Network Rail IP (via **Balfour Beatty Rail)**

Angerstein Track **Upgrade Project**

South East Route

Permanent Way

19 months

CONTACT US 01707 927 400

www.prorailservices.co.uk info@prorailservices.co.uk Follow us @prorailuk

Unit 2 – 4 Little Ridge, The Ridgeway, Welwyn Garden City, Hertfordshire, AL7 2BH



ANGERSTEIN - TRACK UPGRADE PROJECT

INTRODUCTION

Pro Rail Services Ltd. is a Railway Civil Engineering Contractor who execute Civil & Permanent Way contracts on Network Rail infrastructure. This re-railing and S&C project took place on the IBJ recovery programme for Network Rail as part of the KO2 upgrade. The work consisted of the removal of 101 existing IBJ left from the signalling upgrade in various area spread over a 15kilometre area in addition to multiple S&C timber sleeper replacements.

THE CHALLENGE:

Possession access required the following tasks to be delivered:

- · Rail Surveys
- · Rail Drops Train Planning
- Rail Distribution
- · Complex recovery that needed derogation for the existing Track Standards
- · Extensive re-railing due to RCF
- Stressing Plans
- Welding Inspections
- G110 Test Plan
- · Scrap removal

During the detailed site survey at Blackheath Station, severe RCF was identified resulting in the normal process of installing 20m long closure rails not being viable for this site.

The re-railing site at Blackheath station consisted of removing & installing 2 x 60m rails (due to excessive RCF), alongside the removal of 6 No. additional redundant IBJ and installing 6 No. 20m rails.

THE SOLUTION

The Team developed a project delivery programme and access strategy that allowed them to implement a solution that mitigated the challenging access problem.

A full site survey was carried out by Site Surveyors, Track Engineers and Welding Inspectors to identify cutting in locations to remove the redundant IBJ's, plus identified timber S&C sleepers to be switched out.

Rail drops were planned as part of the overall programme and rail were positioned within the required areas.

Inner & Outer Tell Tails were marked up by the Track Engineer on the recovery weekend prior to the burning team burning the existing rail into 5m lengths.

These were then removed from the track and loaded onto RRV Trailers. The extremities of the re-rail site were disc cut, pads & nylons replaced and the 2 No. 60m closure rails were installed, installed in accordance with the possession programme.















Network Rail IP (via **Balfour Beatty Rail)**

Angerstein Track **Upgrade Project**

South East Route

Permanent Way

19 months

CONTACT US

01707 927 400

www.prorailservices.co.uk info@prorailservices.co.uk Follow us @prorailuk

Unit 2 – 4 Little Ridge, The Ridgeway, Welwyn Garden City, Hertfordshire, AL7 2BH

ANGERSTEIN - TRACK UPGRADE PROJECT

DELIVERING THE SOLUTION

The track staff then clipped up the closure rails ready for blank welding. 1 No. welding team then cast 2 No. blank welds.

Under the direction of the Track Engineer, 90m of track was unclipped and rollers were installed ready for stressing. Rail temperature was increasing and reached 27' at which time the rollers were removed, and the track was clipped up under a stress-free environment.

The welding team then cast an additional 2 No. welds

Works were carried out over various 27-hour possessions and consisted of:

- 2 No. RRVs
- 1 x Burning Team
- · 3 x Welding Teams
- 3 x Site Engineers
- · 3 x Site Mangers
- 1 x Track Hand Back (Level 4)
- 3 x SWL
- · 2 x S&C Cover
- · 24 x Skilled Track Operatives

THE RESULTS

The following results were achieved:

- · S&C timber sleepers replaced to programme
- · Stressing records were completed
- · From G completed to full line speed
- · Welding inspections carried out with no failures to report
- · S&T testing was completed
- · The site was then cleared, and rail removed from site and loaded on to lorries.

All works were safely delivered in accordance to Network Rail Standards, with zero late handback on any of the possessions.

A full handback file containing the as-built delivery programme, as-built drawings, A-G Forms, and all Network Rail compliance requirements was issued to the Client within seven days of the last project delivery milestone.













