RAILWAY BRIDGE

TAIWAN HIGH SPEED RAIL, CONTRACT C295

TAIWAN

The Taiwan High Speed Rail is a 326 km (203 mi)-long dual-track line that connects the major cities of Taipei in the North and Kaohsiung in the South on the island of Taiwan. A number of wide, shallow rivers cross the alignment; and the site is exposed to heavy rains and severe typhoons during the monsoon season. The region is also subject to intense seismic activity.

The 27.3 km (17 mi) of bridges for the C295 contract consists of 30 m (98 ft) prestressed concrete box girder spans monolithically connected to twin-wall piers at each end. The box girder is cast-in-situ using a self-launching shoring system that allows for efficient construction of the superstructure where key stages of the construction activity can be spread over three spans in succession. Additional bridge structures include three-span and seven-span continuous structures with spans up to 58 m (190 ft) and a 2000 m (6560 ft) long elevated station structure with multiple side-by-side box girders. High-level continuous bridges over rivers were built using the balanced cantilever construction method.

ESSENTIALS:

Owner: Taiwan High Speed Rail Authority

Contractor: Evergreen Italian Thai Joint Venture

Consultant: JMI-Pacific,./. Ltd.

Bridge Design Consultant (special seismic and dynamic analyses): SYSTRA IBT