Peace Bridge Reinforced Soil Abutment & Green Terramesh Solution

LONDONDERRY/DERRY - NORTHEN IRELAND - United Kingdom



TYPE OF PROJECT	YEAR OF CONSTRUCTION	CLIENT	CONTRACTOR	DESIGNER
Reinforced Soil Walls And Slope Reinforcement	**2010**	**Ilex Urban Regeneration Company**	**Graham Construction**	**Aecom**

PROD. RELATED
TerraMesh (Null)

Challenge

The Peace Bridge in Derry-Londonderry, Northern Ireland, is a landmark pedestrian and cycle bridge spanning the River Foyle. As a key element of a major urban regeneration project, the bridge was designed to physically and symbolically connect two historically divided communities. This iconic 312-metre-long self-anchored suspension bridge required carefully considered engineering solutions at both abutments to meet structural, environmental, and aesthetic demands.

On the City side, traditional bored concrete piles were used to support the bridge abutments. However, the Ebrington Barracks side presented a more complex challenge. The presence of an existing grassed embankment meant that a conventional concrete structure would have been visually intrusive and inconsistent with the surrounding landscape. The project, therefore, required a sustainable, visually sympathetic retaining wall solution that could provide structural stability while preserving the natural appearance of the site.



PEACE BRIDGE



Stage one of construction

Solution

To meet both engineering and environmental requirements, a 40-metre-long and 8-metre-high Green Terramesh® reinforced soil wall was constructed at the Ebrington Barracks abutment. This reinforced soil solution provided the necessary structural support for the bridge bank seat while seamlessly integrating with the existing grassed embankment, maintaining the natural landscape and enhancing the visual appeal of the area.

The Green Terramesh® system not only delivered a durable and cost-effective retaining wall solution but also contributed to the overall functionality of the site. It enabled the creation of a level viewing platform at bridge deck height, offering panoramic views of the River Foyle and the surrounding cityscape. In addition, the design improved accessibility by providing disabled access to the adjacent Ebrington Barracks parade ground, supporting inclusive urban design.

This project highlights the effectiveness of reinforced soil solutions in bridge abutment construction, particularly where environmental integration, aesthetics, and sustainability are key considerations.



Construction of the Peace Bridge



Strong vegetation growth

MACCAFERRI LTD. 9 Blenheim Office Park Fenlock Road, Long Hanborough, Oxfordshire OX29 8LN, UK
PH:+44 1865 770555 E-mail: info.uk@maccaferri.com



Vegetation growth after 2 months

MACCAFERRI LTD. 9 Blenheim Office Park Fenlock Road, Long Hanborough, Oxfordshire OX29 8LN, UK
PH:+44 1865 770555 E-mail: info.uk@maccaferri.com

OPEN GOOGLE MAPS

OPEN GOOGLE EARTH

MACCAFERRI LTD. 9 Blenheim Office Park Fenlock Road, Long Hanborough, Oxfordshire OX29 8LN, UK
PH:+44 1865 770555 E-mail: info.uk@maccaferri.com