



2017 AWARDS FOR ENGINEERING EXCELLENCE

Award of Merit Abraham Lincoln Bridge



Consultant

COWI North America

Prime Consultant

Jacobs Engineering Group

Owner/Client

Kentucky Transportation Cabinet

Category

Transportation & Bridges

The Abraham Lincoln Bridge is part of the Ohio River Bridges project connecting downtown Louisville, Kentucky with Jeffersonville, Indiana. COWI was engaged as engineer of record for the cable-stayed bridge, and also provided detailed erection engineering and temporary works designs.

Designed under unique geotechnical conditions, the bridge uses an innovative foundation system with an inherently flexible three tower cable-stayed system. COWI employed state of the art probabilistic service life design to achieve the specified 100 years of life.

The three-tower cable stayed main span is 640 metres long. The two middle spans are 228 metres and the two side spans are 92 metres. The centre tower extends 59 metres and the side towers extend 44 metres above the deck. All three towers have twin reinforced concrete vertical legs in a pentagon shape with no cross beams above the deck. Two planes of stay cables fan out from the tower tops and are anchored to the exterior of the steel superstructure. The substructure consists of three tower foundations on drilled shafts placed in the river, and two anchor piers with drilled shafts, at each end of the bridge.

The Abraham Lincoln Bridge opened to traffic in December 2015, 4 months ahead of schedule. The project reached final completion in December 2016.

For more information, please contact:

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