

Edinburgh Gateway Station

CLIENT: Balfour Beatty Civil Engineering Ltd.

LOCATION: Scotland

YEAR OF COMPLETION: 2017

We carried out a value engineering design and assessment of an existing anchored king post retaining wall for incorporation into the permanent works for the station. The wall was constructed as a temporary structure for the new tramway and the new works involved increase loading and design life requirements. This alternative saved £2.5m on the project cost.

The assessment included the installation and testing of trial anchors and detailed inspection of the existing wall and anchorages.

We also prepared an alternative design for the A8 pedestrian subway. This was constructed top down with a combination of sheet pile and H Pile walls and in situ concrete top and base slabs. Particular details were required for incorporation of services which could not be moved, the underpass was fully clad and incorporated a glazed entrance canopy.

We used 3D modelling to prepare the design. This allowed co-ordination with the building designer to ensure the new foundations did not put the existing wall anchors at risk.

The project won an ICE Saltire Award in 2017.

KEY FACTS:

- Investigation and assessment
- Pedestrian subway design
- Sheet pile and H pile
- 3D modelling
- Sustainability

