AN ARCHAEOLOGICAL WATCHING BRIEF ON CORBRIDGE BRIDGE, CORBRIDGE, NORTHUMBERLAND

An Archaeological Watching Brief on Corbridge Bridge, Corbridge, Northumberland

Central National Grid Reference: NY 9889 6412

Site Code: CBN 10

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CONTENTS

1. NON-TECHNICAL SUMMARY

1.1 An archaeological watching brief was undertaken in February 2010 by Pre-Construct Archaeology on Corbridge Bridge, Corbridge, Northumberland. The work monitored intrusive engineering investigations co-ordinated by Northumberland County Council for the purposes of a structural assessment. The central National Grid Reference for the site is NY 9889 6412.

1.2 Corbridge Bridge spans the River Tyne and carries the B6321, which gives access to the town of Corbridge. The present bridge is predominantly of 17th century date with medieval elements surviving on the northern side. During the 19th century the bridge was widened and the southern span renewed.

1.3 The bridge is a scheduled ancient monument thus all intrusive engineering investigations required scheduled monument consent, which stipulated that an archaeological watching brief must take place in association with the work. The main aims of the watching brief were to ensure that important archaeological remains were not damaged by the investigations and that adequate recording was undertaken of any important archaeological remains encountered.

1.4 Two methods of engineering investigation were monitored. The first involved hand-excavation of seven trial holes. The earliest archaeological deposits recorded likely dated to the 17th century and comprised masonry representative of the arch barrels in two bridge spans. Potentially contemporary with the masonry was an area of metalled surface, which likely represents a pre-19th century road surface on the bridge. Evidence of probable 19th century bridge alterations recorded in the form of masonry likely representing widening of the structure. The remainder of the deposits recorded within the trial holes were of modern date.

1.5 The second method of structural investigation to be monitored was mechanical boreholing. The earliest deposits encountered in the boreholes comprised masonry, which likely represents part of the structural fabric of bridge piers or one or more episodes of construction backfilling. Post-dating these remains were deposits likely representing backing material for bridge piers or spans. The dates of these remains are uncertain. The remainder of the deposits recorded by boreholing were of modern date.

2. INTRODUCTION

2.1 General Background

2.1.1 This report details the results of a programme of archaeological monitoring and recording (watching brief) undertaken on Corbridge Bridge, Northumberland by Pre-Construct Archaeology Limited (PCA). The watching brief, undertaken 14-16 February 2010, monitored intrusive engineering investigations, which aimed to collect structural information for an assessment of the need to strengthen the bridge, which is in generally poor condition.

2.1.2 The watching brief was commissioned by Northumberland County Council (NCC). The work comprised archaeological monitoring and recording of seven hand-excavated trial holes designed to locate services and six mechanically-excavated boreholes undertaken to investigate various structural issues relating to the bridge.

2.1.3 Corbridge Bridge is a scheduled ancient monument (SAM) and scheduled monument consent (SMC) was granted for the engineering investigations by the Department for Culture, Media and Sport (DCMS) on the advice of English Heritage. The undertaking of the watching brief and the compilation and submission of this report fulfilled conditions of SMC.

2.1.4 A 'Written Scheme of Investigation' (WSI) for the watching brief was prepared by PCA and approved by English Heritage prior to the commencement of the work.[1] The main aims of the watching brief were to ensure that important archaeological remains were not damaged by the engineering investigations and that any remains encountered were adequately recorded.

2.1.5 At the time of writing, the Site Archive is housed at the Northern Office of Pre-Construct Archaeology, at Unit N19a, Tursdale Business Park, Durham, DH6 5PG. The completed Site Archive, comprising written and photographic records will be deposited at Woodhorn, Ashington, under the site code CBN 10. The Online Access to the Index of Archaeological Investigations (OASIS) reference number for the project is: preconst1-78614.

2.2 Site Location and Description

2.2.1 The historic core of the town of Corbridge, Northumberland occupies a strategic bridging point situated in the Middle Tyne Valley, *c.* 5km east of Hexham and *c* .10km downstream of the confluence of the Rivers North and South Tyne. Corbridge Bridge spans the Tyne, giving access to the town from the south. The area is located on stepped alluvial terraces formed by the changing course of the Tyne.

2.2.2 Corbridge Bridge is a seven-span masonry arch bridge, which carries the B6321 across the Tyne. Each span consists of single ashlar hammer dressed sandstone arch barrel, with the ashlar corbelled extensions carrying the parapet walls. The spans vary in dimension from a minimum of 13.90m at the southern span to a maximum of 19.90m at the northern span.

2.2.3 The central National Grid Reference for the bridge is NY 9889 6412.

[1] Pre-Construct Archaeology 2010.

2.3 Planning Background

2.3.1 Corbridge Bridge has SAM status (County Monument No. 123) and thus has statutory protection under *The Ancient Monuments and Archaeological Areas Act 1979* (as amended). Accordingly, the intrusive engineering investigations on the structure proposed by NCC required SMC from the DCMS prior to their undertaking.[2]

2.3.2 Relevant conditions of SMC for the engineering investigations were:

3(b). No investigation works shall take place until the applicant has confirmed in writing the commissioning of a programme of archaeological work (watching brief) in accordance with a written scheme of investigation which has been submitted to and approved by the Secretary of State advised by English Heritage.

3(e). A report on the archaeological recording shall be sent to the County Historic Environment Record and to English Heritage within three months of the completion of the work (or such other period as may be mutually agreed).

2.3.3 PCA was contracted to undertake the archaeological element of the project by NCC. A WSI was compiled and submitted to English Heritage in advance of the investigations. Failure to ensure an adequate level of archaeological monitoring during the work would have constituted a breach of SMC.

2.4 Archaeological and Historical Background

Prehistoric

2.4.1 Evidence of prehistoric settlement and activity in the vicinity of the town of Corbridge is notably absent, whilst within the wider area there is very little evidence of prehistoric activity.

Roman

2.4.2 The Roman settlement of *Corstopitum* lay to the west of Corbridge. The remains of a succession of forts have been excavated, the earliest of which was built by Agricola in *c.* AD 79/80. The fort was rebuilt in stone *c.* AD 139, contemporary with the Antonine advance into Scotland and probably remained in use until the early 3rd century. During the 3rd and 4th centuries the settlement flourished as a supply depot for Hadrian's Wall, the course of which runs *c.* 4km to the north.

2.4.3 The Roman road 'Dere Street' approached Corbridge from the Roman fort (*Vindomora*) at Ebchester on a north-west alignment and ran along the south bank of the River Tyne, before crossing the river by a bridge located to the south-west of the town. In addition, a second major Roman road, the 'Stanegate', ran to the north of the Tyne in the vicinity of Corbridge. Based on chance finds of late Roman date, including a probable 4th century silver armlet discovered beneath the bridge in 1736, the settlement at Corbridge is presumed to have been in use until the later Roman period.

[2] The decision to grant SMC and the conditions applicable were set out in a letter from English Heritage to NCC dated 7 January 2010.

2.4.4 By the end of the 4th century, the Roman town was in a decline and appears to have been abandoned by the early years of the 5th century. Whilst the settlement was apparently not reoccupied, the Roman bridge appears to have stood as a crossing over the Tyne for a considerable number of years after the end of Roman activity in the area.

Saxon

2.4.5 The Anglo-Saxons chose a spur of land *c.* 0.5km to the east of the Roman site of *Corstopitum* as the focus for a village and monastery site, a choice which may have been affected by the proximity of the still-standing Roman bridge. The church of St. Andrew would have been the focal point of the Saxon village and whilst very little of the original fabric survives, the west tower retains some original Saxon elements, as well as a re-used Roman gate archway.

Medieval

2.4.6 The northern extent of the early medieval town of Corbridge has been extrapolated from the presumed location of an enclosure ditch around the town. The ditch is assumed to be of mid to late 10th/early 11th century origin and rather than being an attempt to fortify the settlement, this feature was probably associated with a general expansion of the town at this time.

2.4.7 Corbridge was already a borough when Henry II came to the throne in AD 1154 and in AD 1201 King John granted Corbridge the status of a royal borough. Corbridge was situated at the cross roads of the major routes of 'Carelgate' and 'Dere Street', later known as Watling Street, and as such was a natural location for a commercial centre to develop.

2.4.8 The importance of Corbridge as a crossing point on the Tyne was ensured by the construction of a bridge in AD 1235, a structure that is widely thought to have replaced the Roman bridge. Elements of the 10th century bridge remain in the existing structure, particularly on the northern side, having survived post-medieval and modern alterations of the bridge, as described below.

2.4.9 In the 13th century, the town of Corbridge was at its most prosperous and had become the second largest borough town in the region, second only to Newcastle. However, as a consequence of repeated destruction during the 'Border Wars' at the beginning of the 14th century, and population decline after the 'Black Death' of 1349, the prosperity of the town declined.

Post-medieval

2.4.10 By the late 16th century medieval Corbridge had declined to little more than a village and the settlement remained in a stagnated state until the latter part of the post-medieval period. However, whilst the post-medieval settlement was of little significance, the crossing over the Tyne remained important as a transportation link and in 1674 the bridge was rebuilt. The river crossing at Corbridge was the only bridge across the Tyne to survive devastating floods in 1771 and, as a consequence, elements of the post-medieval fabric, in addition to earlier phases of construction, remain extant.

2.4.11 Corbridge appears to have stagnated during the post-medieval period and it was not until the opening of the Newcastle to Carlisle railway in 1835 that the town experienced any expansion. The subsequent creation of a large livestock market near to the railway station significantly boosted the economy. Around this time, the bridge was widened and its southern span renewed, whilst in 1881 further widening of the bridge was undertaken.

Modern

2.4.12 As previously described, the present bridge at Corbridge is predominantly of 17th century date, built in 1674 with elements of the medieval bridge surviving on the northern side. It is thus the oldest surviving bridge on the Tyne and the only one to survive floods of 1771. The bridge was widened and the southernmost span renewed in the 19th century, with further widening undertaken in 1881. Work undertaken during the 20th century included raising the parapets and installing sheet-piles with a concrete curtain. The bridge has SAM status and is a Grade I Listed Building.

2.5 Aims and Objectives

2.5.1 As described in the SMC decision, the engineering investigations were undertaken:

1) to confirm the form of construction and structural details, particularly of the arch barrels;
2) to confirm the type and depth of fill above the arches for assessment purposes;
3) to confirm the presence of any structural backing for assessment purposes;
4) to confirm the thickness of the arch barrels for each of the spans for assessment purposes;
5) to locate known services in the body of the structure.

2.5.2 These works had the potential to disturb important archaeological remains, most notably historic structural elements of the bridge. As such, it was considered that archaeological monitoring and recording under watching brief conditions was the appropriate archaeological response to the scheme. Therefore the main aims of the watching brief were to ensure that important archaeological remains were not damaged by the engineering investigations and that adequate recording was undertaken of any important archaeological remains encountered.

2.5.3 The archaeological watching brief had the potential to make a significant contribution to archaeological knowledge of the area. *Shared Visions: The North-East Regional Research Framework for the Historic Environment* (NERRF)[3] highlights the importance of research as a vital element of development-led archaeological work and sets out key research priorities for all periods of the past so that all elements of commercial archaeological work can be related to wider regional and national priorities for the study of archaeology and the historic environment.

[3] Petts and Gerrard 2006.

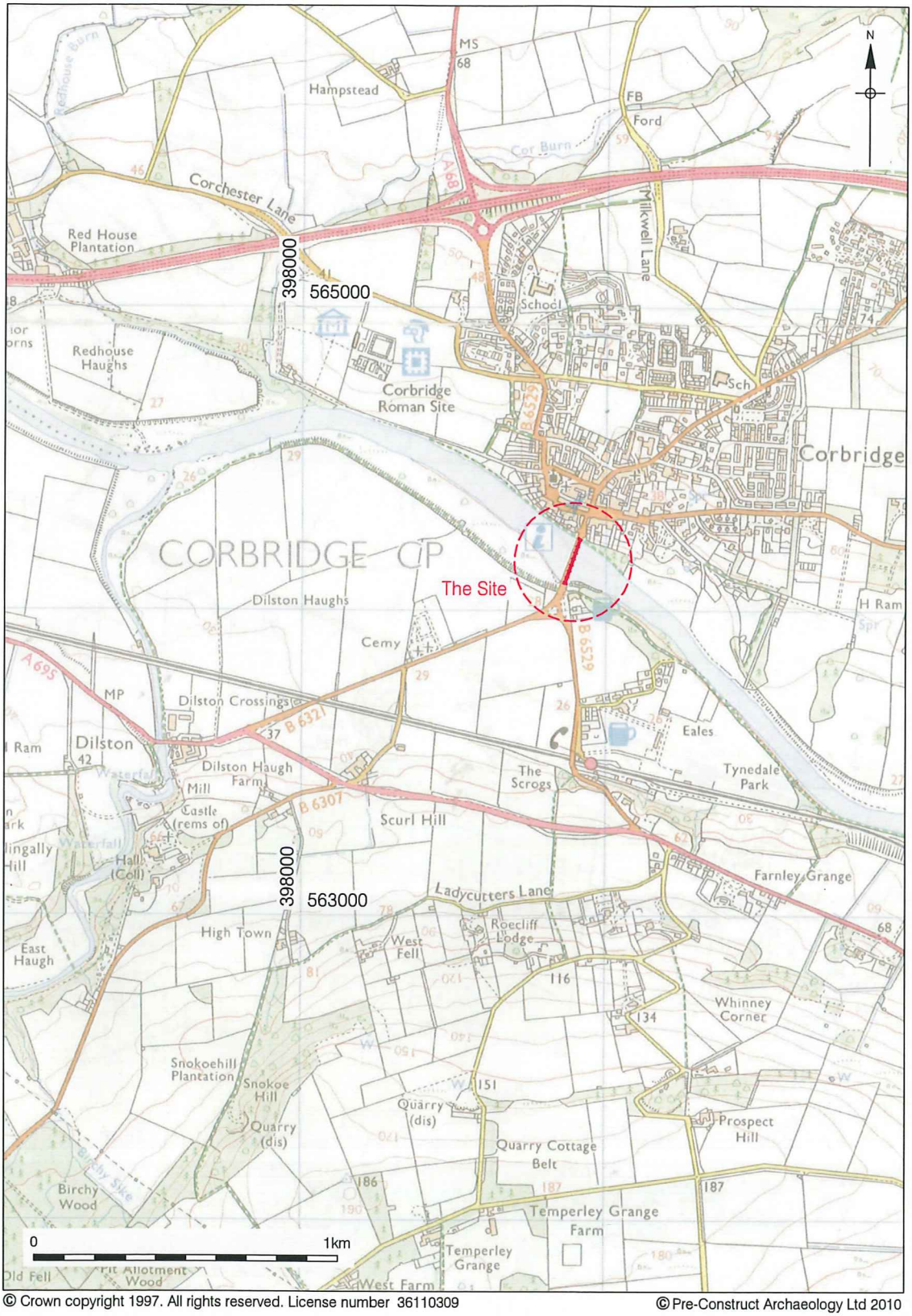

Figure 1
Site Location
1:20,000 at A4

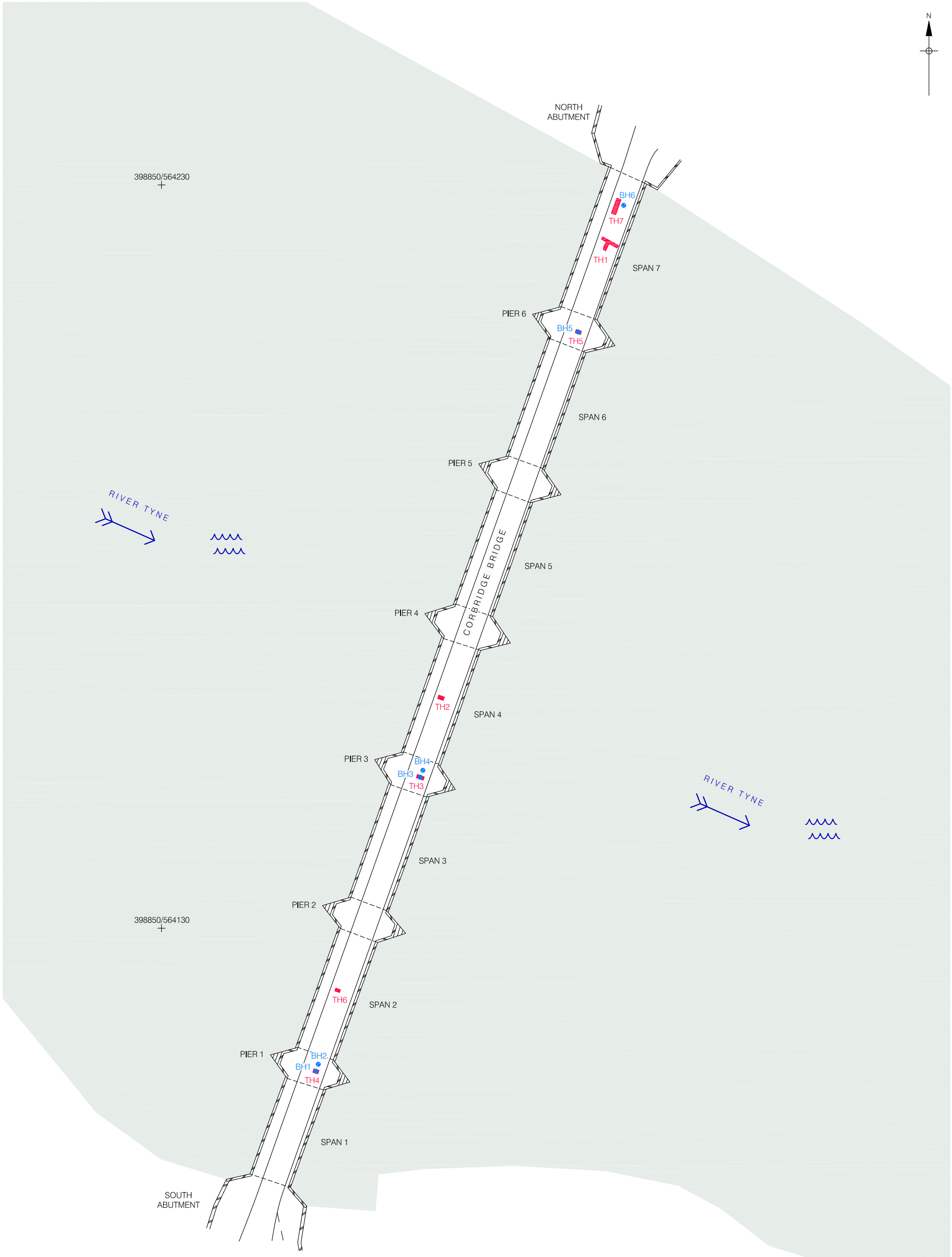

Figure 2
Areas of Investigation
1:500 at A3

3. METHODOLOGIES

3.1 Fieldwork

3.1.1 The archaeological work was undertaken in accordance with the relevant standard and guidance document of the Institute for Archaeologists (IfA).[4] The locations of the engineering investigations were specified within the SMC application, as depicted on NCC drawing number HBO51782/B/B6231/02/10 (dated November 2009).

3.1.2 The engineering investigations comprised two operational phases of work undertaken within one overall programme of work, undertaken 14-16 February 2010. The first phase comprised hand-excavation of seven trial holes (THs 1-7) and the second phase comprised mechanical boreholing of six boreholes (BHs 1-6).

3.1.3 The seven trial holes were excavated within the vehicular carriageway of the bridge, variably located above the bridge spans and piers. Trial holes located above the bridge spans were: TH1 and TH7 on Span 7; TH2 on Span 4; TH6 on Span 2. The purpose of these trial holes was to determine the profile of the intrados of the arch barrel on each span and to assess the composition of the backing material of Spans 2, 4 and 7. Trial holes located above the bridge piers were: TH3 on Pier 3; TH4 on Pier 1; TH5 on Pier 6. The purpose of these trial holes was to determine the presence/absence of services beneath the road surface of the bridge.

3.1.4 TH2, TH3, TH4, TH5 and TH6 were roughly square in plan measuring up to 0.52m by 1m at ground level. TH1 was a T-shaped trench measuring 2.45m east-west by 1.10m north-south by up to 0.45m wide. TH7 was a linear trench measuring 2.15m north-south by up to 0.65m wide. All trial holes were excavated to depths of between 0.60m and 0.90m below ground level.

3.1.5 The six boreholes were variably commenced from the vehicular carriageway of the bridge or from the base of the excavated trial holes. The boreholes were thus located: BH1 and BH2 above Pier 1; BH3 and BH4 above Pier 3; BH5 above Pier 6; BH6 towards the northern extent of Span 7. All six boreholes were sited to determine the composition of backing material either to the bridge piers or to the junction between the bridge piers and spans, whilst BH6 also served to examine the intrados of the arch barrel of Span 7.

3.1.6 All groundworks were undertaken or co-ordinated by NCC, with consultancy advice from AECOM. All intrusive engineering investigations were monitored by an attendant archaeologist from PCA. Boreholing was undertaken by J. B. Site Investigations Limited, utilising a Massenza M.1.2 rotary drilling rig (Figure 5). When significant structural fabric was encountered, excavation ceased and the investigation area was cleaned, recorded and photographed.

3.1.7 Archaeological remains were recorded on *pro forma* 'Context Recording' and 'Masonry Recording' sheets. A 'Harris Matrix' stratification diagram was compiled to document stratigraphic relationships.

[4] IfA (then IFA) 2001. Pre-Construct Archaeology is an IfA-Registered Organisation (RO 23).

3.1.8 A photographic record of the investigations was compiled using SLR and digital cameras. This comprised black and white prints and colour transparencies (on 35mm film), illustrating in both detail and general context the principal remains encountered. The photographic record also included 'working shots' to illustrate more generally the nature of the works. All photographs (except ‘working shots’) included a graduated metric scale. The photographic record forms part of the Site Archive.

3.2 Post-excavation

3.2.1 A total of 29 archaeological contexts were defined during the watching brief. Post-excavation work involved checking and collating site records and phasing the stratigraphic information (see Appendices A and B). A written summary of the findings was then compiled, as described in Section 4 of this report.

3.2.2 No ceramic or organic material was recovered. No material was recovered that required specialist stabilisation or an assessment of potential for conservation research.

3.2.3 The palaeoenvironmental sampling strategy of the project was to recover bulk samples where appropriate, from well-dated (where possible), stratified deposits covering the main periods or phases of occupation and the range of feature types represented. To this end, no features or deposits encountered were significant enough to warrant the recovery of bulk samples.

3.2.4 The complete Site Archive, in this case comprising the written, drawn, and photographic records, in addition to all material generated electronically during post-excavation, will be packaged for long term curation. The depositional requirements of the receiving body, in this case Woodhorn, Ashington, will be met in full.

4. ARCHAEOLOGICAL RESULTS

4.1 Trial Holes

4.1.1 Phase 1: 17th Century

4.1.1.1 In TH1, sandstone masonry, [6], representing the intrados of the arch barrel of Span 7, was exposed across an area measuring 1.40m north-south by 0.80m east-west (Figure 3). The masonry was encountered between 0.66m and 0.74m below the existing carriageway surface, at a maximum height of 30.83m OD. The exposed masonry comprised sandstone blocks, bonded with lime mortar, with the blocks measuring up to 500mm x 200mm. This masonry probably represents part of the 17th century bridge.

4.1.1.2 In TH2, similar masonry, [11], representing the intrados of the arch barrel of Span 4, was encountered at *c.* 0.63m below the carriageway surface, at a maximum height of 31.18m OD. The very limited nature of this investigation meant that no constructional details could be recorded. However, the masonry is believed to represent part of the 17th century bridge.

4.1.1.3 In TH6, similar masonry, [23], representing the intrados of arch barrel of Span 2, was encountered at *c.* 0.60m below the carriageway surface, at a maximum height of 30.83m OD. Once again the very limited nature of this investigation meant that no constructional details could be recorded (Figure 6). Again, like TH2, the masonry is believed to represent part of the 17th century bridge.

4.1.2 Phase 2: Pre-19th Century

4.1.2.1 A small area of metalled surface, [28], was exposed within the northern half of TH7 (Figures 3 and 7). Measuring at least 0.72m north-south by 0.40m east-west it was encountered at 30.61m OD. The surface had been constructed from generally well-sorted, fine and medium rounded and sub-rounded stones set within a sandy silt matrix. Whilst no artefactual material was recovered from the surface, evidently it pre-dated 19th century alterations to the bridge and could, therefore, potentially represent a metalled road surface on the bridge of 17th or 18th century date.

4.1.3 Phase 3: 19th Century

4.1.3.1 In the southern part of TH1, an area of masonry, [5], was exposed (Figures 3 and 4). This comprised sandstone blocks, measuring up to 350mm x 320mm x 200mm and bonded with silty clay. It was exposed across an area measuring 0.90m north-south by 0.20m east-west and was recorded at a height of 31.08m OD. This masonry is interpreted as part of cantilever extensions associated with the widening of the bridge during the 19th century.

4.1.3.2 In the northern part of TH7, an area of masonry, [27], was exposed (Figures 3 and 7). This comprised sandstone blocks, measuring up to 420mm x 300mm x 200mm, encountered at 30.96m OD. The masonry was exposed across an area measuring at least 1.10m north-south by at least 0.40m east-west and again is interpreted as part of cantilever extensions associated with 19th century widening of the bridge.

4.1.4 Phase 4: Modern

4.1.4.1 North-south aligned service trenches, [4], [10] and [22], all backfilled with loose sand fills, [3], [9] and [21], respectively, were recorded in TH1, TH2 and TH6 (Figure 6). Apparently contemporary with these services was a sandy 'made-ground' layer, [13], [18] and [26], recorded in TH3, TH5 and TH7, respectively. This deposit varied in thickness between 0.18m and 0.90m.

4.1.4.2 The remainder of the deposits recorded in all seven trial holes comprised an up to *c.* 0.50m thick concrete aggregate layer, [2], [8], [12], [15], [17], [20] and [25] (THs 1-7, respectively), which formed the sub-base for a *c.* 50mm thick tarmac surface, [1], [7], [14], [16], [19], [24] and [29] (THs 1-7, respectively). Together these remains represent the modern carriageway surface of the bridge.

4.2 Boreholes

4.2.1 BH1 and BH2

4.2.1.1 BH1 and BH2, sited above Pier 1, extended to depths of 2.70m and 5.0m below the existing carriageway surface, respectively. The more informative results of BH2 are summarised below. The earliest strata recorded in BH2 comprised successive layers of sandstone cobbles, sandstone and siltstone cobbles (with cement observed on some cobbles), sandstone blocks, cement, and sandstone blocks. The uppermost of these deposits was encountered *c.* 3.60m below carriageway level and the material was thus collectively at least 1.40m thick. This material could either represent part of the fabric of Pier 1 or backfill material. The period of origin of the material is unknown.

4.2.1.2 Above the earliest strata in BH2 were two successive similar layers of sandstone gravel with sandstone and granite cobbles, overlain by a layer of sandstone cobbles. Collectively this material was 2.60m thick, encountered at 29.82m OD, this 1.0m below carriageway level. This material is interpreted as backing material for Pier 1. Once again, the period of origin of the material is unknown.

4.2.1.3 The next deposit in BH2 comprised a layer of sand and gravel 'made-ground', up to 0.70m thick; the corresponding deposit in BH1 was more extensive, being up to 2.0m thick. Above the 'made ground' in BH2 was the concrete sub-base for the existing tarmac carriageway surface, the surface itself at 30.82m OD. These uppermost strata belong to Phase 4, as described above, being associated with carriageway modification/maintenance during the 20th century.

4.2.2 BH3 and BH4

4.2.2.1 BH3 and BH4, sited above Pier 3, extended to depths of 5.50m and 5.0m below the existing carriageway surface, respectively. The more informative results of BH3 are summarised below. The earliest strata recorded in BH3 comprised two successive, similar layers of sandstone blocks (with some cement observed), then a layer of sandstone gravel with cement and then a layer of sandstone gravel. The uppermost of these deposits was encountered *c.* 3.50m below carriageway level and the layers were thus collectively at least 2.0m thick. This material could either represent part of the fabric of Pier 3 or backfill material. The period of origin of the material is unknown.

4.2.2.2 Above the earliest strata in BH3 were two successive, similar layers of sandstone cobbles and/or blocks. Collectively this material was 2.0m thick, first encountered 1.50m below carriageway level, at 30.26m OD. This material is interpreted as backing material for Pier 3. Once again, the period of origin of the material is unknown.

4.2.2.3 The next deposits in BH3 comprised two successive layers of sand and gravel 'made-ground', collectively 1.40m thick. Above this was the concrete sub-base for the existing tarmac carriageway surface, the surface itself at 31.76m OD. These uppermost strata belong to Phase 4, as described above, being associated with carriageway modification/maintenance during the 20th century.

4.2.3 BH5 and BH6

4.2.3.1 BH5 and BH6, sited above Pier 6 and on Span 7, respectively, extended to depths of 5.50m and 2.0m below the existing carriageway surface, respectively. The results of both are summarised below. The earliest strata recorded in BH5 comprised two successive, similar layers of sandstone gravel and cobbles. The uppermost of these deposits was encountered 3.50m below carriageway level and the layers were thus collectively at least 2.0m thick. This material could either represent part of the fabric of Pier 6 or backfill material. The period of origin of the material is unknown.

4.2.3.2 Above the earliest strata in BH5 were two successive, similar layers of sandstone gravel. Collectively this material was 2.0m thick, encountered at 30.07m OD, this 1.50m below carriageway level. This material is interpreted as backing material for Pier 6. Once again, the period of origin of the material is unknown.

4.2.3.3 The earliest layer recorded in BH6 was a layer of possible sandstone cobbles at least 1.0m thick and first encountered 1.0m below carriageway level, at 30.53m OD. This material is interpreted as backing material for Span 7; its period of origin is unknown.

4.2.3.4 The next deposits in BH5 comprised two successive layers of sand and gravel 'made-ground', collectively 1.40m thick. Above this was the concrete sub-base for the existing tarmac carriageway surface, the surface itself at 31.57m OD. These uppermost strata belong to Phase 4, as described above, being associated with carriageway modification/maintenance during the 20th century.

4.2.3.5 Underlying the existing carriageway surface at BH6 was a 'made-ground' layer of sandstone cobbles, *c.* 0.85m thick. Above this was the concrete sub-base for the existing tarmac carriageway surface, the surface itself at 31.53m OD. These uppermost strata belong to Phase 4, as described above, being associated with carriageway modification/maintenance during the 20th century.

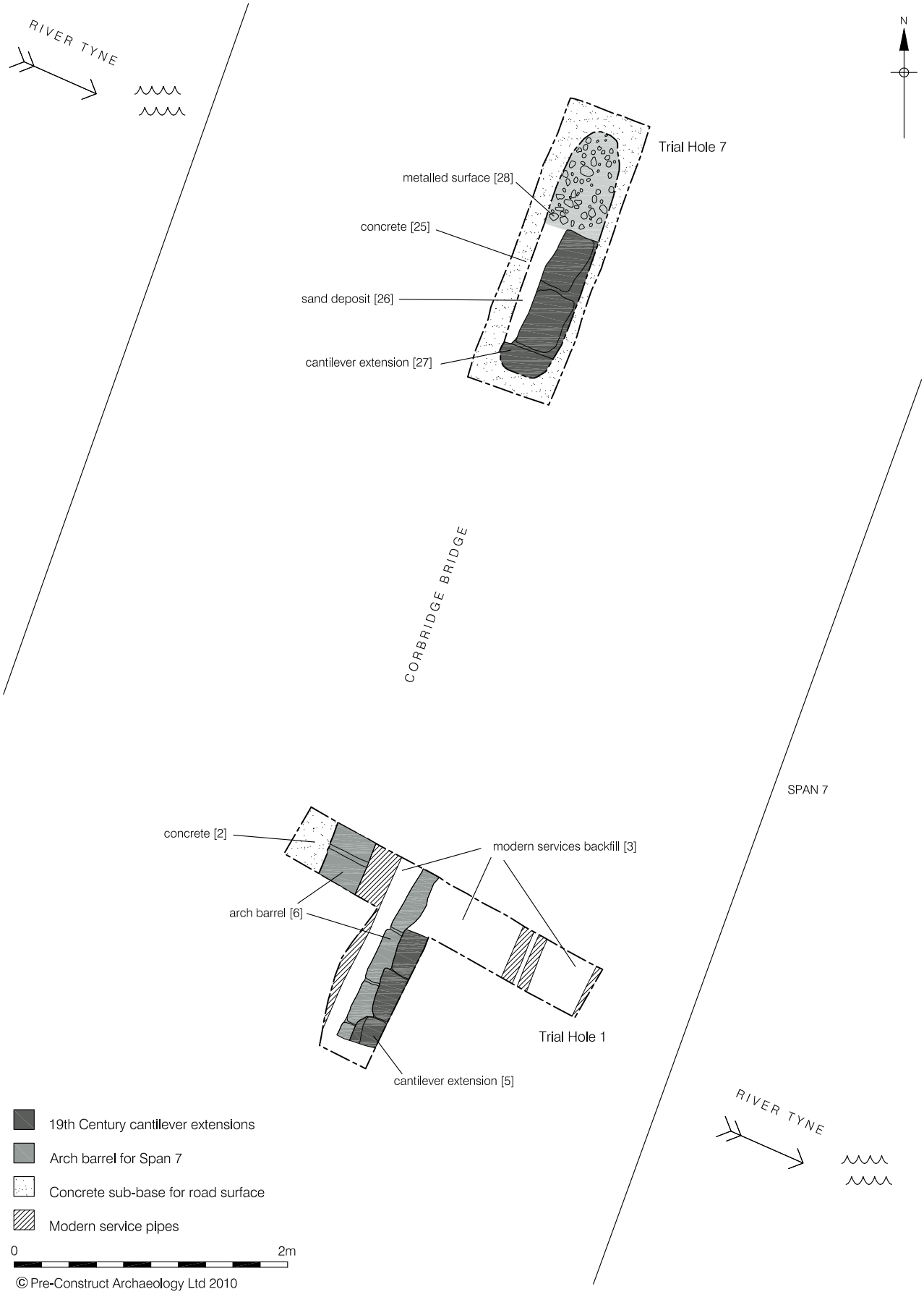

Figure 3
Plan of Trial Holes 1 & 7
1:40 at A4

Figure 4 Trial Hole 1 (N-S arm), Masonry [5], looking SSW *(scale 1m)*

Figure 5 View of Boreholing in Progress, looking N

Figure 6 Trial Hole 6, looking N *(scale 1m)*

Figure 7 Trial Hole 7, Masonry [27], and Surface [28], looking S *(scale 1m)*

5. CONCLUSIONS

5.1 Trial Holes

5.1.1 The earliest archaeological remains (Phase 1) recorded within the investigative trial holes comprised mortared sandstone masonry, encountered in TH1 and TH7. The masonry in TH1 is interpreted as representing the intrados of the arch barrel at the crown of Span 7, while that in TH7 likely represents the arch barrel further north on Span 7. These remains potentially date to the 17th century.

5.1.2 Potentially contemporary with the 17th century masonry, and certainly pre-dating an episode of bridge alteration in the 19th century, was an area of metalled surface in TH7 (Phase 2). The surface may represent an earlier road surface on the bridge, possibly during the 17th, 18th or early part of the 19th century.

5.1.3 Evidence of alteration to the bridge in the 19th century (Phase 3) was recorded in TH1 and TH7, where the presence of sandstone masonry is thought to reflect cantilever extensions of Span 7, associated with the widening of the bridge during this period.

5.1.4 The remainder of the deposits recorded during the excavation of the trial holes likely date to the modern era (Phase 4) and comprised a variety of service trenches, ‘made-ground’ material, as well as the sub-base and tarmac surface of the existing carriageway. The Phase 4 contexts represent modification/maintenance of the bridge-deck carriageway during the 20th century.

5.2 Boreholes

5.2.1 The earliest deposits encountered during the boreholing comprised sandstone blocks and cement in BH1, BH2, BH3 and BH4, this material potentially representing part of the structural fabric of Piers 1 and 3. Alternatively, the material may represent backfilling associated with an episode of bridge construction/alteration. The period(s) of origin of this material is uncertain.

5.2.2 Post-dating these earliest deposits were various layers of gravel, cobbles and sandstone blocks, recorded in all boreholes and likely representing backing material for the bridge piers or spans on which the boreholes were sited. Once again, the period(s) of origin of this material is uncertain.

5.2.3 The uppermost deposits recorded in all boreholes comprised gravel ‘made-ground’ and the sub-base and tarmac surface of the existing carriageway surface. These materials were assigned to Phase 4, representing modification/maintenance of the bridge-deck carriageway during the 20th century.

6. REFERENCES

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Pre-Construct Archaeology Limited, 2010. *An Archaeological Watching Brief on Corbridge Bridge, Corbridge, Northumberland: Written Scheme of Investigation*, Pre-Construct Archaeology unpublished.

Internet Sources

Keys to the Past, the online Historic Environment Record of County Durham and Northumberland: www.keystothepast.info/

7. ACKNOWLEDGEMENTS AND CREDITS

Acknowledgements

Pre-Construct Archaeology would like to thank Northumberland County Council for commissioning and funding the project herein described. The liaison role of Patrick Smith, Engineer, is particularly acknowledged.

The curatorial roles of Kate Wilson (English Heritage) and Nick Best (the Northumberland County Council Conservation Team) are acknowledged.

Pre-Construct Archaeology Credits

Fieldwork: Aaron Goode

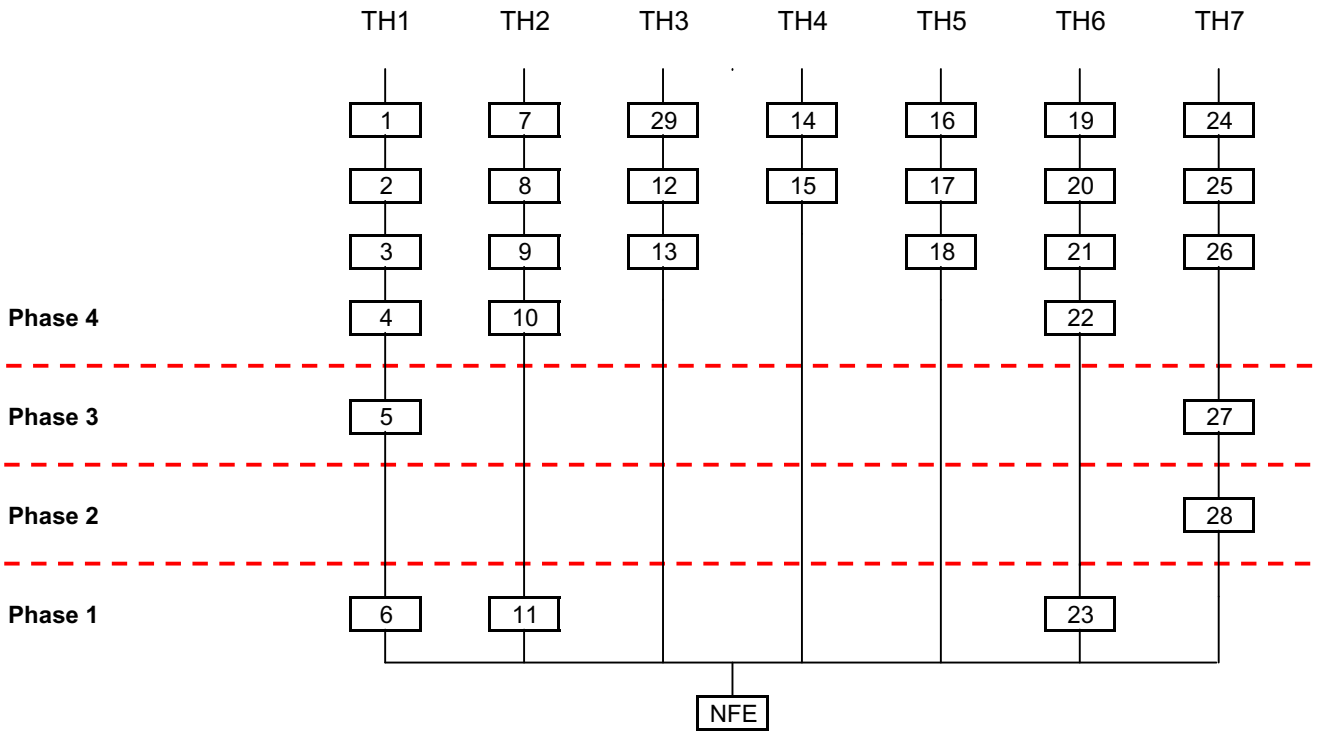
Report: Aaron Goode and Joanna Taylor

Project Management: Robin Taylor-Wilson

CAD: Hayley Baxter

APPENDIX A
STRATIGRAPHIC MATRICES

CBN 10: STRATIGRAPHIC MATRICES



APPENDIX B
CONTEXT INDEX

CBN 10: CONTEXT INDEX

Context	*Phase*	*Proposed date*	*Trial Hole*	*Type 1*	*Type 2*	*Interpretation*
1	4	20th century	TH1	Deposit	Surface	Tarmac
2	4	20th century	TH1	Deposit	Layer	Concrete sub-base
3	4	20th century	TH1	Deposit	Fill	Fill of [4]
4	4	20th century	TH1	Cut	Construction cut	Modern services
5	3	19th century	TH1	Masonry	Masonry	Cantilever extensions
6	1	17th century	TH1	Masonry	Masonry	Arch barrel - Span 7
7	4	20th century	TH2	Deposit	Surface	Tarmac
8	4	20th century	TH2	Deposit	Layer	Concrete sub-base
9	4	20th century	TH2	Deposit	Fill	Fill of [10]
10	4	20th century	TH2	Cut	Construction cut	Modern services
11	1	17th century	TH2	Masonry	Masonry	Arch barrel - Span 4
12	4	20th century	TH3	Deposit	Layer	Concrete sub-base
13	4	20th century	TH3	Deposit	Layer	Made ground
14	4	20th century	TH4	Deposit	Surface	Tarmac
15	4	20th century	TH4	Deposit	Layer	Concrete sub-base
16	4	20th century	TH5	Deposit	Surface	Tarmac
17	4	20th century	TH5	Deposit	Layer	Concrete sub-base
18	4	20th century	TH5	Deposit	Layer	Made ground
19	4	20th century	TH6	Deposit	Surface	Tarmac
20	4	20th century	TH6	Deposit	Layer	Concrete sub-base
21	4	20th century	TH6	Deposit	Fill	Fill of [22]
22	4	20th century	TH6	Cut	Construction cut	Modern services
23	1	17th century	TH6	Masonry	Masonry	Arch barrel - Span 2
24	4	20th century	TH7	Deposit	Surface	Tarmac
25	4	20th century	TH7	Deposit	Layer	Concrete sub-base
26	4	20th century	TH7	Deposit	Layer	Made ground
27	3	19th century	TH7	Masonry	Masonry	Cantilever extensions
28	2	pre-19th century	TH7	Deposit	Surface	Metalled surface
29	4	20th century	TH3	Deposit	Surface	Tarmac

APPENDIX C
ARCHITECTURAL GLOSSARY

Arch:	In this instance, a curved structural member which is supported at its ends and supports a vertical load mainly by axial compression.
Arch barrel:	The inner surface of an arch.
Crown:	The point at the top of an arch.
Intrados:	Interior arc of an arch.
Pier:	A vertical structure which supports the ends of a multi-span superstructure at a location between abutments.
Span:	The horizontal space between two supports of a structure, but also refers to the overall structure itself.