

## M32 BUS LANE BRIDGE EXTENSION BRISTOL, SOUTH WEST, UNITED KINGDOM

### Mass Gravity Retaining Walls

#### Problem

The M32 in Bristol is a busy road causing congestion, slow bus travel times and high levels of pollution. The site is to the North West of Bristol which crosses the M32 then connects a route from Bristol to the M4.

#### Solution

A smarter way of travelling was needed to speed up bus journey times, relieve congestion and reduce pollution. As one of the many bus priority improvements in Bristol, it was agreed that a bridge would be constructed extending the M32 Bus lane, which would only allow for buses. With this bridge in place bus journey times would be reduced by 30 minutes, a substantial amount for commuters. The design and build contract to construct the 35m span bridge overall costs were to be £10m. Before this construction, an installation of a new MetroBus bridge over the M32 in June 2016 was successful, this gave great headway for this project. The lane will link to a new junction on the M32 which provides access to the motorway.

To minimise the impact close by on Stoke Park Estate and the area surrounding, extensive parts of the new proposal will include tree planting and landscaping. The M32 will still be open when this work is carried out, this will reduce disruption although there will be times when evening motorists will be diverted onto junction 3 of the motorway across a roundabout and then immediately back onto it. The bridge construction is two pairs of braced steel beams weighing 70 tonnes each and over 35m long. Graham Construction closed the M32 over a weekend to allow the bridge to be safely lifted into place. Site clearance works were undertaken and drainage and fencing works.

As part of the contract, Maccaferri will be constructing sections of the slip road with our MacWall® Vertica.

**Client:** BRISTOL CITY COUNCIL

**Designer / Consultant:** Atkins

**Contractor:** Graham Construction

**Products used (Qty.)**

**Date of construction:** 10/2016 - 02/2017

[Google Maps](#)

[Google Earth](#)



MacWall construction with reinforced soil support



Slip road with further construction of MacWall



MacWall Construction



Slip Road Section - MacWall Vertica - 4 Degrees BBA



MacWall construction moving forward towards completion