

BREVARD SPECIAL EDITION

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SR 528 / SR 3 EMERGENCY BRIDGE REPAIR

Submitted by: Hector Matos

A traffic accident between a pickup and an 8,200 gallon gasoline tanker traveling west bound on SR 528 occurred on Friday, January 21, 2011 at 3:30pm leaving two fatalities and the bridge beyond repair. The traffic on SR 528 and SR 3 came to a complete halt. The traffic was so congested on SR 528 that when Dennis Kyle, Jim Boughanem, Hector Matos and Jim Connelly arrived at the intersection of SR 528 and US 1, we were escorted by the Brevard County Sherriff with lights and siren blazing through US 1 to SR 520 onto SR 3 to the Command Center. Once we arrived at the command center, which was located at the Brevard County Sherriff's Office on SR 3, the decision was made to use the off/on ramps from SR 528 from both directions to alleviate the traffic on SR 528 and from SR 3.

At around 5:00pm FDOT forces, under the direction of George Keyser, Jim Connelly and Reuben Scott, arrived to set up the maintenance of traffic (MOT) on the ramps and on SR 3. Transfield, the asset management contractor for SR 528, set up the MOT for SR 528.

At 8:30pm, FDOT was allowed to inspect the structure to determine if the structural integrity had been compromised.

By 10:00pm it was determined that two (2) out of three (3) spans of the bridge would need to be replaced. Three contractors, Lane Construction, Johnson-Bros and Leware Construction, were contacted to attend a pre-bid conference at noon on Saturday, January 22, 2011 for the replacement of two spans and one pier on both bridges and all repair associated with the accident.

The next morning the FDOT team, which was comprised of Alan Hyman, Frank O'Dea, Jim Boughanem, Dennis Kyle, Ron Meade, David Thompson, Hector Matos and Steve Olson, began preparing a scope of services to handout to the potential contractors. The plans to the existing bridges were acquired. The MOT was determined along with detour information signs and locations of variable message boards. The scope of services package was ready in four (4) hours, and given to the potential contractors at the project site.

The next morning, Sunday, January 23, 2011 at 8:00am, the bids were opened with Lane Construction being the successful bidder with a bid of \$2,191,000 and 25 days to have the bridge opened to traffic. The contract also had a user cost penalty of \$50,000 per day if the bridges were not opened to traffic in the time the contractor had bid.

At 8:30am, District 5 Secretary, Noranne Downs and Gary Jerabeck, District Manager for Lane Construction, signed and executed the contract. That Sunday afternoon, Lane Construction began mobilizing equipment and people to the job site. Hector Matos was appointed FDOT Project Manager and an experienced CCEI team was assembled, comprised of Ray Budd from RS&H as the Project Administrator, Robert Eads from DRMP as the Senior Bridge Inspector, Carl Johnson and Raphael LaChance both from Target Engineering as inspectors. FDOT Secretary Stephanie Kopelousos visited the job site on Sunday as well and saw the devastation first hand.

The next 22 days had the contractor and the CEI working together to make this project run as smoothly as possible. Everyone had the contractor's deadline in mind and made every effort to make sure issues were resolved in a timely manner. At times there were 40 or more people working on different aspects of construction. From the construction of the columns and pier caps, to the setting of beams, to the forming, steel placement and concrete pouring of the decks, barrier walls and slope pavement; everyone worked together to make it happen. The suppliers, pre-cast yards, material producers, Brevard County Sheriff's Office and Traffic Services also contributed to the effort. The communication which existed and the team cooperation made this a successful project for all.

The SR 528 bridges and SR 3 were opened on Sunday, February 13, 2011 at 2:30pm, Three (3) days ahead of schedule to a flurry of honking horns and thumbs up by the traveling public. The contractor's people along with Department personnel remained and relished the appreciation being exhibited. This reaction by the public made it all worthwhile. It was awesome!



Hector Matos



The bridges were demolished in two (2) days by the giant concrete eaters.



Monolithic concrete pour of the columns and pier caps. This type of pour saved the contractor three (3) days. The forming of the columns and pier caps was accomplished in four (4) days.



Not knowing how long the concrete was going to cure and achieve the design strength for the substructure pour, a total of 60 concrete cylinders were made.



Two days after pouring the substructure, beams were being set. The contractor accomplished this in one day.



Seven days after the beams were set, the bridge decks were ready for concrete. The contractor used stay in place forms for the bridge decks.



Two days after the decks were poured; the barrier walls were slip-formed.



While the barrier walls were being placed, milling of the SR-528 pavement occurred.



The concrete slopes were also being placed.



Once the milling was completed, paving of SR 528 began.



Milling of SR 3 was completed the next day.



Once milled, SR 3 was paved.



Two days later the barrels were removed to allow the traffic onto the bridges.



Traffic was allowed on the bridges on Sunday, February 13, 2011 at 2:30pm, three (3) days ahead of schedule. A slow roll was conducted in order to remove the barrels and bring the traffic onto the bridges.



The completed bridges.

To see more pictures and Daily Diaries, go to:
H:\Pictures\SR 528 - SR 3 Emergency Bridge Repair