



East Kent Re-signalling Phase 1



Project

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Client

Kent Route

Location

Kent, UK

Start Date

2009 (Construction Phase)

End Date

Commissioned 2012

Duration

33 Months (Construction Phase)

Contract Value

£93.5m

Services Provided

Signalling, train control and telecoms, programme management and feasibility design

Background

The project incorporated the renewal of signalling along 62 miles of railway in East Kent between Sittingbourne and Faversham, Faversham to Minster and Faversham to Buckland Junction. The equipment controlled by Ramsgate, Margate, Faversham, Canterbury East and Shepherds Wells signal boxes was over 50 years old and was life expired.

The old system was installed in the late 1950s and used mechanical levers, bells and pulleys to control signals and points at Ramsgate, Margate, Canterbury East and Shepherds Well. This was replaced with a modern computerised system and simplified track layout, which gave signallers more flexibility when controlling train movements. This in turn allowed capacity to be increased, reliability to be improved, resulting in better journeys for passengers.

The method of train detection is via axle counter with the exception of Faversham and Ramsgate station areas, where conventional TI21 track circuits are used.

The existing track infrastructure also required alteration and rationalisation in accordance with current Network Rail standards.



Scope of Works

The constituent parts of this project were:

- ▶ the renewal of all signalling assets within the area controlled by Ramsgate, Margate, Faversham, Canterbury East and Shepherds Well signal boxes in like-for-like modern equivalent form
- ▶ introduction of Solid State Interlocking (SSI) Smartlock signalling control technology
- ▶ introduction of axle counters and the retention of track circuits at Faversham and Ramsgate Station Areas
- ▶ closure of Ramsgate, Margate, Faversham, Canterbury East and Shepherds Well Signal Boxes and transfer of signalling control to East Kent Signalling Centre
- ▶ track enhancement, remodelling and abandonments at Faversham, Margate, Ramsgate, Whitstable, Birchington and Herne Bay
- ▶ point conversions for point ends not being renewed or removed
- ▶ extension of platforms at Faversham to accommodate South Eastern High Speed services
- ▶ refurbishment of pedestrian subway at Faversham
- ▶ recovery of all redundant materials and cables.

Key Project Outputs

The main outputs of the project were to replace life expired signalling equipment, specifically:

- ▶ installation of 195 new signals
- ▶ installation of 209 axle counter sections
- ▶ 92 track circuits set up and tested
- ▶ 23 track stageworks

- ▶ 44 point conversions
- ▶ improved headways between Faversham and Dover
- ▶ installation of 4 aspect signalling
- ▶ improved operational flexibility for Train Operators at Ramsgate Maintenance Depot
- ▶ conversion of Teynham gated crossing to Manually Controlled Barrier (MCB) CCTV
- ▶ closure of 5 signal boxes and transfer of signalling control to East Kent Signalling Centre
- ▶ installation of 'Access for All' lifts at Faversham Station
- ▶ improved reliability and train performance.