



**HATCHFORD PARK BRIDGE
M25 MOTORWAY
EMERGENCY REPAIR WORKS**

PROJECTS

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CONTRACT SERVICES - HIRE - SALES

PROJECT DESCRIPTION

Since opening, the M25 has undergone a number of widenings and expansions.. The most recent widening plan was proposed in 2009. A design, build, finance and operate (DBFO) contract worth £6.2bn to widen junctions 16 to 23 and 27 to 30 was awarded to Connect Plus, a consortium. As part of the concession contract the consortium will maintain the motorway for 30 years. The project covers a length of 63km.

Hydra Capsule were approached by the main contractor on the M25 Major Highway Framework to complete emergency repair works on the Hatchford Bridge, which had damaged support beams over a major M25 route, due to a traffic incident.



PROJECT WORKS

The works involved design and supply of a complete synchronised jacking and monitoring system to lift the entire bridge deck, supported by a complete temporary support system.

Whilst repair works were carried out, Hydra Capsule maintained equal loading between the bridge supports. Once completed, the bridge deck was lowered to distribute the loads equally throughout the newly installed supports.

If the loads distributed un-uniformly whilst works were carried out. Hydra Capsule was able to adjust each jack position accordingly to the specification. To maintain safe working loads and displacement limits throughout the project.

"The 188km M25 motorway around London is one of the longest and busiest orbital roads in world."



The hollow ram cylinders were installed using high-strength threaded-rod bar, which supported the bridge-deck underneath and supported the bridge top deck. All supported off an independent temporary frame.

The jacks were monitored using our digital read-out and movement LVDTs displacement sensors. Allowing monitoring of the jacks to stroke in excess of +150.00mm, until the bridge jacks was fully supported.



Client

Highway Agency (Connect Plus)

Type of Works

Hydraulic Jacking
Synchronised Control Systems
Temporary Support System(s)
Bespoke Structural Steel
Supports Manufacturing

Commence Date

August 2013

Completion Date

September 2013



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