First deck span cast on Mersey Gateway

The Mersey Gateway project in the north west of England achieved another milestone this week as the first deck span for the elevated north approach viaduct was completed. The reinforced concrete deck span was revealed when Merseylink's movable scaffolding system 'Trinity' moved to its second casting position.



A close up view of the first concrete deck span for the Mersey Gateway's north approach viaduct. (David Hunter).

It is the first of 11 spans that will be cast by the MSS for the deck of the elevated approach viaduct on the north side of the River Mersey. This span connects the beginning of the approach viaduct from the north abutment in Widnes to the first supporting pier. The enormous structure measures around 60m long and 18m wide and is angled at a crossfall of 5 degrees. Construction teams worked around the clock to get the span ready. This involved pouring 1,146m³ of concrete into the MSS non-stop over a period of 34 hours.

Merseylink general foreman Declan Cannar, who is in charge of the MSS operation, said: "This is a real achievement for the project and a milestone that we've been looking forward to with anticipation. Our construction teams have put a considerable amount of time and effort into constructing this initial span so it's great to see it finished. We're now busy preparing the MSS so it's ready to cast the next section."

Councillor Rob Polhill, Chair of the Mersey Gateway Crossings Board and Leader of Halton Borough Council, said: "This is such an exciting moment for the project and it is fantastic that we can now see a completed span of the approach viaduct. You can track Trinity's journey via the live view webcam on the Mersey Gateway website and it's well worth a look. This remarkable example of engineering is truly special and I can't wait to see its progress over the coming months."



The first deck span of the Mersey Gateway's north approach viaduct showing the north abutment. (David Hunter).

The approach viaduct deck is being constructed in three phases. The deck spans are constructed first by the MSS, then a deck slab is built on top of the span, and finally the outer deck or 'wings' are built by a wing traveller machine to provide the full six lane width of the approach road. The MSS has moved to its second casting position ready for work to begin on the next span, which will be cast in March.