

PERTH – SWAN RIVER PEDESTRIAN BRIDGE

DESCRIPTION

The bridge is formed by three steel arches and three cable stayed steel decks. The geometry of the steel arches follow the free form shape designed by the architects. The total length of the bridge is about 400[m] with a central span of 144[m] and the two lateral of 84[m].

Each arch is formed by four legs, supported by concrete piers.

The first and last steel arches have approximately a 84m free span and 36m height above the water level. The central arch has a 144m free span and 75m height above the water level.

The main arches are connected at the top by a hinge joint that allow a rotation in the longitudinal plan but ensure a rigid connection in the transversal plan. In the apex of the main arches there are two cantilever part of the structure of about 25[m] length.

Service provided: Preliminary, final and executive structural design

Client: Rizzani De Eccher

Year: 2016

Amount of works: € 50.000.000.

