London Bridge Station Redevelopment Programme
RHT Supported Works
The Train Shed Roof
Train Shed Roof

- The redevelopment involved the demolition of the Grade II listed train shed under listed building consent.

- One of the conditions of the demolition was to retain various elements of the train shed roof for potential reuse, namely 10 of the upright columns and 10 of the foliate spandrels (decorative angle pieces).

- The project exceeded the consents requirements by retaining 16 columns and 14 beams, but the process was very complex and challenging. This was partly due to complications of working round operational requirements; in part due to the logistical difficulties of the demolition process as a whole and also due to the nature of the retained objects – made of brittle cast iron and in the case of the columns weighing approximately 10 tons each.
Train Shed Roof

• The removal of the columns was further complicated by the fact that their base plates were buried within concrete below platform level; the platform area had to be excavated down to the base plate level and then the four bolts connecting the column to the base plate removed.

• The base plate and columns were then split apart prior to lifting out of the columns to which the spandrels (in most cases) were still attached.

• Whilst the column and spandrel removal process was underway, the project successfully negotiated with the Vale of Rheidol Railway to take all the agreed savage items together with various additional materials to form the cornerstone of their planned new locomotive museum in Aberystwyth.

• The listed train shed roof, was replaced with a fine piece of contemporary architecture designed by Grimshaw and was praised by Southwark Council for its design quality.
A better railway for a better Britain
Architectural Model

SCOPE
The 1:500 Historic model should describe the same plan area as the 2018 model in order to display the ‘before’ and ‘after’ conditions of the site area.

The base dimensions are:
1035mm by 520mm

The model will be displayed in the new concourse, within bay 51B, appropriately alongside the archaeological display (Planning Condition 7). It shall be placed in an enclosure to match the ‘2018’ model enclosure.

The layout of the station has continually changed over its lifetime. We have identified the photograph (right) from the 1950s as a basis for the physical model - except where station buildings were destroyed in the 2nd World War. Where buildings were bomb damaged the model should represent the prewar condition. For the purposes of the model therefore the modelmaker should try to model the station layout as it stood in 1928 as per the diagram included in the Network Rail Historical Report.
St Thomas St Facade
St Thomas Street Facade

- The railway arches in St Thomas Street were listed on 7th July 2011 after the original planning submission earlier in that year.

- The demolition of the trainshed also included the demolition of a small area of these separately listed arches, but the majority were retained, cleaned, repaired and restored.
The Warren Trusses
Description of the Listed Feature Prior to Restoration

The Warren Truss Bridge Abutments have been subject to a great number of repair interventions, and periods of minimal maintenance.

Generally, sections of the stone columns and arches have been replaced with cementitious render repairs at high and low level. The elevations have also been repointed incementitious mortar of varying depth.

There were signs of issues with water infiltration to both elevations. Also notable was the amount of salt crystallisation on the surfaces of stone and brickwork, which demonstrates the level of moisture trapped within the fabric of these elevations.

Brickwork to both elevations shows signs of aggressive cleaning which has removed the more durable exterior surface and exposed the softer, interior fabric.
Description of the Works

- Removal of the ticket barriers
- Waterproofing and removal of the temporary drainage equipment
- Removing power cables form the walls and roof areas so far as is reasonably practical
- Cleaning of brickwork and stonework
- Painting of warren trusses
The Western Arcade - Quadripartite Arches
Victorian Heritage

- Throughout the station original Victorian features have been sympathetically incorporated within the final design where possible.

- While the different eras of development created something of a labyrinth underneath the platforms, the new design pays homage to its Victorian roots, with quadripartite arches lining increased retail and leisure space, keeping the aesthetics while enhancing London Bridge as a destination in itself.
1836 Quadripartite arches

Description of Works

- Cleaned all surfaces
- Removed all redundant fixings, cable cleats, surface mounted fittings and brackets.
- Filled holes with lime mortar, or with brick cores
- Raked out loose/failed mortar and repointed in lime mortar, colour and finish
  Carefully removed all decayed and damaged brickwork, allowing for replacement
Tooley st
Bermondsey st
South Eastern Railway Office (SERO)

64/84 Tooley Street
• Although within the Tooley St Conservation area, the building itself was not listed

• An attempt to have the building listed was made by the Victorian society in 2010 - the request was turned down by English Heritage, as was the later appeal

• The retention of 64-84 Tooley Street was entirely incompatible with the safe and effective operation of the station, for example
  - Safety – congestion on Tooley St
  - Construction of platforms would be prohibited
  - Design Quality - retention would have compromised legibility of entrances
SERO

Liaised with the Vale of Rheidol Heritage Railway to identify features for salvage to complement the train shed roof elements already donated

- Stone portal – the entrance to the building
- SER Cartouche
- Iron Staircase
- Stonework Parapets
Doorway Portal and SER Cartouche
Stairwell handrail and Parapet

- 16 panels of stairwell handrail
- 70m of Parapet stonework
Other notable features
War Memorial
Plaques

Former Stainer Street (South)

JOINER STREET BRIDGE
ERECTED 1849

James Warren (1802-1870) and W T Monzani patented their iron girder in 1848. The triangular frames are cast iron, with a wrought iron bottom chord, and the Grade II listed trusses above this area are some of the earliest surviving examples.

The eastern abutment arches are believed to be remnants of the 1839 London and Croydon Railway terminus station.
Heritage Installation

Four Plaques;
- 1836 – The first station
- 1845 – The joint station
- 1871 – Further expansion
- 2018 – The Present

Former Stainer Street (North)