

A38 Liskeard Bypass Retaining Wall Remediation

Liskeard, Cornwall



TYPE OF PROJECT
Simple Drapery

YEAR OF CONSTRUCTION
2006

CLIENT
Highway England

CONTRACTOR
Saxton Drilling

DESIGNER
**Applied Geotechnical &
Parson Brinkerhoff**

PROD. RELATED
Netting ()

Challenge

The A38 dual carriageway bypass at Liskeard in Cornwall, constructed in 1976, features a deep rock cutting through Devonian slate. To stabilise the excavation, engineers installed a retaining wall system consisting of anchored concrete kingposts spaced at 3-metre intervals, with precast concrete panels spanning between them. The void behind the structure was backfilled with loosely compacted granular material. Designed by Freeman Fox & Partners, the system delivered long-term performance and structural stability for several decades.

However, routine inspection and monitoring of the A38 retaining wall identified emerging structural concerns. While the ground-anchored concrete kingposts remained in good condition, several precast concrete panels began to show signs of localised deterioration and reduced strength. This raised safety concerns, particularly the risk of concrete spalling or falling debris onto the carriageway below, posing a hazard to motorists and requiring urgent remediation.



Retaining wall on a key route to the West country



Steelgrid mesh anchored to the original slate formation.

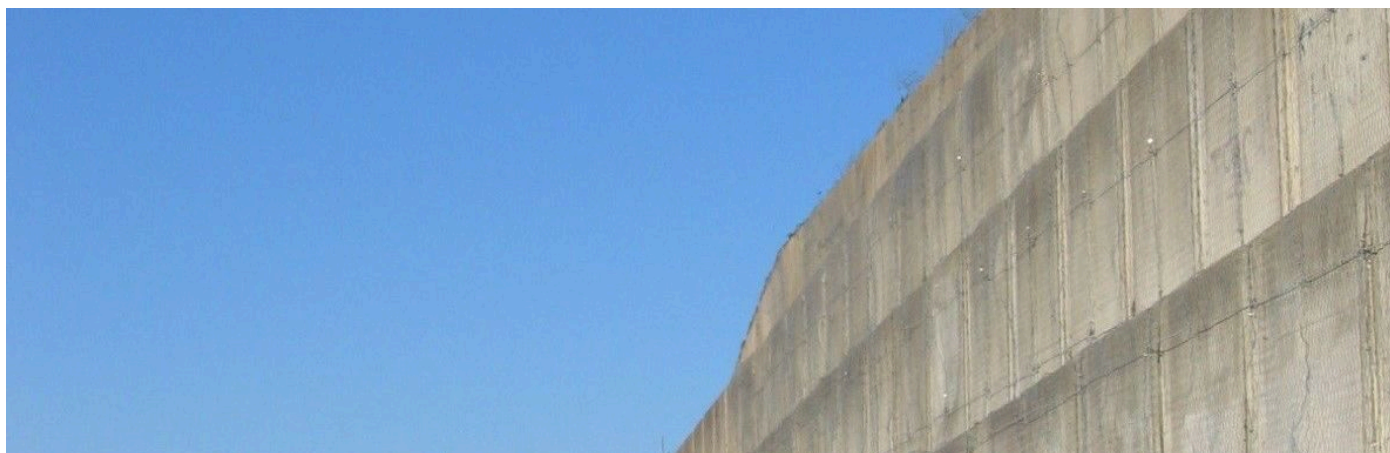
Solution

To address the issue, the Highways Agency appointed Parsons Brinckerhoff (PB) to design a cost-effective and low-disruption retaining wall remediation solution. Given the need to maintain traffic flow on the busy A38 route, PB developed a stabilisation system using high-performance rockfall protection netting combined with rock nailing techniques.

The proposed solution involved installing a high punching resistance Steelgrid mesh across the entire retaining wall surface. This rock netting system was secured using rock nails drilled through the existing precast panels and anchored into the underlying Devonian slate. This approach effectively reinforced the weakened panels, improved slope stabilisation, and ensured long-term containment of any loose material.

The construction contract, valued at just under £12 million, was awarded to Dean & Dyball. The contractor worked in partnership with specialist drilling subcontractor Saxton Drilling and geotechnical consultant Applied Geotechnical Engineering (AGE) to deliver the project efficiently.

A total of 2,220 square metres of Steelgrid mesh was installed, providing a durable and robust rockfall protection solution. The works were completed with minimal disruption to traffic, successfully eliminating the risk of falling debris and extending the service life of the A38 retaining wall.



Steelgrid mesh system laid over the kingpost & panel wall.



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