

# DESIGN AND CONSTRUCTION OF SEGMENTAL BOX GIRDER BRIDGE

## Synopsis

This topic provides an overview of the design and construction of concrete segmental box girder (SBG) bridge. The following will be discussed during the evening talk:

- Advantages and limitation of the precast and cast in-situ segmental box girder bridge
- Fundamental design consideration of the concrete segmental box girder bridge
- Typical prestressed and steel reinforcement details for SBG and their erection method
- Types of temporary work involved in the erection of the segmental box girder erection or construction

**Ir. Low Hin Foo** graduated from University Malaya with an Honours degree in Civil Engineering. He has 20 years of design and construction experience in various types of bridges, as well as prestressed building structures both locally and abroad.

Ir. Low was previously with BBR Construction Systems (M) Sdn Bhd working as a Technical Manager dealing with prestressing specialist contractor. He is currently working with OS Alliance Pte Ltd, a bridge consultancy firm as a Principal Engineer and Monash University Malaysia on a research project on prestressed transfer plate in Kuala Lumpur. He is also the Group Managing Director of OSD Consultants Group in Malaysia.

Ir. Low has vast experience in the design and construction of long span bridges using precast and cast in-situ prestressed segmental box girder (SBG) and he is familiar with the design of integral bridge with prestressed girders made continuous. Besides, he has huge design experience in the design of prestressed structures for large commercial projects and high-rise towers, particularly in handling the design of prestressed flat slab or flat plate systems with irregular column grids, including prestressed transfer plate and raft foundation.

Ir. Low is also actively involved in the training of engineers and undergraduates by conducting courses on the design of bridge and prestressed building structures.

## PROGRAM DETAILS

Date: 22 October 2019

Time: 6.15pm – 9.15pm  
*(Registration and Dinner Starts at 6.15pm)*

**6.15pm – Registration and Networking Dinner**  
**7.00pm – Presentation by Ir. Low**  
**9.00 pm – Question and Answer**  
**9.15pm – End of Talk**

Venue: e2i, 80 Jurong East St 21 (TBC)

CPD Program: STUs / PDUs for PEs and CEngs (All TBC)

Fees:  
IES and SIBL Members: \$32.10  
CIJC Members: \$53.50  
Non Members: \$64.20  
*Fees are inclusive of dinner and 7% GST*

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