

ENRSoutheast

Construction of \$1.8-Billion I-595 Project Ramping Up

01/23/2011

South Florida Sun-Sentinel

By Michael Turnbull, Sun Sentinel, Fort Lauderdale, Fla.

Jan. 23—

It's hard to drive Interstate 595 these days and not be engrossed in the view.

But keep your eyes on the road, it's changing constantly.

Commuters have a front-row seat as a massive production of concrete, steel, dirt, earth-movers and cranes is choreographed with precision.

Giant cranes drive concrete logs called piles into the ground to provide a foundation for new bridges and ramps. The ping-pong and thumping sound is unmistakable to motorists or anyone who lives or works along the highway.

It's all happening while the existing number of lanes -- three in each direction -- are kept open to traffic during the day. Just wait until one of the University Drive flyovers is closed for two weeks this summer, the first in a series of long-term ramp closures planned, some lasting more than 200 days.

"We've got to keep the heart pumping while essentially we build a new heart," said Ed Perez of the Corradino Group, the engineering firm coordinating the design and construction.

Milestones

By year's end, drivers will be riding over short sections of the new, modern I-595. It's the first major reconstruction of the highway since it opened in 1989, opening up what had been cow pastures and swamps in west Broward County to explosive development.

Several new bridges and crisscrossing ramps will spring out of the ground, and miles of new pavement will fill in the missing link of westbound State Road 84 and a stretch of the new express lanes from University Drive to Southwest 136th Avenue.

Project concessionaire I-595 Express, headed by Spanish construction giant ACS Infrastructure Development, can pocket up to \$18.5 million in bonuses if workers complete several milestones by Sept. 28.

The bonuses, intended as an incentive to keep the massive rebuild on track, include:

- \$10 million for completion of a new direct ramp from westbound I-595 to the northbound turnpike.
- \$8 million for completion of braided ramps, which keep traffic trying to exit I-595 from crossing paths with traffic entering. The ramp braids will carry a new westbound exit to Nob Hill Road over a new westbound entrance from S.R. 84 west of Pine Island Road, and a new westbound exit to University Drive over a new westbound entrance from S.R. 84 west of Davie Road.
- \$500,000 for completion of noise walls along the turnpike north of I-595 and along westbound S.R. 84 near the turnpike.

Quick construction

About 1,268 full-time and 500 part-time workers are toiling in some capacity on I-595.

It's a mix of construction workers laboring mostly during the day, though the nighttime work might be more noticeable because that's when crews are allowed to close lanes. Meanwhile, out of public view, engineers, designers and state highway officials work elbow to elbow in an office building on the south side of I-595 near Nob Hill Road.

The number of workers will triple later this year as a 10-mile stretch of I-595 -- from east of State Road 7 to the I-75 and Florida's Turnpike approaches to I-595 -- becomes one giant work zone. If traditional design and construction methods were used, the entire project would take more than 15 years. Instead, it is expected to take just five years.

The \$1.79 billion contract is "design-build," in which designers and builders work together under one contract and construction often begins before the ink on the drawings is dry. Proponents of the method, which is now used by most states, say less time is wasted.

If you're a driver, there's an upside and a downside to the build-it-all-at-once approach. When I-95 was widened between Delray Beach and Palm Beach Gardens in Palm Beach County, the work was done in stages over a decade so it wasn't white-knuckle driving the entire way.

But to get I-595 done in half the time, much of the entire highway will be torn up at the same time. Officials say drivers have told them repeatedly in surveys that they prefer construction be done sooner rather than strung out.

Bigger and better

In less than four years, I-595 will have reversible express lanes in the median that will separate long-distance commuters from those traveling only a few exits.

From west of University Drive to Nob Hill Road, the new express lanes are starting to take shape in the old grassy strip between the eastbound and westbound lanes.

Unlike the row of plastic poles that separates the I-95 express lanes, I-595's express lanes will be divided by concrete barriers.

Most of I-595's entrance and exit ramps, which are too close to each other, will be relocated to end the high-stakes game of chicken that drivers now play trying get on and off the highway.

Some exits will be combined. For instance, on eastbound I-595, Hiatus Road and Nob Hill Road will share the same exit ramp. Once drivers get on the ramp, they will have a choice of going to Hiatus or continuing on a "bypass bridge" over Hiatus to Nob Hill.

The missing pieces of S.R. 84, which now force drivers to get on I-595, will be completed between S.R. 7 and Davie Road.

The new S.R. 84 running parallel to I-595 will be designed to move local traffic and minimize the points where traffic merges onto the interstate.

Safer turnpike interchange

The maze of ramps at the turnpike will be improved and made safer, with gentler curves and less lane-switching required.

When westbound I-595 commuters want to go north on the turnpike, they currently have to go south first and fight for lanes with eastbound traffic on a sharp curve.

The northbound turnpike entrance from I-595 has been the scene of numerous accidents over the years, including a fiery collision in 2005 involving a gasoline tanker that overturned and exploded. Four people were killed in an adjacent car, including the mother of Dallas Stars hockey player Jeff Halpern.

Starting this fall, drivers will take a more direct route to the northbound turnpike that is as simple as making a right turn. The new ramp will come off a stretch of westbound S.R. 84 that is being built between S.R. 7 and Davie Road.

Once traffic is switched to the new ramp, crews will begin reconfiguring ramps in the turnpike interchange to separate areas where drivers now have to merge and crisscross each other to go from one highway to the other.

Westbound traffic will be shifted while a pair of new bridges are built connecting the turnpike to express lanes being built in I-595's median, just west of the turnpike overpass. Columns for the new ramps are rising in the field northwest of where the turnpike crosses I-595.

Building bridges, shifting lanes

Bridges make up the bulk of the construction. In the works are 63 new, modified or widened spans.

Only one existing span -- the westbound bridge over Pine Island Road -- will be completely demolished and rebuilt.

Crews are completing a new three-lane bridge that will carry three express lanes over Pine Island Road. They're also building the new exit ramp for Nob Hill Road, which will split from I-595 before Pine Island Road and cross over both Pine Island and a new westbound entrance from S.R. 84.

By the end of the year, westbound traffic will be shifted left to the new express lane span so workers can tear down and rebuild the existing westbound bridge over Pine Island.

Initially, it looked like one or both of the University Drive flyovers would have to be removed for a wider I-595. But in its bid proposal, engineers found a way to incorporate some existing bridges, including both flyovers, into the design.

Plans call for raising the southbound University-to-eastbound I-595 flyover by 18 inches so the last two piers can be relocated for new eastbound lanes underneath.

"It's a huge savings to the state," said Sergio Gonzalez, senior project engineer. "The amount of time that traffic will be inconvenienced will be much, much shorter than if we were to build new structures from scratch. In the end, I think drivers will be very happy about that."

Michael Turnbell can be reached at mturnbell@sunsentinel.com or 954-356-4155. Follow him on Twitter @MikeTurnpike or Facebook at <http://www.sunsentinel.com/concreteideas>.

To see more of the Sun Sentinel or to subscribe to the newspaper, go to <http://www.sun-sentinel.com/>.

Copyright (c) 2011, Sun Sentinel, Fort Lauderdale, Fla.
Distributed by McClatchy-Tribune Information Services.