

KENT BECK BRIDGE, NEASHAM, CO. DURHAM



WATCHING BRIEF REPORT

CP. No: 01439/11

09/07/2012



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Quality Assurance

This report covers works as outlined in the brief for the above-named project as issued by the relevant authority, and as outlined in the agreed programme of works. Any deviation to the programme of works has been agreed by all parties. The works have been carried out according to the guidelines set out in the Institute for Archaeologists (IfA) Standards, Policy Statements and Codes of Conduct. The report has been prepared in keeping with the guidance set out by WA Archaeology Ltd on the preparation of reports.

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SUMMARY

Wardell Armstrong Archaeology Ltd were commissioned by the Environment Agency to undertake an archaeological watching brief on groundworks relating to the creation of new flood defences at Kent Beck Bridge, Neasham, County Durham (NGR NZ 3235 1015). The site is located close to the presumed site of Neasham Priory and as a result the Clare Henderson, Assistant Archaeology Officer Durham County Council Historic Environment Services (DCCHES), granted planning consent for the development on the condition that an archaeological watching brief be undertaken during the works.

The archaeological watching brief was undertaken intermittently over 23 days between the 1st August 2011 and 14th November 2011. The watching brief monitored 3 separate phases of work; the creation of an access road and compound area, a half mile strip of landscape remodelling and the partial demolition of Kent Beck Bridge. No evidence of any features relating to Neasham Abbey were observed and no archaeological remains were noted during the watching brief.

As this archaeological watching brief was conducted as part of a recommendation to observe groundworks in association with the development of new flood defences, no further work is deemed necessary. However, given the high archaeological potential of the area, it is recommended that any future work be subject to a programme of archaeological investigation.

ACKNOWLEDGEMENTS

Wardell Armstrong Archaeology Ltd would like to thank The Environment Agency for commissioning the project, and for all assistance throughout the work. WA Archaeology Ltd would also like to thank Clare Henderson, Assistant Archaeology Officer, Durham County Historic Environment Service (DCCHEs), for all their assistance throughout the project.

The archaeological watching brief was undertaken by Nigel Cavanagh, Jocelyn Strickland and Sue Thompson. The report was written by Angus Clark and the drawings were produced by Adrian Bailey. The project was managed by Matt Town, Project Manager for WAA Ltd. The report was edited by Frank Giecco, Project Manager for WAA Ltd.

1 INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

- 1.1.1 In August 2011, Wardell Armstrong Archaeology were invited by the Environment Agency to maintain an archaeological watching brief at Kent Beck Bridge, Neasham, County Durham (NZ 3235 1015, Figure 1), during groundworks associated with the construction of new flood defences. The proposed works lie within the immediate vicinity of the presumed location of Neasham Abbey. As a result, Clare Henderson of Durham County Council requested that all ground reduction be subject to a programme of archaeological observation and investigation. This is in line with government advice as set out in Section 12 of the National Planning Policy Framework (NPPF 2012).
- 1.1.2 All groundworks associated with the development of the flood defences had to be excavated under full archaeological supervision and all stages of the archaeological work were undertaken following approved statutory guidelines (IfA 2008), and were consistent with the specification provided by NP Archaeology Ltd (Town 2011) and generally accepted best practice.
- 1.1.3 This report outlines the monitoring works undertaken on-site, the subsequent programme of post-fieldwork analysis, and the results of this scheme of archaeological works.

2 METHODOLOGY

2.1 PROJECT DESIGN

2.1.1 A project design was submitted by Wardell Armstrong Archaeology Ltd in response to a request by The Environment Agency, for an archaeological watching brief of the study area (Town 2011). Following acceptance of the project design by Clare Henderson, Assistant Archaeology Officer, DCCHEs, Wardell Armstrong Archaeology Ltd was commissioned by the client to undertake the work. The project design was adhered to in full, and the work was consistent with the relevant standards and procedures of the Institute for Archaeologists (IfA), and generally accepted best practice.

2.2 THE WATCHING BRIEF

2.2.1 The works involved a structured watching brief to observe, record and excavate any archaeological deposits from the development site. A watching brief is a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons, on a specified area or site on land, inter-tidal zone or underwater, where there is a possibility that archaeological deposits may be disturbed or destroyed (IfA 2008).

2.2.2 The aims and principal methodology of the watching brief can be summarised as follows:

- to establish the presence/absence, nature, extent and state of preservation of archaeological remains and to record them;
- to carry out further excavation and recording work in adequate time, if intact archaeological remains are uncovered during the project;
- to accurately tie the area watched by the archaeologist into the National Grid at an appropriate scale, with any archaeological deposits and features adequately levelled;
- to sample environmental deposits encountered as required, in line with English Heritage (2002) guidelines;
- to produce a photographic record of all contexts using colour digital, 35mm colour slide and monochrome formats as applicable, each photograph including a graduated metric scale;
- to recover artefactual material, especially that useful of dating purposes;
- to produce a site archive in accordance with MAP2 (English Heritage 1991) and MoRPHE standards (English Heritage 2006).

2.2.3 An area running for a length of approximately half a mile and measuring 10m in width was stripped of topsoil across open farmland. A later trench was excavated along the length of the easement area to an average width of 6m and an average depth of 1.7m. The stripped topsoil was banded up along the length of the site, to be landscaped at a later date. Archaeological monitoring and supervision of groundworks associated with the stripping commenced on 1st August 2011. A summary of the findings of the watching brief is included within this report.

2.3 THE ARCHIVE

2.3.1 A full professional archive has been compiled in accordance with the specification, and in line with current UKIC (1990) and English Heritage Guidelines (1991) and according to the Archaeological Archives Forum recommendations (Brown 2011). The archive will be deposited within the Bowes Museum, with copies of the report sent to the County Historic Environment Record at Durham, available upon request. The archive can be accessed under the unique project identifier NPA11, KBB-A, CP 01439/11.

2.3.2 Wardell Armstrong Archaeology Ltd, and Durham County Council, support the **Online Access to the Index of Archaeological Investigations (OASIS)** project. This project aims to provide an on-line index and access to the extensive and expanding body of grey literature, created as a result of developer-funded archaeological work. As a result, details of the results of this project will be made available by Wardell Armstrong Archaeology Ltd, as a part of this national project.

3 BACKGROUND

3.1 LOCATION AND GEOLOGICAL CONTEXT

3.1.1 Neasham lies within the undulating farmland of the Tees Valley, approximately 10km south-east of Darlington in County Durham. The site lies at a height of approximately 21m AOD and is positioned close to the confluence of the Kent Beck and the River Tees. The site is situated on the banks of the Kent Beck to the north of the village.

3.1.2 The underlying geology is Permian marl and Permian Triassic limestone (British Geological Survey North Sheet, Third Edition Solid 1979) with overlying Moranic Drift, glacial sand, gravel and Alluvium (British Geological Survey North Sheet, First Edition Quaternary, 1977). The overlying soils are known as Wick 1 soils, which are typical brown earths.

3.2 HISTORICAL CONTEXT

3.2.1 This background is intended as only a brief account of historical developments around the village of Neasham, in order to set the bridge and its site in its historical context. This information is derived mainly from the County Historic Environment Record (HER), a database of known historical and/or archaeological sites in County Durham, which is maintained by Durham County Council.

3.2.2 There is some slight evidence of Roman or Romano-British occupation in the area around Neasham, in the form of coins of Roman date which are said to have been found at the confluence of Crec Beck and Neasham Stell (HER Ref: H182; Grid Ref: NZ 323 103), to the north of Kent Beck Bridge.

3.2.3 The first part of the place name '*Neasham*' is believed to have derived from the Middle English word meaning 'nose'; therefore Neasham means '*homestead by the nose shaped bend*' [of the River Tees]. It is first recorded in an early Yorkshire charter of 1158 as '*Nesham*', literally meaning the '*village by the headland*' (HER Ref: H4580).

3.2.4 The Priory of St Mary's, Neasham, often referred to as an abbey, was founded c.1150AD by Emma, daughter of Waldef and wife or widow of Ralph de Tees (the family later adopted the name Greystoke). It was founded for eight nuns of the Benedictine order, and had three permanent lay officers. It was surrendered into the King's hands on the 29th December 1540, and was granted to the brother of the Prioress. Some fragments of stone effigies exist in Darlington Museum, Bowes Museum and in Hurworth Church. Fragments of stone sculpture from the priory were also to be found in the area around Neasham, including a '*handsome cross*' in a garden at Low

Middleton; a piece of sculpture fixed into the wall of the house at Neasham Hill Top, and a monumental effigy of a baron of Greystoke, preserved *'in the late Miss Ward's garden at Hurworth* (Fordyce 1857).

- 3.2.5 Located close to the site of Kent Beck Bridge, and the site of the Priory of St Mary's, is the possible site of St James' Chapel. The advowson of St James' chapel at Neasham was among the possessions of John de Balliol in 1294. It is mentioned again in 1397 and in the 15th century when Bishop Langley sequestered the chapel. Its exact position and later history is not known, but it has been tentatively sited close to the Kent Beck Bridge at grid reference NZ 32 10 (HER Ref: H302).
- 3.2.6 In the 15th century, the manor of Neasham consisted of 10 messuages; ten cottages; 20 ox-gangs; 20 acres of meadow; 100 acres of pasture; a water mill and passage over with River Tees with a boat (Parson 1828). This indicates that there was a settlement in the location of the present village in the medieval period, and it is likely that there would have been a crossing over the Kent Beck at some point to allow access to the chapel, and beyond towards Hurworth.

3.3 PREVIOUS WORK

- 3.3.1 Excavations that were undertaken by Northern Archaeological Associates on the site of Neasham Abbey in 1996 revealed evidence of a forge or smithy that was in use from the 13th /14th century until the mid-16th century (HER Ref: H181).
- 3.3.2 In September 2010, Archaeological Services WYAS undertook a geophysical survey in the grounds of Neasham Abbey (WYAS 2010), located just to the west of Kent Beck Bridge, in advance of proposed flood alleviation works by the Environment Agency. The survey sought to identify anomalies which may have located a 12th century abbey or features or activities associated with it. No anomalies of obvious archaeological potential were identified, although several anomalies of uncertain origin were identified.

4 ARCHAEOLOGICAL WATCHING BRIEF

4.1 INTRODUCTION

4.1.1 The watching brief monitoring was undertaken over three phases intermittently over 23 days between 1st August and the 14th November 2011. The first phase was on the 1st - 2nd August, followed by a longer phase between 14th September and 25th October, with a final phase from the 14th November 2011. The initial phase related to laying the site infrastructure, with the stripping of topsoil for an access road and compound area (Phase 1). The second phase observed the controlled stripping of top soil and the excavation of a foundation trench associated with landscape reshaping along the flood defence route (Phase 2). The final phase observed the partial demolition of Kent Beck Bridge (Phase 3) in an attempt to locate the original medieval surface (Figure 2).

4.2 PHASE 1: ACCESS ROAD AND COMPOUND

4.2.1 The Phase 1 watching brief covered the controlled stripping of ploughsoil in the field immediately to the north-west of the Kent Beck Bridge in order to create an access road and a compound area for the future works (Figure 2).

4.2.2 The ploughsoil was stripped by a JCB bulldozer to a maximum depth of 0.30m. This proved to be shallower than the depth of the ploughsoil, and so subsoil and natural deposits were not revealed. As a consequence, no archaeological finds or features were encountered.



Plate 1: General view of access road strip facing west.



Plate 2: View of compound strip facing south.

4.3 PHASE 2: TOPSOIL STRIP AND FOUNDATION TRENCH

4.3.1 The second phase of the watching brief aimed to monitor all subsequent groundworks associated with the excavation of the flood defences. This included a topsoil strip of the entire length of the defenses, creating a 10m wide easement area in which to work. Also monitored was the subsequent landscape reshaping in order to create a variety of flood defence earthworks (Figure 2).

4.3.2 The stratigraphic matrix observed within the excavated area remained constant throughout. The topsoil (100) was removed to a depth of c.0.30m along the length of the site prior to the foundation trench excavation.



Plate 3: Topsoil strip looking southwest

- 4.3.3 Within the topsoil stripped easement area a trench was excavated along its full length. This trench was excavated in order to carry any excess river water around the town in an aid to prevent localized flooding. The trench was excavated to an average depth of 1.50m below the reduced ground level and to an average width of 6m.
- 4.3.4 The trench was excavated through 1.20m of mid brown sandy silty subsoil (102) which had been previously capped by the topsoil (100). The subsoil sealed the natural light brown/ grey sandy clay substrate (101) which was exposed to a depth of 0.30m. No archaeological features were noted during the entire process of landscape redevelopment.



Plate 4: Flood alleviation ditch looking south east

4.4 PHASE 3: KENT BECK BRIDGE MONITORING

- 4.4.1 This phase of the watching brief was intended to determine the nature or extent of any surviving remains of the Kent Beck bridges original medieval road surface (Figure 2).
- 4.4.2 The modern tarmac road surface (103) and the underlying bedding layer (104) of the bridge were removed to reveal a reinforced concrete lintel (105). It was believed that this lintel had been incorporated into the bridge at the expense of the part of the bridges original structure and therefore no further

archaeological monitoring was required during the demolition of the bridge. No features of archaeological significance were observed.



Plate 5: Bridge demolition looking south

4.5 ARCHAEOLOGICAL FINDS AND ENVIRONMENTAL SAMPLING

4.5.1 No archaeological finds of note were recovered, and no environmental samples were taken during the groundworks.

5 CONCLUSIONS AND RECOMMENDATIONS

5.1 CONCLUSIONS

- 5.1.1 **Phase 1:** Phase 1 oversaw the partial removal of a hedgerow and the removal of 0.30m of ploughsoil (**100**) to create an access road and compound area prior to the flood defence work being undertaken. The groundworks of this phase didn't exceed the maximum depth of the ploughsoil therefore no further deposits were recorded and no archaeological features were noted.
- 5.1.2 **Phase 2:** Phase 2 oversaw the initial topsoil strip along a half mile easement within which flood alleviation landscaping works were to be undertaken. The topsoil was removed to an average depth of 0.30m over the entire area. A trench was excavated along the line of the stripped area that measured 6m in width and 1.5m in depth, this trench was excavated through 1.2m of mid brown sandy subsoil (**102**) which capped 0.30m of natural brown/ grey sandy clay (**101**). No archaeological remains were noted along the entire length of the excavated area.
- 5.1.3 **Phase 3:** Phase 3 observed the partial demolition of the Kent Beck Bridge in order to determine the nature or extent to which the bridge's original medieval surface survived. The modern tarmac road surface (**103**) and bedding layer (**104**) were removed. For health and safety reasons staff were not permitted onto the bridge during the demolition process so measurements were unable to be attained. Capped by the modern road surface was a reinforced concrete lintel (**105**). It was believed that this lintel had been incorporated into the bridge at the expense of the part of the bridge's original structure and therefore no further archaeological monitoring was required during the demolition of the bridge.

5.2 RECOMMENDATIONS

- 5.2.1 As this watching brief was conducted as a condition of ground works associated with flood alleviation landscaping and associated bridge demolition, no further archaeological work is deemed necessary. However, given the site's location in relation to the possible site of Neasham Abbey, it is recommended that any work conducted in the future be subject to a similar programme of archaeological investigation.

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APPENDIX 1: CONTEXT TABLE

Context Number	Context Type	Description
100	Deposit	Topsoil
101	Deposit	Natural
102	Deposit	subsoil
103	Deposit	Tarmac
104	Deposit	Bedding layer for Tarmac surface
105	Deposit	Reinforced Concrete Lintel

Table 1: List of Contexts issued during Watching Brief

APPENDIX 2: FIGURES
