Infrastructure Projects

Northern Programmes



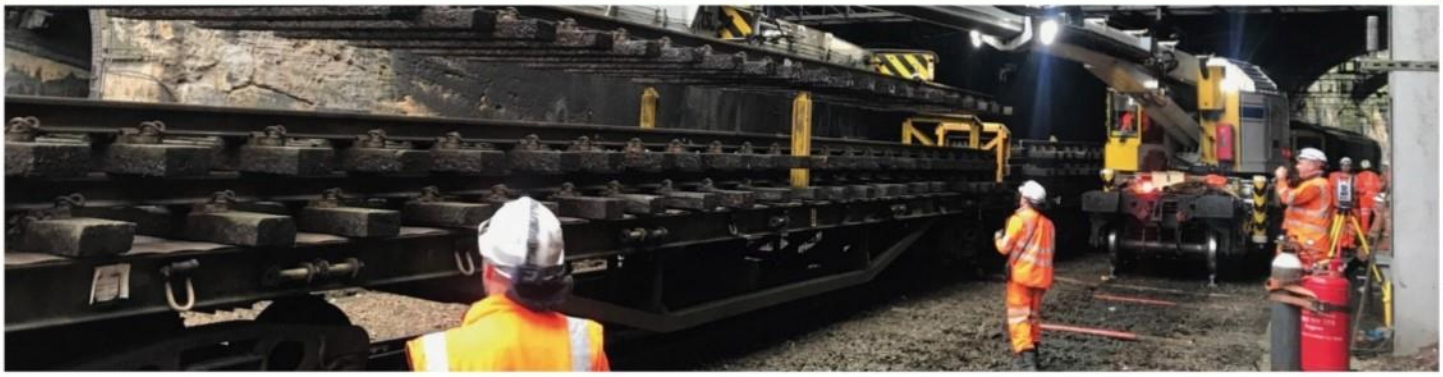


The Network Rail (Huddersfield to Westtown (Dewsbury) Improvements) Order

Huddersfield Station – Conservation Implementation Management Plan: Phase 4

Network Rail

November 2025



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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 (Planning Direction for the Order was received from the Department for Transport, referenced TWA/21/APP/03, dated 13 October 2022). The works granted in the Network Rail (Huddersfield to Westtown (Dewsbury) Improvements) 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 Huddersfield Station was granted on 27 June 2022 (Ref: 2021/91328). A plan showing the location of Huddersfield Station is included in Appendix A.

1.1.4 The consent for the Order Scheme requires the discharge of various conditions attached to the Deemed Planning Permission and Listed Building Consent (refer to Appendix B for the list of agreed Listed Building Consent conditions). Condition 5 attached to the granted Listed Building Consent for the works to Huddersfield Station (Ref: 2021/91328) 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 (CIMP) 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 It was acknowledged by way of the LBC conditions 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.

1.2.3 This CIMP has been produced to satisfy the requirements of Condition 5 of the Listed Building Consent, the wording of which states as follows:

'*No works including any works of demolition shall commence until a Conservation Implementation Management Plan (CIMP) for Huddersfield Station 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. *repairs and strengthening to the existing fabric of the trainshed roof at Huddersfield Station;*

iii. *the deconstruction, storage and reconstruction of the Tea Rooms at Huddersfield Station;*

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

v. *any improvements to the setting to sustain, enhance and better reveal the heritage asset affected;*

vi. *details of the maintenance access regime with particular reference to the roofs;*

vii. *dissemination of "toolbox talks" to personnel involved in demolition and construction works;*

viii. *provision of heritage interpretation boards during construction works;*

ix. *the exact affixing details of overhead line electrification; and*

x. *an overarching design guide covering both Huddersfield Station and Huddersfield Viaduct.*

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

1.2.4 The CIMP outlines the best practice methodologies that are to inform how construction works should proceed based on a full understanding of the heritage asset. However, some of the information needed to advise on methodologies for some works, such as repair and reconstruction, are not available until works have commenced. Therefore, a phased approach to the CIMP utilising a partial discharge of Condition 5 is necessary to create a complete, relevant and high quality CIMP document that informs high quality works appropriate for the Grade I Listed Huddersfield Station. Section 2.2 covers the need for partial discharge in further detail.

1.2.5 Phases 1, 2 and 3 of the CIMP have been submitted to Kirklees Council and approved as part of the partial discharge of the condition with respect to the related construction works to

those CIMP phases.

1.2.6 Phase 1 of the CIMP was submitted in June 2023 and partial discharge approved in July 2023, under application reference 2023/91628. Phase 2 of the CIMP was submitted in October 2023 and approved in February 2024, under application reference 2023/93044. Phase 3 of the CIMP was submitted in April 2025 and approved in July 2025, under application reference 2025/91093.

1.2.7 Further detail about the approved contents of those CIMPs is indicated in Table 2-1 in Section 2 below.

1.3 Consultation Process

1.3.1 Stakeholder liaison in conjunction with consultees is an integral part of this process. The CIMP has been developed alongside engagement with relevant historic environment stakeholders.

1.3.2 Important consultees for this CIMP have comprised:

- Kirklees Council; and
- Historic England.

1.3.3 The above historic environment stakeholders have been engaged on the development of this CIMP document through regular meetings (for example the TRU Kirklees Heritage Working Group), which have included opportunities to review and comment on draft document structures, contents and the presentation of detail on individual methodologies covered in this document.

1.3.4 In relation to this Phase 4 CIMP, the consultation process has included:

- The proposals for strengthening the lateral trusses and drivers' welfare building parapet wall at the northern (Leeds) end of Roof A.
- The decision to not include glazing in the clerestory connection between the spans of the new roof canopies B and C at the western side of Roof A.
- Presentation and discussion of the approach to phasing the CIMP and utilising partial discharge of Condition 5, particularly with respect to the contents and coverage of Phases 4, 5 and 6.
- The proposals for lighting conduits and containment at a high level, for under Roof A.

1.3.5 The engagement with these consultees will continue to be an integral part of the CIMP process throughout the construction of the Scheme at the Station. This will include, as appropriate, specific meetings to present, discuss and review methodologies, products or issues arising during works, as well as site visits if required to discuss matters and view works referenced in the CIMP at the Station.

1.4 Other Supporting Information

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

- specifications of materials and finishes, produced to satisfy Condition 2 attached to the Listed Building Consent;
- the Written Scheme of Investigations (WSIs) for Historic Building Recording, produced to satisfy Condition 3 attached to the Listed Building Consent;

- details of platform furniture, produced to satisfy Condition 4 attached to the Listed Building Consent, to be included in the Design Guide which will be contained in an Appendix to the Phase 2 and Phase 4 CIMPs;
- approved and revised design drawings, submitted with the Listed Building Consent application and/or produced subsequently to provide additional detail, including those related to the Tea Rooms included in the Tea Rooms Deconstruction Methodology document in, Appendix C to this CIMP;
- approved and revised design drawings, submitted with the Listed Building Consent application and/or produced subsequently to provide additional detail, including those related to the refurbishment and strengthening of Roof A, removal of Manchester End bays of Roof A and works to the Penistone Line included in Appendix D to this CIMP;
- the Design Guide in its current iteration as it relates to the works relevant to Phases 2, 3 and 4 of the CIMP, included in Appendix E to this CIMP; and
- detailed methodologies and specifications to support the details outlined in Section 4 of the CIMP, included in appendices as appropriate.

1.4.2 The CIMP should also be read in conjunction with the TWA Order and LBC Application documents including the Heritage Assessment[1] and Environmental Statement (ES)[2] [3].

1.5 Project Role Definitions

1.5.1 For the purpose of this document, the following project roles are defined as such:

- Network Rail are the Promoter of the Scheme
- The contractor refers to the TRU Alliance construction team and/or specialist subcontractors working at the Station
- TRU Heritage Team comprises the heritage specialists within AtkinsRéalis[4], Arup, BAM Nuttall and Network Rail
- The Conservation Team (as referred to in the Tea Rooms Methodology Document, in Appendix C) means conservation specialists within or sub-contracted to the TRU Alliance (for example those working on the deconstruction of the Tea Rooms), heritage team at Arup and specialist contractors at BAM Nuttall
- The Consents Team (as referred to in the Tea Rooms Methodology Document, in Appendix C) means heritage specialists at AtkinsRéalis, on behalf of Network Rail

[1] Network Rail, 2021. *The Network Rail (Huddersfield to Westtown (Dewsbury) Improvements) Order: Wheatley's Overbridge (MVL3/103) Heritage Assessment*.

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

[3] Network Rail, 2020.*Network Rail (Huddersfield to Westtown (Dewsbury) Improvements) Order application Environmental Statement, Volume 2ii: Huddersfield, Chapter 6 – Historic Environment.*

[4] Note, Atkins Ltd. changed their name to AtkinsRéalis in October 2023, subsequent to the submission of the Phase 2 CIMP.

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 5 of the Listed Building Consent for Huddersfield Station (Ref: 2021/91328), 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 Huddersfield Station 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 (particularly related to the roofs); introduction of new fabric; the deconstruction, storage and reassembly of the Tea Rooms; 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 This Phase 4 CIMP has also included details of two minor changes to the consented design: these regard the removal of a section of glazing from the clerestory connection of the new canopies, as well as the strengthening of lateral trusses connecting the northern end of Roof A and the driver's welfare building. This has resulted from further detailed design following the submission and granting of the LBC (Ref: 2021/91328). It was agreed via the regular TRU Heritage Working Group with Kirklees Conservation Team that the details of these minor changes could be covered within this phase of the CIMP for review and approval rather than requiring the submission of a new LBC.

2.1.5 The methodologies and approaches discussed in this CIMP are conversant of the significance of Huddersfield Station and other heritage assets to be affected by the works. The significance of Huddersfield Station is outlined below in Section 3, with further information on its historic context and significance detailed within the Heritage Assessment produced to support the Listed Building Consent application[5] and in the Environmental Statement produced for the Scheme[6] [7].

2.1.6 The heritage significance of the Trans-Pennine Route as a whole, of which Huddersfield Station is a part, has already been analysed and outlined in the Trans-Pennine Route

[5] Network Rail, 2021. *Network Rail (Huddersfield to Westtown (Dewsbury) Improvements) Order Huddersfield Station – Heritage Assessment.*

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

[7] Network Rail, 2020.*Network Rail (Huddersfield to Westtown (Dewsbury) Improvements) Order application Environmental Statement, Volume 2ii: Huddersfield, Chapter 6 – Historic Environment.*

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 Huddersfield Station, 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.

2.1.7 The design development of the proposals at Huddersfield Station was conversant of group value and the elements of the Station that are shared with other similar buildings and structures constructed on the national rail network during the mid-late 19th century. The methodologies detailed within this CIMP have also been developed in the context and understanding of the significance the Station derives from this group value. The group value associated with the Station, and its contribution to the Station's overall significance, is explored in more detail in Section 3.5 below.

2.2 Methodological Approach – Discharge of Condition

Strategy for Partial Discharge

2.2.1 The production of the constituent elements of this CIMP are reliant, in part, on the approval of multiple stages of methodologies and/or on information obtained during different elements of the construction work at Huddersfield Station. Consequently, some elements of the CIMP cannot be completed until other elements have been reviewed and approved. Similarly, some elements cannot be completed until development of the Order Scheme has commenced and certain construction activities are underway. Due to this, the strategy of the production of the CIMP has been shaped accordingly to result in multiple phases of submission, resulting in a phased partial discharge of Condition 5.[9]

2.2.2 The CIMP effectively comprises an iterative 'live' document which is updated consistently prior to, and during, the construction of the Scheme at Huddersfield Station. The CIMP will be formally submitted to Kirklees Council in multiple phases. After each phase of submission, the Council will formally partially discharge elements of the condition, based on the completed content submitted in that particular phase of the CIMP.

2.2.3 It is currently anticipated that the CIMP will be submitted in six phases, with the current timescales for submission outlined as follows, timescales may be subject to change:

- Phase 1 – Submitted for review and partial discharge of elements prior to deconstruction and storage of Tea Rooms (submitted in June 2023, approved in July 2023)
- Phase 2 – Submitted for review and partial discharge of elements prior to works commencing, and covering construction works up to the first blockade at Huddersfield Station in August/September 2025 (submitted in October 2023, approved February 2024)
- Phase 3 – To be submitted for review and partial discharge of elements prior to works to be undertaken during and immediately after the first blockade at Huddersfield Station in August/September 2025, up to the commissioning of the first span of the footbridge in c. March 2026 (submitted in April 2025, approved in July 2025)
- Phase 4 – To be submitted for review and partial discharge of elements prior to works commencing following the commissioning of the first span of the footbridge in c. March 2026, up to the second blockade at Huddersfield Station in 2026 (to be submitted November 2025)

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

[9] For details of approval for phased approach please refer to letter to Kirklees Council dated 22nd May 2023 'Re: Network Rail (Huddersfield to Westtown (Dewsbury) Improvements) Order. Huddersfield Station Listed Building Consent (LBC Ref: 2021/91328): Phased Approach and Partial Discharge'. Further see para 2.1.1 of 'Justification for Phasing of Conservation Implementation Management Plan (CIMP) for Partial Discharge of Condition' of the justification document included as part of the submission pack for Phase 1 of the Huddersfield Station CIMP.

- Phase 5 – To be submitted for review and partial discharge of elements prior to works commencing regarding the reconstruction of the Tea Rooms (to be submitted early 2026.
- Phase 6 – Submitted for review and partial discharge of elements prior to works commencing during the second blockade at Huddersfield Station in late 2026, and to completion of the works (to be submitted mid-2026)

2.2.4 Should the need be identified for the phasing of the CIMP to be amended to realise efficiencies or to facilitate a change in programme, the TRU Heritage Team will engage with Kirklees Council to agree the change of approach. The strategy of phased delivery of the CIMP and subsequent partial discharge of Condition 5 has been agreed with Kirklees Council and Historic England. Engagement is ongoing with the Council and Historic England through the production of the constituent elements of the CIMP, via the TRU Heritage Working Group, including the presentation of draft content for comment between the formal submission of the Phases of the CIMP.

2.2.5 The alignment of the phased delivery of the CIMP to the staged programme of the construction works at Huddersfield Station is outlined in the section below. Similarly, paragraphs 2.2.8 to 2.2.10 and Table 2-2 below detail the current status of the CIMP and discharge of Condition 5 at any Phase of submission.

Alignment with Construction Programme

2.2.6 The phases of submission for the CIMP for Huddersfield Station have been scheduled to align with the key phases of construction work for the Order Scheme at the Station, to ensure that the methodologies relevant to each phase have been reviewed, approved and the condition partially discharged prior to commencement of each respective phase of construction work.

2.2.7 Table 2-1 below outlines the alignment of the construction works with the elements of the CIMP to be submitted for approval and partial discharge of the condition in each phase. Due to the complexity of the works and longevity of the programme, it is possible that there may be some changes to the current proposed phasing. In this instance, the TRU Heritage Team will engage Kirklees Council to agree updated phasing of the CIMP, via the TRU Heritage Working Group, to ensure all relevant elements are discharged prior to the corresponding construction activity commencing.

Table 2-1 Alignment of CIMP phasing with construction works stages at Huddersfield Station.

Phase of CIMP	Construction Works (to be undertaken after Phase of CIMP submitted and agreed / discharged)
Phase 1	Enabling works to ensure conservation of Tea Room prior to Roof works: - Deconstruction of the Tea Rooms - Commencement of storage of Tea Rooms
Phase 2	Works prior to first blockade, including: - Erection of scaffolding under Roof A - Refurbishment and strengthening of Roof A - Removal of Manchester End bays of Roof A - Works to Penistone Line Canopy
Phase 3	Works during and immediately after first blockade, including:

Phase of CIMP	Construction Works (to be undertaken after Phase of CIMP submitted and agreed / discharged)
	- Demolition of signal box / relay room - Demolition of cable gantry - Demolition of Roofs B and C - Piling and foundations for new canopies - Commencement of construction of footbridge - Commencement of works to platforms - Commencement of works to subways
Phase 4	Works following commissioning of first span of the footbridge, up to the start of the second blockade, including: - Completion of footbridge - Works to new Platforms 5 / 6 - Construction of new canopies - Completion of works to subways - Commencement of construction of Roof A Leeds End extension
Phase 5	Works to ensure the conservation, repair and to realise the reconstruction of the Tea Rooms: - Storage, repair and reconditioning of the Tea Rooms - Commencement of reconstruction of Tea Rooms
Phase 6	Works during second blockade and thereafter, including: - Completion of Roof A Leeds End extension - Construction of OLE - Completion of works to platforms - Completion of reconstruction of Tea Rooms

Discharge of Conditions Register

2.2.8 Each phase of the CIMP results in the partial discharge of elements of Condition 5, based on the contents of that interim CIMP document. As outlined above in paragraphs 2.2.1 to 2.2.4, the CIMP should be considered as a 'live' document, which is continually being updated until the final submission of the document.

2.2.9 Each version of the CIMP will be given a unique Phase Number. This version of the CIMP for Huddersfield Station comprises the Phase 4 submission version.

2.2.10 Table 2-2 below provides a summary of progress of the partial discharge of Condition 5, against the different elements of the CIMP. This outlines which elements of the CIMP are included in this Phase of the CIMP for approval (and, where appropriate, partial discharge) (shown in red text in the second column), as well as which have already been approved and discharged, including appendices.

Table 2-2 Register of content and partial discharge of elements of the CIMP.

Element of CIMP	Included in previous or current CIMP Phase No.	Further information included in future CIMP Phase No.	Condition Discharged	
			Application Number	Decision Date
1. Introduction	Phase 1	-	2023/91628	27-07-23
2. Strategic Overview	Phase 1	-	2023/91628	27-07-23
3. Understanding the Site	Phase 1	-	2023/91628	27-07-23
4. Huddersfield Station – Methodologies	Phase 1, 2, 3, 4	Phase 6	2023/91628 2023/93044 2025/91093	27-07-23 01-02-24 09-07-25
4.1. Summary	Phase 1	-	2023/91628	27-07-23
4.2. Station Roofs	Phase 2, 3, 4	Phase 6	2023/93044 2025/91093	01-02-24 09-07-25
(a) Historic Building Recording and Monitoring	Phase 2, 3, 4	Phase 6	2023/93044 2025/91093	01-02-24 09-07-25
(b) Fabric Removal	Phase 2, 3	-	2023/93044 2025/91093	01-02-24 09-07-25
(c) Introduction of New Fabric	Phase 2, 3, 4	Phase 6	2023/93044 2025/91093	01-02-24 09-07-25
(d) Repairs, Vegetation Removal etc.	Phase 2, 4	Phase 6	2023/93044	01-02-24
(e) Identification of historic fabric for reuse or preservation	Phase 2, 4	Phase 6	2023/93044	01-02-24
4.3. Tea Rooms	Phase 1	Phase 5	2023/91628	27-07-23
a) Historic Building Recording and Monitoring	Phase 1	-	2023/91628	27-07-23
(b) (c) (d) Deconstruction, Storage and Reconstruction of the Tea Rooms	Phase 1	Phase 5	2023/91628	27-07-23
(e) Identification of historic fabric for reuse or preservation	Phase 1	Phase 5	2023/91628	27-07-23
4.4. Platforms	Phase 3, 4	Phase 6	2025/91093	09-07-25
(b) (c) Works to Platforms	Phase 3, 4	Phase 6	2025/91093	09-07-25
4.5. Subway	Phase 3, 4	-	2025/91093	09-07-25
(b) (c) Works to Subway	Phase 3, 4	-	2025/91093	09-07-25
4.6. Footbridge	Phase 3, 4	-	2025/91093	09-07-25
(c) Introduction of New Fabric	Phase 3, 4	-	2025/91093	09-07-25
4.7. OLE	-	Phase 6	-	-

Element of CIMP	Included in previous or current CIMP Phase No.	Further information included in future CIMP Phase No.	Condition Discharged	
			Application Number	Decision Date
(c) Introduction of New Fabric	-	Phase 6	-	-
4.8. Relay Room / Signal Box	Phase 3	-	2025/91093	09-07-25
(b) Fabric Removal	Phase 3	-	2025/91093	09-07-25
4.9. Cable Bridge	Phase 3	-	2025/91093	09-07-25
(b) Fabric Removal	Phase 3	-	2025/91093	09-07-25
4.10. Design Guide	Phase 2, 3, 4	Phase 5, 6	2023/93044 2025/91093	01-02-24 09-07-25
4.11. Improvements to the setting	Phase 1, 2, 3	Phase 6	2023/91628 2023/93044 2025/91093	27-07-23 01-02-24 09-07-25
Temporary Heritage Interpretation	Phase 1, 2, 3	-	2023/91628 2023/93044 2025/91093	27-07-23 01-02-24 09-07-25
Other Setting Improvements	-	Phase 6	-	-
4.12. Toolbox Talks	Phase 1	-	2023/91628	27-07-23
5. Maintenance and Management Schedules	-	Phase 6	-	-
6. Implementation and Review	Phase 1, 2	-	2023/91628 2023/93044	27-07-23 01-02-24
Appendix A	Phase 1	-	2023/91628	27-07-23
Appendix B	Phase 1	-	2023/91628	27-07-23
Appendix C	Phase 1	-	2023/91628	27-07-23
Appendix D	Phase 2	-	2023/93044	01-02-24
Appendix E	Phase 2, 3, 4	Phase 5, 6	2023/93044 2025/91093	01-02-24 09-07-25

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. The prime example of this is seen through Huddersfield Station, a magnificent exercise in architectural patronage, which itself influenced the growth and development of the town centre and shaped the character of Huddersfield's architecture. Other stations along the route are more minor examples and have been altered or rebuilt during their lifetime.

3.1.5 Huddersfield Station is located on the section of the Trans-Pennine Route constructed by the Manchester & Huddersfield Railway between 1846 and 1849. With the continued growth of the network and expansion in volume of passenger and freight traffic during the second half of the 19th century, the LNWR embarked on widening the Trans-Pennine Route between Ravensthorpe and Stalybridge during the 1880s and 1890s. A number of the stations and structures along the Route were altered during this period to accommodate the widening of the line. Huddersfield Station also underwent changes during this period as a result of the growth of the use of the railway (see below, paragraphs 3.2.6 to 3.2.8).

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 Huddersfield Station

3.2.1 Huddersfield Station originated as a product of the joint enterprise of two railway companies: the Huddersfield & Manchester Railway (which was amalgamated into the LNWR) and the Lancashire & Yorkshire Railway. The outcome of this unusual agreement allowed the companies to build a railway station of unprecedented scale. The station was jointly owned and operated by the LNWR and the Lancashire & Yorkshire railways from 1849 until they amalgamated in 1922.

3.2.2 The station was designed by architect James Pigott (J. P.) Pritchett (1789-1868), commissioned by Earl Fitzwilliam of Wentworth Woodhouse and built by the firm of Joseph Kaye. A public holiday and celebrations marked the laying of the station's foundation stone on October 9th, 1846. Work on the line was completed on August 2nd, 1847, when the station was partly opened for the commencement of services and arrival of the first train. The station building's central portion was completed in 1848, followed by the outer wings flanking the central building from both sides; the final touch was a clock, placed in the centre of the station's front façade in 1850.

3.2.3 It is likely that Pritchett was influenced in his design by the country house style of Wentworth Woodhouse as well as the work of John Carr at Harewood House, Colen Campbell's Wanstead House, and of James Wyatt's work, which included Castle Coole in Enniskillen.

3.2.4 Huddersfield Station was considered by many to have one of the finest station facades in Britain. The main station building was two storeys tall and 416 ft. long, with eight Corinthian columns 68 ft. high in the central portico, flanked by single storey colonnades ending in small matching pavilions. The central building was intended to be a hotel and the pavilions the ticket offices for the two companies. However, according to Pritchett's plans on completion, the main building contained elaborate refreshment rooms, which functioned until at least 1883, arranged on either side of a central passage connecting with the long single platform beyond. The outer wings at either end did, however, house duplicate booking offices, uniformly divided waiting rooms, parcels offices and staff accommodation for both companies (see below). The station had a single platform until the enlargement that took place during the 1880s, with scissors crossings and turn-tables facilitating train movement from the through line into the platform or parallel carriage sidings from either direction. A simple composite pitched iron roof originally covered the station's single platform, sitting on a row of columns on the far side of the tracks, with a further colonnade on the edge of the platform.

3.2.5 The relationship between the Lancashire & Yorkshire Railway and the LNWR at Huddersfield continued following completion of construction, with the operation of the station shared between the two railway companies, each company also having their own individual goods warehouses. As noted above, each company had a separate booking office, each occupying one of the lodges at the end of each wing of the station building: the Lancashire & Yorkshire Railway Company occupied the western end, while the LNWR occupied the eastern end. The crests of the Lancashire & Yorkshire Railway and the Huddersfield & Manchester Railway Company adorned their respective office, and these features still survive today. The station remained under joint operation until the merging of the two railways into the London Midland & Scottish Railway (LMS) in 1922.

3.2.6 By the 1860s, the state of the public accommodation had become the subject of many complaints. Station facilities became less fit for purpose with the increase in usage and the limited capacity of the single platform proved a considerable issue, with a number of serious

accidents known to have taken place. The issues were only exacerbated by the prospect of the Midland Railway's proposals to construct an alternative route into West Yorkshire, which would involve additional trains serving the station. By 1870, public pressure had reached a high and an inquiry was held into matters at the station, whilst the arrival of bigger locomotives and longer carriages had made the old track obsolete and it became necessary to enlarge the station platforms. In 1881, alongside the LNWR doubling of the lines through Huddersfield (see above, paragraph 3.1.5), the decision was taken to extend the station by the addition of an island platform, providing a subway link to the new platform and erecting a large roof to cover both the old and the new platforms.

3.2.7 By 1886, the station enlargement was completed, and the station had three through platforms and five bays for local and terminating services. The accommodation in the main building was rearranged so that the booking offices occupied the central portion, and a large dining and refreshment room took the place of some of the offices and rooms in one of the wings. Waiting rooms were built on the new island platform, comprising what is today known as the Tea Rooms. These were of timber-boarded construction and formed part of the overall movement to improve the facilities for station passengers, provided four separate waiting rooms, as well as toilets to service the two Ladies Waiting Rooms. The subway was built to provide access to the added platforms and platform buildings, with steps down to the subway between platforms 4 and 8 and in the principal station building; the former stairs were widened and moved slightly west in 1898.

3.2.8 The 1886 station enlargement allowed for a new wider roof, that covered the extended platforms, to be built. The new platforms were given an overall pitched roof, consisting of two spans, the wider of which being 77 ft. 6 in, originally with a lantern along the top of both pitches. The roof represents an example of the iron-trussed pitched roof train shed, an approach which had been pioneered by the London & Birmingham Railway at Euston in 1837 and is consequently referred to as the 'Euston Roof'. The approach was common to a number of stations during the 19th century, particularly those of the LNWR, though the scale and survival of Huddersfield's example is especially notable. On August 10th, 1885, a collapse occurred during the construction of the station roof, killing four men and injuring several others. A number of defects in the roof design were found, mostly around insufficient structural stability to withstand loading from high winds. The roof was reconstructed with improved structural design by Joseph Butler & Co. of the Stanningley Ironworks. The roof was finally completed in 1886. Smaller canopies were also installed over platforms 2 and 3.

3.2.9 Huddersfield Station has been subject to a number of changes and alterations between the 1890s and the early 21st century. These have resulted in the alteration of elements of the station, although it should be noted that the majority of the major elements of the station are largely unchanged from its expansion in the 1880s. It remains an impressive and iconic landmark that continues to serve 21st century train passengers, retaining its primary purpose as a transport hub for people to navigate across the Pennine landscape.

3.2.10 The history and significance of Huddersfield Station is further discussed in the *Huddersfield Station Statement of Significance* (Atkins, 2018), submitted as a supporting document to the Listed Building Consent application.

3.3 Heritage Context: Other Designated Heritage Assets

Huddersfield Town Centre Conservation Area

3.3.1 Huddersfield Station and the surrounding area, including the extent of the historic goods yard, are located within the Huddersfield Town Centre Conservation Area. Comprising the majority of Huddersfield's historic core, the Conservation Area is bordered by the Ring Road in its northern half, extending from the station, St George's Square and the western end of Huddersfield Viaduct, down to New Street and Queen Street at its the south end.

3.3.2 The Conservation Area contains numerous listed buildings, largely of commercial character and dating to the late 18th and 19th centuries, very much defining the townscape of central Huddersfield. The survival of such buildings and integrity of historic townscape character within the Conservation Area evidences the expansion of the town during the late Georgian and Victorian period, contributing to its significance. A large number of the buildings within the area continue to be used, though modern shop fronts and alterations have degraded their appearance in some areas. However, the Conservation Area largely retains its historic character. The edges of the Conservation Area are defined partly by later development, particularly to the south, such as the Ring Road, Huddersfield Bus Station and the Kirklees Council offices. Though the Ring Road has severed the centre of the town from those other areas of historic expansion to the west, there are still visual and non-visual connections which evidence the wider spread of the town's development and form part of the Town Centre Conservation Area's setting.

Grade II Listed Warehouses and Accumulator Tower

3.3.3 The historic extent of the Huddersfield Station goods yard and sidings contain four other Listed Buildings. These comprise:

- The Stone Warehouse (Grade II Listed, NHLE 1287149), today known as "Brian Jackson House", located to the south-west of the island platform;
- The Large Brick Warehouse (Grade II Listed, NHLE 1228533), located to the west of the island platform;
- The Accumulator Tower (Grade II Listed, NHLE 1289593), located in the north-west corner of the historic goods yard; and
- The railings to the station yard (Grade II Listed, NHLE 1232086), located to the north east of the principal station building, between the station building and The George Hotel.

3.3.4 Dating from the expansion of Huddersfield Station in the 1870s-1880s, the warehouses and accumulator tower were constructed as an integral part of the station complex, providing vital infrastructure for its successful and smooth operation. The Brick Warehouse (Grade II Listed, NHLE 1228533) is a substantial five-storey red brick structure, ornamented with blue and yellow brick dressings, and fenestrated with industrial windows. The warehouse includes loading bay two bays wide projecting over the railway lines and resting on two massive iron columns. Located to the south of this, the Stone Warehouse (Grade II Listed, NHLE 1287149) is of more modest scale and footprint. Constructed of hammer-dressed stone with industrial windows, the warehouse includes large semi-circular lunette windows in its gable ends. Located to the east of the goods yard, the Accumulator Tower (NHLE 1289593) is formed by a tall main shed and tower with pyramidal roof to its north, constructed in red brick with blue and yellow dressings. The tower forms a notable feature on Fitzwilliam Street, enhanced by its classical treatment and well-proportioned pyramidal roof.

3.3.5 Another part of the station complex are the railings defining station yard, located to the northeast of the station (Grade II Listed, NHLE 1232086). Erected contemporarily with the station building, these are elaborate cast iron railings mounted on a stone plinth

St George's Square

3.3.6 St George's Square, to the east of the principal station building contains a further nine Listed Buildings, which all either face onto the Square towards the station or overlook the station from adjoining streets. These comprise:

- The George Hotel (Grade II* Listed, NHLE 1277386);
- Lion Buildings (Grade II* Listed, NHLE 1134167);

- Britannia Buildings (Grade II* Listed, NHLE 1232119);
- 7 St George's Square (Grade II* Listed, NHLE 1231781);
- 13-21 Railway Street (Grade II Listed, NHLE 1277428);
- 1-11 Railway Street (Grade II Listed, NHLE 1231474);
- 8 and 10 Railway Street (Grade II* Listed, NHLE 1231473);
- 12-20 St George's Square (Grade II* Listed, NHLE 1232139); and
- 1 and 3 St George's Street (Grade II Listed, NHLE 1231782).

3.3.7 Together with Huddersfield Station, these Listed Buildings create an imposing formal space in front of the station building. With the exception of Numbers 1-11 Railway Street (Grade II Listed, NHLE 1231474), all date from the early 1850s, and early years of Huddersfield's redevelopment under the Ramsden estate which established its character as a fine Victorian town. Although of individual design and construction, the Listed Buildings surrounding St George's Square are unified by their use of ashlar construction, considered scale and massing, and their architectural quality. With the exception of Numbers 1-11 Railway Street (Grade II Listed, NHLE 1231474), all are designed in the Neo-Classical style, reflecting the imposing classicism of the station building, although varied in individual treatment.

3.3.8 Flanking the south end of St George's Square, the George Hotel (Grade II* Listed, NHLE 1277386) and Britannia Buildings (Grade II* Listed, NHLE 1232119) are elaborate Neo-Classical buildings designed by Wallen and Child and Sir William Tite respectively. The buildings are richly ornamented with finely moulded cornices, pediments, sill bands, and window architraves, and provide an imposing gateway into St George's Square and flanking views towards the principal façade of the station. Opposing the Station is the more understated structure of the Lion Buildings (Grade II* Listed, NHLE 1134167), its architectural emphasis being focussed on a central three-bay pavilion articulated by coupled columns and balustrade at roof level, with open pediment and lion statue over the central bay.

3.3.9 Numbers 12-20 St George's Square (Grade II* Listed, NHLE 1232139), 8-10 Railway Street (Grade II* Listed, NHLE 1231473) and 1 and 3 St George's Street (Grade II Listed, NHLE 1231782) employ many characteristic Neo-classical features, executed in exceptionally fine workmanship, with an elaborately rusticated ground floor, below upper floors articulated with sash windows set within pedimented and corniced architraves, with moulded sill bands, and a deep modillion cornice over. The neoclassicism of 7 St George's Square (Grade II* Listed, NHLE 1231781) and 13-21 Railway Street (Grade II Listed, NHLE 1277428) is more restrained, with simple banded rustication and ionic columns to the ground floor, and a moulded eaves cornice.

3.3.10 In contrast to the classicism of other buildings around St George's Square, Numbers 1 -11 Railway Street (Grade II Listed, NHLE 1231474), is designed in the gothic style. Designed by W. H. Crossland as the Ramsden Estate office, this building dates from 1871-2, and is formed by a four storey ashlar building, replete with arched doorways, heraldic shields over the ground floor, closely set windows with marble colonnettes to the upper floors, and a pierced parapet to the roof with decorative corbelled turrets above the northernmost bays.

3.4 Heritage Context: non-designated assets

3.4.1 The ES (Chapter 6 in Volume 2i and 2ii) produced for the Scheme has identified eight non-designated heritage assets located in proximity to Huddersfield Station. These comprise:

- The historic extent of Huddersfield Station goods yard (HER 6525), located immediately west of the station;
- The railway station water tower (HER 10539), located approximately 50m north-east of the principal station building;
- Westgate Overbridge (MVL3/90), located approximately 25m south of the station;
- The site of Brick Mill, located immediately east of John William Street bridge (Span 1) of Huddersfield Viaduct;
- The former sites of two tenterfields;
- The former site of a Methodist Chapel located on the route of the Huddersfield Ring Road; and
- The former site of a shed associated with the local textile industry, now demolished.

3.4.2 Two of the above assets relate to the historic infrastructure at Huddersfield Station: the extent of the historic goods yard (HER 6525) and the former railway station water tower (HER 10539). The historic goods yard today contains some stabling sidings for the station, as well as an area of car parking and a number of buildings, while also being closely associated with the Listed warehouses and accumulator tower (see above, paragraph 3.3.4). The former water tower is today used as offices, having been converted in c. 2012. Located to the west of the Station, Westgate Overbridge (MVL3/90) comprises an overbridge dating from the 1950s which carries Westgate over the railway lines.

3.5 Significance of Heritage Assets: Huddersfield Station

Overall significance

3.5.1 Huddersfield Station is a significant piece of architecture and engineering, reflecting the historic importance of the Trans-Pennine rail line; the exceptional interest of the Station, as reflected in its Grade I listing, is evident, with key elements contributing to this overall significance. The station as a whole derives its significance largely from its historical and evidential value as an element of the line which has undergone only limited change, evidencing the historic railway architecture, engineering and operations, and its communal value grounded in its role in shaping Huddersfield's townscape and as a focal point for the civic life of the town, a role it continues to play to this day. Built in the Heroic Age (1841 – 50) of railway building mania, Huddersfield Station stands today as a testament to this period of railway expansion and growth.

Principal station building

3.5.2 The main Station building is the principal reason for its Grade I listed status. Designed in the Classical style, the façade of the main station has remained relatively unaltered and has stood for over 160 years, and despite several expansion programmes and modern enhancements at the station, indicates the importance attached to the principal station building. The first passengers travelling in 1850 would be familiar with the Station façade as it exists today. This clearly demonstrates both the station's historical, as well as aesthetic, value. The historical and evidential value of the principal station building are further demonstrated through its design concept and understanding the architectural influences from the northern country house style. The monumentality, proportionality, symmetry and order of the Station's architectural style not only celebrated the arrival of the railway into Huddersfield but also reflected the grand architectural expressions of the country houses of the North: making it appeal to local residents as both new and familiar at the same time.

3.5.3 The façade of Huddersfield Station forms the principal backdrop to the northern side of St George's Square, and here too the relationship and scale of the building evidences the station's historical value. The Square was planned after the erection of the station building

and probably completed by the mid to late 1850s.The buildings around St George's Square compliment the Station's Classical architectural style and this urban planning is still evident today. The close relationship between station and town has been retained and is very much visible in the connectivity of space and architectural character. The principal façade of Huddersfield Station looks out across St George's Square and the complementarity in scale and spatial proportions between town and station is clearly evident, revealing a strong aesthetic value through the conscious design philosophy that has been largely retained.

3.5.4 The historical and evidential value of the principal station building is also derived from the legibility of the joint station operation which defined Huddersfield's identity during the 19th century. The illustrative bosses of the railway company logos can still be seen above each wing portico, evidencing this relationship and the historic importance of the station's status. The station's design reflects the business enterprise and investment that was occurring during the Heroic Age (1841-50) of the mid-19th century, as railway companies sought to develop profitable and new routes and stations as travelling by train became increasingly popular. Though the end of the joint operation of the station in 1922 resulted in some internal re-configuration of the building, the façade retained its symmetrical dimensions and the station's historic operation is still legible. This planned investment and building of the station provides a substantial contribution to its historical and evidential value.

3.5.5 There is also a considerable contribution made to the significance of the Station from communal value. Over the years and to the present day, St. George's Square has been used as a space for communal gatherings, celebrations, political mass meetings, festivals and public art almost serving the purpose of a civic or town square with Huddersfield Station holding a prominent position on the north west side. These events form part of collective memories with numerous photographs, videos and news streams documenting the events with Huddersfield Station as a prominent landmark in these. This connection communicates an image of Huddersfield town as closely associated with the station, solidifying its presence in people's individual and collective memories.

Trainshed roofs

3.5.6 Huddersfield Station roof is a very rare survival and example of how train sheds were being designed and erected in the second half of the 19th century. Its engineering design and use of wrought iron to create an expansive structure is a remarkable achievement and of architectural interest. The significance of the train shed is demonstrated in both historical and evidential values; which provides a visual reference to the process of original design, construction and later alteration. The rarity of the 'Euston Roofs' throughout the UK rail network means that the survival of the train shed at Huddersfield Station makes an important contribution to its significance through historical value. The train shed's association with Joseph Butler and Company's Stanningley Ironworks, a well-respected firm that held a national reputation for the quality of their work, also gives it historical value which contributes to its significance.

3.5.7 The trainshed roofs also demonstrate the station's evidential value. The 'Euston Roof' has very visible structural elements that showcase the engineering skill being developed with cast iron and the increasing development and use of wrought iron, especially from c.1860 till the late 19th century. Evidential value can also be realised due to the survival of the two cast iron columns on platform 4 which still display decorative capitals and bases and provide evidence of details of the station's development.

Tea rooms

3.5.8 The timber boarded Tea Rooms on the island platform was built as part of the station improvements, with a drawing from the LNWR design office dated to 1884 corresponding to the facility evident on the Station today. Though it has retained its historic character, its

internal layout has been altered considerably, and there have also been isolated alterations to its exterior. Similarly, though the historic beer cellar / basement under the building remains, this is no longer in use and makes little contribution to its overall significance. The continuing presence of the tea rooms on the island platform is a contributing element to the significance of the Station through historical value, enhanced through the continued use of it in its historical function.

3.5.9 Whilst the tea rooms are of historic interest and their presence signifies the expansion programme and development of passenger facilities during the Consolidation Age (1850s-1870s), they are of limited architectural merit and were a commonplace feature across the railway network. The location of the tea rooms also contributes to its significance; the design of the tea rooms' elevations is grounded in the requirements for passengers to access the building from two sides, something which has also shaped historic changes to the building. Similarly, it forms an important element evidencing the development of the island platform and station expansion of the 1880s. Consequently, its position on the island platform and with access from either side are important elements of the building, closely tied to its design and the history of the station's expansion.

Platforms and subways

3.5.10 The platform arrangement has been altered little since the enlargement of the station in the mid-1880s, increasing the legibility of the station's historic development. This is enhanced further by the retention of platform 1, albeit widened in 1990, which evidences the single platform of the station when construction was completed in 1850. The track arrangement has altered more than the platforms, as a result of developing operational standards and station capacity; other than the basic alignment of through-lines between platforms 1 and 4, there is little in the current track layout around the station which survives from the station's opening. The overall platform arrangement contributes to the station's significance by evidencing its historic development, and those small changes which have occurred haven't detracted from this. However, the current track layout is not of any great importance.

3.5.11 The passenger subway also evidences the expansion of the station in the 1880s, and its contribution to the significance of the station is enhanced by it still forming a part of the operation of the station today. Though there have been some changes within it, it still retains a large majority of its historic fabric, including the stone flag floor. Its survival, continued use and the legibility of its relationship with the island platform provide both historic and evidential value, and while it doesn't contribute as much significance as other contemporary elements such as the trainshed roof, it nevertheless is a notable constituent element of this period of the station's development.

3.5.12 The Historic England list description for the Station does make note of the stairs on the island platform, with particular reference made to the wooden handrails, cast iron balustrade and turned newels[10], and there may also be original steps that have been covered over by modern non-slip materials and advertising boarding. The original features of the staircase reflect the approach to creating station facilities in order to increase capacity, and the detailing incorporated emphasises their use as important movement routes. However, the stairs are of a typical standard and not of any great importance.

3.5.13 The surviving parcels tunnel historically provided a connection between the main building and the tea rooms on the island platform; though this tunnel is still extant, it is no longer in use, and contributes little importance to the wider significance of the Station.

[10] Historic England List Description. 'Huddersfield Railway Station'. Huddersfield Railway Station, Non Civil Parish - 1277385 | Historic England. Accessed 27 September 2022.

Contribution of setting

3.5.14 Huddersfield Station derives significance from a number of aspects of its setting. In particular, the relationship between its principal façade and St George's Square, evidenced in views and vistas, contributes to the significance of the station. However, the relationships with the other sides of the station, how these are experienced by those using the station, and the movement of public and passengers through the station buildings, also contribute to an understanding of the station's significance.

3.5.15 The historic development of St George's Square has defined and over time accentuated a major element of the setting of Huddersfield Station. The historic and communal value of the station is particularly closely related to this relationship. This is evidenced by the common architectural style, grain of the townscape and regularity of movement through the Square and to and from the station. The contribution of these aspects of the station's setting reinforce the importance of the station to the civic life of the town and to its historic development.

3.5.16 The relationships between the station and the other sides of its surroundings also contribute to an understanding of its significance. From within the station, particularly on the island platforms, the topography of the area emphasises the former goods yard area to the west of the station. This evidences the contribution of the wider railway infrastructure both to the historic character of the station and also to the wider town and region. This understanding is further enhanced by the survival of the warehouses and goods yard buildings such as the accumulator tower and water tower.

3.5.17 A number of other views and vistas also make some contribution to the significance of the station, evidencing those historic relationships discussed above, or significant elements of the station's design. These include those views across St George's Square towards the principal façade of the station, as well as those out from the station platforms towards the goods yard and along the viaduct. The station also derives some significance from views which evidence the engineering of the roof structure, including those from Westgate above the tunnel portals for example. Views of the station experienced by those traveling by train through the station also make some contribution, as they represent the historic approaches and experiences of, for example, the views across the town from atop Huddersfield Viaduct (MVL3/92), and the dramatic reveal of exiting the tunnel portals and entering the station from the south.

3.5.18 The station also derives some significance from the movement routes of passengers. This is particularly the case where passenger movement routes remain unchanged from either the station's completion in 1850 or its expansion in the 1880s, for example the primary route through the principal station entrance and onto platform 1, or the route accessing the island platforms via the stairs and subway.

Group Value

3.5.19 Huddersfield Station is an exceptional example of a surviving station from the Heroic Age (1841-50) of railway building; the high quality of its architecture and monumental scale of its elements make it a unique example of a station of that era. Consequently, there isn't group value associated with the station as a whole, from other similar stations from that period. However, the individual elements of the building which contribute to its exceptional interest do themselves have their own group value. This has been explored through comparative assessment within the Huddersfield Station Statement of Significance, submitted as a supporting document to the Listed Building Consent application.

3.5.20 The station derives some significance from group value due to the survival of the trainshed roof as one of the few remaining large-scale 'Euston roof' examples on the operational

railway network today. Other notable examples of large-span 'Euston Roofs' were erected at Euston Station, Exeter St David's, Liverpool Exchange and Nottingham Victoria; however, all of these examples have been demolished. There are some surviving examples[11], but these do not match Huddersfield in width. The roof at Huddersfield, though being unique in its survival at such a scale, does therefore derive some significance from group value through its relationship with these other examples.

3.5.21 The survival of the historic roof structure also lends it group value through common associations, alongside other structures on the Trans-Pennine Route and beyond, with the Stanningley Ironworks who also cast the ironwork for the roof at York Train Station and the cast iron Calder & Hebble Canal Underbridge (MDL1/6) and the River Calder Underbridge (MDL1/8). The trainshed roofs derive some significance from their association with Stanningley, and thereby the group value they share with other surviving Stanningley constructions of the period.

3.5.22 As with the trainshed roof, the tea rooms also derives some significance from group value as one of a number of surviving examples of timber boarded tea rooms from the late 19th and early 20th century. A large number of stations saw the addition of such facilities during this period, though the survival of timber-boarded examples of the quality of Huddersfield's is quite rare. Goostrey Station on the Crewe to Manchester Line still retains a timber boarded waiting room, although it is of a much simpler, plainer architectural design than the tea rooms at Huddersfield. Newton Abbot Station presents a later example of similar structures, while the island platforms at Kettering Station incorporate surviving timber boarded waiting rooms with classical detailing not dissimilar to Huddersfield. At Clapham Junction, some of the platforms feature timber-boarded waiting rooms dating to the late 19th century, which again reflect a similar style to Huddersfield's. Though such examples provide specific similarities of materiality and architectural language, a large number of stations also retain platform facilities which continue with their historic function of servicing passengers; another aspect which contributes to the Huddersfield tea rooms' significance. At York, for example, the York Tap public house is located within an area of similar facilities dating to the 1870s, which other stations such as Sheffield and Stalybridge retain similar functions in their historic waiting rooms. While the tea rooms at Huddersfield may not represent as unique an example of an element of the station as the roof or station building, nevertheless they do derive some significance from their group value as one of a number of surviving examples of such facilities constructed during the period of station expansion across the historic railway network.

3.6 Significance of Other Designated Heritage Assets

Huddersfield Town Centre Conservation Area

3.6.1 Huddersfield Station and the associated historic railway infrastructure makes a contribution to the significance of the Conservation Area, particularly in defining the localised townscape and architectural character of the northern part of the Conservation Area, as well as the historic importance of the Station as a catalyst for the wider historic development of Huddersfield town centre during the mid-19th century. St George's Square forms a key public open space within the Conservation Area, acting as a gateway into the town and an important civic and public space. The coherent character and quality of architecture established by Huddersfield Station and the Listed Buildings surrounding St George's Square create a strong sense of place which forms a key aspect of the Conservation Area's significance, and evidence's a key historic phase of the town's development.

Grade II Listed Warehouses and Accumulator Tower

[11] A substantial portion of the Euston roofs at Chester (Grade II* Listed), Preston and Crewe (both Grade II Listed) survive.

3.6.2 The warehouses and accumulator tower derive significance as surviving elements of the infrastructure associated with the expansion of Huddersfield Station in the later 19th century, with the Brick Warehouse also deriving significance from its survival in largely unaltered form and treatment of the projecting loading bay. The Listed Buildings derive significance from their setting within the Huddersfield Station complex, and from their relationship with surrounding 19th century railway structures.

3.6.3 The railings to the station yard (Grade II Listed, NHLE 1232086) derive significance from their erection as part of the original station design, and their continued functional relationship with the Station building.

St George's Square

3.6.4 The Listed Buildings around St George's Square form a coherent and unified group around St George's Square, which developed in response to the construction and grandeur of Huddersfield Station. These represent significant examples of the commercial buildings erected during the mid-19th century and the Victorian expansion of Huddersfield and were to shape the neo-classical architectural character of the town which developed over the following decades. These buildings are of significance both for their architectural quality and their historic value as evidence of the mid-19th century development of Huddersfield by the Ramsden estate. The relationship of these Listed Buildings with Huddersfield Station is a key aspect of their setting and contributes to their significance, as do views towards them across St George's Square and the surrounding streetscapes of John William Street, Northumberland Street, Railway Street, Station Street and St George's Street.

3.7 Significance of non-designated assets

3.7.1 The non-designated assets located in proximity to Huddersfield Station fall into two groups: those associated with the historic infrastructure of the station, and those comprising former elements of the wider historic environment of Huddersfield.

3.7.2 The former assets, comprising the historic extent of the goods yard (HER 6525), station water tower (HER 10539) and Westgate Overbridge (MVL3/90) form part of the wider built environment around the station, sharing historical and operational relationships with the station, as elements of the wider historic railway infrastructure that characterises this part of the Trans-Pennine Route. This relationship forms an element of their setting, which makes a limited contribution to their significance. The latter assets represent the sites of former buildings or features which have been subject to redevelopment, and which derive no appreciable significance from their setting in relation to Huddersfield Station.

4. HUDDERSFIELD STATION – METHODOLOGIES

4.1 Summary

4.1.1 As outlined above in Section 1.2, this CIMP responds to the requirements of Condition 5 attached to the Listed Building Consent for Huddersfield Station, which states:

'No works including any works of demolition shall commence until a Conservation Implementation Management Plan (CIMP) for Huddersfield Station 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. *repairs and strengthening to the existing fabric of the trainshed roof at Huddersfield Station;*

iii. *the deconstruction, storage and reconstruction of the Tea Rooms at Huddersfield Station;*

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

v. *any improvements to the setting to sustain, enhance and better reveal the heritage asset affected;*

vi. *details of the maintenance access regime with particular reference to the roofs;*

vii. *dissemination of "toolbox talks" to personnel involved in demolition and construction works;*

viii. *provision of heritage interpretation boards during construction works;*

ix. *the exact affixing details of overhead line electrification; and*

x. *an overarching design guide covering both Huddersfield Station and Huddersfield Viaduct.*

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 x) as identified in the Condition wording, as well as those items identified in Section 4 of the model template CIMP structure annexed to the list of conditions (see Appendix B).

4.2 Stations Roofs

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

Historic Building Recording and Monitoring – Station Roofs

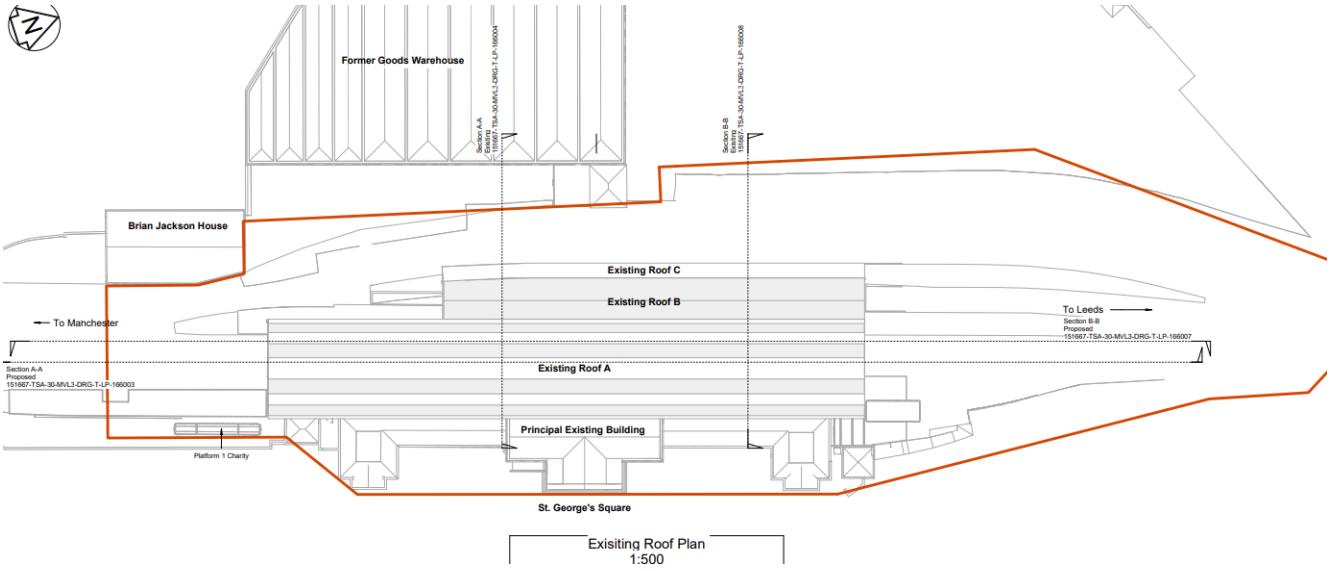
4.2.1 As secured by Condition 3, historic building recording is being undertaken in accordance with the WSI submitted to Kirklees Council and approved by West Yorkshire Archaeological Advice Service (WYAAS). The historic building recording survey of the station roofs was

conducted between 3 and 4 October 2023 (from ground level) and on 18 November 2024 (facilitated by access to Roof A scaffolding). A report concluding the findings was subsequently completed and submitted as agreed in the WSI to the relevant parties on 16 April 2025. In accordance with the WSI, monitoring visits are available to WYAAS or Kirklees Council should they wish to visit site. Kirklees Council fully discharged Condition 3 for historic building recording for the station roofs on 12 June 2025 (Ref: 2025/91068).

4.2.2 Monitoring visits during the works to the roofs will be co-ordinated using the Inspection Test Plans (ITPs) drafted for the various elements of the structure. ITPs allow for inspections to be programmed for during the course of the construction works. Arrangements can be made for Officers from the local authority and/or Historic England to be able to witness or inspect works. These arrangements will be discussed and where appropriate progressed via the TRU Heritage Working Group.

(b) Methodology for Fabric Removal

Methodology for removal of southern (Manchester end) bays of Roof A



Insert 4-1 - Existing layout of the roofs of Huddersfield Station, showing the historic Roof A to be retained and Roofs B and C which are to be removed and replaced with new canopies.

4.2.3 As approved via the granted Listed Building Consent, the six southernmost bays of Roof A will be removed.

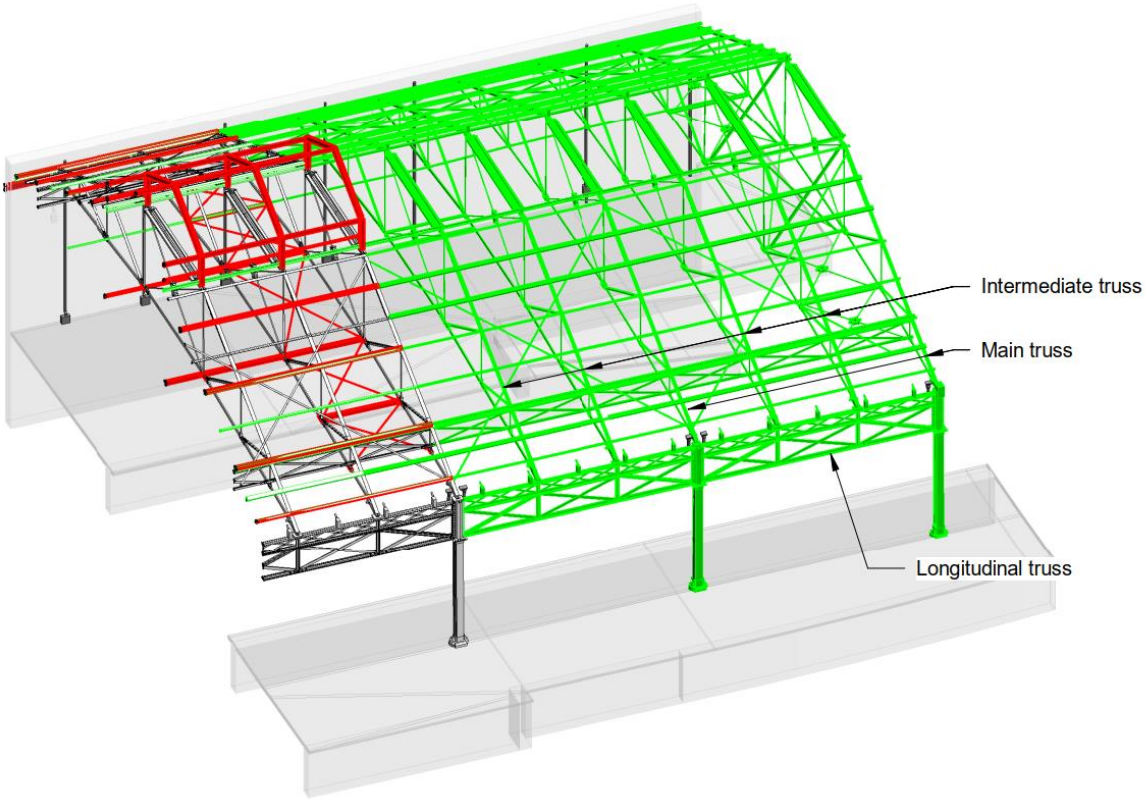
4.2.4 To enable to removal of these bays at the southern (Manchester) end of Roof A, access will be provided via a temporary Rail Road Access Point (RRAP) from the construction compound which is adjacent to Brian Jackson House. The existing roof covering is to be removed by the contractor, with this work to be undertaken from top to bottom, working on both sides of Roof A simultaneously, with access to the roof covering via a Mobile Elevated Work Platform (MEWP).

4.2.5 The lifting out the trusses of the spans from the Manchester end of Roof A will be undertaken by cutting the trusses from the existing columns. These will then be craned down in pairs. Temporary bracing may be used to maintain stability and integrity of the structure if needed. The columns and lattice beams will be cut down to below ground level (in the case of the columns) and then lifted down to ground level as combined sections by crane.

4.2.6 Following their removal from the roof, the trusses of the removed section of Roof A will then

be retained for grit blasting trials to enable better understanding of materials corrosion levels. This will inform the approach to grit blasting and repairs throughout the rest of the structure. This also will allow for assessment of any opportunity to retain elements for potential reuse in unforeseen repairs to Roof A (see below, paragraphs 4.2.84 to 4.2.85). All material which is not required for retention beyond the lifespan of the project is to be disposed of safely off site by the agreed contractor.

4.2.7 An extension to the Penistone line canopy is required where the existing end bays of Roof A are to be removed. The resulting 18m gap between the southern end of the retained Roof A and the Penistone Line canopy from the removal of these bays will remain uncovered until the Penistone Line canopy is extended (see below, paragraphs 4.2.30 to 4.2.33).



Insert 4-2 – Drawing depicting the removed bays of Roof A at the southern (Manchester) end in green.

Methodology for removal of Roofs B and C

4.2.8 As approved via the granted Listed Building Consent, Roofs B and C over the existing island Platforms 4 and 8 will be dismantled. The removal of the roofs will be undertaken by an experienced specialist demolition contractor.

4.2.9 The stages of the dismantling of the roofs are described in more detail below, with the overall stages comprising:

- Track protection and installation of working platform
- Brace roof trusses in pairs
- Cut trusses from columns and beams
- Remove roof material from site

4.2.10 As Roofs B and C share columns with Roof A, works to ensure the stability and protection of

Roof A are required before commencing the dismantling and removal of Roofs B and C. This will comprise the protection of the shared columns in the form of plywood box cut outs and a cut line clearly delineated on site to de-bond Roofs B and C from Roof A.

4.2.11 Prior to commencement of the deconstruction works, the specialist contractor will install track protection and a working platform over the existing Platform 8 tracks and adjacent sidings area. Bog mats will be used to protect the tracks and a ramp constructed to access the existing Platform 8 area. Similarly, to protect the platform surfaces during the removal of Roofs B & C, in particular any remaining historic York stone slabs, platform protection will be put in place before works begin. This will be placed underneath the working areas to prevent any accidental damage to the platforms as a result of construction plant, machinery or from falling material.

4.2.12 Dismantling of the roofs will be undertaken from one end to the other, working in pairs of trusses, starting at the southern (Manchester) end of the roofs and working towards the northern (Leeds) end.

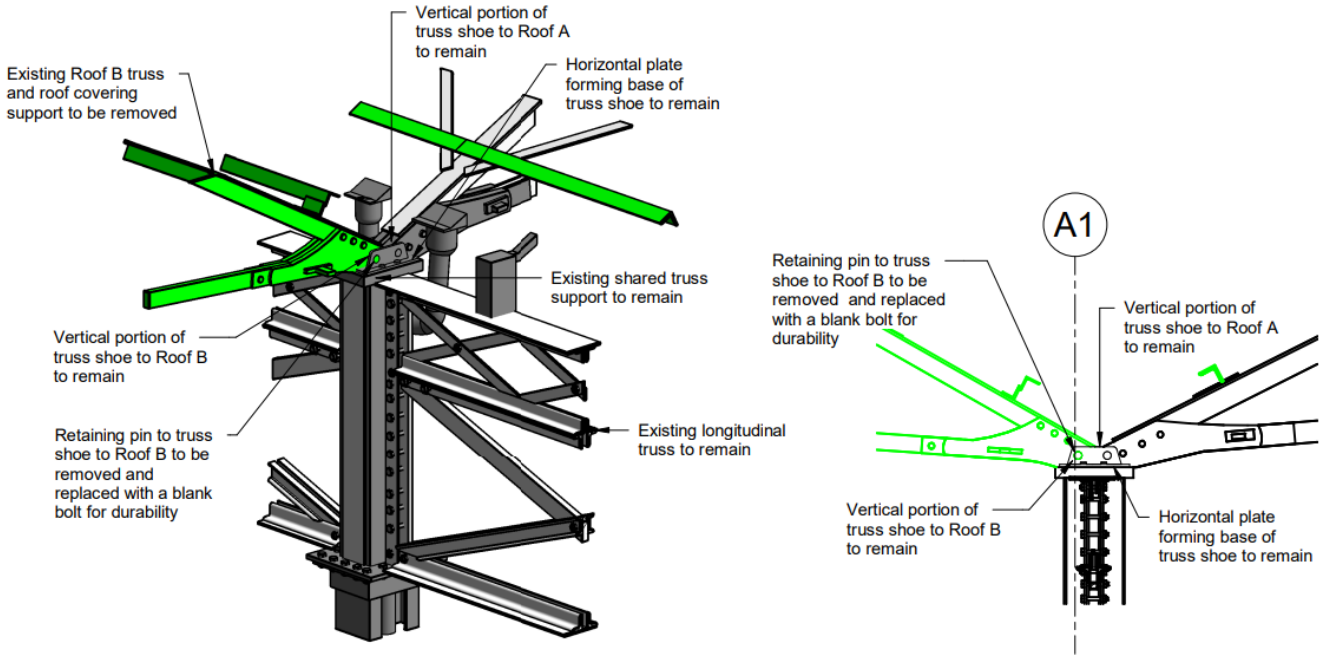
4.2.13 To enable the removal and dismantling of Roofs B and C, the contractor will access the roofs from the platform via MEWPs. Following installation of platform and Roof A protection measures identified above, the contractor will brace each of the roof trusses in pairs, using scaffold tubes. This approach will create a rigid structure for the trusses to be more safely removed via crane and ensure stability of the structure during the removal of the roof coverings. The braced trusses will be individually cleanly cut from the columns and beams, while being stabilised in a sling at specified points.

4.2.14 After the disconnection of the trusses from the longitudinal beams and columns along the existing Platform 8, the contractors will sling the ends of the beams between the columns, so as to take the weight off the beams, before cleanly cutting the beams from the columns. The remaining columns will be cut flush with the platform surface on the existing Platform 8, to prevent uneven surfaces and potential tripping hazards.

4.2.15 Finally, the paired trusses will be cut from the shared columns between Roofs A and B on the existing Platform 4. This will be done using the tension in the crane supporting the braced pair to ensure stability and protection of Roof A. For safety and to further protect Roof A from accidental damage during the lifting, a leading edge will be cut away from the shared columns. The retaining pins that connect the truss shoe of Roof B to the shared columns will be removed and replaced with a blank bolt for durability and to minimise the visual change to the connections. The vertical portion of the Roof B truss shoe will remain *in situ* post removal of Roof B.

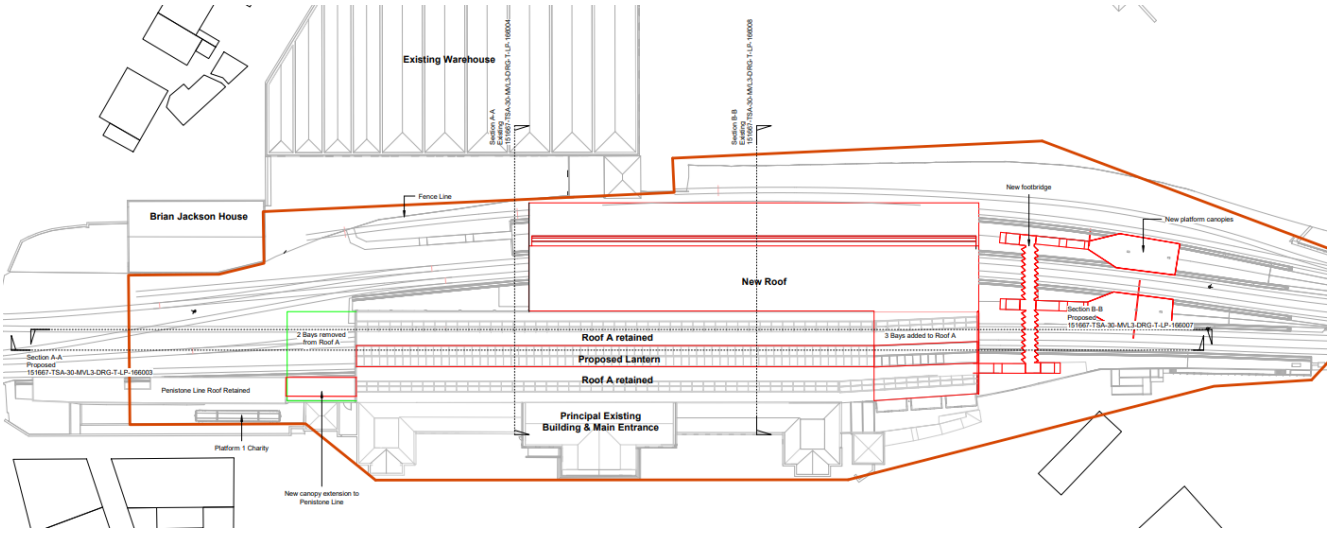
4.2.16 Each pair of trusses will be carefully lifted out by crane, to allow for the weight to be distributed evenly and prevent slippage, following all cuts and disconnections being completed. The columns and longitudinal beams will also be lifted clear.

4.2.17 All removed roof materials will be lifted post-removal over the existing Platform 8 tracks and sidings area, to an appropriate laydown area within the HD1 compound. The roof material will subsequently be broken down into manageable sizes, with the paired trusses being carefully packaged, for transportation and storage via road.



Insert 4-3 - Drawings showing connections between Roofs A and B, and which section will be removed to facilitate the removal of Roofs B and C.

(c) Introduction of New Fabric – Roofs



Insert 4-4 - Proposed layout of the roofs of Huddersfield Station, showing the historic Roof A with 2 bays removed, new roof in place of removed Roofs B and C and new footbridge.

Methodology for construction of scaffolding and working platform under Roof A

4.2.18 The scheme works to refurbish Roof A, including the repairs and strengthening to the roof and installation of lantern and maintenance walkway (see below), will all be conducted from scaffolding and working platforms. The scaffolding and working platforms will be installed underneath Roof A, following the removal of the southern (Manchester) end bays (see above). The first section of scaffolding to be installed will be that from the southern (Manchester) end towards the centre of the platform, followed by scaffolding from the northern (Leeds) end.

4.2.19 At either end of the station, temporary scaffold platforms will extend to high-level loading platforms in the adjacent compounds: one extending over the existing Platform 8 towards Brian Jackson House at the southern end, and one extending out over the single storey building adjacent to the former Platform 3 at the northern end. The compounds will be fitted with hoist or telehandler to support lifting plant and material to the working platform.

4.2.20 The scaffolding structure will be landed on the existing Platforms 1 and 4, with the temporary working platforms consisting of a full height walkway enabling access across the tracks from one end of the platform to the other above the existing platforms. Once foundations to the scaffold platforms have been established, the scaffold towers will be erected on the platforms, including linking towers with spine beams and low-level walkway as required. The main cross-track scaffold cassette beams will be assembled off-site and brought in via articulated vehicles. These will then be lifted into position via a crane, and rolled into position along the length of the platform. Access will be provided via a staircase for construction personnel, and there will be access to the working platform every three bays, as well as four emergency fire exits. The minimum distance between the scaffold and the platform edge will be 2.5m.

4.2.21 The line of scaffolding along the existing Platform 1, adjacent to the station building will be constructed to match the existing access points into the station building, thereby minimising disruption to passenger movement. Where the scaffolding will need to be fixed to the station itself, any fixing points will be over-cored and plugged using similar stone, once the scaffolding has been removed, if fixing into stonework is unavoidable. Where possible, scaffolding will be fixed into mortar rather than stone, where, upon removal, the holes in

mortar would be made good using appropriate colour matched lime mortar. This will ensure minimal visual alterations to the elevation of the station building as a result of the scaffolding. Similarly, where reasonably practicable, fixings would be minimised in number and positioned at points away from eye-level to reduce how visually obtrusive they may be from platform level.

Methodology for installation of lantern

4.2.22 A new lantern will be installed as part of the restoration works to Roof A. As detailed in the Heritage Assessment submitted to support the granted Listed Building Consent application, this was designed to reflect the lost historic lantern which formerly sat atop Roof A, while also being honest about this modern intervention in the historic evolution of the station's design.

4.2.23 The steel lantern structure will be fabricated, constructed and pre-painted off-site. All materials for the lantern and its connection to the roof will be moved by hand or via pallet truck from a high-level loading bay integrated into the scaffold access at the northern end of the station roof. A temporary access platform will be erected at the top of truss level to enable the installation of the lantern. The individual elements of the lantern will then be lifted into position by hoist or telehandler.

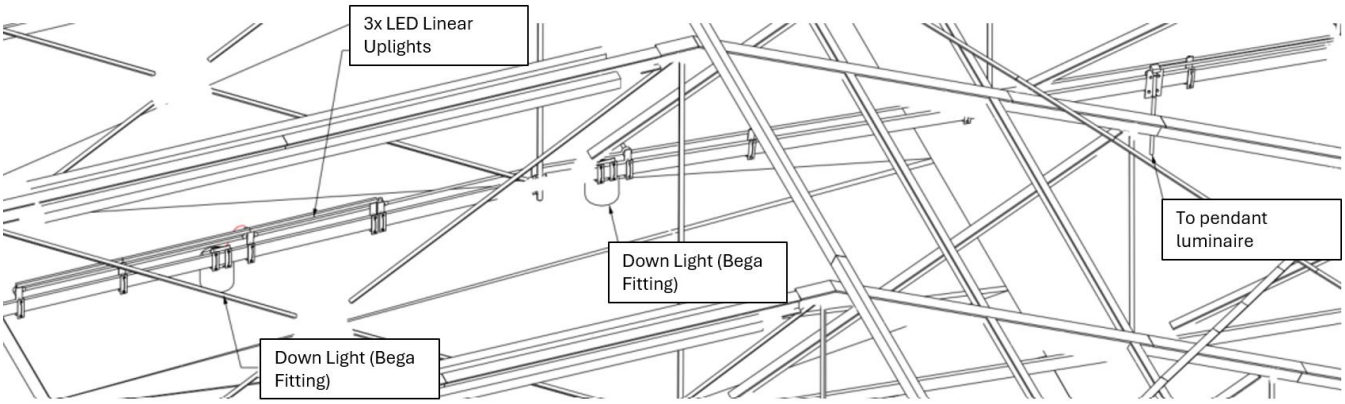
4.2.24 The steel lantern structure will be clad using a standing seam roof on the top of the lantern and a component-based louvre system will be used to minimise manual handling. Access and movement of the materials for the cladding of the lantern will follow the same approach as that described above for the steel lantern frame. The standing seam and walkway will be installed above the gutter line of the main roof on the station side. Lead flashing will be installed below the louvre to cover the seam of the overlapping roof slates to be subsequently laid.

4.2.25 Further design detail on the makeup of the lantern and the design principles behind the approach are provided in the Design Guide, included in Appendix E.

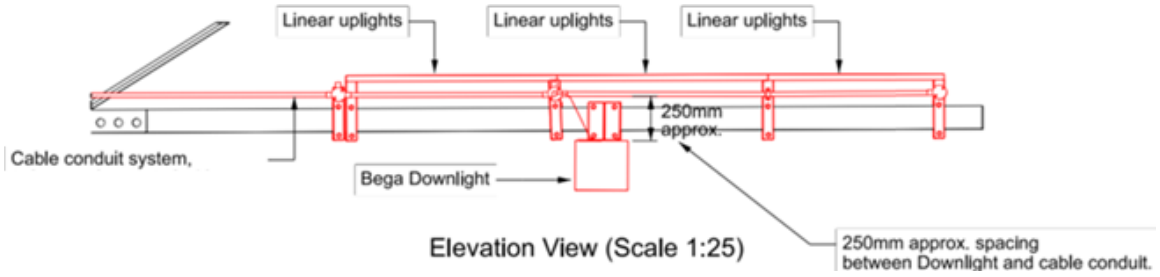
Proposals for Roof A Lighting

4.2.26 As outlined in the Heritage Assessment submitted to support the granted Listed Building Consent application, the use of sensitive lighting to enhance the experience of the station architecture is an important component of the proposed intervention. It was recognised that the scale, consistency and architectural quality of Roof A could be emphasised by a carefully considered lighting scheme, enhancing the way in which station users experience the architecture of the building.

4.2.27 It is proposed that Roof A will be lit using a combination of downlight, uplight and pendant luminaires (see Insert 4-5 and Insert 4-6 below). The proposed combination of luminaires will provide the required level of illumination for station users, while also accentuating the rhythm and scale of the Euston truss roof and would create a welcoming, low contrast environment. The proposed luminaires would form an aspect of a wider suite of contemporary light fittings proposed for use across the wider station, enhancing the consistency and character of the station environment.



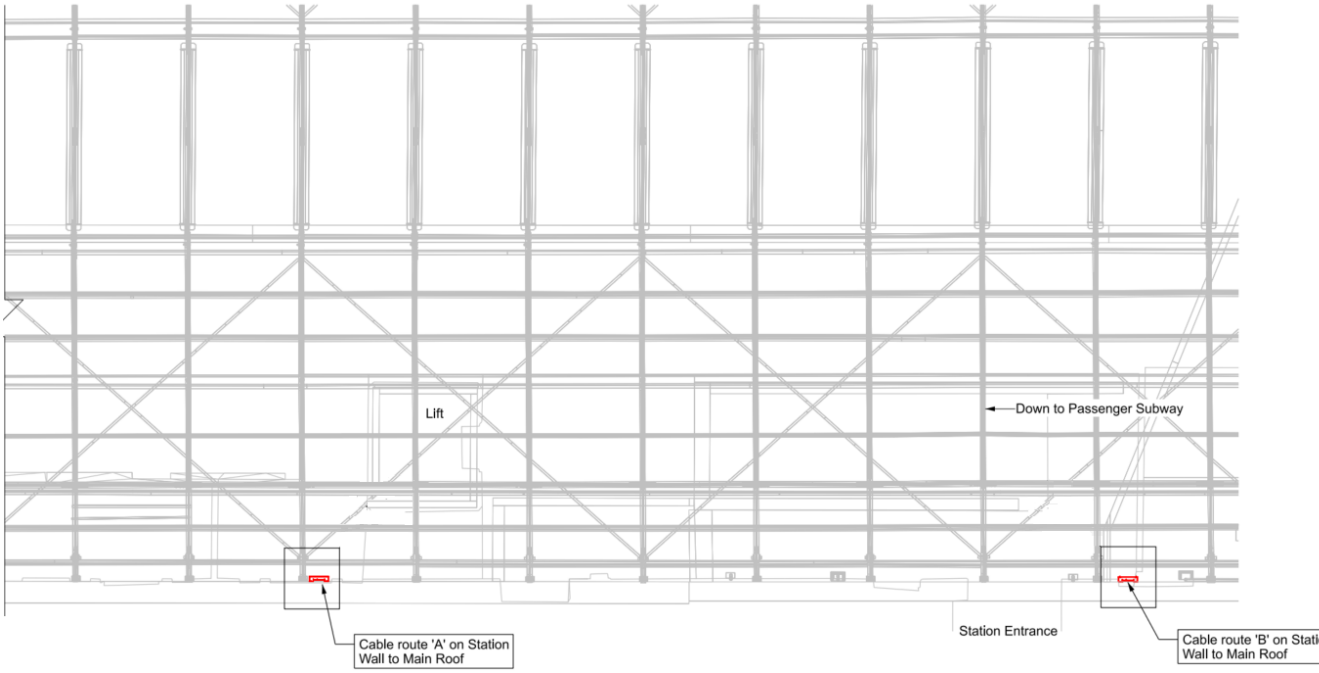
Insert 4-5 - General arrangement of Roof A luminaires



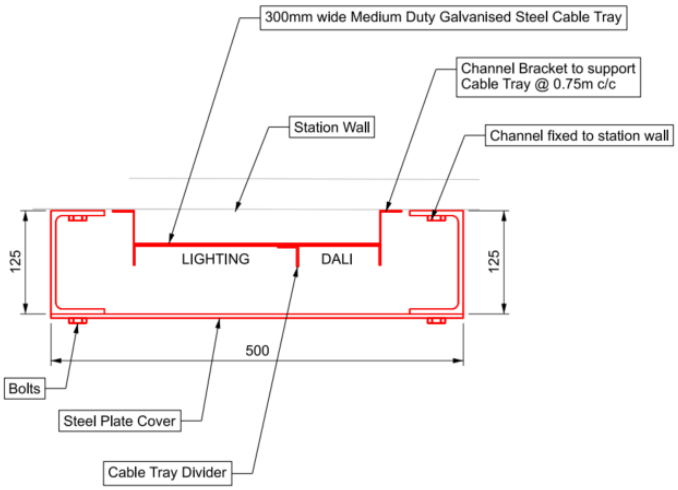
Insert 4-6 - Detailed layout of truss mounted uplights and downlights

4.2.28 The proposed lighting will be affixed to the Roof A structure using a series of bespoke mild steel brackets. Bolts will pass around the roof trusses clamping the light fittings in place thereby avoiding direct physical impact to historic fabric. Neoprene gaskets will be used as a protective barrier between the newly repainted roof structure and the lighting brackets. The brackets themselves would be finished in RAL9007 to match the roof trusses. The conduit feeding the lighting will run above the trusses and be similarly attached using saddles to clamp the conduit in place. It is proposed that the conduit, conduit boxes and saddles (attaching conduit to trusses) would remain as unpainted galvanized steel. Running above the trusses, these elements would be minimally visible from the platforms below, galvanised steel is also similar in colour to the proposed paint finish of adjacent fabric. The conduit could only be painted once *in-situ* as paint on the threads could impact the electrical continuity of the conduit and to ensure a safer system under fault conditions. This process would require working at height over the railway. The conduit boxes also require regular maintenance likely to damage a painted finish. It is therefore considered reasonable to allow for safe and practical installation and maintenance of the lighting conduits, by installing them unpainted.

4.2.29 It is proposed that two cable routes affixed to the station building elevation would be required to power the proposed lighting (see Insert 4-7 for exact locations). [*additional detail be discussed in a later phase of the CIMP*] These cable trays would be covered by a steel plate, with all components painted dark blue to match the station downpipes. The trays would be 500mm in width and extend to truss level to facilitate the safe and efficient routing of lighting cables (see Insert 4-8 below).



Insert 4-7 - Proposed cable route locations



Insert 4-8 - Section of proposed cable tray affixed to station building

4.2.30 Additional detail on the design philosophy of the lighting for Roof A is included in the Design Guide, included in Appendix E.

Methodology for installation of maintenance access walkway and steps to be attached to Roof A

4.2.31 The design of Roof A has successfully incorporated maintenance access onto and over the roof, allowing for routine maintenance to the structure to be performed.

4.2.32 The maintenance walkway will be installed alongside the installation of the lantern. A stepover walkway will be installed on a strip of standing seam in order to ensure safe passage along the roof during maintenance operations. This will prevent the need for intrusive interventions into the roof in order to fix the walkway and steps, which will in turn ensure the long-term preservation of the truss. The walkway will run along the edge of the roof adjacent to the station building parapet, with the steps positioned behind the highest point of the existing roof line of the station building, to minimise their visibility from St George's Square.

4.2.33 Eaves battens will be sized to accommodate the standing seem, and metal flashing will be fixed to the battens. The traverse walkway will be made of Kee with GRP nylon threads on aluminium frame, and the guardrail will be constructed of galvanised steel. The proposed structural framing will support the new gutters in terms of spacing and size and will be sealed to prevent water seepage.

4.2.34 Further design detail on the makeup access walkway and the design principles behind the approach are provided in the Design Guide, included in Appendix E.

Methodology for extension to Penistone Line Canopy

4.2.35 Under the granted Listed Building Consent, the Penistone Line Canopy on the existing Platform 2 will be extended to accommodate a longer platform and to fill the resulting gap in platform coverage left by the removed bays at the Manchester end of Roof A. The design principle for this extension was to reflect the character and form of the existing Penistone Line Canopy.

4.2.36 The extension will retain a similar envelope to the existing canopy of Roof A but will use a new design for the structure to retain clarity of phasing of the roofs and of the new interventions. The design will include timber dagger boarding on the Penistone Line canopy extension, as well as on the existing canopy where the front will be cut back to allow for the new track alignment, to reflect the existing canopy style. As the Penistone line historically had its own individual identity within the station, the colour scheme will reflect this distinction using darker tones of grey and blue.

4.2.37 The existing steelwork at the northern end face of the existing canopy is to be cut back, with the section of dagger board on this end, which would be located effectively between the existing and proposed canopies, to be removed and then replaced. The finished canopy is to be positioned with 50mm overhang to the end of the platform, maintaining a weathertight edge. The treatment of the transition from existing canopy to canopy extension will also ensure that this connection is also weathertight, maintaining constant platform coverage. Foundations to support the new Penistone Line canopy extension will be installed below platform level and columns installed using bolts into conical voids into installed foundations. Columns will have a similar geometry to the existing structure. The new canopy structure will be fixed to the existing structural canopy edge with a combination of 8mm welding and bolts and used to join elements to existing beams and fixed with cover plates.

4.2.38 Further design detail on the extension to the Penistone Line Canopy and the design principles behind the approach are provided in the Design Guide, included in Appendix E.

Methodology for construction of extension to Roof A at northern (Leeds) end

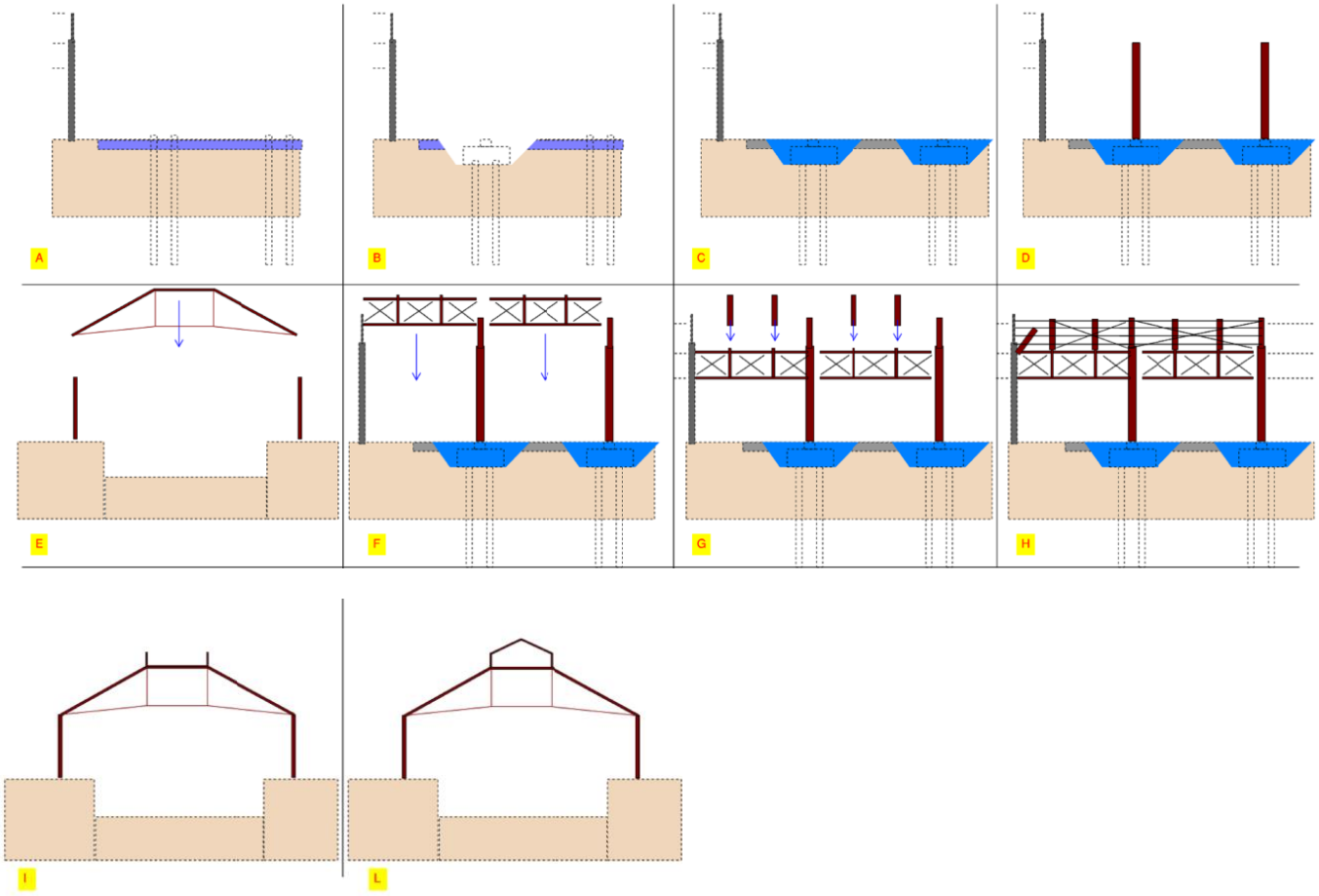
4.2.39 As part of the consented changes at Huddersfield Station, Roof A will be extended at its northern (Leeds) end, to allow for coverage across the new platforms and ensure consistent passenger comfort and experience throughout the station. The strengthened and refurbished Roof A will be extended in total by three new bays, each at a distance of approximately 9m apart and with three new supporting columns. This would provide coverage to passengers between Roof A and the proposed new footbridge.

4.2.40 Prior to commencing the extension of Roof A, an appropriate number of trial holes will be undertaken into the platforms in order to better understand and adapt for any potential unrecorded structural details, such as existing and unchartered buried services, which may be in locations where piling or proposed foundations are required. Once these investigations are completed, the piling and foundation activities can commence.

4.2.41 Before installing piling and foundations, services which will be isolated and protected. Sectional Continuous Flight Auger piles (SFA) are proposed to be used for the piled

foundation supports. The piling contractor is to demonstrate that the proposed piling equipment is suitable for the ground conditions identified on the site and to provide evidence of previous pile performance in similar ground conditions and using the same rig type. Piles will then be inserted for the foundations of the extension to Roof A. Once installed all piles will be trimmed by the contractor to the appropriate level. Foundation bar reinforcement will be installed, projecting from as-built piles. These are to be left unbent and cut down if and where necessary to ensure a minimum 75mm end cover. Pile caps will be placed on the piles which are to support the new Roof A extension columns. Foundations would then be set *in situ* with poured concrete and once set, holding down bolts installed.

4.2.42 The form of the new bays will be a tied portal frame which is of similar scale to the existing trusses of Roof A (see below Inserts 4-9, 4-10 and 4-11). The Roof A extension will taper on plan, which is to match and follow the existing taper of the final column bay of trusses at the end of the existing roof structure, so that the existing plan form of Roof A remains legible. A lantern will be included on the roof, which is to match in both methodology and design, that of the lantern reinstated along the strengthened and refurbished portion of the existing Roof A, see paragraphs 4.2.22 to 4.2.25.

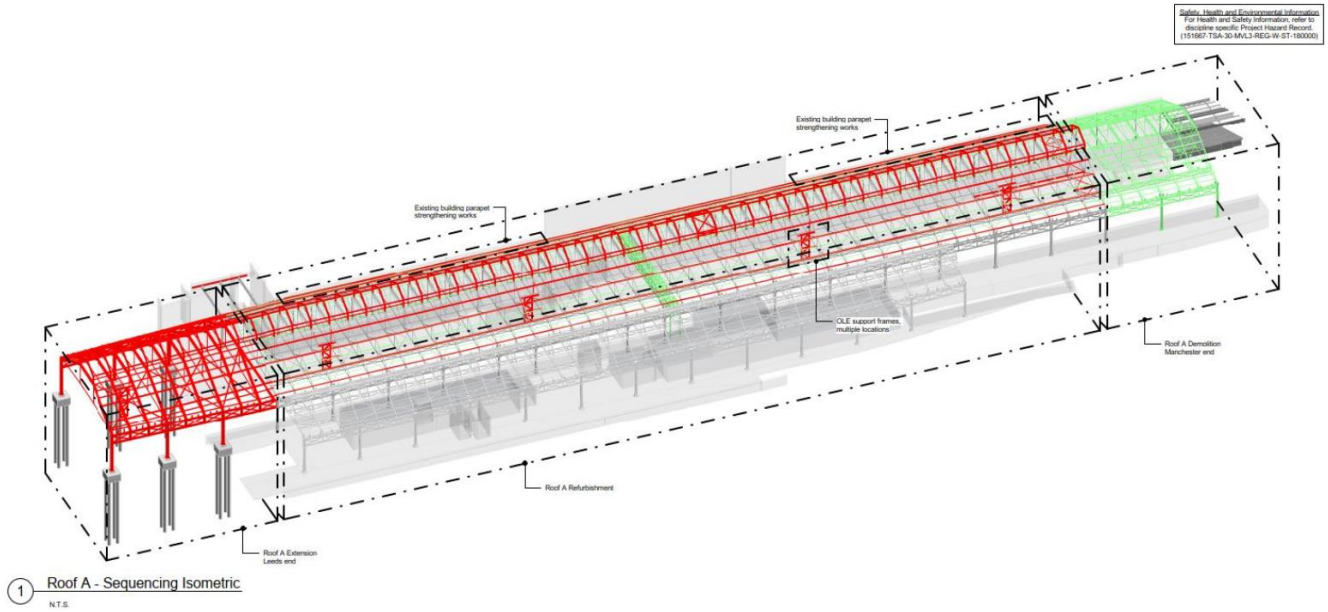


Insert 4-9 – Construction sequencing of the extension to Roof A at the northern (Leeds) end.

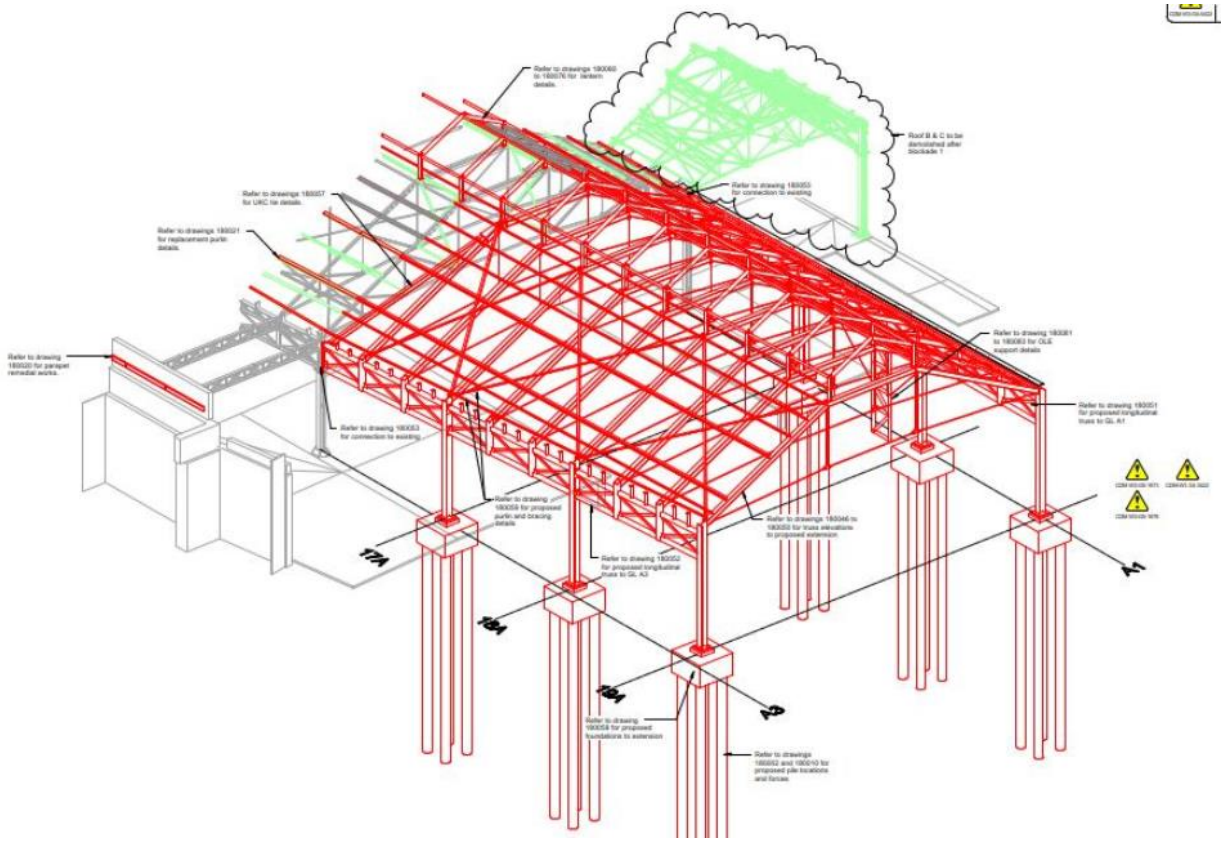
4.2.43 Once the piling and foundations are in place, then the three new columns on each side of the new Roof A extension are installed into the new foundations, sitting on each of the pile caps. Once the columns are completed, the main transverse trusses of the roof extension can be installed; these sections of roof provide the majority of the main roof frame spanning across tracks. The main transverse truss structure, minus the lantern (see Insert 4-9, stage E), will be fabricated off-site and then lowered by a crane onto the columns as a single element, with its lifting points at each of the truss ends. Once this main roof frame is in

place, the longitudinal truss with cross design elements (see Insert 4-9, stage F) will be lowered between the new column pairs and between the existing roof A and the new column. These trusses will also have been constructed off-site and lowered into place via crane. The secondary transverse trusses (see Insert 4-9 stage G), will then be lowered into place to attach the main transverse trusses and the longitudinal trusses together. The bracing, purlins installation and connections to the existing canopy will then follow this.

4.2.44 Once all elements of the roof extension are in place, the new lantern structure will be put into place to match the design of the refurbished existing Roof A (see Insert 4-9, stage L). Stability of the lantern will be provided by the action of the portal frame in the transverse direction and bracing of the end bays in the longitudinal direction.



Insert 4-10 – Drawing depicting the new Roof A, including the extension to Roof A at northern (Leeds) end, to the left in red.



Insert 4-11 – Drawing depicting the construction of the extension of Roof A at the northern (Leeds) end.

Construction of new canopies to replace Roofs B and C

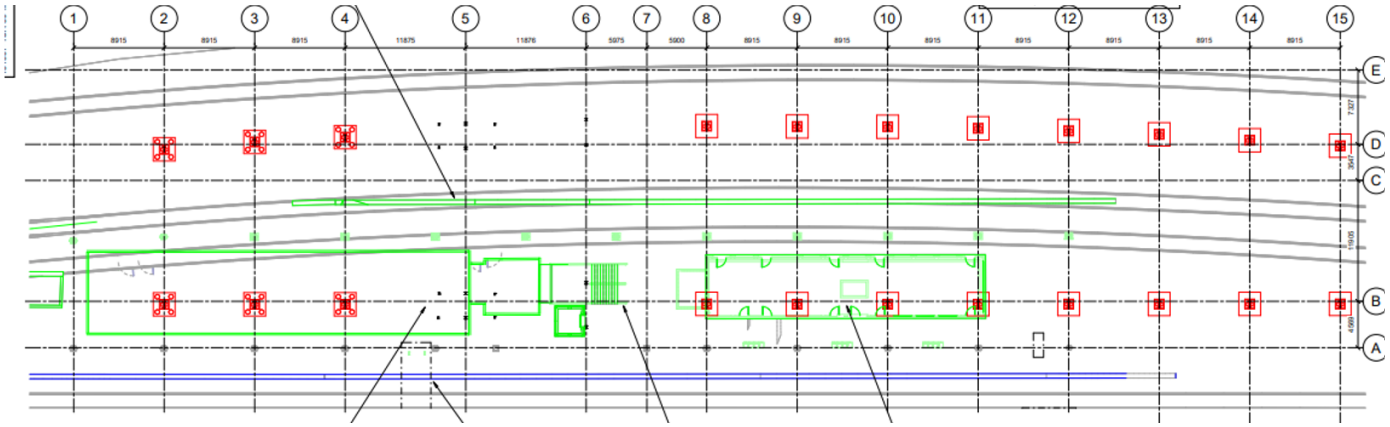
Piling and Foundations

4.2.45 Once the removal of Roofs B and C is complete and all material and debris cleared from the site, the new platform canopies be constructed in their place. These new canopies will require additional platform works to accommodate the larger coverage of the future Platforms 3 through 6.

4.2.46 The new canopies require works to install piled foundations, as well as preparatory works for the installation of columns to support the new canopies into these piled foundations. Prior to the commencement of the foundation works, a series of trial holes will be undertaken to best understand the suitability of the surface for piling. These trial holes will clarify any unrecorded structural details such as existing column foundations or lift shaft wall foundations and help determine where piling foundations are required.

4.2.47 Sectional Continuous Flight Auger piles (SFA) are proposed to be used for the piled foundation supports. The piling contractor is to demonstrate that the proposed piling equipment is suitable for the ground conditions identified on the site and to provide evidence of previous pile performance in similar ground conditions and using the same rig type. In all, 22 piles will be inserted for the foundations of the new canopy columns; 11 along the existing Platform 8 area (to support the new canopy for future Platforms 3 / 4) and 11 along the alignment of the future Platforms 5 / 6 (see below Insert 4-12, as well as Insert 4-21, Insert 4-22 and Insert 4-23 for current and future platform layout). The area around the existing and future subway stairs and lifts will not undergo piled foundations. Once installed, all piles will be trimmed by the contractor to the appropriate level for the column foundation pads. The foundation pads will be cast atop the piles, with appropriate column baseplate bolt assemblies cast into the foundations.

4.2.48 The new canopies will be supported by columns which are to be distanced approximately 9m apart, to reflect the historic layout of Roof A. These columns will be canted and will maintain a minimum of 3.3m distance from the coping of the platform edge. The columns will be installed into the foundations using movement resisting bolted baseplates, which will be fixed to a concrete plinth set into the piled foundations. The columns themselves and the rest of the canopy superstructure will be added at a later stage.



Insert 4-12 - Drawing showing location of piling and foundations for columns to be installed to support new roof canopies (existing island platform, relay room / signal box and Tea Rooms shown in green).

New Canopy B and C Structures

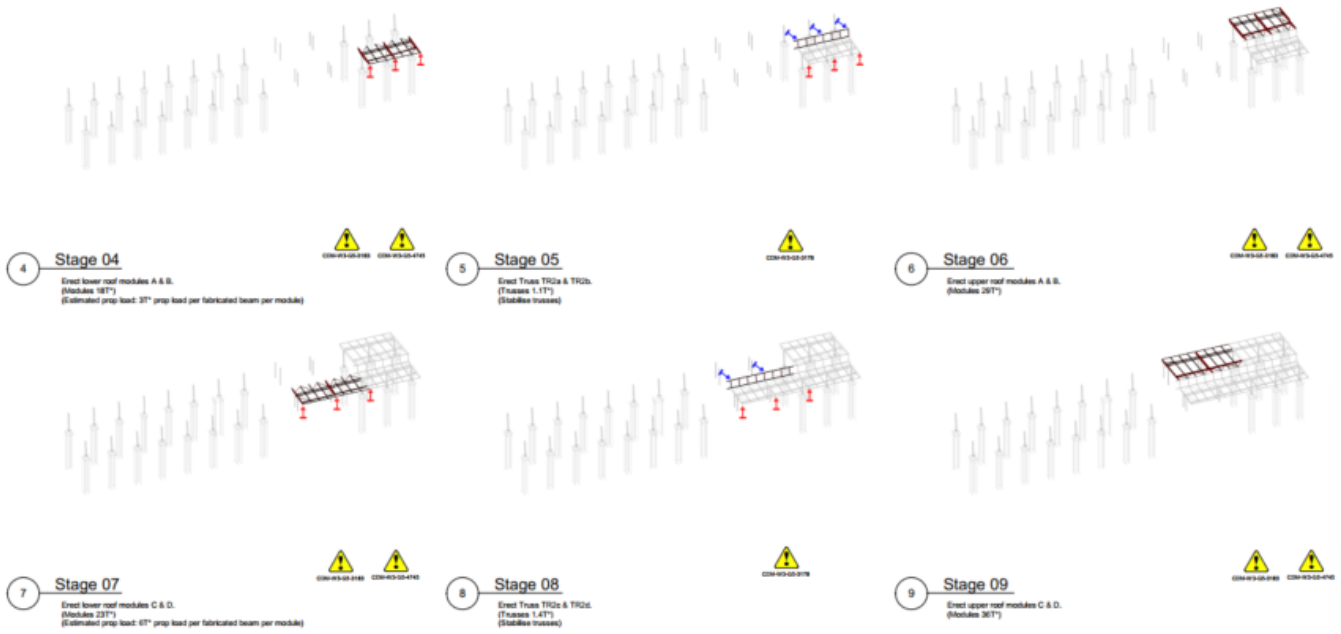
4.2.49 Following the removal of the existing Roofs B and C, new canopies to suit this modern phase of development at Huddersfield Station will be erected to provide cover for passengers on the future Platform 4 as well as future Platforms 5 and 6.

4.2.50 Prior to installation, to allow for a more efficient transfer, the new canopies will have pre-drilled lifting holes where the sections of canopy are to be lifted to be more easily connected once installed at the station.

4.2.51 Once the piling and foundations are in place and the columns installed at 9m intervals along the new Platform surface, as described in paragraphs 4.2.40 to 4.2.43 above, then the roof canopies can begin to be installed atop the columns. This follows a sequence of firstly erecting sections of the lower roof canopy of three bays in length, then attaching the associated clerestory trusses which form the vertical connections between the two new canopies and thirdly attaching the section of the upper roof canopy, also at 3 bays in length to the trusses. This process repeats working from the southern (Manchester) end of the Station towards the northern (Leeds) end (see Insert 4-13 below).

4.2.52 During the stage when the vertical clerestory trusses are to be connected to the lower roof canopy, two types of propping will be required to enable a stable construction process and transfer of weight while being installed. One type of propping will be at of the outer edge of the lower roof canopy, at three points aligning with the columns. The second will be at the unconnected top of the vertical trusses, at three points for the first section of roof, aligning with the columns, and then at each of the two unconnected trusses for each subsequent section of truss to be connected.

4.2.53 Once all sections of both lower and upper roof canopies have been installed and connected with the vertical clerestory trusses, then the lift frames on the future Platform 5 and Platforms 3 / 4 will be erected. Following this, the OLE droppers and fascia modules will be fixed to the underside of the new roof canopies [*to be discussed in a later phase of the CIMP*].



Insert 4-13 – Drawing depicting the sequencing of the construction of the new roof canopies, by erecting the lower canopy, connecting the vertical clerestory trusses and then attaching the upper canopy in repeating sections starting from the southern (Manchester) end.

New Canopies B & C - Clerestory Glazing

4.2.54 In the consented design of the new canopies, the clerestory connection included between the new canopy B and C structures featured glazing panels between each of the vertical connecting trusses, which would allow for better light filtration and coverage from weather. During detailed design development it was discovered that including glazing at the clerestory of the new canopies would constitute a fire safety hazard, as in the event of a train catching fire while stationary under the new canopies, it would not allow sufficient opportunity for smoke to escape and would increase the severity of hazards to passengers evacuating the station as a result.

4.2.55 To address this, the decision was taken to not include the glazing panels in the clerestory, instead leaving the panels between the vertical trusses open. The adapted design would still allow for natural light and views out towards the Listed warehouses and avoids replacing the glazing with ventilation grates or mechanical louvres. This would have some slight increase in weather ingress on future Platforms 3 and 4, where the newly refurbished and relocated Tea Rooms would reside. This would mean a slight decrease in passenger comfort, as well as some rain affecting the Tea Rooms. As a result, a hardier, weather resilient paint would be used on the exterior of the Tea Rooms timber cladding to better protect the exterior from adverse weather conditions. This isn't considered to compromise on the integrity or conservation philosophy of the Tea Rooms reconstruction.

New Finger Canopies

4.2.56 As part of the construction of the new footbridge, new finger canopies will extend across the future Platforms 3 / 4 and 5 / 6 to allow for greater passenger comfort towards the northern (Leeds) end of the station.

4.2.57 The installation of the finger canopies follows on directly from the completion the first span of the footbridge, once the sections spanning between future Platforms 3 / 4 and future Platform 2 (see below, paragraphs 4.6.1 to 4.6.6). The main columns to support the canopy, three tapered columns per finger canopy, are to be installed as part of the footbridge

installation (at Stage 2 of the construction sequence, as outlined in Insert 4-29 in Section 4.6). The canopy structure itself for future Platforms 3 / 4 would then be installed following the installation of the first span of the footbridge, connecting to the projecting northern canopy of the footbridge stairs on this platform (see Insert 4-29 in Section 4.6). The topside of the canopy would then be clad in a single ply waterproofing system to match the coverings on the footbridge, and fit out for passenger use.

4.2.58 The finger canopies extend from the footbridge canopy and then taper to becomes wider cover for the majority of the platform, with edges of the roof canopy sloping inwards towards the centre to create a natural drainage channel. The process outlined above for the Platforms 3 / 4 finger canopies would then be repeated following the installation of the footbridge extending to future Platforms 5 / 6, where the canopy to cover this same platform would be installed within the same sequence and methodology.

(d) Repairs, Vegetation Removal etc. – Roofs

Roof A – Strengthening and Repairs

4.2.59 The trusses of the retained section of Roof A will be strengthened and, where required, repaired, to reinforce the structure and improve the roof's overall structural integrity in responding to the wider design changes around it. The structure is to be blast cleaned and a corrosion protection system to be reinstated. Due to the limited knowledge of the condition of the steelwork beneath and the new information about the structure's condition and construction that blast cleaning and surveys may reveal, it is proposed to use two approaches outlined below.

4.2.60 The strengthening and repairs to the retained trusses of Roof A will comprise two broad approaches:

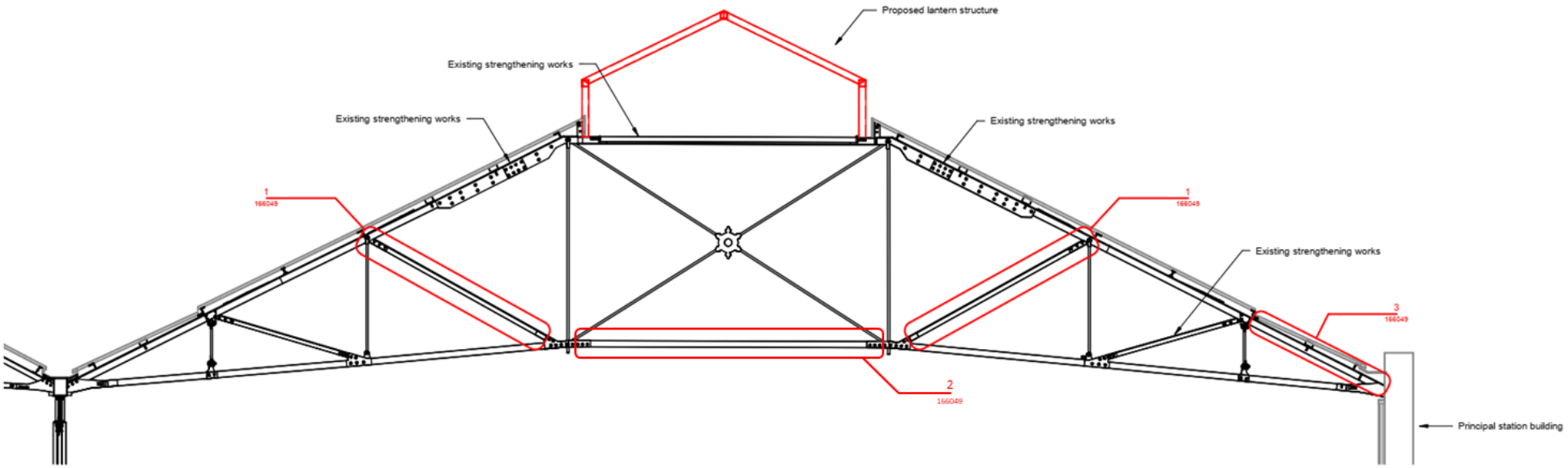
- A standard suite of strengthening across the trusses where it was known at time of application that strengthening will be required (as detailed within the LBC application for the Station); and
- Specifications for repairs in principle, to be undertaken if previously unknown issues are identified during the construction works.

Standard strengthening for known required repairs

4.2.61 The standard suite of strengthening which will be applied to the retained trusses of Roof A is outlined in the drawings submitted in support of the granted LBC application for the works, notably in the following drawings, which are also included in Appendix D:

- Structural Plan (151667-TSA-30-MVL3-DRG-T-LP-166045)
- Structural Sections (151667-TSA-30-MVL3-DRG-T-LP-166047, 151667-TSA-30-MVL3-DRG-T-LP-166048)
- Strengthening Details (151667-TSA-30-MVL3-DRG-T-LP-166049); and
- Bracing Details (151667-TSA-30-MVL3-DRG-T-LP-166057).

4.2.62 These works utilise three types of repairs, designed based on assessment of the required loading on Roof A following completion of the works to the roof and addition of the new canopies to replace Roofs B and C. The trusses of Roof A to which these will be applied are shown below in Insert 4-14, as well as in the drawings in Appendix D. A summary description of the specification of each consented repair type is outlined below in Table 4-1.



Insert 4-14 Section of retained Roof A, showing the location of the three types of strengthening repairs consented via the granted LBC (full drawings shown in Appendix D).

Table 4-1 Known types of strengthening for trusses of Roof A, as approved via granted LBC application.

Repair Type	Section of Roof	Trusses	Description of repair
1	Whole length of retained section of Roof A	7-52	Strengthening of diagonal truss members with two 10mm steel plates, bolted to web of truss section with M8 bolts either side of web at 500 c/c. 10mm steel plates bolted to flange of truss with m10 bolts either side of web at 500 c/c.
2	Section 1 of retained section of Roof A	7-12	Strengthening of bottom boom with 5mm steel plates, bolted to web with M10 bolts either side of web at 500 c/c.
3	Section 3 of retained section of Roof A	20-35	Strengthening of truss top cord edge member with 70x50x6 steel unequal angles bolted with M16 bolts at 300 c/c.

4.2.63 Repair type 1 is to be used across the whole length of the retained section of Roof A (trusses 7-52). Repair type 1 will comprise strengthening the larger diagonal members of the truss with two 10mm thick steel plates, which will be bolted to the web of the truss section with M10 (8.8) bolts either side of the web at 500 c/c, as well as 10mm thick steel plates to be bolted to flange of the truss section with M10 (8.8) bolts either side of web at 500 c/c.

4.2.64 Repair type 2 is to be used across Section 1 of the retained section of Roof A (trusses 7-12, the five trusses at the southern end of the retained section of Roof A). Repair type 2 will comprise strengthening the bottom boom of the truss with two 5mm thick steel plates, which will be bolted to the web of the section with M10 (8.8) bolts either side of the web at 500 c/c.

4.2.65 Repair type 3 is to be used across Section 3 of the retained section of Roof A (trusses 20-35). Repair type 3 will comprise strengthening the top cord member of the truss adjacent to the station building. This will be done with two 70x50x6 steel unequal angles, to be bolted to the web of the section with M16 (8.8) bolts at 300 c/c. The angles are to be notched locally around the existing rivets.

4.2.66 Plan bracing is to be used across the whole width of the Manchester end (southernmost) truss of the retained section of Roof A (truss 7). Struts will be fixed with bolts the bottom boom of the trusses to provide further restraint across Section 1 of the retained section of Roof A (trusses 7-12).

4.2.67 All material changes to the trusses are specified to use S355 steel throughout and all foundational changes will use reinforced concrete, unless noted otherwise on the LBC application drawings.

4.2.68 Across all repair works, to maintain the good condition of existing trusses, all trusses in the section will be grit blast cleaned. The surfaces will be prepared and then repainted with paint specifically for protection from their external environment to reduce continuous future wear and tear.

In principle specification for unforeseen / unexpected repairs and strengthening

Truss and Connections

4.2.69 As mentioned in paragraph 4.2.59, full information regarding the condition of the trusses' steelwork and historic construction will not be known until the re-conditioning work to Roof A has commenced. The existing roof trusses will be grit blasted to reveal the condition of the steelwork, with any as yet unknown defects identified at this point and the extent of repairs determined.

4.2.70 The condition of each section of the truss and their connections have been assessed to be generally in favourable condition, with some sections having mixed conditions (S11) and others assessed to have good condition (S2 and S5). That being said, the possibility exists for blast cleaning to uncover evidence of hidden corrosion which would require repairs to maintain the structural stability of Roof A.

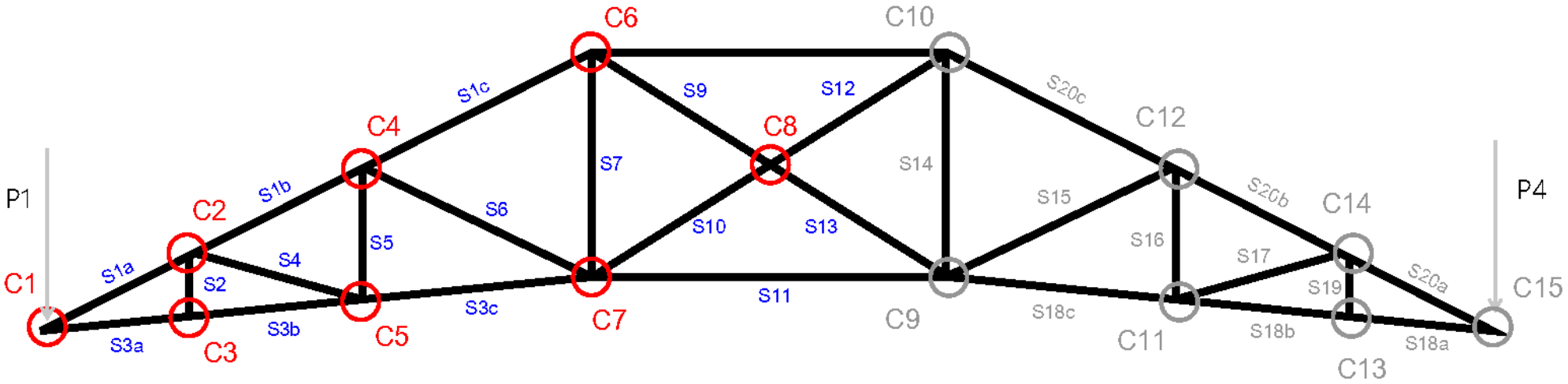
4.2.71 Full details of conjectural repairs have been prepared in *Huddersfield Station: Roof A Truss Pre-emptive Interventions Proposal Sketchbook*, included in Appendix D. This will be used to define the specification in the event that repairs to the steelwork will be required following blast cleaning.

4.2.72 The works described here are undertaken in line with the conservation objective of the project and provide minimal interventions in areas which it requires and are to be undertaken in a consistent manner.

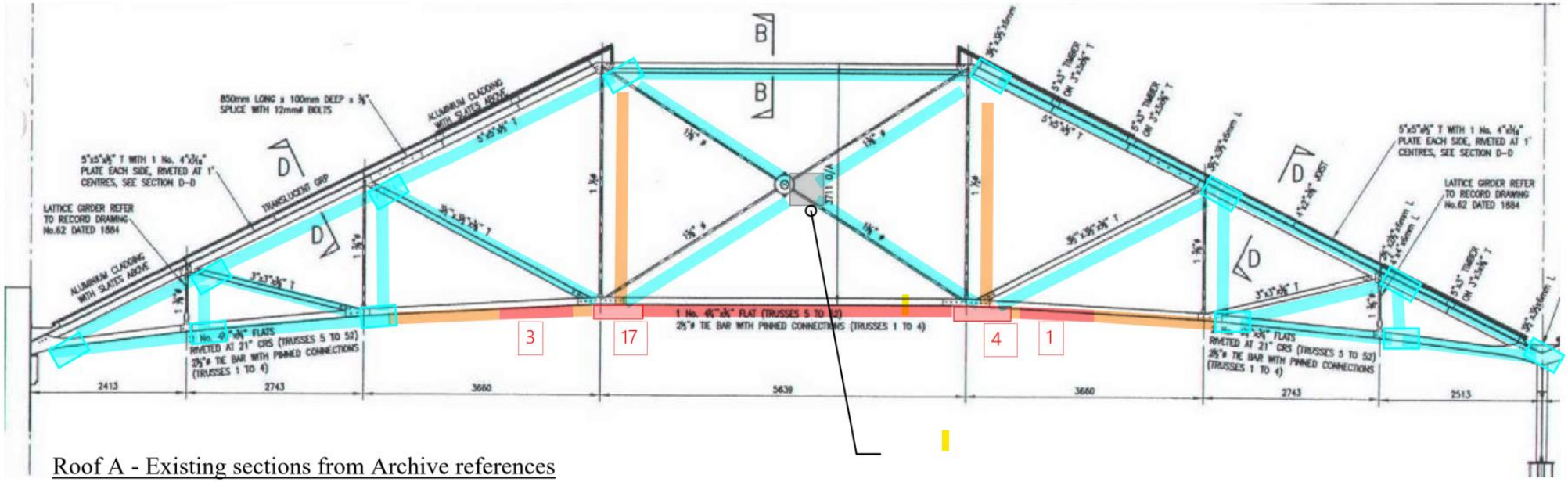
4.2.73 The likelihood of each repair being applied to its respective truss member has been graded based on current knowledge of their condition. In summary, these grades are as follows:

- Possible intervention required – where the element or truss has visible deterioration *and* the element is at or near full utilisation (this may be the case for up to 16 trusses in total, and one connection point)
- Unlikely intervention is required – where the element or truss either has visible deterioration *or* where the element is at or near full utilisation; and
- Highly unlikely intervention is required – where the element or truss has limited or no visible deterioration and the element has some residual capacity.

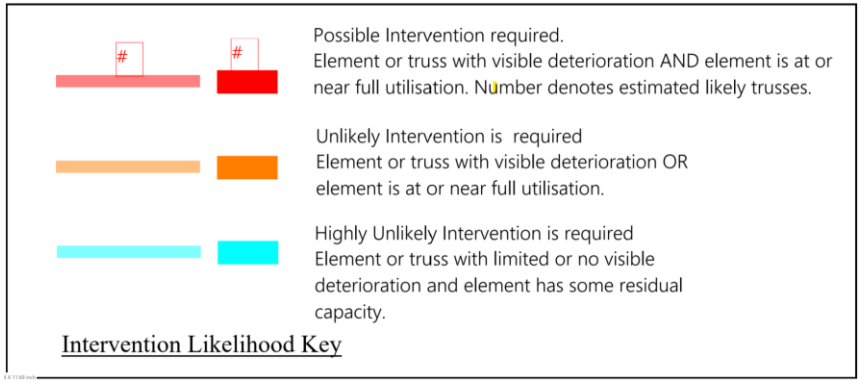
4.2.74 The specifications of the repair for each type of member or truss which may potentially be applied, dependant on condition, is summarised below in Table 4-2, including reference to the likelihood of repairs being required detailed in paragraph 4.2.73 above. The categorisation of the type of truss or section of roof is shown below in Insert 4-15.



Insert 4-15 Section of retained Roof A, showing the categorisation of truss members and connections for the specification for unforeseen / unexpected repairs. (Note – the station building is to the left).



Roof A - Existing sections from Archive references



Intervention Likelihood Key

Insert 4-16 Section of retained Roof A, showing the likelihood of intervention for each truss as currently anticipated.

Table 4-2 In principle specification for unforeseen repairs and strengthening to roof members.

Roof A Truss Member or Connection	Likelihood of repair being required	Remedial Categories	Assessed condition	Description of repair
S1a, S1b and S1c	Highly unlikely	Short length and midspan element strengthening of Roof A	Reasonable condition (member S1c already previously strengthened). Low potential for corrosion or section loss to be identified during blast cleaning.	Top boom T section to be strengthened with new angles bolted to existing section. Angles to match other agreed strengthening proposals. Bolts will be bespoke to fit identified damaged or lost sections.
S2	Highly unlikely	Full Element Replacement	Elements of the original vertical elements are in good condition with. Minimal risk of loss through corrosion.	Identified cracked elements are to be retained and supported by four angle bolts around tie rod. Bolts will be fixed through new and existing holes.
S3a, S3b and S3c	S3c - Possible / unlikely S3a, S3b – Highly unlikely	Short length and midspan element strengthening of Roof A	Reasonable condition. Four identified areas of corrosion for S3c caused by leaking water. Low potential of excessive corrosion or cracking.	Strengthen existing flats with additional flat of same thickness. Flat will be secured with bolts measured to suit extent of defect and be fixed through existing rivet holes. The additional flats will be installed at regular intervals.
S4	Highly unlikely	Short length and midspan element strengthening of Roof A	Reasonable condition.	Strengthening works to existing T section with additional bolted top plate to top of T section. Where there is significant loss of element damage an additional T section will be installed on top of existing. Plate and bolt size will be relative to the extent of damage. Existing bolts to be removed and replaced where required. The extent of the strengthening works will span past the area of concern to ensure sufficient capacity.

Roof A Truss Member or Connection	Likelihood of repair being required	Remedial Categories	Assessed condition	Description of repair
S5	Highly unlikely	Short length and midspan element strengthening	Good condition with minimal risk of lost due to corrosion	Identified cracked elements are to be retained and supported by two new angles installed into two new site-specific gusset plates (on the top and bottom nodes) which will be fixed to the tie rod. The additional elements will be sized for the full capacity of the existing sections.
S6	Highly unlikely	Short length and midspan element strengthening	Reasonable condition. Low potential of significant corrosion or section loss to be identified during blast cleaning.	Strengthening the inner diagonals by fixing and increasing the thickness of the current specified strengthening works as required to account for any loss of section or element damage.
S7	Unlikely	Short length and midspan element strengthening / Full Element Replacement	Generally good condition, some show signs of pitting which may be historical.	Dependant on condition one of two proposals. Proposal 1 is for a supplementary new steel flat or angle section added each side of existing hanger with top and bottom gusset plates connected to truss. Proposal 2 is for would replacement of existing elements with equivalent member from the dismantled northern (Manchester) end bay trusses (1-6) or by a newly forged section. Existing section will be cut or drilled out and replaced with equivalent element from demolished trusses or by forged equivalent new section. During the replacement, temporary measures to tie together top and bottom booms are required.

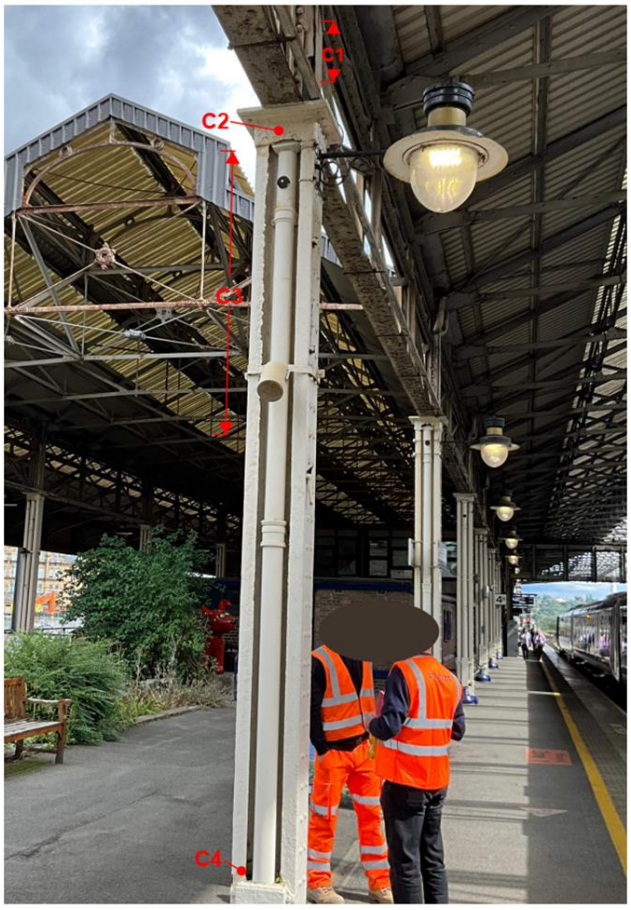
Roof A Truss Member or Connection	Likelihood of repair being required	Remedial Categories	Assessed condition	Description of repair
S8	Highly unlikely	Short length and midspan element strengthening	Poor condition, however modern materials have reduced the risk of interventions.	Existing corruption of the original fabric and additional two steel hollow section (SHS) boxes to be restored like-for-like. The flanges of the central I section to be blast cleaned and ground to minimum thickness in line with Network Rail Guidance and to reduce visible impact when viewed from platform level, prior to coating.
S9 and S10	Highly unlikely	Full Element Replacement	Generally good condition. These sections share pin connections which, due to the wrought iron and circular nature, are impracticable to strengthen	Intervention would replace existing elements with equivalent member. New S9 and S10 replaced with like-for-like rods with fork ends to match existing. S7 hanger would need to be temporarily removed for new S9 installation.
S11	Possible	Short length and midspan element strengthening	Mixed condition (rusting and coating failure) as a result of missing lantern.	Strengthening existing flat plates in the bottom boom central elements with additional flat of the same thickness installed at regular intervals (similarly to process undertaken for section S3). Flat will be secured with bolts measured to suit extent of defect and be fixed through existing rivet holes. Strengthening works will span past area of concern to match existing bolt spacing at S3.
Connection C1	Highly unlikely	Element strengthening	No evidence to suggest damage.	If inner connection plates are deteriorated, new side plates would be proposed as per main works proposals and loads transferred out of new side plates.

Roof A Truss Member or Connection	Likelihood of repair being required	Remedial Categories	Assessed condition	Description of repair
Connection C2	Highly unlikely	Full Element Replacement	Reasonable condition. Connection is complex due to interface with perpendicular longitudinal truss.	Temporary works to hold elements in place while the single through pin is replaced and made longer. New side plates to be bolted outside existing side plates.
Connection C3	Highly unlikely	Element strengthening	Reasonable condition. Connection is complex due to interface with perpendicular longitudinal truss.	New plan bracing connections at the southernmost trusses. If outer connection plates only deteriorate, new side plates outside existing, shaped to suit flared fork end. If outer plates are sound but fork ends are not, then side plates bolted along bottom chord.
Connection C4	Highly unlikely	Element strengthening	Reasonable condition.	Assuming temporary works in place, new pin proposed whilst temporary work is removed. Diagonal S6 cut back and new plates in same plane as existing bolted into S6.
Connection C5	Highly unlikely	Element strengthening / Full Element Replacement	Reasonable condition. Main works include additional side plates to receive new plan bracing on southernmost trusses.	Dependent on deterioration level, three intervention types proposed. Proposal A: add new bridging plates with temporary works whilst new pin is installed. Proposal B (if S5 deteriorated): replace structure rather than strengthen. Proposal C: as Proposal B with inclusion of wider new bridging plates.
Connection C6	Highly unlikely	Element strengthening /Full Element Replacement	Reasonable condition. Main works package includes strengthening works through rivet replacement.	Dependant on condition, one of two proposals to be followed. Proposal 1: affix supplementary bridging plate over existing. Ties S7/S9 may need to be removed in temporary case that S7/S9 now have a wider

Roof A Truss Member or Connection	Likelihood of repair being required	Remedial Categories	Assessed condition	Description of repair
				connection. Potential for re-use of S7 tie rod and wider fork with new tie rod at S9. Proposal 2: avoids element replacement through more extensive temporary works. Allows for full removal of existing connection plates and therefore new bridging plates can be used in same plane as existing. Existing S7/S9 tie rods can be re-used.
Connection C7	Scenario A – Possible Scenario B&C – Highly unlikely	Element strengthening	Corrosion present. Most significant on bolts and connection plates around the base of diagonal members and central side of truss (toward S11). Scenario B and C unlikely due to assessed generally good condition of S7, S10.	Scenario A: assumes deterioration of outer connection plates only. New bridging connection plate over existing side plates, to match existing. Scenario B: assumes deterioration of outer connection plates, as well as S7 and S10 ends. As Scenario A, with full strengthening and capacity matching of S7/S10. Extension to bridging plate to accommodate S7/S10 tie rod strengthening. Scenario C: assumes deterioration of outer connection plates, S7/S10 ends and S6/S3c/S11 ends. As Scenario B, with bridging plate extended past existing connection.
Connection C8	Highly unlikely	Full Element Replacement	Unknown, due to inaccessibility. No excessive corrosion to the fascia plates. Position under roof could mean hidden deterioration.	Assuming full failure of part of the structural ring, a new like-for-like replacement ring would be proposed. Significant temporary works needed to facilitate the replacement.

Columns

4.2.75 The columns supporting Roof A along the current Platform 4 are also planned to undergo strengthening and repairs, as required. For the repair specification, the columns are divided structurally into four sections which may display defects which need addressing: C1, C2, C3 and C4. These categorisations are shown in the labelled photograph in Insert 4-17 below, with detailed drawings of each type included in the full specification sketchbook in Appendix D.



Insert 4-17 Column on platform 4, with labelling to show the sections of the column corresponding to the repair specification.

4.2.76 All columns will undergo standard strengthening work which will be as follows:

- Blast cleaning of the surface
- Sharp edges to be ground back to 2mm thickness
- Surface to be painted with corrosion protection paint

4.2.77 C1 sections of the columns are found at the upper column section of the longitudinal trusses at the junction of Roof A and the start of roof B. In at least one location on the roof, the column section is visibly corroded likely due rainwater runoff. Standard strengthening works as detailed in paragraph 4.2.76 will be undertaken.

4.2.78 C2 sections of the columns comprise the column cap horizontal plates. They have significant corrosion to the horizontal plates of the column caps due to the location of the rainwater down pipes. Where the remaining plate is at 90% of the original depth or more and has a minimum of 3mm of thickness remains, the plate will be prepared and standard strengthening works as detailed in paragraph 4.2.76 will be undertaken. Where the

horizontal plates have suffered greater loss than these limitations, a new 6mm plate will be bolted, using two bolts with channel flanges to each side, over the corroded horizontal plate and treated with a paint to match existing elements.

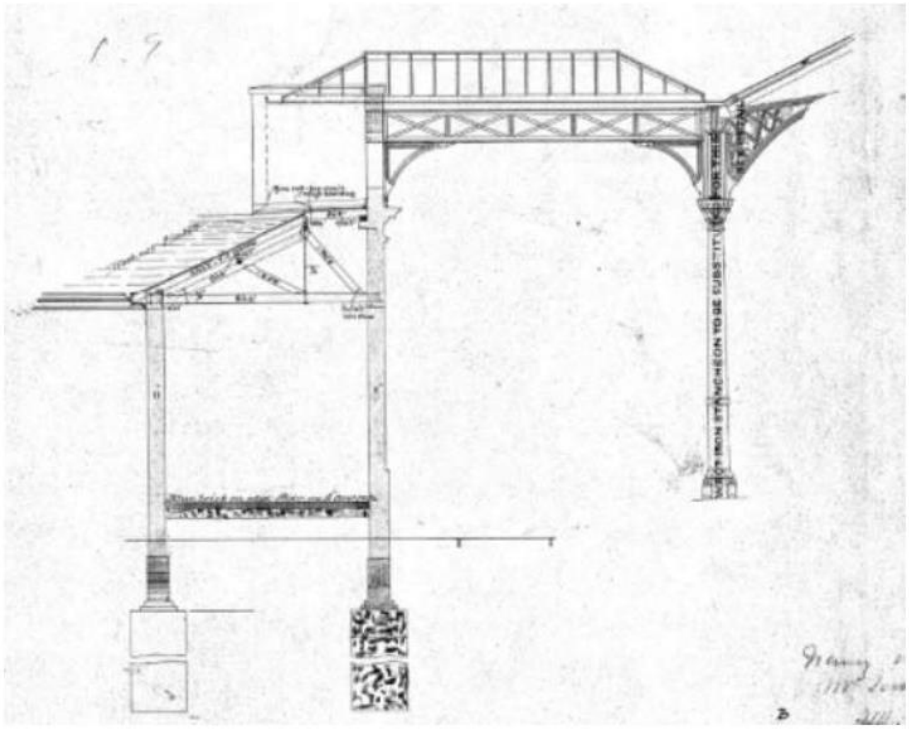
4.2.79 C3 sections of the columns comprise the main column shroud channel, significant corrosion to the inside flanges of the PFC sections is anticipated, due to the location of the rainwater down pipes. The corrosion is not currently thought to be causing imminent severe structural instability and any intervention is to be considered only where corrosion has significant aesthetic impact. The level of section loss will determine whether the works require standard strengthening works to prevent further deterioration as detailed in paragraph 4.2.76 or whether a cover plate is required.

4.2.80 C4 sections of the columns relate to the column feet. In a small number of locations, the PFC flanges on these sections are fully corroded where water or other debris has pooled around the base. The corrosion is not currently thought to be causing imminent severe structural instability and any intervention is to be considered only where corrosion has significant aesthetic impact. The level of section loss will determine whether the works require standard strengthening works to prevent further deterioration as detailed in paragraph 4.2.76 or whether a cover plate is required.

Lateral truss strengthening at northern (Leeds) end

4.2.81 As part of ongoing detailed design development, it was identified that the construction of the new Roof A extension at the northern (Leeds) end of the station would transfer some of the load both into the existing Roof A structure and through a lateral connection back to an existing part of the Station building, which is currently in use as a drivers' welfare facility. Strengthening of this lateral connection would be required to better distribute the load from the new Roof A extension as part of these works, to ensure stability of this structure and spread the structural loading impact across the existing Roof A and the Station building.

4.2.82 Historically there had been further lateral ties from this drivers' welfare building to a demolished span of roof bays connected to Roof A. This roof is no longer extant in its entirety, but evidence of these historic connections remains on site (see below Insert 4-19) as well as images and plans depicting the previous bays and lateral ties (see below Inserts 4-18 and 4-19). The lateral truss girders between the station building parapet and Roof A do remain.



Insert 4-18 – Drawing from Network Rail archives depicting the former tying of Roof A to the station building, of which only the lateral trusses are extant.



Insert 4-19 – Photos showing the surviving lateral trusses and evidence of the cut off previous roof covering, where the drivers' welfare building had been connected laterally to Roof A.

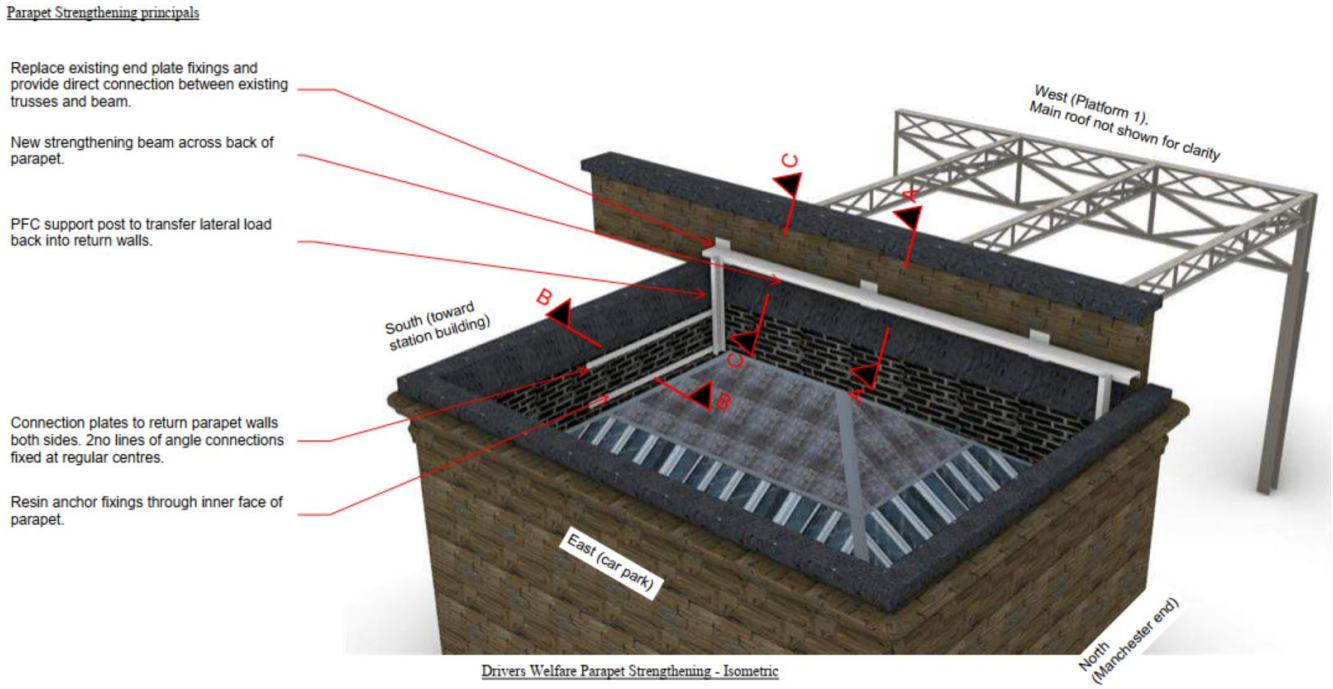
4.2.83 Works to strengthen the welfare building parapet and lateral truss connections would be scheduled to be completed prior to the extension of Roof A at the northern (Leeds) end.

4.2.84 The new strengthening measures would require the installation of new strengthening plates and connection plates to the internal facing side of the parapet walls which rise above the glass and slate roof the drivers' welfare building. This change would only be appreciably visible from within the drivers' welfare building and have little to no visual impact on the

understanding of Huddersfield Station for most of the general public. There would be very minimal loss of historic fabric as a result of this element of the proposal.

4.2.85 Additionally, the existing lateral trusses would be strengthened via over-plating, in an approach which reflects the philosophy of the wider strengthening of the main spans of Roof A. Both a strengthening steel plate and an additional cheese plate would be attached to the top and bottom members of the existing tying trusses, connecting the Roof to the drivers' welfare building. These would add 6mm in thickness to the existing trusses. This would also require the replacement of each of the existing 5/8" rivets with M16 bolts, to be replaced in sequence of one by one. This approach has been shaped to minimise the visual change to the profile of the trusses and would be only minimally appreciable from platform level.

4.2.86 These additional works are not anticipated to result in any harm to the significance of the Grade I Listed Huddersfield Station due to the minimal visibility of the change and minimal loss of historic fabric. The proposal has been developed under the same philosophy of the approved works for the strengthening of the rest of Roof A and its design allows the structurally safe realisation of these works, while keeping visual change to a minimum. This approach was agreed with the Kirklees Council Conservation Officer at a TRU Heritage Working Group Meeting on 24th July 2025, with further agreement that the proposals could be formally approved and discharged through inclusion within this CIMP document.



Insert 4-20 – Diagram depicting the lateral truss strengthening to support the shared weight of the extension to Roof A at the northern (Leeds) end, via connections to the drivers' welfare building, largely hidden behind the parapet.

Roof A - connection into principal Station building, repointing etc. [*if required*]

4.2.87 [*TBC – To be included in future CIMP phase, see Table 2-2*]

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

4.2.88 During the design development process prior to submission of the granted Listed Building Consent application, it was considered as to whether the sections of the roof to be removed, particularly the Manchester end bays of Roof A, could be reused, for example moved in their

entirety to form the required extension at the Leeds end of the roof. Due to the differing geometry of the roof across its length, re-use of historic fabric in this wholesale way was, and remains, impossible to achieve. Additional information on this was included in the Heritage Assessment submitted in support of the Listed Building Consent application[12].

4.2.89 The development of the specification for unforeseen repairs to Roof A has noted one possible member where there may be opportunity to salvage a type of truss member from the removed Manchester end bays for us as replacement elements if required in the rest of the roof. This relates to the central diagonal truss member S7 (see above, Table 4-2). The likelihood of a replacement of such truss members is considered unlikely.

4.2.90 While such opportunity for replacement with a similar S7 element salvaged from the removed bays will be considered, it will naturally be dependant on the condition of the salvaged elements, following removal and blast cleaning. The relative fragility of the roof structure, individual structural members and the materials involved, in particular in the context of the nature of the interventions, all mean that such an opportunity will need to be carefully considered, and only pursued if structural condition allows.

4.2.91 It is unlikely there will be any other opportunities for the safe re-use of existing fabric from elements of Roof A to be removed. However, in the event that any material be in salvageable condition post removal, particularly with regard to the S7 elements, then potential re-use should be considered pending the following assessments.

4.2.92 Material removed will need to demonstrate compliance with the following assessments:

- Protection of human health and protection of the environment
- Suitability for re-use, without further treatment
- Certainty of use
- Quantity of material
- Quality of material

4.2.93 The re-use of material where feasible should be considered within the following hierarchy for suitable re-use.

- Firstly – for re-use within a similar context to its original purpose (for example with the S7 truss members)
- Secondly – for re-use within the same site in alternative context
- Thirdly – for re-use within the wider TRU scheme

4.2.94 Any material which post-demolition is found to be viable for re-use, compliant with these assessments, and for which an appropriate opportunity for re-use following the hierarchy has been found, shall be retained and stored for the duration of the construction programme to be reused.

4.2.95 Should any material then be identified for re-use, careful methods of deconstruction and appropriate storage will be used to minimise risk to damage to any elements and increase the chance for re use. If an element is successfully identified for re-use then it should be recorded and a reference number and name assigned, and appropriately labelled for storage. Re-usable elements will be transported to the construction compound to be stored in a manner to minimise any damage, overstress, degradation, mishandling or distortion. Wrapping, padding and appropriate restraints will be utilised to protect from potential risk from weather, mishandling, impacts or jolts during transportation. Storage will be assessed

[12] Network Rail, 2021. *Network Rail (Huddersfield to Westtown (Dewsbury) Improvements) Order Huddersfield Station – Heritage Assessment*.

to be of correct environmental conditions for each potential re-usable element and adjusted where needed to be weathertight and of appropriate humidity and temperature.

4.2.96 Any element of the roofs identified as suitable for re-use may undergo potential repairs to maximise longevity. These repairs will be conversant of the agreed approach and specification for repairs to the roof outlined above in paragraphs 4.2.59 to 4.2.80. Each reusable element will be attached using the specific same fixing where possible and like-for-like method of fixing type, as alternative to ensure for as close to identical reconstruction as possible (again taking into account agreed approaches for repairs to Roof A).

4.2.97 During the removal process, the elements of the building will be catalogued and recorded, with details passed to the Historic Building Recording contractor for the Station; information on elements retained for re-use could be incorporated in the Historic Building Recording report as appropriate.

4.3 Tea Rooms

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

Historic Building Recording and Monitoring – Tea Rooms

4.3.1 As secured by Condition 3, historic building recording has been undertaken in accordance with the WSI submitted to Kirklees Council and approved by West Yorkshire Archaeological Advice Service (WYAAS). A report concluding the findings was subsequently completed and submitted as agreed in the WSI to the relevant parties for review and approval. Condition 3 for Historic Building Recording of the Tea Rooms has now been partially discharged under ref. 2023/92144 on 11th September 2023.

4.3.2 Monitoring visits during the works to the Tea Rooms will be co-ordinated using the Inspection Test Plans (ITPs) drafted for the various elements of the structure. ITPs allow for inspections to be programmed for during the course of the construction works. Arrangements can be made for Officers from the local authority and/or Historic England to be able to witness or inspect works. These arrangements will be discussed and where appropriate progressed via the TRU Heritage Working Group.

(b) (c) (d) Methodology for Deconstruction, Storage and Reconstruction of the Tea Rooms

4.3.1 A detailed methodology has been produced to define the deconstruction, storage and reconstruction of the Tea Rooms. This has drawn on existing knowledge of the building and specialist studies to provide an approach which will achieve the building's disassembly, storage and reconstruction in a way which minimises on the harm to significance of the Station.

4.3.2 This section provides a summary of the methodology. The full detailed methodology document is included within Appendix C of this CIMP.

4.3.3 The methodology for disassembly is underpinned by an understanding and analysis of the building's significance, morphological evolution, materials and current condition. Archival research and *in-situ* surveys have been undertaken to support this, and as a result has produced, or will produce, the following documentation:

- Morphological study of the building's historical development
- Record of elements (including an assumed structural layout)
- Record of materials
- High-level condition survey

- Opening-up works to establish the existing roof construction and condition
- Full photogrammetric survey of building interiors
- Paint analysis (history and toxicity)

4.3.4 The methodology document is split into four parts as follows:

- Part 1: General Principles and heritage significance
- Part 2a: Exteriors
- Part 2b: Interiors
- Part 3: Outline repair and specification notes

General approach

4.3.5 As a component of the Grade I listed Huddersfield Station, it is recognised that the Tea Rooms make a contribution to the Station's overall exceptional heritage interest. The methodology for dismantling, storage, repair and reconstruction of the building is conversant of this and seeks to strictly limit disturbance of the building fabric as much as is reasonably practicable.

4.3.6 Deconstruction, storage, repairs and reassembly shall be carried out by skilled craftspeople supplied by the contractor with evidence of relevant previous successful work experience with regard to historic buildings. The contractor will provide method statements and risk assessments for all aspects of *in-situ* cleaning, repairs, dismantling, labelling, storage, off-site cleaning, off-site repairs and reconstruction. Work will not commence without the review and approval of these documents by the TRU Heritage team.

Understanding the building, its historical development and significance

4.3.7 The Tea Rooms are a simple timber building, rectangular in plan. The building was originally divided roughly symmetrically with a central area of WCs, each side with passenger rooms divided by a single cross-wall with chimney. External elements feature a plinth base and entablature with console brackets at the roof line. Elevations are divided vertically with repeating pilaster and capital modules, with each bay containing either a door or window.

4.3.8 The Tea Room is reflective of trends for improved station facilities for passengers within stations from the 1860s onwards. It represents a rare example of the use of timber boarding in station facilities buildings. As noted above in Section 3.5, the significance of the building is associated with the expansion of the station in the 1880s and its timber-boarded elements, as well as the plan form for access on both sides. These key elements need to remain understood post reassembly. The interior has been altered and further minor alterations will not significantly affect the building's significance as a result.

4.3.9 The Tea Rooms' condition has altered with time and renovations. Visual inspection of the exterior reveals inappropriate timber repairs, loss of timber, loss of paint, additional layers of paint, general cracks, signs of detachment between panel mouldings and inset panes, addition of cables with fixings, heads of nails present from previous fixings, signs of corrosion and the addition of advertising and station signs. Part 1, Section 4 of the methodology document (Appendix C) details the specific changes over time and includes archival 19th and 20th century drawings of the alterations, as well as the current layout as affected by these changes over time.

Record of materials and condition

4.3.10 Part 2a, Section 3.1 of the methodology (Appendix C) illustrates the principal materials used in the construction of the exterior of the building, as currently understood. These are characterised as follows:

- Timber (wall studs, floor/roof joists, floorboards, rafters, pilasters, cladding boards, sash windows, doors, moulding and surrounds)
- Cast iron (console brackets)
- Glass (windows)
- Plastic (vent grilles)
- Metal (vent grilles at upper level, service conduits, door handles, hinges)
- Stone (flags around base)

4.3.11 Further paint analysis is to be undertaken by specialists to establish layers and historic paint colours as well as inform safety risk to dismantling due to the chemical components of the paint. This paint analysis will be included within further phases of the CIMP as uncovered.

4.3.12 Part 2b, Section 3.1 of the methodology documents the record of materials for the interior of the building. This is organised by elements rather than materials, as each element is made of a larger range of materials and the interior has undergone more adaptation over time. The elements are categorised as follows:

- Joinery
- Flooring
- Ceilings
- Building services

4.3.13 The methodology document also details the current condition of each material or element for the exterior (Part 2a, Section 3.2) and interior (Part 2a, Section 3.1), the ongoing analysis of which will help determine any requirement for replacement or removal of elements (see below).

Additional surveys and schedules

4.3.14 The specialist contractor will carry out additional surveys of the Tea Rooms including a detailed photogrammetric and metric survey. Before and during the deconstruction works, they will record the materials, condition and parts, a catalogued and codified record of elements, including those elements to be retained, replaced, or repaired, and any other findings related to the building. Measured surveys will be used to maintain ‘live’ drawings, schedules and photographic records of the building as it is dismantled and reassembled. Such metric survey will also provide the framework for setting out the reconstruction of the building.

4.3.15 The contractor will produce a comprehensive system to define and catalogue every element of the building. Each architectural component must be identified and organised within a set of key drawings with an organised naming and numbering system. These key drawings will be used to identify parts with in-situ locations and relationships to adjoining elements and will assist in reassembly and reconstruction. The contractor will prepare a comprehensive drawing schedule with photographs to present all elements to be removed as it is reconstructed. The contractor will also prepare a drawn and cross-referenced record of all items to be replaced with new material and all items to be repaired.

4.3.16 Any new information about the Tea Rooms will be recorded, updated on any relevant key drawings and recording documents and noted within the relevant Phase of the CIMP. New information will also undergo review to ensure any potential alterations to the methodology in response to new information is undertaken according to best practice conservation principles and meets the TWAO and LBC conditions, as well as being agreed with Kirklees Council and Historic England via the TRU Heritage Working Group. Such new information could include previously unknown fixings or historic materials, unknown levels of

degradation or unknown previous alterations that affect significance.

Dismantling

4.3.17 Dismantling trials shall be undertaken once the building has been emptied and will include a removing a portion of external paving slabs, a section of cornicing, two cast-iron console brackets, a window, a door, a pilaster and section of cladding boards. This will help determine the likely condition and construction of similar elements and confirm best methodology for dismantling and storage. Dismantling will be carefully undertaken by the specialist contractor, with no power tools used at any point during the dismantling process unless approved by the TRU Heritage team and used with appropriate care.

4.3.18 Composite elements and joinery will be disassembled into as few subsidiary components as possible to minimise damage and loss. Timber elements will be carefully prised off to the agreed joint line. Cladding boards are to be detached from the top and move downwards. Joinery mouldings will be protected during dismantling. Connections between internal partitions and perimeter walls are to be exposed and presented to the TRU Heritage team for further understanding and informed reassembly. Bricks of solid chimney breasts and solid walls shall be carefully dismantled, stored and cleaned for use in reconstruction. Careful removal of the floor finishes shall be undertaken to determine if there any surviving original floorboards underneath which could be suitable for reuse.

4.3.19 All types of fixings will be assessed prior to dismantling where possible, with location noted for record and reassembly. Details of previously unknown fixings including type, location, depth and condition will also be noted in the record and used for appropriate reassembly of the building.

4.3.20 The sequence of dismantling is intended to reverse the sequence in which they were constructed to minimise damage, the full sequence of which is laid out in Part 2a, Section 5.3 for the exterior and Part 2b, Section 5.2 of the methodology document (Appendix C).

Preparation, handling and storage

4.3.21 The contractor shall provide appropriate temporary support including scaffolding, ties and braces to all elements of the building during the dismantling in order to prevent damage through uncontrolled collapse. Repairs will be undertaken to the building prior to dismantling only for elements which require stabilisation to ensure safe removal and storage. The contractor shall also carry out trial small scale areas of cleaning on different elements to ensure elements can be cleaned before reconstruction without damage.

4.3.22 A recording system will be used during disassembling of the building. Each element of the building will be identified with a name, labelled and placed on a set of key drawings to aid in the reassembly of the building. The storing of the dismantled building will inform the recording system and storage must allow for adequate humidity control, access for inspection and clear and logical ordering of elements.

4.3.23 Each element will be identified on the relevant key drawing with a reference number and labelled using stickers identifying the reference and drawing number, which will not leave any lasting damage or residue, metal tags wired in place may be used for other elements such as cast iron.

4.3.24 Elements to be reused shall be stored off site, a method statement for storage and handling will be provided by the contractor that will demonstrate all necessary steps to minimise risk of damage. All elements will be protected, stored, transported and handled in a manner aiming to prevent any damage, distortion, overstressing, uneven weathering or degradation. Storage space shall be clean, secure, weathertight and free from infestation within appropriate environmental conditions, including temperature and humidity, for each element.

Each element is to be protected by padding and wrapped to prevent abrasion and exclude dust. All elements to be disposed of shall be disposed of responsibly with as much as possible to be reused elsewhere or otherwise recycled.

Outline of the repair and specification notes

4.3.25 All elements of the building are to undergo appropriate repairs unless specifically marked on drawings or notes. Urgent repairs may be required to parts disturbed during site activities or dismantling process. The contractor shall propose a method of rapid assessment for repairs for appropriate review and approval prior to any dismantling work.

4.3.26 All components to be retained shall be repaired and reinstated as per their original location and arrangement on the building. Damaged surfaces and mouldings shall be made good by fitting new pieces to match the adjacent planes and profiles. Replacement elements shall match the material and geometric characteristics of the original components with the exception of obvious damage or defects, as no attempt shall be made to falsify the effects of age. Existing rusted fixings which cannot be reused shall be replaced with new fixings suitable for and compatible with existing dimensions and materials.

Specific repair notes and materials

4.3.27 Element-by-element specification for repair is detailed in Part 3, Section 5.2 of the methodology document (see Appendix C) to ensure that each element is given the appropriate care for specific condition of each element and to maximise potential reuse where possible.

4.3.28 Part 3, Section 6.1 of the methodology outlines the full repair treatments for different materials throughout the Tea Rooms, covering the specific repair and cleaning methodology most appropriate for each material. This section of the methodology characterises the proposed repair treatment in relation to:

- Timber
- Fixings
- Cast and Wrought Iron
- Stone, including the marble buffet counter top
- Historical plaster[13]
- Glass; and
- Paint and other coatings.

Outline of reconstruction and specification notes

4.3.29 The contractor will reconstruct the building in the following order, in reverse of the dismantling:

- Foundations
- Columns
- Utilities
- Walls
- Roof
- Doors and windows

[13] The methodology document identifies that the possible presence of historical plasterwork within the building is under investigation, with repair notes to be provided should any be found.

- Internal walls, floors and ceilings
- Internal doors, counters and historic carpentry
- Building services and lighting
- Decoration
- Fixtures, fittings, furniture, posters, clocks, signage etc

4.3.30 Each element will be reinstalled into its former position using the same fixings, subject to their condition. Sample repairs for each principal type of timber component shall be approved by the TRU Heritage team before proceeding with the repairs, with appropriate review and approval by Kirklees Council and Historic England, as required.

4.3.31 The contractor shall create a visual mock-up of two re-erected bays with studwork and cladding to both the exterior and interior offsite. Approval of this mock-up shall be offered to the TRU Heritage team prior to reconstruction, with appropriate review and approval by Kirklees Council and Historic England, as required.

4.3.32 [*TBC – Additional information regarding construction of the Tea Rooms to be included in future CIMP phase, see Table 2-2*]

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

General methodology for historic fabric re-use

4.3.33 In the deconstruction and reassembly of the Tea Rooms, it is intended, where possible, to re-use as much of the existing fabric as is appropriate. This is to preserve the understanding of the building's significance as a sum of its current parts. The detailed methodology document for the deconstruction, storage and reconstruction of the Tea Rooms, included in Appendix C, defines that the approach will take particular care that the elements of the building that greatly contribute to its significance, such as the timber boarding, its plan form and access on the platform from both sides, maintain a clear continuity post re-assembly.

4.3.34 As summarised above in paragraphs 4.3.10 to 4.3.26, and detailed in full in Appendix C, elements of the building will be catalogued before deconstruction and carefully recorded to aid in identical reconstruction placement. These elements will be assessed continually during the deconstruction process for their potential for re-use during reconstruction. Careful methods of deconstruction and appropriate storage will be used to minimise risk to damage to any elements and increase the chance for re use. Fixings and materials will have been assessed prior to dismantling and shall be reinstated in the same position using the same type of fixing, subject to their condition.

4.3.35 Where elements cannot be re-used due to degradation or damage, they will be recorded and included in the historic record. Further, where any fabric retained cannot be re-used in the reconstruction of the Tea Rooms, opportunities will be explored to save for other potential re-use within the station development where possible. Such reuse should be appropriate to the material and to the particular significance and history of the other part of the station. If an appropriate use elsewhere in Huddersfield Station is found, then appropriate opportunities for interpretation to identify this re-use in the wider station should be explored, to contribute to a richer understanding of the continued history of station's development.

4.3.36 Clear communication between contractors, contracted historic building recorders, the TRU Heritage team, Kirklees Council and Historic England will be maintained throughout. This will be via agreed communication strategies and use of the TRU Heritage Working Group.

Methodology for deconstruction of fabric for potential re-use

4.3.37 During the deconstruction process, the contractor will take all care possible, and continually make reference to the dismantling methodology and key drawings to determine the most suitable approach. An external condition survey has been undertaken prior to deconstruction, and is included as part of the methodology document included in Appendix C, to assess which elements are likely to be able to be reused, and which may be unsuitable for re-use. As well as this, a physical survey will be conducted by the contractors following the approved methodology to produce record surveys before and during the dismantling process, as outlined above in paragraphs 4.3.14 and 4.3.15.

4.3.38 Composite elements will be disassembled into as few subsidiary components as possible and types of fixings shall be assessed and noted in the record for potential re-use or like-for-like matching of replacement fixings.

4.3.39 Although surveys and assessments will be completed prior to deconstruction works beginning, there is potential for new understanding of the fabric and construction of the building to be discovered during the dismantling. As per the approach outlined the Methodology document (see Appendix C), any such discoveries which have material impact on the approaches to reuse or preservation of historic fabric from the Tea Rooms, will be communicated to Kirklees Council and Historic England via the agreed processes.

Methodology for assessment of re-usability and potential replacement

4.3.40 As noted above in paragraph 4.3.37, the potential for re-use of fabric during reconstruction has been assessed prior to dismantling in the methodology document included in Appendix C. This assessment will help determine the potential for re-use as well as inform the strategy for dismantling and storage.

4.3.41 For any identified sections that are assessed as unlikely or unable to be re-used to due condition, care shall be taken to record the element within the historic building record. A like-for-like replacement should be also sourced at this stage to allow for time for review for suitability for replacement. Potential replacements should not attempt to falsify the effects of age and should be clearly identifiable as part of reconstruction. Replacement materials and additions should be noted in any potential interpretation describing the reconstruction process.

4.3.42 Should any damage occur during the deconstruction, transportation or storage processes then assessment by the contractor and the TRU Heritage team should occur to determine whether the fabric can be repaired and re-used appropriately, before resorting to using replacement materials, although structural integrity and longevity of the structure should be prioritised. Any damage should be recorded including a note of the assessment as the re-usability of the damaged element.

4.3.43 If elements cannot be re-used, whether due to poor current condition or potential damage during the dismantling and reconstruction process, they must be thoroughly recorded at time of this discovery and detailed in the appropriate building record and relevant Phase of the CIMP. If an element from the Tea Rooms is unsuitable for their reconstruction but has potential reuse capacity elsewhere in the station development, then appropriate opportunities for this should be explored, as detailed above in paragraph 4.3.34.

Organisation and storage of fabric for potential re-use

4.3.44 A recording system will be used to apply a reference number and name to each element to be disassembled, which will be labelled within the set of key drawings. Elements shall be identified for deconstruction by order of deconstruction as outlined in the methodology included in Appendix C and by specific joint line and labelled in accordance with this. If there

are any changes to specific elements in separation during the deconstruction then labels and key drawings will be updated live in accordance with any chance.

4.3.45 Each element will be transported to the contractor's storage facility in a manner to minimise any damage, overstress, degradation, mishandling or distortion to the materials. Wrapping, padding and appropriate restraints will be utilised to protect from potential risk from weather, mishandling, impacts or jolts during transportation. Storage will be of correct environmental conditions for each specific element and adjusted where needed to be weathertight and of appropriate humidity and temperature.

4.3.46 Wrapping and padding will continue to be used to protect against abrasion and dust and adjust humidity and temperature of each element. A plan for placement of each element within the storage space will be created to ensure ease of assessment of any particular element if needed.

Reconstruction of Tea Rooms using original fabric

4.3.47 Elements of the Tea Rooms that, during the dismantling and storage process, have been continually confirmed as suitable for re-use in reconstruction should be noted in the key drawings, building record and relevant Phase of the CIMP. The reconstruction of the Tea Rooms should utilise the key drawings, storage plan and recorded order of disassembly to plan for reconstruction and minimise risk.

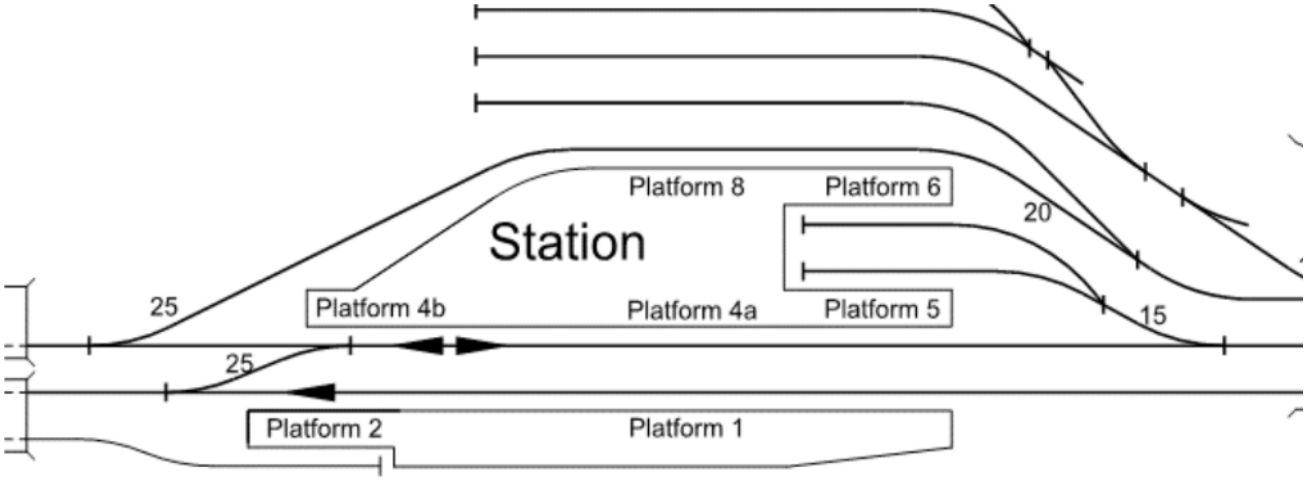
4.3.48 Each element identified as suitable for reuse should undergo potential repairs to increase longevity and structural integrity of the Tea Rooms during reconstruction and for future use, as outlined in paragraphs 4.3.25 to 4.3.28 above.

4.3.49 Each reusable element will be reinstalled using the same fixings, subject to their condition. Where it is proposed to replace any fixings, then the contractor shall demonstrate that they are no longer fit for purpose.

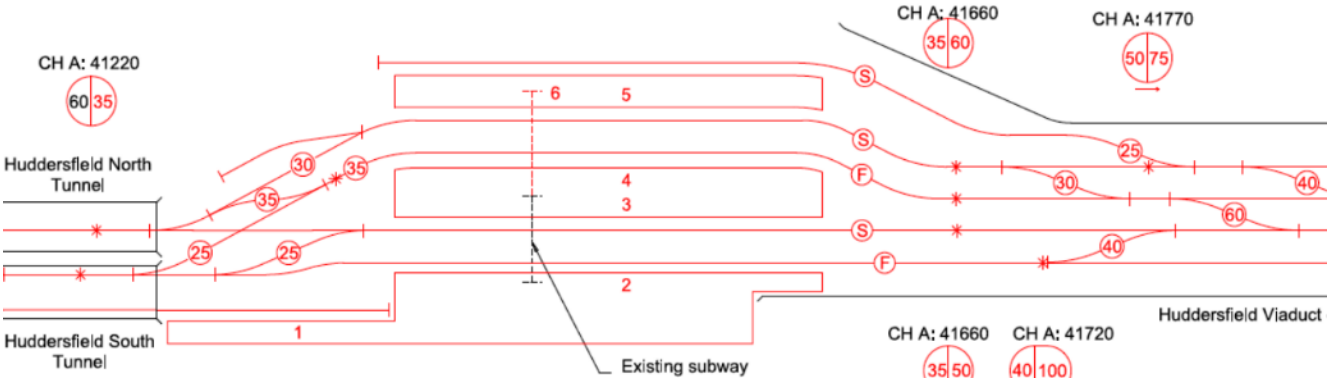
4.3.50 As the Tea Rooms in its current location was an operational café serving Huddersfield Station, a waste drainage scheme is to be submitted prior to commencement of works to ensure proper drainage from the new location of the Tea Rooms, which will also operate as a café serving Huddersfield Station, This is set out in Condition 16 of the granted Deemed Planning Permission (Ref: TWA/21/APP/03) that no development to the Tea Rooms will commence until a waste drainage scheme to prevent fats, oils, and grease entering the drainage network, serving food preparation and dishwashing areas at Huddersfield Station, has been submitted to and approved in writing by the local planning authority.

4.3.51 [*TBC – Additional information regarding construction of the Tea Rooms to be included in future CIMP phase, see Table 2-2*]

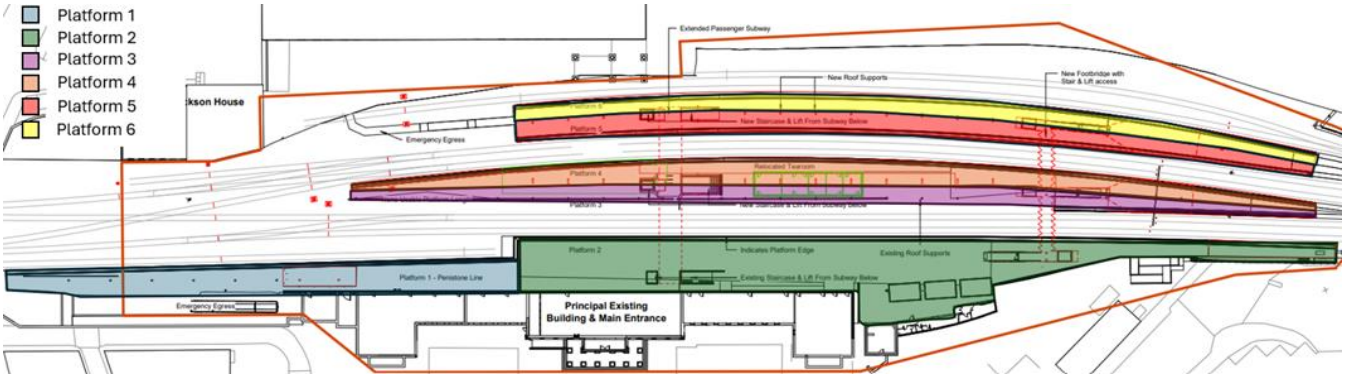
4.4 Platforms



Insert 4-21 - Existing platform and track layout schematic for Huddersfield Station.



Insert 4-22 - New platform and track layout schematic for Huddersfield Station.



Insert 4-23 – New platform numbering arrangement schematic for Huddersfield Station.

(b) (c) Methodology for Works to Platforms

4.4.1 To allow for the re-alignment of track beds and extension of platforms, multiple areas of platform are to be demolished, realigned and rebuilt to accommodate the use of the platforms for these approved changes. The following section details the methodology and sequencing across the different areas of platform to be altered.

Demolition and rebuild of Penistone line platform

4.4.2 As part of scheme works, the Penistone line platform edge will be demolished, and then rebuilt. This is required due to the works to upgrade and extend the existing Penistone line platform by approximately 30m at its northern (Leeds) end. This platform extension is partly facilitated by the removal of the southern (Manchester) end bays of Roof A, covered in paragraphs 4.2.3 to 4.2.7 above.

4.4.3 To enable this demolition, the existing track and ballast of the Penistone line will be removed and an excavator will break away the brickwork of the existing Penistone line platform. Once the existing platform has been demolished, two reinforced concrete footings will need to be installed to provide foundations for the new Penistone line canopy extension. Once the existing platform edge has been demolished, the new platform will be constructed using riser units which are pre-cast off site. These pre-cast riser units will be brought onto site using track mounted machines, and installed along the platform edge, before the platform area is backfilled behind the new riser wall. The tracks will then be reinstalled and the platform surface completed to match existing, with asphalt and copers installed atop the riser units.

4.4.4 As part of the platform reconstruction, new drainage is to be installed at the back of the platform.

Demolition and rebuild of existing Platform 1 (future Platform 2)

4.4.5 As part of the scheme works, the current edge of Platform 1 (future Platform 2) is planned to be demolished, rebuilt, and extended closer to existing Platform 4 (future Platform 3 / 4). This will also facilitate the extension in length of the Penistone line platform. This will be achieved by first removing the track and ballast adjacent to existing Platform 1, followed by the existing Platform 1. The latter will be removed by an excavator which will break away the platform from ballast level. The extent of platform which will be broken out will be appropriate to achieve the extension of the Penistone line platform at the southern (Manchester) end of the existing Platform 1 (future Platform 2) and the widening for the rest of the length of the platform.

4.4.6 Once demolition is complete, the new platform with extension will be constructed by laying the base layer of recycled hardcore and compacted. Riser units will be pre-cast off site and then brought to site using track mounted machines, to then be lifted into position. Once the pre-cast risers have been installed, and the area behind the risers has been backfilled, then tracks will be reinstalled, copers added atop the riser walls and the surface completed to match existing.

4.4.7 As part of the platform reconstruction, new drainage is to be installed along the platform, including appropriate inspection chambers and manholes.

Works to existing Platform 4 (future Platform 3) and Platform 8 (future Platform 4)

4.4.8 As per the consented scheme designs, the current Platform 4 (future Platform 3) is to remain in its existing alignment, with small-scale increases in height of copers and adjustments to accommodate the incoming new track alignment through the station. Existing Platform 8 (future Platform 4) will be realigned to move closer to Platform 4 (future Platform 3), to allow for the incoming new track alignment which will require the reduction of the overall width of the existing island platform. On completion of the scheme works, the existing Platform 4 will become future Platform 3 and the existing Platform 8 will become future Platform 4.

4.4.9 A section of existing Platform 8 at the northern (Leeds) end is planned to be demolished, in preparation for its future extension northwards. A working platform will be installed across existing Platform 8 and the adjacent sidings, to allow for safer working and better access, while temporary track protection will be installed across the existing Platforms 5 and 6

tracks. The demolition of the end of existing Platform 8 will be achieved using an excavator from the installed working platform, to break away the existing Platform 8. The materials removed from the existing Platform 8 will be processed on the working platform and appropriately stored in the adjacent compound area.

4.4.10 The alignment of the existing Platform 4 will remain the same as existing and is to become the future Platform 3. The existing Platform 4 has an existing brick riser wall which shall be retained and new pre-cast concrete riser units will be added at the northern (Leeds) end of the platform, to allow its length to be extended. The existing southern (Manchester) end of Platform 4 will be non-operational due to train-stopping positions; however the structure will be retained to allow for maintenance access to OLE as well as to signalling infrastructure.

4.4.11 Works to remove the existing Platform 8 edge and reduce the overall island platform width will be undertaken following the removal of the adjacent railway sidings. Using 25 ton excavators, working from the working platform, installed over the existing Platform 8 track lines, the existing platform riser walls and fill material will be broken away. The materials removed will be processed on the working platform and stored behind the installed hoarding fence. The existing track bed will be excavated of materials and prepped for installation of the new concrete pre-cast risers to support the realigned platforms. These pre-cast platform riser units will be lifted and set out into position to form the newly realigned platform edge of the future Platform 4. The area behind the riser units will then be backfilled, along with the installation of associated platform drainage, service ducts and platform copings.

4.4.12 As part of works, where any remaining York stone slabs are present on either the existing Platforms 4 or 8, these will be carefully removed prior to commencement of works and stored safely at the on-site compound, in line with the previously approved methodology for their removal. These slabs will then be re-laid on their respective platforms as part of the rebuilding of the future Platforms 3 / 4 and final surface finishing works.

4.4.13 Once works around the new Platforms 3 / 4 are complete, including installation of new structures such as the footbridge, surface finishes will be finalised to complete the platforms, including re-laying of York Stone where required.

Installation of hoarding (existing Platform 4)

4.4.14 As part of the scheme, hoarding will be installed to allow for the safe segregation of ongoing works from station users as well as for safe separation of different works areas. A hoarding fence will be installed along the length of the back of existing Platform 4, separating the live station from ongoing civils works. The footings of the hoarding fence will be excavated by hand, to check for any existing services or obstructions and prevent any damage. 150mm timber posts will be fixed with concrete into the excavated footings in the existing Platform 4, spaced 2m maximum apart and 22mm thick plywood sheets will then be fixed to the posts.

4.4.15 Most of the existing Platform 4 will be constructed of ground tarmac and compacted soil at the time of the installation of hoarding, as any York stone slabs previously on the platform will have been carefully removed and stored on-site at the time of these works.

Removal of Analogue Clocks on existing Platforms 1, 4 and 8

4.4.16 As part of works to existing Platforms 1, 4 and 8 analogue clocks on these platforms will be removed to prevent them being damaged during the works, or restricting scaffolding or successful deconstruction of the Tea Rooms.

4.4.17 These analogue clocks hang above each of existing Platforms 1, 4 and 8, one on each platform. They have traditional analogue clock faces (see Insert 4-24), with matching clock face designs. The platform analogue clocks are not of particular historic significance in of themselves and make only a very limited contribution to the overall significance of the

station; there will be no appreciable harm to significance as a result of their removal. There is no shared connection or shared control between these analogue platform clocks and the main station analogue clock on the principal façade of the station building. There will be no impact from the removal of these analogue platform clocks on the operation of the main station clock.

4.4.18 It is proposed to remove and store them safely on-site while construction works on their respective platforms are underway. The clock on the existing Platform 1 will be in the path of, and therefore restrict, the scaffolding for the Roof A refurbishment. The clocks on the existing Platforms 4 and 8 would also collide with the access towers which are to be used for access to deconstruct the Tea Rooms roof. The control for these clocks currently connects to the Network Rail relay room, which will be demolished in Blockade 1.

4.4.19 To prevent damage to the clocks, their controls and to not limit refurbishment and deconstruction works these clocks are to be disconnected and carefully removed prior to works commencing. Network Rail's specialist contractor for such elements, will then carefully remove the clocks. They will be stored on-site, and opportunities to reuse them either at Huddersfield Station or elsewhere will be sought following completion of the works.





Insert 4-24 - Images depicting the existing analogue platform clocks, to be removed to prevent damage and later reinstated either at Huddersfield Station or another appropriate Network Rail site.

4.4.20 [*TBC – Additional works to platforms to be included in future CIMP phase, see Table 2-2*]

Construction of future Platforms 5 and 6

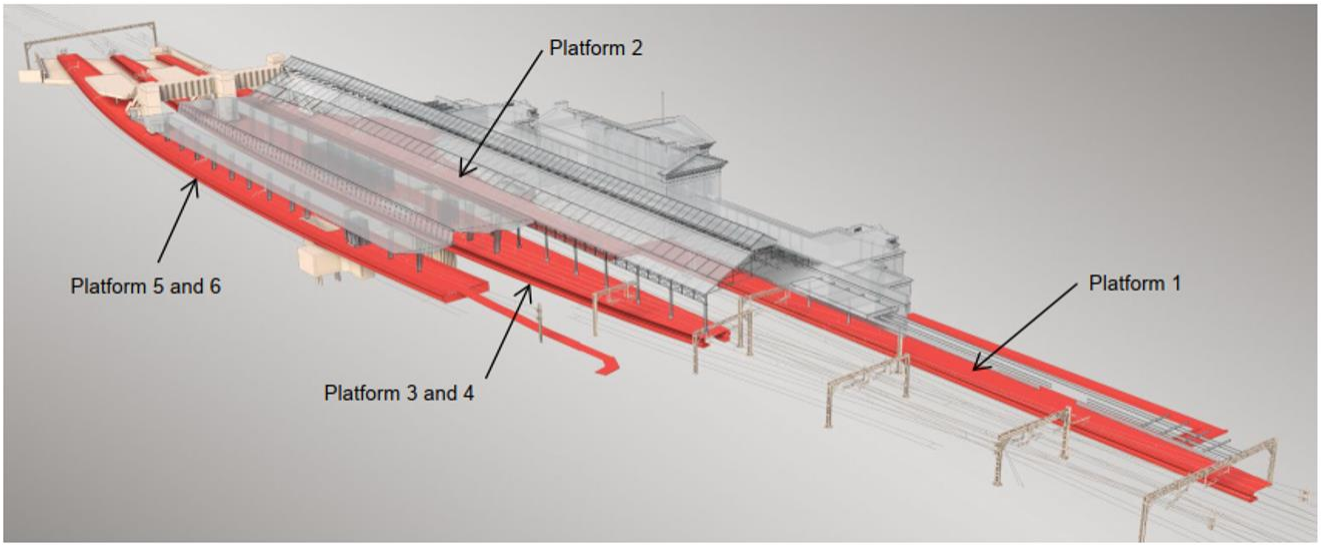
4.4.21 A new island platform which will become future Platforms 5 and 6 and will be constructed to the west of the existing island platform, aligned slightly further towards the northern (Leeds) end of the station than the existing platforms (see Insert 4-25 below). This is to be covered, on completion, by the new Roofs B and C canopies. It will have a proposed operational

length of approximately 200m and will include a minimum usable clear platform width of 3.3m from new structures such as the new footbridge and columns for new Roofs B and C canopies.

4.4.22 Once the existing Platforms 5, 6 and 8 have been demolished, and the future Platform 4 and subway extension have been completed, then construction of the future Platforms 5 and 6 would commence.

4.4.23 Enabling works for the future Platforms 5 and 6 would consist of the excavation of the existing track bed and preparation for the installation of the new concrete pre-cast risers to support the island platform. The pre-cast concrete riser units will then be lifted and set out into position to form the new platform edge of the future Platforms 5 and 6. Once the pre-cast concrete riser units are set out, then the area behind the riser units would be backfilled with material compacted at 150mm thick layers. Any associated platform drainage, service ducts or services would then be installed alongside this. Once backfilled and services in place, the platform edge coper units and asphalt surfacing of the platform would be undertaken to complete the installation. Once the wider works around the future Platforms 5 and 6 are complete, including installation of new structures such as the canopies and footbridge, surface finishes will be finalised.

4.4.24 For the future Platforms 5 and 6, a step free fire and emergency escape route would be located at the southern (Manchester) end of the platform, with a fire refuge point located at the northern (Leeds) end of the platform. Track maintenance access steps would also be provided at both ends of the island platform.



Insert 4-25 – Diagram depicting the layout of the future Platform layout at Huddersfield Station.

4.5 Subway

(b) (c) Works to Subways

Infill of Parcel Subway

4.5.1 The existing parcel subway extends underground between the station building and the island platform, under the existing Platform 1 and the intervening tracks. Works to the parcel subway will include infilling the majority of its length with foam concrete, strengthening of the roof of the subway structure, replacement of foul water services and protection of existing services.

4.5.2 Existing foul water sewers currently run along the wall of the parcel subway and are to be replaced with new services and then encased in protective trunking. Other existing mechanical and electrical cables which run along the subway walls will be replaced with up-to-date cabling where needed and placed in protective ducting. Additional ducting will also be added for new services which will be run through the infilled parcel subway following removal of the cable bridge (see below, Section 4.9).

4.5.3 The masonry arches underneath the existing Platform 4 will be strengthened by bolting members to the bottom of the beam flanges. This will provide sufficient strength for this end of the subway post-infilling of the central section.

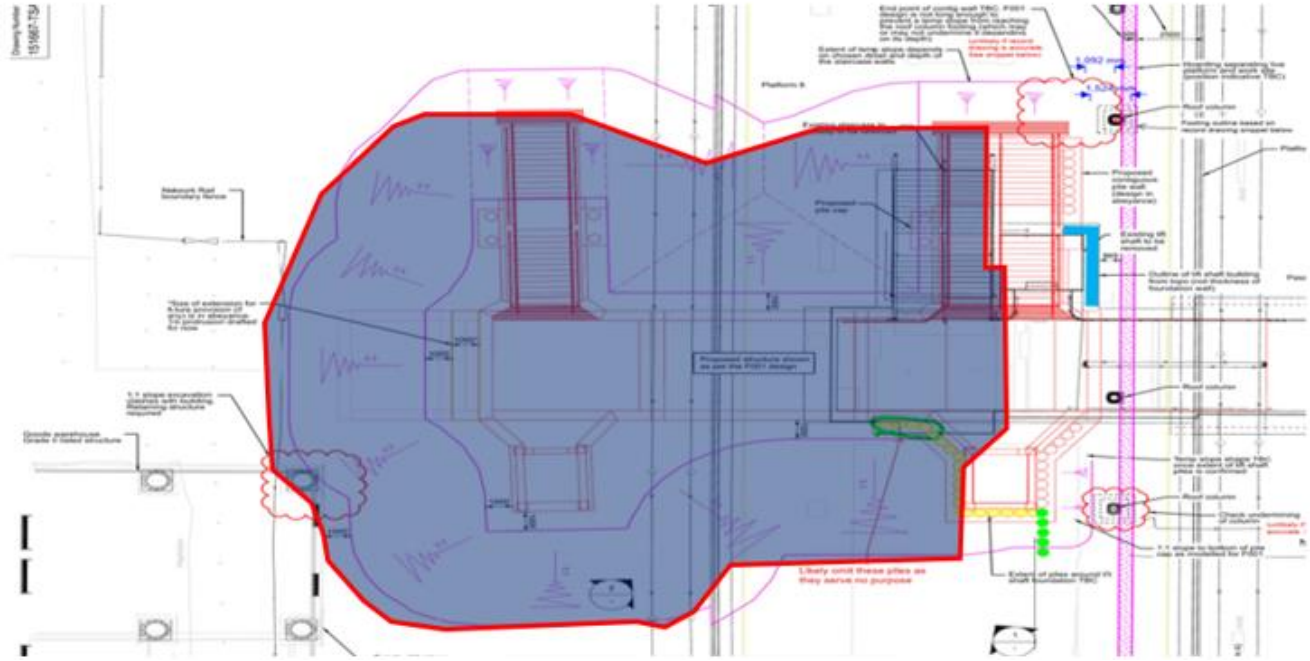
4.5.4 A concrete pump will be located in the nearby HD1 compound and will cross the existing Platforms 8 and 4 to the vent between the tracks that leads into the parcel subway. Blockwork walls will be constructed at either end of the central section of the subway to be infilled. The foam concrete will then be pumped through the vent into the parcel subway, which will then infill the central section of the subway with concrete, poured in stages to the underside of the trough deck. Before completion of the infilling of the parcel subway, the short section of the existing Platform 4 over the subway is required to be broken down in part and its masonry riser walls reconstructed to allow for the change in construction of the parcel subway below, see Section 4.4.10-12. Once the infill of the parcel subway is complete, this section of riser wall will be reconstructed, reusing the existing bricks.

Extension of the Passenger Subway

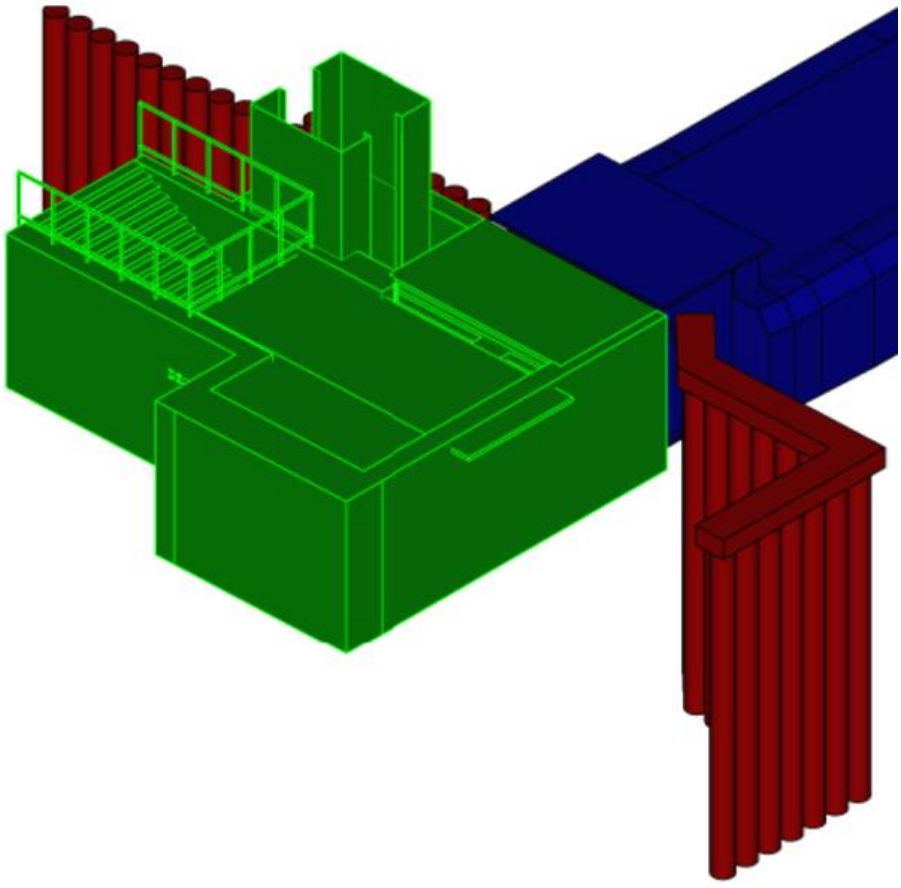
4.5.5 Works to excavate the subway extension, beneath current Platforms 4 / 8 (future Platforms 3 / 4 and 5 / 6) are required. This will involve the installation of 35 reinforced concrete bored piles, which will form a temporary contiguous bored pile wall between the existing Platform 4 edge and the subway stairs between the existing Platforms 4 and 8 for the excavation and construction of an extension to the passenger subway as well as the lift shafts and staircases.

4.5.6 Piling works to form the contiguous wall will be carried out from platform level next to existing tracks. Piles will be cast *in situ* and will be approximately 600m in diameter. Those piles to be located next to the proposed lift shaft will be 10m in length and those next to the proposed staircase on the existing Platforms 4 and 8 (future Platforms 3 / 4) will be 8m in length.

4.5.7 Once the temporary contiguous bored pile wall is completed, the excavation works required to construct the subway extension and the construction of the extension itself, can commence. The area of the subway extension to the west of the existing subway will then be carefully excavated of material to allow for extension. Post excavation for and installation of the contiguous wall and piling works, demolition of the stairwell, stairs and lift will be undertaken.



Insert 4-26 – Extent of excavation area required for works to passenger subway to commence.

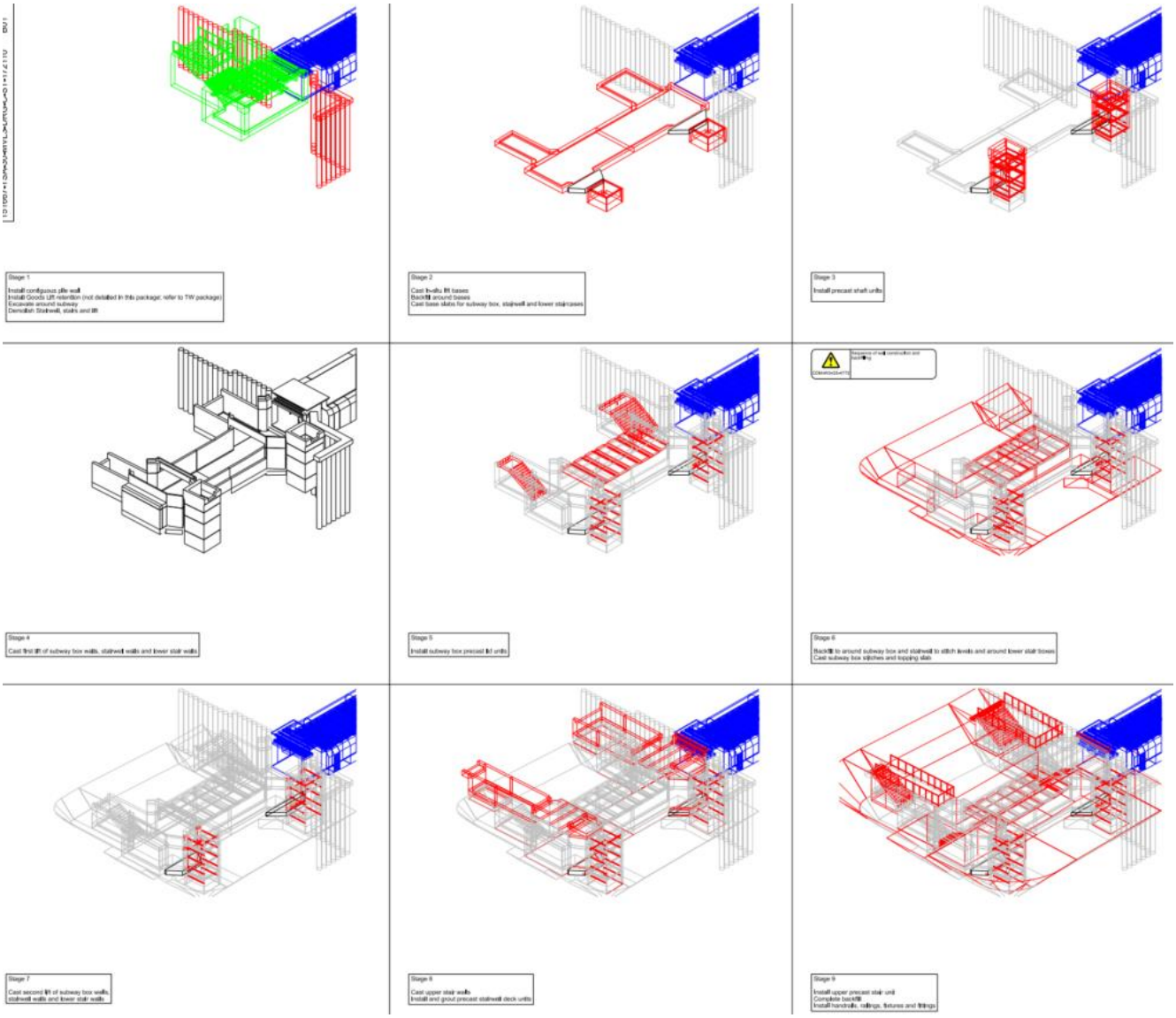


Insert 4-27 - Diagram showing existing subway, stairs and lift on existing island platforms in green to be altered, existing subway to be retained in blue and install of contiguous piled walls in red.

4.5.8 Sequencing for construction of the extension to the subway itself would then follow, as

outlined below and in Insert 4-28 in the following stages of construction works:

- Following excavation of the area for the subway extension (Stage 1), the bases of the subway structure are to be installed (Stage 2). This includes the cast for the *in situ* lift bases, then backfilling around the bases to secure them. The cast of the base slabs for the subway box, the stairwell and lower staircases are then to be installed to form the base of the structure.
- The pre-cast lift shaft units are set onto on the installed lift bases (Stage 3).
- The casts of the first subway box walls, stairwell and lower stair walls, which attach to the lift shaft units and sit atop the installed base of the subway, are then installed (Stage 4).
- The subway box pre-cast lid units, which form the roof of the subway passageway, will then be installed on top of the subway walls (Stage 5). The area around the completed subway box and stairwell would then be backfilled.
- Further backfilling around the subway box, as well as backfilling around the stairwells between the subway and platforms. The cast for the subway box stitches and the topping slab are then also installed (Stage 6).
- The second pre-cast layer for the lift, subway, stairwell and lower stair walls are installed (Stage 7).
- The upper stair wall cast is then installed, along with the installation and grouting of pre-cast stairwell deck units (Stage 8).
- Finally, the entire upper pre-cast stair unit is installed, and all remaining areas around the subway and stairs structures backfilled to bring the area to platform surface level (Stage 9). Handrails, railings, fittings and fixtures are then added to the stairwells and subway extension at this final stage to complete the subway extension.



Insert 4-28 – Construction sequence of the stages of the extension to the passenger subway.

4.6 Footbridge

(c) Introduction of New Fabric – Footbridge

4.6.1 A new footbridge is to be constructed for passengers, which will span from future Platform 2 to future Platforms 5 / 6. The footbridge will comprise two spans, with stairs and lifts, and will be constructed in two stages.

4.6.2 The first stage will focus on the construction of the footbridge span between future Platform 2 and Platforms 3 / 4; and the second stage will see the completion of the structure with the second span to future Platforms 5 / 6. The two stages to this work are to allow for a temporary operational state where access and egress of passengers between existing Platforms 1 and 4 is provided by the footbridge, while the works to the subway are underway and this is closed to passengers. Stage 2 will commence once the island for future Platforms 5 and 6 has been constructed.

4.6.3 The new footbridge will be installed with the use of a 500-ton crawler crane and/or 100-ton cranes, dependent on the individual sections being installed and the extent of disruptive access around the site at the point of each element install. Accompanying crane pads will be

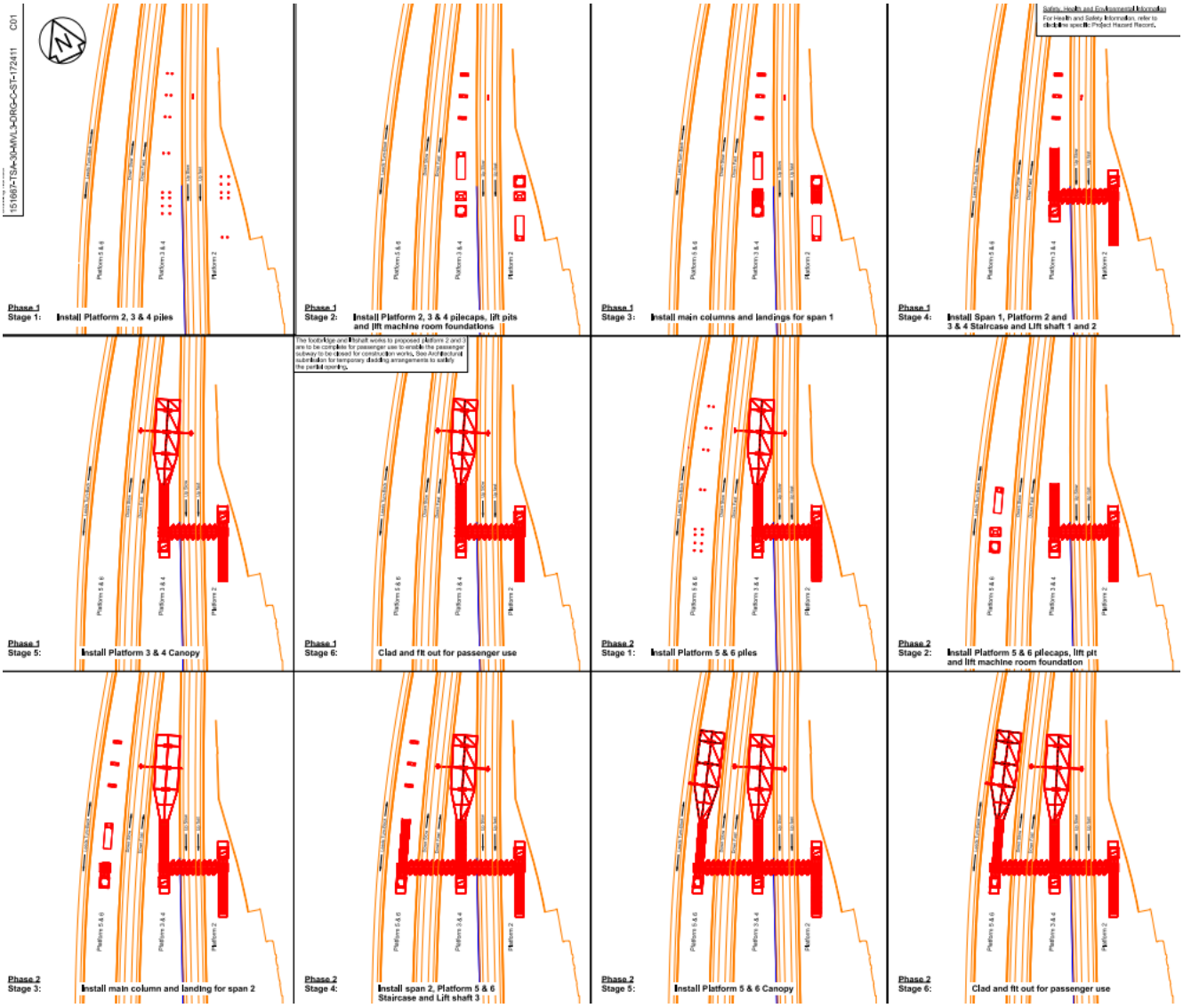
located on both the west and east sides of the station to facilitate the installation, in the adjacent construction compounds. Smaller elements, such as glazing, will be installed using MEWPS.

4.6.4 In both stages the methodology sequence for construction of the footbridge will be as follows:

- Install piles and pile caps (on future Platform 2 and Platforms 3 / 4 during Stage 1, then on future Platforms 5 / 6 in Stage 2). Track monitoring will be put in place during piling for each line.
- Lift pits and lift shafts to be constructed and installed to the base areas of each shaft pile cap. Lift machine room foundations to be installed. Stairs and landing foundations to be installed (on future Platform 2 and Platforms 3 / 4 in Stage 1, then on future Platforms 5 / 6 in Stage 2).
- Install the steelwork for the main columns and landings (on future Platform 2 and Platforms 3 / 4 in Stage 1, then on future Platforms 5 / 6 in Stage 2).
- Install the lift shaft steelwork (on future Platform 2 and Platform 3 / 4 in Stage 1, then on future Platforms 5 and 6 in Stage 2).
- Install the steelwork for the stairs (on future Platform 2 and Platforms 3 / 4 in Stage 1, then on future Platforms 5 / 6 in Stage 2).
- Install the main span of each section of the footbridge, lifted using a 500-ton crawler crane positioned on the western side of the station construction area (the first span from future Platform 2 to Platforms 3 / 4 in Part 1, with the second span to future Platforms 5 / 6 installed during Part 2).
- Install cladding to the footbridge columns and spans, including glazing which will be installed using MEWPS. All external and internal fixtures and fittings to be completed.
- Install mechanical and electrical services.
- Installation of platforming surfacing to match existing tarmac, plus installation of appropriate tactile surface areas.
- Install, commission and re-calibrate lifts as required. Once the footbridge lifts are commissioned on existing Platforms 1 and 4 at the end of Stage 1, the footbridge will be opened to allow passengers over its first span (and thereby enable works to commence on the existing passenger subway).
- Access from the footbridge to future Platforms 5 / 6 will be blanked off using a steel plate until Part 2 is completed. On completion of the entire footbridge, including lifts to future Platforms 5 and 6, this will be also be opened.

4.6.5 Following the completion of the footbridge spans, the new platform canopies extending from the end of the stairs towards the northern (Leeds) ends of the platforms will be installed. The methodology for the installation of the finger canopies can be found in paragraphs 4.2.56 to 4.2.58 in Section 4.2 above. These finger canopies will extend across the future Platforms 3 / 4 and 5 / 6 to allow for greater passenger comfort towards the northern (Leeds) end of the station.

4.6.6 When both stages are completed and the footbridge has been fully constructed, OLE will later be attached to the underside of the structure. [*TBC – To be included in future CIMP phase, see Table 2-2*].



Insert 4-29 - Drawing showing construction sequence of installation of the footbridge and associated finger canopies.

4.7 OLE

(c) Introduction of New Fabric – OLE

This section will provide the detail and methodology for fixing the OLE to the retained section of Roof A. This will comprise a succinct but thorough summary methodology, supported by cross-references to additional detailed drawings and specifications as appropriate, contained within appendices.

This section will also provide confirmation of the design approach to OLE within the station environs, not attached to existing / retained historic fabric of the station. There may also be interface between this and the Design Guide – again, cross-references will be included as appropriate.

Where elements of the design do not differ from those as shown in drawings and documents submitted as part of the Order and/or LBC applications, these will also be appropriately referenced.

4.7.1 [*TBC – To be included in future CIMP phase, see Table 2-2*]

4.8 Relay Room / Signal Box

(b) Methodology for Fabric Removal – Relay Room / Signal Box

4.8.1 The former relay room, including former signal box, located on the existing Platform 4 was constructed in the late 1950s and has been out of use and abandoned for some years. It has been established that there is no fabric or internal features / equipment of historic significance present in the relay room.

4.8.2 The relay room and signal box are to be demolished using excavators from ballast level and then using machinery from platform level to clear the debris. A working platform will be installed over the existing Platform 8 track and adjacent sidings area. Rubber ground matts will be used as platform surface protection to prevent any damage during this process. Debris netting will also be used to prevent debris from the removal of the relay room falling onto tracks.

4.8.3 Prior to commencement of demolition works, the interior of the relay room will have been stripped of all remaining internal fixtures, fittings and services. The relay room will de-bonded from the lift motor by cleanly saw cutting, leaving the lift motor room as a standalone structure following the demolition of the relay room. The relay room will then be removed, with the excavators working carefully under Roofs B & C in sequence to deconstruct the building towards the edge of the existing Platform 8. Debris from its removal will be cleared through to the adjacent HD1 construction compound and then removed by road.

4.8.4 Once the relay room has been successfully removed, demolition complete and all materials and debris removed, the remaining void where the basement level relay room had existed will be infilled with appropriate material to bring the basement to platform level. The ground level surface will be made good in the same manner as existing platforms, with an asphalt finish.

4.9 Cable Bridge

(b) Methodology for Fabric Removal – Cable Bridge

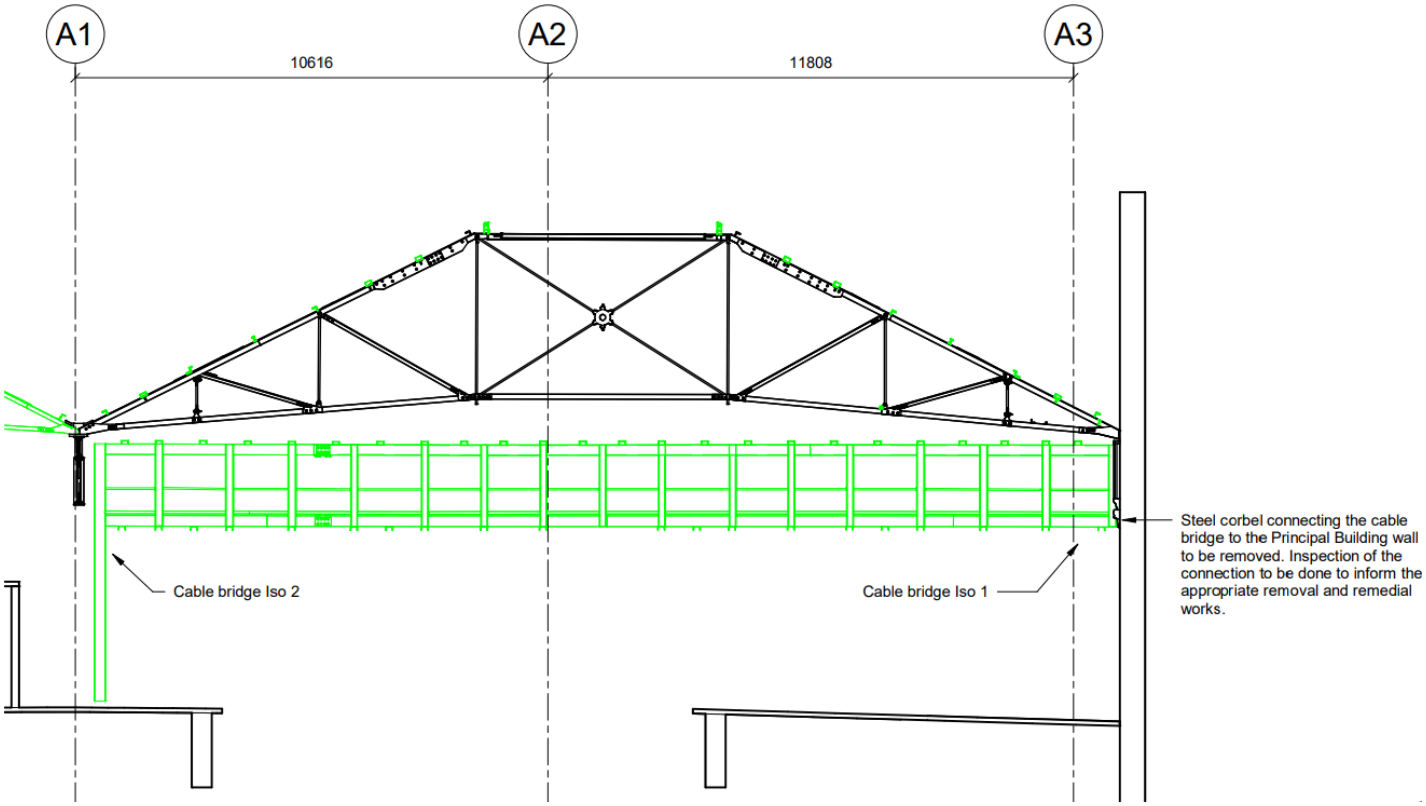
4.9.1 The cable bridge between the existing Platforms 1 and 4 will be dismantled and removed. This will be undertaken by specialist demolition contractors, working from the existing Platforms 1 and 4, as well as the space between the platforms. To protect surfaces from the machinery, such as forklifts and MEWPS, track protection and a working platform will be installed in the form of bog mats between the existing Platforms 1 and 4.

4.9.2 The removal will involve the contractor supporting the cable bridge at both ends with the use of forklifts from track level. When both ends are stable the cables will be cut off from the station building walls and Roof A beam, and the ends of the cables gas torched. Protective fire blankets will be used to shield the station building walls during cutting operations. The cable bridge will be cut shy of the wall brackets attached to the station building wall, to avoid potential damage to the stone of the station building itself.

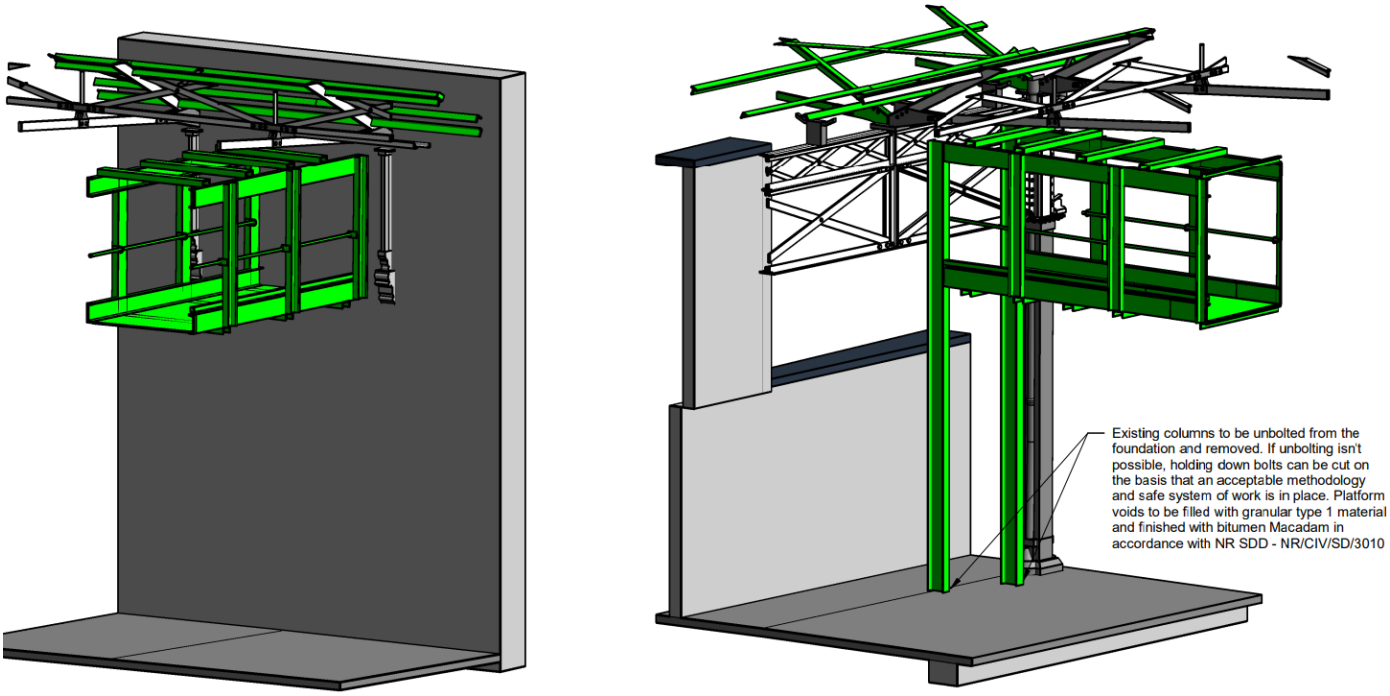
4.9.3 At the other end of the cable bridge above the existing Platform 4, the cable bridge will be cut free from its supporting legs, again with appropriate protection of the adjacent Roof A beams. Once both ends of the bridge are free of connections, the cable bridge and attached cables will then be lowered to the ground using the forklift. The removed cable bridge will be carefully spun 90 degrees to a more manoeuvrable position, as well as cables and sections cut into more conveniently sized pieces to be taken away for processing.

4.9.4 The supporting columns on the existing Platform 4 will be unbolted from the platform, if possible, and cut if they cannot be removed. The columns will then be cut flush from the platform surface once the cable bridge has been removed and the surface made good post-removal to match the existing bitumen surface.

4.9.5 The wall brackets attached to the station building that supported the removed cable bridge will then be carefully removed by disconnecting the fixings from the steel corbel brackets. The fixing holes in the stone station building walls will then be repaired using a lime mortar which will be colour matched to the existing stone, to later be repaired using colour matched masonry by a skilled heritage contractor. This need for a temporary repair before the permanent solution is due to the tight timeframe for the works, with the area of the former cable bridge to be covered by the central section of Roof A scaffolding following its removal. The hole will be temporary sealed during this time to seal the area and protect the stone from exposure, before being permanently repaired by a skilled heritage contractor with masonry when suitable time allows for the works to be done to the highest standard.



Insert 4-30 - Drawing showing the location of cable bridge (green) to be removed from beneath Roof A.



Insert 4-31 - Drawing showing the connections of cable bridge (green) to Roof A and station building.

4.10 Design Guide

4.10.1 The Design Guide for Huddersfield Station and Viaduct ensures that the integration of proposed new development is achieved through a consistent approach to purposeful design at Huddersfield Station. Core design principles will ensure that the design of station elements will adhere to the safety, security and comfort of passengers, operational capacity, and complement the existing station and character of the historic environment. The guidance contained within the Design Guide therefore ensures that all proposed development aligns with the high-level requirements of the TRU scheme and stakeholder ambitions for both the short and long term.

4.10.2 The Design Guide contains:

- Historic context identifying surrounding designated assets, key views, historic background and the existing condition of Huddersfield Station.
- A detailed section including diagrams and figures summarising the wider design optioneering which was undertaken as part of the design process in order to meet TRU requirements and objectives.
- Overarching design vision, requirements and principles for each element of the consented design at the Station i.e. the roofs (existing and new), footbridge, platforms, platform canopies, tea rooms and subways. These include:
  - detail and finishing (i.e. form, materials, colours etc.);
  - general operation (i.e. OLE, maintenance access and structural considerations);
  - strengthening works; and
  - lighting.
- Additional detailed breakdown of architectural design for those specific elements of the station altered or introduced by the scheme, corresponding to those methodologies covered in the respective Phase of the CIMP (see below, 4.9.4 and Table 4-3).

- Details of specific measures to ensure regular maintenance and access to the roof and platform canopies, including hidden elements to enable access.

4.10.3 The successful implementation of the Design Guide will ensure consistency in materials and design for the proposed developments within Huddersfield Station. This will also ensure the sensitive integration against the historic fabric of the Grade I Listed railway station and the character of its surrounding historic environment.

4.10.4 Like the CIMP, the Design Guide is phased to cover those elements of the consented interventions which are covered in the corresponding CIMP. Table 4-3 below outlines what elements of the architectural design are covered in detail in the version of the Design Guide submitted alongside this phase of the CIMP.

Table 4-3 Elements of the station design covered in this phase of the Design Guide.

Phase of CIMP	Element of Design included in submitted Design Guide
Phase 2	Detailed design of: • Roof A, including lantern and maintenance access • Penistone Line platform canopy
Phase 3	Detailed design of: • Footbridge
Phase 4	Detailed design of: • New Roof B & C Canopies • Platform Finger Canopies • Platform surfaces • Subways • Signage • Maintenance and Access
[*To be updated in future CIMP phase*]	

4.10.5 The Design Guide corresponding to this phase of the CIMP is contained within Appendix E.

4.11 Improvements to the setting to sustain, enhance and better reveal significance

Heritage Interpretation material

4.11.1 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.

4.11.2 This methodology is concerned with discharging Condition 5 in respect of:

v) any improvements to the setting to sustain, enhance and better reveal the heritage asset affected; and

viii) provision of heritage interpretation boards during construction works.

4.11.3 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.

4.11.4 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 Huddersfield Station.

4.11.5 The approach to meeting Condition 5 item v and viii is outlined in this methodology which covers:

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

Concept Design

4.11.6 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.

4.11.7 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.

4.11.8 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.

4.11.9 The Concept 2 design is shown in Insert 4-32 below.



Insert 4-32 Chosen Concept 2 design for temporary heritage interpretation.

4.11.10 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 – Felix and Bolt the Station cats will provide a fun way to discover facts about the Station's history,
- Casual passes-by – wanting to gain a quick insight into the works and history of Huddersfield Station
- Travellers focused on getting trains – wanting to know how the Scheme will improve the train service for them, but some interest in the historical background.
- Residents / local people - who want to know more detailed information about the history of their local train Station.

4.11.11 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

4.11.12 In order to produce the content for the Huddersfield Station temporary heritage interpretation, a variety of documents were consulted. These include but are not limited to:

- Transpennine Route Upgrade: *Huddersfield Station Statement of Significance* (Atkins, August 2018); and
- The Network Rail (Huddersfield to Westtown (Dewsbury) Improvements) Order: Huddersfield Station – Heritage Statement (Atkins, March 2021).

4.11.13 Key information was drawn out of these documents in order to produce a summary which sought to effectively communicate the historical significance of Huddersfield Station. This included:

- General scheme information and messaging;
- A history of the railway;
- A timeline on the coming of the railway;
- Information about architect James Pigott Pritchett;
- A history of the Tea Rooms;
- A history of the roof;
- A history of the goods yard; and

- Information about the frontage of the principal station building and its relationship to St George's Square

4.11.14 This information was then condensed in order to provide an effective amount of text and content on the interpretation panel. 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 I Listed Station with messaging on the needs for the scheme and the benefits it would bring.

4.11.15 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 Huddersfield Station buildings. 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

4.11.16 The interpretative elements will not be fixed to historic fabric. They are designed to take the form of airflow banners which will be located in St George's Square around the Compound site. The final design of the temporary interpretation on these airflow banners is shown below in Insert 4-33.



Insert 4-33 - Final designs for Huddersfield Station Heritage Interpretation airflow banners.

4.12 Toolbox Talks

4.12.1 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[14]. 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.

4.12.2 The Toolbox Talks will outline the sensitivities of Huddersfield Station and its environs, as well as the measures to be taken throughout the relevant construction sites to preserve the significance of the station, its constituent elements (for example roofs and Tea Rooms), its

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

setting, and the contribution the station makes to the setting of other heritage assets, such as St George's Square and surrounding Listed Buildings. The Toolbox Talks aim to address such best practice throughout the construction phase.

4.12.3 Toolbox Talks will be delivered to the TRU construction contractors and teams working at the Station. They will comprise written handout information sheets and slide pack presentations, as appropriate.

4.12.4 The Toolbox Talks material for Huddersfield Station 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 Huddersfield Station and within its setting, including relevant specific details on the principal station building, train shed roofs, the Tea Rooms and the passenger subway
- Best practice guidance on avoiding accidental damage to heritage assets and minimising temporary settings impacts from construction activity; and
- Reporting requirements for contacting Environmental, Consents and Heritage staff, both within the TRU project and Kirklees Council, in respect of any unforeseen circumstances

4.12.5 As outlined in the methodologies in this CIMP, the deconstruction of the Tea Rooms (see above Section 4.3 and Appendix C) and the works to Roof A (see above Section 4.2 and Appendix D will be undertaken by specialist contractors. All construction personnel involved in the deconstruction process will receive specialist briefing on processes and sensitivities of the building as appropriate.

4.12.6 Full details for the wider station, including samples of the presentation / material for the Toolbox Talks at Huddersfield Station will be included in a future phase of the CIMP.

4.12.7 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.

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

This section will provide a thorough but succinct summary of maintenance schedules where relevant to the long-term condition of the Station's historic fabric, for example with relation to the retained section of Roof A and the Tea Rooms. This will include reference to specific timescales / regularity of cyclical maintenance inspections or works and any requirement for the involvement of specialist contractors in such works.

Clarification will also be included as to any requirement to consult with Kirklees Council regarding such works, with respect to whether they require Listed Building Consent or not.

This will be supported by proposed maintenance schedules, which will be contained in an appendix, and appropriately cross-referenced.

If there are any elements which are identified during the construction works where more immediate specific remediation will be required on completion of the project or within a short period afterwards, these will also be referenced in this section.

5.1.1 [*TBC – To be included in future CIMP phase, see Table 2-2*]

6. IMPLEMENTATION OF THE CIMP

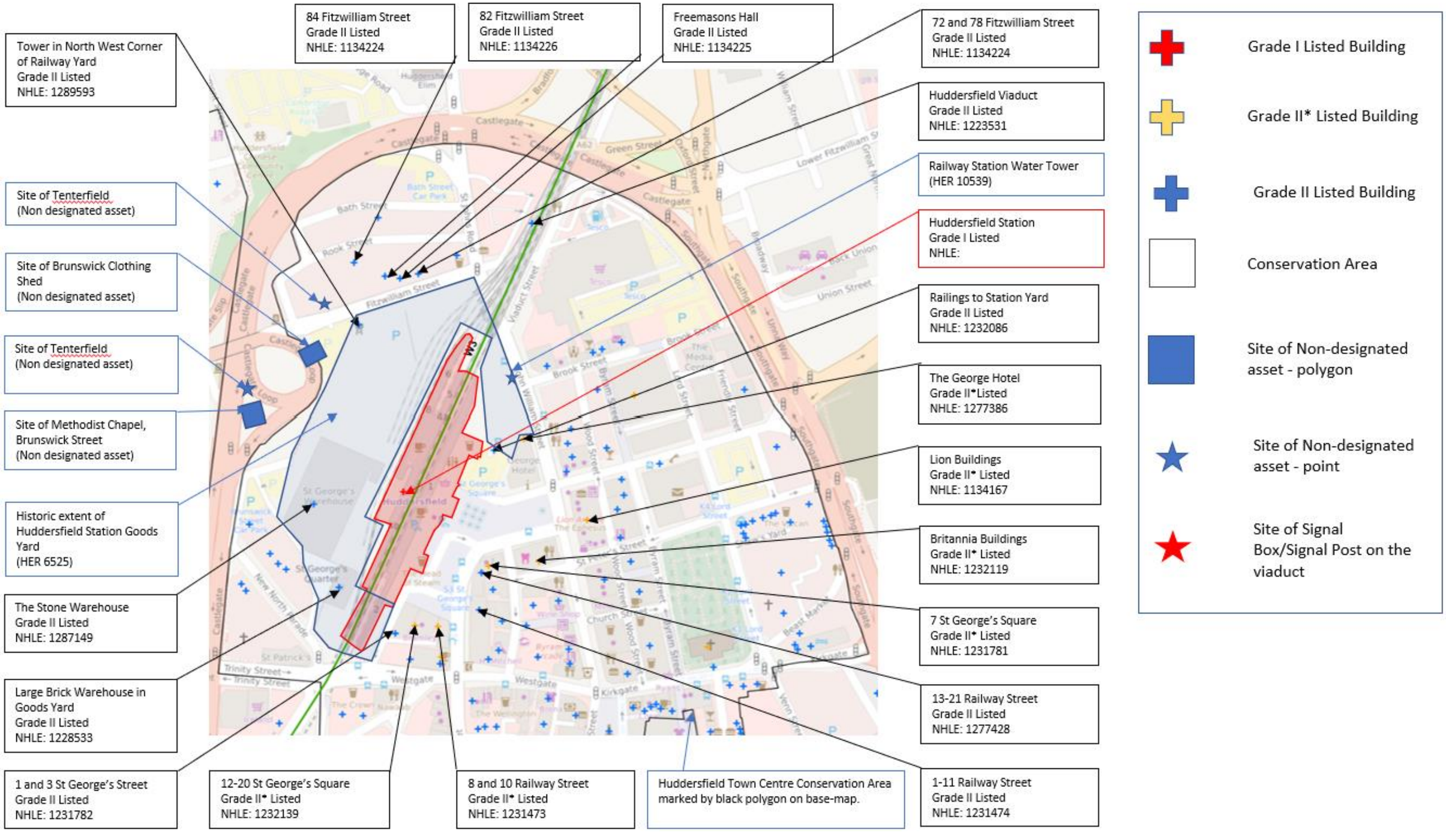
6.1.1 On approval of this document by the relevant local planning authority it will be implemented as approved for the works undertaken as agreed by the Secretary of State for the Network Rail (Huddersfield to Westtown (Dewsbury) Improvements) Order.

6.1.2 As outlined above in Section 2, this document comprises the Phase 4 submission of the CIMP for Huddersfield Station. As identified in Section 2.2 and Table 2-1, the methodologies within this Phase 4 CIMP relate to the completion of the footbridge, works to future Platforms 5 and 6, construction of new canopies, completion of works to subways, commencement of construction of Roof A Leeds end extension including additional lateral truss support, scaffolding design adaptations for Roof A and changes to consented design for the new canopy clerestory. This document also contains the methodologies outlined in:

- the Phase 1 CIMP, which relate to works to be carried out in order to commence deconstruction of the Tea Rooms at Huddersfield Station, and their subsequent storage
- the Phase 2 CIMP, which relate to the erection of scaffolding under Roof A, the refurbishment and strengthening of Roof A, the removal of Manchester End bays of Roof A and works to Penistone Line Canopy; and
- the Phase 3 CIMP, which relate to the demolition of Roofs B and C, the signal box/relay room and cable gantry, the piling and foundations for new roof canopies, and commencement of construction of the footbridge and works to the platforms and subways.

6.1.3 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 – CONDITIONS ATTACHED TO GRANTED LISTED BUILDING CONSENT (REF: 2021/91328)

Huddersfield Railway Station – Application Reference 2021/91328

Huddersfield Railway Station, St George Square, Huddersfield
Demolition of roofs B and C; demolition of two bays of roof A at the Manchester end; new section of canopy on the Penistone platform; installation of two new bays on roof A at the Leeds end: 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 (within a Conservation Area).

The Secretary of State's decisions

The Secretary of State has given careful consideration to your representations together with those submitted by other parties in relation to the applications. The Secretary of State concurs with the Inspector that Listed Building Consent should be granted subject to conditions.
The Secretary of State hereby grants Listed Building Consent for the above works, subject the following conditions.

1. (Time Limit) The works must be begun not later than the expiration of five years beginning with the date of this permission.
2. (Huddersfield Station Materials) Before the works hereby approved commence, or within a timescale to be otherwise agreed in writing by the local planning authority, samples and specifications of all materials to be used on all external elevations, roofs and subways of the works shall be submitted to and approved in writing by the local planning authority. The works shall be constructed only using the approved materials unless otherwise agreed in writing by the local planning authority.
3. (Huddersfield Station Recording) No works of demolition shall take place until an approved methodology for full structure recording has been approved in writing with the local planning authority. Subsequent recording to the appropriate level (as recommended by Historic England) 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. The following structures are the subject of this condition:

i) The entire Huddersfield Station Roof (level 3);

and ii) Huddersfield Station Tea Rooms (level 2).

4. (Platform Furniture Huddersfield Station) Details of new platform fixtures and fittings, including close circuit television, public address system, customer information screens, waiting shelters, lighting, weather screens, station signage and platform surfacing, shall be submitted to and agreed in writing with the local planning authority. The proposed works shall be carried out in accordance with these approved details unless otherwise agreed in writing by the local planning authority.

5. (Conservation Implementation Management Plan – Huddersfield Station Environs) No works including any works of demolition shall commence until a Conservation Implementation Management Plan (CIMP) for Huddersfield Station 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) repairs and strengthening to the existing fabric of the trainshed roof at Huddersfield Station;

iii) the deconstruction, storage and reconstruction of the Tea Rooms at Huddersfield Station;

iv) the identification of historic elements of the fabric which once removed may be reused or preserved, and a strategy for their storage or reuse;

v) any improvements to the setting to sustain, enhance and better reveal the heritage asset affected;

vi) details of the maintenance access regime with particular reference to the roofs;

vii) dissemination of “toolbox talks” to personnel involved in demolition and construction works;

viii) provision of heritage interpretation boards during construction works;

ix) the exact affixing details of overhead line electrification; and

x) an overarching design guide covering both Huddersfield Station and Huddersfield Viaduct.

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

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*]	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

• (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*]	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*]	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.

N.B. Those applicable to the asset	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 assets affected	Agree any particular management needs and set out a timetable for regular inspection as part of NR's management of historic assets. As 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	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.

• 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 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 – METHODOLOGY FOR THE DECONSTRUCTION, STORAGE AND RECONSTRUCTION OF HUDDERSFIELD STATION TEA ROOMS

APPENDIX D – ROOF A REPAIR AND STRENGTHENING DETAIL

APPENDIX D.1 – CONSENTED LBC DRAWINGS OF KNOWN STRENGTHENING DETAIL

APPENDIX D.2 – SPECIFICATION SKETCHBOOK FOR UNKNOWN REPAIRS – TRUSSES AND CONNECTIONS

APPENDIX D.3 – SPECIFICATION SKETCHBOOK FOR UNKNOWN REPAIRS - COLUMNS

APPENDIX E – DESIGN GUIDE





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