

Digital technology helps protect rail workers from confrontations and threats

The installation of a digital closure at the Thorpe Bank level crossing reduced incursions and protected Network Rail workers from confrontations with road users and the general public.

In addition, the deployment of Portable Site Alarms (PSA), Customer Communication Terminals (CCT) with QR codes, and CCTV reduced the need for manned closures but maintained communication and information channels for road users. This allowed Network Rail workers to concentrate on maintenance repairs to the level crossing, without safety concerns or interruptions from the general public.



The Challenge

Previous closures of the Thorpe Bank level crossing had resulted in high levels of hostility and threatening behaviour from cyclists, motorists and members of the general public towards Network Rail workers. There was also a serious concern for rail worker safety due to the high number of closure breaches which had previously occurred.

The Network Rail Section Manager wanted a safe and cost-effective traffic management plan which could prevent incursions, protect rail workers and minimise interaction between his employees and the general public.

Our Solution

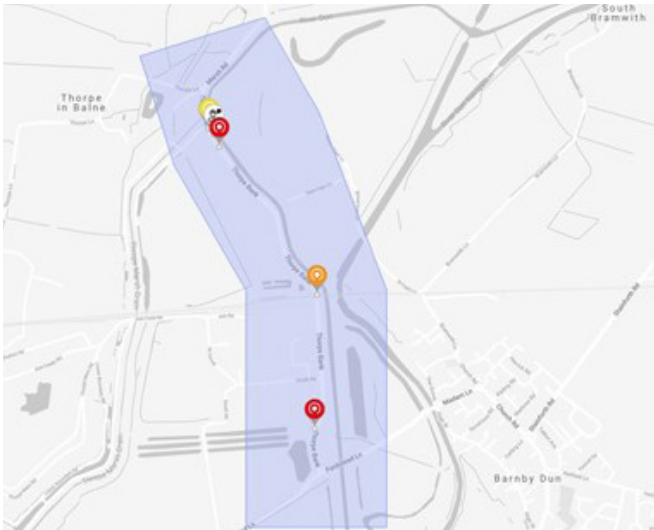
Chevron Traffic Management collaborated with HRS to create a digital closure using innovative digital technology, including Intellicone® PSA, CCT with QR codes and CCTV. Having used these products on previous schemes, Chevron TM was confident that the digital closure would minimise risk to road workers by warning them in advance of potential incursions, and reduce physical threats and verbal confrontations with road users by replacing operatives with remote, real-time communication channels.

Two digital closure points were set up at each side of the level crossing. An unmanned closure equipped with an Intellicone® PSA, CCTV and a CCT with QR code was the first point of deterrence. Members of the public were encouraged to use the CCT intercom or the QR

Network Rail Thorpe Bank level crossing Rail

code to access information on the works and directions to help them navigate around the diversion. The Intellicone® PSA sounded if the closure was breached to deter people from proceeding any further.

A manned closure fitted with a red Intellicone® PSA was the second line of defence and was activated by operatives who pressed an alarm button to alert Network Rail workers. When the alarm button was pressed, it activated the workforce Intellicone® PSA which was located at the level crossing. If this alarm sounded, rail workers had time to take evasive action and remove themselves from the danger zone.



The Outcome

Working with HRS, Chevron TM used digital technology to create a safe work zone for Network Rail workers.

The end result was that Network Rail workers carried out their works without any threats or confrontation with the general public.



“The team from site reported that it was far quieter than normal. The kit was well received, and the team got on with their work unhindered. This is a vast improvement on previous years where teams have been subjected to abuse whilst carrying out their work.”

Shaun Capel, Network Rail Section Manager

“I thought the way the closure was set up was brilliant. The blocking points were far away from the crossing and were also manned so they could turn vehicles away. We were left to get on with our job without having to deal with any members of public. Also the staff explained how it would work before starting. I think it would be good to work this way at busy high-speed crossing such as Stainforth Road and Kirton Lane.”

Adam, Network Rail Team

Scan the QR code to watch our video which shows motorists and cyclists using the CCT boards and intercom to access information and how they were deterred by the Intellicone® PSAs.



Scan me to see our digital closure in action