## border archaeology

archaeology & built heritage



## **Programme of Archaeological Work**

For

Signature Homes and Construction Ltd

Concerning

Land at Pinsley Mill Leominster Herefordshire

September 2017



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#### **REPORT SPECIFICATION**

**Compilation:** 

K. H. Crooks BA

**Artwork:** 

Holly Litherland BA (Hons)

**Editing:** 

George Children MA MCIfA

Final Edit & Approval:

Neil Shurety Dip. M G M Inst M

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#### **REGIONAL OFFICES**

#### Leominster (Administration)

Chapel Walk **Burgess Street** Leominster, HR6 8DE t: 01568 610101

#### Leominster (Post-excavation and archiving)

The Old Sunday School 6 Chapel Walk **Burgess Street** Leominster, HR6 8DE t: 01568 737969

#### Bristol

1<sup>st</sup> floor, Citibase Bristol Aztec West Aztec Centre, Aztec West Almondsbury Bristol, BS32 4TD

#### Leeds

No1 Leeds 26 Whitehall Road Leeds, LS12 1BE t: 0113 818 7959

t: 0117 9110767

#### Milton Keynes

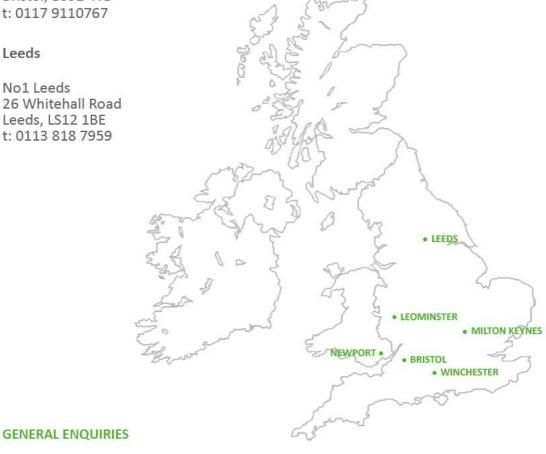
Common Farm Calverton Lane Milton Keynes, MK19 6EU t: 01908 467904

#### Newport

Merlin House No1 Langstone Business Park Newport, NP18 2HJ t: 01633 415339

#### Winchester

Basepoint Business Centre, Winnal Valley Road, Winchester, SO23 0LD t: 01962 832777



e: info@borderarchaeology.com

t: 01568 610101



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#### 1 Executive Summary

Border Archaeology Ltd (BA) was instructed by Signature Homes & Construction Ltd to carry out a Programme of Archaeological Work comprising Archaeological Observation and Field Evaluation on land at Pinsley Road Leominster Herefordshire (fig. 1).

The area comprises a narrow strip of land running roughly north/south parallel to the main Newport-to-Shrewsbury railway line and backing onto Pinsley Road. The site was formerly occupied by Pinsley Mill, shown on Isaac Taylor's map of 1754 as a cotton mill and later rebuilt as a corn mill and which continued in use until the Second World War. It was thought to occupy the location of the medieval Priory Mill (HWCM 19589), which was in the ownership of Leominster Priory and which represents one of Leominster's first mills, located at the point where the Pinsley Brook exits the monastic precinct.

A number of geotechnical Test Pits (TPs) were opened on the site under Archaeological Observation prior to development. The majority of these were devoid of archaeological finds or features, the exception being TP 5, which contained red brick rubble, possibly demolition debris relating to the mill. Elsewhere on the site, a layer of disturbed natural may have been the result of levelling the ground at the same time. A further possibility is that the deposits lying beneath the topsoil may have been the result of either deliberate raising of the surface to avoid flooding from the confluence of the Kenwater and the Lugg (some 270m to the north) or they may derive from alluviation associated with that flooding.

An evaluation trench subsequently opened on the site in the location of the mill structure revealed a masonry wall which had been subject to several phases of alteration. Evidence for its demolition was also encountered. No evidence for the medieval Priory Mill, archaeological or artefactual, was seen, although it should be stated that no dating evidence was found for stone wall (107), which ran the length of the trench. Also recorded were a number of deposits relating to demolition and backfilling.



#### 2 Introduction

Border Archaeology Ltd (BA) has been instructed by Signature Homes & Construction Ltd 171 Widemarsh Street Hereford to carry out a Programme of Archaeological Work comprising Archaeological Observation (AO) and Archaeological Field Evaluation (AFE) in respect of the proposed erection of 29 dwellings with associated private drive, landscaping and external works on land at Pinsley Road Leominster Herefordshire (NGR: SO50091 59085) (Planning Ref. P141022/F) (figs. 1 & 2).

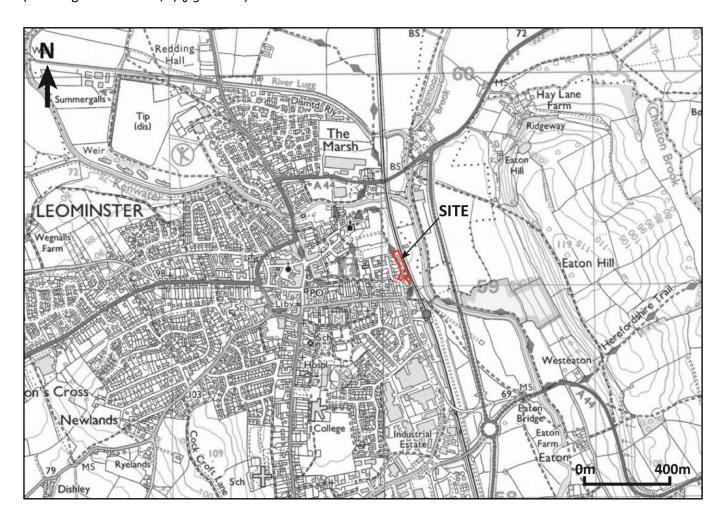


Fig. 1: Location of site (shown in red)

Prior to the commencement of development, a number of Test Pits (TPs) were opened under AO) A single 'L'-shaped evaluation trench was subsequently opened in the approximate location of the mill structure (*fig. 2*).

TP AO took place on 10<sup>th</sup> March 2015, with AFE following on 7<sup>th</sup> and 10<sup>th</sup> April 2017.



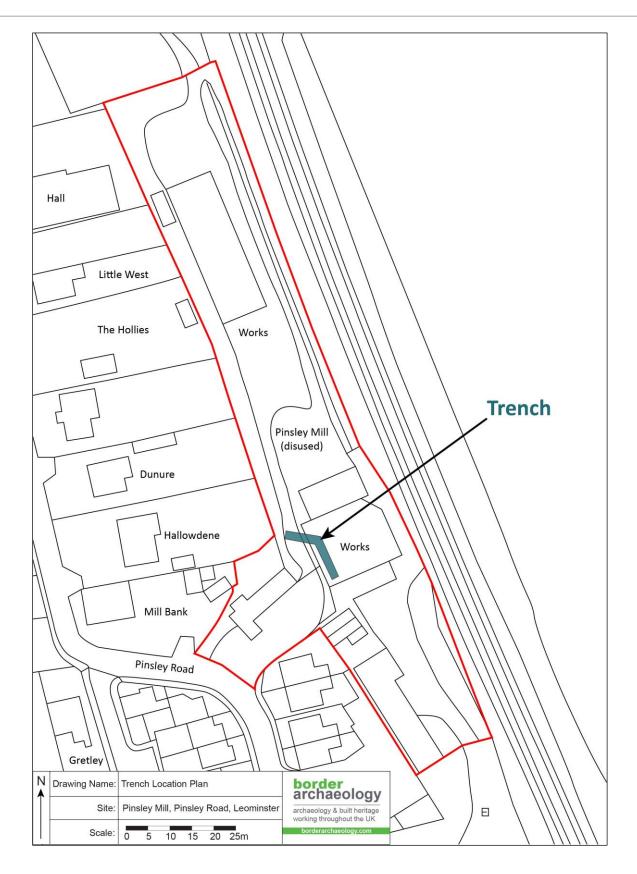


Fig. 2: Plan showing location of evaluation trench.



#### 2.1 Site Description

The site lies at a height of some 72.4m AOD within an area of 0.45ha at the western extent of the Leominster River Meadows Conservation Area. It forms a strip of land on the E side of Pinsley Road running parallel to the main Newport-to-Shrewsbury railway.

#### 2.1.1 Soils and Geology

The site lies within an area characterised by typical argillic brown earths of the ESCRICK series (571P) (SSEW 1983). The soils are generally deep, well-drained and reddish with a coarse loamy texture. The site is underlain by the Raglan Mudstone Formation of Silurian Age with superficial deposits of undifferentiated glacial till and morainic deposits, with alluvium likely to occur at the S and E side of the site. There is also a covering of made-ground resulting from previous uses of the site (EMS 2012).

#### 3 Historical and Archaeological Background

The site is situated at the eastern extent of Etnam Street, which represents an early route forming part of the medieval street system of Leominster (HWCM 19582) and which appears to have been established by 1393 when it is mentioned in a list of burgage rents; it may possibly have replaced an earlier route running from the marketplace and continuing the line of Grange Walk along the southern perimeter of the Priory precinct (HWCM 728), this earlier route forming an original element of the town (Buteux 1996).

The White Lion Public House, an early 16<sup>th</sup>-century timber-framed structure, is situated close by to the S (RCAM 1934).

Pinsley Mill (Herefordshire SMR No. 726) (NGR: SO5010 5906) is considered to occupy the site of the medieval Priory Mill (HWCM 19589), which was in the ownership of Leominster Priory and which represents one of Leominster's earliest mills, located at the point where the Pinsley Brook exited the monastic precinct. A lease of 1675 contains a reference to two 'watercorne' mills sites at the lower end of Etnam Street, both indicated on Bryant's 1835 map of Leominster.

Taylor's Map of 1754, however, shows the site as a 'Cotton Mill'. This mill is first mentioned in 1748 in connection with the inventor Daniel Bourn, who applied for a patent for a carding machine with rotating cylinders for wool and cotton (Wadsworth & de Lacy Mann 1931, 441-2). This is presumed to have been the only cotton mill outside the control of Lewis Paul and John Wyatt, the inventors of roller spinning technology and whose Paul-Wyatt cotton mills, which operated between 1741 and 1764, were the world's first mechanised cotton-spinning factories operating 'without the aid of human fingers'.

The Leominster mill burnt down in 1754, an event reported in the *Manchester Mercury* in its edition of November 5<sup>th</sup>, which refers to this 'sad calamity' resulting in a loss to Bourn of some 'sixteen hundred pounds and upwards'.



Leominster appears to have been chosen as a location for the mill as it lay directly on the main route between Manchester and Bristol and the coastal trade in finished goods was at that time beset by piracy. It was reported in 1766 that '150 packhorses and two broad wheel wagons went from Manchester to Bristol every week with goods for export and may well have brought back cotton'.

The mill was rebuilt as a corn mill and in 1825 the complex was purchased by John Arkwright of Hampton Court in 1844. The tenancy passed to Joseph Cooke in 1893, who undertook a programme of refurbishment and modernisation, which included installation of a gas engine together with a plant for producing gas from coal. The mill continued to operate until the Second World War.

The Ordnance Survey 1<sup>st</sup>-edition 25-inch map of 1887 shows 'Pinsley Mill (corn)' situated centrally within the site together with several small outbuildings. A mill stream flows along the W side of the site. The area immediately to the W of the site appears to have been under horticultural cultivation, possibly representing allotments. The White Lion Inn is shown to the S.

The mill suffered recent damage from vandalism and was set alight on several occasions in 2010-13 resulting in its eventual demolition in 2014; no above-ground remains thus survive. It is considered likely that the deposit profiles on the site have undergone substantial prior disturbance.

#### 4 Methodology

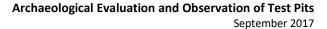
The programme of archaeological work was carried out according to the Standard and Guidance for an archaeological watching brief (CIfA 2014), Standard and Guidance for archaeological field evaluation (CIfA 2014) and Standard and guidance for the collection, documentation, conservation and research of archaeological materials (CIfA 2014). BA adheres to project management advice set out in Management of Research Projects in the Historic Environment: The Project Managers' Guide (Lee 2015).

Engineering TPs were opened by machine under archaeological supervision in advance of development and a photographic record made. These measured approximately  $2m \times 0.7m \times 2m$ .

Two trenches, each measuring roughly  $10m \times 2m$ , were proposed. In the event, however, on-site constraints meant that a single, roughly L-shaped trench measuring 9m (NW/SE)  $\times$  10m (SSE/NNW) was excavated (*fig. 2*). Trenching was opened using an appropriate machine fitted with a wide, toothless ditching bucket.

All machining was carried out under archaeological supervision and was halted at the first significant archaeological horizon. Investigation of archaeological deposits and structural remains was by hand.

Full written, graphic and photographic records were made in accordance with Border Archaeology's *Field Recording Manual* (2017). The written record comprised a *pro-forma* context record for each stratigraphic unit.





The drawn record was produced on gridded, archive stable polyester film. The plans showed the extent of the area (tied into the Ordnance Survey National Grid and located on a 1:2500 plan), the extent of all stratigraphic units and appropriate detail within stratigraphic units. Plans of stratigraphic units were at 1:20.

All drawings were numbered and listed in a drawing register, these drawing numbers being cross-referenced to written site records.

A photographic record of all stratigraphic units was made using a high-resolution digital camera, comprising photographs of archaeological features and appropriate groups of features and structures. Included in each photograph was an appropriate scale and all photographic records were indexed and cross-referenced to written site records. Details of subject and direction of view were recorded in a photographic register, indexed by frame number. A representative photographic record of the progress of the archaeological work was also made.

Since only structural features were identified during the work, no samples for palaeoenvironmental purposes were collected. No artefacts were recovered during the course of the work.



#### 5 Results

#### 5.1 Test Pits (TPs)

#### 5.1.1 TP 1

						Finds					
Item	No.	Matrix Phase	Туре	Interpretation	Discussion	Small Find	Pot	Bone	Misc.	Sample No.	Comments
1	1001	-	Deposit	Existing surface.	Moderately compact grey crushed concrete, rubble & aggregate; 0.4m thick. Overlying (1002).	-	-	-	-	-	-
2	1002	-	Deposit	Disturbed natural.	Well-compacted mid pinkish-brown clay & stone; >1.7m thick. Underlying (1001). Overlying (1003).	-	-	-	-	-	-
3	1003	-	Deposit	Natural in base of TP.	Well-compacted mid purple-brown gravel. Underlying (1002).	-	-	-	-	-	-

#### 5.1.2 TP 2

						Finds					
Item	No.	Matrix Phase	Туре	Interpretation	Discussion	Small Find	Pot	Bone	Misc.	Sample No.	Comments
1	2001	-	Deposit	Existing surface.	Moderately compact grey rubble & aggregate; 0.4m thick. Overlying (2002).	-	-	-	-	-	-
2	2002	-	Deposit	Disturbed natural.	Well-compacted mid reddish-brown clay; occasional stone fragments & white flecks; some yellowish discolouration; c.0.6m thick. Underlying (2001). Overlying (2003).	-	-	-	-	-	-



						Finds					
Item	No.	Matrix Phase	Туре	Interpretation	Discussion	Small Find	Pot	Bone	Misc.	Sample No.	Comments
3	2003	-	Deposit	Natural in base of TP.	Well-compacted strongly reddish-brown clay; >1m thick. Underlying (2002).	-	-	-	-	-	-

#### 5.1.3 TP 3

						Finds					
Item	No.	Matrix Phase	Туре	Interpretation	Discussion	Small Find	Pot	Bone	Misc.	Sample No.	Comments
1	3001	-	Deposit	Existing surface.	Moderately compacted grey concrete, stone rubble & aggregate; 0.4m thick. Overlying (3002).	-	1	-	-	-	-
2	3002	-	Deposit	Disturbed natural or made ground.	Well-compacted mid reddish-brown silty clay; white & black flecking, some brown discolouration; 0.4m thick. Underlying (3001). Overlying (3003).	-	-	-	-	-	
3	3003	-	Deposit	Natural.	Compact strongly pinkish-brown clay; >1m thick. Underlying (3002).	-	-	-	-	-	-

#### 5.1.4 TP 4

						Finds					
Item	No.	Matrix Phase	Туре	Interpretation	Discussion	Small Find	Pot	Bone	Misc.	Sample No.	Comments
1	4001	-	Deposit	Existing surface	Moderately compact grey rubble & aggregate; 0.4m thick.  Overlying (4002).	-	-	-	-	-	-

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						Finds					
Item	No.	Matrix Phase	Туре	Interpretation	Discussion	Small Find	Pot	Bone	Misc.	Sample No.	Comments
2	4002	-	Deposit	Disturbed natural/made ground	Compact mid reddish-brown silt clay; moderate rounded stones, occasional lime patches; c.0.2m thick. Underlying (4001). Overlying (4003).	-	-	-	-	-	-
3	4003	-	Deposit	Natural	Well-compacted strongly reddish-pink clay (more purple to base); >0.14m thick. Underlying (4002).	-	-	-	-	-	-

#### 5.1.5 TP 5

						Finds					
Item	Context No.	Matrix Phase	Туре	Interpretation	Discussion	Small Find	Pot	Bone	Misc.	Sample No.	Comments
1	5001	-	Deposit.	Existing surface.	Moderately compact grey rubble & aggregate; 0.15m thick. Overlying (5002), (5003).	-	-	-	-	-	-
2	5002	-	Deposit.	Demolition rubble.	Well-compacted broken brick, lime, mortar patches, charcoal, stone; 0.8m thick. Underlying (5001). Overlying (5004).	-	-	-	-	-	-
3	5003	-	Deposit.	Made ground/ levelling.	Well compacted mid greyish-brown clay; occasional stone & mortar; c.0.8m thick. Underlying (5001). Overlying (5004).	-	-	-	-	-	Less rubble than, but probably equivalent to, (5002).
4	5004	-	Deposit.	Natural in base of TP.	Well-compacted mid pinkish-brown clay, gleying; >1.05m thick. Underlying (5002), (5003).	-	-	-	-	-	-



5.1.6 TP 6

						Finds					
Item	Context No.	Matrix Phase	Туре	Interpretation	Discussion	Small Find	Pot	Bone	Misc.	Sample No.	Comments
1	6001	-	Deposit.	Existing surface.	Moderately compacted dark grey stone & crushed concrete rubble; c. 0.3m thick. Overlying (6002).	-	-	-	-	-	-
2	6002	-	Deposit.	Disturbed natural/made ground.	Compact mid pinkish-brown clay; moderate mortar & plaster patches, occasional CBM; 0.8m thick. Underlying (6002).  Overlying (6003).	-	-	-	-	-	-
3	6003	-	Deposit.	Natural.	Well-compacted mottled greyish-green & strongly pinkish- brown clay (more purple to base of pit); >1.6m thick. Underlying (6002). Overlying (6003).	-	-	-	-	-	-
4	6004	-	Deposit.	Natural seen in base of pit.	Well-compacted mid purple-brown gravel; >0.3m thick. Underlying (6003).	-	-	-	-	-	-

#### 5.1.7 TP 7

						Finds					
Item	Context No.	Matrix Phase	Туре	Interpretation	Discussion	Small Find	Pot	Bone	Misc.	Sample No.	Comments
1	7001	-	Deposit.	Existing surface.	Moderately compacted dark greyish-brown mixed silty clay/	-	-	_	-	-	-
				0 11 0 11 11	rubble; c. 0.3m thick.						
2	7002	_	Deposit.	Surface.	Grey blocks; c. 0.2m thick. Underlying (7001). Overlying	_	_	_	_	_	Included sub-
_	7002		2 0 0 0 0 1 1 1		(7003).						base for blocks.
					Very firm mottled greyish-green & strongly pinkish-brown clay						
3	7003	-	Deposit.	Natural.	(more purple towards base of pit); >1.6m thick. Underlying	-	-	-	-	-	-
					(7002). Overlying (7003).						
1	7004	_	Deposit.	Natural in base of	Well-compacted mid purple-brown gravel; >0.3m thick.	_	_	_	_	_	_
4	7004	_	Deposit.	pit.	Underlying (7003).	_	_	_	_	_	_



#### 5.2 Evaluation Trench

						Finds					
Item	Context No.	Matrix Phase	Туре	Interpretation	Discussion	Small Find	Pot	Bone	Misc.	Sample No.	Comments
1	101	-	Deposit	Tarmac surface	Tarmac & aggregate; 0.2-0.8m thick. Overlying (109).	-	-	-	-	-	Sealed all deposits & features associated with mill.
2	102	ı	Deposit	Fill/dump	Firm/compact mid greyish-brown silt clay; frequent small-to-medium angular & sub-angular stones, CBM, frequent charcoal, moderate white flecks; >9m (NW/SE) $\times$ >1.6m (NE/SW) $\times$ c.0.5m. Cut by [115]. Fill of [103]/above (104).	-	1	-	-	-	Not seen in SSE arm of trench.
3	103	-	Cut	Possible cut or tip-line defining boundary of dumping deposits (102) & (104).	Form in plan unknown; break of slope top unknown, sides steeply sloping, break of slope base gradual, base flat; 3.7m × >1.6m × 0.8m. Filled by (102).	-	-	-	-	-	Seen in section only.
4	104	-	Deposit	Redeposited natural, apparently pushed against wall (107).	Firm bright reddish-brown clay, bluish-grey flecking; 1m (length) × 0.5m (thickness). Overlying (105). Underlying (102). Cut by (103).	-	-	-	-	-	-
5	105	-	Deposit.	Layer of clay apparently associated with (108).	Firm mottled grey clay; occasional CBM, charcoal, stone flecks & larger fragments of angular stone; 3m × >1.6m × 0.4m. Underlying (104). Overlying (106).	-	-	-	-	-	-

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						Finds					
Item	No.	Matrix Phase	Туре	Interpretation	Discussion	Small Find	Pot	Bone	Misc.	Sample No.	Comments
6	106	-	Deposit.	Natural.	Firm mid reddish-brown clay, grey marled patches. Underlying (105). Cut by [118].	-	-	-	-	-	-
7	107	-	Structure.	Masonry mill wall.	Linear; aligned NNW/SSE; coursed, roughly squared rendered masonry, pinkish-brown white-flecked mortar; size of materials: av. 260mm × 160mm × 90mm; extent of feature >10.6m × 0.56m × 0.86m. Abutted by (108). Fill of [118].	-	-	-	-	-	Brick-facing (114) at NNW end.
8	108	-	Deposit.	Surface associated with (107).	Masonry; roughly shaped blocks; size of materials: c. 200mm square; measured c. 9m NW/SE $\times$ >1.6m NE/SW $\times$ 0.3m. Underlying (104). Abutted (107).	-	-	-	-	-	Clay (105) fairly loosely compacted around stones.
9	109	-	Deposit.	Demolition deposit used as fill for basement.	Loose, mid-brown silt & mortar; very frequent brick, stone & modern rubbish (plastic wrap etc.); 5m (length) × 1.2m (thickness). Underlying (101).	-	-	-	-	-	Seen in section. Later than (110).
10	110	-	Structure.	Brick wall of basement.	Masonry; brick; size of materials: $120$ mm $\times$ $80$ mm $\times$ $240$ mm; measured $1.2$ m (height) $\times$ $0.25$ m (width). Fill of [115]. Abutted by (109).	-	-	-	-	-	Seen in section only. Skim of plaster on internal face.
11	111	-	Structure.	Brick walls & stone capping forming chute to cellar.	Masonry; stone-capped brick; size of materials (brick): 100mm × 75mm × 220mm (stone) 0.32 (width); grey mortar bonding; measured >0.54m × 0.6m × 0.8m.	-	-	-	-	-	Aperture for chute inserted into wall (107) measured 0.4m (width) × 0.53m (height).
12	112	-	Structure.	Wall.	Masonry; aligned ENE/WSW; >0.65m × >0.25m × >0.2m. Sealed by (101). Abutting (107).	-	-	-	-	-	Stone wall at right-angles to mill wall (107); faced with a

## Archaeological Evaluation and Observation of Test Pits September 2017



		Matrix Phase	Туре	Interpretation	Discussion	Finds					
Item	Context No.					Small Find	Pot	Bone	Misc.	Sample No.	Comments
											plaster/mortar skim.
13	113	-	Structure.	Floor.	Concrete; 5.3m × >1.6m × 0.13m. Underlying (109). Contemporary with (possibly) (114).	-	-	-	-	-	Associated with basement defined by wall (110).
14	114	-	Structure.	Cellar/basement wall facing Brick facing on (107).	Masonry; brick; size of materials: 100mm × 75mm × 220mm; English bond (possibly, although wall faced with mortar); grey mortar; measured >3.4m × 0.22m × 1.17m. Abutted (107), Contemporary with (possibly) (113). Filled by (109).	-	-	-	-	-	In places two thicknesses of brick; in others one only with rubble fill.
15	115	-	Cut.	Construction cut for (110).	Linear (?) in plan; sides steeply sloping/near-vertical; 0.55m (width) × 1.2m (depth). Cut (102), (117). Filled by (110).	-	-	-	-	-	Identified in section only. Wall did not extend across the trench.
16	116	-	Cut.	Construction cut for chute (111).	Form in plan unclear; sides near-vertical, base flat; >0.54m × 0.8m × 0.8m. Cut (107). Filled by (111).	-	-	-	-	-	Plan not apparent – seen in section only.
17	117	-	Deposit.	Thick layer at NNW end of longer trench.	Mid pinkish-brown clay; 5.75m (length) × 1.2m (thickness); Cut by [115]. Overlying (106).	-	-	-	-	-	Seen in section only. May be later than (107).
18	118	-	Cut.	Construction cut for (107).	Linear in plan; aligned NNW/SSE; >10.6m (length) × >0.56m (width). Filled by (107). Cut (106).	-	-	-	-	-	Unexcavated and depth not seen.

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						Finds					
Item	No.	Matrix Phase	Туре	Interpretation	Discussion	Small Find	Pot	Bone	Misc.	Sample No.	Comments
19	119	-	Deposit.	Fill of cut [115].	Loosely compacted clay; frequent Old Red Sandstone, brick & tile. Fill of [115] (on SSE side of wall (110) only). Underlying (109).	-	-	-	-	-	-



#### 6 Discussion

The trenching revealed structural remains relating to basements associated with Pinsley Mill and demonstrated various construction phases, including the insertion of a chute and the erection of brick partition walls. A number of the alterations appeared to be fairly recent.

The wholesale nature of the demolition of 2014 meant that it was difficult to identify a sequence for a number of deposits on the site.

#### 6.1 Pinsley Mill

#### 6.1.1 Phase 5: Demolition and levelling

The existing surface consisted of a layer of tarmac on a sub-base of aggregate (101). Similar aggregate had also been used to level the surface of the site and filled a substantial hollow (*Plate 2*). At the NNW end of the longer trench, aggregate (101) overlay (109), a loose deposit consisting almost entirely of building rubble and presumably deriving from demolition works in 2014. The rubble sealed a number of earlier deposits and features, including walls (110) and (107), and filled the Phase 4 basement associated with floor (113).

#### 6.1.2 Phase 4: Alteration to basement

The latest construction phase identified comprised basement alterations. Concrete screed flooring (113) had been laid concurrent with the concrete rendering of the walls. The addition of partition wall (110) and brick-facing (114) on wall (107) may relate to this phase or slightly earlier. It is also possible that these two alterations took place at different times, as the bricks used in (114) were of different dimensions ( $100 \text{mm} \times 75 \text{mm} \times 220 \text{mm}$ ) to those in (110) ( $120 \text{mm} \times 80 \text{mm} \times 240 \text{mm}$ ), although both walls contained a similar grey cement mortar. Facing (114) appeared to be constructed in running bond, although the concrete facing made this difficult to confirm. Wall (110) survived to a height of some 1.2m and measured 0.25m wide; it appeared to be of poor quality and was comparatively flimsy. There was no evidence for the continuation of this structure on the WSW side of the trench and this was presumably lost during demolition. It is thought unlikely that a door had been present, as it seems probable that deposit (117) was in place to the SSE at the time the cellar was in use. The construction cut [115] for (110) measured 1.2m (depth)  $\times$  0.55m (width) and was clearly visible cutting Phase 3 clay (117). On the SSE side only, a fill of rubble (119) may have served to retain clay (117), taking the weight of that deposit from the wall.

Neither facing nor concrete floor (113) were present to the NNW of (110). Wall (110), facing (114) and floor (113) seem to have formed a small basement, possibly reducing in size a larger cellar associated with earlier wall (107). If so, wall (107) at the S end of the building would have been redundant by this time.



#### 6.1.3 Phase 3: Demolition of earlier mill?

Deposits (102) in the NW part of the trench and (117) to the S were considered broadly contemporary. Each was of red clay, strongly discoloured by charcoal/burning. It could, therefore, be postulated that this deposit derived from the demolition of Bourn's cotton mill following the fire of 1754 and the levelling and construction of the most recent building. However, considerable disturbance had taken place on the site over time and it should also be noted that an engine powered by coal gas was in place at the mill by 1910 and discolouration could also result from the coking of coal to produce gas. Clay (117) seems to have been in place when Phase 4 wall was constructed, as the cut [115] for this feature was clearly visible in it. Dumping or levelling deposits, including red clay (104) and tip-line or possible cut [103], are thought to be part of the same activity.

#### 6.1.4 Phase 2 Earlier structures

Phase 2 incorporates the earlier structures associated with Pinsley Mill, including roughly N/S aligned stone wall (107) and possible surface (105/108).

A chute (111) had been inserted [116] into wall (107). The chute lay just to the N of the alignment of wall (110), implying that it may have remained in use following alteration of the cellar to form basement room (113) or even that (110) was positioned so that the chute was included in the new layout. The cut into wall (107) measured 0.8m (height)  $\times$  0.8m (width). It was very irregular, confirming that the chute was not an original part of the structure. The capping was of stone, which appeared to have been inserted rather than being part of the original structure, although it is possible that they were reused. The brick lining was bonded with a grey cement mortar, similar to that used in Phase 4, and the bricks were of similar size (100mm  $\times$  75mm  $\times$  220mm) to those used in the construction of wall (110). It cannot, therefore, be ruled out that the chute was inserted at the same time as the cellarage was otherwise altered (Phase 4). The opening of the chute measured 0.53m (height)  $\times$  0.4m (width).

Wall (107) (*Plate 1*) was thought to be the earliest masonry present on site. It was constructed of roughly-squared sandstone of varying size, bonded with a pale brownish-pink lime mortar with flecks of lime and charcoal. The recorded section of the wall measured >10.6m  $\times$  0.8m  $\times$ 0.6m, continuing outside the trench to the SE. The N end had been faced with brick and rendered in concrete (Phase 4). There was no evidence for similar treatment to the S and it may be that this part of the original basement had gone out of use prior to demolition. An earlier chute or doorway appeared to have been blocked (*Plate 1* - left). This would further suggest that the S end of the basement went out use and chute (111) was inserted in place of an original structure to the N of new partition wall (109).





Plate 1: E Elevation showing insertion of chute (111) into wall (107).







Plate 2: Above: Plan view of wall (107) S end of trench. Below: Facing (114) at N end of trench.



A return wall of similar construction (112) had been added later as it was not keyed into wall (107). A section of only 0.65m in length was seen before the wall extended outside the excavation area. It is known that a number of alterations were carried out during the history of the mill, including the addition of turbines and a coal gas engine for use when the water level was low.

In the NW arm of the trench, a layer of stones (108) set in greyish-pink clay (105) measured c.0.3m thick and appeared to have been deliberately placed. Individual stones had been roughly squared to form blocks some 200mm square. The deliberate placing of the stones indicates that they did not derive from demolition and, since the deposit was present in both trench sections, it was at least 1.6m wide and therefore unlikely to be a wall. No dating evidence was recovered and (108)/(105) lay immediately beneath possible 18<sup>th</sup> century demolition deposits and above the natural (106). It abutted wall (107) and may have been a stone surface contemporary with wall (107).

#### 6.1.5 Phase 1 Natural

The natural deposit throughout the trench was of strongly pink clay, with some green marling.



Plate 3: Stones (108) in clay (105) with natural (106) in base of trench: wall (107) back left; view SW.



#### 6.2 Test Pits (TPs)

The TPs showed that undisturbed natural deposits survived beneath the existing surface and a layer of disturbed deposits or made-ground. This may have derived from the demolition of buildings associated with the mill, although it is also possible that the material immediately beneath the existing surface was the result of alluviation or the deliberate raising of the ground to avoid flooding. The former millrace was not identified; however, it should be noted that the TP considered most likely to encounter evidence of this feature was not excavated.

#### 6.3 Conclusions

No structural or artefactual evidence was found relating to either the medieval or 18<sup>th</sup> century mills, although both surface (105)/(108) and wall (107) were undated. The lack of artefactual dating evidence may be the result of extensive disturbance during demolition and levelling of the mill buildings. Successive phases of alteration during the working life of the mill, particularly in the later post-medieval period, may also have removed evidence of earlier structures.

As expected, evidence for recent widespread levelling and movement of deposits was present, with plastics found in the latest cellar fill (109). The TPs showed a layer of aggregate and demolition debris lying above made-ground over much of the site.



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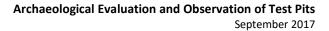


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#### 7.1 Cartography

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