Infrastructure Projects

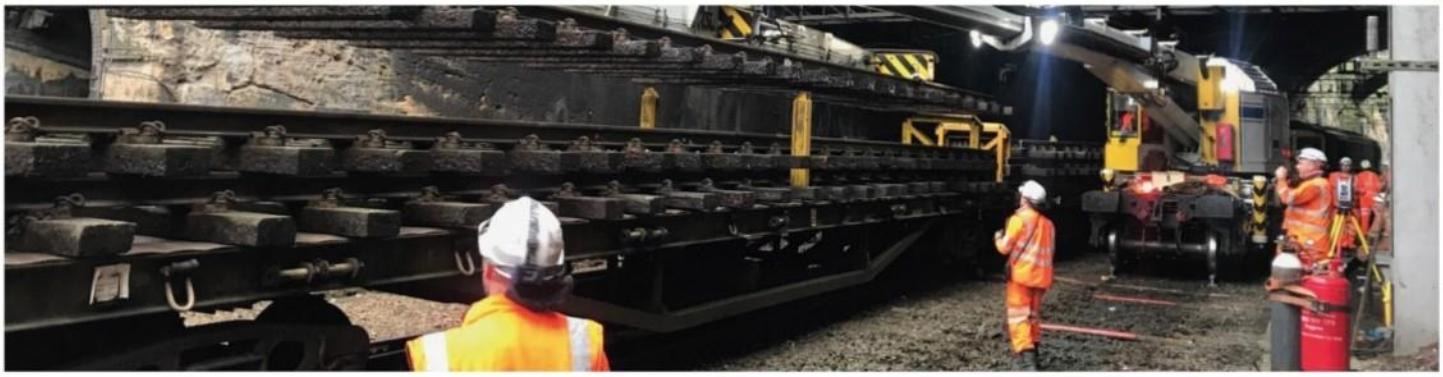
Northern Programmes

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

Colne Bridge Road Overbridge (MVL3/107) – Conservation Implementation Management Plan

Network Rail

June 2024



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1. INTRODUCTION

1.1 Overview

1.1.1 Network Rail has been granted a Transport and Works Act Order (TWAO) to authorise the Huddersfield to Westtown (Dewsbury) Improvements of the Trans-Pennine Route Upgrade (TRU) programme. The works granted in the Order are referred to as 'the Order Scheme'. The Order Scheme forms part of a wider TRU programme which will improve the Trans-Pennine railway between Manchester, Huddersfield, Leeds and York and improve connections between key towns and cities across the north of England. The Order Scheme will contribute to the overall TRU Programme aims of increasing service capacity and offering journey time benefits through:

- Four tracking and upgrading of the existing railway line including track realignment (currently the majority of the railway in the Scheme area has two tracks);
- Electrification of the line;
- Increase in line speeds;
- Provision of sections of new railway;
- Provision of new grade-separated junction within the Ravensthorpe area;
- Remodelling of stations including platform extension works at Deighton, Mirfield and Huddersfield; and
- Provision of replacement station at Ravensthorpe.

1.1.2 The application under the Transport and Works Act 1992 (TWAO) has been determined by the Secretary of State for Transport. As the proposed works affect a number of heritage assets and pass through a number of conservation areas a series of separate Listed Building Consent applications were submitted to Kirklees Council. Under the TWA (Listed Buildings Conservation Area and Ancient Monuments Procedure) Regulations 1992 these applications were automatically called in and considered at the Huddersfield to Westtown (Dewsbury) public inquiry and were also granted permission by the Secretary of State.

1.1.3 Listed Building Consent for the proposed Order Scheme works at Colne Bridge Road Overbridge (MVL3/107) was granted on 27 June 2022 (2021/65/91330/E). A plan showing the location of Colne Bridge Road Overbridge (MVL3/107) is included in Appendix A.

1.1.4 The consent for the Order Scheme requires the discharge of various planning and listed building consent conditions (refer to Appendix B for the list of agreed conditions). Condition 3 of the Listed Building Consent for the works to Colne Bridge Road Overbridge (MVL3/107) requires the production of a Conservation Implementation Management Plan (CIMP) before any works of demolition can commence.

1.2 Purpose of the Document

1.2.1 A Conservation Implementation Management Plan is a comprehensive document based on a detailed understanding of an historic asset and its significance. It sets out a conservation framework in the context of which the work for the Order Scheme is undertaken. This includes policies to ensure an asset's significance is retained in any future use, repair, alteration, development or management. Where it is not possible to retain an asset's significance, such as through partial or total loss, then the purpose of the CIMP is to set out best practice methodologies for demolition and removal which will be adhered to during the construction works.

1.2.2 Colne Bridge Road Overbridge (MVL3/107) will be partially removed as part of the Order Scheme and this CIMP has been produced to satisfy the requirements of Condition 3 of the Listed Building Consent, the wording of which states as follows:

'***3. (Conservation Implementation Management Plan)*** *No works including any works of demolition shall commence until a Conservation Implementation Management Plan (CIMP) has been submitted to and approved in writing by the local planning authority. The approved CIMP will include as a minimum requirement contents based on the model template CIMP structure attached to this list of conditions. The CIMP will specifically include methodologies for:*

i. fabric removal, masonry repairs, vegetation removal, repointing, metalwork repairs and application of protective paint systems as appropriate;

ii. the identification of historic elements of the fabric which once removed may be reused or preserved, and a strategy for their storage or reuse where appropriate;

iii. details of any maintenance access regime required (if any);

iv. provision of heritage interpretation boards during construction works; and

v. dissemination of "toolbox talks" to personnel involved in demolition and construction works.

The works must be carried out in accordance with the approved CIMP unless otherwise agreed in writing with the local planning authority.'

1.3 Other Supporting Information

1.3.1 The CIMP should be read in conjunction with further information submitted for discharge of the Order Scheme Deemed Planning Permission and Listed Building Consent Conditions. These include:

- Demolition Methodology Statement – Colne Bridge Road Overbridge (MVL3/107) - submitted with respect to Condition 5b (ix) (stage 6 W3B) attached to the deemed planning permission for the Order[1];
- Materials (Stage 6 W3B) submitted with respect to Condition 7 (stage 6 W3B) attached to the deemed planning permission for the Order [2];
- specifications of materials and finishes, produced to satisfy Condition 4 attached to the Listed Building Consent; and
- detailed methodologies and specifications to support the details outlined in Section 4 of the CIMP, included in appendices as appropriate.

1.3.2 The CIMP should also be read in conjunction with the TWA Order and LBC Application documents including the Heritage Assessment[3] and Environmental Statement (ES) chapters[4].

[1] Network Rail, 2023. *Network Rail (Huddersfield to Westtown (Dewsbury) Improvements) Order. Condition 5b(ix): Demolition Methodology Statement – Colne Bridge Road Overbridge (MVL3/107) – Stage 6 W3B.*

[2] Network Rail. 2024. *Network Rail (Huddersfield to Westtown (Dewsbury) Improvements) Order. Condition 7: Materials – Stage 6 W3B.*

[3] Network Rail, 2021. *The Network Rail (Huddersfield to Westtown (Dewsbury) Improvements) Order: B6118 Bridge Road Overbridge (MVL3/107) Heritage Assessment.*

[4] Network Rail, 2020. *Network Rail (Huddersfield to Westtown (Dewsbury) Improvements) Order application Environmental Statement, Volume 2i – Scheme-wide Assessment, Chapter 6 – Historic environment*. Network Rail, 2020. *Network Rail (Huddersfield to Westtown (Dewsbury) Improvements) Order application Environmental Statement, Volume 2ii – Route Section Assessment, Route Section 4 Colne Bridge and Battyeford, Chapter 6 – Historic environment.*

2. STRATEGIC OVERVIEW

2.1 Strategic Approach of the CIMPs within the TRU Project

2.1.1 As outlined above in Section 1.2, this CIMP has been produced as a requirement to discharge Condition 3 of the Listed Building Consent for Colne Bridge Road Overbridge (MVL3/107), for the works undertaken for the Network Rail (Huddersfield to Westtown (Dewsbury) Improvements) Order affecting the Listed Building. As such, the CIMP sits alongside other documents produced for the Listed Building Consent application and the wider Order Scheme.

2.1.2 The production of CIMPs for the works where Listed Building Consent was required as part of the Order Scheme was agreed between Network Rail and Kirklees Council (with the support of Historic England) in order to provide further design and construction detail pertinent to the impact on the significance of such Listed Buildings. It was acknowledged that, at the time of making the Order and associated Listed Building Consent applications, elements of detailed design and specifics of construction methodology were not fully determined. The CIMP was agreed to provide a suitable framework to capture, review and approve such details, within the context of the heritage significance of the Trans-Pennine Route and the individual Listed Buildings affected.

2.1.3 The content of the CIMP will define how the construction of the Order Scheme at Colne Bridge Road Overbridge (MVL3/107) is undertaken with respect to the sensitivity of the historic fabric, character and setting of the Listed Building. The critical elements of this CIMP are in setting out the detailed approaches to be undertaken in respect of: fabric removal; the introduction of new fabric (infilling and new bridge construction); identification of historic elements suitable for re-use; and the provision of temporary interpretation. The CIMP provides a conservation framework for the duration of the construction of the Order Scheme.

2.1.4 The methodologies and approaches discussed in this CIMP are conversant of the significance of Colne Bridge Road Overbridge (MVL3/107). The significance of Colne Bridge Overbridge (MVL3/107) is outlined below in Section 3, with further information on its historic context and significance detailed within the Heritage Assessment[5] produced to support the Listed Building Consent application 2021/65/91330/W and in the Environmental Statement produced for the Scheme[6] [7].

2.1.5 The heritage significance of the Trans-Pennine Route as a whole, of which Colne Bridge Road Overbridge (MVL3/107) is a part, has already been analysed and outlined in the Trans-Pennine Route Upgrade Route-Wide Statement of Significance, produced by Alan Baxter Associates[8] (submitted as part of the Order submission). As well as being shaped by the significance of Colne Bridge Road Overbridge (MVL3/107), production of the contents of this CIMP has taken into consideration the wider significance of the Route as a whole, including group value associated with this and other historic structures along it.

2.1.6 The design development of the proposals at Colne Bridge Road Overbridge (MVL3/107) was conversant of the group value and the significance derived from relationships between the

[5] Network Rail, 2021. *Network Rail (Huddersfield to Westtown (Dewsbury) Improvements) Order B6118 Bridge Road Overbridge (MVL3/107) Heritage Assessment*

[6] Network Rail, 2020. *Network Rail (Huddersfield to Westtown (Dewsbury) Improvements) Order application Environmental Statement Volume 2i – Scheme-wise Assessment, Chapter 6 – Historic Environment*

[7] Network Rail, 2020. *Network Rail (Huddersfield to Westtown (Dewsbury) Improvements) Order application Environmental Statement, Volume 2ii – Route Section Assessment, Route Section 4 Colne Bridge and Battyeford, Chapter 6 – Historic environment.*

[8] Alan Baxter Associates, 2019. TransPennine Route Upgrade Route-wide Statement of Significance.

structure and other similar and related bridges elsewhere on the Trans-Pennine Route. This was particularly the case in relation to the relationship between the bridge and the nearby Wheatley's Overbridge (MVL3/103), which will be completely removed as a result of the Order Scheme.[9] The methodologies detailed within this CIMP have also been developed in the context and understanding of the significance the bridge derives from this group value. The group value associated with the bridge, and its contribution to the bridge's overall significance, is explored in more details in Section 3.5 below.

2.2 Methodological Approach – Discharge of Condition

Strategy for Partial Discharge

2.2.1 For a number of Listed Buildings subject to works under the Order, The CIMP will be submitted in a number of phases for partial discharge to allow elements of works to commence prior to the full availability of information covering all works proposed to the structure. However, in the case of Colne Bridge Road Overbridge (MVL3/107) it is anticipated that this CIMP will contain sufficient information to fully discharge the relevant condition.

2.2.2 We do not anticipate any need to depart from the information provided, however there may be unforeseen circumstances which require us to urgently revise proposals. In such circumstances Kirklees Council will be notified as soon as possible, and their agreement sought on the proposals through the established TRU Heritage Working Group

[9] As approved on 27 June 2022 by listed building consent reference 2021/65/91337/W.

3. UNDERSTANDING THE SITE

3.1 Heritage Context Overview: History of the Trans-Pennine Route

3.1.1 The Trans-Pennine Route between Huddersfield and Westtown (Dewsbury) was constructed and opened between 1836 and 1849. The route today comprises sections of rail line developed by different railway companies, characteristic of the wider Trans-Pennine Route between York, Selby and Manchester. The complex chain of companies and projects is a typical product of the "Railway Mania" of the mid-1840s, the height of a period of commercial confidence and expansion in the railways.

3.1.2 Between Huddersfield and Westtown (Dewsbury), the Trans-Pennine Route is made up of sections of:

- The Manchester & Leeds Railway, constructed 1836-39, between Ravensthorpe and Heaton Lodge;
- The Leeds, Dewsbury & Manchester Railway, constructed 1845-47, between Westtown (Dewsbury) and Ravensthorpe; and
- The Manchester & Huddersfield Railway, constructed 1846-49, between Heaton Lodge and Huddersfield.

3.1.3 The line formed a new, more direct route to the West Riding from Manchester, in competition to the earlier Manchester & Leeds Railway which had been constructed through the Calder Valley in the late 1830s. The more direct route was enabled partly through the advances in tunnel construction and large-scale engineering technology, notably realised through the construction of the 3-mile Standedge Tunnel under the Pennine watershed to connect the line between the Upper Thame and Colne Valleys. Between Huddersfield and Westtown (Dewsbury), the line is partly characterised by such examples of large scale and/or pioneering engineering structures, including tunnels, viaducts and both masonry and cast iron bridges.

3.1.4 The development and expansion of the railways and their associated infrastructure during the first half of the 19th century, was characterised by the considerable influence on those towns which experienced the development of this new mode of transport. The railways resulted in place-making and industrial growth, as towns benefited from the connections and influences which they brought with them. The Trans-Pennine Route between Huddersfield and Westtown (Dewsbury) certainly had an influence on towns, forming an additional infrastructure element of the expansion of settlements, such as Huddersfield, which was already underway as a result of the growth of textile, mining and malting industries.

3.1.5 Colne Bridge Road Overbridge (MVL3/107) is located on the section of the Trans-Pennine Route constructed by the Manchester & Huddersfield Railway between 1846 and 1849. The line was engineered by Alfred Stanistreet (A.S.) Jee and Joseph Locke. Before construction was complete, the company was absorbed, along with the Leeds, Dewsbury & Manchester Railway into the London & North Western Railway (LNWR) company. Following the creation of the route in 1846-9, there were a series of staged changes to the railway to update the infrastructure and increase capacity across the route. This section of line was widened during the expansion of the railway by the LNWR in the 1880s and 1890s to incorporate four tracks in place of the previous two.

3.1.6 The history and significance of the Trans-Pennine Route is discussed at more length in the Route-Wide Statement of Significance (Alan Baxter, 2019). This was produced to characterise the overall heritage significance of the Trans-Pennine Route as a whole and was included in Appendix 6-1 of the ES for the Scheme.

3.2 Historic Development of Colne Bridge Road Overbridge (MVL 3/107)

3.2.1 Colne Bridge Road Overbridge (MVL3/107) is located on the section of the Trans-Pennine Route constructed by the Manchester & Huddersfield Railway between 1846 and 1849. This section of line was widened during the expansion of the railway by the LNWR in the 1880s and 1890s. As discussed below in Section 3.5, it is noteworthy that this widening of the structure was conducted in a sympathetic manner.

3.2.2 The bridge was designed by the noted railway engineer A. S. Jee and was constructed between 1845 and 1849. It is thought to have been originally built as a double-span overbridge to carry the Kirkheaton Bradley Road (B1668) over the Huddersfield and Manchester Railway, using a northern continuation of the embankment from the adjacent Sir John Ramsden's Canal Bridge No. 3 (Grade II Listed, NHLE 1221180), located immediately to the south-east. The bridge was then believed to have been extended by the LNWR between 1881 and 1884 to a three-span length with an additional subsidiary southern span, allowing it to cross four railway tracks and a path.

3.3 Heritage Context: Other Designated Heritage Assets

3.3.1 There are three designated heritage assets located within the immediate vicinity of Colne Bridge Road Overbridge (MVL3/107). These all relate to the operation of the Huddersfield Broad Canal and the Calder and Hebble Navigation canal, and not to the railway and are:

- Colne Bridge (Grade II Listed, NHLE 1134290);
- Canal Bridge taking Colne Bridge Road (Grade II Listed, NHLE 1221180); and
- Calder and Hebble Navigation Number 2 Lock / Sir John Ramsden's Canal Number 2 Lock (Grade II Listed, NHLE 1313801).

3.4 Heritage Context: Non-Designated Heritage Assets

3.4.1 There is one non-designated heritage asset located within the immediate vicinity of Colne Bridge Road Overbridge (MVL3/107). This is the Huddersfield Broad Canal (West Yorkshire HER 18486), which runs to the south of the railway before passing under it at Huddersfield Broad Canal Underbridge (MVL3/108S), approximately 150m north-west of Colne Bridge Road Overbridge (MVL3/107).

3.5 Significance of Heritage Assets: Colne Bridge Road Overbridge (MVL 3/107)

3.5.1 Colne Bridge Road Overbridge (MVL3/107) derives significance from its historic integrity and association with the railway, its engineering importance and the nature of its sympathetic alteration in a later period.

3.5.2 Colne Bridge Road Overbridge (MVL3/107) was designated a Grade II Listed building in March 2018. The Historic England National Heritage List for England (NHLE) description[10] identifies the following elements of significance from which the structure is considered to have special interest;

- Historic interest:
  - an original 1840s overbridge constructed during the Heroic Age of railway building on what is now one of the main railway lines in northern England; and

[10] Railway overbridge MVL3/107, Colne Bridge (B1168 Bridge Road), Non Civil Parish - 1450265 | Historic England. Accessed 15 May 2024.

- designed by the noted railway engineer Alfred Stanistreet Jee (A.S. Jee).

- Architectural interest:
  - a triple-span segmental arch bridge with a fourth subsidiary arch, demonstrating a high level of craftmanship in its construction, detailing and dressing; and
  - sympathetic lengthening that has resulted in little impact to its visual character.
- Group value:
  - with the other Listed structures designed by Jee on the Huddersfield & Manchester Railway line.

3.5.3 The bridge's association with the heightened phase of railway construction and its relation to historic railway companies from that time (Huddersfield and Manchester Railway and LNWR) and a notable railway engineer A.S. Jee, who also designed similar structures along the route (see 3.5.7 below), gives the structure historical value from which it derives significance.

3.5.4 The bridge also derives significance from its aesthetic value in relation to its sympathetic design alterations during the widening phase between 1881 and 1884. The resulting triple-span segmental arch design possesses architectural interest as this later alteration shows a great degree of care and effort in duplicating the original double-span in a manner similar to the original bridge's design and detailing. Enhanced by very limited further alteration to the bridge since the widening of the line in the late 19th century, the sensitive design of the widening is testament to the quality of design and engineering of the LNWR, as well as preserving and responding to the language of A.S. Jee's original design.

3.5.5 The structure also possesses some evidential value, particularly considering the limited alterations which it has undergone since the widening of the line in the late 19th century. The structure evidences 19th century construction techniques and sourcing of materials both in the original 1840s span and the later 1880s addition during the widening phase.

3.5.6 Colne Bridge Road Overbridge (MVL3/107) does not derive particular significance from its setting. The bridge is screened by vegetation and industrial/ retail structures and is largely experienced by those crossing over it along the B6118 Colne Bridge Road. Although it has a relationship with the railway, the legibility of this can currently only be appreciated by those actually using the structure and passing underneath it on trains; setting therefore makes little contribution to its overall significance.

3.5.7 The NHLE notes that Colne Bridge Road Overbridge (MVL3/107) has group value with the other Listed structures designed by Jee on the Huddersfield & Manchester Railway. Jee's engineering on the line commonly involved the design of masonry bridges that possess semi-circular arches, with quarry-faced stonework throughout; and examples of this can be seen a short distance up the line towards Huddersfield in the similarly styled construction of Wheatley's Overbridge (MVL3/103) (Grade II Listed, NHLE 1450537), as well as similar overbridges located further west on the Trans-Pennine Route, for example in Heyrod (MVL3/9), Roughtown Road (MVL3/14), Wright's Mill (MVL3/20) and Wrights (MVL3/23).

3.5.8 The group value of Colne Bridge Road Overbridge (MVL3/107) makes some contribution to its overall significance, as it comprises one element of the wider surviving group of structures associated with A.S. Jee on the Trans-Pennine Route; and in particular it shares group value with those bridges that share commonly styled construction as outlined above. Similarly, the other bridges designed by Jee also derive part of their value from their group relationship with Colne Bridge Road Overbridge (MVL3/107) and the other similar bridges.

3.6 Significance of Other Designated Heritage Assets

3.6.1 There is an inter-relationship between Colne Bridge Road Overbridge (MVL3/107), Colne Bridge and Canal Bridge taking Colne Bridge Road in that they all carry the B6118 Colne Bridge Road, evidencing the historic road network and chronology of transport infrastructure in the Colne Bridge area. However, this does not particularly contribute to the significance of Colne Bridge Road Overbridge (MVL3/107) or the other bridges.

3.6.2 There is no historic inter-relationship between Colne Bridge Road Overbridge (MVL3/107) and the Number 2 Lock, although they are visible from each other; this inter-visibility forms only a very minor element of the setting of either asset and neither derives significance from this aspect of their setting, other than the fact that they have both been in place over a long period of time, which makes little contribution to their significance.

3.7 Significance of Non-Designated Heritage Assets

3.7.1 Huddersfield Broad Canal (West Yorkshire HER 18486) is a significant surviving element of the 18th century transport network along the Colne valley, this significance is enhanced by the canal still being in use. It also draws significance from its historical associations with the surrounding historic townscapes of the settlements it passes through and the railway which runs in proximity to it. The canal does not derive particular significance from its visual relationship with Colne Bridge Overbridge (MVL3/107), though this forms one of the multiple elements of visual connection with the railway which evidences the historic development of transport infrastructure along the Colne valley.

4. COLNE BRIDGE ROAD OVERBRIDGE (MVL 3/107) – METHODOLOGIES

4.1 Summary

4.1.1 As outlined above in Section 1.2, this CIMP responds to the requirements of Condition 3 attached to the Listed Building Consent for Colne Bridge Road Overbridge (MVL3/107), which states:

'No works including any works of demolition shall commence until a Conservation Implementation Management Plan (CIMP) has been submitted to and approved in writing by the local planning authority. The approved CIMP will include as a minimum requirement contents based on the model template CIMP structure attached to this list of conditions. The CIMP will specifically include methodologies for:

i. fabric removal, masonry repairs, vegetation removal, repointing, metalwork repairs and application of protective paint systems as appropriate;

ii. the identification of historic elements of the fabric which once removed may be reused or preserved, and a strategy for their storage or reuse where appropriate;

iii. details of any maintenance access regime required (if any);

iv. provision of heritage interpretation boards during construction works; and

v. dissemination of "toolbox talks" to personnel involved in demolition and construction works.

The works must be carried out in accordance with the approved CIMP unless otherwise agreed in writing with the local planning authority.'

4.1.2 The following sections consider and outline the key principles and approaches which are to be applied in relation to the methodologies i) to v) as identified in the Condition wording, as well as those items identified in Section 4 of the model template CIMP structure attached to the list of conditions (see Appendix B).

4.2 (a) Historic Building Recording and Monitoring before and after the works

Historic Building Recording

4.2.1 As secured by Condition 2, historic building recording will be undertaken in accordance with the WSI submitted to Kirklees Council and approved by West Yorkshire Archaeological Advice Service (WYAAS). A separate application to Kirklees Council to discharge Condition 2 will be made following the production of the report. In accordance with the WSI, monitoring visits may also occur should WYAAS or Kirklees Council wish to visit site.

4.3 (b) Methodology for Fabric Removal

4.3.1 In order to best co-ordinate the construction sequencing and methodologies for the different elements of the works at Colne Bridge Road Overbridge (MVL3/107), while minimising disruption both to highways and rail users, the construction of the new bridge abutments and deck (see below, Section 4.4) will be undertaken prior to the demolition of the spans of the existing bridge (as detailed below in this section). In this document, the methodology for fabric removal is dealt with first, given the inherent impact on the Listed structure involved in this process.

4.3.2 The methodology for the consented demolition of the central two spans of the overbridge as detailed below has been shaped to balance an appreciation of the heritage significance of the structure with the overarching constraints of undertaking such extensive physical intervention into a historic masonry structure within a necessarily short time period. Such major works undertaken within the context of the operational railway have to be designed in order to minimise disruption to the operational railway, highway and their respective users. It is recognised that such constraints unavoidably have implications on, for example, the extent of mechanical intervention, compared to doing work by hand, and the ability to retain and reuse historic fabric (see below, Section 4.6).

4.3.3 The main demolition works at the structure will be undertaken by a specialist demolition sub-contractor with experience of working on historic masonry structures in an operational rail environment.

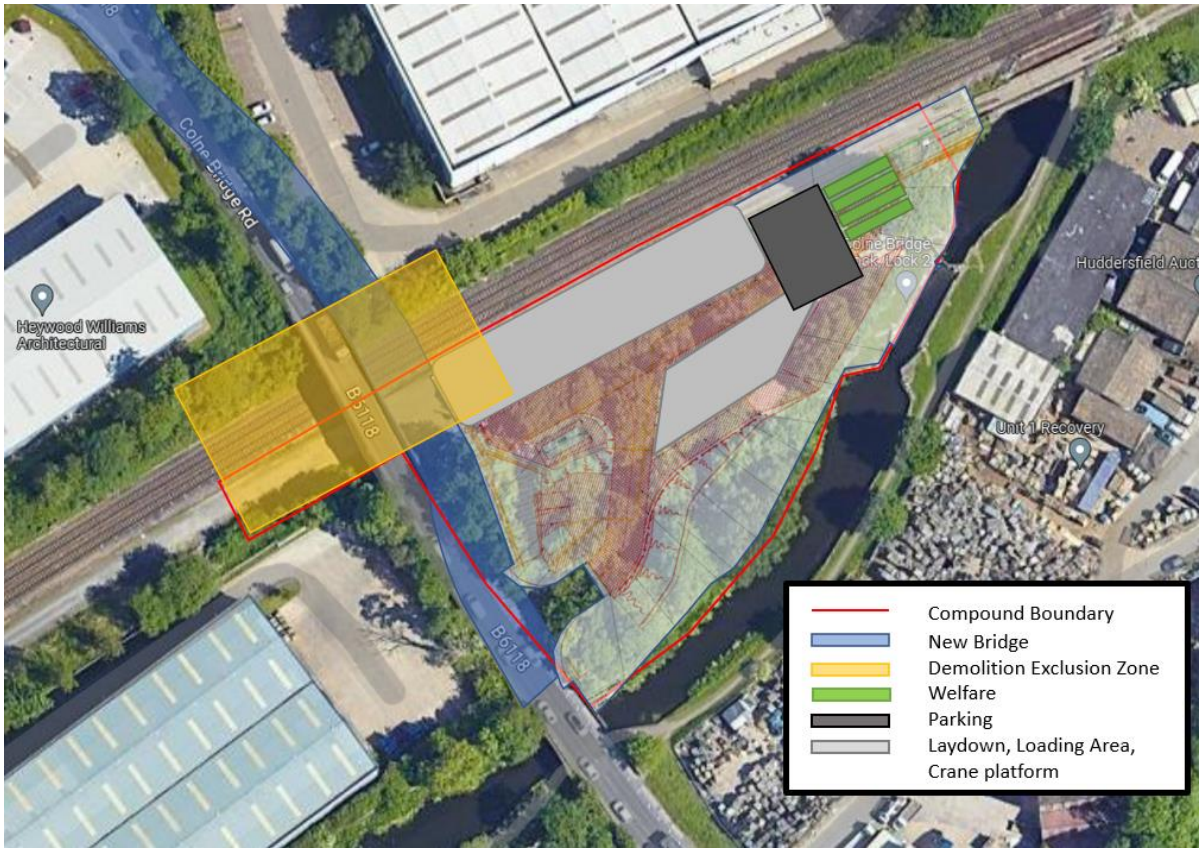
Site Establishment and Pre-Start

4.3.4 An exclusion zone for the demolition works will be set up within the site area around Colne Bridge Road Overbridge (MVL3/107). Fencing in the form of either timber hoarding or heras fencing with access gates, will be erected around the bridge structure. The enclosed area will be defined in order to offer suitable room to allow the demolition works to be carried out safely.

4.3.5 Demolition warning signage will be positioned at appropriate points on internal and external fencing, so as to make clear the risks on site. All new site staff will undergo a full TRU site induction delivered by the TRU Site Manager/Supervisor, including the relevant historic environment toolbox talk for the structure (see below, Section 4.8).

4.3.6 A demolition exclusion zone will be established prior to any demolition works commencing. The proposed exclusion zone is shown below in Insert 4-1. Only trained operatives to Certificate of Competence of Demolition Operatives (CCDO) Standards (or equivalent) will be authorised to access this area during demolition activities. The exclusion zone will be controlled by banksmen with detcom radios with constant contact with plant operatives and demolition sub-contractor supervisor. Demolition operatives working within the exclusion zone will similarly be in radio communication with all other operatives. Any other construction operatives, including contractors, will be escorted into the exclusion zone by the demolition contractor where practicable to do so. All non-essential access into the area during demolition operations is to be prohibited.

4.3.7 Prior to demolition taking place, all existing services will have been disconnected and relocated onto the new structure and confirmation that all services are no longer live will be obtained by licensed professionals.



Insert 4-1- Demolition compound layout details.

Installation of Track Protection

4.3.8 Operatives to access track level and working in teams will unfold and place heavy duty Terram sheeting directly onto the rail infrastructure below the bridge, covering an area underneath the footprint of the deck as a minimum. A rubber tracked excavator will then commence installation of the track protection system; using a selector grab, a base layer of mats will be placed running parallel with the existing running rail covering the extent of the Terram. A second layer of mats will be placed perpendicular to the base layer (running from abutment to abutment). This will create a solid working platform for the demolition works and a suitable track protection system for the existing rails. Subsequently, hardwood timber mats are to be placed at least 5m to the west of the bridge and at least 15m to the east of the bridge deck to facilitate a suitable surface for the wider working area during the demolition works. None of the track protection matting will need to be physically attached to the Listed structure.

4.3.9 On completion of the track protection measures, a joint inspection will take place between the demolition contractor supervisor and TRU Site Manager, prior to the main demolition works taking place. This is to ensure that the installation of the track protection has successfully provided the required safe working area and required protection.

Partial demolition of south-east wing wall

4.3.10 Prior to the commencement of the demolition of the spans of Colne Bridge Road Overbridge (MVL3/107) and the construction of the replacement span and abutments, the south-east wing wall of the existing bridge needs to be reduced in height to 1m below the level of the proposed carriageway (indicated in Insert 4-5 below in Section 4.4). This is required to reduce the risk of hard spots forming under the new highway carriageway to the east of the new bridge deck.

4.3.11 The proposed highway sits at a higher level than the existing, meaning that only the top two courses of the south-eastern wing wall will likely require removal. Blocks will be removed course by course using hand tools to the required level.

Demolition of spans 2 and 3

4.3.12 The demolition of spans 2 and 3 of the existing Colne Bridge Road Overbridge (MVL3/107), over the railway, will be undertaken after completion of the preparator works outlined in the preceding paragraphs. The demolition will comprise the following sequence of individual works, as outlined below in this section:

- The removal of the parapet walls and pilasters
- The demolition of the two arches, either side of their central pier
- The partial removal of the abutments either side of the two removed arches; and
- The removal of the central pier between the spans.

4.3.13 All demolition works are to be carried out in accordance with BS6187:2011 Code of Practice for Full and Partial Demolition as well as measures set out in the CoCP Part A and Part B documents (Noise and Vibration Management Plan (Stage 6 W3B), Nuisance Management Plan (Stage 6 W3B) and Pollution Prevention and Incident Control Plan) (Stage 6W3B).

4.3.14 Throughout the demolition, dust suppression units will be made available and utilised where appropriate. The dust suppression units will be fed by water tankers where necessary. The position of the dust suppression units will be determined by the Site Manager based on the prevailing weather conditions.

Removal of parapet walls and pilasters

4.3.15 Prior to the demolition of the two arched spans of the bridge, the parapet walls over the two spans and associated pilasters will be removed by excavators positioned adjacent to the bridge.

4.3.16 The following approach is planned for this stage of the works:

- A 50t excavator will gain access to the track protection adjacent to the structure (adjacent to span 3).
- A 50t excavator will be positioned next to the 50t excavator off the track protection (adjacent to span 2).
- A 5t excavator will be positioned on the north abutment.
- A 35t excavator will be positioned on the south abutment.
- Working in unison the demolition excavators will carefully reduce the masonry parapets using selector grabs.
- The parapet walls are to be reduced course by course to maximise the amount of stone viable for potential reuse.
- Masonry arisings are to be retained on the deck before being removed and palletised for assessment by the stone mason for potential reuse (see paragraph 4.6.1).

Demolition of arches

4.3.17 Following the removal of the parapet walls, the main demolition of the two arched spans of the bridge will be undertaken.

4.3.18 Once the parapets have been reduced, demolition excavators situated on both abutments will remove any remaining non-structural overburden from the bridge deck. Excavators will utilise the bucket attachment to remove overburden in even layers to expose barrel of

arches.

4.3.19 A diamond wire saw will be used to create a vertical cut through the abutment at the junction between the retained piers and those spans proposed for demolition. This saw cut will be made in front of the proposed finished alignment of the retained piers to enable a mason to tooth out stone as required and to re-dress masonry to the achieve a satisfactory finish following the completion of the demolition (see below, paragraph 4.4.15).

4.3.20 Once the saw cuts have been completed and overburden removed to expose the arch barrels, the demolition of the arches themselves will be undertaken. Both arches are to be demolished simultaneously. Working in a pre-agreed direction, the arches will be mechanically demolished in 1m sections. Starting from the crown of the arch back towards the saw cut, each block is to be removed. Plant operatives will endeavour to gather the arisings in the bucket; however, arisings will be allowed to fall onto a crash deck below the structure.

4.3.21 Where necessary hydraulic breaker attachments will be used to pre-weaken the arch structure. The saw cuts referred to above in paragraph 4.3.19 will ensure adequate separation between the fabric to be removed and the retained spans, limiting the risk of unintended damage to the retained spans 1 and 4 of the bridge. Similarly, the completion of the infilling of these retained spans 1 and 4 prior to the demolition of spans 2 and 3 will provide additional structural support to those retained spans during the demolition works.

4.3.22 Any loose materials at crash deck level will be removed via the Articulated Dump Trucks (ADTs) to the appropriate construction compounds. This loose material will then be palletised to enable its assessment for reuse by a specialist stone masonry subcontractor.

Partial removal of abutments

4.3.23 Once the arches of spans 2 and 3 have been demolished, leaving only the central pier between the two remaining, work will be undertaken to cut back the retained abutments to prepare them for their new finish.

4.3.24 Working from the rear of each abutment (i.e. working towards the railway line), a 13t excavator and a 35t excavator will mechanically reduce each abutment to saw cut level utilising bucket attachments, assisted by the 50t excavators at ground level if required. Where necessary, localised breaking will be used to achieve the required finish. Soft infill material will be excavated to the agreed level and graded to a safe profile to the existing carriageway level.

4.3.25 As with the previous stage of the works, any loose materials at crash deck level will be removed via the ADTs to the appropriate construction compounds. This loose material will then be palletised to enable its assessment for reuse by a specialist stone masonry subcontractor.

Removal of central pier

4.3.26 The final element of the demolition works will be removal of the central pier between the demolished spans 2 and 3.

4.3.27 The masonry pier is to be pre-weakened utilising a hydraulic breaker attachment to the excavators. The central pier is then to be reduced in height, deconstructing the above-ground masonry and removing the structure to 300mm below ground level. Working in tandem, the two 50t excavators will provide support to the pier, to side load the structure during its demolition. Following removal of the masonry, the foundation of the pier will be substantially removed and backfilled with suitable engineered fill to prevent the formation of a hard spot in the track bed.

4.4 (c) Introduction of New Fabric

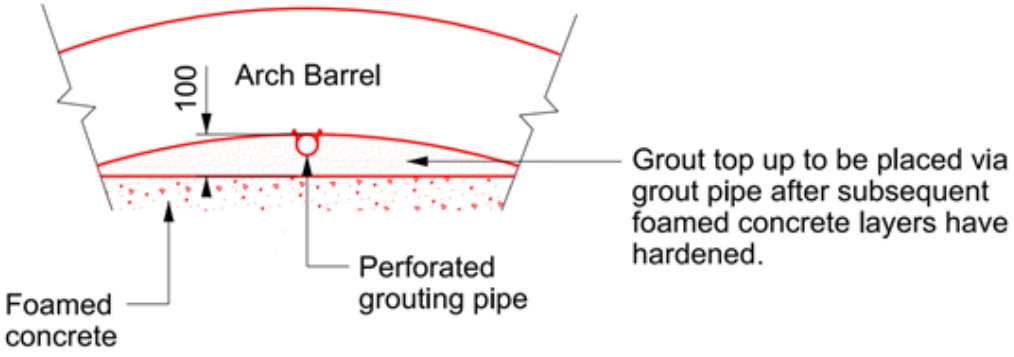
4.4.1 As noted above in paragraph 4.3.1, the majority of the consented introduction of new fabric at Colne Bridge Road Overbridge (MVL3/107), namely the infilling of redundant spans and the construction of the new bridge abutments and deck (as detailed in the following section of this CIMP) will be undertaken prior to the demolition of the spans of the existing bridge (as detailed above in Section 4.3).

Infill of spans 1 and 4

4.4.2 As noted above in paragraph 4.3.21, the infilling of the redundant spans 1 and 4, either side of the two arches to be demolished, will be undertaken prior to the removal of those spans. This is to partly to provide additional structural support to the retained fabric of the existing bridge during the demolition of spans 2 and 3.

4.4.3 Utility diversion works will take place prior to commencement of the infill works. Diverted utilities will be buried at a depth of at least 900mm below existing ground level and will therefore not be disturbed during requirements for excavation as part of the infill works.

4.4.4 A 50mm diameter grout pipe will be fixed to the underside of the barrel arch prior to any infilling. This perforated grout pipe will extend the width of the arch and be used to ensure the very top of the arch will be completely infilled with grout reducing the risk of voids and ensuring a complete infill is achieved (see Insert 4-2 below, described further in 4.4.7). Once the grouting has been completed the excess length of pipe will be cut back and obscured behind the masonry facing wall.



Insert 4-2 Section showing grout pipe arrangement.

4.4.5 Prior to commencement of the infilling, the ground surface underneath the arches will be suitably prepared. The ground will be excavated down to the required formation level and compacted to achieve a suitable bearing capacity. Within this fill, a reinforced concrete strip footing will be cast *in-situ* to support the masonry facing wall. Any utilities which may clash with location of the strip footing will need to be adjusted and/or moved ahead of the casting (see above). The voussoir will be used to set out the location of the strip footing, with a 50mm recess from its edge maintained in order to preserve legibility of the structure's historic design.

4.4.6 The infilling will commence with the installation of formwork on either side of the arch, with cast-in channels attached to the back of the western side to facilitate tying the masonry facing to the foamed concrete infill. To mitigate the risk of foamed concrete seepage, polythene sheeting will be laid on top of the compacted engineered fill and will wrap up the formwork for the first layer of foamed concrete.

4.4.7 The infilling will be undertaken in stages to ensure the material has time to settle and set

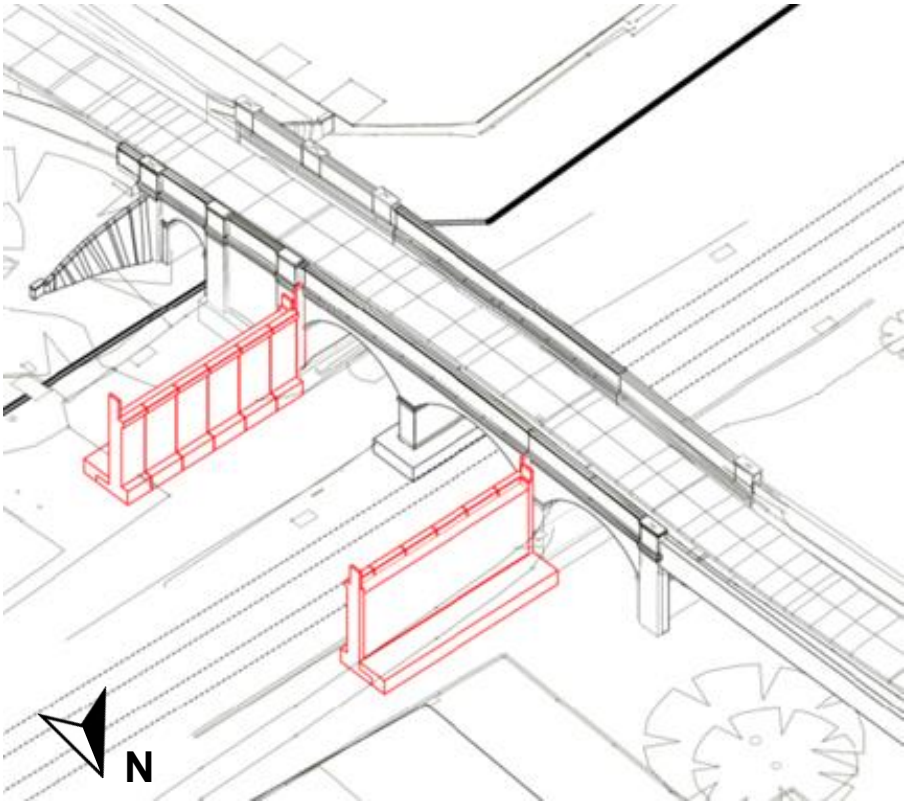
appropriately. The foamed concrete will be built up in 1m segments, with a minimum of 24 hours between each pour to allow sufficient time for curing. Grout poured via the previously affixed 50mm diameter pipe will be used to fill the final void beneath the arch. Once the foamed concrete is cured, the temporary formwork will be stripped off both faces of the infill revealing the new concrete infill complete with cast-in channels on the western side. Where there will be an interface between the existing abutment and the new masonry wall, the sandstone will be scabbled to allow the flush positioning of the new wall at the junction with the existing.

4.4.8 The natural sandstone masonry facing wall will be built up and tied in using cast-in channels and movement ties. Stone reclaimed from the demolished spans is intended to be used to construct the masonry facing wall, subject to an assessment of its condition (see paragraph 4.6.1 for further detail). Should there be a shortfall in the volume of stone viable for reuse, additional stone will be sourced from a local quarry (as detailed in the separate submission to discharge condition 4 relating to external materials). Once quarried, this stone will be dressed to match the finish of the adjacent abutments. To ensure a high quality finish is achieved, the facing wall will be built by a specialist masonry stone sub-contractor, with each sandstone block manually handled into position. The cavity between the masonry wall and the foamed concrete infill will be filled using lime mortar. The natural sandstone masonry walling will be recessed at least 50mm from the face of the voussoir outer edge, to ensure the legibility of this work in the structure's historic development.

Construction of replacement bridge

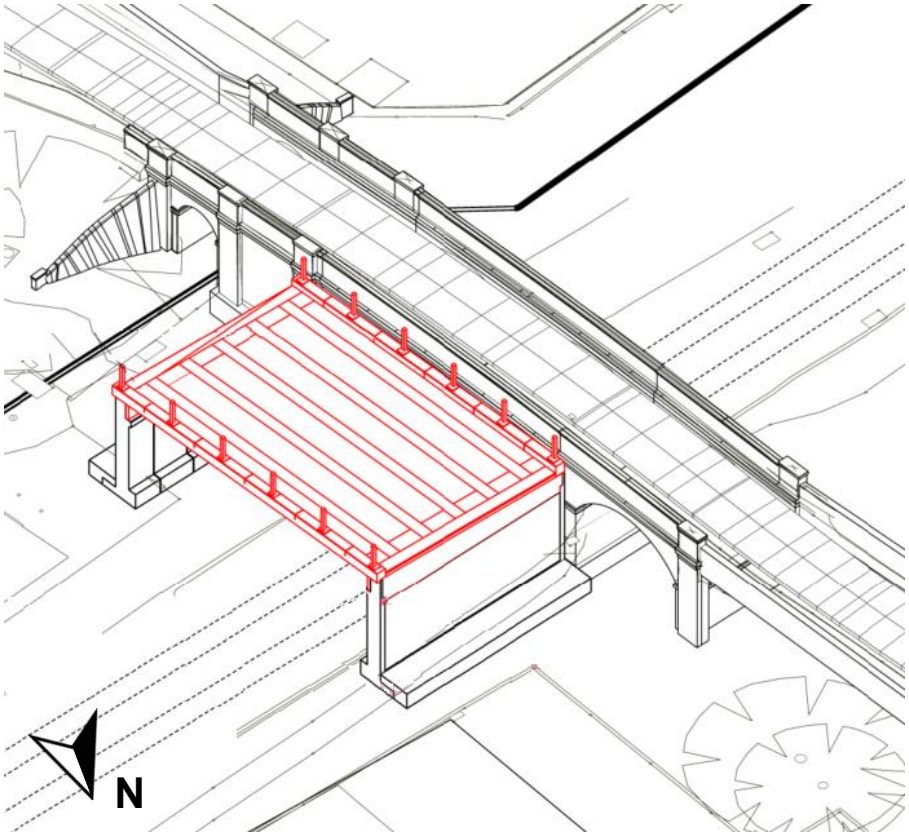
4.4.9 Prior to excavation and as required, temporary works will be put in place to maintain or remove existing track drainage, cable troughs, utility cabinets, and other existing services. The existing Yorkshire Water sludge main and three Northern Power Grid ducts beneath span 4 will be diverted prior to construction commencing. The existing access road serving the adjacent commercial unit will then be realigned.

4.4.10 The site of the proposed north and south abutments will be excavated for foundations. In order to provide a smooth joint between the existing bridge and the new pre-cast bridge abutments, dowels will be installed into the existing masonry to facilitate the creation of a concrete outstand. The masonry abutments will be drilled, holes cleaned to remove friable material, anchor inserted and torqued to provide mechanical fixing. Once the reinforced concrete outstand has been formed, the precast abutments units will be lifted in during a railway possession (see below, Insert 4-3). The remainder of the pad foundations and lower portion of the stem walls will be cast *in-situ.*



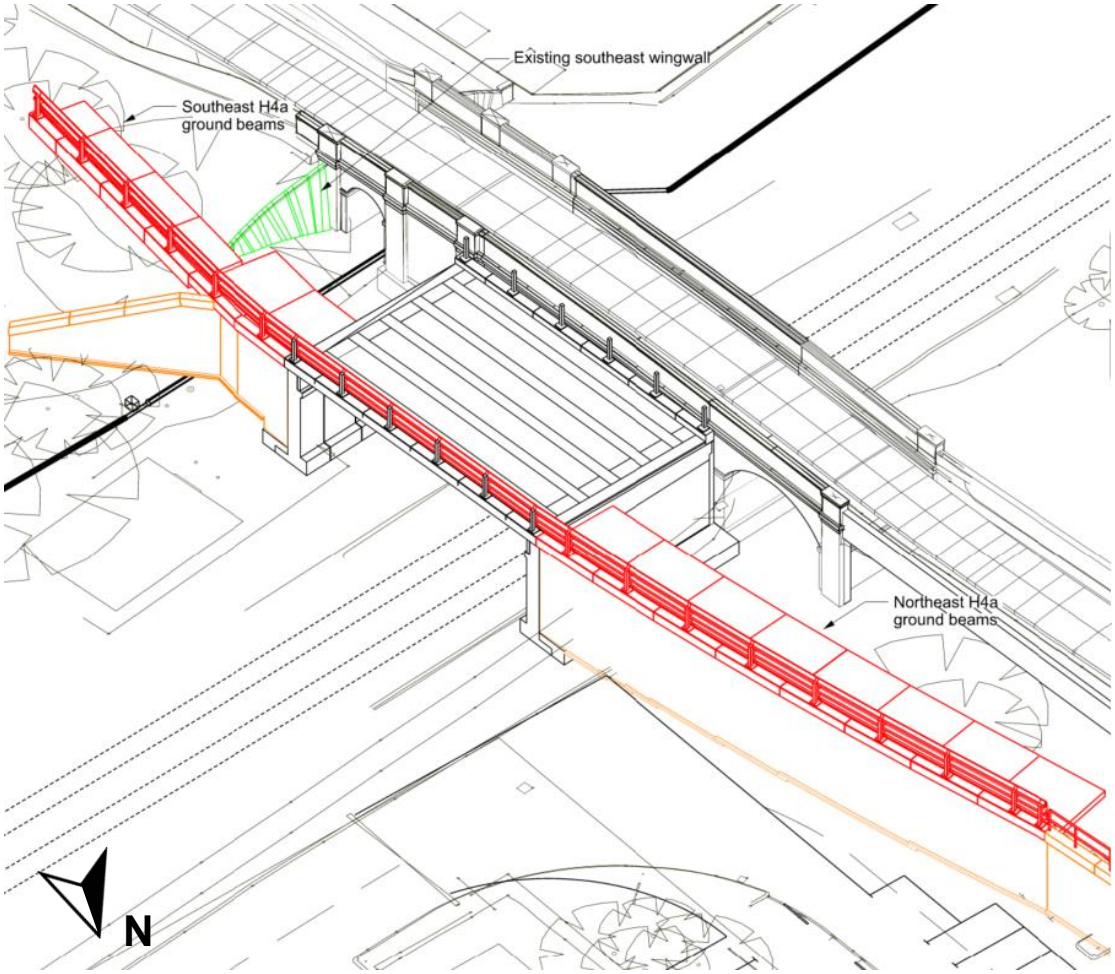
Insert 4-3 – Construction sequence drawing of proposed abutments (shown in red) and dowelled connection with existing abutments.

4.4.11 Six steel girders with composite reinforced concrete deck unit will be fabricated off site and will then each be lifted onto the new abutments by a rail mounted crane (see below, Insert 4-4). The edge girders will be lifted in with steel parapet posts attached, with horizontal scaffold tubes then attached to provide edge protection during construction. In order to tie the deck reinforcement to the abutments, diaphragms will then be cast *in-situ* at each end of the bridge. The *in-situ* longitudinal stitches which tie the deck units together will then be cast.



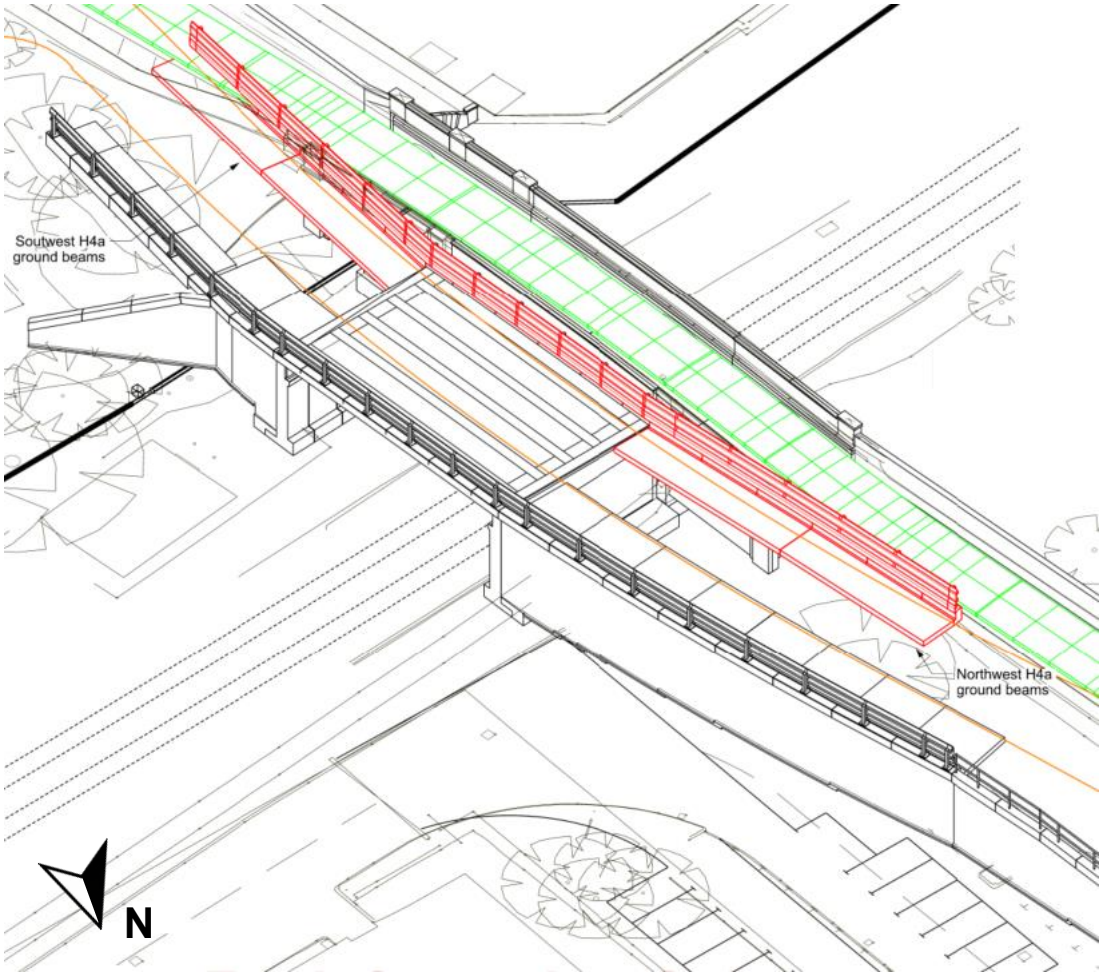
Insert 4-4 - Construction sequence drawing showing proposed deck and parapet posts.

4.4.12 In order to avoid any hard spots within the new highway, the existing south-east wingwall will be partially demolished to 1m below the proposed road surface level (see paragraph 4.3.10 above). The existing highway will be supported by temporary works during the demolition. The new abutments will then be backfilled on the north and south sides with reinforced earth retaining walls constructed. Precast concrete ground beams will be installed on the east side of the proposed highway (see below, Insert 4-5). Ground beam foundation stitches for north-east and south-east parapets will be cast *in-situ*, which will then allow the installation of the steel parapet beams.



Insert 4-5 - Construction sequence drawing showing proposed parapet (red), south-east wingwall to be reduced in height (green) and proposed retaining walls (orange).

4.4.13 The existing north-east retaining wall will then be demolished to 1m below the proposed level of the highway to avoid the formation of hard spots. The existing south-east and north-east bridge parapets will then be demolished to the level of the underside of the proposed replacement parapet ground beams, with the stone from the existing parapets set aside for reuse (see paragraph 4.6.1). Precast concrete ground beams will be installed on the west side of the proposed highway. Ground beam foundation stitches for north-west and south-west parapets will be cast *in-situ*, which will then allow the installation of the steel parapet beams. Utilities and traffic will then be diverted onto the proposed highway, prior to the demolition of the spans of the existing bridge.



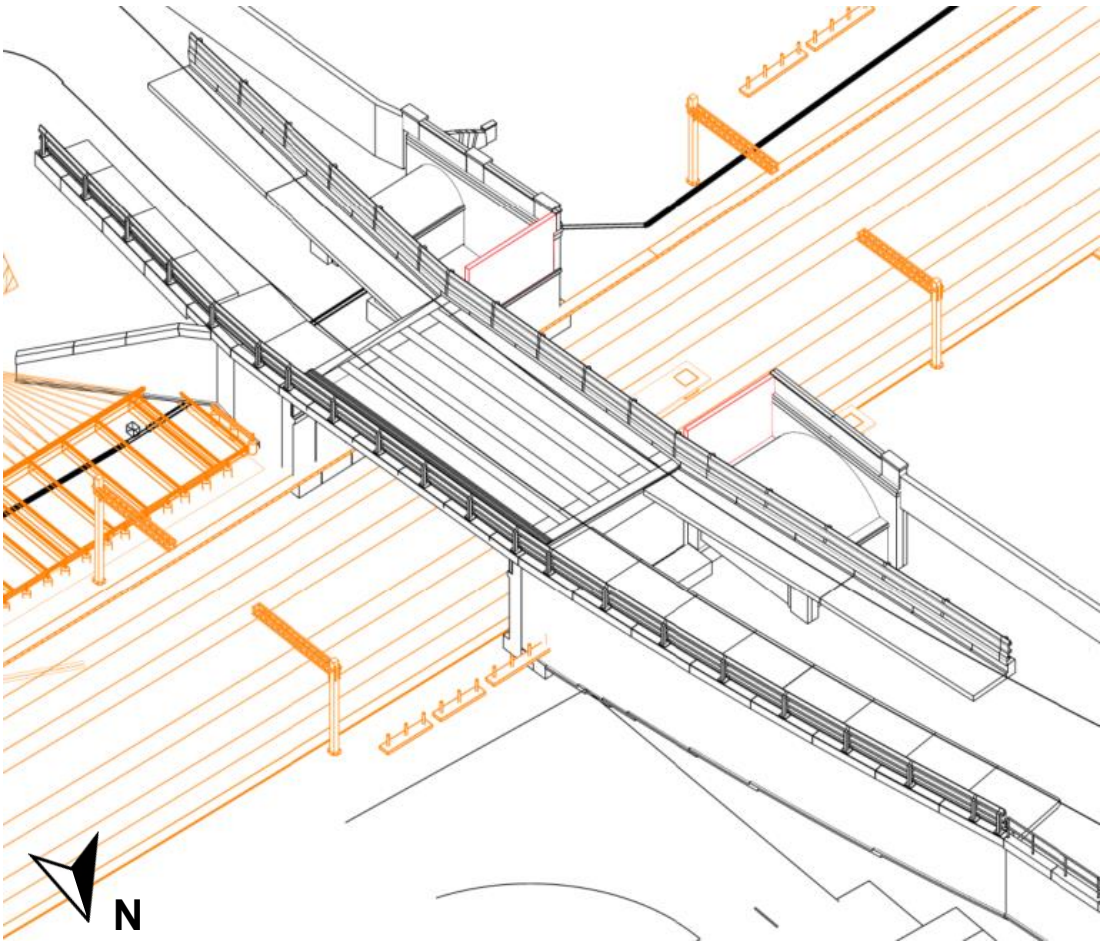
Insert 4-6 - Construction sequence drawing showing proposed west parapet and ground beams (red) and the existing highway surfacing to be removed (green).

4.4.14 Spans 2 and 3 of the existing bridge will then be demolished according to the methodology outlined above in Section 4.3.

4.4.15 Following the demolition works, the retained spans will be made good. Masonry blocks salvaged from the demolished spans will be built up from the impost of the retained piers and will be coursed to align with the voussoirs of the retained arches. The alignment of the saw cut (as described in paragraph 4.3.19) will enable the mason to achieve a satisfactory finish by redressing the stone and piecing in reclaimed stone as required. Once these masonry elements have been built to a sufficient height, precast concrete retaining L wall panels will be lifted on top of the retained sections of abutments (see below, Insert 4-7).

4.4.16 The L wall panels will be clad with stone slips off-site to ensure a sympathetic finish is achieved. The proposed L wall panels have substantial benefits for the health and safety of operatives working in the railway corridor. The panels will minimise the duration of work required under possession of the railway undertaken at height and in the dark, instead the maximisation of off-site fabrication increases the safety and efficiency of this element of the works while achieving a finish sympathetic to the significance of the structure. The proposed retaining wall will perform the structural function of retaining the new bridge fill, while also providing sufficient edge protection at the ends of the retained spans. At the junction between the new masonry clad retaining walls and the retained parapets, a smaller L wall panel will be cast *in-situ* with cladding installed on site in order to allow it to be tied in to the existing masonry parapet. Coping stones that match those present on the existing parapet will finish the proposed return walls.

4.4.17 The final stage of works will see OLE affixed to the underside of the new deck in accordance with the required standards for clearance and safety.



Insert 4-7 - Construction sequence drawing showing final layout (including masonry clad concrete parapet return walls (red) and OLE and track (orange)[11].

4.5 (d) Repairs, Vegetation Removal etc.

4.5.1 No other repairs have been identified as being required to Colne Bridge Road Overbridge (MVL3/107), prior to the demolition works and construction of the replacement bridge.

4.5.2 Section 5 outlines the approach to the future regime for inspections which will form the basis on an ongoing maintenance plan. Should repairs be needed in the future, repairs will be undertaken with a matching material and be undertaken following best conservation practice to maintain the special interest of Colne Bridge Overbridge (MVL3/107).

4.5.3 Similarly, there is no vegetation growth identified which is causing harm to the structure requiring removal.

4.6 (e) The identification of historic fabric which once removed may be reused or preserved, and a strategy for their storage or reuse

4.6.1 Operatives will seek to ensure masonry from the demolished elements of Colne Bridge Road Overbridge (MVL3/107) can be reused either as facing for the infilled spans or for use elsewhere on the scheme. The masonry parapets will be demolished using a selector grab

[11] Note that the proposed surfacing of the highway and retained spans has been omitted to provide clarity of the structural elements.

by excavators with operatives seeking to ensure the stone is removed in a condition conducive to its reuse. The stone from the demolished spans will be removed from the track protection via articulated dump trucks (ATDs) and stockpiled at the appropriate construction compound. A specialist stone masonry contractor will then assess the salvaged masonry for its viability for reuse.

4.6.2 Consideration was given to the possibility of numbering individual stones to assist with aligning stones more easily in their rebuilt positions, potentially reducing the amount of resizing required (and subsequent loss of historic fabric). However, the stringent time constraints of undertaking works in the railway corridor to minimise disruption to rail users make this approach unfeasible. Instead, those selected units capable for reuse to clad the infilled arches will be redressed by the mason as required and sized and finished to clad the foamed concrete as outlined above in section 4.4.8. Reclaimed stone will also be used, where reasonably practicable, to make good the retained piers and spandrels following the demolition of spans 2 and 3. Stone considered by the mason not suitable for reuse will be processed in accordance with the Waste Hierarchy. The waste hierarchy sets out the options in order of preference (namely prevention, preparing for re-use, recycling, other recovery and disposal as set out in the Waste (England and Wales) Regulations 2011. Every effort will be made to achieve the highest options that are reasonably practicable and compliant with the law.

4.7 Improvements to the setting to sustain, enhance and better reveal the significance of the heritage assets affected

Heritage Interpretation material

4.7.1 The Environmental Statement (ES) submitted with the TWAO application recommended that appropriate mitigation should include the provision of temporary information panels or hoardings during the construction period which will depict the historic development of the heritage assets within their local and wider context.

4.7.2 This methodology is concerned with discharging Condition 3 in respect of:

iv) provision of heritage interpretation boards during construction works.

4.7.3 The wording of this CIMP condition was agreed via the Public Inquiry process regarding the Listed Building Consents and TWAO, with input from Kirklees Council and the Planning Inspector. Interpretation was included in the CIMP condition as a recognised way to capture the methodological approach to securing heritage interpretation for the scheme as a mitigation and compensation measure. This section of the CIMP responds to the condition wording and this intended purpose.

4.7.4 The heritage interpretation to be produced and installed will provide the opportunity for members of the public to engage with the heritage of the Trans-Pennine railway, better revealing the significance of Colne Bridge Road Overbridge (MVL3/107).

4.7.5 The approach to meeting Condition 3 item iv is outlined in this methodology which covers:

- Part 1: Concept design
- Part 2: Research and content creation
- Part 3: Construction and implementation

Concept Design

4.7.6 At the concept design stage, a team of graphic designers worked on creating three concepts with different approaches as summarised below:

- Concept 1: Traditional Portrait Panel Layout - this concept makes use of informative bold key messaging with a playful typography which grabs attention and creates a memorable impression. Duotone photography in company branding is paired with spot illustrations to create a cohesive and engaging visual style.
- Concept 2: Modular Layout – this concept makes use of a playful annotation style applied over a traditional layout to create a concept with a dual personality which can appeal to different demographics. The complimentary palette is used to highlight key information and pairs with the annotated assets, which range from key messaging to photography and illustrations.
- Concept 3: Dynamic Layout – this concept differs from the standard panelled approach and allows for content to flow smoothly between sections. The concept includes large scale illustrations which are embedded with key messaging and information on a stone colour background to align with the surroundings, as well as allowing space for community engagement.

4.7.7 The concepts were further developed with discussions largely focused on social value and how that might be prioritised in the final design. The interpretation had to appeal to different communities and to a wide range of people, including residents, travellers, visitors, young people and the construction / work teams undertaking the TRU scheme. These concepts were thus developed with consideration of the above discussions and the need to comply with Network Rail brand guidelines and design standards.

4.7.8 Concept 2 was chosen as the agreed concept. This was due to the modular design which would enable ease of content and messaging; and the ability to section out more historical interpretative facts and information alongside sharing the TRU Programme concept and the ultimate benefits to the public from the new scheme. The concept design is aimed at meeting the social value principles of: identity, inclusion and wellbeing.

4.7.9 The Concept 2 design is shown in Insert 4-8 below:

Insert 4-8 - Chosen Concept 2 design for temporary heritage interpretation

4.7.10 The font and colour palette, whilst relating to the TRU Programme branding, is also designed to appeal to a wide spectrum of people and be user-friendly. It is styled to encourage engagement and discussion about the content. The design takes account of dual messaging with content aimed to accommodate different needs and perspectives. For instance, the content will be sectioned across panels and hoarding at different heights and with varying depth of detail. This is to purposefully aim particular content at:

- Children – Bolt and the late Felix the Huddersfield Station cats will provide a fun way to discover facts about the history of the railway,
- Users of the canal towpath – will have the opportunity to gain an insight into the works and history of the site,
- Residents / local people - who want to know more detailed information about the history of their local railway assets.

4.7.11 The benefits of this interpretive approach are:

- Increased engagement with local history and local stories.
- Increased sense of identity and community understanding of their past
- Greater perspective and appreciation of places and spaces within which people live and work.

Research and content creation

4.7.12 In order to produce the content for the Colne Bridge Road Overbridge (MVL3/107) temporary heritage interpretation boards, a variety of documents were consulted. These include but are not limited to:

- TransPennine Route Statement of History and Significance: West of Leeds (Baxter, March 2017);
- TransPennine Route Upgrade Route-wide Statement of Significance (Baxter, August 2019); and
- The Network Rail (Huddersfield to Westtown (Dewsbury) Improvements) Order: B6118 Bridge Road Overbridge (MVL3/107) – Heritage Assessment (Atkins, March 2021).

4.7.13 Key information was drawn out of these documents in order to produce a summary which sought to effectively communicate the historical significance of Colne Bridge Road Overbridge. This included:

- General scheme information and messaging;
- A history of the railway;
- A timeline on the coming of the railway;
- Information about engineer A. S. Jee;
- A history of Colne Bridge Road Overbridge (MVL3/107); and
- Information about relationship to other underbridges on the route.

4.7.14 This information was then condensed in order to provide an effective amount of text and content on the interpretation board. It was essential to achieve an appropriate balance between providing enough information and not over-burdening with text. It had to blend historical content and the importance of the Grade II Listed asset with messaging on the needs for the scheme and the benefits it would bring.

4.7.15 Each of the interpretative elements will feature general key messages about the works and the wider TRU scheme. In addition, there will be some historical background about the coming of the railway in Huddersfield and the significance of the railway assets. Each board or hoarding will then have specific information about the correlating location. This will consist of historic background, a summary of significance, information about the works being implemented and what is being done in order to protect the heritage assets during these works.

Construction and Implementation

4.7.16 The interpretative elements will not be fixed to historic fabric. Due to the location of Colne Bridge Road Overbridge (MVL3/107), it is anticipated that the A0 interpretation board will be installed on the Huddersfield Broad Canal towpath from which Colne Bridge Road Overbridge (MVL3/107) is visible. It is anticipated that the panel will be fixed to a wall facing the canal which is situated within a land plot which will be temporarily acquired under the possession powers afforded Network Rail via the TWA Order.

4.7.17 Further details will be shared once the location, sizing and materials for the interpretation

elements have been agreed.

4.8 Toolbox Talks

4.8.1 Toolbox Talks were identified as a required mitigation measure which would be applied in relation to the historic environment in the ES for the Scheme[12]. Toolbox Talks aim to disseminate best practice guidance to the construction staff working on the Scheme, identifying the sensitivities of the historic environment with the objective of reducing impact on the historic environment as a result of construction of the Scheme.

4.8.2 The Toolbox Talks will outline the sensitivities of Colne Bridge Road Overbridge (MVL3/107) and its environs, as well as the measures to be taken throughout the relevant construction sites to preserve the significance of the bridge, its setting, and the contribution the bridge makes to the setting of other heritage assets. The Toolbox Talks aim to address such best practice throughout the construction phase. The Toolbox Talk material for Colne Bridge Road Overbridge (MVL3/107) is included as Appendix C.

4.8.3 Toolbox Talks will be delivered to the TRU construction contractors and teams working at Colne Bridge Road Overbridge (MVL3/107), including specialist sub-contractors. The dissemination of the Toolbox Talks will be secured via the embedding of environmental and consents leads within the TRU Alliance teams co-ordinating on-site works for the Scheme. The Toolbox Talk will be delivered as part of the site induction for all personnel working at the listed structure. A register will be kept of all personnel who have received the information contained within the Toolbox Talk, this record will be kept at the site office and will be available to Kirklees Council for inspection when requested. They will comprise written handout information sheets and/or slide pack presentations, as appropriate.

4.8.4 The Toolbox Talks material for Colne Bridge Road Overbridge (MVL3/107) will include reference to:

- Extent of the granted Listed Building Consent and requirement to adhere to consented documentation, including relevant conditions attached
- Relevant historic environment legislation and policy
- Procedure for obtaining Listed Building Consent for any works outside of the granted Consent
- Agreed methodologies and processes, including details of agreed working practices
- Areas of particular heritage sensitivity at Colne Bridge Road Overbridge (MVL3/107) and within its setting
- Best practice guidance on avoiding accidental damage to heritage assets and minimising temporary settings impacts from construction activity
- Reporting requirements for contacting Environmental, Consents and Heritage staff, both within the TRU project and Kirklees Council, in respect of any unforeseen circumstances

4.8.5 The material of all historic environment-related Toolbox Talks on the Scheme will continue to be reviewed and revised, as necessary, throughout the duration of the construction phase of the Scheme.

[12] Network Rail, 2020. *Network Rail (Huddersfield to Westtown (Dewsbury) Improvements) Order application Environmental Statement, Volume 2i – Scheme-wide Assessment, Chapter 6 – Historic environment.*

5. MAINTENANCE AND MANAGEMENT SCHEDULES TO PROTECT THE LONG-TERM CONDITION OF THE HERITAGE ASSETS AFFECTED

5.1 Asset Management

5.1.1 Network Rail is among the largest land and property owners in the UK, owning and managing a unique estate of railway infrastructure which is widely acknowledged as being of international significance. This estate includes circa 30,000 bridges, tunnels and viaducts to be maintained, with circa 1450 Listed Buildings forming part of this number. Many of these assets continue to form part of the active network subject to ongoing heavy physical wear and tear. This context prompts the two main drivers of current Network Rail maintenance policy namely: the safe management of railway structures and the long-term care and maintenance of the asset. A planned programme of routine inspection is key to satisfying both of these drivers.

5.1.2 Structures within Network Rail's estate are subject to two types of inspection. These aim to ensure that inspection of structures are both appropriately regular and detailed, in order to maintain and protect the structures' long-term condition. The two types of inspection comprise:

- Visual examinations – these are undertaken on an annual basis from ground level to check for changes to tracked defects and to identify any new areas of concern; and
- Detailed surveys – these are where every structural element is examined, photographed and its condition recorded, and are undertaken at a frequency based on the assessed risk at each specific structure.

5.1.3 Some structures with non-critical defects also require additional examination to monitor their condition until they are repaired.

Colne Bridge Road Overbridge (MVL3/107)

5.1.4 As stated in paragraph 5.1.2 the assessed risk at each structure dictates the frequency of detailed examination. Detailed examination at Colne Bridge Road Overbridge (MVL3/107) currently takes place every 12 years. There is the potential for this examination interval to change where the risk factors are considered to have increased or decreased. This decision will be made by a suitably qualified individual following the completion of the works.

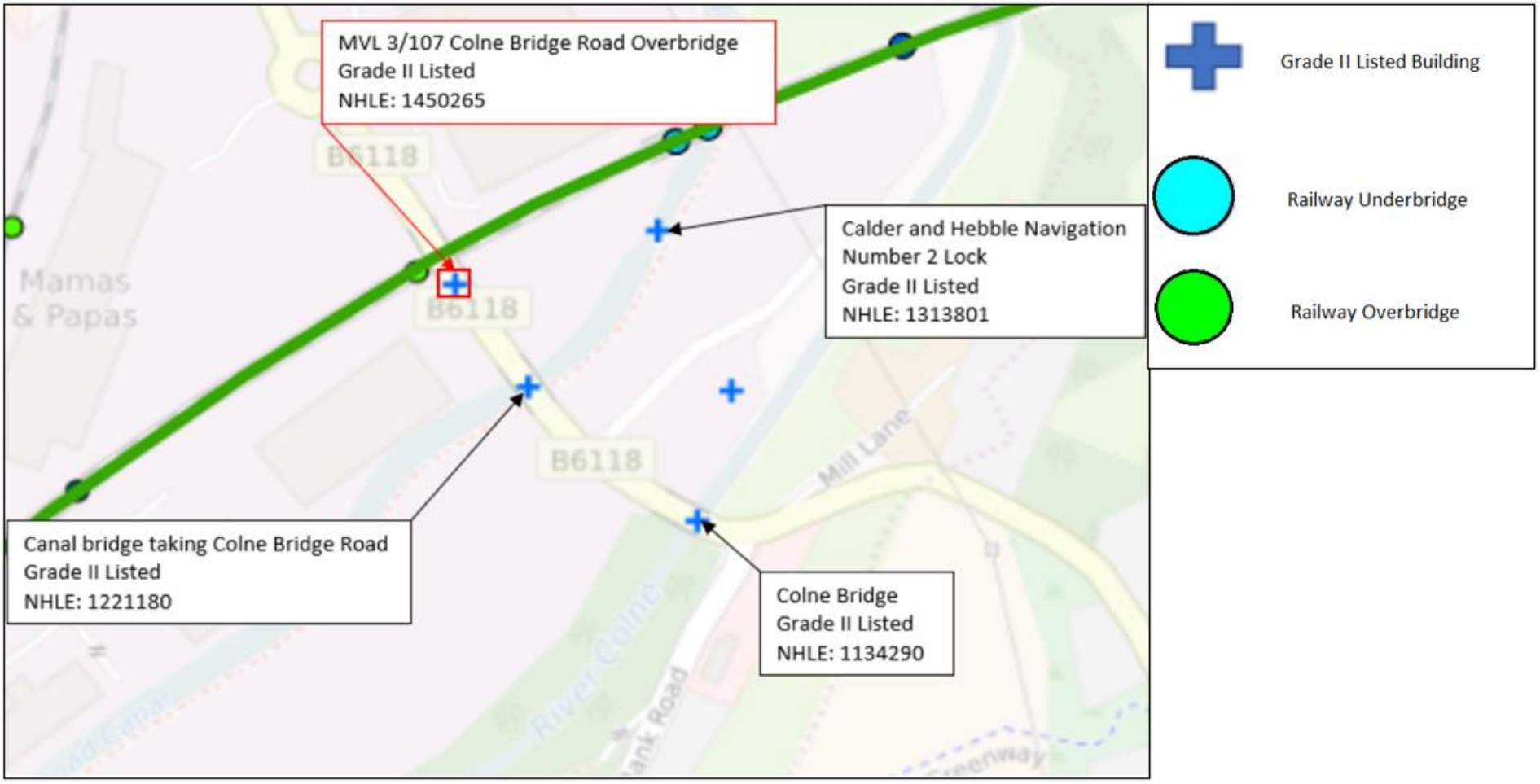
6. IMPLEMENTATION OF THE CIMP

6.1 Implementation

6.1.1 On approval of this document by the relevant local planning authority it will be implemented as approved for the works undertaken as agreed by the Secretary of State for the Network Rail (Huddersfield to Westtown (Dewsbury) Improvements) Order.

6.1.2 As outlined above, in Section 2, this document comprises the sole submission of the CIMP for Colne Bridge Road Overbridge (MVL3/107). The methodologies included within this CIMP will be implemented in accordance with the detail provided, as approved by Kirklees Council, for the duration of construction works until the submission, approval and partial discharge (as appropriate) of subsequent phases of the CIMP. Any necessity to depart from the methodologies due to unforeseen or emergency circumstances will be discussed and agreed with Kirklees Council (and Historic England, as appropriate) via the TRU Heritage Working Group.

APPENDIX A – LOCATION PLAN



APPENDIX B – AGREED LISTED BUILDING CONSENT CONDITIONS

Colne Bridge Road Overbridge (MVL3/107)- Application Reference 2021/91330

1. (Time Limit) The works must be begun not later than the expiration of five years beginning with the date of this permission.

2. (Historic Structures Recording) No works of demolition shall take place until an approved methodology for full structure recording including the appropriate level of recording has been approved in writing with the local planning authority. Subsequent recording will take place prior to demolition and be deposited with the West Yorkshire Archive Service and West Yorkshire Historic Environment Record in accordance with the timescales agreed in the approved methodology.

3. (Conservation Implementation Management Plan) No works including any works of demolition shall commence until a Conservation Implementation Management Plan (CIMP) has been submitted to and approved in writing by the local planning authority. The approved CIMP will include as a minimum requirement contents based on the model template CIMP structure attached to this list of conditions. The CIMP will specifically include methodologies for:
i) fabric removal, masonry repairs, vegetation removal, repointing, metalwork repairs and application of protective paint systems as appropriate;
ii) the identification of historic elements of the fabric which once removed may be reused or preserved, and a strategy for their storage or reuse where appropriate;
iii) details of any maintenance access regime required (if any);
iv) provision of heritage interpretation boards during construction works; and v) dissemination of "toolbox talks" to personnel involved in demolition and construction works. The works must be carried out in accordance with the approved CIMP unless otherwise agreed in writing with the local planning authority.

4. (Materials) Before the commencement of any works in respect of bridge MVL3/107 samples and specifications of all materials to be used on all external elevations must be submitted to and approved in writing by the local planning authority.

SCHEDULE 4: Approved Plans
151667-TSA-33-MVL3-DRG-T-LP-163400 Rev P02 Existing Plan Sheet (1)
151667-TSA-32-MVL3-DRG-T-LP-163401 Rev P02 Proposed Plan Sheet (2)
151667-TSA-32-MVL3-DRG-T-LP-163402 Rev P01 Existing & Proposed Elevation Sheet (3)
151667-TSA-32-MVL3-DRG-T-LP-163403 Rev P01 Existing & Proposed Elevation Sheet (4)

Proposed Outline Contents of Conservation Implementation Management Plans (CIMPs)

CIMP – proposed contents:	Details:
1. Introduction • (a) Overview • (b) Purpose of the Document • (c) Consultation Process • (d) Other Supporting Information [*TBC dependant on structure*]	Aims to provide succinct introduction to the document, including placing it in the context of ongoing consultation processes (with Kirklees Council and/or Historic England as applicable) The Other Supporting Information section will outline those other documents alongside which the CIMP should be read (e.g. the Design Guide for Huddersfield Station, WSIs for Building Recording etc.)
2. Strategic Overview • Strategic overview of the CIMP in relation to the wider TRU scheme	Inclusion in each CIMP of a strategic overview of the particular works in the wider context of TRU, group value of the asset(s) and the overall Transpennine Route Upgrade *This section has been included in response to a recommendation from Kirklees Council in their Objection (**OBJ/33**)*
3. Understanding the Site • (a) Heritage Context Overview: History of the Transpennine Route • (b) Historic Development of [*Structure*] • (c) Heritage Context: Other Designated Heritage Assets [*TBC dependant on structure*] • (d) Significance of Heritage Assets: [*Structure*] • (e) Significance of Other Designated Heritage Assets [*TBC dependant on structures*]	A succinct overview of the heritage context and significance of the assets affected by the proposed works covered by the particular CIMP. This will draw on pre-existing accepted sources, including the ES, Heritage Assessments, Statements of Significance etc. This aims to provide the context in which the methodologies which follow have been developed. This section will also include opportunity for identification of any associated heritage assets which will also be affected by the proposals, for example consideration of the Huddersfield Town Centre Conservation Area in the CIMPs concerning Huddersfield Station and Huddersfield Viaduct (MVL 3/92)

4. [*Structure*] - Methodologies • Summary • (a) Historic Building Recording and Monitoring before and after the works • (b) Fabric removal • (c) Introduction of new fabric • (d) Repairs, vegetation removal, repointing • (e) The identification of historically or architecturally significant elements of fabric which once removed may be reused or preserved, and a strategy for their storage or reuse [*TBC*] • (f) Any improvements to the setting to sustain, enhance and better reveal the significance of the heritage assets affected • (g) Any improvements to sustain the long-term conservation of the heritage assets affected [*TBC*] *N.B. Those applicable to the asset*	This section will form the bulk of the document and will outline the specific methodologies for the individual elements of work at the heritage assets concerned. These will be supported by appendices where appropriate (e.g. for additional information, supplementary documentation) Where appropriate, this section of the CIMP may be sub-divided according to the Stages of development; this is particularly the case where structures will undergo the proposed works over a longer period of time, such as at Huddersfield Station. Similarly, for those structures such as Huddersfield Station where there are multiple interventions over multiple elements proposed, each methodology sub-section will be divided by area, so for example (a) Historic Building Recording and Monitoring will be split into the relevant methodologies for the principal Roof A, Roofs B and C, the Tea Rooms etc. This section of the CIMP, supported as necessary by the appendices, will provide the details of the approach to the works, and for the different relevant work areas will cover items including, but not limited to: • Definition of the required standard of works and workmanship • Methodologies around storage of any temporarily removed material (for example regarding the Tea Rooms at Huddersfield Station) • Construction methods and adopted techniques • Specification of materials, for example for new elements (such as at Huddersfield Station or Wheatley's Overbridge (MVL 3/103)) • Use of equipment • Details of heritage interpretation
5. Maintenance and management schedules to protect the long-term condition of the heritage	Agree any particular management needs and set out a timetable for regular inspection as part of NR's management of historic assets. As

assets affected	with Section 4 (above) this will be supported by appendices, where relevant and applicable, such as proposed maintenance schedules.
5. Implementation and Review of the CIMP • (a) Implementation • (b) Review	Very succinct identification of how the document will be implemented (once approved) and any elements which will require further review (e.g. building recording etc.) and how the continual engagement and review of works with stakeholders will be planned.
Appendices [*would include*] • Site Plan • Planning and Listed Building Consent conditions • Additional drawings and visualisations • Samples • Maintenance schedules • Specific method statements • Results of any intermediary surveys etc. *N.B. Those applicable to the asset*	Each CIMP would include various appendices to provide supplementary information, for example providing specific method statements around fabric removal, strengthening works or introduction of new elements. Each CIMP would also include as Appendices both the relevant Planning and Listed Building Consent conditions which seek to be fully or partially discharged through the contents of the CIMP

APPENDIX C – TOOLBOX TALK COLNE BRIDGE ROAD OVERBRIDGE (MVL3/107)

The below text comprises the material which will be included in the Toolbox Talk regarding Colne Bridge Road Overbridge (MVL3/107) and the historic environment. Note – the handout and/or presentation to accompany the Toolbox Talk will be accompanied by illustrative pictures to supplement the text below.

Toolbox talk – Colne Bridge Road Overbridge (MVL3/107)

Listed Buildings
Listed Buildings are structures considered of special architectural or historical importance which are protected by legislation. There are around 400,000 Listed Buildings in England. Listed Buildings are classified into three grades:

- Grade I Listed Buildings are of exceptional interest.
- Grade II* Listed Buildings are very important buildings of more than special interest.
- Grade II Listed Buildings are important buildings, warranting every effort to preserve them.

A Listed Building may not be demolished, extended, or altered without special permission from the local planning authority and the relevant central government agency.

Colne Bridge Road Overbridge (MVL3/107) is one of nine sites where Listed Building Consent has been granted as part of section W3 of the Trans-Pennine Route Upgrade. Its partial demolition and construction of a replacement structure will be achieved in a sympathetic manner by retaining elements of historic fabric, retaining the legibility of the arches and considerate choice of material.

What?
Colne Bridge Road Overbridge (MVL3/107) is a Grade II Listed Building built in the 1840s as a double-span overbridge that carried Kirkheaton Bradley Road over the railway. During the 1880s the bridge was extended by LNWR to accommodate four railway tracks and a path. Colne Bridge Road Overbridge (MVL3/107) today accommodates 2 railway tracks. It is significant as a triple-span bridge with a high level of craftsmanship in construction and details.

Listed Building Consent has been approved based on the exact designs and programme of works proposed. This is legally binding and any deviation from the agreed plans without consent could result in serious penalties, including up to two years imprisonment or an unlimited fine.

The approved Listed Building Consent includes various conditions which must be adhered to. These conditions include agreed specifications for materials, methodologies for the works, and requirements for recording, toolbox talks and heritage interpretation.

Works must be undertaken in accordance with the methodologies, specifications and working practices as included in the construction pack.

Why?
Protected heritage: Colne Bridge Road Overbridge (MVL3/107) is a Grade II Listed structure. By working on this project, you will be helping to safeguard elements of this historic overbridge for future generations.

Avoid prosecution: It is illegal to make changes to a Listed Building without prior consent, any breaches can result in criminal prosecution, including up to two years imprisonment and unlimited fines.

Avoid reputational risk: Making changes to a Listed Building that are not approved has the potential to reflect badly on the reputation of TRU and Network Rail. Due to the high-profile nature of the works, it is likely that progress of these works will be of particular interest to stakeholders, special interest groups and the general public.

Do

- Be prepared to find any historical artefacts/features and report them immediately to the site manager.
- Take care when using tools and equipment close to and on Listed Buildings.
- When possible, fence off any heritage assets which are not being worked on.
- Follow the advice of an appointed archaeologist or heritage consultant.
- Contact Environmental, Consents and Heritage staff, both within the TRU project and Kirklees Council, in respect of any unforeseen circumstances.

Don't

- - Make any changes to the Listed Building which were not included in the granted Listed Building Consent.
- Deviate from the documentation approved by Kirklees Council as part of the granted Listed Building Consent application or subsequent condition discharge processes.
- Use equipment, tools or materials which have not been approved in the Listed Building Consent.

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