

HRE major work review template

Proforma for SAF consideration



Purpose – to document the results of the lens review undertaken for the identified structure and, based on this, offer recommendations for the proposed engineering solution for the structure.

The Structures

This section outlines the background to the structure and the issues identified with it.

Structure name	Asset ID	NH Priority Rank
Braughing Station Bridge, Hertfordshire	SMB/2062	P1

Structure Type	Grid Reference	Date of last assessment	Date of construction	Date of decommission
Bridge	TL 390 241 539020 , 224131	2026	c1863	1965

Brief description of structure

SMB/2062, Braughing Station, is a single span bridge constructed circa 1863. The bridge is built in a buff coloured stock brick and the superstructure comprises six longitudinal compound girders with brick jack arches spanning between them.

It carries the B1368 Station Road over the former Buntingford railway.

Identified issues with structure

The structure is in bad condition with extensive corrosion throughout the beams, the southern edge beam is severely corroded.

A BD21 assessment in 2005 rated the bridge at 26 Tonnes. Issues were found with the jack arches, the tie bars and the substructure. A scheme to provide tie bars, paint the edge beams and make repairs to the jack arches was completed in October 2008 but this did not change the 26 Tonne rating. The local authority did not apply a load restriction on the road.

A CS454 assessment carried out by Jacobs engineering in June 2025 found that the internal girders were a marginal pass for normal traffic loading but the southern edge beam had a zero-capacity rating. In November 2026 a BE4 assessment confirmed that the southern edge girder has a zero-capacity rating.

As this structure is a BE4 failure the liability for remediation falls to Secretary of State rather than the Local Highway Authority.

Lens Review

This section documents the results of the lens review undertaken for the identified structure

 New operational rail	Are there any identified linkages with English, Welsh or Scottish government new rail restoration programmes? The RYR scheme has now been discontinued by the current Government. There appear to be no planned/proposed schemes associated with the former track-bed.																
 Heritage Rail	Are there any identified linkages with heritage rail restoration programmes? There appear to be no planned/proposed schemes associated with the former track-bed.																
 Active Travel	Does the structure have potential to be repurposed for active travel use? Queries have been made with Hertfordshire County Council and there are no current proposals for active travel beneath this structure. Structure has known possible future use within a 20 year time span – Yes ☐ No ☒																
 Environment and Ecology	Does the structure hold significant value in ecological terms? Part of Site of Special Scientific Interest – Yes ☐ No ☒ Within a conservation area – Yes ☐ No ☒ Within or near to a locally designated wildlife site – Yes ☐ No ☒ Within or near to a local network recovery site – Yes ☐ No ☒ Any priority habitats in the vicinity – Yes ☒ No ☐ Any European Protected Species present – Yes ☒ No ☐ Ecological survey outcomes – <table border="1"> <tr> <td>ELR within any designated sites</td> <td>No</td> </tr> <tr> <td>Risk of ELR impacting nearby designated site</td> <td>No</td> </tr> <tr> <td>Priority Habitats present</td> <td>Yes – Good quality semi improved grassland and coastal and floodplain grazing marsh within 1km of the structure and deciduous woodland within 0.28km. Hedgerows along the road above/adjacent.</td> </tr> <tr> <td>Biodiversity Net Gain required</td> <td>Dependant on site design and habitat loss</td> </tr> <tr> <td>Ecological Surveys completed (dates)</td> <td>PEA: November 2020 Summer surveys: May and June 2022 Due to be repeated 2026 Winter surveys: January and February 2021 and January and February 2023</td> </tr> <tr> <td>Protected species confirmed present? (Not confirmed absent, precautionary ecological measures and timings likely still required)</td> <td>Yes – Roman Snails, exclude under licence.</td> </tr> <tr> <td>Protected species licence requirements</td> <td>Roman Snails.</td> </tr> <tr> <td>Other</td> <td>Other</td> </tr> </table>	ELR within any designated sites	No	Risk of ELR impacting nearby designated site	No	Priority Habitats present	Yes – Good quality semi improved grassland and coastal and floodplain grazing marsh within 1km of the structure and deciduous woodland within 0.28km. Hedgerows along the road above/adjacent.	Biodiversity Net Gain required	Dependant on site design and habitat loss	Ecological Surveys completed (dates)	PEA: November 2020 Summer surveys: May and June 2022 Due to be repeated 2026 Winter surveys: January and February 2021 and January and February 2023	Protected species confirmed present? (Not confirmed absent, precautionary ecological measures and timings likely still required)	Yes – Roman Snails, exclude under licence.	Protected species licence requirements	Roman Snails.	Other	Other
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Heritage

Does the structure hold significant value in heritage terms?

Structure has significant Engineering / Architectural / historic merit - Yes ☐ No ☒

Listed – Yes ☐ No ☒

Locally listed – Yes ☐ No ☒

Has the Historic Environment Record been consulted – Yes ☒ No ☐

Rapid Heritage Assessment conducted – Yes ☒ No ☐

Rapid Heritage Assessment outcomes –

Overall heritage value is Low. The bridge is recorded by the Hertfordshire HER as a non-designated heritage asset. While the bridge retains some limited historical and evidential interest as part of the former Buntingford branch line, it lacks any significant architectural or engineering merit to warrant any formal heritage designation.

A sufficient photographic record of the bridge exists from the historic inspection reports to negate the need for any heritage mitigation. This photographic record could be shared with the Hertfordshire HER if necessary to ensure a permanent record of the bridge and its current setting are preserved for posterity.

The bridge is located within the designated area of the Roman site near railway station (NHLE ref: 1005249) a Scheduled Monument.

While it is likely that any surviving archaeological remains associated with the scheduled monument within the track bed would have been removed or severely truncated during the construction of the railway, nevertheless, it is recommended that a detailed assessment of SMB/2062 is undertaken due to its location within the designated area of the Scheduled Monument.

Consultation with Historic England should be undertaken to determine whether Scheduled Monument Consent (SMC) would be required for any groundworks associated with the Scheme.

Any groundworks within the scheduled area would require SMC, this would include temporary compounds or access routes.

SMC can take approximately three months to obtain following submission of an application.

Other factors and considerations

This section documents any additional factors or considerations that have been taken into account as part of the review for the identified structure

Are there any other factors that affect the structure or the proposals for it?
No

Have transfer opportunities been considered? If yes, with who and why discounted
Has the structure been offered to the local authority? Yes ☒ No ☐ Is there another suitable owner for the structure? Yes ☐ No ☒

Is the structure protected under any Local Planning policies?
No

Any significant Stakeholder comments	
Local Planning Authority	N/A
Local Highways Authority	Want the bridge to remain unrestricted.
Sub-national Transport Body	N/A
Community	The landowner at Braughing Station would prefer a scheme that does not infill the structure, However, the landowner understands the need to protect the travelling public.
Other interested parties e.g. MP, Bat Group, local active travel groups, heritage groups etc	HRE engineer attended the Braughing Parish Council meeting of 8 January 2026 to present to them on the issue. Parish Council worried about effect of current traffic light restrictions, keen to get this addressed quickly.

Engineering Proposals

Based on the review work conducted, this section documents proposals for engineering solutions for the structure and highlights the recommended solution by HRE Engineers

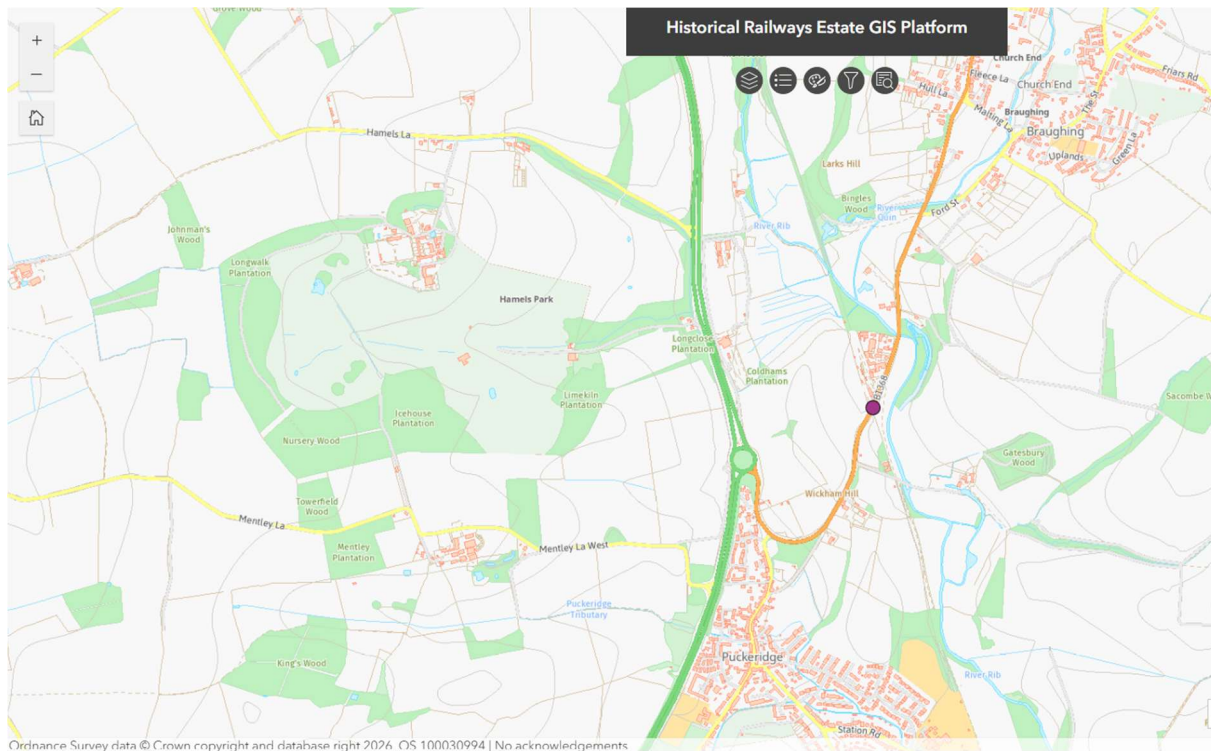
Sustainable management considerations	
Structure forms a current transport link	Yes ☒ No ☐
Structural deterioration issues	Yes ☒ No ☐
Health, safety and/or environmental concerns	Yes ☒ No ☐

Engineering options	Pro's	Con's	Estimated cost* of remedy
Do Nothing / do minimum	Lowest capital cost	Presents an ongoing risk to the travelling public as the bridge is weak and is currently restricted with traffic lights.	£0
Repair	Retains access Retains elements of historic structure/fabric	High capital cost with ongoing maintenance liabilities.	£600k*
Replacement deck and underpinned abutments	Full strength bridge that broadly meets modern standards.	High capital cost Does not retain original structure	£1.2m*
Vertical Infill	Removes safety risk Retains element of historic structure / fabric	Would remove the span and hide some of the original features. Considerably reduces ongoing maintenance costs by removing span element.	£510k*

**Prices are intended as rough estimates only*

Responsible NH Engineer	Alistair Dore
Date of proforma completion	TBC

Map and photos of site:



Location on B1368 between Braughing and Puckeridge



Southern Elevation



Southern edge beam severe corrosion.



Southern edge girder, eastern end support.



Southern internal beam soffit.

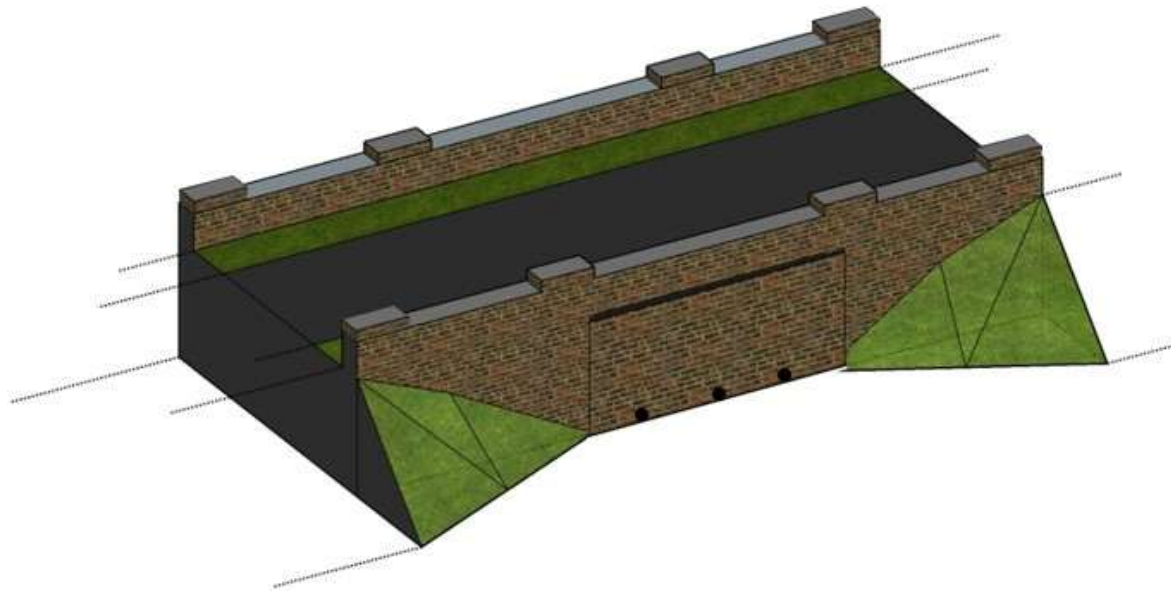
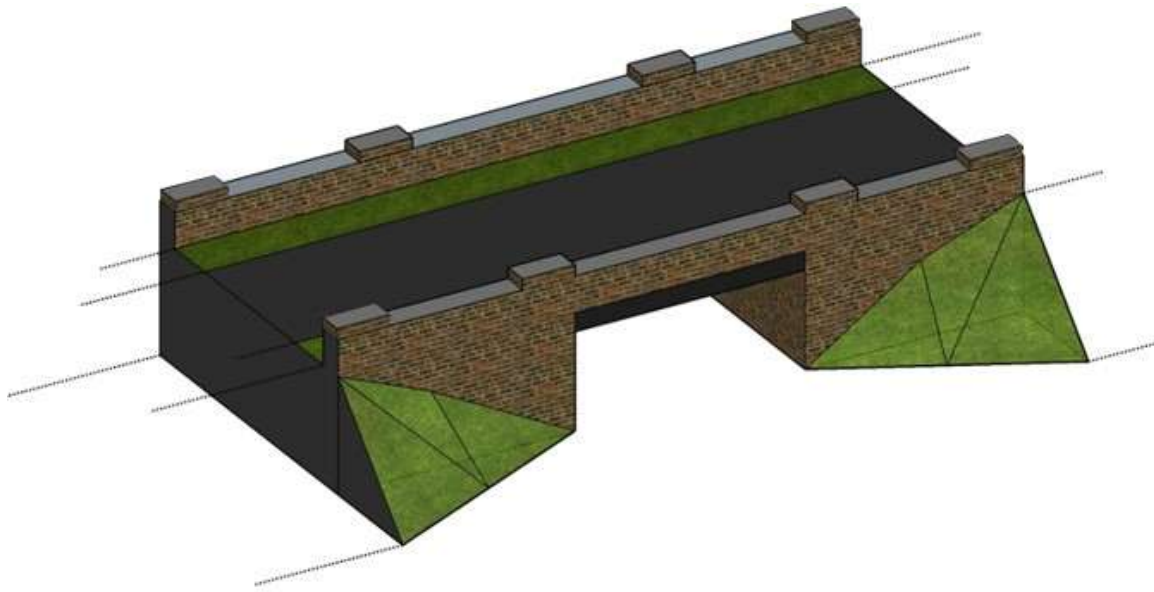


Fractures in abutment below padstone.



View over towards North.

Sketches showing existing bridge arrangement & vertical infill option



Cross section through deck

