

“An absolutely fantastic job by the Ewell West team in achieving the date against all odds! A significant amount of hard work has gone into getting Ewell to this point, especially over the last couple of months. Well done!

Andy Parker

Delivery Enabling Manager
Station Enhancements and Renewals
Network Rail

Case Study

AfA Ewell West Station – Fully accessible listed station

PROJECT	Ewell West Station AfA
CUSTOMER	Network Rail
LOCATION	Wessex Route
CONTRACT	IP Southern Framework
COMPLETION	2019





Need

Providing step free access, from station drop off to train, is an essential requirement for the travelling public. With many rail stations built in a by-gone era and some with listed building status, the retrofitting of lifts and link bridges in the station environment can be challenging.

Ewell West was just such a project where lifts and link spans had to be seamlessly incorporated into the listed station and a life-expired footbridge removed.

Due to its prominence in the village, the council had to be fully engaged in the overall appearance and the delivery proposals. Network Rail's Diverse Impact Assessment also highlighted an increased number of station users with visual impairment to be accommodated.

Solution

Design and Installation

From the outset the installation method helped inform the structures design. To reduce impact on the operational railway and the public, the steel sections were designed for installation by mobile crane in a series of 6-hour rules of the

route line blocks. Off-site fabrication and assembly of the link span and stairs complete with sides, roof, and windows, saved time on site and improved safety and durability.

To meet planning conditions the steel lift shaft was brick clad. This post installation element put the shafts on the critical path. The team absolutely committed themselves to the programme and overcoming the challenges to achieve the key milestone. They delivered a text-book overnight installation of the steel, which was followed by a clever cantilevered access scaffold to lay the brickwork. The scaffold released space to keep passengers moving safely on the platform below.

Visual Impairment

To improve accessibility for the visually impaired a new approach was taken. A computer-generated 3D model of the project was viewed using Virtual Reality Headsets and software that replicated conditions such as macular degeneration, glaucoma, cataracts, and colour blindness.

As a result, the best colours, and positions for markings to denote platform edges, steps and handrails were selected.

Demolition

The final activity to demolish the redundant bridge in an 18-hour possession was successfully handed back 4 hours early.

Outcome

Meticulous planning and clear communications have been key to achieving everyone home safe and receiving six Network Rail Route to Gold safety awards.

The team took time out to create a new raised bed for local St Clement's School much to the delight of children and parents.

As a result of this care and attention to detail, the bridge was opened two weeks ahead of programme, and heartfelt commendations and a poem were received from members of the public. A testament to the work ethic and the collaborative ethos of our customer, designers, suppliers, and delivery team.

