A45 Pickford Interchange Wingwalls

West Midlands, Coventry



Image: Google

TYPE OF PROJECT	YEAR OF CONSTRUCTION	CLIENT	CONTRACTOR	DESIGNER
Reinforced Soil Walls And Slope Reinforcement	**2025**	**National Highways And Coventry CC**	**Breheny Civil Engineering**	**Maccaferri (Pell Frischmann - Principle Designer)**

PROD. RELATED

MACWALL (MacWall 4.0 - 8m High Max.)

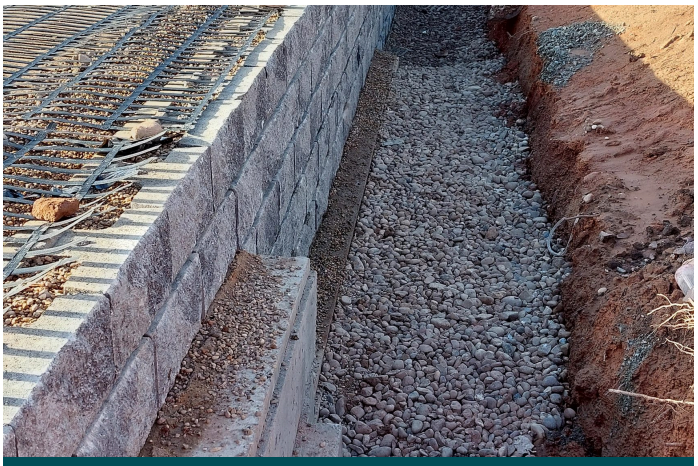
Challenge

The Pickford Green Interchange is a strategically important highway infrastructure project on the A45, west of Coventry, designed to enable significant residential and commercial development. The scheme will support the delivery of up to 2,400 new homes and a 15-hectare business park comprising R&D, light industrial, and distribution facilities. Central to the project is the construction of a new grade-separated interchange and overbridge, replacing two existing junctions to improve traffic capacity and safety.

Consistent with the UK construction section, the delivery team were under pressure to find cost savings that align with the CO2 goals of this new scheme whilst keeping to delivery program due to the A45 being kept live during the upgrade.



During installation


During installation

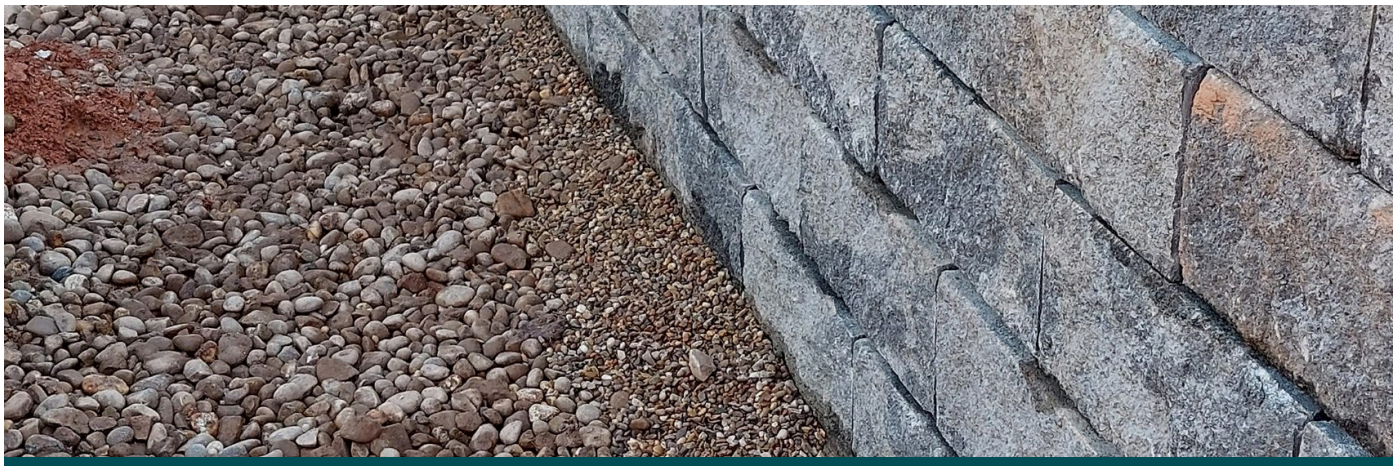
Solution

To overcome the challenges posed Maccaferri work closely with the project team of Breheny civil engineering limited and their appointed designer, Pell Frischmann during the design phase of the scheme to look at offering a value engineered solution to the tender specification.

Maccaferri offered their BBA HAPAS certified MacWall reinforced soil modular block retaining wall as an alternative to the reinforced soil incremental panel wall that had been originally considered. Maccaferri offer both types of retaining system, but based on the geometry of the 8.0m high wing walls, which reduce in height rapidly as they move away from the abutment, MacWall was the more viable option as it uses discrete modular facing blocks which give a higher degree of build flexibility over its sister incremental panel system.

The element design and responsibility for the wingwalls was carried out by Maccaferri and covered under their own P I Insurance as part of a design and supply package. The retaining walls were sat on existing weathered sandstone with out the need for potentially expense ground treatments. A DoT class 6I fill material was used as the reinforced soil.

The MacWall was system was adopted and offered a 50% saving on the retaining wall materials when compared to the in house panel wall system.



Detail of wall showing 'split-face' natural appearance

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