



West Coast Route Modernisation – Rugby Remodelling



Project

West Coast Route Modernisation –
Rugby Remodelling

Client

UK Department for Transport

Location

Rugby, UK

Start Date

2002

End Date

2008

Duration

75 Months

Contract Value

£375m (combined Rugby
Nuneaton project £595m)

Services Provided

Whole railway upgrade, railway
performance & whole life cost
analysis, systems integration,
programme management, business
cases, including cost benefit analysis

Background

Rugby is a key junction on the West Coast main line, the busiest rail corridor in the UK. As part of the West Coast upgrade Rugby was rebuilt and extensively remodelled to provide additional capacity, increased speed and improved maintainability.

Rugby was remodelled in the 1960s when the route was electrified, but still retained features of the earlier steam railway layout, and the site was extensively contaminated as a result. The layout restricted capacity at this vital junction about 80 miles north of London where routes diverge to Birmingham, Manchester, the North West and Scotland, and join from Northampton to the South.



Scope of Works

The remodelling reused the main station building, and flyovers, but modified and life extended these assets. Three additional platform faces were provided (making five in total), additional tracks were installed, with new bridges for the widened layout.

Linespeed was increased from 75mph to 125mph, including a 125mph switch for the route to Birmingham. Segregation of freight and passenger traffic was provided to increase operational capacity.

The track, signalling and overhead lines were completely renewed, as was the formation following removal of the contaminated spoil.

Being such a vital part of the West Coast line the works had to be phased to allow continued operation during the works. This necessitated nine separate commissioning phases in addition to the bridge and platform works.

Key Project Outputs

Capacity:

Overall there are now 80 more long distance passenger trains each week day, increased commuter services and capacity for up to 60 % more freight paths.

- ▶ London – Birmingham: from 2 services per hour to 3
- ▶ London – Manchester from 1 service per hour to 3.

Maintainability:

The new layout allows half of the routes to be closed for maintenance, while a reasonable level of service continues to operate on the other half of the layout.

Journey times:

The line speed increase from 75mph to 125mph contributed to the 20 % reduction in journey times on the route.