

Direct Dial: 01904 601961

Our Ref: PL00749223

The Secretary of State for Transport c/o Transport Infrastructure Planning Unit Department for Transport Great Minster House 33 Horseferry Road London, SW1P 4DR

sent via email to: transportinfrastructure@dft.gov.uk

17 May 2021

Dear Secretary of State

Transport and Works Act 1992

The Transport and Works (Applications and Objections Procedure) (England and Wales) Rules 2006

The Network Rail (Huddersfield to Westtown (Dewsbury) Improvements) Order

I refer to the letter of 31 March 2021 from Network Rail informing Historic England of the application for an Order under sections 1 and 5 of the Transport and Works Act 1992 for the Network Rail Huddersfield to Westtown (Dewsbury) Improvements) Order.

Historic England is an Executive Non-Departmental Public Body sponsored by the Department for Digital, Culture, Media and Sport. We are the UK Government's principal adviser on the historic environment and lead body for the heritage sector. We are a statutory consultee with regard the historic environment including all surviving physical remains of past human activity, whether visible, buried or submerged, and landscaped and planted or managed flora." We work in partnership with central government departments, local authorities, voluntary bodies and the private sector to conserve and enhance the historic environment, broaden public access to our cultural heritage, and increase people's understanding and appreciation of the past.

Summary

As we understand it, the Network Rail Huddersfield to Westtown (Dewsbury) Improvements Order forms part of the Transpennine Rail Upgrade (TRU) scheme (the 'Scheme'). The Scheme affects one of the main railway lines in northern England and forms a vital part of the North of England's long-term, low carbon economic growth







agenda, better connecting people to jobs, services, education and leisure.

Ensuring that this pioneering historic railway is fit for purpose and continuing to perform its designed function, adapting to advances in technology, helps to maintain the heritage significance the route.

The Scheme is being split into phases. This is the first phase to come forward as 'a Transport Works Act (TWA) application'. The historic significance of the railway line varies throughout the route, with impacts on the historic environment resulting from the proposals being greater in some phases rather than others.

In order to implement the Scheme, some harm to the historic environment will be caused. Electrifying and widening the route will cause serious harm to several heritage assets.

Turning our attention to this phase of the Scheme the 'TWA application'. The harm will be caused primarily in terms of loss of fabric and historic bridges. There will be a significant impact on the historic character of the Grade I listed Huddersfield Station This includes new tracks/new sheds; changes to the configuration of the station with major new additions to this structure.

We therefore have concerns about the impact of the scheme on heritage grounds. Our key concern is the lack of detail in the submission relating to how the harm will be mitigated and the how the benefits will be secured.

Pre-application advice

Historic England has been involved during the pre-application stage on this phase of the Scheme, the TWA application. We attended design workshops alongside Network Rail's heritage consultants and Network Rail's engineers.

Our input focused on:

- Overseeing an appropriate methodology for assessing the significance, including contribution setting makes to significance, of the heritage assets affected.
- Ensuring that the impact on the significance of the heritage assets affected is avoided if possible and if not, minimised as far as reasonably possible.
- Reducing the loss of historic fabric to the minimum necessary
- Seeking that new interventions are high quality and designed in a bespoke manner with the benefit of a thorough understanding of what is significant about the heritage assets affected.
- Ensuring that any proposed mitigation of impact and proposed benefits can be







secured and delivered.

Historic England Position

We are broadly supportive of the Scheme as a whole, and its objectives. We are also broadly supportive of this TWA application, subject to a number of issues being resolved.

We also support the methodology and approach to assessing the significance of the heritage assets affected. Nevertheless, for this phase of the Scheme we have the following concerns regarding lack of:

- mechanism to mitigate harm and secure the benefits
- detailed drawings for Huddersfield Station to show the impacts
- detailed drawings for the listed bridges to show the impacts
- visualisations for the listed bridges to show the impacts

We support the use of a 'Conservation Implementation Management Plan (CIMP)'. However, the absence of the heavily relied upon document and detail on the plans means that we are not convinced that the level of harm can be fully understood or justified.

Without the CIMP there is a lack of clarity on what the Scheme will deliver for the historic environment. The aspirations for the historic environment should be translated into the CIMP without delay, using the principles set out in the Heritage Assessments, and then adopted by the local planning authority.

Whilst this proposal is part of the larger Scheme, careful consideration is required as to the harm arising with regards this phase of the development against the benefits arising from this phase of the development.

Following our overarching advice on the TWA Order application, our detailed advice is provided in three appendices:

- 1. Individual advice on each LBC application (west to east)
- 2. Calder and Hebble Canal and River Calder Underbridges:
 - setting and future use
- 3. Heritage policies

Historic England advice on the TWAO application

Significance of this section of the Transpennine railway

The first railway line connecting Lancashire and Yorkshire in the late 1830's took a







tortuous, winding route. It wasn't long before c.51 miles to get from Leeds to Manchester was superseded. The 'Railway Mania' era of the 1840s meant that a race was on between different railway companies to achieve a more direct route.

No plan or overarching design aesthetic was applied, as with other routes for example Brunel's Great Western or Robert Stephenson's London and Birmingham Railway. The line therefore exhibits structures by different engineers, using different materials, executed in different styles. What is important about this route is that a journey from one part to the next provides a cross-section of how different engineers and designers approached a broadly similar range of problems.

The only part that survives from the late 1830's original line is c.5-mile section between Mirfield and Ravensthorpe.

The 1880s saw an attempt to increase the capacity from 2 to 4 tracks to separate passengers from freight. But this was, like the development of this section of the line, piecemeal. However, the ethos was to not disrupt the design qualities as far as possible. In considering how to adapt to this latest phase of railway development, this ethos has been adopted, taking a bespoke approach, responding to the heritage values attached to each structure, including how setting contributes to significance.

Today, the railway line exists in an almost unbroken urban environment, punctuated by the more open environment of the Calder and Hebble Canal park. The rivers, supplemented by the Calder and Aire Navigation, fostered industrial development with the railway sustaining this expansion.

Impact of the TWA application on this section of the Transpennine Railway

This c.8mile section of the route contains 20 listed structures (1 Grade I and 19 Grade II).

9 listed buildings will be physically impacted by the TWA application site (1 Grade I and 8 Grade II).

2 listed buildings will be affected by changes within their settings that will impact upon their significance.

Grade I listed Huddersfield Station

The works proposed at the Grade I listed Huddersfield Station are multi-faceted. Whilst the overall impact on the significance of the Grade I listed building will be less than substantial, the harm to certain aspects of significance will be very serious, and in some cases, irreversible. Extreme care and attention will be required to secure the







mitigation and heritage benefits that have been identified.

The harm to the significance of the station will primarily be caused by the removal of the whole of roof B and two bays of roof A. This places sharp focus on the need for the potential heritage benefits that have been identified, for example sensitive new design for the new canopies and footbridge.

Grade II listed structures affected:

Work type	Heritage assets	Level of harm to
		significance
Demolition	Wheatley's Overbridge	Substantial
Substantial	Colne Bridge Road Overbridge	Substantial
demolition		
Infill	Occupation, Toad Holes, Ming Hill Underbridges	Less than
		substantial
OLE	Hudds Viaduct, Mirfield Viaduct & Wheatleys	Less than
attachments	Underbridge	substantial
Setting and	River and Canal underbridges - new	Less than
redundancy	Ravensthope viaduct	substantial

Substantial harm will be caused to two Grade II listed buildings (Wheatley's Colliery Overbridge and Colne Bridge Road Overbridge). Substantial public benefits should be demonstrated in each case.

Less than substantial harm will be caused to eight Grade II listed buildings.

Where harm has been identified to the significance of other heritage assets, including conservation areas and non-designated heritage assets, we urge you follow the advice provided by the Conservation Team at Kirklees Council.

Where there are potential impacts on archaeological remains, we urge you to follow the advice provided by the West Yorkshire Archaeological Service (WYAS).

Suggested conditions to secure the mitigation and benefits

Heritage Assets

No stage of the development is to commence until the CIMP has been signed off by all stakeholders. Key matters to be included:

Historic Building recording to be undertaken prior to, and during, the







construction of the Scheme to produce a scheme-wide record for the HER.

- <u>Material reuse:</u> agreed methodology for the removal, storage and re-use of all historic fabric.
- <u>Themed interpretation:</u> bespoke heritage interpretation will be incorporated into the design of the two replacement bridges
- Design Guide for new works at the Grade I listed Huddersfield Station

Reason: To ensure the conservation of the historic environment.

No stage of the development is to commence until a detailed analysis and design of specific elements of proposals which affect a listed building or its setting have been submitted to and approved by the local planning authority.

Reason: To ensure the conservation of the historic environment.

The removal of the two listed bridges (Wheatleys and Colne Bridge Road) must not commence until details of the new bridges have been submitted to and approved by the local planning authority.

Reason: To ensure the conservation of the historic environment.

Materials, colour schemes and finishes

No stage of the development is to commence until details of the materials, colour schemes and finishes, including samples of bricks and details of antigraffiti coatings in respect of the bridge and viaduct structures included in the Scheme have been submitted to and approved by the local planning authority with responsibility for any area within the stage.

Reason: To ensure that the development provides an acceptable quality of historic built environment.

Conclusion and recommendation

We have concerns regarding the securing of the mitigation and benefits and further details are required regarding impact.

These are our representations to be taken into consideration by the Secretary of State and if there are any queries arising, then we would be pleased to offer further assistance.

We therefore do not object to the granting of this Order on heritage grounds - subject to:







- Timely production, agreement and implementation of the CIMP
- detailed drawings and visualisations to show the extent of heritage impact

Yours Sincerely

Kerry Babington

Inspector of Historic Buildings and Areas

E-mail: kerry.babington@HistoricEngland.org.uk

cc: National Planning Case work Unit (via email to: npcu@communities.gov.uk)

Penny Carter, Network Rail (via email)

Appendices

Appendix 1

Historic England advice on the listed building consent applications

Our comments start with the Grade I listed Huddersfield Station, followed by comments on the 8 other LBC applications west to east

<u>Huddersfield Station</u>, Grade I listed building, (NHLE 1277385)

Significance

Huddersfield Station is one of only eight Grade I listed stations in the country.

Built in 1844-50 by J.P. Pritchett, its grand country house style and scale made a bold and ambitious statement that announced Huddersfield as a key industrial town in the north, at the heart of a new and critical east to west coast railway connection.

The neo-Classical ashlar façade dominates St George's Square. The central block has eleven bays, articulated by giant Composite pilastrade. The central five bays have a free-standing pedimented portico, two bays deep. The station addresses the town and sets the tone and ambition for the public facing municipal and commercial core. The station frontage was described by John Betjeman as "the most splendid in England" and by Sir Nikolaus Pevsner as "one of the best early railway stations in England".

The 1886 ironwork train shed roof is an engineering masterpiece of its time spanning almost 24 metres, it creates a different, bold aesthetic, arguably no less impressive







than the principal façade of the station building.

The large polychromatic brick St George's Warehouse (Grade II listed) borders the station to the west. Built between 1878 and 1883, when the station was being enlarged, its five storeys facing the railway with 22, lift and loading doors, gives railway passengers a glimpse and a sense of a different character, telling the story of the industrial workings of the town.

Impact

Various works are proposed at Huddersfield Station, including:

- total demolition of roofs B & C;
- demolition of two bays of roof A at the Manchester end;
- · new section of canopy on the Penistone platform;
- the installation of two new bays on roof A at the Leeds end of the station.
- re-instatement of lantern to whole of roof A;
- · platform alterations and extensions;
- new island platform;
- extension of existing passenger subway; in-filling of disused parcel subway;
- demolition of signal box, relay room and cable gantry between platforms 1 and
 4:
- re-location of tea rooms:
- provision of new eastern footbridge and lifts/stairs and canopies; provision of overhead electric line equipment.

The station building will remain unchanged.

Roof A (principal roof) will be retained, repaired and redecorated. This is a major heritage benefit. Significant investment will be required to repair the roof which at one time was thought could be beyond repair. The reinstatement of the lantern is also positive.

The removal of two bays of roof A and the whole of roof B (contemporary with roof A) will cause serious, irreversible harm to the historic and architectural interest of the Grade I listed building. We understand for the Scheme to achieve its objectives, this is unavoidable

Operationally, to achieve more and longer platforms, significant changes are required to the layout of the tracks which has implications for the position of the platforms and canopies.

<u>New canopies</u> the design is unapologetically contemporary, but the underlying geometric principles have taken their cues from the main train shed roof. This should







ensure it sits comfortably alongside the majestic principal roof and not compete with or detract from its historic character.

A key significance setting of the station to the west is its historic connection with the industrial buildings, such as the Grade II listed St George's Warehouse. The legibility of this historic relationship has been eroded in recent years. The new canopies take opportunities to open up new views through to the warehouse and reconnect people's perceptions of this side of the station.

<u>Tea Room</u> - the position of this structure on an 'island' to be experienced in the round is a key part of its significance. Care is being taken to move the structure but keep it as close to its original location as possible. An appropriate methodology for dismantling, storage and reconstruction and monitoring will be required.

<u>New footbridge</u> - the principle of making this as 'light touch' was used as far as possible within the constraints of practical considerations such as glare affecting train drivers. The creative response of angled large new openings to create new views through the principal historic train shed roof and across St George's Square, should help to orientation visitors and showcase the city.

Huddersfield is undergoing a transformation. The Huddersfield 'Blueprint' identifies the 'Station Gateway' as a critical area for improving connections to the city and beyond. The Scheme will provide opportunities to enhance the station and improve connectivity through and around it.

Opportunities

The success of the new interventions within the historic context of the station will to a dependant on the detail of the execution and quality of the materials for the new canopies and footbridge. Our comments are based on the information provided to date which establishes the approach but leaves critical elements unresolved. A consistency of style and design for each new intervention, for example seating, signage, etc should all be given careful consideration to ensure they have an appropriate impact on the character of the railway station.

The impacts and harm will not be dealt with unless these opportunities and benefits are secured and realised.

To ensure this is achieved we suggested that the following should be produced and adopted as part of the CIMP:

- A 'Design Guide' for the new works that includes an indicative materials palette
- detailed construction drawings for the new interventions







This is in order to demonstrate the overall visual and physical impacts on the historic environment.







Huddersfield Viaduct (MVL3/92), NHLE 1223531

Less than substantial harm

Significance

Huddersfield Viaduct is a 47-span rock-faced stone viaduct, spanning a distance of approximately 600m across the townscape and shallow valley to the north of Huddersfield town centre and Huddersfield Station.

The viaduct was constructed between 1845 and 1847 as part of the Huddersfield & Manchester Railway, and is largely of masonry construction. The viaduct was widened in the 1880s, to provide additional tracks along much of its length; the majority of the widening was undertaken in masonry closely matching the original structure, however a number of spans were widened with metallic decks of wrought iron, in particular over John William Street (Span 1), Fitzwilliam Street (Span 4) and Northgate/Bradford Road (Span 29). The viaduct survives largely unchanged in fabric and appearance since the widening of the 1880s.

Impact

Extensive remodelling works are required to this structure to strengthen elements and improve emergency escape routes.

Overall, these works will result in less than substantial harm to the significance of the listed structure, resulting from the permanent loss of historic fabric and changes to the appearance of the structure.

We consider that these proposals have been devised sensitively, with the heritage significance of the listed structure in mind with the following measures taken to reduce the harm.

The design of the replacement deck of Span 1 (John William Street bridge), has been shaped to reflect the historic character of the existing structure, particularly through the design of the parapets to match the detail of the existing.

The design of the replacement Span 29 Underbridge has been shaped to respond to the significance of the structure. The widened abutments will be clad to match the existing appearance of the viaduct, while the parapets of the concrete deck have been designed to reflect the lost metallic spans with patterned relief.

The proposed reuse of masonry removed during the strengthening works to the north-western abutment at Huddersfield Viaduct Span 4 to face the strengthened abutment







has been defined to maintain the appearance of the structure.

The design of the signal gantry and OLE have been developed to minimise the visual impact and alteration to historic fabric as far as is practicable in the context of operational constraints and maintain rhythm along the structure and to position the portals on the deck where possible, while the signal gantry has been designed to avoid the need to attach it to the exterior of the viaduct.







Wheatley's Overbridge, Colliery Lane (MVL3/103), NHLE 1450537

Substantial harm

Significance

Wheatley's Overbridge is an original 1840s overbridge designed by the noted railway engineer Alfred Stanistreet Jee. It is a two span, segmental masonry arch, pedestrian and cycle bridge that carries the National Cycle Route 69 over the railway.

It was constructed in two phases; originally built in 1849 as a single span masonry arch bridge, in the 1880's a second span was added to the south consisting of a brick arch ring with stone voussoirs, as part of the London & North Western Railway widening of the railway. The later alteration shows a great degree of care and effort to duplicate the original structure in a manner sympathetic to the original bridge's design and detailing.

Named after Charles Wheatley J.P. The Wheatley family was a wealthy coal mining family, and Charles Wheatley owned several land and coal mines in the area, one of which is believed to be Colne Bridge Colliery, which Wheatley's Overbridge (MVL3/103) served. In 1851, Wheatley had 110 men and 140 boys working in his coal mines.

Group value with the other listed structures designed by A.S. Jee on the former Huddersfield & Manchester Railway line ,derive part of their value from their group relationship.. It is one of twenty two bridges on the line by Jee, one of six in the same semi-circular stone.

Impact

The demolition and replacement of Wheatley's Colliery bridge will cause substantial harm to its significance.

The majority loss of the Grade II Listed bridge due to its removal and replacement, resulting in permanent significant adverse effects. The use of new concrete abutments to be clad with stonework that is similar to the historic fabric to reflect original design.

The design of the new structure has been the subject of some consultation. However, the final design does not fully realise the advice we provided for a high quality, bespoke solution that draws out the heritage significance of the site. Embedded mitigation is referred to in the ES as being the use of materials and finishes for the new bridge span and deck to reflect the area's historic industrial character such as light-weight Weathering Steel. This does not go far enough without contextual







interpretation on site.

The proposed demolition of the structure in combination with that of Colne Bridge Road Bridge, Grade II, would have an impact on the group value of the bridges designed by A. S. Jee on the Transpennine Route. It would remove one element of this group of 22 bridges designed by A.S. Jee and one of six bridges with which it shares a common design language.

The group would, however, substantially survive and the impacts to other bridges would amount to considerably less than substantial harm. The significance of each of the other bridges would therefore be slightly diminished by the removal of two (along with Wheatleys) of their number.

We are particularly concerned about an over-reliance on the CIMP for this aspect of the Scheme.

The proposal design as shown in the material submitted with the listed building consent application is disappointing. Understanding and the legibility of the history of the Grade II Listed bridge, including its use and historical associations is key. However, the proposed integrated heritage and public benefits are not shown. This should not be seen as an 'add on' in the CIMP. There are three non-designated heritage assets located in proximity to Wheatley's Overbridge. They comprise sites of a coal staith, a coke kiln and Colne Bridge Colliery, located in a cluster approximately 50m to 100m east of the bridge.

There is a lack of detail regarding how the heritage significance of this part of the route be presented. Direct connections with nearby non-designated heritage assets may have been eroded and obscured, but there may be an opportunity to better reveal historic connections, for example using digital technology for historic maps and 3D models.

The following details should be provided in the CIMP and on updated, detailed drawings:

- · Attention drawn to the original alignment of the bridge
- The list description refers to the abutments being covered by the embankment could more be revealed?
- · Placing seats and interpretation boards focused around old abutments?
- Which stones will be re-used, where and how?
- Cast iron fence posts mentioned in the listed description, marked SYDNEY RAINES WAKEFIELD, are these to be re-used?







The bridge also evidences the historic industrial activity in the area as it was originally constructed to provide access down to the colliery site by the canal, which has since been removed. This would have been almost a processionary route (the shifts coming and going from the mine) traversing the railway which is now rather lost, but could easily be celebrated as part of the installation of the replacement. Therefore, there is an opportunity for placemaking that better reveals how industrial activity shaped this area. These are fundamental, site specific public and heritage benefits.







Colne Bridge Road (B1168 Bridge Road) (MVL3/107), NHLE 1450265

Substantial harm

Significance

An original 1840s railway overbridge constructed during the heroic age of railway building, like Wheatley's Overbridge, also designed by Alfred Stanistreet Jee. A triple-span segmental arch bridge with a fourth subsidiary arch, demonstrating a high level of craftsmanship in its construction, detailing, and dressing; if the bridge has been lengthened, this has been undertaken sympathetically with little impact to its visual character.

Squared coursed quarry-faced gritstone, tooled gritstone, and blue engineering brick. Handsomely constructed and of good quality stone, typical and conventional structure of the era.

Group value with the other listed structures designed by A.S. Jee on the former Huddersfield & Manchester Railway line ,derive part of their value from their group relationship. It is one of twenty two bridges on the line by Jee, one of six in the same semi-circular stone.

Impact

The demolition of a substantial proportion (three of the five arches and infilling of the remaining two arches) would result in substantial harm to the significance of the listed structure. Retaining and infilling works for a significant portion that will allow the form of the structure to be understood.

The interpretability of the historic structure will be key -

- Retained Abutments (infill)- Stone masonry façade
- Retained Parapets Masonry parapet wall atop retained existing pier

The proposed demolition of the structure in combination with that of Wheatley's Overbridge would have an impact on the group value of the bridges designed by A. S. Jee on the Transpennine Route. It would remove one element of this group of 22 bridges designed by A.S. Jee and one of six bridges with which it shares a common design language.

The group would, however, substantially survive and the impacts to other bridges would amount to considerably less than substantial harm. The significance of each of the other bridges would therefore be slightly diminished by the removal of two (along with Wheatleys) of their number.







Opportunities

The proposed design as shown in the material submitted with the listed building consent application is disappointing. The proposed integrated heritage and public benefits is not shown and we are concerned about this being perceived as an 'add on' in the CIMP.

A new bridge in such close proximity to the parts of the listed bridge that are to be retained requires extremely sensitivity and creativity to ensure that the old and the new sit comfortably alongside each other.

The heritage significance and qualities of the listed structure and its original alignment should be interpreted and highlighted.

The lack of detail on the drawings and visualisations provided do not, in our view, demonstrate the 'substantial public benefits' of a bespoke design of the highest quality and materials, that would be expected to replace and sit alongside the listed structure.

Wheatleys Overbridge and Colne Bridge Road Overbridge - group value impacts

The Scheme will impact on the group value of the bridges designed by A.S. Jee on the Transpennine Route, such as Wheatley's Overbridge (MVL3/103), and B6118 Bridge Road Overbridge (MVL3/107).

The loss of these bridges would remove an element of this group of 22 bridges designed by A.S. Jee, which are constructed of good quality stone, while being typical and conventional structures of the era.

The bridges designed by Jee derive part of their value from their group relationship, and the significance of the unaffected bridges would therefore be slightly diminished by the removal of some of their number. The group would, however, substantially survive and the impacts to other bridges would amount to less than substantial harm.







Mirfield Viaduct, Railway bridge over River Calder, MVN2/192, NHLE 1313676

Less than substantial harm

Significance

A masonry viaduct structure built between 1836-39 by the engineer George Stephenson. Comprising 12 spans in total; 11 of regularly coursed quarry faced sandstone, with a twelfth span at the eastern end of the structure over Newgate which today has a metallic deck. A brick and steel extension to the south was added in the early-mid 20th century.

The bridge derives its primary significance from its historical association with George Stephenson and the Pioneering Age (1825-41) and its high-quality design. It also derives limited significance from its setting and the group value drawn from its shared architecture with Wheatley's Underbridge, Grade II listed.

Impact

Three OLE portals would be installed on the viaduct. The portals would have a minor impact on the Grade II Listed viaduct, affecting the significance it derives from its high-quality design and its aesthetic value. This impact has been reduced by the sympathetic positioning of the OLE portals above the existing piers and the portals being supported directly on the deck, in board of the parapet of the original masonry side.

Repairs to the listed structure should be top priority, given that Network Rail's maintenance regime in 2018 identified some areas of bulging masonry and issues with vegetation on the Listed 1830s northern side of the viaduct.

Opportunities

Better revealing historic connections to non-designated assets

The ES produced for the Scheme has identified two non-designated assets within the immediate vicinity of Mirfield Viaduct. The first, Butt End Mill (HER 13996) to the north, was originally constructed in the 1820s and derives significance from the survival of its historic buildings (albeit having undergone a change in use), as well for its historical association with the textile industry in Mirfield and the wider Calder Valley.

The Mill does derive some significance from its visual relationship with the Grade II Listed viaduct, as the viaduct is prominent in views from the mill.

This opportunity to better reveal significance and historic context relationships should







be included in the CIMP. Could views and / or interpretation be included along national cycle route 69 running alongside it to the south?







Wheatleys Viaduct, (MVN2/196), NHLE 1450703

Less than substantial harm

Significance

Railway skew bridge in gritstone and blue engineering brick built in 1836-39. It comprises five segmental arch spans. A brick and masonry extension to the south was added in the early-mid 20th century.

The bridge derives its primary significance from its historical association with George Stephenson and the Pioneering Age (1825-41). It also derives limited significance from its setting and the group value drawn from its shared architecture with Mirfield Viaduct, Grade II Listed.

Impact

Two OLE portals would be installed on the viaduct. Due to the narrowness of the bridge, this requires removal of the parapet at specific locations. Once the OLE portal foundations are installed, the parapet would be reinstated with a reduced thickness around the portal foundations.

This will impact on the appearance of the listed structure, resulting in some harm to its aesthetic value. This equates to less than substantial harm to its significance.

Repairs to the listed structure should be priority, given that the viaduct was subject to a detailed examination as part of Network Rail's maintenance regime in 2017, which identified that the bridge is currently in a fair condition. The viaduct currently has an amount of vegetation growth on its elevations, particularly on the southern side.

Opportunities

No other designated or non-designated heritage assets affected.

The opportunity to address para 200 of the NPPF to better reveal significance and historic context relationships should be included in the CIMP. Could views and / or interpretation be included along national cycle route 69 running alongside it to the south?







Ming Hill Underbridge, Westtown, MDL1/14, NHLE 1451887

Less than substantial harm

Significance

Cast-iron beam bridge, built in the mid-1840s as a railway underbridge for a former lane, designed by the notable Scottish railway engineer Thomas Grainger for the Leeds, Dewsbury and Manchester Railway. It is a rare surviving example of a cast iron level beam bridge, a form very widely used up until the late 1840s; The later replacement deck incorporating wrought iron beams is a good example of the way that cast iron bridges were strengthened in the later 19th century.

Although it is a minor accommodation bridge, the inclusion of features such as ashlar pilasters and cornices with embellishment also extended to the ironwork lifts the design above the purely functional.

Impact

The bridge was partially in-filled on the north side c.1970. The total infill and deck reconstruction of bridge will cause harm to the significance of the listed structure.

A new reinforced wall with masonry facework of similar appearance to existing masonry is proposed, with the original cast iron edge girders on the deck to be retained.

The bridge is in fair condition. However, it currently appears to be deteriorating, and though the structure would have sufficient capacity to carry the new line speeds, there are major issues which present a significant risk long-term.

Justification for the harm that would be caused to the listed structure lies heavily in the opportunities for recording and better revealing significance through interpreting historic context.

Opportunities

Better revealing historic connections with nearby non-designated heritage assets, recording and interpretation:

There are two non-designated heritage assets located in proximity to Ming Hill Underbridge. They comprise the former sites of Ing Mill, directly adjacent to the structure to the south and Anchor Mill Webster Hill (HER 15200) approximately 50m to its north east.

The 1852 1:1,056 town plan shows that the bridge was provided for Dam Lane leading







to Ing Mill, a textile mill, on the south-eastern side of the railway line.

Both Ing Mill and Anchor Mill comprise sites of former textile mills dating to the mid-19th century. Ing Mill formed part of the complex that Ming Hill Underbridge was built to provide access to. The sites have since been demolished and currently comprise modern industrial buildings and open undeveloped ground. They derive limited significance from their historic interest as evidence of development of Dewsbury's textile industry.

The non-designated assets make some contribution to the significance of Ming Hill Underbridge in helping understand the purpose and origins of the bridge and its association with the wider industrial landscape character of the area. However, the clearance of the mill buildings and the subsequent partial infilling of Ming Hill Underbridge have substantially degraded the context and spatial relationship from which they derive significance from one another.

The opportunity to address para 200 of the NPPF to better reveal significance and historic context relationships should be included in the CIMP







Toad Holes Underbridge, Westtown, MDL1/12, NHLE 1450704

Less than substantial harm

Total infill and deck re-construction of bridge

Significance

Cast iron level beam bridge constructed in the mid-1840s. Designed by the notable Scottish railway engineer Thomas Grainger for the Leeds, Dewsbury & Manchester Railway. A rare surviving example of this form of bridge which was very widely used up until the late 1840s.

Although it is a minor accommodation bridge, the inclusion of features such as ashlar pilasters and cornices with embellishment also extended to the ironwork lifts the design above the purely functional.

The deck of the bridge is a later replacement consisting of steel beams and concrete panels. The edge girders are surviving features of the bridge's original design and construction, from which it derives notable heritage significance. The substructure consists of stone abutments and curving, raked wing walls.

Impact

The bridge has been partially in-filled on its north western approach. The total infill and deck re-construction of the bridge will cause harm to the significance of the listed structure.

New reinforced wall with masonry facework of similar appearance to existing masonry with the original cast iron edge girders on the deck to be retained.

The bridge is currently in fair condition. However, it appears to be deteriorating, and though the structure would have sufficient capacity to carry the new line speeds, there are major issues which present a significant risk long-term.

The structure currently appears in a poor and worsening condition with corrosion, concrete and settlement defects. A scheme of repairs for the listed structure should therefore be included in the Construction phase.

Justification for the harm that would be caused to the listed structure lies heavily in the opportunities for recording and better revealing significance through interpreting historic context.







Opportunities

Better revealing historic connections with nearby non-designated heritage assets, recording and interpretation:

There is one non-designated heritage asset located in proximity to Toad Holes. This comprises the site of Watergate Mill / West End Mills (HER 9504) located adjacent to the underbridge to its east.

The 1852 1:1,056 town plan shows the bridge situated between groups of buildings that were part of a woollen mill known as Watergate Mill. The plan suggests that the bridge provided access between two groups of buildings that were separated by the construction of the railway line.

The site of the former textile mill dates from the mid-19th century and forms part of the complex that Toad Holes was built to provide access to. The site today only retains a small number of much altered historic one and two-storey structures of stone and brick construction. The asset is of limited significance as a, much altered, historic textile mill site and for its association with the local Dewsbury textile industry, and particularly mungo manufacture, a locally significant industry.

The non-designated heritage asset is noted in the HA as making some contribution to the significance of Toad Holes, in helping understand the purpose and origins of the bridge and its association with the wider industrial landscape character of the area. However, the clearance of the mill buildings and the subsequent partial infilling of Toad Holes, has degraded their inter-relationship.

The opportunity address para 200 of the NPPF to better reveal significance and historic context relationships should be included in the CIMP







Occupation Underbridge (Thornhill Road), Westtown, MDL1/10, NHLE 1450702

Less than substantial harm

Significance

A largely unaltered example of a masonry underbridge, dating to the Heroic Age (1841-50) of railway building. It derives historical value in particular from its association with the engineer Thomas Grainger, and aesthetic value from the quality of its architectural expression, which lifts the structure above the purely functional.

The significance of the bridge is enhanced by the fact it has undergone little alteration since construction, particularly to those elements of its design from which it derives architectural interest.

The structure is largely in its original form, with only minor additions. There has been little alteration since its construction, ensuring the continued legibility of its historic design; this is particularly the case for those elements of notable aesthetic value such as the voussoirs and wing walls.

Impact

In-filling will end the asset's historic function as an accommodation bridge and alter the way in which the bridge is experienced. This, along with the embankment widening of bridge, will cause harm to the significance of the listed structure.

Embedded mitigation is proposed in the form of the sensitive design of the infilling on the south-eastern side. The battered embankment on the north-western side of the structure and a masonry-clad retaining wall inside the face of the arch on the southeastern side will serve to maintain the aesthetic value of the bridge.

Network Rail inspection reports indicate that the structure currently appears in good condition. Nevertheless, sympathetic repairs should be considered.

Opportunities

Setting and relationship to other heritage assets is not an issue in this case, as it is with Ming Hill and Toad Holes.







Group value of the three Grade II listed masonry Thomas Grainger underbridges:

A sequence of three bridges (Toad Holes (MDL1/12), Ming Hill (MDL1/14) and George Street (MDL1/16) all sharing a common design language within a relatively short length of line.

The Scheme will impact on the group value of the masonry underbridges designed by Grainger, with impacts on Occupation, which has group value alongside MDL 1/35 Howley Mill Lane (Grade II Listed, NHLE 1452199) and MDL 1/39 Churwell (Grade II Listed, NHLE 1451051).

Although there will be changes to Occupation Underbridge (MDL 1/10), its value alongside the other structures will continue to be able to be appreciated, and the structures will still form a group of three bridges recognisable for their common architectural form.

Similarly, though the Scheme will result in changes to other Grainger structures, such as Toad Holes, and Ming Hill Underbridge (MDL1/14), the value of the Grainger-designed structures as a group will not be appreciably diminished.







Appendix 2 - setting of two Grade II listed bridges

Calder and Hebble Canal Underbridge (MDL1/6) NHLE 1183783 and River Calder Underbridge (MDL18) NHLE 1313646

Less than substantial harm

A new 'offline' solution is proposed at Ravensthorpe. This will result in these two Grade II listed bridges being decommissioned.

The new viaduct at Ravensthorpe (the Baker Viaduct (RBA/2) will form a major new element that will be a dominant feature in views towards these bridges from the southeast. The new viaduct in such close proximity to the listed structures would a significant adverse effect and visual impact on their setting.

As no physical works are proposed to these listed structures there are no separate listed building consent applications. We therefore request that this advice is taken into account in response to the TWA application.

Significance

The contribution that setting makes to the significance of these listed structures is a key consideration in assessing the impact of the Scheme in this case. The rivers, supplemented by the Calder and Aire Navigation, fostered industrial development with the railway sustaining this expansion. The Calder and Hebble Canal park setting of the bridges offers opportunities for public interest and the appreciation of the majesty of the railway in this area to be better revealed. The five significant railway and rivers crossings are prominent in local views and allow the landscape to be understood from the train.

Impact

We note that efforts that have been made to reduce impacts on the setting of the listed structures whilst at the same time opening up new views of the listed structures from Public Right of Way (PRoW) and for passengers on the trains. The following design features have been used such as:

- Crossing the River Calder with a 55m span, enabling use of a thinner bridge deck which avoids the use of a bulky and thick span across the river;
- Matching spacing of the viaduct piers to the abutments of River Calder Underbridge as it crosses the River Calder;
- Incorporation of a back span to the new structure, enabling views of Calder & Hebble Canal Underbridge from the south to be framed by the new viaduct;







- Design of the viaduct piers to comprise a large central column flanked by a smaller column to either side, reducing their visual impact and providing visual permeability through the structure;
- Visibility of the arrangement of weathered steel girders supporting the viaduct, reminiscent of the cast iron girder construction of Calder & Hebble Canal Underbridge and River Calder Underbridge;
- Use of a slightly arched spans to the viaduct, echoing the arched form of Calder & Hebble Canal Underbridge and River Calder Underbridge; and
- Use of concrete and weathered steel for construction of the new structure, which will be visible to users of the PRoW under the structure, enabling understanding of its form and construction, in a similar way to visibility and legibility of the construction of the Listed bridges when viewed from the PRoW.

The proposal is for these listed structures will be 'preserved as unused assets'. We do not consider this to be acceptable without a secure mechanism to ensure that they are maintained in good order.

Whilst recognising the long-term benefits of removing the physical impacts of the railway to the longevity of these two listed structures, their redundancy is a major concern. Plans should be put in place and implemented for a new function for these structures.

Policy

We draw attention to paragraph 200 of the NPPF (see appendix 3) which calls for opportunities to better reveal heritage significance to be explored when change affects the setting of a listed building. A new re-imagined use, potentially involving public access, should be actively explored. Leaving these two listed structures without a use puts them at risk of decay and long-term erosion of their historic fabric and significance.

Opportunities

We strongly advise that the public benefits that would flow from a new use and activities should be a core part to any changes. Fencing off is not good enough. The CIMP should include, as a bare minimum, a maintenance plan for the fabric, but should will also need to explain how the sustainable future of these two listed structures will be implemented and secured in the long-term to an achievable timescale.

The National Cycle Network Route 69 (Calder Valley Greenway) Footpath DEW/155/10, footpath DEW/116/30 and footpath DEW/116/20 and 116/40 passes close to the structures in this area. Interpretation of the heritage significance of these two listed structures, as well as the route as a whole, should be identified.







The design of the new bridge should be high quality and demonstrate how it will contribute to enhancing the high architectural and technological qualities of the structures on the line. We refer to our document 'Conservation Principles for the Sustainable Management of the Historic Environment (2008), para 14 - states that new work or alteration to a significant place should aspire to a quality of design and execution which may be valued now and in the future'.







Appendix 3 Heritage policies

Section 16(2) of the Planning (Listed Buildings and Conservation Areas) Act 1990 states that 'In considering whether to grant listed building consent for any works the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses.

Section 66(1) of the 1990 Act places a general duty on the decision maker as respects listed buildings in exercise of planning functions when considering whether to grant planning permission for development which affects a listed building or its setting, to have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses.

The National Planning Policy Framework (NPPF) (2019) and the associated Planning Practice Guidance explains what measures and balances are required to make sure this statutory duty is adequately addressed.

Section 93 of the NPPF advises that 'When 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 (and the more important the asset, the greater the weight should be). This is irrespective of whether any potential harm amounts to substantial harm, total loss or less than substantial harm to its significance.

Section 194 of the NPPF requires that 'Any harm to, or loss of, the significance of a designated heritage asset (from its alteration or destruction, or from development within its setting), should require clear and convincing justification'.

The NPPF introduces the concept of 'public benefits' and the need to balance what is achieved for the public when harm is caused to heritage assets.

The overarching public benefits of the overall Scheme have been articulated in the supporting information. However, it will be necessary to give 'great weight' to the conservation of each heritage asset affected - and show clearly how this has been applied (para 193 of the NPPF). This is irrespective of the level of harm (para 194).

Opportunities for heritage and public benefits should be identified (para 200 of the NPPF). Heritage benefits can be public benefits and at each of the sites affected, better revealing or capturing and strengthening the essence of these assets and the contribution they make to the significance of the railway should be interrogated and then taken.







Where 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 total loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply:

- a) the nature of the heritage asset prevents all reasonable uses of the site; and
- b) no viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation; and
- c) conservation by grant-funding or some form of not for profit, charitable or public ownership is demonstrably not possible; and
- d) the harm or loss is outweighed by the benefit of bringing the site back into use.

Key points:

 Substantial harm to two listed buildings requires 'substantial public benefits' to be secured in each individual case.

Where less than substantial harm has been identified to heritage assets, public benefits need to be secured in each case.



