

# NOTTINGHAM-EXPRESS-TRANSIT BRIDGES

**Client:**

NOTTINGHAM CITY  
COUNCIL

**Person of Reference:**

MARTIN CARROLL

**Main Contractor:**

TAYLOR WOODROW /  
ALSTOM

**Completed:**

2014

**Contract Value:**

£5.8m

**Tonnage:**

1,623 tonnes



This project was to fabricate and erect five steel bridges which would form part of the Nottingham Express Transit (NET) Phase-2 tramline project. NET Phase-2 is a major extension of the existing tram network which aims to continue to improve Nottingham's infrastructure and provide a boost to its local economy. The five bridges are:

- *Nottingham Station Bridge* – 104m long Warren-Truss structure composed of Jumbo Sections. Launched over roads and rail-lines
- *Queens Road Bridge* – 70m long, two-span, Trapezoidal Box Girders erected by crane over Queens Road
- *Lenton South Junction Bridge* – 45m long, skewed single-span Plate Girders. Final positioning with the utilisation of SPMT's
- *Clifton Boulevard Bridge* – 61m long, single-span Bow-strung Arch structure with Macalloy Hangers. Final positioning using SPMT's
- *Wilford Toll Bridge* – 91m long, 3-span, strengthening and widening of existing bridge with Plate Girders over the River Trent



**CBUK's Role** - Cleveland Bridge were responsible for the fabrication, delivery and site assembly/erection of the structural steelwork, including all necessary protective treatment. Launching and SPMT operations were precluded.

**Design** – CBUK provided expert advice to the principal contractor on erection methods and details for ease of fabrication and build-ability.

**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. Trial assemblies were carried-out to assure fit-up at site.

**Assembly & Erection of Superstructure** – Through the use of a variety of in-house-designed temporary works and a range of cranes from 50te to 500te capacity all of the bridge components were assembled and erected into their full structures, either in their final position or ready to be re-positioned via launching or SPMT's. Works were carried out both in the day and night and during rail/river/road possessions where necessary.

**Completion of Works** – CBUK commenced on site in mid-2012 on Nottingham Station Bridge. As the project progressed the works on the other bridges commenced at various stages, with overlapping programs of work. All works were completed by January 2014.

