

HOOBROOK LINK ROAD BRIDGE KIDDERMISTER, WORCESTERSHIRE, UNITED KINGDOM

Reinforced Soil Walls and Slope Reinforcement

Problem

The Static Method combined with the BS 8006 was used to design the reinforced slope required to provide a temporary platform for a piling rig, and subsequently for the two cranes: the Terex AC250-1 (250t) and the LG1750 (750t). The Static Method was used also to check and analyse the combinations of:

- the modular trailer and LG1750 travelling loads and
- the modular trailer and AC250 crane outrigger loads.

Especially due to space site constraints and the position of the bridge beams close to the front face of the 70 degrees reinforce soil slope (not necessarily for the abnormal loadings), the LG1750 crane outriggers were placed over a piled foundation. CFA piles were driven and installed through the reinforced soil block before the LG1750 lifting operations

Solution

In December 2015, the latest phase of the Hoobrook Link Road was finalised with the construction of the bridge over the canal and river. This saw large and heavy beams (nr 4 in total, 75 tonnes each) being lowered into place using the biggest crane in Europe, the LG1750. Hoobrook Link Road now connects the A451 Stourport Road over the Staffordshire and Worcestershire Canal and River Stour, through to the A442 Worcester Road. The road is situated within the South Kidderminster Enterprise Park. In December 2015, the latest phase of the Hoobrook Link Road was finalised with the construction of the bridge over the canal and river. This saw large and heavy beams (nr 4 in total, 75 tonnes each) being lowered into place using the biggest crane in Europe, the LG1750. Hoobrook Link Road now connects the A451 Stourport Road over the Staffordshire and Worcestershire Canal and River Stour, through to the A442 Worcester Road. The road is situated within the South Kidderminster Enterprise Park.

Client: Worcestershire County Council

Designer / Consultant: Cass Hayward LLP

Contractor: Alun Griffiths

Products used (Qty.)

Date of construction: 10/2015 - 03/2016

[Google Maps](#)

[Google Earth](#)



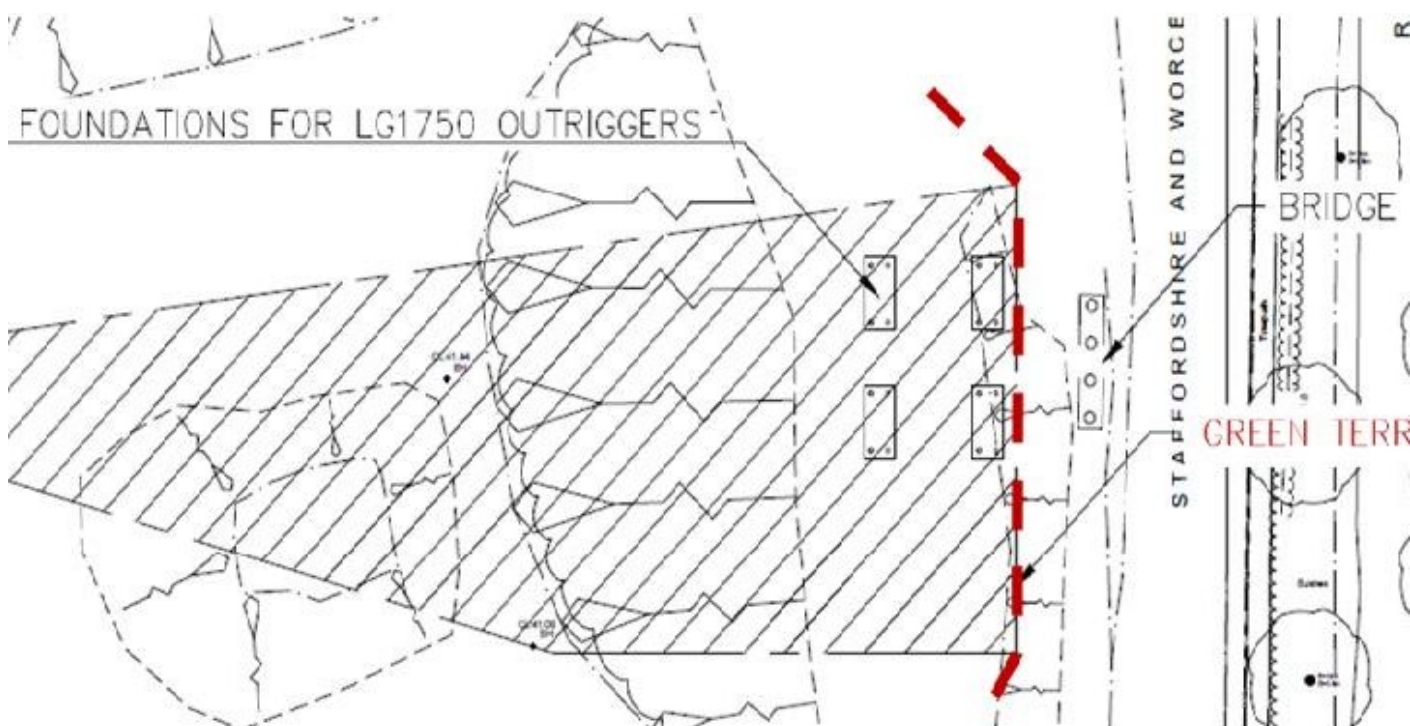
The 70 degrees soil reinforced structure was designed and combined with Rammed Earth.



Crane outriggers/pads placed very close to the front face of the reinforcement.



Crane pads over CFA foundation piles.



The 70 degree soil reinforced structure was designed and combined with ParaGrid