

# NORTHAMPTON TRAIN PROTECTION AND WARNING SYSTEM (TPWS)

## Project Summary

**Client:** Network Rail

**Timescales:** March 2014-December 2015 (commissioning)

**Linbrooke Disciplines:** Signalling

**Linbrooke Services Utilised:** Project/site management, design, installation, test and commission

## Customer Objective

To amend the current Train Protection and Warning System (TPWS) on the Northampton HNR line of route in order to increase safety and provide separate fault indication for all TPWS and signal filament failures.

## Project Overview

Constantly improving the infrastructure, safety and efficiency of the railway, Linbrooke were selected to provide modifications to the TPWS on the HNR line of route by Network Rail as the current TPWS fitments were utilising method 3 fault reporting following the Northampton resignalling scheme. Method 1 was introduced to enable separate fault indication for both TPWS and signal filament failures.

With the control being operated from Rugby SCC Northampton desk, Linbrooke were required to change the location wiring, the Solid State Interlocking (SSI) data and the Modular Control System (MCS) for 21 signals on Northampton, Mill Lane and Daventry SSI interlockings.

*“Well done - a great result - and thank you to everyone who gave up their Christmas to ensure these works were delivered successfully - it is very much appreciated.”*

– Simon Green, Project Director of Signalling for Network Rail

## Linbrooke Project Scope

Responsible for delivering GRIP 5-8 of the project, Linbrooke successfully provided all design, installation, testing and commissioning works.

These works included:

- MCS design services – Alstom
- Design of lineside wiring modifications in 13 location cases for the associated 21 signals
- Installation of lineside wiring modifications in 13 location cases for the associated 21 signals
- Testing of lineside wiring modifications in 13 location cases for the associated 21 signals
- Modification of SSI and MCS data (with the support of OSL) to accommodate the change in TPWS method from type 3 to type 1
- Installation of 3 permanent speed signs

## Benefits of working with Linbrooke

While respecting the contract agreement, a fully collaborative approach was adopted between all parties. Discussing pragmatic solutions for project success, we ensured decisions were unanimous and effective.

To ensure successful project delivery, we consistently provide:

- A strong, detailed understanding of the technical scope
- A full delivery of telecoms, signalling, power, civils and track which ensures multidisciplinary efficiency
- An impeccable health and safety record
- The ability to adjust to project alterations rapidly – and provide alternative solutions when required
- A highly skilled and experienced work force
- Collaborative prowess and strong relationships with a number of industry experts

