

## SALTAIRE STATION PLATFORM EXTENSION PROJECT

Client: North South Rail



*"True North Rail helped the Signal Sighting Committee find a compliant solution to a very difficult problem. L4001 Signal and Banner Repeater's readability were not compliant to today's standards. We needed a realistic model, flexible to move the assets around and provide accurate data. Jay from True North Rail was a pleasure to work with and very knowledgeable about the model."*

**Russ Mosley - Signal  
Sighting Chairperson  
North South Rail**



## OVERVIEW

Saltaire station is on the Airedale line between Bradford and Leeds and Skipton. It is a busy commuter station both for passengers travelling to Leeds & Bradford and for staff in companies based in Salt's Mill, as well as serving tourists visiting UNESCO World Heritage Site at Saltaire.

The team at True North Rail were called upon to assist with Signal Sighting requirements in order to avoid the need for a costly data change to a new Signalling Control System.

Saltaire station is located on a very curved section of railway, and was facing a significant cost impact due to the perceived need to relocate a Signal several hundred meters onto a straighter section of track; a location not preferred by Railway Undertaking representatives. This relocation would also have required a data change for the new Control Centre Signaller Workstation, leading to substantial project costs.

True North Rail deployed its advanced gaming engine platform, TrueSight™, to provide an innovative and cost-effective solution. Our team utilised client BIM data and various GIS datasets to create a photorealistic Signal Sighting model using Unreal Engine. This model allowed for rapid review and adjustment of multiple Signalling options in real-time.

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Client: Network Rail



*"The TrueSight™ tool was excellent and made everyone's job easier, removing a lot of the 'if's and but's' typically encountered when discussing Signal placement. The realism of the model was almost indistinguishable from video footage. I will be recommending True North Rail to all my colleagues with Signal Sighting problems."*

**Ricky Scarff - Senior  
Signalling Project  
Engineer Network Rail**



## OUR ROLE

Key Actions:

1. **Rapid Implementation:** Our Signal Sighting model delivered within 10 days from the client's purchase order, allowing for swift review and decision-making by the Signal Sighting Committee.
2. **Signal Placement:** Our TrueSight™ modelling tools enabled the Signal Sighting committee to quickly visualise and test options and demonstrate that a cantilevered Main Signal positioned to the right, combined with a high-up, reduced offset Banner Repeater would provide a compliant solution. This allowed for the Signal to be repositioned at the end of the new 43m platform extension on the curved section of track and avoid a costly data change to the Signalling Control System.
3. **Dispatcher Visibility:** Our TrueSight™ platform provided a realistic dispatchers eye view for the Sighting of OFF Indicators on both platforms, ensuring the optimal Signal/Passenger Train interface arrangements.

True North Rail unblocked the signal sighting problem, avoiding any significant cost and programme impacts, whilst also ensuring compliance with Signal Sighting standards. The entire review process was conducted during a 2-hour Teams meeting with the Signal Sighting Committee and other project Stakeholders, showcasing the efficiency and effectiveness of the TrueSight™ tool.

The Saltaire Station platform extension project demonstrates True North Rail's commitment to innovation, efficiency, and cost-effectiveness. The successful application of the TrueSight™ platform not only provided a compliant solution but also significantly reduced project costs and timeframes. True North Rail continues to set new standards in the Rail Engineering sector, delivering best-in-class solutions for complex Signalling challenges.