

Marsh Mills Viaduct Renovation (UK)



Project description

After a respectable life of good service under heavy traffic, the modular expansion joints at both ends of the Marsh Mills Viaduct near Plymouth in England showed signs of their age, and it was decided to renovate them. Modern TENSA®MODULAR joints, continually developed and now offering far superior performance and durability than any modular joints of the era in which the original joints were installed, were chosen. The ability of the replacement joints to be designed to make use of the concreted-in parts of the old joints was a key benefit, offering significant advantages.

mageba scope

TENSA®MODULAR expansion joints, with 5 or 6 gaps each, were tailored to suit the project's demands, considering the preferred "box-in-box" method of joint replacement and the geometry of the existing joints and structures. By reusing the embedded parts of the old joints, the need for breaking out of concrete and placing and curing of new concrete could be avoided. This enabled the construction effort and time to be substantially reduced, minimising costs, environmental impacts and traffic congestion while the works were carried out – a win-win situation for all concerned.

Highlights & facts

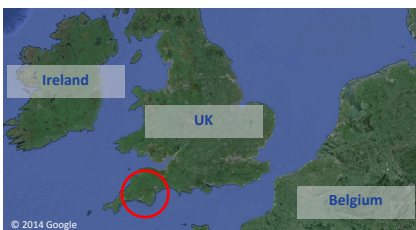
mageba products:

Type: TENSA®MODULAR expansion joints of types LR5 and LR6
Installation: 2013
Method: "Box-in-box" method of modular expansion joint renovation

Structure:

City: Plymouth
Country: UK
Type: Highway viaduct
Length: 410 m

The viaduct is on the A38 highway in southwest England, near the city of Plymouth.



Bridge gap following removal of the removable parts of an old expansion joint.



Lifting into position of a new expansion joint – excluding concreted-in parts, which are re-used.

