

Major works to repair historic 15-arch railway viaduct

January 8, 2024



Progress of significant repairs to the 120-year-old Stanway Viaduct on the [Gloucestershire Warwickshire Steam Railway \(GWSR\)](#), were inspected by Sir Tim Laurence KCVO, CB, President of the [Gloucestershire Warwickshire Railway Trust \(GWRT\)](#), on 5th January.

The first stage of work on the 15-arch, 200m (660ft) viaduct, which carries the railway over a valley between Toddington and Broadway, began in November to replace the failed waterproof deck, the railway's volunteers having first removed the track.

However, following removal of the track ballast a failed mortar joint was discovered beneath both parapets and running almost the full length of the viaduct, resulting from the parapets leaning slightly outwards. Described by the railway's Civil Engineering Director, Dr Graham Plant as 'an unwelcome surprise' that appears to have been developing over many years, work is now being undertaken to stabilise the parapets.

During his visit, hosted by GWRT Chairman Philip Young and Dr Graham Plant, Sir Tim Laurence saw that the gap in the mortar had been cleaned and cement grouted and the technique for stabilising the parapets described. Stainless-steel ropes attached to the parapets will be secured to the reinforcing mesh within the new deck to reduce the risk of further movement.

Sir Tim, who until 2022 was Chairman of the English Heritage Trust and has considerable experience of managing historic buildings, said: "This is a neat solution that has been developed collaboratively between GWSR's engineers, designer Jonathan Symonds and contractor Walsh Construction. Importantly, it does not affect the external appearance of this heritage structure and I compliment the railway on the way it is tackling the project to preserve it for future generations to enjoy.

"However, I appreciate that the additional work has significantly added to the cost of the viaduct's refurbishment and that reopening of the line to Broadway will be delayed by a few weeks. But I look forward to returning and travelling over the viaduct when this initial stage of the project is completed."

Sir Tim was interested to see the progress being made in installing the new waterproof deck, alongside the parapet repair. Once the stabilisation work along with the new waterproof deck is completed, ballast and track will be reinstated and the line from Toddington to Broadway re-opened.

Dr Graham Plant pointed out: "Failure of the original waterproof deck allowed rainwater to seep within the structure of the viaduct, causing damage to the brickwork. Over the following months the viaduct will be allowed to dry out before we begin the long and costly task of repairing the brickwork along the length of the viaduct, which is 15m (almost 50ft) at its highest.

"I expect that work to be carried out in stages over the coming years."

Philip Young commented "The Railway's engineers and their external advisors have come up with a solution which was straightforward to install and while it is an extra unexpected cost it is something the Trust can meet, if necessary, by rearranging its reserves. The Trustees felt that this was an appropriate response as it ensured the sustainability of the railway and would see trains return to Broadway hopefully in April, only about a month later than originally planned.

"Meanwhile our appeal remains open for donations as each £1 received means that is less for us to find from our reserves which will help us support the Railway elsewhere if the need arises."

Added Sir Tim: "This is a very worthwhile and important project that will secure the long-term future of this award-winning heritage railway and I encourage anyone who loves this outstandingly beautiful line to support the Trust's appeal."

Donations to the appeal can be made on the Trust's website,
<https://www.gwrt.org.uk/donate/stanway-viaduct-appeal>