



## High Bridge

As part of Reading's investment in their bridges over the last four years, VolkerLaser has recently completed parapet repairs on High Bridge for Reading Borough Council.

High bridge is an 18th Century, Grade II listed arch bridge, which spans over the River Kennett. The bridge is also a Scheduled Ancient Monument. Over the centuries, the bridge's stone parapets have deteriorated due to weathering and salt crystallisation, affecting the structural integrity.



Essential restoration began in July 2024 and spanned 17 weeks, using 1.7m<sup>3</sup> of Portland Stone to complete 64 stone replacements. The works included parapet repairs, temporary works, and traffic and river management. Temporary platforms and lifting beams were installed behind the parapets, with fully encapsulated scaffolding to prevent river pollution. The parapets were steam cleaned before restoration.

The project was split into two phases—west and east—where deteriorated parapet sections were dismantled and repaired. Coping stones were carefully removed to expose the inner structure, allowing the team to cut out and replace damaged sections with Portland Stone. In partially degraded areas, only the front face was replaced and reinforced with stainless-steel dowel bars. A custom mortar mix of lime, cement, sand, and Portland Stone dust was used to securely set the new stones, preserving both aesthetics and structural integrity.

One key challenge was the leaning parapets, which had shifted 65mm from vertical. To fix this, the team dismantled and rebuilt the affected section using the original stone.

Due to the bridge's Scheduled Ancient Monument status, Cliveden Conservation was brought in to reinscribe the original date onto new stones. Historic England approved the works with a Scheduled Monument consent, following a site assessment.

Night closures over three nights allowed safe scaffold installation and phase transition, with roads reopened each morning. A crane was used to lift beams, requiring additional closures, while two-way traffic lights maintained flow during the day. The careful planning and execution of traffic management ensured minimal disruption to the public while allowing the essential restoration works to proceed.

The works were completed to time and budget demonstrating the value of effective collaboration with Reading Borough council and their Term Structural consultant, Stantec.

