

A14 HUNTINGDON VIADUCT STRENGTHENING

Client:

Highways Agency

Person of Reference:

Paul Sinfield

Main Contractor:

Costain

Completed:

2013

Contract Value:

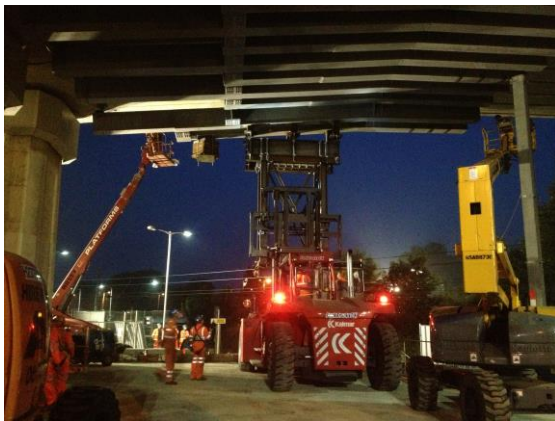
£2.5m

Tonnage:

316 tonnes



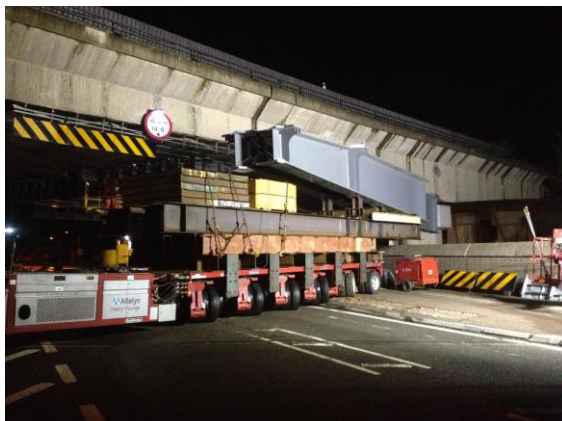
A14 Huntingdon viaduct strengthening consists of 38 steel I beams 1.75m deep arranged in a grillage formation, with 19 beams on each side of the viaduct. These beams replace older box section beams to create a stiffer and more durable alternative load path to the structures half joint and actively support the existing concrete structure.



CBUK's Role - Cleveland Bridge were responsible fabrication of the structural steelwork, Delivery and site assembly, removal and disposal of old steelwork and erection of new steelwork.

Fabrication – The steelwork elements of the structure were fabricated in CBUK's Darlington facility. The sizes of the elements were designed to allow them to be transported to site by road haulage

Installation of Superstructure – The 38 new beams were installed as braced pairs weighing up to 25t, prior to a new pair of beams an old pair of beams were removed then replaced with the new pair in the same shift. Because the beams span either busy road or live railway all of the work was completed at night with many lifts requiring railway possessions. The 19 beams on the north side were installed using SPMT's with a large capacity scissor lift installed on it to get the height needed. Beams on the south side were installed using a 37t capacity forklift fitted with a 5m high lifting frame.



Completion of Works – CBUK commenced on site with the preparation works for replacing beams in March 2013. Beam replacement commenced in June 2013 with all beams replaced by October 2013. The replacement of all 38 beams was completed without the need for any traffic management on the A14 and with minimal disruption to east coast main line services.