



## Securing visual quality and architectural intent while aiming for an affordable tender design - the procurement of the Mersey Gateway Crossing

**Bartłomiej Halaczek, Martin Knight**

*Knight Architects, High Wycombe, United Kingdom*

Contact: [b.halaczek@knightarchitects.co.uk](mailto:b.halaczek@knightarchitects.co.uk)

### Abstract

Since its announcement in 2005, the Mersey Gateway Crossing Project between Runcorn and Widnes is getting close to its completion. The 9.5km long bypass corridor project, featuring a 1000m long three pylon cable stay bridge, becomes a precedent on a procurement route that allowed its client, Halton Borough Council, to maintain a high quality design intent while controlling the budget of a project, which was under increasing pressure as regards affordability, due to economic downturn. With the help of infrastructure specialist Knight Architects the client managed to outline areas of greater flexibility and key design requirements. The resulting descriptive Design and Access Statement, was a key reference document in the subsequent Competitive Dialogue. Using the Mersey Gateway as an example, the paper will explore how the choice of the right procurement route enables to realise a major infrastructure project of high functional and architectural quality, while allowing the client to remain in control of both budget and design, significantly improving its chances to be supported by the public.

**Keywords:** procurement, competitive dialogue, tender, cable-stayed bridge.

### 1 Introduction

The Mersey Gateway is a major new infrastructure scheme between the towns Widnes and Runcorn in the north west of England. The project comprises a new highway corridor with several partly new and partly re-designed intersections and culminates with a 2.2 km elevated crossing of the river Mersey, a 1000m wide tidal estuary at the doorstep of Liverpool. Once completed, the scheme will provide significantly increased local and regional highway connectivity and relieve congestion around the existing Silver Jubilee Bridge. The new route will form an essential link between Merseyside area and North Wales and Cheshire where the strategic routes carry up to

450 thousand vehicles each working day [1]. The construction stage of the project is currently coming to an end with commissioning planned for autumn 2017. The centre piece of the scheme is the 1000m long, twin-span cable-stayed bridge crossing the Mersey Estuary and the adjacent Manchester Ship Canal. A bridge consisting of three singular pylons carrying the 6 lane highway deck on a central cable plane arrangement. The pylons vary in height, with the outer pylons being 122m and 108m above river bed level, balanced by a shorter, central 75m tower. The clear spans between the towers vary between 294m and 318m, whereas their side spans reach out up to 205m. The unusual approach of using three pylons instead of the classic pair, results from height restrictions prescribed by the nearby John Lennon