

Bath Road Overbridge – Repair work

*Application for Listed Building Consent - Supporting
Statement*

Date: August 2024



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1 Introduction

- 1.1 Inspections of the bridge at Bath Road have found the structure needs urgent repair works to ensure that the bridge remains safe and able to carry vehicles and traffic over the railway.
- 1.2 This Statement has been prepared by Network Rail in support of an application for Listed Building Consent for repair works to Bath bridge, Bath Road, Reading, RG30 2AX. The development comprises: *“Repair works to bridge (including re-casing, re-bed and repair to spalled brickwork).”*
- 1.3 Railway bridge carrying Bath Road over the Basingstoke Branch line (BKE) at 37m 29ch. Bath Road Overbridge was designated as Grade II, Listed in 2012. As such Network Rail has prepared an application for Listed Building Consent to seek approval for the proposed urgent repair works to the bridge.
- 1.4 This Supporting Statement gives a summary and assessment of policy, heritage and design and access. It is divided into the following sections:
 - ▣ site description, historical context and background;
 - ▣ proposed development;
 - ▣ planning policy framework;
 - ▣ assessment of the proposals; and
 - ▣ conclusion.

2 Site Description, Historical Context and Background

Bath Road Overbridge and Surrounding Area

- 2.1 Bath Road Overbridge, **Bath Road, Reading, RG30 2AX** is located over the Basingstoke Branch (Paddington via Reading) (BKE) line at 37 miles 29 chains.
- 2.2 The bridge is Listed Grade II Listed Building; list entry name Bath Road Bridge (BKE3729). The listed building details are provided in Appendix A.
- 2.3 The bridge is a Brunel-designed overbridge, It is a masonry structure and consists of 3 semi-elliptical spans, on a skew, in a cutting. The viaduct carries Bath Road over two tracks of the BKE line, south of Reading West station at Southcote. Pedestrian walkways are provided on both sides of the bridge via steel footbridges; these are later additions to the bridge.

Figure 1: Bath Road Overbridge



Historical Context

Description of structure

- 2.14 A good example of the standard Brunel triple-arched overbridge, dating from the construction of the Berks & Hants Line. Semi-elliptical arches, red brick and skewed. The bridge was built to carry the London-Bristol turnpike (now A4) and therefore has a wider roadway than normal. Original handmade red brick. Red engineering brick used for patching and for alterations to the parapets. English bond. Limestone copings. The central arch is slightly taller than the side arches. Dimensions appear to be similar to those of neighbouring and contemporary Tilehurst Road Bridge (BKE 3709), which has a central span of 38 ft (11.6 m.) and c. 30 ft (9.1 m.) side arches. The drawings for Tilehurst Road Bridge show that the superstructure in the spandrels was lightened by the construction of a series of voids and spine walls, with the carriageway on carried on arches linking the spine. The carriageway for Bath Road Bridge is 24 ft (7.3 m.) between parapets. The piers are tapered and were originally pierced by three tapering transverse arches. These arches have been blocked up with brick so they now read as blind arches. At least one tie plate is visible in the north (low mileage) face. Abutment/wing walls are vertical and straight. A stepped string course runs across each face and above the outer face of the parapet is stepped. They have been raised in the twentieth century by two courses of red engineering brick above the original coping left in situ and have steeply pitched purple brick copings with small anti-climb spikes. The parapets are also rebuilt in red engineering brick at the ends, possibly in connection with the construction of the entrances to the modern steel footbridges which flank the bridge on both sides. In particular, the east end of the south (high mileage) parapet was truncated and rebuilt in engineering brick so that it curves back on a concrete raft to form part of the entrance to the southern footbridge. The bridge is generally not visible in the wider landscape because it is in a cutting and because of topography and existing structures. However, it is interspersible with Tilehurst Road Bridge (BKE 3709).

Assessment of significance

- 2.15 This is a good example of Brunel railway bridge design, being on the one hand typical of his standard approach (three semi-elliptical arches, relieving arches in the piers) and on the other elevated above the normal quality by virtue of its height (because of the cutting) and its dimensions (because it carried an important turnpike). It is also little altered. Therefore, it is of medium historic and architectural interest, but the utilitarian later 20th century steel footbridges flanking it significantly detract from this interest.

Summary Statement

- 2.16 An imposing, red brick, three-arch bridge by Brunel to carry the London-Bath turnpike (A4) which is the finest surviving overbridge on the Berks and Hants line to Newbury. Despite the harm caused to its setting by the flanking 20th century footbridges, the road bridge is of medium historic and architectural interest.

Significance Value

- 2.17 Medium architectural and historic interest; no archaeological or artistic interest.

Planning History

- 2.19 No historic applications were found on Reading Borough Council Online Planning.

3 Proposed Development

- 3.1 An examination of the viaduct was undertaken on 11/5/2024, this highlighted the need for the repair work. Photos of the defects have been provided within the Bridge Detailed Examination Report submitted with this application.
- 3.2 Repairs shall comprise the following:
- Secure loose to hammer/dropped brickwork by re-case area of brickwork on a like-for-like repair - LOCATION: Span 2, high mileage face rings.
 - Clean off graffiti on the Bridge Strike Information Plate - Overbridge parapet.
 - Re-bed lifting brickwork on a like-for-like bases - LOCATION: Upside high mileage wing wall parapet.
 - Remove loose, missing and spalled brickwork and repair. Repoint deep open joints to spandrel/face rings as required. Further, break out and re-case any remaining face ring brickwork where longitudinal fracturing is present - LOCATION: The immediate rear Centre span 2 (H/M upside spandrel/face rings 2.5m2).

4 Planning Policy Framework

- 4.1 This section summarises relevant policy and guidance in the consideration of this application.

The National Planning Policy Framework (NPPF)

- 4.2 The revised National Planning Policy Framework was published in December 2023 and describes the Government's planning policies for England. This document sets out the Government's planning policies for England and how these should be applied. It provides a framework for plan making and development.
- 4.3 The NPPF outlines the Government's economic, environmental and social planning objectives. Taken together, the NPPF articulates the Government's vision of sustainable development, which should be interpreted and applied to meet local aspirations. It is advised that these three objectives should be pursued in an integrated way, looking for solutions which deliver multiple goals. The following sections of the NPPF are of relevance to this proposal.

Heritage

- 4.4 Section 16 of the NPPF sets out national policies in relation to conserving and enhancing the historic environment. Paragraph 200 advises that in determining applications, Local Planning Authorities (LPAs) should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance.
- 4.5 Paragraph 201 states that local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise.
- 4.6 In determining planning applications, the NPPF advises at Paragraph 203 that LPA's should take account of:
- the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation;
 - the positive contribution that conservation of heritage assets can make to sustainable communities including their economic vitality; and
 - the desirability of new development making a positive contribution to local character and distinctiveness.
- 4.7 Paragraph 205 advises that in considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation. The more important the asset, the greater the weight should be. Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting.
- 4.8 The NPPF advises at paragraph 207 that a proposed development will lead to "*substantial harm to or total loss of significance of a designated heritage asset, local planning authorities should refuse consent unless it can be demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply:*
- *the nature of the heritage asset prevents all reasonable uses of the site; and*
 - *no viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation; and*

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- ▮ *conservation by grant-funding or some form of charitable or public ownership is demonstrably not possible; and*
 - ▮ *the harm or loss is outweighed by the benefit of bringing the site back into use.”*

4.9 In cases where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, paragraph 208 of the NPPF states that this harm should be weighed against the public benefits of the proposal, including securing its optimum viable use.

National Planning Practice Guidance

4.10 The National Planning Practice Guidance (NPPG) was launched on the Department of Communities and Local Government’s website in March 2014.

4.14 The NPPF and NPPG define historic significance is defined as *“The value of a heritage asset to this and future generations because of its heritage interest. That interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset’s physical presence, but also from its setting.”*

4.15 When assessing if there is substantial harm to a historic asset as a result of a proposal the guidance states *“While the impact of total destruction is obvious, partial destruction is likely to have a considerable impact but, depending on the circumstances, it may still be less than substantial harm or conceivably not harmful at all, for example, when removing later inappropriate additions to historic buildings which harm their significance.”*

Local Policy

Reading Borough Local Plan – Adopted November 2019

4.16 The Local Plan guides development in Reading up to 2036 and is the main point of reference for anyone wishing to undertake development within Reading over that period.

4.17 POLICY EN1 Protection and Enhancement of the Historic Environment - proposals will be expected to protect and where possible enhance the significance of heritage assets and their settings, the historic character and local distinctiveness of the area in which they are located. Applications which affect, or have the potential to affect, the significant features of heritage assets should be justified by a Heritage Statement. The Council will monitor buildings and other heritage assets at risk through neglect, decay or other threats, proactively seeking solutions for assets at risk including consideration of appropriate development schemes that will ensure the repair and maintenance of the asset, and, as a last resort, using its statutory powers.

4.18 POLICY TR1: Achieving the Transport Strategy - All development proposals should make appropriate provision for works and contributions to ensure an adequate level of accessibility and safety by all modes of transport from all parts of a development, particularly by public transport, walking and cycling, in accordance with any agreed transport assessment submitted as part of the application.

5 Assessment of the Proposals

- 5.1 The following section considers how the proposal is acceptable in terms of the planning policy framework and other relevant matters.

Principle of Development

- 5.2 The development involves the repair of the railway bridge that carries Bath Road over the railway in order to maintain and ensure the continued running of the highway and railway.

The proposal has incorporated the following aims;

- to provide a safe and secure railway infrastructure;
- to deliver the work whilst minimising the operational impact of the railway and highway above; and
- to deliver the work whilst protecting the heritage asset and surrounding environment.

The Need for the Work

- 5.3 The project forms part of works to primarily repair, refurbish and renewal of buildings, civil and geotechnical assets on the Western Route. Work delivered under the frameworks represents a significant portion of the investment Network Rail uses for running, maintaining and improving Britain's railway, which currently sees four million passenger journeys and thousands of tonnes of freight transported every day.
- 5.4 Following examinations Bath Road Overbridge was found to have areas of spalled/ drummy/ displaced brickwork. Works are required to ensure continued safety and operational requirements of the railway at this location.

Design Considerations

- 5.5 Where possible repairs of the existing structure will be undertaken. Replacement of any materials will be on a like for like basis. With a finish to match the existing finish on the bridge.
- 5.6 Elements of the bridge are under capacity and will be replaced with increased capacity to meet this requirement. This has been calculated on live loading and wind load.
- 5.7 The design solutions have been chosen for operational and aesthetic design reasons. The proposed works will not compromise the structural robustness of any existing structures. The proposals have considered requirements for environmental and sustainable development.

Access

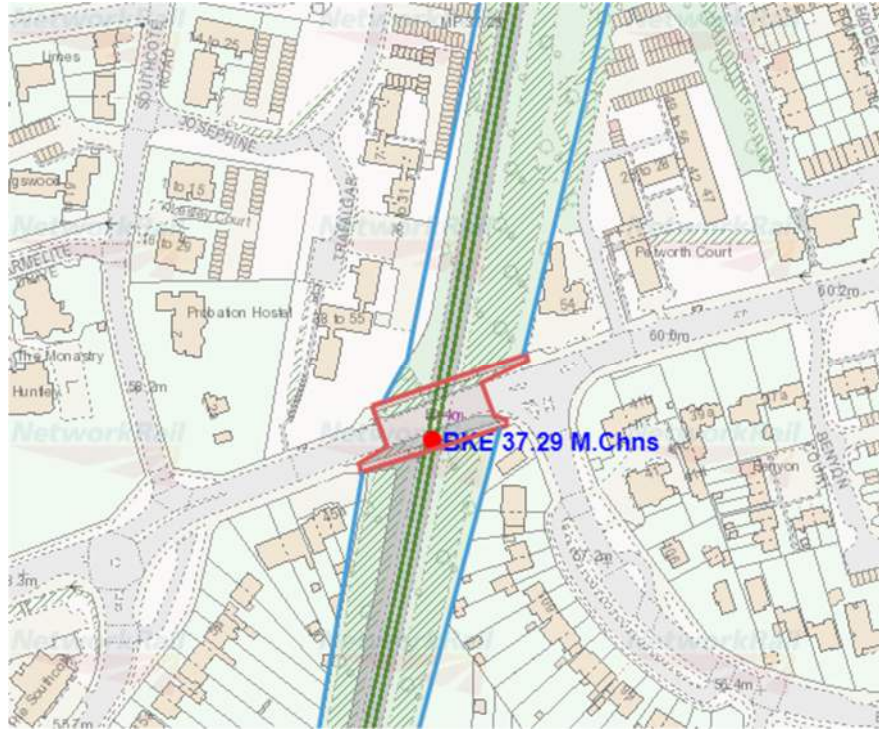
- 5.8 The works proposed have been designed to minimise disruption to the railway and highway below. All the temporary work during construction will be carefully managed within the project, to reduce any impact to the local highway and railway corridor.

6 Conclusion

- 6.1 Network Rail is seeking Listed Building Consent for repair works to Bath Road Overbridge at , Bath Road, Reading, RG30 2AX. This bridge was designated as Grade II Listed in 2012 and repairs to the bridge require Listed Building Consent. As such Network Rail has prepared an application for Listed Building Consent, for consideration by Reading Borough Council, to seek approval for the proposed scheme.
- 6.2 The proposed works will have a minimal effect on the significance of the listed building and will provide positive benefits for public access.
- 6.3 The works proposed in this application will need to be implemented to ensure the continued safe operation of the railway.
- 6.4 For the reasons outlined in this supporting statement Network Rail consider the proposed development to be in accordance with both national and local planning and heritage policy. We therefore hope that Reading Borough Council will support the proposals submitted under this application for Listed Building Consent.

Appendix 1 – Location Plan and Photographs

Location Plan



Aerial Photo



Appendix 2 – Listing Description

The following listing description has been sourced from the Heritage Gateway website:

Listed Building Grade: II
List Entry Number: 1409263
Date first listed: 17-Jul-2012
List Entry Name: Bath Road Bridge (BKE3729)
Statutory Address 1: Bath Road Bridge, Bath Road, A4, Reading
District: Reading (Unitary Authority)
National Grid Reference: SU7004272662

Summary

Tall, triple-arch skew road overbridge with semi-elliptical spans, set in a cutting, erected c.1845-47.

Reasons for Designation

Bath Road Bridge is designated at Grade II for the following principal reasons: * Selectivity: a triple-arch skew overbridge with semi-elliptical arches; in this case it is unusually high, built to span a deep cutting; * Design, engineering & material interest: built to the high standard employed for brick-built bridges of this date; intact outer faces, semi-elliptical arches and arch rings, with slightly heightened, patched and repaired parapets; similar to Tilehurst Bridge which was constructed with internal voids and spine walls that reduce the weight of the superstructure and carry the carriageway; * Historic interest: built 1845-7, shortly after the main line by the Hampshire and Berkshire Railway for the Reading-Newbury line, probably by an assistant engineer to Brunel's earlier specification; the drawings survive; * Group Value: forms an impressive pair with the similar and contemporary Tilehurst Road Bridge.

History

The railway line from Reading to Newbury, opened in 1847, was the outcome of a dispute between the Great Western Railway (GWR) and the London and South Western Railway about the provision of a railway to Newbury. The GWR originally proposed to reach the town by a branch from the main line at Pangbourne, but eventually settled on the present route. This was built by a subsidiary company to the GWR, the Berkshire and Hampshire Railway. The engineer was Isambard Kingdom Brunel (1806-59) who, as with the main line, designed the line on the broad gauge. Having previously dismissed the idea of a route to Bristol via Newbury and the Vale of Pewsey he did not regard this as a major project: it only became part of the direct GWR route to Exeter in 1906. It is not known who was the Resident Engineer for the project.

Bath Road Bridge was erected during the construction of the line c. 1845-7 to carry the London-Bristol turnpike (now the A4) south-west of Reading.

In one or more phases in the late-C19 and mid to late-C20 some patching and refacing, and other minor alterations, have been carried out in engineering brick. In the last few decades, steel footbridges have been built alongside on both sides.

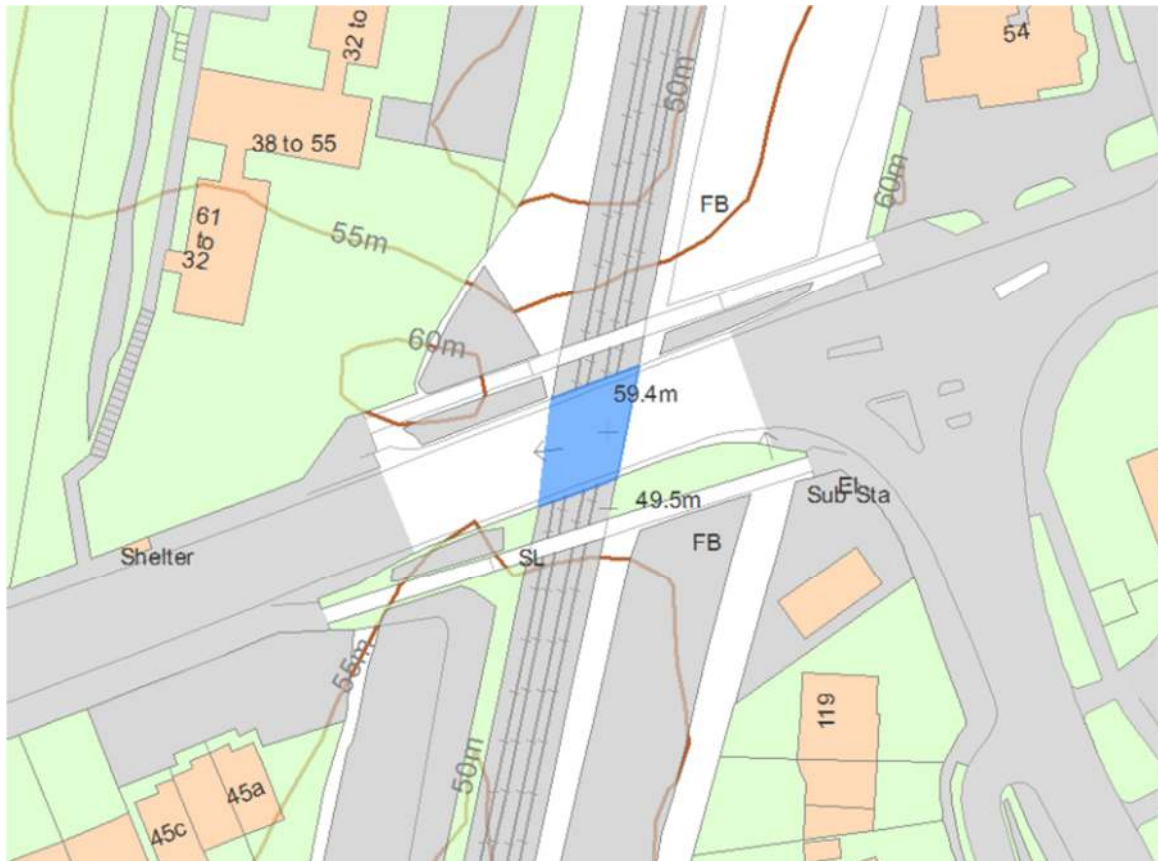
Details

MATERIALS: original handmade red brick. Red engineering brick used for patching and for alterations to the parapets. English bond. Limestone copings.

DESCRIPTION: the central arch is slightly taller than the side arches. Dimensions appear to be similar to those of the neighbouring and contemporary Tilehurst Road Bridge (BKE3709), which has a central span of 38ft 4in and c. 30ft side arches. The carriageway is 24ft [7.3m] between parapets. The piers are tapered and were originally pierced by three tapering transverse arches. These arches have been blocked up with brick so they now read as blind arches. At least one tie plate is visible in the north (low mileage) face.

Abutments/wing walls are vertical and straight. A stepped string course runs across each face and above the outer face of the parapet is stepped. They have been raised in the C20 by two courses of red engineering brick above the original coping left in-situ and have steeply pitched purple brick copings with small anti-climb spikes. The parapets are also rebuilt in red engineering brick at the ends, possibly in connection with the construction of the entrances to the modern steel footbridges which flank the bridge on both sides (these are not attached.) In particular, the east end of the south (high mileage) parapet was truncated and rebuilt in engineering brick so that it curves back on a concrete raft to form part of the entrance to the southern footbridge. The modern steel footbridges are not of special interest.

The bridge is generally not visible in the wider landscape because it was designed to span a cutting. However, it is mutually visible with Tilehurst Road Bridge (BKE3709).



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