# Cartagena-Barranquilla Grand Viaduct

**Cartagena, Colombia**

## Project Description

The Cartagena-Barranquilla Grand Viaduct connects Cartagena and neighboring Barranquilla allowing traffic to bypass the beach resorts in the area, alleviating traffic concerns for both commuters and tourists. The viaduct is a 3 mile long bridge comprised of 391 pre-cast concrete tub girders erected with DEAL's L43 launching girder. In total there are 133 spans with a typical span length of 37m.

## Owner

Ministry of Transport,, Colombia

## Contractor

DEAL / RDE

## Designer

McNary Bergeron/DEAL

## Our Role

McNary Bergeron redesigned the bridge from a precast segmental bridge to concrete tub girders. Our design scope included the substructure, tub girders, and the cast-in-place deck slab. We also provided seismic detailing.

## Total Contract Value

$80 Million

## Timeline

2015 - 2017

## Construction Method and Specifications

The viaduct was erected from the top down using the L43 launching girder from DEAL with a pile driver mounted to the front of the launching girder. Precast piles were driven to the proper depth by the pile driver. The launching girder would then place precast concrete pile caps onto the pile groups. With the leading pier erected, the L43 could then deliver the precast tub girders to their final position before launching to the next span.