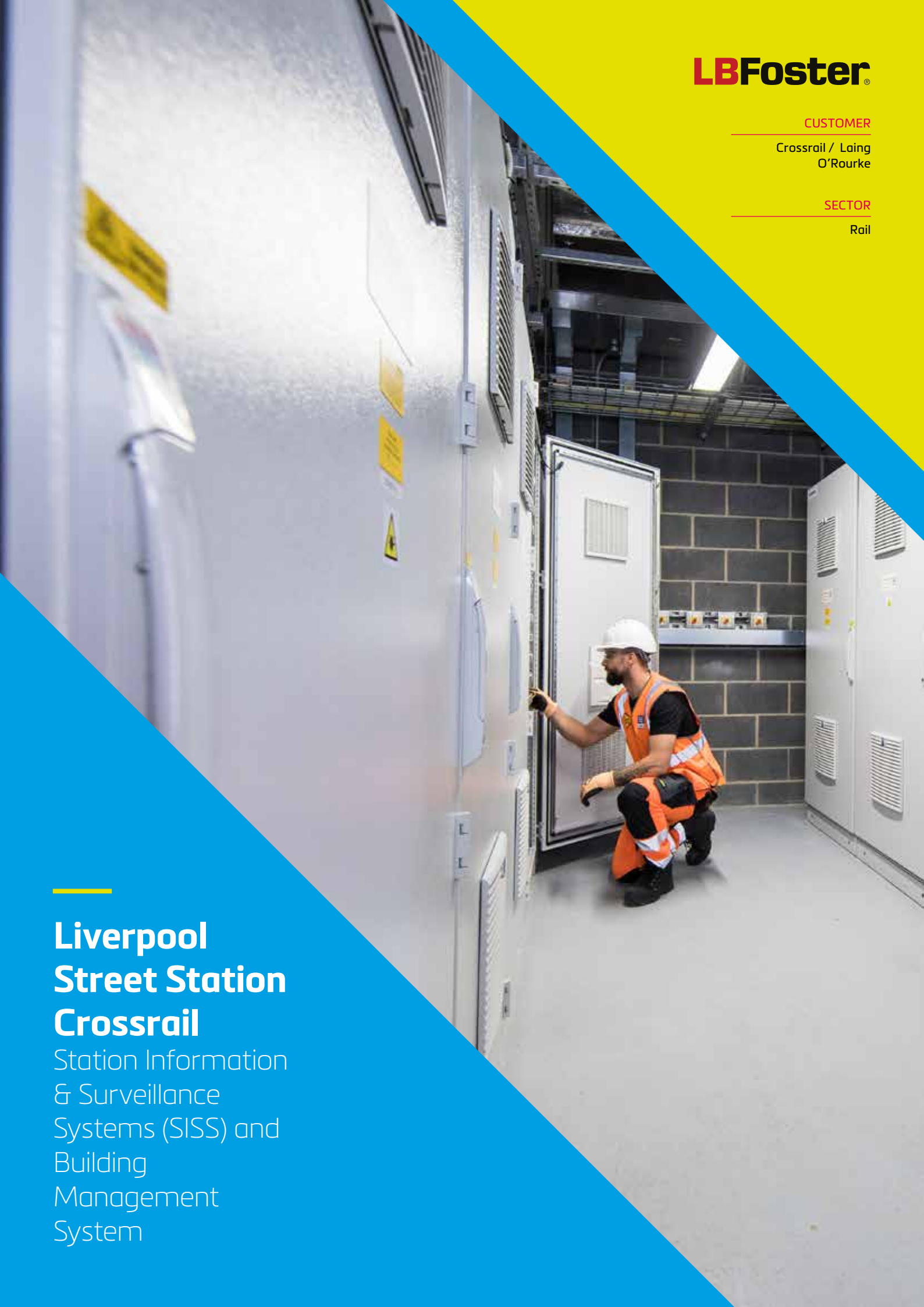


Liverpool Street Station Crossrail

Station Information
& Surveillance
Systems (SISS) and
Building
Management
System





“Our inspirational telecoms solutions keep the world moving for over seven million passengers using Whitechapel station each year, ensuring safer, more secure and easier journeys for all.”

Crossrail is among the most significant infrastructure projects ever undertaken in the UK. There will be 40 Crossrail stations including 10 new stations at Paddington, Bond Street, Tottenham Court Road, Farringdon, Liverpool Street, Whitechapel, Canary Wharf, Custom House, Woolwich and Abbey Wood.

Whitechapel station is an important interchange for both the Hammersmith & City and District lines and London Overground. As part of the Crossrail project, the station is undergoing a major remodelling to accommodate the new Elizabeth line.

An interim station re-routes passengers out of the station to ensure future engineering works take place in a safe environment with minimal disruption to the existing Underground and Overground services. A temporary ticket hall and London Underground staff accommodation and Communications Equipment Room (CER) opened in January 2016 at the junction of Court Street and Durward Street. The ticket hall's relocation enabled demolition of existing staff accommodation buildings containing the Station Supervisor's Office / Ticket Hall / Ticket Machines (POMs) / UTS Gate Line / Welfare / CER.

L.B. Foster Telecoms was contracted by BBMV, the Balfour Beatty, Morgan Sindall, VINCI Construction joint venture which is delivering the Crossrail Whitechapel Main Station Works contract (C512), to install and commission the new temporary ticket hall. Works included new Station Information & Safety System (SISS), head end and control equipment, duplicating existing functionality within the old Whitechapel station.

Requirement

L.B. Foster Telecoms was contracted by BBMV on behalf of Crossrail Limited to install, enable, test and commission the new temporary ticket hall at Whitechapel station.

Details of the required test criteria for the commissioning of the design elements included migration and integration testing, as applicable:

- > detailed design drawings
- > migration design drawings
- > new asset register
- > inspection and test plans (ITP)
- > Mandatory Asset Information Data (MAID)
- > operation and maintenance manuals.

Specification

- > Closed Circuit Television (CCTV)
- > Public Awareness Monitor (PAM)
- > EN54-16 compliant Public Address (PAVA)
- > intercom
- > passenger help point Local Operator Panel (LOP)
- > telephone and data network;
- > master and slave clocks;
- > GPS antenna
- > TV aerials.

“L.B Foster was instrumental in the success of the temporary ticket hall; from our ‘initial contact’ pre-contract with the senior management through to delivery, they have been nothing short of excellent.”

Dave Cranston
Package Manager
BBMV



Our solution

Working closely with BBMV and Crossrail Limited, our expert team drew on its experience of working on similar schemes in the rail sector to produce informed communications designs for the new temporary ticket hall at Whitechapel.

We challenged the scope of the project, attending and generating discussions with both BBMV and Crossrail. This resulted in a number of potential major issues being avoided at the preliminary stage. Our innovative engineering solutions effected savings both on cost and delays to the planned works, as well as avoiding any impact on the daily operation of the station.

Once commissioned, our systems interfaced with existing London Overground Operations Limited (LOROL) PAVA/CCTV and data communications equipment and associated demarcation point junction boxes.

We enabled all communication assets and effected a positive handover to London Underground Limited and LOROL.

"I have no hesitation in endorsing L.B. Foster for future works. They have carried all the company attributes of L.B. Foster through to the present and C660, H & S values, their professionalism, commitment, expertise in their field, ability to adapt as the project develops and most importantly to me, they have good people at all levels of the business representing them daily on the 'front line' with clients."
Dave Cranston, BBMV



What they said

"One of our first discussions was about Health & Safety. L.B. Foster Telecoms demonstrated clearly how seriously it takes this.

"The team also dealt with any issues arising during the project, looking for solutions rather than finding problems.

"Technical issues faced by the team included the migration of existing CER to the new CER within the temporary ticket hall, testing and commissioning, over and back testing, periodic migration works during possessions, plus countless other issues. Suffice to say they were all met 'head on' by them and resolved.

"I must make reference to the senior management team who led the works and I liaised with daily. I am very 'focused and driven' so it was reassuring to work with like-minded people. They could not do enough to assist both me personally and the project demands - totally committed, brilliant."



"Our SISS solutions are critical for the safe day-to-day operation of stations."