

Cross Bay Link – Main Span Steel Bridge

CLIENT: China Road and Bridge Corporation

LOCATION: Hong Kong

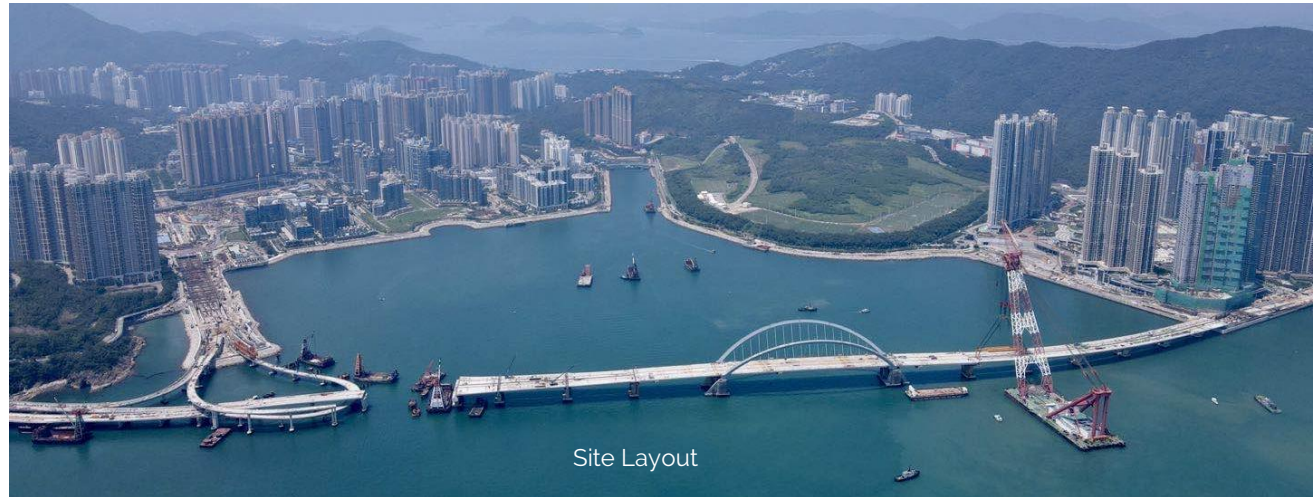
YEAR OF COMPLETION: Anticipated 2022

Cross Bay Link is the new iconic major marine crossing in Hong Kong, which features a 200m long 'Eternity Arch' main span and two 100m long steel side spans.

Hewson Consulting are appointed by the Main Contractor as their Designer to provide both the design and erection engineering services on this project.

We provided the full erection engineering services for the steel arch bridge and the side spans by utilising the 'float-in' method. Our services included full stage-by-stage erection analysis, structural capacity assessment for temporary stages, derivation of precambers, cable stressing analysis and bridge monitoring.

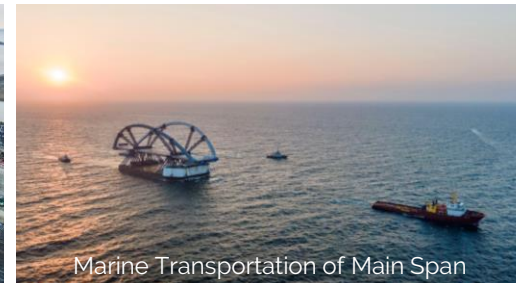
We have also designed the Tuned Mass Dampers on the main span arch bridge for mitigating the vortex shedding induced vibrations and carried out major temporary works design to facilitate the bridge erection.



Site Layout



Fabrication and Assembly



Marine Transportation of Main Span



Delivery of Side Spans

KEY FACTS

- Erection engineering for enabling the 'float-in' method.
- Stage-by-stage analysis for bridge assembly, transportation and erection.
- Tuned Mass Damper Design.
- Temporary Works Design.



Skidding onto Delivery Barge



Float-in Erection of Main Span



Float-in Erection of Side Spans