deep holes in the bottom of the inlet near the piers that support the existing bridge. It is expected that these scour holes will continue to get larger over time, and would ultimately affect the stability of the existing bridge supports in the long term.

What is the status of bridge construction? (September 08, 2010)

As summer ends and fall begins, so does a new phase in construction of the bridge. With 65% of the construction complete, the project continues the stay cable installation process. The contractor has completed the pylon/towers for the bridge and is now installing cables, decking and edge girders. Workers will use form travelers, (large customized pieces of equipment used to traverse the inlet), to assist with constructing the bridge decks across the inlet. They will also be casting the transition piers - the portions of the bridge that transition from traditional pier-supports in the approach spans to the cable-stay supported main span portion of the bridge.

What are some recent questions people have had about the new bridge? (from project meetings)

Some of those attending the regular monthly project update meetings, which are open to the public, have asked about foundation settlement. We have observed about ¼" inch of foundation settlement at the pylons/towers, which is within the tolerance anticipated in the design. The design-build team and DelDOT regularly surveys many points on the bridge structure to monitor movements. Others have asked about construction employment fluctuations. The bridge construction will have peaks in employment when construction of the approaches, pylons, decking and other key parts of the project are being performed concurrently. Fluctuations in the labor force will naturally occur as construction activities are completed as part of the progression of work.

What recent challenges have occurred during construction of the new bridge?

During regular quality control inspections in July 2010, DelDOT discovered some thin "hairline" cracking in the deck around the north and south pylon areas. The cracks' depths vary from a few inches to 10½". DelDOT, the design-build team, the quality control team and Federal Highway Administration conducted inspections and determined that these cracks did not affect the stability or structural integrity of the bridge. The "hairline" cracks were extremely narrow - the widest measuring .006" wide, comparable to the width of a coarse human hair. The contractor is starting the repair work on the cracks using a high-performance epoxy material. The repair work is expected to be completed in October, but will not delay other work activities or the anticipated completion date.

How have recent challenges affected the construction schedule?

Weather impacts between November, 2009 and March, 2010 slowed the construction schedule by about 25 days. There were also delays associated with various design and construction issues over the past several months that have impacted the completion date. The construction schedule is subject to various fluctuations that may or may not affect the completion date of the project. DelDOT does not expect additional cost to the budget or to taxpayers.

Is current construction on time and on budget?

The current bridge project is on budget and is expected to stay on budget. The project is about 4 to 6 months behind its original schedule but the contractor is working to make up this time through other efficiencies.

How much does the new bridge cost?

Design, construction and inspection is approximately \$150 million. The bridge is being funded 80% by the federal government (Federal Highway Administration) and 20% by the State of Delaware (through DelDOT Transportation Trust Funds).

When can we expect the new bridge to be completed?

Late Fall 2011.

What is the status of the current Indian River Inlet Bridge?

DelDOT is continuing to perform underwater and above ground inspections of the current bridge. The next underwater inspection is scheduled for October 2010. The bridge and bridge piers continue to be stable and the existing bridge is safe.

What happened during the first attempt to build a new bridge?

DelDOT began this project planning two separate contracts: one for roadway approaches to the bridge and another for actual construction of the bridge itself. In 2005, a contractor began building the bridge approaches. In 2007, DelDOT terminated the roadway contract because it did not have a contractor for the bridge itself. At the same time, approach embankments showed problems with soil settlement. DelDOT is still pursuing recovery of costs associated with embankment design.

In spring 2008, DelDOT awarded Skanska USA Civil Southeast Inc. a contract for design, construction and inspection of a new bridge. A separate contract to complete the roadway approaches to the new bridge is currently out for bid. Bids are scheduled to be opened on October 5, 2010. Work on the approaches should begin spring 2011.

What can we expect as this project moves forward?

DelDOT is working with the design-build team to mitigate delays without compromising safety to workers or the quality of the completed structure. Rigorous quality control and quality assurance are meant to ensure that the project is built according to the approved plans and specifications. These processes will continue to play an important role in the continuing construction of the new bridge.

DelDOT and the design-build team are committed to providing the citizens of Delaware with a completed bridge of high quality that is built safely, efficiently, and economically - to serve as a new landmark that the citizens of Delaware can be proud of.

How can I stay current with information on construction of the new bridge?

You can attend monthly project meetings in person or continue to visit the website for project updates. The monthly project meetings take place at 10:00 a.m. at the DelDOT Field Office, 39368 Inlet Road, Rehoboth Beach, DE 19971 on the last Monday of every month.

For more information on the Indian River Inlet Bridge construction project, visit:
www.trib.deldot.gov