

Abbeydale Industrial Hamlet Mill Pond – Archaeological Watching Brief Sheffield City Council

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Non-Technical Summary

Ecus Ltd. were commissioned by Sheffield City Council (SCC) to undertake an archaeological watching brief during works to the dam and mill pond within the Scheduled area of Abbeydale Works (SM no. SY 1039, and National List No. 1004822) at Abbeydale Industrial Hamlet, Abbeydale Road South, Sheffield, located at SK 32562 81953.

The archaeological watching brief was required as a condition of Scheduled Monument Consent (SMC ref S00072815) for the proposed works and undertaken in accordance with a Written Scheme of Investigation agreed with English Heritage Principal Inspector of Ancient Monuments. Following amendments to the scope of the work, a revised methodology was agreed by email correspondence.

The principal aim of the works was to address a long standing leak through the dam into the adjacent buildings which are included within the scheduled designation and are also Grade I listed. The initial plan was to create a temporary dam across the mill pond, allowing the northern end to be drained, and then to install a liner. As the project progressed various problems were encountered during the drain down of the pond resulted in the scaling back of the original solution.

The final works comprised: the draining down of the entire mill pond; repointing the exposed section of the northern dam wall between the penstock structures and the low level drain; the excavation of material between the dam wall and south wall of the Forge; the injection of grouting into the wall; and backfilling excavation behind the dam in a limited area with good quality puddling clay.

The archaeological watching brief was undertaken between 13/06/14 and 23/10/14, monitoring the excavation of four test pits, stripping for an access track, and observations during the installation of the new penstocks. Observations made during the course of the watching brief evidence of fixings for an earlier structure on the southern penstock, and identified evidence for the construction of the dam wall and bank. Whilst outside of the monitoring area, the presence of remains of possible structures within the mill pond was also noted.



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1. Introduction

1.1 Project Background

- 1.1.1 Ecus Ltd. were commissioned by Sheffield City Council (SCC) to undertake an archaeological watching brief during works to the dam and mill pond within the Scheduled area of Abbeydale Works (SM no. SY 1039, and National List No. 1004822) at Abbeydale Industrial Hamlet, Abbeydale Road South, Sheffield (**Figure 1**), located at SK 32562 81953 (hereafter 'the site'). The programme of monitoring was undertaken between 13/06/14 and 23/10/14.
- 1.1.2 English Heritage granted Schedule Monument Consent (SMC ref S00072815) for the proposed works, as described in the document ED 0398 ST/01/001A 'Abbeydale Industrial Hamlet Dam Repairs General Arrangements', subject to a number of conditions, including:
 - (iii) No ground works/building works shall be take place until the applicant has submitted a written scheme of investigation for archaeological watching brief to, and approved by, the Secretary of State advised by English Heritage.
 - (xi) A report on the archaeological recording shall be sent to Dinah Saich, Team Leader, South Yorkshire Archaeology Service, Development Services, Howden House, 1 Union Street, Sheffield, S1 2SH and to Neil Redfern at English Heritage within 3 months of the completion of the works (or such other period as may be mutually agreed).
 - (xii) The contractor shall complete and submit and entry on OASIS (On-line Access to the Index of Archaeological Investigations http://oasis.ac.uk/england/) prior to project completion, and shall deposit any digital project report with the Archaeological Data Service, via the OASIS form, upon completion.
- 1.1.3 The principal aim of the works was to address a long standing leak through the dam into the buildings behind. The initial plan was to create a temporary dam across the mill pond, allowing the northern end to be drained, and then to install a liner. As the project progressed various problems were encountered during the drain down of the pond resulted in the scaling back of the original solution. The final works comprised:
 - The draining down of the entire mill pond;
 - Repointing the exposed section of the northern dam wall between the penstock structures and the low level drain;
 - The excavation of material between the dam wall and south wall of the Forge;
 - The injection of grouting into the wall; and
 - Backfilling excavation behind the dam with good quality puddling clay.
- 1.1.4 A Written Scheme of Investigation was produced for the archaeological watching brief, in agreement with English Heritage Principal Inspector of Ancient Monuments, for and on behalf of, the Secretary of State for Culture, Media and Sport. Following amendments to the scope of the work, a revised methodology was agreed by email correspondence.



1.2 Site Location and Description

- 1.2.1 Abbeydale Industrial Hamlet lies in the historic parish of Ecclesall-Bierlow 7 km southwest of the centre of Sheffield, on the western bank of the River Sheaf. Situated to the south of the hamlet, the mill pond comprises an elongated body of water of approximately 4 acres, contained by a dam that runs along its eastern and northern sides. The depth of the mill pond varies from less than 1 m to the south to over 6.5 m at the point of the overspill on the southern corner of the works.
- 1.2.2 The mill pond is bounded to the east by the Midland Mainline railway between Sheffield and Chesterfield, to the west by Abbeydale Road South (the A621), and the south by Beauchief Gardens.
- 1.2.3 The bedrock geology of the site comprise mudstone and siltstone of the Pennine Lower Coal Measures Formation, with overlying superficial alluvial deposits forming the western terrace of the River Sheaf (Geology of Britain Viewer 2013).

2. Historical and Archaeological Background

2.1 Introduction

- 2.1.1 The historical and archaeological background of the site and its surrounding area has been described in detail in a previous desk-based assessment (Ecus 2013), the results of which are outlined below.
- 2.1.2 The DBA identified the following significant components:
- 2.1.3 **Northern Dam** comprises stone walling retaining an earthen embankment that slopes down towards the buildings of Abbeydale Industrial Hamlet. The walling is generally of narrow rubble slabs laid to courses and coped in places with used grinding wheels. Around the penstocks and over-spill the wall is constructed of large ashlar blocks. This likely comprises the earliest structure within the dam.
- 2.1.4 **Penstock** situated within the Northern Dam are penstocks for two water wheels powering the grinding hull and tilt-hammers.
- 2.1.5 **Over-spill and Low-level Drain** situated at the eastern end of the Northern Dam, the overspill comprises an ashlar stone structure with sluice leading into a channel towards the Sheaf.
- 2.1.6 **Mill Pond Steps** removed during the 2001 works and reconstructed, comprising steps from the northern dam down into the mill pond constructed from stone including dressed grinding stones treads.
- 2.1.7 **Eastern Dam** comprises two phases of stone walling comprising a continuation of the curing coursed rubble walls south of the over-spill, interrupted in the centre by a straight section of walling bounding the railway.
- 2.1.8 **Western and Southern Dam –** coursed rubble walls of similar fabric to parts of the northern dam line much of the western and southern edges of the Mill



Pond. Walls appear to have been lost along much of the western edge.

2.1.9 Head-goit – the present head-goit enters the mill pond at its southern end through an opening in the Southern Dam that has evidently been cut through. The former route of the head-goit is visible along the western edge of the pond as a dry channel to the point indicated on modern Ordnance Survey maps as joining the pond. A hollow is visible beyond this point preserving the route the head-goit depicted on historic Ordnance Survey maps. Where the route meets the pond there is the remains of a stone wall.

2.2 Previous Archaeological Investigations

- 2.2.1 A series of archaeological watching briefs were undertaken during the work, recording the foundations of the wall and the remains of the adjacent grinding hull (ARCUS 2001a, 2001b, and 2002). Whilst no evidence of activity predating the post-medieval works was identified the events did make significant observations and records of the fabric and construction of the dam and works buildings.
- 2.2.2 During the course of the works a series of other archaeological works were undertaken for which little information has been located. This involved a series of observations made by Frances Evans, a summary of which is published in the South Yorkshire Industrial History Society Journal, with unpublished work including a geophysical survey by the University of Sheffield, and chemical analysis by Salford University. The results of these latter studies currently can not be traced.

2.3 The Development of the Site

- 2.3.1 The mill pond at Abbeydale Industrial Hamlet likely dates to the late 18th century, when it was expanded from an earlier head-goit that was constructed in the late 17th century. The earliest recorded reference to the mill pond indicates it was extended in 1777, although whether this was from an earlier pond completed shortly before, or from the head-goit is not known. It is likely that the fabric of the dam walls surrounding the pond were maintained and possibly rebuilt as required over its 150 years of use, although the majority of fabric appears to be of at least 19th century date.
- 2.3.2 Geophysical survey and probing whilst the dam was drained in 2001-4 indicated there is potential for remains of former structures to be present within the mill pond. Whilst the results of the surveys have not been located, the structures have been indicated to lie just beyond the area proposed for lining (Peter Gribben, *pers. com.*: manages the pond for Abbeydale Industrial Hamlet and originally located the structures in 2001-4). It is considered that the structures likely predate the expansion of the pond in 1777.



3. Methodology for Archaeological Recording

3.1 Aims and Objectives

- 3.1.1 The overall aim of the monitoring was to mitigate the impact of the works through a descriptive and analytical record of the condition, form and character of historic fabric of the dam exposed during the course of the works, and prior to and following any alterations to the Scheduled Monument.
- 3.1.2 The general aims of the project are:
 - to identify and record any archaeological deposits, structures or built fabric within the Scheduled area;
 - to determine the extent, condition, character, significance and date of any encountered or exposed archaeological remains;
 - to accurately record the location and stratigraphy of areas excavated during groundworks;
 - to recover artefacts disturbed by the site works;
 - to recover samples from sealed waterlogged contexts for environmental processing;
 - to prepare a comprehensive record and report of archaeological observations during the site work;
- 3.1.3 The objectives of the project are:
 - to preserve through record any archaeological remains impacted by the proposed works; and
 - to contribute to the understanding of the Scheduled Monument of Abbeydale Works.
- 3.1.4 The watching brief was maintained in compliance with the standards outlined in the Institute for Archaeologists' *Standard and Guidance for Archaeological Watching Briefs* (revised IfA 2008).

3.2 Monitoring of Excavations/Groundworks

- 3.2.1 All mechanical excavation was carried out by hand or using a mechanical excavator with toothless ditching bucket in such a manner as to avoid or minimise damage to any archaeological remains under the direct supervision of an archaeologist, including:
 - The excavation of three trial pits across the bank to the south of the dam:
 - The excavation of material from between the dam wall and the south wall of the Forge building; and
 - The excavation of an access track around the inside northwest corner of the pond.
- 3.2.2 All excavated areas were inspected and all potential archaeological remains were cleaned and recorded. The extent of the excavated area and the location of any archaeological features and deposits were recorded in plan, and are illustrated on **Figure 1**.



- 3.2.3 All archaeological deposits were recorded using a *pro forma* recording system. The written record is hierarchically based and centred on the context record. Each context record will fully describe the location, extent, composition and relationship of the subject and will be cross-referenced to all other assigned records. A list of contexts is reproduced in **Appendix 1**.
- 3.2.4 A section through the dam wall was drawn at 1:20. Drawings where be made in pencil on permanent drafting film. A digital photographic record was produced with a camera of 10 MP resolution in both .JPG and .TFF formats. The photographic archive was supplemented with photographic registers and site location plans providing a record of the location, subject and direction of each shot. Photographic scales were used where ever practical.

3.3 Finds

3.3.1 No archaeological finds were recovered during the watching brief.

3.4 Environmental Sampling

3.4.1 No securely sealed deposits were encountered during the watching brief.



4. Results of the Watching Brief

4.1 Introduction

4.1.1 This section presents the results of the archaeological watching brief. Recorded contexts, where discussed in the following section, are annotated with their associated context number in bold text. A full list of contexts is reproduced in the appendix of this report.

4.2 The Penstocks

- 4.2.1 Archaeological monitoring visits were made throughout the project to maintain an archaeological photographic archive of the work undertaken to install the new penstock structures. The works comprises:
 - The removal of the grates in front of the penstocks;
 - The excavation beneath the level of the base of the penstocks to accommodate new concrete footings;
 - The truncation of the existing timber penstock structures leaving the upper part of the frame and winding mechanism in place;
 - The chasing out of a level channel in the face of the dam wall to accept the new penstock; and
 - The setting of tie down bolts into the channel for fixing the new penstock.

Penstock 1

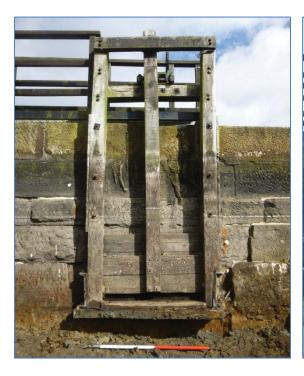
- 4.2.2 Penstock 1 is the northern of the two penstocks, and provides water to the wheel powering the grinding hull. The former penstock was set between two jambs in the dam wall, comprising two sluice gates which could be operated independently of one another. Horizontally timbers were laid up each jamb, relating to the pentrough behind, and appearing to have been sealed against the stone with resin.
- 4.2.3 Grey clay **5002** was excavated from the base of the penstock within a 3.5 x 1.3 m wide and 0.25 m deep area to accommodate the creation of concrete foundations for the new penstock structure. The excavation revealed the penstock rested at its base on timber joists set within a stone sill (**Plate 1**).
- 4.2.4 The lower gates of were truncated and removed, with the upper cogged risers fixed in place by bolting them to the remaining timber structure.
- 4.2.5 The steps to the north of the gate were removed (having already been removed and rebuilt in 2001) and a concrete core was constructed behind them and the stairs rebuilt. To the south of the penstocks a channel was chased out 1.5-2.5 cm deep and 20-21 cm wide (**Plate 2**).
- 4.2.6 No features were exposed relating to the construction of fitting of previous phases of original penstock structure.







Plates 1-2: Detail of Penstock 1 as cleared and following pre-fit works





Plates 3-4: Detail of Penstock 2 as cleared and following pre-fit works





Plate 5: Penstocks following completion of works (image curtesy of J.N. Bentley)

Penstock 2

- 4.2.7 Penstock 2 is the southern of the two penstocks, and provides water to the wheel powering the tilt hammer shop. The former penstock was set on the face of the dam wall with an aperture through the wall with stone lintel and sill (Plate 3). A bolted iron trough emerged through the aperture at an angle to the face of the dam wall. This structure was truncated back in order to provide clearance for the new penstock structure. The removed parts were retained by the Sheffield Industrial Museums Trust on their request.
- 4.2.8 Grey clay **5002** was excavated from the base of the penstock within a 3.5 x 1.7 m wide and 0.35 m deep area to accommodate the creation of concrete foundations for the new penstock structure.
- 4.2.9 The lower sluice gate was truncated and removed, with the upper cogged riser fixed in place by bolting to the dam wall.
- 4.2.10 To either side of the penstock a channel was chased out 7.5-10 cm deep and 25-34 cm wide (**Plate 4**).
- 4.2.11 Several redundant fixtures were identified relating to an earlier penstock structure comprising six bolt holes, two chains and a central inverted 'C' section bar (Plate 6). The location of these features is illustrated on Plate 7.



Plate 6: Detail of truncated 'C' section bar and two bolt holes below.



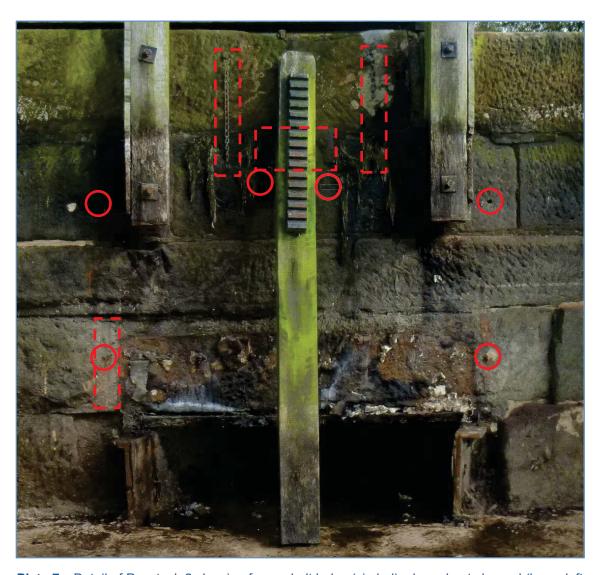


Plate 7: Detail of Penstock 2 showing former bolt holes (circled), chased out channel (lower left rectangle, chains (upper two narrow rectangles) and central truncated inverted 'C' section bar (central rectangle).

4.3 The Dam

Test pits 1-3

- 4.3.1 Test pits 1-3 (**Plate 8**) were excavated across the base of the bank to the south of the dam wall. The pits were excavated in error following a miscommunication regarding the excavation of test pit 4. Test pit 1 (**Plate 9**) was excavated to a depth of 0.95 m, whilst test pits 2 and 3 were aborted before reaching a similar level. The approximate location of these pits is shown on **Figure 1**.
- 4.3.2 An identical stratigraphic sequence was observed within each of test pits 1-3, comprising a sloping bank at the northern end of each pit formed of compact sand with a reddish hue **1000/2000/3000**. The slope of the bank steepened



toward the south, although the test pits were not excavated to the base. Overlying the upper portion of the bank to the north was deposit 1001/2001/3001 comprising mottled grey and yellow clay with moderate inclusions of sandstone.

4.3.3 The bank deposits were overlain by silt **1002/2002/3002** which continued beyond the base of the test pit. Probing by the site contractors suggested the silt continued to a depth of over 1.5 m at the modern base of the bank indicating the original profile of the bank may have been considerably steeper then at present.



Plate 8: General view of test pits 1-3 across bank of dam, looking north.



Plate 9: General view of test pit 1, looking south.



Test pit 4

- 4.3.4 Test pit 4 (**Plates 10-11**), measuring 1.70 m wide by 2.00 m long by 0.93 m deep, was excavated between the dam wall and a rubble stone wall parallel to the south wall of the Forge. The purpose of the test pit was to investigate the depth of material above good quality puddling clay, and provide a suitable platform for replacing the material and repairing any potential points of leakage into the Forge. The location of the test pit is shown on **Figure 1** and a section through across the dam wall is reproduced as **Figure 2**.
- 4.3.5 The southern dam wall **4002** comprised part of the penstock structure associated with the eastern water wheel providing power to the Forge. The wall was comprised of monumental ashlar blocks at the deepest observed level (1.28 m from the top of the wall), overlain by a stone rubble structure with lime mortar bedding, and ashlar coping. The rubble section of the wall was built to rough courses to the south, but was not faced to the north.
- 4.3.6 The northern wall **4003** was relatively narrow (0.3 m at depth of the trench) although it had a slight batter and is anticipated to have continued to widen at greater depths. The wall comprised coursed rubble with lime mortar, and was not faced to the south. The upper surface of the wall had been repaired with concrete, when a hand-made brick appears to have also been in incorporated.
- 4.3.7 Grey malleable wet clay **4004** was encountered at 0.93 m, and is believed to be the puddling clay core of the dam. This layer abutted the wall structures **4002** and **4003** to the south and north.
- 4.3.8 Overlying the clay core was mottled clay deposit **4001** with occasional inclusions of unsorted sub-angular sandstone. The rubble backing of the dam wall to the south appeared contemporary with this layer; although the level of disturbance in the upper courses could indicate that the material had been removed and redeposited. Occasional voids were noted within this context suggesting water permeation through it from the dam.
- 4.3.9 Context **4001** was overlain by dark brown silty clay topsoil **4000**. The backing material from wall **4002** lay partially with the southern edge of this context, and comparatively spread further into it than in **4001**.
- 4.3.10 Grout was injected into the fabric of the wall beneath the level of the test pit, with the pit itself backfilled with puddling clay in an attempt to solve the leak from this area of the dam wall.





Plate 10: Test pit 4, looking south.



Plate 11: Test pit 4 looking north.



4.4 The Access Track

- 4.4.1 A level access track was created along the inside northwest edge of the pond, from the crane pad structure adjacent Abbeydale Road South round to the penstocks (Plates 12-13). The depth of the excavation varied, with a maximum depth of approximately 0.80 m in the northwest corner of the pond. The route and approximate extent of the works associated with the access track is shown on Figure 1.
- 4.4.2 In areas silt **5000** was removed to expose **5001**: a compact sand layer with red hue, similar to context **1002**. Towards the northwest corner the silt was excavated to reveal grey clay layer **5002** at a depth of between 0.2 and 1.0 m below ground level. Both 5001 and 5002 appeared to represent undisturbed layers, potentially representing the original base of the pond.



Plate 12: General view of the access track, looking south.





Plate 13: View of the exposed clay in front of the penstocks, looking north.

4.5 Wider Observations

Remains of structures in the Dam

- 4.5.1 A rubble spread was observed in a raised area towards the centre of the pond. The rubble comprised unsorted angular narrow slabs of sandstone. Whilst no edges were discernible, two possible centres to the spread were recorded with a handheld GPS at:
 - NGR 432546 381906 (Plate 14) ±3m; and
 - NGR 432545 381902 ±3m
- 4.5.2 These areas lie in the approximate area of the structures recorded during the 2001-2003 works, the archives of which can not been located. The location of the two centres and the rubble spread is illustrated on **Figure 1**.

Head Goit

4.5.3 The remains of the former head goit structure feeding the mill pond was clearly evident as a linear spread of rubble extending out at an acute angle from the western bank of the pond (**Plate 15**). The location of the remains of the head goit structure is illustrated on **Figure 1**.

Subsidiary Inlet

4.5.4 An inlet in the northwest corner of the dam that collects water from Ecclesall Woods is situated within the rubble built western dam wall (**Plate 16**). At this point there was a square opening with flat lintel that had silted up and likely represents the original inlet. Above it are two salt-glaze pipes from which water was running at time of survey. The location of the inlet is indicated on **Figure 1**.





Plate 14: View of the possible remains of a structure within the dam, looking east.



Plate 15: View of the remains of the head goit structure, looking east..





Plate 16: View of an inlet within the northwest corner of the dam, looking west.

5. Conclusion

5.1 Assessment of the Results

- 5.1.1 Changes to the historic fabric of the dam from the installation of the new penstocks comprise the creation of level faces either side of the pentoughs in order to create suitable surfaces to tie the new penstock structures to the dam wall. Although no evidence for earlier structures was identified on the northern of the two penstocks, the southern penstock (Penstock 2) retained bolt holes and redundant fixtures that may relate to an earlier structure. It appears from this evidence that the earlier penstock may have been fixed in a similar fashion to the later structure that was removed during the monitored programme of works.
- 5.1.2 The dam wall in the vicinity of the penstocks comprises principally of large ashlar blocks. A variety of chisel marks and finishes are present along its length indicating the possibility that the wall has been rebuilt. This is further attested by several irregularities in the face of the dam wall, specifically at the angle between the penstocks and to the immediate south of Penstock 2.
- 5.1.3 Test pit 4 indicated that the southern stretch of dam wall from the penstocks was rubble backed, and that this backing had settled over the years into the clay bank creating a number of voids. Grouting was injected behind the wall along this stretch in an attempt to rectify this.
- 5.1.4 The monitoring of the reduction in levels within the mill pond at Abbeydale Industrial Hamlet has identified that there is likely a considerable depth of silt towards the centre of the pond. Within the vicinity of the penstocks and along the western dam wall the level of silt was much lower, with a clean grey clay layer encountered at between 0.2 and 1.0 m below ground level. The clay appeared to be natural although it was not excavated to identify its depth. The



bank of the dam in front of the wall was formed from deposited orange clay with sandstone inclusions overlying a compact sand layer. Behind the wall the bank comprised deposited clay with sandstone inclusions overlying clean grey clay.

5.1.5 Whilst outside of the monitoring area, the presence of possible structures within the mill pond is considered to be of significant interest. Unfortunately the results of the geophysical survey in this area undertaken between 2001-4 were not located. The location of the rubble spread that likely relates to the structures will be provided to South Yorkshire Archaeological Service for inclusion in the SMR.

5.2 Summary

5.2.1 The archaeological watching brief was undertaken between 13/06/14 and 23/10/14, monitoring the excavation of four test pits, stripping for an access track, and observations during the installation of the new penstocks. Observations made during the course of the watching brief evidence of fixings for an earlier structure on the southern penstock, and identified evidence for the construction of the dam wall and bank.

6. Archive and OASIS

6.1 Archive Deposition

- 6.1.1 The project archive will be prepared in accordance with *Guidelines for the* preparation of excavation archives for long-term storage (UKIC 1990) and the Archaeological Archive Deposition Policy for Museums Sheffield (2013).
- 6.1.2 The project archive will be deposited on the 9th January 2015 with Sheffield Museums under the accession no. **SHEFM: 2014.116**. Until this time the archive will be held at Ecus's Sheffield office.

6.2 OASIS Form

6.2.1 An OASIS form (Oasis ID - **ecusItd1-196921**) has been created and a copy is provided in Appendix 2 of this report.



7. References

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Appendix 1: Tables

Context Descriptions

Area	Context Number	Туре	Description	Depth (m)
Test pit 1	1000	Layer	Dark brown silt. Overlies 1001 and 1002.	Varies
Test pit 1	1001	Layer	Mottled yellow and grey clay made-ground with moderate rounded sandstone <10 cm. Overlies 1001.	Varies
Test pit 1	1002	Layer	Compact sand with red hue. Likely represents principal face of dam.	Varies
Test pit 2	2000	Layer	Same as 1000 . Overlies 2001 and 2002.	Varies
Test pit 2	2001	Layer	Mottled yellow and grey clay made-ground with moderate rounded sandstone <10 cm. Overlies 2001.	Varies
Test pit 2	2002	Layer	Compact sand with red hue. Likely represents principal face of dam.	Varies
Test pit 3	3000	Layer	Same as 1000 . Overlies 3001 and 3002.	Varies
Test pit 3	3001	Layer	Mottled yellow and grey clay made-ground with moderate rounded sandstone <10 cm. Overlies 3001.	Varies
Test pit 3	3002	Layer	Compact sand with red hue. Likely represents principal face of dam.	Varies
Test pit 4	4000	Layer	Dark brown silty clay topsoil . Overlies 4001 and 4003.	0.00 - 0.21
Test pit 4	4001	Layer	Mottled yellow and grey clay made-ground with occasional inclusions of sandstone. Rubble backing to 4002 lies in matrix and may therefore be contemporary. Overlies 4004.	0.21 - 0.93
Test pit 4	4002	Structure	Penstock structure for east wheel comprising large ashlar blocks for coping and foundations with rubble structure in between.	n/a
Test pit 4	4003	Structure	Random stone rubble wall with concrete coping and hand-made red brick repair.	n/a
Test pit 4	4004	Layer	Grey puddling clay.	0.93 +
Access Track	5000	Layer	Same as 1000 . Overlies 5001 and 5002.	Varies
Access Track	5001	Layer	Compact sand with red hue. Likely represents principal cut of pond.	Varies
Access Track	5002	Layer	Grey clay with occasional inclusions of sandstone <20 cm.	Varies



Appendix 2: OASIS form

OASIS ID: ecusltd1-196921					
Project details					
Project name	Abbeydale Industrial Hamlet				
Short description of the project:					

Ecus Ltd. were commissioned by Sheffield City Council (SCC) to undertake an archaeological watching brief during works to the dam and mill pond within the Scheduled area of Abbeydale Works (SM no. SY 1039, and National List No. 1004822) at Abbeydale Industrial Hamlet, Abbeydale Road South, Sheffield, located at SK 32562 81953. The archaeological watching brief was required as a condition of Scheduled Monument Consent (SMC ref S00072815) for the proposed works and undertaken in accordance with a Written Scheme of Investigation agreed with English Heritage Principal Inspector of Ancient Monuments. The principal aim of the works was to address a long standing leak through the dam into the buildings behind. The initial plan was to create a temporary dam across the mill pond, allowing the northern end to be drained, and then to install a liner. As the project progressed various problems were encountered during the drain down of the pond resulted in the scaling back of the original solution. The archaeological watching brief was undertaken between 13/06/14 and 23/10/14, monitoring the excavation of four test pits, stripping for an access track, and observations during the installation of the new penstocks. Observations made during the course of the watching brief evidence of fixings for an earlier structure on the southern penstock, and identified evidence for the construction of the dam wall and bank. Whilst outside of the monitoring area, the presence of remains of possible structures within the mill pond was also noted.

Project dates Previous/future work	Start: 13-06-2014 End: 23-10-2014 Yes / Not known
Any associated project reference codes	SY 1039 - SM No.
Any associated project reference codes	1004822 - NHLE No.
Any associated project reference codes	4763 - Contracting Unit No.
Any associated project reference codes	SHEFM:2014.116 - Museum accession ID
Type of project	Recording project
Monument type	DAM Post Medieval
Monument type	PENSTOCK Post Medieval
Significant Finds	NONE None
Investigation type	"Watching Brief"
Prompt	Scheduled Monument Consent
Project location	
Country	England
Site location	SOUTH YORKSHIRE SHEFFIELD
	SHEFFIELD Abbeydale Industrial Hamlet
Study area	0 Square metres
Site coordinates	SK 32562 81953 53.3332147601 -
	1.51097756815 53 19 59 N 001 30 39 W Point



Project creators	
Name of Organisation	ECUS Itd
Project brief originator	English Heritage
Project design originator	ECUS Itd
Project director/manager	Paul White
Project supervisor	James Thomson
Type of sponsor/funding body	County Council
Project archives	
Physical Archive Exists?	No
Digital Archive Exists?	No
Paper Archive recipient	Sheffield Museums
Paper Archive ID	SHEFM:2014/116
Paper Contents	"none"
Paper Media available	"Context
	sheet","Diary","Photograph","Report","Section"
Project bibliography 1	
Publication type	Grey literature (unpublished
	document/manuscript)
Title	Abbeydale Industrial Hamlet Mill Pond -
	Archaeological Watching Brief
Author(s)/Editor(s)	Thomson, J.
Other bibliographic details	4763
Date	2014
Issuer or publisher	Ecus
Place of issue or publication	Sheffield
Description	A4 PDF and spiral bound



432564

432554

432500

381979

Inlet

Grinding Hull

Legend

The Site

Track

N Test Pits

Penstock 2

-381969

Rubble spread associated with possible structures

Hammers Ħ

Figure 2

-381959

Edge of former head-goit

Mill Pond

+

90

Location of possible remains of structures

381900

4763 Abbeydale Industrial Hamlet **Sheffield City Council**

Site Location Plan

Mill Pond

381949

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Detail (1:250)

Date: December 2014

Scale: 1:800