LABOURMAP-MACAO

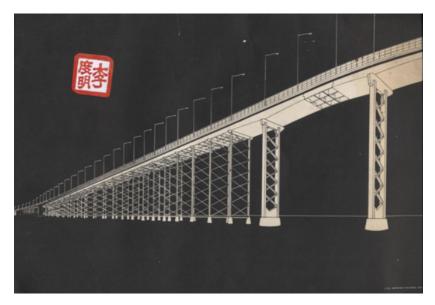
Mass labour impact on Public Works in Macau under Portuguese administration (1849-1999)

This record was shared by LabourMap-Macao, (PI) Ana Vaz Milheiro

This record was created by Inês Lima Rodrigues

MACAO RECORD

NEWSLETTER



"Model of the Macau-Taipa Bridge". Macau-Taipa Bridge Magazine, Macau National Press, 1973.

Macau-Taipa Bridge Magazine

The Macau-Taipa Bridge Magazine was produced by the Macau-Taipa Bridge Office and published on April 30, 1973. It focused on the bridge's design and specific features. This volume included 12 pages, a map of Macau, and six folders with schematics and drawings of the structures (pillars, beams, viaducts). It was printed in Portuguese and Chinese by the Macau National Press. The first page reproduces a statement by General Nobre de Carvalho, Governor of Macau: "For the entire Portuguese and Chinese population, the Macau-Taipa Bridge is truly the symbol of Macau's future". In the "conclusions" sections, the bridge is prreset as "a work of art that meets the constraints of modern road traffic, with perfectly acceptable and duly coordinated slopes, allowing the free passage of all types of shipping (...)".

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MACAU-TAIPA BRIDGE

Initially named the Macau-Taipa Bridge, the Governor Nobre de Carvalho Bridge connects the Macau Peninsula to the Taipa and Coloane islands. Designed by the Portuguese engineer Edgar Cardoso, construction began in June 1970 and finished in October 1974. This project significantly advanced Macau's infrastructure under Portuguese control. At the time, it was the longest continuous prestressed reinforced concrete bridge in the world, featuring a 3.4-kilometer dragon-like bend. The bridge presented technical issues, including height restrictions, construction technique constraints, navigation compatibility, and low soil quality (HPIP, 2012). Modern methods, including prefabricated systems and unique materials, were employed. Key prefabricated elements were constructed onsite (BIT, 1972), incorporating creative ideas such as epoxy resin application (Appleton, 2020) and binding a lightweight concrete superstructure with its "extraordinary lightness," mostly prefabricated, "as though it were Lego" (RM, 2014). Correspondence from 1969 to 1974 shows close cooperation between Portuguese, local, and foreign companies (AHU/IPAD). The bridge operated as a toll system until December 1981 (BO No. 37-S) and played a crucial role in the urban development of Taipa and Coloane, symbolising technological progress and modernisation (Rodrigues, 2025). Until 1994, the bridge was the only ground link to Taipa.

Keywords: Nobre de Carvalho Bridge; Macau-Taipa Bridge; Engineer Edgar Cardoso; Macau Infrastructure; Modernity













