

## **50<sup>th</sup> Anniversary of the Inauguration of Governor Nobre de Carvalho Bridge**

The Governor Nobre de Carvalho Bridge, the first sea-crossing bridge connecting the Macao Peninsula and the island of Taipa, was once the world's longest continuous prestressed-concrete girder bridge at the time of completion. The unique design and significance of the Bridge made it one of the design elements of the regional flag and regional emblem of the Macao Special Administrative Region.

The Bridge had a total length of 2,569.8 metres, running from the Praça de Ferreira do Amaral in Macao to Taipa near the Rotunda Leonel de Sousa. With a width of 9.2 metres, it consists of two lanes for bidirectional traffic, each of which is 3.5 metres wide, and a 0.8-metre-wide sidewalk on each side, serving as the only cross-sea bridge in Macao that allows pedestrian access. The middle of the Bridge includes a raised section forming a triangular arc, where the highest point is 35 metres above mean sea level for the passage of vessels underneath it.

This first cross-sea bridge in Macao officially commenced construction on 18 June 1970 and was completed in about 4 years. The contract of the construction project was executed by Governor Nobre de Carvalho, representing the then Government of Macao, and Mr Ho Yin, the representative of the contractor. The Bridge was inaugurated on 5 October 1974 at 11:00 am by the then Governor Nobre de Carvalho, after whom the Bridge was named, the Portuguese designer Professor Edgar Cardoso and Mr Ho Yin, and started operating at 1:00 pm on the same day.

Despite the less sophisticated computer technology in the 1970s, Professor Edgar Cardoso, the Portuguese designer, managed to overcome the technical constraints of the project at the time. In order to complete the project, he sought to obtain useful data by means of modelling the Bridge and conducting laboratory experiments. Through regular monitoring and maintenance over the years, the Bridge has remained in good condition.

Due to the contractual project for the redesign of the Rotunda Ferreira do Amaral in Macao and the relevant passages, part of the Governor Nobre de Carvalho Bridge, which is close to the Macao section, was demolished in 2005 to make way for building an underground tunnel, and now the Bridge has a total length of over 2,400 metres.

The Governor Nobre de Carvalho Bridge has a beautiful outlook, a unique and appealing shape, with simple and spectacular lines. For designers, the Governor Nobre de Carvalho Bridge is not only a sea-crossing bridge, but also an architectural work of art. For years, the Bridge has attracted visitors from all over the world to enjoy its beauty and take photos of it.

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