



I-10 New Orleans East Girder Repairs New Orleans, LA

Work / Activity 1

Cofferdam/
Concrete Repairs

Work / Activity 2

External PT with load
cell/welded sensors and
off-site monitoring



Description of the work

LADOTD identified 30 Concrete girders at Interstate 10 Westbound and Eastbound bridges that are in need of repairs. These bridges span across a channel adjacent to Lake Pontchartrain.

Freyssinet Mission

Freyssinet, Inc. was awarded the contract and executed the repair of the deteriorating concrete girders using DOT approved concrete repair material, installed External 1-1/4 inch diameter PT bars and in one span utilizing the innovative 7 wire, 11/16 inch diameter carbon fiber strand. A first time application of carbon fiber strand required continuous monitoring gauges and equipment, a system designed by Advitam, Inc. was put in place to monitor the performance of the girders and compare the effectiveness of each of the two types of external post tensioning over time. Monitoring was done remotely.

Included in this work was the installation of two water filled cofferdams designed and provided by Aquadam. The cofferdam helped to control the water level and to draw down by 5' the water level under these bridges to allow the repair crew to access and carry out the concrete repair, install/stress the PT bars and carbon fiber strands, install the load cells, weld sensors and connect electrical cables/ conduits.

A special safety plan was designed to address a different type of hazard and keep our workers safe as the waters of the channel is the known habitat of alligators!

General Contractor :

Freyssinet, Inc.

Owner :

Louisiana DOTD

Subcontractors :

Advitam, Inc.

Beginning of works :

Feb 2014

End of works :

July 2014



