

MACAO - TAIPA THIRD BRIDGE (SAI VAN BRIDGE) (design checking)



Client / Employer Government of the Macao Special Administrative Region
Infrastructure Development Office

Service Design Checking by CONSULASIA, LDA.

Investment Approx. MOP 600 Million

Contract Price MOP 1,472,343

Time Schedule February 2002 to February 2003

Description of the Project The third bridge between Macau and Taipa Island connects the southwest area of Macau peninsula near the Sai Van Lake and the northwest area of Taipa island, crossing the Inner Harbour navigation channel. This bridge was named "Sai Van" bridge meaning "West Bay" bridge.



Since the construction project was awarded as a "Design and Build" contract by Macau Government, the main scope of CONSULASIA's services of this contract was to evaluate and verify the structural concept of the design developed by the contractor.

The bridge has a length of 2.5 kilometers and represents an investment of approximately 600 million patacas.

In general terms, is composed by two structurally independent parallel bridges each of which consists of a prestressed concrete box girder. The bridge has a contemporary y style, with double deck. The upper deck comprises 3 traffic lanes in each direction. The lower deck is prepared to be used by the Light Rail System and a traffic lane only to be used in case of Typhoon, i.e. each time that for safety reasons the upper tray is closed to traffic.

The bridge is composed of two approach viaducts with continuous 60m spans and a central cable-stayed bridge, composed by two pylons and three spans, being the central span of 180m, directly above the navigation channel.

The Sai Van Bridge was completed and formally inaugurated on December 19, 2004 and open to the public on January 9, 2005.