

# The Elizabeth line Stockley Junction

West London 2015



Client	Network Rail
Contractor	Carillion
Consultant	Jacobs

The Elizabeth line runs from Reading and Heathrow in the west, through new twin-bore 21km tunnels under central London to Shenfield and Abbey Wood in the east.

It brings an additional 1.5 million people within 60 minutes commuting distance of London's key business districts. It provides new transport links with the Tube, Thameslink, National Rail, DLR and London Overground.

The new flyover in Stockley, Hillingdon, ensures that The Elizabeth line and Heathrow Express services heading towards central London will be able to join the Great Western Main Line without delaying, or being delayed, by other trains using the route.

Reinforced Earth Co Ltd (RECo), were employed to assist Jacobs in the design and to supply the materials for the Reinforced Earth retaining walls. The walls would have to support not only the critical Heathrow Express rail line, but also the launch of the new bridge for the flyover.

The bridge weighed 1000 tonnes, Two jacks launched the bridge with a force equivalent to that needed to lift 115 London taxis. A total of 20 moveable wheels and special Teflon sheets were also used to help the bridge launch.

To match the appearance of previous similar structures on the line, RECo designed a facing panel system combined with high adherence galvanised steel strips to provide a strong and durable structure for such a significant and sensitive application. Durability test strips are provided as standard to allow the life cycle monitoring of the soil reinforcement.