



### Description of the work

Central Florida residents recently celebrated the opening of the Boggy Creek Road interchange at State Road 417 and Orlando International Airport's South Access Road that typically handles about 27,000 cars per day. Designed by Dewberry, and led by the Central Florida Expressway Authority in cooperation with the Florida DOT, the two new flyover structures are the first U-girder, precast, post-tensioned design in Florida, and only the second in the country. The original design called for steel box girders, but the innovative alternate chosen saved the state \$9M dollars and provided a sleek, visually more dramatic and durable result that also cut the duration of construction and maintenance cost.

### Freyssinet Mission

The general contractor, SEMA Construction chose Freyssinet Inc. to provide material and perform the challenging post-tensioning of the multi-segment ramps. The superior design created longer spans (up to 220') and fewer piers. The post-tensioned U-girders utilized 4 & 12 strand tendons in the bottom flange and 15 & 19 strand tendons in the girder. A total of **1,268,000 feet (469 T)** of strand was installed in the new structures that rose to a maximum height of 90 feet.

Orlando is now the 4th leading destination in the country for its tourist attraction, weather and economy. The flyover ramps will improve traffic flow and safety by eliminating the traffic lights and old interchange and double the traffic capacity for the forecast demand of the current OIA expansions.

General Contractor :  
Owner :

SEMA Construction  
OOCEA

Subsidiaries :

Beginning of works :  
End of works :

June 2014  
November 2015

