

**Bretby Mill, Bretby, Derbyshire.
An Archaeological Watching Brief.**



Trench 1 with turf removed, prior to excavation

ARS Ltd Report 2015/34
May 2015

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EXECUTIVE SUMMARY

In March 2015 Archaeological Research Services Ltd was commissioned to undertake an archaeological watching brief at Brethby Mill, Repton Road, Brethby, Derbyshire. Archaeological monitoring was requested due to the possible presence of earthworks related to a millstream associated with a Grade II listed Mill. The monitoring was carried out during ground works for the erection of a stable and parking barn. The site was located in the fields north of the Mill. Small amounts of 19th and early 20th century pottery were recovered from the topsoil. No other finds, features of archaeological significance or buried land surfaces were revealed.

1. INTRODUCTION

1.1. Location and scope of work

1.1.1. In March 2015 Archaeological Research Services Ltd was commissioned to undertake an archaeological watching brief at Bretby Mill in Bretby, Derbyshire (Fig. 1). The work was carried out during ground works for the installation of a new stable building and parking barn in the fields north of the Mill. The archaeological monitoring of the ground works was undertaken on the 16th March and 7th May, 2015.

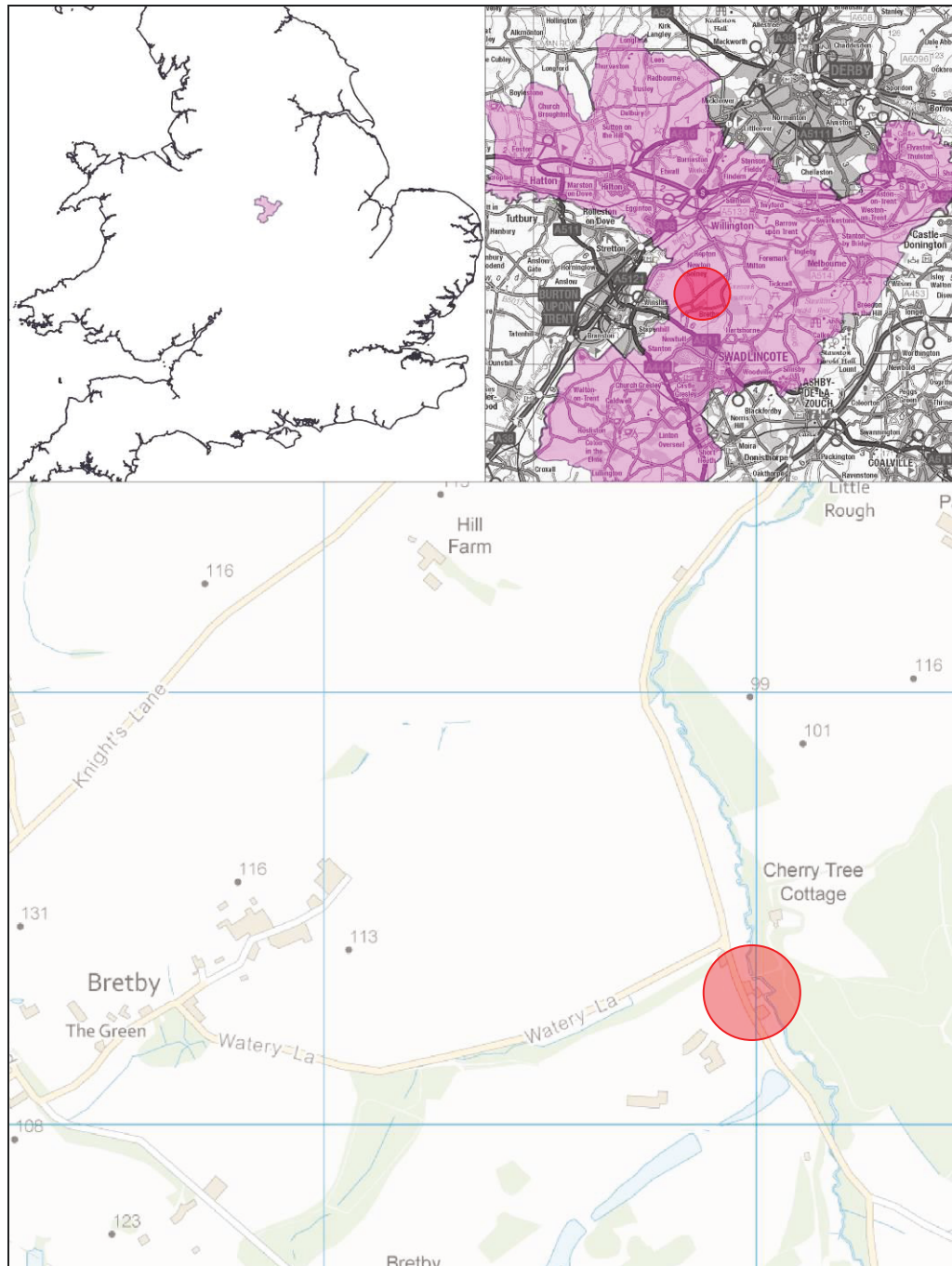
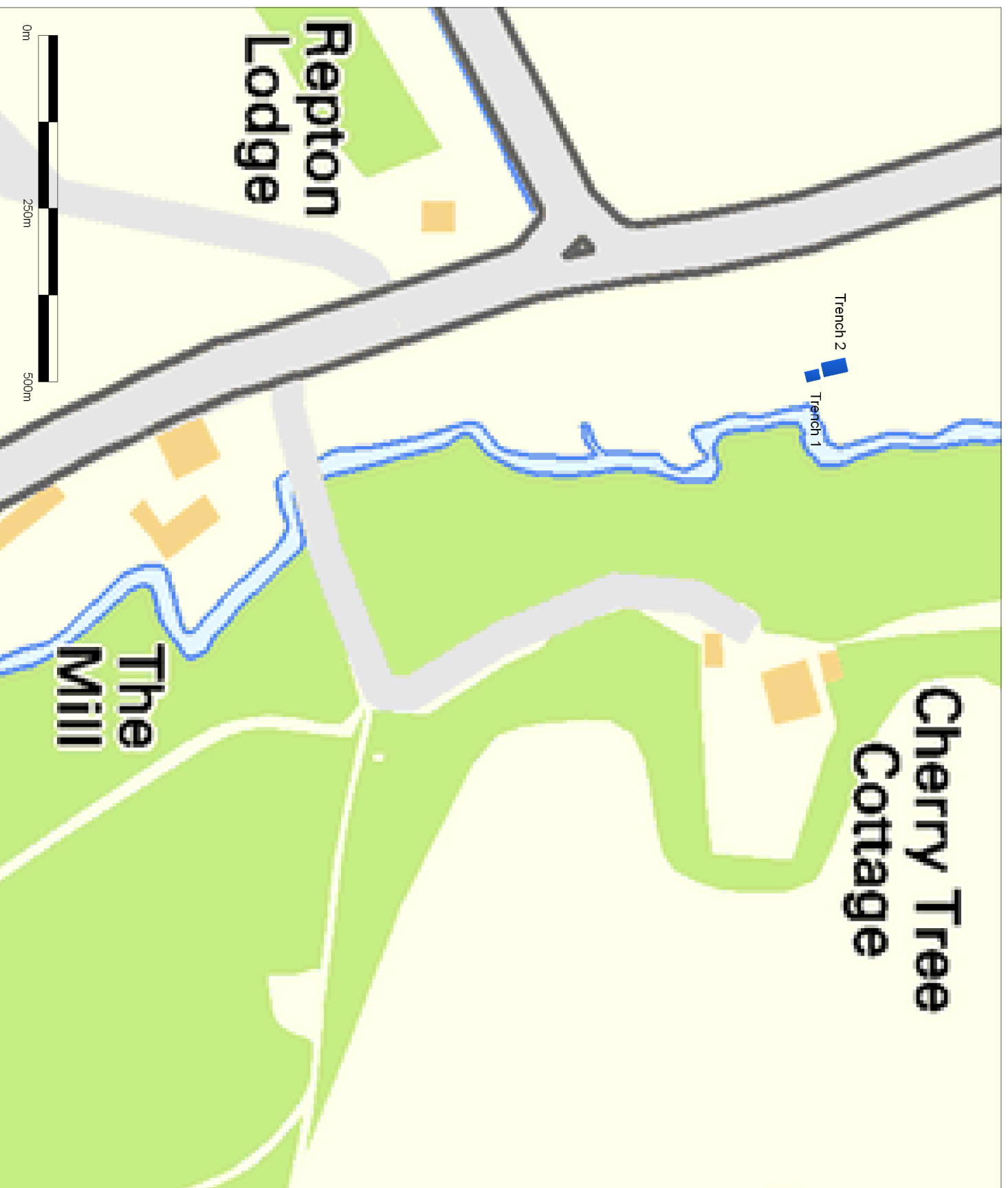


Fig. 1 Site location

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Figure 2: Brebby Mill, Brebby, Derbyshire
Scale: 1:7500



Key:

 Excavated Area



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- 1.1.2. The site is centred at NGR SK30955 23523. A small stream runs to the east of the site which may have originally provided water to the mill but now runs slightly further east, away from the Mill buildings.
- 1.1.3. Two trenches were excavated to the impact depth of the building foundations. As the field slopes towards a small river to the east, the depth of excavation varied to obtain a level surface. The stable building required the excavation of a roughly 20x15m trench to a maximum depth of 0.65m (Trench 1). The parking barn required the removal of topsoil from a 20x35m area (Trench 2); however, further excavation was only required along the western edge to a maximum depth of 0.3m. For a detailed site map see Appendix IV.

1.2. Geology

- 1.2.1 The solid geology of the site consists of Kidderminster Formation sandstone and conglomerate (British Geological Survey 2015).
- 1.2.2 The soil cover for the site consists of made ground and both gleyed and ungleyed clay subsoils. Made ground consists of topsoil mixed with building rubble from the construction of the early 19th century Mill which was spread to level the field surface.

2. METHODOLOGY

- 2.1 The specification required that a watching brief should be carried out to observe any ground works taking place for the proposed development, in order to identify any potential archaeological remains. This involved monitoring the excavation of two foundation trenches, the depth of which varied between 0.05 and 0.65m.
- 2.2 The trenches were excavated by machine, using a 1.2m wide toothless ditching bucket under continuous archaeological supervision. The machine removed the topsoil (101) and subsequent subsoils to reach the level required for the building foundations. This level was determined by the contractors using a total station.
- 2.3 A single context recording system was employed. Each layer encountered was given a unique context number and a full written description (a Harris matrix is shown in Appendix I and a full context register is shown in Appendix II). Digital colour photographs were taken in order to record the ground work. A photographic register can be found in Appendix III.

3. RESULTS

3.1 Topsoil

- 3.1.1 The topsoil (101) covered the whole of both trenches and varied between 0.2m and 0.3m in depth. It consisted of a medium brown silty loam with inclusions of small rounded stones. Fragments of pottery, ceramic building material and glass were recovered from the topsoil. The topsoil in Trench 2 contained occasional tarmac fragments, suggesting the recent spreading of rubble over the field surface.
- 3.1.2 The pottery represents utilitarian wares (black glazed earthenware and stoneware) and refined wares (white earthenware plate fragments) used for storage, preparation and consumption of food and drink. Four fragments of white earthenware plate were recovered as well as two fragments of mocha ware, two fragments of stoneware bottle, and one fragment of black glazed earthenware. These mass-produced wares are in no way unusual and parallels can be found on most sites in the region yielding 19th-20th century material.
- 3.1.3 Topsoil was removed over the entirety of Trench 1 (the stable building). In Trench 2 only a small 5x11m portion of the trench required excavation to reach the building foundation level. Topsoil was removed in this area, exposing the surface of the underlying clays.

3.2 Subsoil

Trench 1

- 3.2.1 The main subsoil (102) extended over the eastern portion of Trench 1 directly beneath the topsoil. The maximum depth from the surface was 0.45m. Context 102 consisted of a reddish-brown clay with patches of sand and smooth stone intrusions.
- 3.2.2 A gleyed pale blue clay subsoil (103) was present in the western portion of the trench (Fig. 2). This context corresponded to a lower area of the field surface, resulting in the wetter soil conditions and the gleying of the clay.
- 3.2.3 A grey sand subsoil (104) was observed only in the deeper south-western corner of the excavation at a depth of 0.45m (Fig.3).



Figure 2. Soil profile showing topsoil (101) and gleyed clay subsoil (103), flecked with yellow inclusion. Trench 1. Scale 0.5m.



Figure 3. Soil profile showing grey sand subsoil (104) at the base of the section. Curved lines through the section are marks from the machine bucket. Scale 1m.

Trench 2

3.2.4 The topsoil was removed in a 5x11m area in the north-east corner of the trench (Figure 4). The surface of the underlying clay subsoil (102) was exposed. No archaeological features were observed.



Figure 4. Area of Trench 2 where the topsoil was stripped, revealing the surface of the clay subsoil (102).



Figure 5. Soil profile of Trench 2 in the north-eastern corner, showing the maximum depth of excavation.
Scale 0.5m.

4. FINDS REPORT

Robin Holgate MCIFA

4.1 A total of 26 finds were recovered from the topsoil.

Pottery

4.2 A total of 21 fragments of pottery were recovered, including five fragments of yellow-glazed earthenware as well as eight fragments of white earthenware plate, five fragments of mocha ware, two fragments of stoneware bottle and one fragment of black-glazed earthenware, all of 19th-20th centuries date.

Ceramic Building Material

4.3 A fragment of roof tile and two drainage pipe fragments were recovered, both of 19th-20th centuries date.

Glass

4.4 Two glass bottle fragments, one clear and the other dark green in colour, of 19th-20th centuries date were recovered.

4.5 All the finds recovered represent mass-produced items that are in no way unusual and parallels can be found on most sites in the region yielding 19th-20th centuries material.

5. DISCUSSION AND CONCLUSION

5.1 There were no archaeological features, deposits or buried land surfaces located within the trenches. Fragments of 19th-early 20th centuries pottery, ceramic building material and glass were recovered from the topsoil (101). The finds from the topsoil are probably related to the spreading of rubble from the construction and use of the Mill to level the fields.

6. PUBLICITY, CONFIDENTIALITY AND COPYRIGHT

6.1 Any publicity will be handled by the client.

6.2 Archaeological Research Services Ltd will retain the copyright of all documentary and photographic material under the Copyright, Designs and Patent Act (1988).

7. ARCHIVING AND PUBLICATION

7.1 Digital and paper copies of the report have been submitted to the Derbyshire Historic Environment Record (HER).

7.2 A copy of the report will be uploaded as part of the OASIS record.

8. STATEMENT OF INDEMNITY

8.1 All statements and opinions contained within this report arising from the works undertaken are offered in good faith and compiled according to professional standards. No responsibility can be accepted by the author/s of the report for any errors of fact or opinion resulting from data supplied by any third party, or

for loss or other consequence arising from decisions or actions made upon the basis of facts or opinions expressed in any such report(s), howsoever such facts and opinions may have been derived.

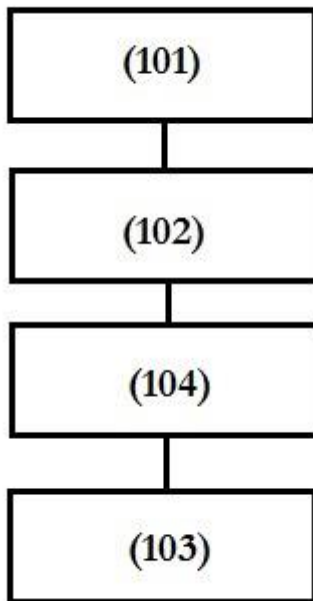
9. ACKNOWLEDGEMENTS

- 9.1 Archaeological Research Services Ltd would like to thank all those involved in this project, in particular Zoe Gillbe for commissioning the archaeological watching brief and her kind assistance in providing access to the site; and Steve Baker, the Derbyshire Development Council Archaeologist, for his assistance and advice.

10. REFERENCES

British Geological Survey 2015. Geology of Britain Viewer. Available online at: <http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html?src=topNav> [Accessed 7th May 2015].

APPENDIX I: HARRIS MATRICES



APPENDIX II: CONTEXT REGISTER

Context No.	Trench	Description
101	1 and 2	Dark brown topsoil with smooth pebble inclusions
102	1 and 2	Reddish-brown clay subsoil with patches of sand and smooth pebble intrusions
103	1	Light blue gleyed clay subsoil specked with yellow.
104	1	Mid-grey sand, no inclusions.

APPENDIX III: Photograph Register

Shot No.	Direction	Scale	Context No.	Description	Photo By	Date
1	S	-	-	General shot of site	EM	16/3/15
2	E	-	-	General shot of site	EM	16/3/15
3	E	-	-	General shot of site	EM	16/3/15
4	S	-	-	River east of site	EM	16/3/15
5	E	1m	(101)	Trench 1 Pre-excavation	EM	16/3/15
6	E	0.5m	(101) (102)	Trench 1 Soil profile W facing section, SE corner	EM	16/3/15
7	E	0.5m	(101) (102)	Trench 1 Soil profile W facing section, SE corner	EM	16/3/15
8	E	0.5m	(101) (102)	Trench 1 Soil profile W facing section, NE corner	EM	16/3/15
9	E	0.5m	(101) (102)	Trench 1 Soil profile W facing section, NE corner	EM	16/3/15
10	SW	1m	(102)	Trench 1 Land drain	EM	16/3/15
11	S	1m	(101)(102) (104)	Trench 1 Soil profile N facing section	EM	16/3/15
12	W	0.5m	(101) (103)	Trench 1 Soil profile E facing section, NW corner	EM	16/3/15
13	W	0.5m	(101) (103)	Trench 1 Soil profile E facing section, NW corner	EM	16/3/15
14	S	1m	(101)(102) (104)(103)	Trench 1 Soil profile N facing section, SW corner	EM	16/3/15
15	S	1m	(101)(102) (104)(103)	Trench 1 Soil profile N facing section, SW corner	EM	16/3/15
16	SE	-	-	River east of site with bridge adjacent to mill	EM	16/3/15
17	NE	-	(101)	Trench 2 Pre-excavation	EM	7/5/15
18	NE	-	(101)	Trench 2 Pre-excavation	EM	7/5/15
19	E	-	-	Trench 1 Foundation installed	EM	7/5/15
20	E	-	-	Trench 1 Foundation installed	EM	7/5/15
21	N	-	-	Looking from stable foundation towards trench 2	EM	7/5/15
22	N	-	(101)	Trench 2 Pre-excavation	EM	7/5/15
23	-	-	(101)(102)	Working shot, removal of topsoil	EM	7/5/15
24	-	-	(101)(102)	Working shot, removal of topsoil	EM	7/5/15
25	W	0.5m	(101)(102)	Trench 2 Soil profile, E facing section	EM	7/5/15
26	W	0.5m	(101)(102)	Trench 2 Soil profile, E facing section	EM	7/5/15
27	NW	-	(101)(102)	Trench 2 Post-excavation	EM	7/5/15
28	N	-	(101)(102)	Trench 2 Post-excavation	EM	7/5/15

APPENDIX IV: Written Scheme of Investigation

Bretby Mill, Repton Road, Bretby, Derbyshire

**Written Scheme of Investigation for an Archaeological
Watching Brief**



1 Introduction

1.1 This scheme of works relates to the erection of an all weather horse exercise area and stables with associated storage and a parking barn on land at Repton Road, Bretby, Derby (Figure 1). The site is centred at SK30955 23523.

1.2 Planning permission (9/2013/0528) has been granted for the works on condition that a Written Scheme of Investigation for archaeological monitoring of ground works is submitted to and approved in writing by the Derbyshire Development Control Archaeologist (condition no. 4 of the planning consent).

1.3 This Written Scheme of Investigation details the programme of work to be undertaken during an archaeological watching brief at the site.

1.4 The objective of the watching brief is to ensure that any heritage assets encountered during the works in the specified area are recorded and understood.

2 Background

2.1 Bretby Mill is a Grade II Listed building (NHLE 82817). It is a watermill dating to the early 19th Century and lies to the south of the area to be developed. Earthworks, possibly relating to a leat or millstream, associated with the Mill have been identified in the area of the proposed development.

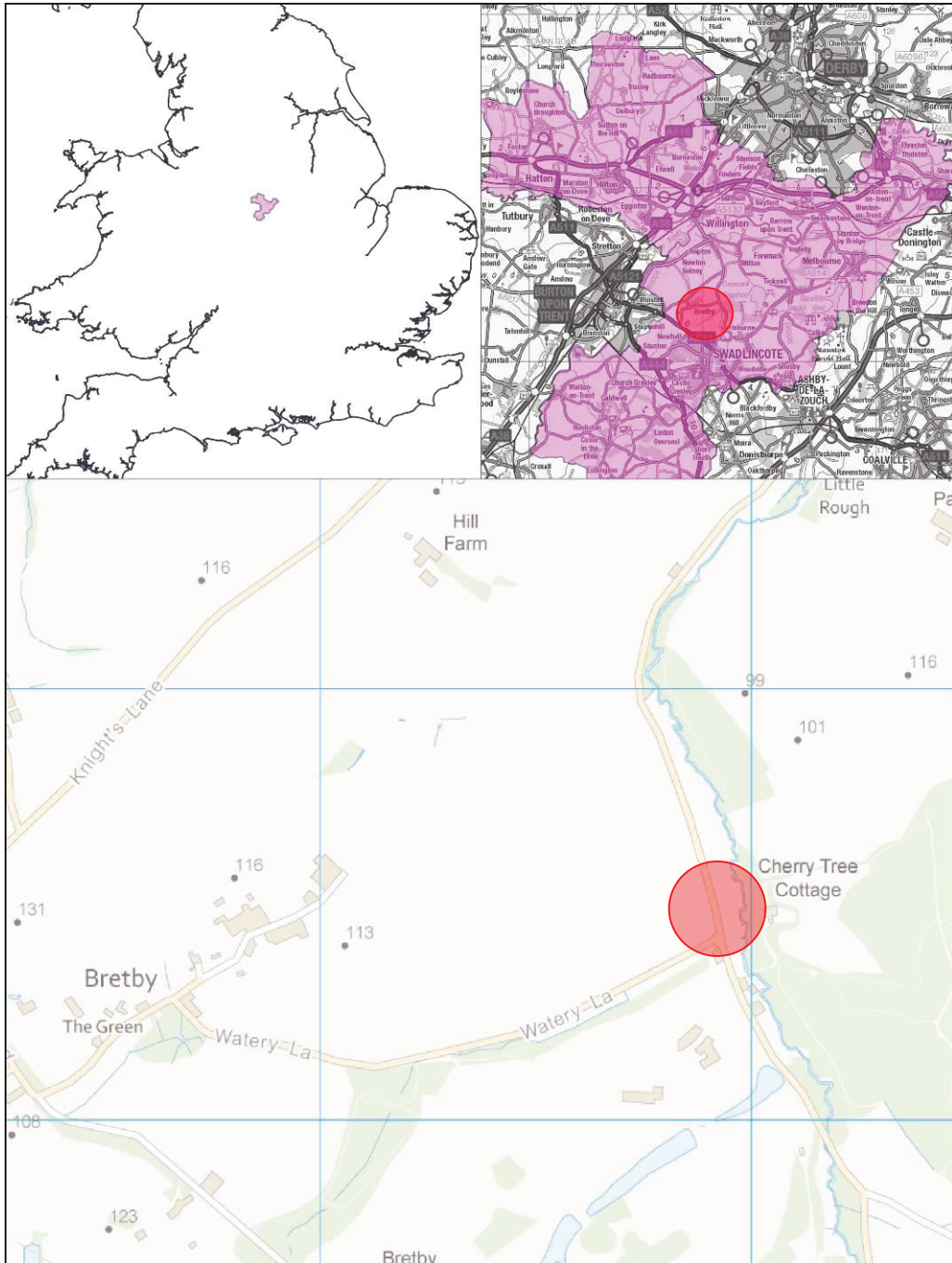


Figure 1. Location of site (highlighted in red)
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3 Objectives

3.1 The objective of the watching brief is to ensure that any archaeological features encountered during the ground works in the specified area are recorded and interpreted.

4 Fieldwork methodology

4.1 Watching brief

4.1.1 All relevant ground works will be undertaken by a suitable mechanical excavator fitted with a toothless ditching bucket or by hand once any overlying concrete and stone has been removed. Archaeological monitoring will not entail excavation beyond the total areas exposed by the development works. Arrangement will be made to avoid any tracking of machinery across recently stripped areas until the areas have been checked and cleared by a representative of Archaeological Research Services Ltd (ARS Ltd). If significant archaeological features are identified, the Derbyshire Development Control Archaeologist, will be notified and a decision taken as to the best method of proceeding.

4.1.2 ARS Ltd will provide a suitably qualified archaeologist at all times during any ground works on the site to undertake a watching brief. The on-site archaeologist will be given the opportunity to stop site work in order to investigate potential archaeological features and adequate time will be allowed for recording any such features.

4.1.3 A written, drawn and photographic record will be maintained during the watching brief plus all significant archaeological remains will be recorded and/or retrieved. All excavations will be recorded in accordance with normal principles of archaeological evaluation upon pro forma context sheets. All significant architectural features will be photographed (with scale) *in situ* and their location recorded on a plan of the site.

4.1.4 Where archaeological features and/or deposits are identified during the watching brief, then a sufficient quantity of the said features will be investigated by hand to allow their date, nature and degree of survival to be ascribed. All features thus investigated will be recorded in plan and section and significant archaeological finds recovered will be retained for analysis. Any archaeological features identified will be photographed and drawn in plan at a scale of 1:20 and in section at a scale of 1:10. The stratigraphy, where relevant and apparent, will be recorded.

4.1.5 For brick structures, the record will include details of brick dimensions and type (handmade/machine-made, plain/frogged), mortar (colour, composition, hardness) and the extent of structures (number of courses, thickness in skins).

4.1.6 A plan of the excavated areas will be maintained, features noted and section lines recorded. All drawings will be carried out at an appropriate scale and all contexts will be recorded using a single context recording system. The site archive will include plans and sections at an appropriate scale, a scale photographic record, and full stratigraphic records on recording forms/context sheets or their electronic equivalent. Should archaeological features be present then the locations and height AOD of the features will be accurately fixed, surveying in either the planning baselines or the features themselves.

4.1.7 The watching brief will be undertaken in accordance with the Institute for Archaeologists *Standards and Guidelines for Archaeological Watching Briefs* (2008) and *Code of Conduct* (2012). The records will follow standard conventions set by the Museum of London Archaeological Services (MoLAS) (2002).

4.1.8 In the unlikely event that human remains are discovered, they will initially be left *in-situ* and, if removal is deemed necessary, this will be undertaken in accordance with the relevant Ministry of Justice regulations.

4.1.9 ARS Ltd will ensure that heavy plant or machinery will not be operated in the immediate vicinity of archaeological remains until the remains have been recorded. Contractors and plant operators will be notified that any observations of archaeological remains must be reported immediately to the archaeologist on site.

4.1.10 A risk assessment will be undertaken before commencement of the work and health and safety regulations will be adhered to at all times.

4.1.11 Should archaeological remains be encountered for which the resources allocated to the watching brief itself are not sufficient to support treatment to a satisfactory and proper standard, then work on site shall cease and the Derbyshire Development Control Archaeologist shall be notified immediately. Site works will not re-commence until resources are in place to secure preservation *in situ* or adequate archaeological treatment of the relevant remains.

5 Artefact and ecofact collection and recording

5.1 Artefact collection policy will be concerned with the provision of adequate samples for meeting the objectives of the work. All finds of medieval and earlier date will be collected as a matter of course. Discarded artefactual materials will be described and quantified through assignment to broad categories in the field. Analysis of finds will be undertaken, as necessary, by suitably qualified specialists. Retained finds will be cleaned, marked, catalogued and packed in materials, as appropriate, for long term storage (see Archive Deposition below).

5.2 Unstratified finds will only be collected where they contribute significantly to the project objectives or are of particular intrinsic interest. Finds of 'treasure' will be reported to the Coroner in accordance with the Treasure Act (1996).

5.3 Collection and policies for structural remains and industrial residues have been set out by the Society of Museum Archaeologists (SMA, 1993). The presence of such materials within a context will be recorded even where comprehensive retention is not considered appropriate.

5.4 The representative from ARS Ltd will inspect and monitor the upcast spoil from the site investigations.

5.5 If significant waterlogged deposits are found, which are judged to be of palaeoenvironmental significance in relation to archaeological deposits, contingency will be set aside to allow for retrieval and assessment of such samples.

6 Monitoring arrangements

6.1 At least two weeks prior notice of the commencement of the works will be given to the Derbyshire Development Control Archaeologist.

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Derbyshire County Council
Shand House
Dale Road South
Matlock
Derbyshire
DE4 3RY
Tel: 01629 539773

6.2 ARS Ltd will liaise with the Derbyshire Development Control Archaeologist at regular intervals throughout the course of the work.

7 Report

7.1 Within two months of the completion of the watching brief, ARS Ltd will produce a report which will include:

- Non-technical summary
- Introductory statement
- Aims and purpose of the project
- Methodology
- A location plan showing all excavated areas and any archaeological features with respect to nearby fixed structures and roads
- Illustrations of all archaeological features with appropriately scaled hachured plans and sections.
- An objective summary statement of results
- Conclusions
- Recommendations for the retention or discard of archive material
- Supporting data – tabulated or in appendices
- Index to archive and details of archive location
- References
- Statement of intent regarding publication
- Confirmation of archive transfer arrangements
- A copy of the approved scheme of works (WSI)
- A copy of the OASIS form.

7.2 One bound copy of the final report with a digital copy of the report in PDF/A format on disk will be deposited with the Derbyshire Historic Environment Record (HER). A copy of the report should be uploaded as part of the OASIS record (see 8.4 below).

7.3 If the watching brief reveals no archaeologically-significant finds or features/stratigraphy, then the report to the HER will be the only record required, and therefore needs to include a good selection of photographs.

8 Archive deposition

8.1 Should significant finds or stratigraphy be generated, then an accession number will be requested from the Derby Museum & Art Gallery, and a digital, paper and artefactual archive will be prepared by ARS Ltd, consisting of all primary written documents, plans, sections, photographs and electronic data (in a format to be agreed by Derby Museum). The archive will be deposited in line with *Procedures for the Transfer of Archaeological Archives: Museums in Derbyshire* (2003), and will be deposited within two months of the completion of the report.

8.2 The Derbyshire Development Control Archaeologist and Museum Curator will be notified in writing on completion of the fieldwork with projected dates for the completion of the report and deposition of the archive. The date for deposition of the archive will be confirmed in the report and the Derbyshire Development Control Archaeologist informed in writing on final deposition of the archive.

8.2 All artefacts and associated material will be cleaned, recorded, properly stored and deposited in the archive (see above).

8.3 A full set of annotated, illustrative pictures of the site, excavation, features, layers and selected artefacts will be supplied to the HER and deposited with the archive as digital images on a CD ROM along that will be attached with the report.

8.4 At the start of work (immediately before fieldwork commences) an OASIS online record <http://ads.ahds.ac.uk/project/oasis/> will be initiated and key fields completed on Details, Location and Creators forms. All parts of the OASIS online form will be completed for submission to the HER. This will include an uploaded .pdf version of the entire report (a paper copy will also be included within the archive).

9 Changes to Methodology or Work Programme

9.1 Changes to the approved methodology or programme of works will only be made with prior written approval of the Derbyshire Development Control Archaeologist.

10 Publication

10.1 If significant archaeological remains are recorded, a summary of the project with, if appropriate, selected drawings, illustrations and photographs, will be submitted within 2 years of the completion of the project to Derbyshire Archaeological Journal for publication.

11 References

Derby Museum & Art Gallery. 2003. *Procedures for the Transfer of Archaeological Archives: Museums in Derbyshire*. Derby Museum & Art Gallery.

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OASIS DATA COLLECTION FORM: England

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OASIS ID: archaeol5-206687

Project details

Project name	Bretby Mill Stable, Derbyshire
Short description of the project	Watching brief, evaluating archaeological material uncovered during the excavation of a foundation for a stable. The excavation took place on the grounds of a Grade II listed mill.
Project dates	Start: 16-03-2015 End: 16-03-2015
Previous/future work	No / Yes
Type of project	Recording project
Site status	Listed Building
Current Land use	Other 14 - Recreational usage
Monument type	CORN MILL Post Medieval
Significant Finds	POT Post Medieval
Investigation type	"Watching Brief"
Prompt	Planning condition

Project location

Country	England
Site location	DERBYSHIRE SOUTH DERBYSHIRE BRETBY Bretby Mill, Repton Road
Postcode	DE15 0RG
Study area	0 Square metres
Site coordinates	SK 30955 23523 52.8080361721 -1.54073355983 52 48 28 N 001 32 26 W Point

Project creators

Name of Organisation	Archaeological Research Services Ltd
Project brief originator	Archaeological Research Services Ltd

Project design originator	Archaeological Research Services Ltd
Project director/manager	Robin Holgate
Project supervisor	Elise McLellan
Type of sponsor/funding body	Landowner

Project archives

Physical Archive Exists?	No
Digital Archive recipient	Derbyshire HER
Digital Contents	"none"
Digital Media available	"Images raster / digital photography", "Text"
Paper Archive recipient	Derbyshire HER
Paper Contents	"none"
Paper Media available	"Context sheet", "Report"
Entered by	Elise McLellan (eamclellan@gmail.com)
Entered on	19 March 2015

OASIS:

Please e-mail [English Heritage](#) for OASIS help and advice

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