

ParaLink™ - Case History



Stansted Airport Rail Link, UK

Profile

ParaLink™ grades used
ParaLink™ 350 & 450

Client / Design: British Railways Board

Contractor: Peter Birse Ltd

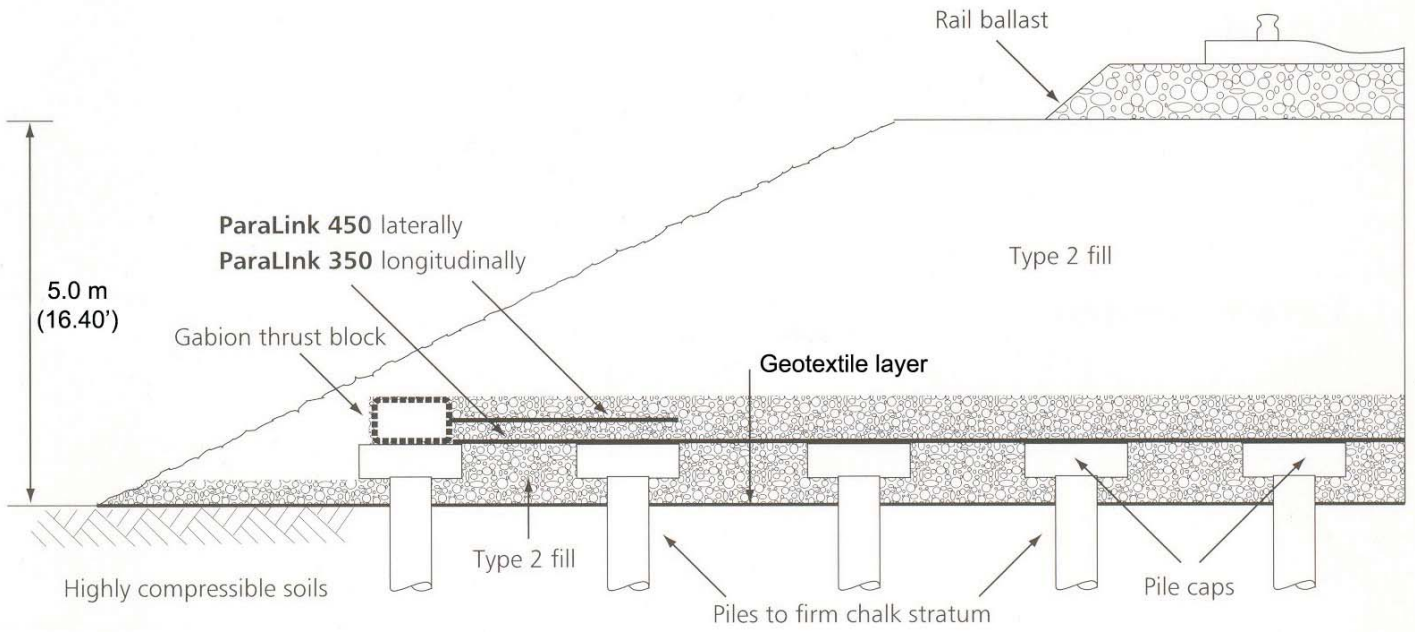


As part of the airport expansion, it was necessary to construct a railway link from the British Rail main line (London ~ Cambridge) to the new airport terminal buildings. The spur line was constructed within a glacial valley on a 5.0m (16.40 ft) high embankment over highly compressible soils including a layer of peat up to 7.0m (22.97 ft) overlying chalk. The time needed for a conventional construction technique of surcharging the embankment, was unavailable.

The chosen solution was ParaLink™ reinforcement over a piled foundation which offered distinct advantages over conventional reinforcement materials. ParaLink™ 350 and ParaLink™ 450, cross laid, was placed over pile caps positioned at 2.75m centres (9.02 ft) the piles being driven through a geotextile layer used to separate the subgrade from the initial stone drainage layer.

ParaLink™ reinforcement enabled the vertical loading of the embankment to be transferred totally onto the piles and provided lateral restraint. A conventional construction would have required large diameter pile caps with the addition of raking piles along the sides of the embankment.

ParaLink's reinforcement core consisting of high tenacity polyester, is protected from possible installation damage from the granular drainage blanket by its polyethylene sheath.



Linear Composites Ltd
 Vale Mills Oakworth Keighley
 West Yorkshire BD22 0EB
 UK
 Tel: +44 (0)1535 643363
 Fax: +44 (0)1535 643605
mail@linearcomposites.com