



<b>Client</b>	Bam Nuttall for Network Rail
<b>Project Description</b>	<p>Emanuel School is located on a wedge of land between the Southampton East London Railway and the Brighton Line in Wandsworth and previously had only one access near the narrow end of the wedge. A new bridge was constructed over the Southampton line to create a safer access to the school and to allow trackside improvement works to be undertaken. The construction was undertaken at a constricted site just south of the busy Clapham Junction as part of a contract including also the highway works and renewal of trackside retaining walls. The new bridge was preassembled on the eastside and launched over the 4 electrified lines.</p>
<b>Cass Hayward Role(s)</b>	<ul style="list-style-type: none"><li>• Detailed design of bridge permanent works including category 2 check</li><li>• Detailed design of highways</li><li>• Detailed design for bridge launch temporary condition</li><li>• Ongoing technical advice during construction including site attendance during bridge launch</li></ul>
<b>Project Statistics</b>	<ul style="list-style-type: none"><li>• Contract Value £8m</li><li>• Completed February 2015</li><li>• Bridge clear span of 24.5m</li><li>• Bridge launch weight 490 tonnes (including 160 tonnes of counterweight) with 27m maximum cantilever. Temporary works included 15.75 nose girder and 2m tail girder</li></ul>
<b>Special Features</b>	<ul style="list-style-type: none"><li>• The vertically inclined alignment of the road was carefully co-ordinated with the design of the bridge to ensure the necessary clearances over the railway were achieved</li><li>• The new bridge was constructed using weathering steel box girders and a composite insitu concrete deck slab</li><li>• Bridge launch included the concreted deck together with completed parapets</li><li>• After launching the bridge deck was structurally connected to the piled abutments to generate an integral structure</li><li>• Precast parapets with high quality white concrete finish also include stainless steel feature panels which are etched to illustrate aspects of the school's history</li><li>• The name Memorial Bridge is mark of respect by the School to the sufferers of the nearby 1988 Clapham Rail Disaster</li></ul>