

Nottingham Express Transit Phase Two



Design Services Contract
here: Dynamic operational simulation of the depot

Technical assistance & operations, infrastructure

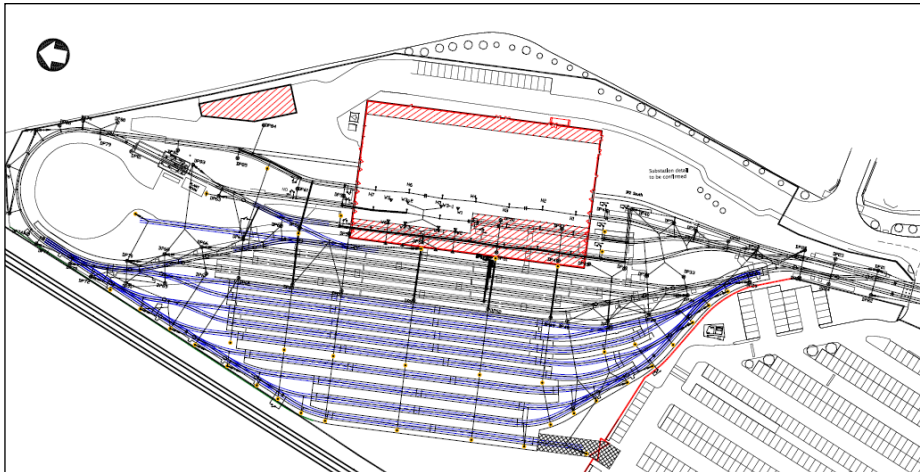
Client: NET

Partner: Mott MacDonald

End: 2009

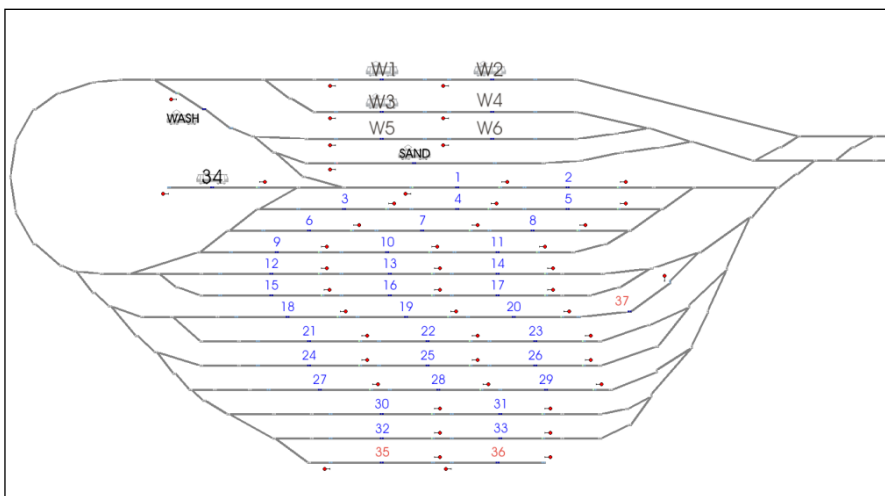


At the end of 2007 Mott MacDonald was awarded with the NET Phase Two design services contract. Purpose of this contract was the development of all documents required for NET to tender the 16 km extension of the 2004 opened system. TTK was part of the MMD team and responsible for operations. In addition TTK supported MMD experts in the areas of depot, track forms and rolling stock.



Lay-out plan of the extended depot

The Nottingham tram scheme is one of the most successful ones in the UK (2007 tram of the year in UK!). Line 1 went into service in 2004 and fulfilled all expectations. The 14.5 km line 1 infrastructure consists of both street running sections and some former railway infrastructure. Today's demand is about 10 million passengers per year. Including the extensions this should rise to 23 million per year.



Schematic OPEN TRACK Layout Plan

For the project TTK had to perform all operational analysis for the whole network. This was carried out using the software tools FBS and OPEN TRACK.

For the extended depot TTK carried out a dynamic operational simulation with OPEN TRACK in order to prove the future functionality and feasibility of the depot. All vehicle movements in the depot from entry around midnight to the exit of the last vehicle in the morning were integrated into the model: Sanding, washing, light maintenance, stabling, and heavy maintenance. The model served the future bidders as a basis for their offers.

The tender was successfully completed in 2010 and published EU-wide. The Tramlink Nottingham consortium (Kéolis, Alstom) finally won the contract in 2012 and will realise the project the coming years.



COURSES	TOTAL TIME	SANDING TIME	CLEANING TIME
1255d	00:14:45	00:03:51	00:03:33
1258d	00:16:48	00:03:26	00:03:26
2202d	00:13:52	00:04:10	00:03:03
2252d	00:13:08	00:03:56	00:02:42
2253d	00:13:36	00:04:15	00:02:41