Ayala Bridge Rehabilitation

Philippines, City Of Manila

BUSINESS ACTIVITIES

Structural design/Roads & Bridges/Design & Build solutions for bridges

New Structures/Heavy structure handling/Jacking/Computer assisted jacking

Repair & Maintenance/Fields of activity/Seismic retrofitting of buildings

General contractor :	Freyssinet in JV with Frey-Fil Corporation
Customer/Owner :	DPWH (Department of Public Works and Highways)
Engineer :	ESCA
Freyssinet subsidiary	Freyssinet International & Cie (Rueil-Malmaison)
Others subsidiaries	Freyssinet International Manila Inc. (FIMI)
Start of works period	05/2014
End of works period	07/2015

PROJECT DESCRIPTION

The Ayala Bridge re-constructed in 1950 is one of the oldest and most important bridge in Metro Manila. This riveted steel arch bridge consist of 2 spans of 61.6 and 73.8 meters. The central Pier and 2 abutments are made of concrete substructures supported by timber piles. In 2009, the National Historical Institute has declared the Ayala Bridge as a historical legacy and landmark which should be preserved for posterity. In 2013, Freyssinet and its partners have been awarded the contract for Design and Build of the rehabilitation of Ayala Bridge superstructure, substructure and foundations, and approaching roads.

The scope of the rehabilitation includes the following:
- The repair and strengthening of the structure to meet the requirements of AASHTO 2002.
- The rehabilitation are being performed under traffic.
- The bridge shall be lifted by 70cm high to conform to regulatory clearance within 31 days of traffic closure.

FREYSSINET MISSION

Freyssinet International Major Project (FIC DGP) and Freyssinet International Manila Inc. (FIMI) scope include the following works:
- Detail design of superstructures and substructures repair and strengthening; Detail design of the lifting operations; Bridge assessment and survey, geotechnical investigations;
- Site supervision, staff and labor to perform the works as Main Contractor;
- Supply of all equipment (Jacks, Pumps, lifting frames …) and supervision for the bridge lifting with synchronized computerized LAO system;
- Supply and installation of Seismic Dampers, Sliding PTFE bearings and expansion joints;
- Repair and strengthening of the steel structure by replacement and addition steel plates welded and bolted; Sandblasting and painting of the steel structure;
- Supply and installation of external posttensioning in bottom chords;
- Concrete retrofitting works for the substructures above water level.