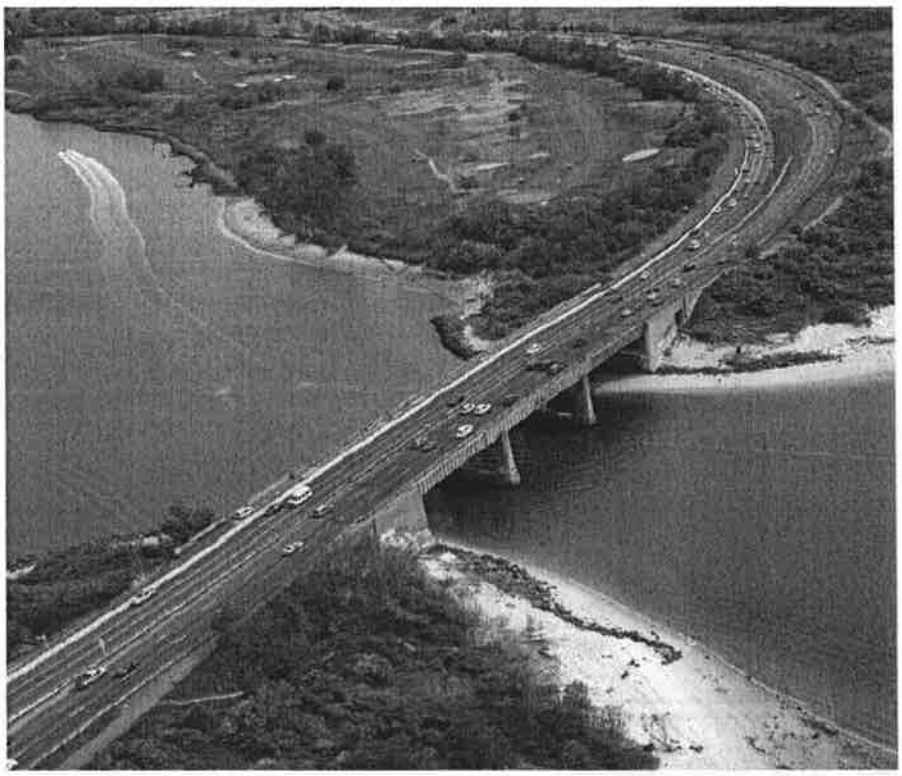
'A Complete Project'

CCA CIVIL IS CONSTRUCTING A NEW BRIDGE FOR NEW YORK'S BELT PARKWAY SYSTEM. BY ALAN DORICH



» CCA Civil will complete a mile's worth of work to replace the Gerritsen Inlet Bridge in Brooklyn, N.Y.

Throughout its history, CCA Civil Inc. has built a portfolio of heavy civil/highway projects. That experience, Project Manager Vicken Bedian notes, has made it the right contractor to build a new bridge to replace the Gerritsen Inlet Bridge (GIB) in Brooklyn, N.Y., for the New York City Department of Transportation (DOT).

Bedian, who has 22 years of construction experience in New York, says the GIB is one of seven bridges being reconstructed in the Belt Parkway system. CCA Civil's work will include the replacement of the 600-foot-long bridge, as well as the approaches.

In total, CCA Civil will complete a mile's worth of work, Bedian says. Although the company started work in February, "We're still in the initial phase," he reports, adding that the project will be finished in September 2017.

A Teaching Tool

The GIB was originally built during the 1940s, which distinguishes this project from others, Bedian says. "You don't see many complete replacements of [U.S. infrastructure] that was built in the '40s and '50s," he explains.

Bedian admits that most of his previous bridge projects have involved the replacement of decks or partial structural steel replacement. "On this one, we're doing everything from scratch, it is a complete project," he says. "It will be a good teaching tool for younger ones."

Guided by more experienced workers, novice staff will get experience in marine work, structural steel, decking, roadway and drainage work.

CCA Civil Inc. – Gerritsen Inlet Bridge

www.chinaconstruction.us

- *Project budget: $104 million*
- *Location: Brooklyn, N.Y.*
- *Employees: 80 (peak)*

"If you hit something unknown, there's a huge impact on the project." –Vicken Bedian, project manager

Avoiding Impacts

CCA Civil crews are working in some of the most environmentally sensitive areas, such as parks and wetlands. "There's two marinas and a golf course nearby where you have a lot of recreational activities," Bedian notes.

He asserts that CCA Civil has made sure that the environment is not impacted unnecessarily. For instance, when clearing land, the company has done its best to cut down the fewest trees possible, he says. CCA Civil also has taken care to protect tree roots that it did not need to remove. "We put special protective mats on the roots so they don't get damaged by the heavy equipment," he says.

The GIB's location has presented CCA Civil with challenges, Bedian says. Because the bridge is on the Belt Parkway, "You can't have trucks on the parkways," he says.

This makes it difficult to get supplies and equipment to the site. "Just getting concrete from different suppliers was a challenge," Bedian admits, adding that CCA Civil has solved the problem by sourcing all of its concrete from a nearby plant.

The project team also has worked as commuters have passed through. To keep them safe, CCA Civil has maintained a community outreach program, he says. "There's constant data being [communicated to] the traveling public," he says. "If there is any upcoming work, we give them notice."

Close Communications

CCA Civil has been at work on the GIB project for only a few months, but already it has learned important lessons, Bedian says. These include the importance of identifying and communicating with all of the project's stakeholders. "Over the course of the project, CCA Civil will interact with over 15 distinct parties ranging from federal, state and city agencies, private entities, consultants, community representatives and others," he says.

By doing so, "We have a better understanding of how everything works," Bedian says. "We share [many] of our concerns, even if it's not 100 percent flattery."

One problem CCA Civil had to solve was related to the site's conditions. According to Bedian, they were not ideal for driving sheet piling to separate the new roadway from the existing with up to 13 feet grade differential.

"We were concerned about some vibrations and unknowns by driving steel sheets that are 40 to 50 long, which are literally one foot away from live traffic," he explains. "If you hit something unknown, there's huge impact on the project."

To preempt this potential problem, CCA Civil's project team presented a value engineering proposal to New York City DOT to substitute the sheet piling with a mechanically stabilized earth system (MSES) that requires no intrusive digging into the ground, he says. "Sure enough after starting the MSES, [a] previously unknown drainage structure was discovered that would have been hit if sheet piles were driven." ◆

J.T. Cleary Inc. is a marine and geotechnical specialty subcontractor. The partnership of J.T. Cleary Inc. and CCA Civil on the Gerritsen Inlet Bridge project has turned into more than the sum of its parts. Jim Cleary, P.E. and President of J.T. Cleary Inc., says "The way I see it is that 'A' team players will eventually get with 'A' team players and that is what you have here. CCA has the same style we do- planning, planning, planning- and then once on site, no drama, no emergencies, and no yelling at people. It's been great."