



Barking Riverside Extension London

Location

London

Client

Transport for London

Main Contractor

MSVF JV (Morgan Sindall Volker
Fitzpatrick JV)

Engineer

Arcadis

Tonnage

3,200 tonnes

The London overground to Barking Riverside extension was formed as part of the Mayors Transport Strategy to support growth through transport investment. The new station extended the Gospel Oak to Barking line, playing a vital role in connecting the development to the capital and its wider transport network.

Our bridge department worked closely with our Lostock teams to fabricate and install a nine-span viaduct that runs over rail, roads, and the HS1 tunnels. The viaduct stretches 1.5km from an existing bridge to the new railway station. At 41 meters long and 3 meters deep, the heaviest girders weigh 122 tonnes each.

The first span installation consisted of two main plate girders, each weighing 113 tonnes and measuring 37 meters. The lifting operations required a large Sarens 1,000-tonne mobile crane. The first plate girder was lifted over a 24m radius, which required the use of 160 tonnes of counter ballast and an additional 140 tonnes of super-lift counter ballast attached to the back mast of the crane.

Providing 3,200 tonnes of structural steel for this extension allowed for 4.5km of new track and was one of several transport measures designed to serve the emerging development area at Barking Riverside. This was the largest housing development in east London, with planning permission for up to 10,800 new homes as well as healthcare, shopping, community, and leisure facilities. The extension is capable of operating four trains per hour from Barking station along the existing Tilbury line used by c2c between Fenchurch Street and Grays.