

Wessex Capacity Upgrade

CLIENT: Skanska UK Civil Engineering

LOCATION: United Kingdom

YEAR OF COMPLETION: 2018

Waterloo is the busiest station in the UK with departures every minute at peak times. Network rail implemented improvements including converting platforms in the former Waterloo International Terminal and extending platforms 1 to 4. Hewson were appointed to carry out temporary works design and checking. This included outline layouts for a temporary roof covering and temporary works & props to enable the use of 200T and 300T cranes adjacent to Waterloo Station.

We carried out a Category 3 check on a temporary tie to the 3 pin arch which was required to allow part removal of the concrete track slab structure. We designed a prop system to support a Kirov crane on a masonry rail bridge widened in steel. We used 3D modelling to understand the layout of the existing structure and to present our proposals.

We carried out the complex temporary works design and construction sequence to form new pedestrian openings in the historic masonry walls under the tracks and through the platforms. The area is supported by riveted plate girders and masonry jack arches.

KEY FACTS:

- Construction engineering advice
- Temporary works design
- Detailed design
- Category 3 checks

