

ASHFORD-IN-THE-WATER MILL

DERBYSHIRE



Archaeological Evaluation (Trial Holes)

November 2014

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SUMMARY OF PROJECT DETAILS

OASIS ID:	Thejesso1-188996
TJC Project Code:	AWM14
Project Type(s):	Archaeological Evaluation (Trial Holes)
National Grid Reference:	SK 19834 69515 (centered); DE45 1QQ
County:	Derbyshire
Parish:	Ashford in the Water
Local Authority:	Peak District National Park Authority
Planning Reference:	n/a
Designation Status(s):	The Mill – LB II; EH No: 1158750 Ashford-in-the-Water Conservation Area
HER Record No:	Derbyshire No. 436
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NON-TECHNICAL SUMMARY

In preparation for the submission of a Listed Building application for the conversion of Ashford Mill in Derbyshire to residential use, three trial holes have been excavated to assess the impact of the proposals upon any sub-surface archaeological deposits within the building. The Mill is located in the village of Ashford-in-the-Water, at NGR 19834 69515. The archaeological investigations have been undertaken in accordance with a Written Scheme of Investigation that has been approved by the Peak District National Park Authority.

An archaeological building appraisal has identified at least ten phases of structural development within the mill. Documentary accounts suggest that there has been a mill on the Site since the Medieval period, however, whether any of the extant walling is from this date cannot be established. The earliest extant fabric appears to have been depicted on a plan of 1616: it formed a square structure with water wheels on either side. In the 19th century the building was radically re-modeled and a corn drying kiln was added to the east end.

The proposed adaptation of the building to residential use has been identified as a means to ensure the long-term preservation of the structure, which will involve the insertion of under floor heating throughout the ground floor. A total of three trial holes were excavated to assess the potential impact of a new heating system upon any sub-surface deposits.

A mechanical excavator was used to remove the concrete floor slab, although subsequent excavation was undertaken by hand. Within trial holes 1 and 2 excavated within the West Wing, the water table was encountered c.0.2-0.3m below the existing ground level. Beneath this were 19th century deposits of made ground, and a substantial salt-glazed pier along the west wall. Trial hole 3 was in the south wing against the former external wall of the mill that predates the corn drying kiln. This was dug to a depth of 0.6m below ground level, and beneath the concrete slab was a loose, un-bonded layer of stone fragments.

The trial holes have confirmed that within the three separate locations that were investigated within the building no features of archaeological significance were encountered within the proposed depth of foundations required for the under floor heating on the ground floor.

It should be noted however, that the observation that there is a high water table within trial holes 1 and 2, gives a greater potential for the preservation of waterlogged deposits within this part of the mill.

1 INTRODUCTION

BACKGROUND

This document describes the results of a programme of archaeological trial holes to understand the extent to which earlier features, or flooring deposits survive within the ground floor of Ashford Mill, Ashford-in-the-Water (**Figure 1**) in Derbyshire. The former water-powered corn mill is a Grade II Listed building (**No.: 188996**).

To ensure the long-term preservation of the building, it is proposed to adapt the interior to residential use which will involve the insertion of under floor heating throughout the ground floor.

AIMS OF THE FIELDWORK

The aims of these investigations have been to identify and record any significant archaeological remains and to provide evidence that will aid and inform the proposed restoration, paying particular regard to:

- ***The sequence of floor construction;***
- ***Any evidence for pre-18th century activity, or structural remains associated with any earlier mill buildings on the Site;***
- ***To interpret any results with reference to the previous historic building appraisal (Jessop 2014) and Conservation Plan (Bench 2014) that have been undertaken for the Site.***

ARCHIVE

The site notes and record photographs produced during this programme of archaeological investigation will form part of an archaeological archive for the Site, which will be lodged upon completion with Buxton Museum. A site-specific record has been registered with the OASIS (Online AccesS to the Index of archaeological investigations) database and a digital copy of an extract of this report will be uploaded for wider consultation; project ID: **thejesso1-188996**.

MONITORING

The Peak District National Park Authority (PDNPA) Archaeologist, Sarah Whiteley, has acted as principal archaeological monitor for this programme of work.

2 SITE LOCATION AND GEOLOGY

LOCATION OF SITE

The building is located on a tributary of the River Wye in North Derbyshire, on an island on the east side of the settlement of Ashford-in-the-Water (**Figure 1**). It is centered on NGR SK 19834 69515 and is c.134m above sea level. The building has an L-shaped plan, and for ease of reference has been divided into a South Range and West Range (**Figure 2**).

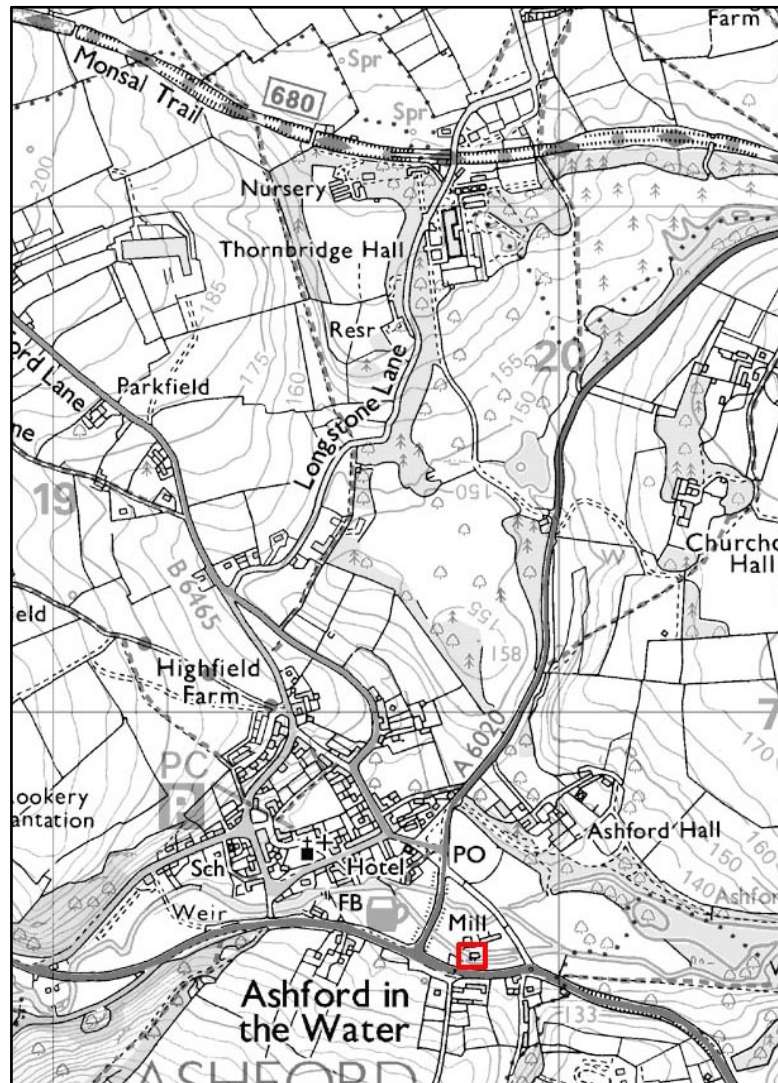


Figure 1: Location of the mill in Ashford-in-the-Water (marked with a red square).

OS map reproduced under Licence No.BLK4450021. Ordnance Survey © Crown Copyright ©.

GEOLOGY

The superficial deposits along the river corridor comprise of Alluvium – Clay, Silt, Sand and Gravel. The underlying bedrock geology is, however, Mudstone from the Bowland Shale Formation (BGS 2014).

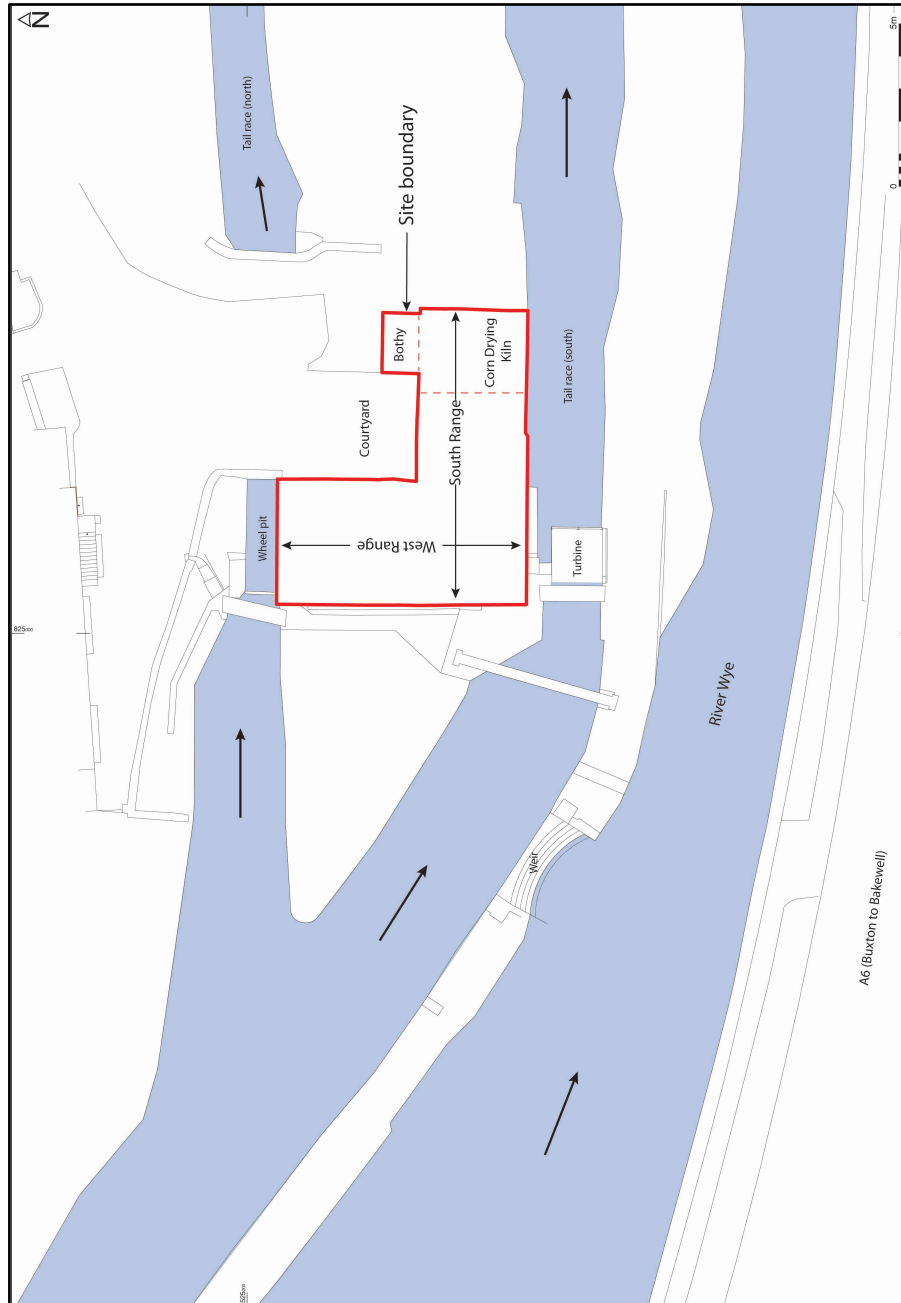


Figure 2: Layout plan of the Mill and surrounding features.

Base survey adapted from Bench Architects © 2014.

3 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

HISTORICAL BACKGROUND (AFTER JESSOP AND BENCH 2014)

The earliest reference to a mill at Ashford-in-the-Water is in the Domesday Survey of 1086, which rendered a fee of twelve pence.

A second reference is from an Inquisition in Derby in 1275 that documents that the vill of Scheladon was part of the Manor of Ashford, and Griffin fil Wenowyn gave it to Galf Pichford together with eighteen marks to be received annually from the Mill of Ashford. During the medieval period, the mill was owned by the manorial lord (Cavendish) whose tenants ran and operated it on his behalf. The mill also paid rent in the form of tithes to the Bakewell Chancery as part of the Diocese of Litchfield. It is suggested that although the exact location of this original mill is unknown, the adaptation of the river into leats appears to have been fairly well established by the time of the 1616 survey of Ashford by William Senior and that the current Site may also be the same location for the medieval mill.

The millers and their families who are known to have operated the mill at Ashford are:

- 17th century – Brownell family
- early 18th century – Joseph Rotherham
- mid 18th century until the mid 19th century – the Cooke/Cooper/Green families
- 1869 to 1906 - the Wallwin family
- 1906 to c.1970s - the Flewitts (known as Flewitts Mill).

The lack of surviving accounts for the mill during the 17th to 18th centuries is not unusual, however, the Devonshire archives retain a very detailed records for a comprehensive rebuilding of the structure between 1866-1872; see below (after Bench Architects 2014).

4 METHODOLOGY

ARCHAEOLOGICAL FIELDWORK

This programme of archaeological investigations has been undertaken to provide additional evidence to aid with the submission of a Listed Building application for the repair and adaptation of the mill into residential use.

The archaeological excavations have been undertaken in accordance with recognised guidelines (IfA 2008a) and a Written Scheme of Investigation (Jessop 2014b) approved by the PDNPA.

Each trial hole has been given a unique reference identifier, **TP1-TP3**. The location of each hole is marked on **Figure 3**.

A standard single context recording system has been used to keep a documentary record of all archaeological remains encountered. The context number sequence that has been allocated started at **001** (see **Appendix 1**).

All archaeological features of significance have been photographed using both an 8 megapixel digital camera and 35mm black and white (b/w) film. A general digital photographic record of site works has also be maintained.

Additional site records were produced as written observations, sketches and notes, which have been incorporated with the site archive.

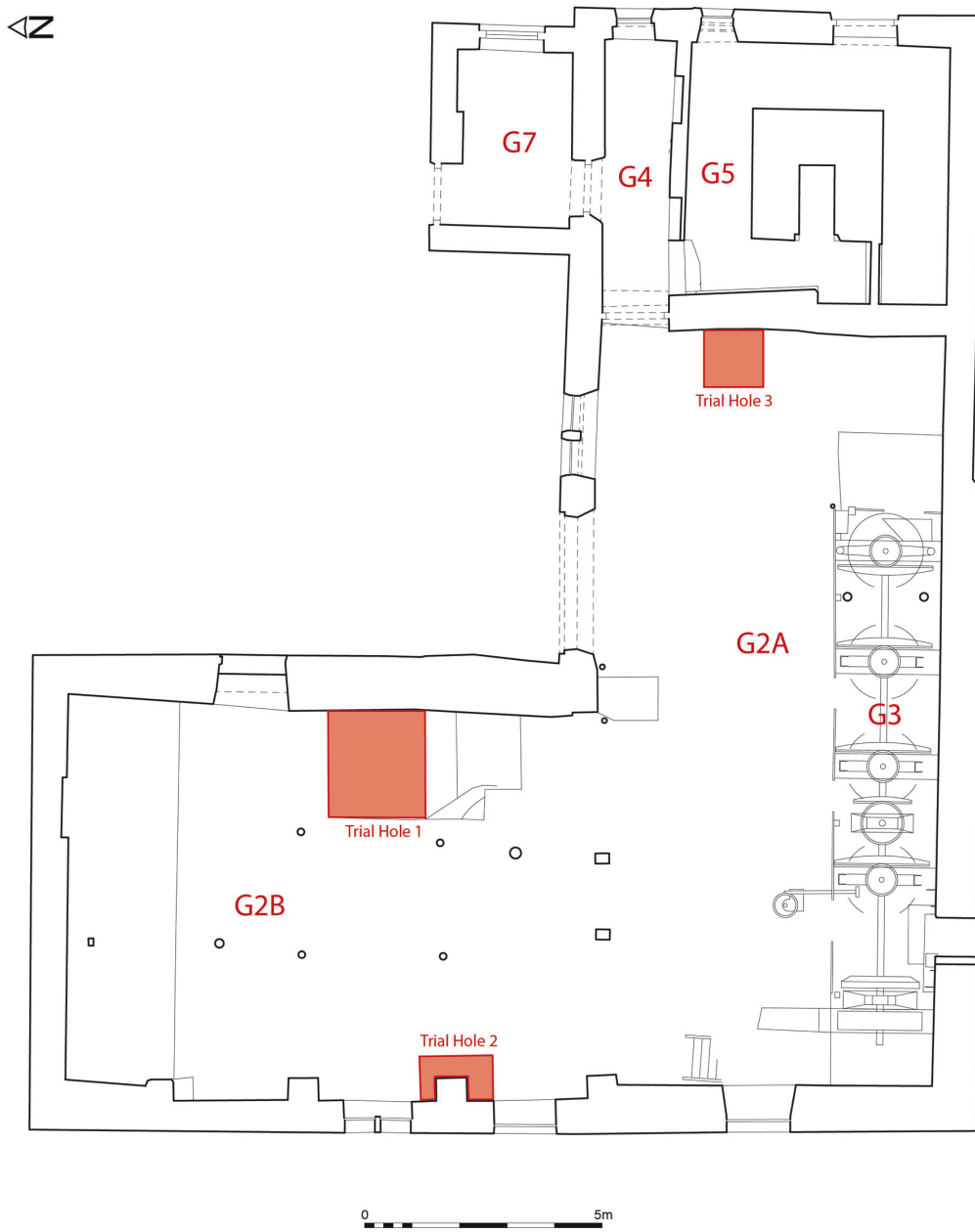


Figure 3: Location of trial holes within mill building.

Base survey adapted from Bench Architects © 2014.

5 RESULTS

INTRODUCTION

This section of the report presents the results of the archaeological investigations. Three trial holes were excavated, **TP1-3**, in locations agreed on site with Sarah Whiteley of the PDNPA (see **Figure 3**). The concrete slab was removed by a mechanical excavator and then the subsurface deposits were excavated by hand. The individual investigative holes are discussed in turn below, with reference made to the context summaries in **Appendix 1**, plans and cross-sections in **Appendix 2**, and photographs **Appendix 3**.

TRIAL HOLE 1

Trial hole 1 (**Figure 3**) was located against the east wall of the West Wing of the Mill (**Appendix 3.1**). It was set within a lowered area **007** that had been adapted for a former weighing machine (**Appendix 2.1**). The ground surface comprised of a concrete slab **008** that was 0.14m in thickness. The slab comprised of a mixture of re-used concrete kerb stones with a layer of concrete poured over the top. The kerb stones were laid on a layer of hardcore chippings **009**, which overlay a layer of sand and mortar **110** at a depth of 0.24m below the base of **007**. The water table was encountered immediately beneath the concrete slab **008** (**Appendix 3.2**).

The use of concrete kerb stones to construct the sunken feature **007** was clearly intended to support a heavy load, such as the weighing machine. No natural ground was encountered in the base of the trial hole.

TRIAL HOLE 2

Trial hole 2 (**Figure 3**) was originally intended to be two separate holes against the west wall of the mill **002**, however once the flagstone flooring (**Appendix 3.3**) had been lifted, it was found that a single hole was more appropriate (**Appendix 3.4**). The hole had an irregular form, but the maximum dimensions were 1.8m x 1.1m (**Appendix 2.2**). The flagstones **001** were 0.08-0.1m in thickness and cut in rectangular slabs. They were bedded on a bed of compacted lime mortar **004**. There is a series of brick piers along the west wall **002**, one of which was located within the edge of the trial hole. This pier **003** measured 0.34m x 0.46m and was built with machine made bricks (7cm x 11cm x 23cm) and bedded in a cement mortar. The pier is a secondary insertion, which was cut through the flagstones, although it sat directly upon **006**.

Beneath **004** was a layer of stone fragments and chippings **006**. The upper surface of this layer was a very compacted upper surface, although at a depth of 0.3m below the ground surface the water table was encountered and the chippings became loose with numerous voids. Within

this layer was a large salt glazed pipe **005** that was parallel to the west wall **002**. The pipe had a diameter of 0.2m and had a large fracture with a folded fragment of tin sheet over the top; presumably representing a historic repair perhaps when the brick pier **003** was inserted. Fragments of ceramic and glass were recovered from **006**.

No natural ground was encountered in the base of the trial hole (**Appendix 3.4**).

TRIAL HOLE 3

Against the east wall **011** of room **G2A (Figure 3)** trial hole 3 was excavated by machine (**Appendix 3.5**). This hole measured 0.9m x 1.05m (**Appendix 2.3**), with a maximum depth of 0.6m. The concrete slab **012** was 0.16m in thickness and overlay a loose sub-base of medium sized angular fragments of Ashford stone **013**. This layer of loose stone was dry and contained many voids and had been backfilled against the inner face of **011 (Appendix 3.6)**, which represents one side of the corn drying kiln that was inserted in the 19th century.

No natural ground was encountered in the base of the trial hole.

MATERIAL CULTURE

Only one context (layer **006**) produced any items of material culture, which was in the form of glass and ceramics.

GLASS

The single fragment of glass was a clear colourless fabric representing part of the side of a mould blown cup, or bowl with faceted scoops and the base of a handle. This form of industrial produced glass was mass produced during the late 19th to early 20th centuries.

POTTERY BY DR CHRIS CUMBERPATCH

The pottery assemblage consisted of nine sherds of porcelain and bone china weighing 149 grams representing a maximum of four vessels.

A date range in the 19th to 20th centuries is suggested although the assemblage lacks the kind of features that facilitate close dating. The fabrics are clearly porcelain and bone china but lack the characteristics which would indicate a Chinese origin and an 18th century date. The transfer printed design on the single decorated sherd appears to be part of the popular Asiatic Pheasants design, which was one of the most popular designs (after Willow) in the latter part of the 19th and early 20th centuries. It was used by a large number of factories throughout Britain and, without a maker's mark cannot be identified to a specific manufacturer or closely dated.

Given this and taken together with the character of the fabrics of the other vessels, the best estimate that can be made of the date range would be in the latter quarter of the 19th century or the very early 20th century.

SUMMARY

The glass and ceramics were located within a sealed deposit **106** beneath the flagstones in the west part of the mill, and their date range- from the late 19th to early 20th centuries- is comparable with that of the large salt-glazed pipe and they are likely to have been contemporary.

None of the items are of particular archaeological interest and it is recommended that they are discarded and not retained as part of any archaeological archive.

6 CONCLUSION

SUMMARY OF RESULTS

The excavation of three trial holes inside Ashford Mill have provided a greater understanding of the sequence of floor construction, and the potential impact of the proposed removal of the ground surface for a new under-floor heating system.

It has been confirmed that the subsurface deposits within the West Range differ to those within the South Range, notably in regards to the level of the water table. Ground water was encountered 0.2-0.3m below the existing ground surface within the West Range, whilst in the eastern part of the mill against the wall of the corn drying kiln the sub-floor was dry. This lack of water may be as a result of buried drainage culverts beneath the existing floor, similar to the pipe recorded in Trial Hole 2, although further investigations would be necessary to establish this with certainty.

The flagstone flooring in the western part of the mill was found to overlay a substantial salt-glazed pier along the west wall, associated with which were fragments of late 19th century china and a single fragment of mould-blown glass from a cup. No evidence of earlier structural elements of the mill, were identified, nor were any features associated with power transmission, or the operation of the water wheels.

CONCLUSION

The trial holes have confirmed that within the three separate locations that were investigated within the building, no features of archaeological significance were uncounted within the proposed depth of foundations required for the under floor heating on the ground floor.

It should be noted however, that the observation that there is a high water table within trial holes 1 and 2, gives a greater potential for the preservation of waterlogged deposits within this part of the mill.

7 REFERENCES CONSULTED AND BIBLIOGRAPHY

REPORTS AND PUBLICATIONS CONSULTED

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- Jessop, O. 2014a. *Ashford-in-the-Water, Derbyshire – historic building appraisal* (unpublished). Report No.TJC2013.47
- Jessop, O. 2014b. *Ashford-in-the-Water Mill, Derbyshire – Written Scheme of Investigation for Archaeological Investigations* (unpublished). Report No.: TJC2014.71.

INTERNET RESOURCES

- ADS: www.archaeologydataservice.ac.uk
- British Geological Survey: www.bgs.ac.uk
- Heritage Gateway: www.heritagegateway.org.uk
- National Heritage List: <http://www.english-heritage.org.uk/professional/protection/process/national-heritage-list-for-england/>

8 APPENDICES

Appendix 1: Summary of Archaeological Contexts

Appendix 2: Fieldwork Illustrations

Appendix 3: Record photographs

Appendix 1:
Summary of Archaeological Contexts

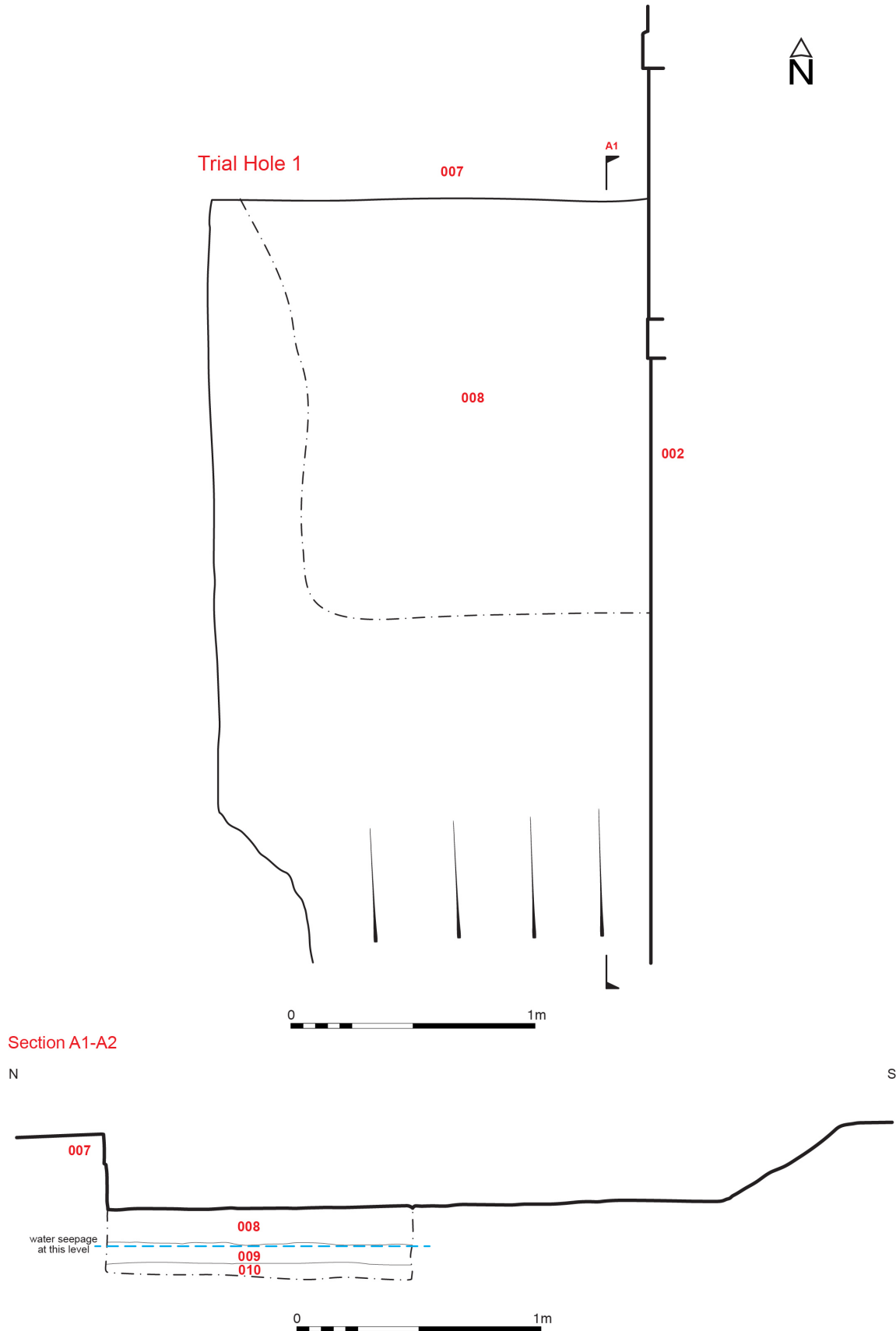
INTRODUCTION

A continuous sequence of context numbers has been adopted during the excavation of the tree trial holes during this phase of archaeological investigations at Ashford Mill. They are discussed in **section 5** of this document, and their context summaries are listed below:

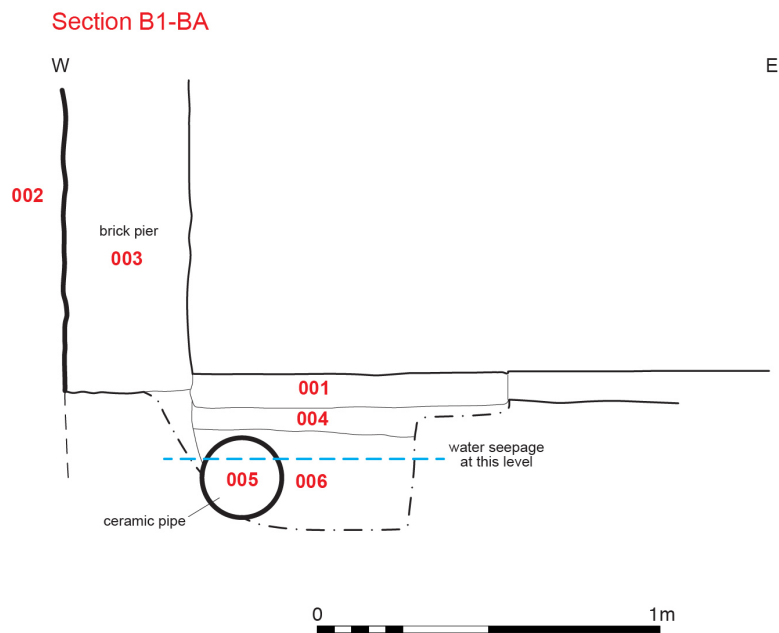
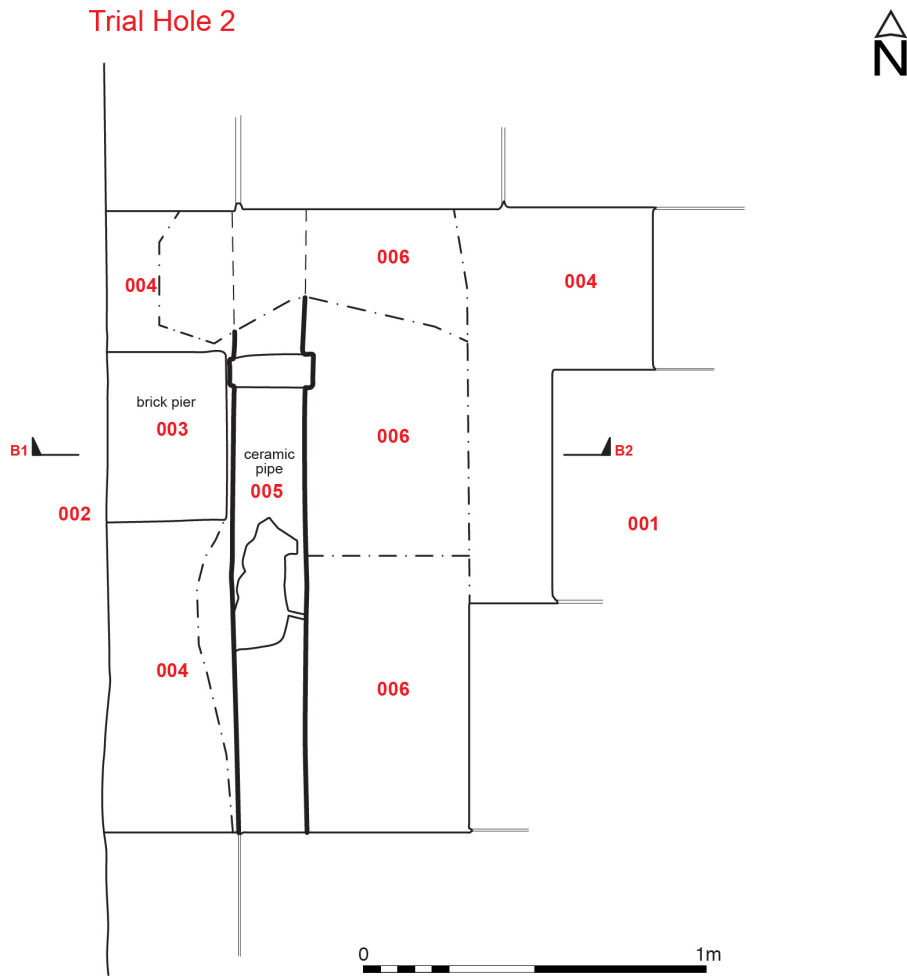
CONTEXT SUMMARY

<i>Context</i>	<i>Type</i>	<i>Description</i>	<i>Material Culture</i>
001	Layer	Sandstone flagstones	n/a
002	Structure	Stone walling forming the exterior of the Mill	n/a
003	Structure	Brick pier (inserted) against the west wall	n/a
004	Layer	Bed of lime mortar below 001	n/a
005	Feature	Salt glazed pipe c.0.2m diameter, below 004	n/a
006	Layer	Backfill against 005 , small loose fragments of Ashford stone with main voids, below 004	Ceramic; glass
007	Structure	Sunken well for former weighing machine	n/a
008	Layer	Concrete base to 007 made from concrete kerb blocks	n/a
009	Layer	Hardcore deposit of chippings, below 008	n/a
010	Layer	Layer of sand and mortar, below 008	n/a
011	Structure	Masonry wall forming east end of mill	n/a
012	Layer	Concrete floor slab	n/a
013	Layer	Backfilled deposit of loose fragments of Ashford stone below 012	n/a

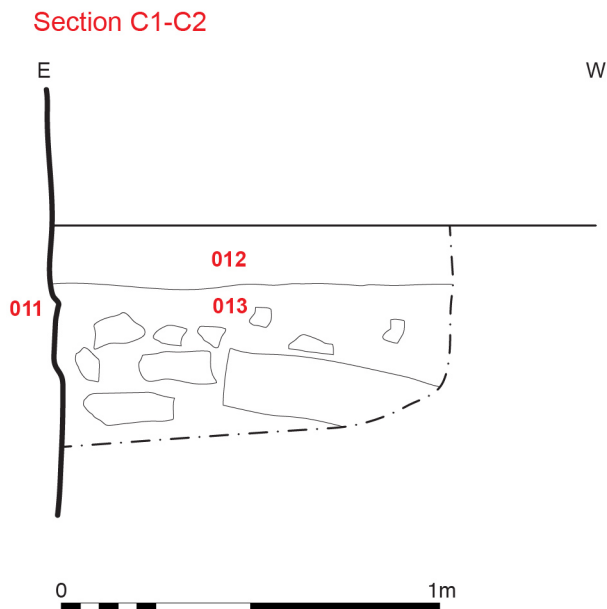
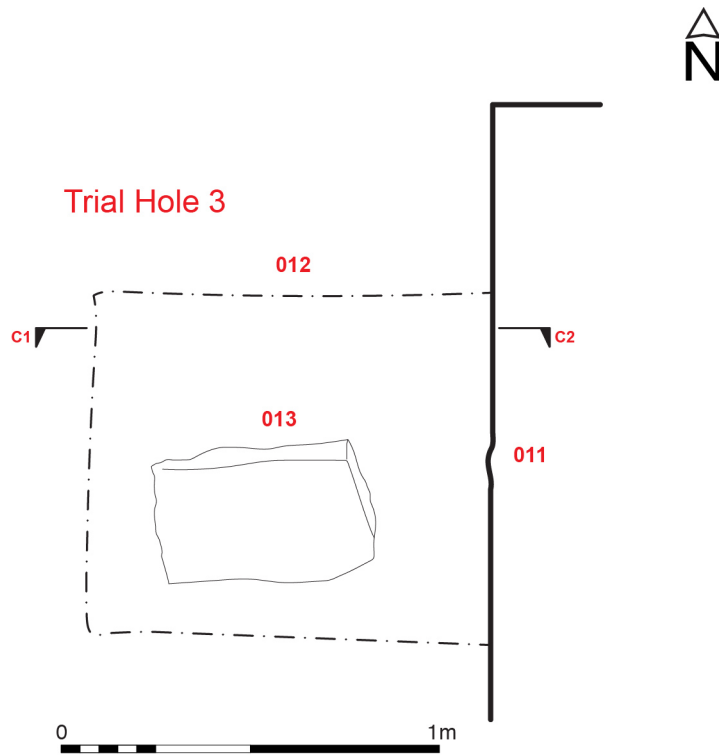
Appendix 2:
Fieldwork Illustrations



Appendix 2.1: Excavation plan and cross-section, Trial Hole 1.



Appendix 2.2: Excavation plan and cross-section, Trial Hole 2.



Appendix 2.3: Excavation plan and cross-section, Trial Hole 3.

Appendix 3:
Record photographs



Appendix 3.1: General view of Trial Hole 1 before excavation, looking east (1m scale).



Appendix 3.2: General view of Trial Hole 1 after excavation, looking east (1m scale).



Appendix 3.3: General view of Trial Hole 2 before excavation, looking northwest (1m scale).



Appendix 3.4: General view of Trial Hole 2 after excavation looking south; note ceramic pipe (1m scale).



Appendix 3.5: General view of Trial Hole 3 before excavation, looking east (1m scale).



Appendix 3.6: Trial Hole 3 after excavation looking southeast; note wall face continues downwards (1m scale).