



Land Adjacent to Crotia Mill, David Whitby Way, Basford East, Cheshire

Archaeological Evaluation Report

November 2022

Client: Taylor Wimpey North West

Issue No: V. 2

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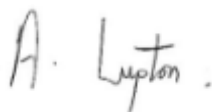
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Land Adjacent to Crotia Mill, David Whitby Way, Basford East, Cheshire

Archaeological Evaluation Report

Written by Charlotte Howsam

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Summary

Oxford Archaeology (OA) North were commissioned by Taylor Wimpey North West, to carry out an archaeological trial trench evaluation in advance of a residential development on land adjacent to Crotia Mill, David Whitby Way, Basford East, Cheshire (NGR: SJ 72319 52844), in October 2022.

In total, three trenches were investigated in the south of the wider development area, targeted upon features associated with Crotia Mill, as suggested by late nineteenth-century Ordnance Survey maps. Of these, one trench was found to contain archaeological remains comprising two poorly preserved timbers, most probably representing the remains of a wooden sluice/gate associated with the mill. A small assemblage of finds, in conjunction with the historic mapping, indicate a late post-medieval date for this feature.

No evidence of other mill-related structures, such as a weir or mill pond retaining wall, were encountered in the trenches. Significant peat deposits, however, were revealed underlying the topsoil in the west of the trenching area, although these were homogenous and undated. No residual finds associated with the earlier phases of the mill were recovered.

The limited evaluation results provide little insight into the location and character of water-powered mills.

Acknowledgements

Oxford Archaeology (OA) North would like to thank Emily Mercer of Lanpro Services and Taylor Wimpey North West for commissioning this project. Thanks are also extended to Kirsty Lloyd, Development Management Archaeologist for Cheshire Archaeological Planning Advisory Service (APAS) who monitored the work on behalf of Cheshire East Council.

The project was managed for OA North by Paul Dunn. The fieldwork was directed by Aidan Park, who was supported by Matthew Hargreaves and Alicia Senelle. Survey was carried out by Aidan Parker and the illustrations were produced by Mark Tidmarsh.

1 INTRODUCTION

1.1 Scope of work

- 1.1.1 Oxford Archaeology (OA) North was commissioned by Lanpro Services, on behalf of Taylor Wimpey North West, to carry out an archaeological trial trench evaluation in advance of a residential development on land adjacent to Crotia Mill, David Whitby Way, Basford East, Cheshire (NGR: SJ 72319 52844; Fig 1)
- 1.1.2 The work was undertaken as a condition of Planning Permission (planning ref. 15/1537N and 19/0704N). A specification was set by Cheshire Archaeological Planning Advisory Service (APAS), as advisors to the Local Planning Authority, Cheshire East Council (CEC), and a written scheme of investigation (WSI) was produced detailing the Local Authority's requirements for work necessary to discharge the planning condition (Lanpro Services Ltd 2021). OA North was subsequently commissioned to undertake the necessary fieldwork, which was completed in three days, 3rd to 5th October 2022. This document outlined how the specified requirements were to be implemented.
- 1.1.3 All work was undertaken in accordance with appropriate Chartered Institute for Archaeologist (CIfA) guidance documents (CIfA 2020a; 2020b; and 2022; Historic England 2015) and local and national planning policies (National Planning Policy Framework 2021).

1.2 Location, topography and geology

- 1.2.1 The site lies in the civil parish of Basford East, immediately south of Crewe, in the unitary authority of Cheshire East and the county of Cheshire (centred on SJ 72319 52844; Fig 1). The area of proposed development consists of agricultural land, with the trial trenches positioned in the south area of the site (Fig 2). To the east of the trial trenching area is Mill Lane and to the west is Basford Brook. Shavington Bypass (A500) lies to the south, with agricultural fields comprising the remainder of the development site to the north.
- 1.2.2 The area of trial trenching sits on the east side of a shallow north/south-aligned valley formed by the Basford Brook floodplain. The topography of the area slopes down from the east (around Trenches 1 and 2) at approximately 54m above Ordnance Datum (aOD) and flattens out in the west (around Trench 3) at approximately 51m aOD.
- 1.2.3 The geology of the area is mapped as mudstone of the Sidmouth Mudstone Formation, a sedimentary bedrock formed during the Triassic period (BGS 2022). Overlying superficial deposits are recorded as alluvial deposits of clay, silt, sand and gravel in the west of the trial trenching area alongside Basford Brook, while diamicton Devensian Till is recorded in the east (*ibid*). The soils of the site are recorded as freely draining, slightly acid and sand (Cranfield 2022).

1.3 Archaeological and historical background

- 1.3.1 The following archaeological and historical background of the site has been drawn from the desk-based assessment (DBA) submitted as part of the outline planning application (CgMs 2015) and an archaeological assessment of Crotia Mill Farm (Haigh 2019).

- 1.3.2 Limited evidence of prehistoric activity has been recorded within the vicinity of the site and largely comprises isolated finds of prehistoric worked flint. This includes a residual worked flint recovered during a watching brief undertaken in 2006 during the diversion of a gas pipeline directly east of the site (ARS 2006).
- 1.3.3 Few Roman remains have been recorded in proximity of the site, suggesting that much of the area comprised agricultural hinterland surrounding dispersed farmsteads and other rural sites.
- 1.3.4 Crotia Mill Farm is believed to have originated as a medieval water mill, having been possibly mentioned in the fourteenth century as le moleyn de schawe or Mill of Shaw. Cartographic sources first record the presence of a mill on Burdett's map of 1777, although it is not named until the Delves Broughton 1815 Estate map as 'Crowfall/Crowshall'. Bryant's map of 1831 shows it as 'Cowshall Mill'.
- 1.3.5 During the medieval period, the mill was located within a rural agricultural landscape with small, dispersed settlements and farmsteads. The settlement of Basford, to the south-west, was recorded in the Domesday Survey (1086). The current Basford House is understood to be in the vicinity of a moated predecessor called the 'Hall of Shaw', the name suggesting an association with the contemporary Mill of Shaw.
- 1.3.6 The present-day mill buildings are of eighteenth- and nineteenth-century date and operated as a flour mill until the end of the nineteenth century and then a corn mill until the mid-twentieth century. The farm is likely to be on the site of the earlier medieval mill. During 1914, outlying portions of the Doddington Estate were being disposed of, including Crotia Mill Farm. Sale particulars from 1914 describe it as a compact dairy farm and corn mill (driven by water-power) comprising 76 acres. It included a house and outbuildings comprising a new range of piggeries, saddle room, trap house, shippon, stable etc.
- 1.3.7 The archaeological assessment of Crotia Mill Farm (Haigh 2019) provides evidence of a tall square chimney at the south-east corner of the mill building on an undated early photograph. This suggests that the water-power at the mill was replaced, possibly in the twentieth century, although the chimney is not shown on any Ordnance Survey (OS) maps and the mill pond had been infilled by the 1954 OS map, although the mill race was still extant.
- 1.3.8 Although the post-medieval mill pond, dam and tailrace, which is recorded as running for c 2km to the east of Basford Brook, are now infilled, they are evident as earthworks to the west of Mill Lane. Archaeological evaluation and monitoring works carried out in 2014, directly east of the current trial trenching area, established the location of the tailrace of Crotia Mill and revealed that it did not feature any stone structures but was a simple hand-cut diversion of Basford Brook (ARS 2015). No artefactual evidence was recovered from the tailrace (*ibid*). Other features encountered during these works included probable drainage gullies/ditches and former agricultural field boundaries (*ibid*).

2 AIMS AND METHODOLOGY

2.1 Aims

2.1.1 The overall aim of the archaeological evaluation, as stated in the WSI (Lanpro Services Ltd 2021) was to obtain sufficient information to establish the presence/absence, character, extent, state of preservation and date of any archaeological deposits within the area of the proposed development.

2.1.2 The project objectives were as follows:

- To determine the location, extent, date, character, condition and significance of any archaeological remains within the portion of the development site outlined for evaluation;
- To excavate and record identified archaeological features and deposits to a level appropriate to their extent and significance;
- To assess vulnerability/sensitivity of any exposed remains;
- To assess the impact of previous land use on the site;
- To assess the potential for survival of environmental evidence;
- To inform a strategy to avoid or mitigate impacts of the proposed development on surviving archaeological remains;
- To undertake sufficient post-excavation assessment to confidently interpret identified archaeological features; and
- To report the results of the evaluation and place them in their local, regional or national context and to make this record available.

2.1.3 The evaluation was conducted within the general research parameters and objectives defined by *The Archaeology of North West England: An Archaeological Research Framework for the North West* (Brennand 2006), recently revised and updated (Research Frameworks 2022). In particular, the evaluation aimed to address the following research objective:

- LM47: How can detailed archaeological investigation define the location and character of water-powered mills?

2.2 Methodology

2.2.1 The full methodology is outlined in the WSI (*Appendix A*) and was adhered to in full, and, as such, was fully compliant with prevailing guidelines and established industry best practice (ClfA 2020a; 2020b; 2022; Historic England 2015). A programme of field observation accurately recorded the character of the deposits within the evaluation.

2.2.2 The three trial trenches were located by a real-time kinematic (RTK) Global Navigation Satellite System (GNSS), accurate to 0.02-0.03m, based upon the proposed trench locations as depicted in the WSI. Following marking the trenches out, they were scanned for underground services by a trained and experienced operator utilising a Cable Avoidance Tool (CAT) and Signal Generator (Genny). No services were identified in the trenches and they were excavated in their intended locations, by an 8-tonne mechanical 360° tracked excavator, fitted with a toothless ditching bucket, under constant supervision by a trained and experienced archaeologist. Spoil was stored

adjacent to, but at a safe distance from, the trench edges. Subsequent cleaning and investigation of all archaeological deposits was undertaken manually, using either hoes, shovel scraping, and/or trowels depending on the subsoil conditions. All features of archaeological interest were investigated.

- 2.2.3 All information identified during the evaluation was recorded stratigraphically, using a system adapted from that used by the former Centre of Archaeology of English Heritage, with an accompanying pictorial record (plans, sections and digital photographs). Primary records were available for inspection at all times.
- 2.2.4 Results of all field investigations were recorded on *pro forma* context sheets. The site archive includes both photographic images and accurate large-scale plans and sections at appropriate scales (1:50; 1:20; and 1:10).
- 2.2.5 A full professional archive has been compiled in accordance with the WSI, and in accordance with current ClfA (2020b) and Historic England (2015) guidelines. The archive will be deposited with the Archaeology Data Service (ADS), due to the lack of artefacts and a suitable repository in Cheshire East, in due course. An online access to index of archaeological investigation (OASIS) form will also be uploaded, along with a copy of this report.

3 RESULTS

3.1 Introduction and presentation of results

3.1.1 The results of the evaluation are presented below and include a stratigraphic description of the three trenches. The full details of all trenches with dimensions and depths of all deposits can be found in *Appendix B*.

3.2 General soils and ground conditions

3.2.1 The soil sequence in Trenches 1 and 2, both located in the eastern half of the trenching area, was fairly uniform. The natural geology of mid orangish brown sand was overlain by a topsoil of dark brownish grey silt, c 0.32–0.35m thick. Trench 3, situated further to the west, revealed a sequence of two peat layers underlying the topsoil. The natural geology was not encountered in Trench 3.

3.2.2 Ground conditions throughout the evaluation were generally good, and the site remained dry throughout, although Trench 3 did rapidly fill with ground water. Archaeological features, where present, were easy to identify against the underlying natural geology.

3.3 General distribution of archaeological deposits

3.3.1 Archaeological remains were present in one of the three excavated trial trenches (Fig 2). A single feature comprised the poorly preserved remnants of a probable wooden sluice. The remaining two trenches were entirely devoid of archaeological remains.

3.4 Trench 1

3.4.1 Trench 1, aligned north/south, was located in the north of the area and was targeted upon the west side of the mill pond to investigate any related sluice features. A single archaeological feature was revealed within the trench, underlying the topsoil **100** and cutting into natural geology **101** (Plate 1).



Plate 1: Trench 1, looking south (1m and 2m scales)

3.4.2 Located at the south-end of the trench was a linear construction cut **102**, which extended across the width of the trench on an east/west-alignment, continuing beyond the trench limits. It was 1.5m wide, 0.32m deep and contained the remnants of probable timber sluice **103**, as suggested by historic OS mapping (Fig 3). The timber sluice comprised two poorly preserved timbers, c 5m x 0.40–0.44m x 0.16m, creating a channel (Plate 2). The timbers appear to have been packed with/set within a mid-purplish red clay fill (**104**).



Plate 2: Remnants of wooden sluice structure **103**, looking south (2m scale)

3.5 Trench 2

3.5.1 Located in the south-east of the trenching area and aligned east/west, Trench 2 was positioned to investigate the east side of the mill pond. Excavation revealed topsoil **200** overlying natural geology **201**. No archaeological features were identified, and no residual finds were recovered from the overburden.



Plate 3: Trench 2, looking east (1m and 2m scales)

3.6 Trench 3

3.6.1 Trench 3 was located in the west of the trenching area and positioned on an east/west-alignment, targeting the weir associated with the mill. Directly underlying topsoil **300** was a 0.95m-thick layer of peat (**301**). Below this was a further peat deposit (**302**) that contained a great quantity of wood inclusions. This deposit was in excess of 2m thick, at which point the water table was reached (Plate 4). The natural geology was not exposed, nor any archaeological features or finds encountered.



Plate 4: Trench 3, looking west (2m scale)

3.7 Finds and environmental remains summary

- 3.7.1 No finds were collected during the evaluation. A few fragments of late post-medieval/modern roof tile, glazed pottery and iron nails were observed in topsoil **100** in Trench 1, although these were not retained.
- 3.7.2 An environmental bulk soil sample was collected from the peat deposits in Trench 3, although it was agreed with Cheshire APAS that it would not be processed, due to the peat deposits being homogenous and unlikely to produce any useful material for dating the peat.

4 DISCUSSION

4.1 Reliability of field investigation

- 4.1.1 The trenches were targeted upon areas, as identified by Cheshire APAS, that had greater potential to reveal archaeological remains associated with Crotia Mill, as suggested by historic mapping and surviving earthworks. The ground conditions were generally good throughout the course of the evaluation and the machining was carried out cleanly providing good visibility of features and deposits in the evaluation trenches.
- 4.1.2 The DBA (CgMs 2015) highlighted the moderate/high potential for remains of post-medieval/modern date associated with Crotia Mill. However, the evaluation demonstrated the presence of only limited archaeological remains associated with the mill and related features.

4.2 Evaluation objectives and results

- 4.2.1 The archaeological investigation of the site is considered to have largely achieved its general aims (*Section 2.1*). The evaluation established and recorded the presence and extent of archaeological features and deposits exposed within the three trial trenches. A single feature, comprising the poorly preserved remains of a probable wooden sluice/gate, was recorded in Trench 1; the remaining two trenches were devoid of archaeological features. Although not retained, the few artefacts observed in Trench 1, together with historic mapping, indicate a late post-medieval date for the probable sluice remains. The limited evaluation results provide little insight into the location and character of water-powered mills.

4.3 Interpretation

- 4.3.1 While the site of Crotia Mill Farm is considered to have medieval origins, no remains of medieval date were identified during the evaluation.
- 4.3.2 The poorly preserved wooden timbers revealed in Trench 1 in the north of the trenching area most probably comprised the remnants of a sluice/gate associated with the mill to the north. Together with the few finds observed in Trench 1 and historic mapping, the remains were most probably associated with the later post-medieval phase of the mill rather than any earlier iterations.
- 4.3.3 Late nineteenth-century OS maps suggest the presence of a weir located to the west of the now infilled mill pond, although no structural evidence of a weir was revealed in Trench 3. However, extensive peat deposits were encountered underlying the topsoil, which was in contrast to the stratigraphy revealed in Trenches 1 and 2. Trench 2 was targeted upon the east side of the mill pond of Crotia Mill, but no evidence of a retaining wall or a change in the deposit compositions were encountered within the trench. The negative results of Trenches 2 and 3 are likely due to minimal remains surviving, given the poor survival of the archaeological remains encountered in Trench 1. The 1899 OS map suggests that Trenches 2 and 3 were located just beyond the mill pond edge and weir respectively (Fig 3).

4.4 Significance

- 4.4.1 The evaluation established the presence of limited archaeological remains associated with Crotia Mill. Only two poorly preserved timbers were revealed and most probably represent the remains of a wooden sluice/gate associated with the later post-medieval phase of the mill. No evidence of other mill-related structures, such as a weir or mill pond retaining wall, were encountered in the trenches. No residual finds associated with the earlier phases of the mill were recovered. The limited evaluation results provide little insight into the character of Crotia Mill and water-powered mills more generally.

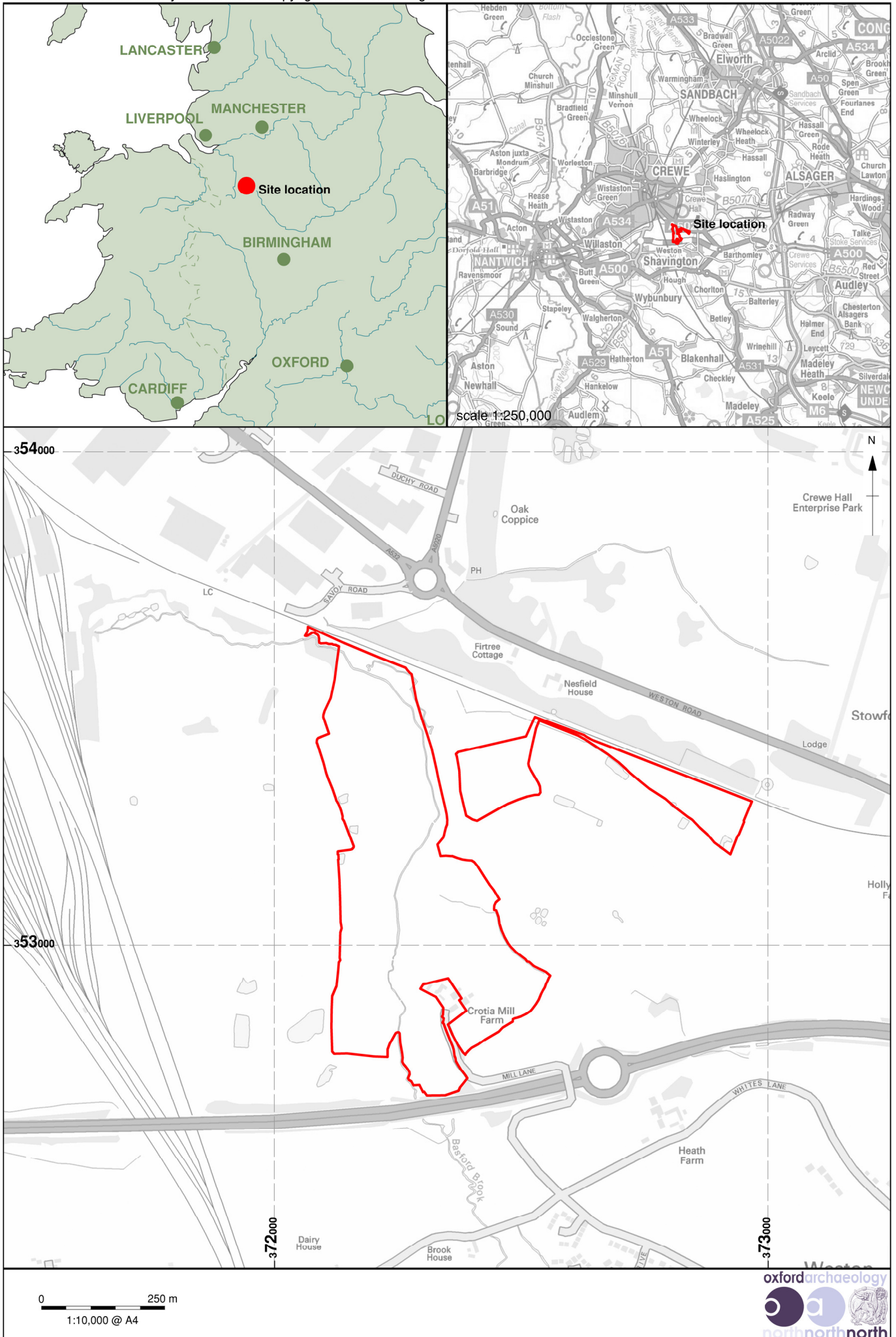


Figure 1: Site location

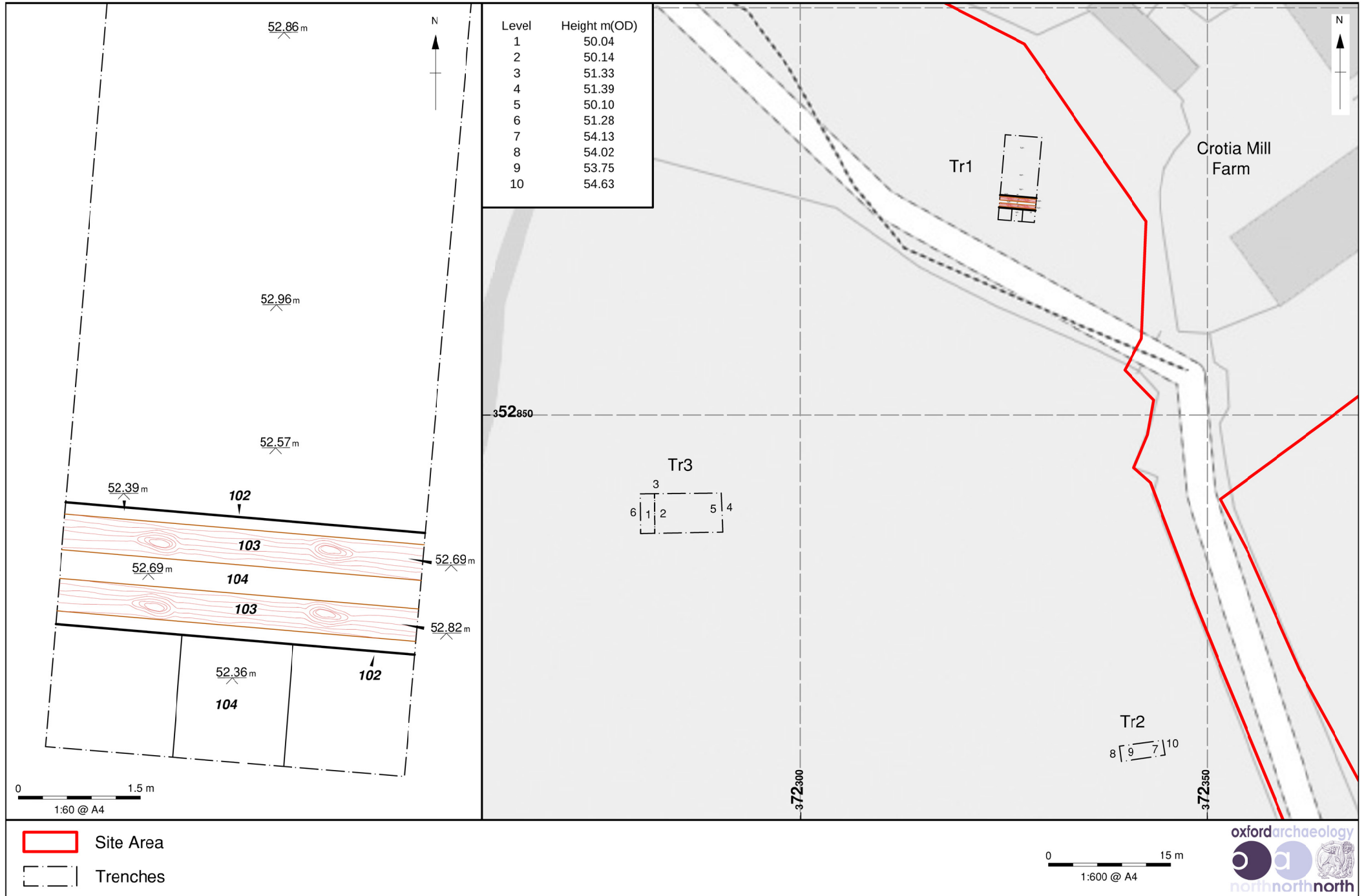
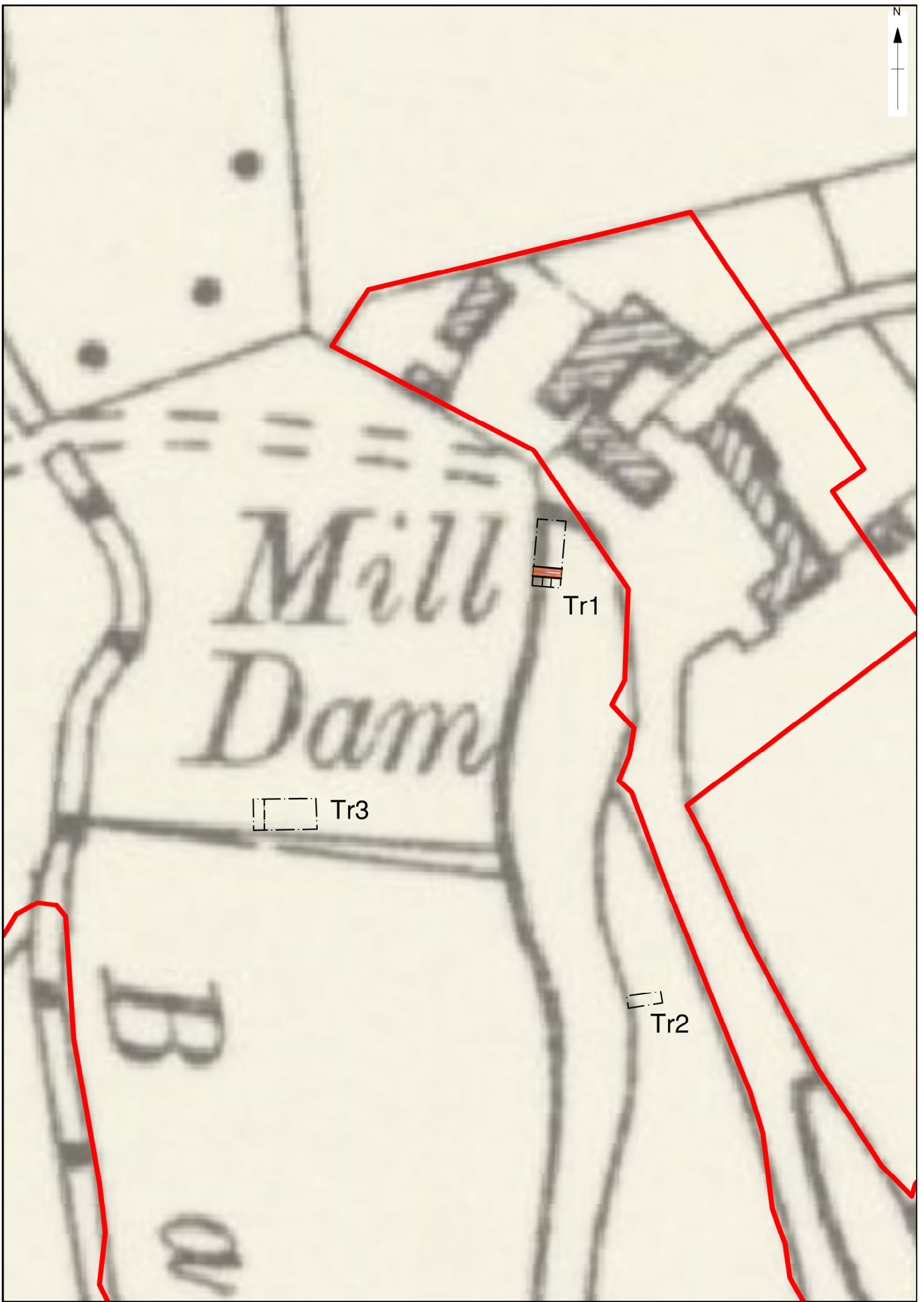
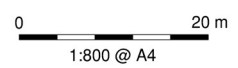


Figure 2: Trench plan



- Site Area
- Trenches



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Figure 3: Trenches superimposed on the Ordnance Survey 6":1 mile map of 1899

APPENDIX A WRITTEN SCHEME OF INVESTIGATION

**WRITTEN SCHEME OF INVESTIGATION FOR
ARCHAEOLOGICAL EVALUATION**

**LAND ADJACENT TO CROTIA MILL
DAVID WHITBY WAY
BASFORD EAST
CHESHIRE**

**PREPARED BY LANPRO SERVICES
ON BEHALF OF
TAYLOR WIMPEY NORTH WEST**

Planning ref: 15/1537N and 19/0704N

May 2021



Planning + Development | Design Studio | Archaeology + Heritage

Project Reference: 2934/01

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Figure 1. Location plan of the proposed development site

Figure 2. Location plan of the trial trenches overlying an aerial view

Figure 3. Location plan of the trial trenches overlying the OS map of 1877

1 INTRODUCTION

- 1.1 This Written Scheme of Investigation (WSI) has been prepared by Lanpro on behalf of Taylor Wimpey North West (the client) and details the methodology for undertaking a scheme of archaeological evaluation adjacent to Crotia Mill on land at David Whitby Way, Basford East, Crewe (Figure 1).
- 1.2 The archaeological evaluation will comprise a programme of trial trenching to establish the presence or absence of buried archaeological remains associated with the mill pond and features associated with Crotia Mill and their nature, date, extent and significance. The results of the evaluation will be used to inform decisions on the need for any further archaeological mitigation investigation and, should this be required, the scope of any additional excavation will be detailed in a further WSI.

2 SITE DESCRIPTION

- 2.1 The proposed scheme of trial trenching is positioned within the south-west area of the proposed development site, targeting the infilled mill pond to the immediate west of Crotia Mill Farm and within agricultural fields (centred at NGR SJ 72319 52844; see Figure 1). To the east of the trial trenching area is Mill Lane and to the west is Basford Brook. Shavington Bypass (A500) lies to the south.
- 2.2 The area of trial trenching sits on the east side of a shallow north/south valley formed by the Basford Brook floodplain. Therefore, the topography slopes down from the east (around Trenches 1 and 2) at approximately 54m AOD and flattens out in the west (around Trench 3) at approximately 51m AOD.
- 2.3 The bedrock geology of the study site comprises mudstone of the Sidmouth Mudstone Formation. This is overlain by Alluvium alongside Basford Brook, with Devensian Till on the east edge of the trial trenching area (bgs.ac.uk).

3 PLANNING BACKGROUND

- 3.1 The proposed development site (Figure 1) was granted outline planning consent in December 2016 (15/1537N) (with all matters reserved) for a mixed-use development comprising residential use (Use Class C3) (up to 325 residential dwellings); employment use (Use Class B1), local centre comprising health centre and community facility (Use Class D1), food/non food retail (Use Class A1), public house/restaurant (Use Class A4/A3) and associated works including construction of a new access road with access from the Crewe Green Link Road South, creation of footpaths and provision of public open space and landscaping. Amendment to the approved application was granted in March 2019 (19/0704N) with a condition relating to a programme of archaeological work (no. 14):

14. *No development shall commence on any phase until a programme of archaeological mitigation for that phase in accordance with a written scheme of investigation has been submitted to and approved in writing by the local planning authority. The development of the phase shall be carried out strictly in accordance with the approved archaeological mitigation and written scheme of investigation unless otherwise agree in writing by the Local Planning Authority.*
- 3.2 A programme of evaluation, comprising three trenches within the south-east area of the proposed development site (Figure 1), has been agreed with the Cheshire Archaeological Planning Advisory Service (CAPAS). The trial trenches will look to examine any evidence associated with the now infilled mill pond and weir, which is recorded on the Cheshire Historic Environment Records (HER 4036/1/2).
- 3.3 This WSI provides a detailed methodology for undertaking the programme of archaeological evaluation work within the proposed development site. This is aimed at identifying, recording and sampling any archaeological features that may be present, and assessing the need for further mitigation excavation if required.

4 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

- 4.1 The following is based on an archaeological desk-based assessment submitted as part of the outline planning application (CgMs March 2015) and an archaeological assessment of Crotia Mill Farm (Haigh 2019).
- 4.2 There are three recorded non-designated archaeological assets within or adjacent to the area of archaeological evaluation. This comprises the medieval Crotia Mill (HER 4036/1/1), and the post-medieval Crotia Mill Pond and Dam (HER 4036/1/2) and Crotia Mill Tail Race (HER 4036/1/4).
- 4.3 Crotia Mill Farm is believed to have originated as a medieval water mill, having been possibly mentioned in the 14th century as *le moleyn de schawe* or Mill of Shaw. Cartographic sources first record the presence of the mill on Burdett's map of 1777, although it is not named until the Delves Broughton 1815 Estate map as 'Crowfall/Crowshall'. Bryant's map of 1831 shows it as 'Cowshall Mill'.
- 4.4 During the medieval period, the mill was located within a rural agricultural landscape with small, dispersed settlements and farmsteads. The settlement of Basford, to the south-west, was recorded in the Domesday Survey (1086). The current Basford House is understood to be in the vicinity of a moated predecessor called the 'Hall of Shaw', the name suggesting an association with the contemporary Mill of Shaw.
- 4.5 The present-day mill buildings are of 18th and 19th century date which operated as a flour mill until the end of the 19th century and then a corn mill until the mid-20th century. The farm is likely to be on the site of the earlier medieval mill. During 1914, outlying portions of the Doddington Estate were being disposed of, including Crotia Mill Farm. Sale particulars from

1914 describe it as a compact dairy farm and corn mill (driven by water power) comprising 76 acres. It included a house and outbuildings comprising new range of piggeries, saddle room, trap house, shippon, stable etc. The mill was described as being “*driven by an 18-inch Turbine Water Wheel*” which was “*fitted for the purposes of the ordinary business dealt with by a country mill*”. It was purchased by the tenant at the time, Mr W Witter, and descended through his family to the present owner.

- 4.6 The archaeological assessment of Croatia Mill Farm (Haigh 2019) provides evidence of a tall square chimney at the south-east corner of the mill building on an undated early photograph. This suggests that the water power at the mill was replaced, possibly in the 20th century, although the chimney is not shown on any OS maps and the mill pond had been infilled by the 1954 OS map, although the mill race was still extant.
- 4.7 The farm complex now comprises an L-shaped farmhouse, to the south of which is a yard enclosed by a two-storey farm building comprising a cowhouse, stables and hayloft to the south. A cart shed sits on the east side and the mill building on the west. The brick mill building, which is of a number of phases, has an infilled arched opening in the south-west corner for the mill race fed from the mill pond, with sluices against the north elevation. Croatia Mill Farm is approached along a tree-lined drive along Mill Lane.
- 4.8 Although the mill pond and dam (HER 4036/1/2) and the tail race (HER 4036/1/4), which is recorded as running for c. 2km to the east of Basford Brook, are now infilled they are evident as earthworks to the west of Mill Lane. Consequently, it is anticipated that features associated with the mill pond and race will survive as below-ground remains.

5 RESEARCH DESIGN

Aims and Objectives

- 5.1 The overall aim of the archaeological evaluation will be to obtain sufficient information to establish the presence/absence, character, extent, state of preservation and date of any archaeological deposits within the area of the proposed development. This will allow reasoned and informed recommendations to be made regarding any requirements for mitigation, the scope of which would be detailed in a subsequent WSI in agreement with CAPAS.
- 5.2 This will be achieved through the following objectives:
- To determine the location, extent, date, character, condition and significance of any archaeological remains within the portion of the development site outlined for evaluation;
 - To excavate and record identified archaeological features and deposits to a level appropriate to their extent and significance;
 - To assess vulnerability/sensitivity of any exposed remains;

- To assess the impact of previous land use on the site;
- To assess the potential for survival of environmental evidence;
- To inform a strategy to avoid or mitigate impacts of the proposed development on surviving archaeological remains;
- To undertake sufficient post-excavation assessment to confidently interpret identified archaeological features;
- To report the results of the evaluation and place them in their local, regional or national context and to make this record available.

Research Framework

5.3 The programme of archaeological work is aimed at investigating the medieval and post-medieval features associated with the powering of the mill, including the mill pond and dam, weir and mill race.

5.4 The evaluation findings have the potential to contribute to research priorities originally identified in the regional research framework *The Archaeology of North West England - An Archaeological Research Framework for the North West* (Brennand 2006), and recently revised and updated (NWRRF, <https://researchframeworks.org/nwrf/>). In particular, the results may contribute to:

LM47: How can detailed archaeological investigation define the location and character of water powered mills?

5.5 The investigation will also take account of the national research programmes outlined in English Heritage's *Strategic Framework for Historic Environment Activities and Programmes in English Heritage* (SHAPE) first published in 2008.

6 STANDARDS AND GUIDANCE

6.1 All work will be undertaken to fully meet the requirements of all nationally recognised guidance for such work, including standards laid down by the former English Heritage (now Historic England) and the Chartered Institute for Archaeologists (CIfA).

6.2 The programme of archaeological evaluation will be managed in line with the standards laid down in the Historic England guideline publication *Management of Research Projects in the Historic Environment (MoRPHE): Project Managers Guide* (2015a), as well as to meet the requirements of the National Planning Policy Framework (NPPF; Chapter 16: 'Conserving and enhancing the historic environment'; revised 2019). All excavation will be undertaken using recording standards detailed in the *Archaeological Field Manual* (MOLAS 1994).

6.3 Guidance of particular relevance to the programme of works are:

- *Standard and guidance for archaeological field evaluation* (CIfA 2014a);

- *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives* (CIfA 2014b);
- *Management of Research Projects in the Historic Environment: PPN3: Archaeological Excavation* (English Heritage 2008).

7 METHODOLOGY

7.1 The programme of archaeological evaluation will comprise:

- trial trenching;
- report production.

Project initialisation

7.2 The appropriate museum will be contacted by the appointed archaeological contractor to arrange for the project archive to be created and deposited in accordance with their deposition and archiving standards.

7.3 Before fieldwork commences an OASIS online record will be initiated and key fields completed on Details, Location and Creator forms.

Trial Trenching

7.4 The configuration of the trial trenches has been agreed with CAPAS and comprises:

Trench 1 – 10m x 5m, targeting the west side of the mill pond and any associated sluice features;

Trench 2 – 5m x 2m, targeting the east side of the mill pond to investigate the potential for a retaining wall;

Trench 3 – 10m x 5m, targeting the associated weir.

7.5 Topsoil across the trenches will be stripped using a mechanical excavator fitted with a 2m wide toothless grading bucket, down to the first archaeological horizon or natural sub-soil.

7.6 Spoil from mechanical excavation will be scanned by eye and by metal detector to aid the recovery of artefacts, and topsoil and subsoil will be stored separately.

7.7 All excavation by mechanical excavator will be undertaken under direct archaeological supervision, by a suitably experienced and qualified archaeologist, with one archaeologist responsible for monitoring each excavator. Mechanical excavation will cease at either undisturbed natural deposits or when archaeological deposits are identified.

7.8 All archaeological features and deposits revealed will be cleaned and excavated in an archaeologically controlled and stratigraphic manner, in order to establish their extent, form, date, function and relationship to other features.

7.9 All structures, deposits and finds will be recorded according to accepted professional

- standards. Individual descriptions of all archaeological strata and features exposed or excavated will be entered onto prepared pro-forma recording sheets. Sample recording sheets, sample registers, finds recording sheets, access catalogues, and photo record cards will also be used.
- 7.10 Any excavation, by machine or by hand, will be undertaken with a view to avoiding damage to any archaeological features or deposits which appear to be demonstrably worthy of preservation in situ.
- 7.11 There will be a presumption of the need to cause the minimum disturbance to the site consistent with adequate evaluation. Significant archaeological features (e.g. solid or bonded structural remains, building slots or postholes), will be preserved intact even if fills are sampled. For linear features, minimum 1m wide slots should be excavated across their width. For discrete features, such as pits, 50% of their fills will be sampled.
- 7.12 Metal detector searches will take place at all stages of the evaluation. Metal detecting of trench locations will be carried out before trenches are excavated, with trench bases and spoil scanned once trenches have been opened. Any metal finds will be located using survey-grade GPS and metal detectors will not be set to discriminate against iron. Metal detecting will also be conducted over the surface of all exposed features before the end of each working day as a countermeasure to 'nighthawking'.
- 7.13 Should the excavation of the trenches reach 1m in depth (or limit of safe working depth) without natural geology being encountered, a machine dug sondage will be excavated in order to establish the depth of natural geology. Where depth of excavation is required to be greater than 1m, suitable stepping will be employed.
- 7.14 All identified finds and artefacts will be collected and retained, bagged and labelled according to their context. Finds of significant interest will be given a 'small finds' number, and information on their location in three dimensions will be entered on a separate pro-forma sheet. No finds will be discarded without assessment by an appropriate finds specialist.
- 7.15 A full written, drawn and photographic record will be made of all features revealed during the course of the archaeological evaluation. The location and extent of archaeological features will be recorded by GPS. Plans will be completed at a scale of 1:20 (as appropriate), with section drawings at a scale of 1:10. All plans will be tied in with the Ordnance Survey National Grid with levels given to above OD.
- 7.16 A photographic record of the project will be maintained. This will illustrate the detail and context of the principal features and finds discovered. The photographic record will also include working shots to illustrate more generally the progress of the programme of archaeological works. All photography will follow the Historic England guidance for digital image capture (HE 2015b). All images will have accompanying metadata specifying; photo ID, capture device, converting software, colour space, bit depth, resolution, date of capture,

photographer, caption, and any alterations made to the image.

- 7.17 Following excavation and recording of any archaeological remains, the evaluation trenches will be backfilled with the previously excavated spoil.

Palaeoenvironmental sampling strategy

- 7.18 Soil samples will be taken from all suitable features or deposits for palaeoenvironmental sampling. This will comprise the removal of a bulk sample from every securely sealed and hand-excavated context, excepting those with excessive levels of residuality or those with minimal 'soil' content (such as building rubble).
- 7.19 Bulk samples will comprise representative 40 litre samples. Where a context does not yield 40 litres of material, smaller samples will be taken (generally the maximum amount of material practicable to collect). Bulk samples will be used to recover a sub-sample of charred macroplant material, faunal remains and artefacts where necessary, as well as any industrial residues.
- 7.20 If buried soils or other deposits are encountered, column samples may be taken for micromorphological and pollen analysis. Environmental material will be stored in a controlled environment and specialists consulted during the course of the work if necessary.
- 7.21 The post-excavation processing of all palaeoenvironmental samples will be undertaken in line with the requirements of the former English Heritage's (now Historic England) *Environmental Archaeology: A guide to the theory and practice of methods from sampling and recovery to post-excavation* (2011).

Human remains

- 7.22 The discovery of human remains is not anticipated during the evaluation fieldwork. However, should these be encountered then the archaeological contractor must contact the Ministry of Justice for an appropriate licence and CAPAS will be informed. The contractor will comply with all statutory consents and licences under the Disused Burial Grounds (Amendment) Act, 1981 or other Burial Acts regarding the exhumation and interment of human remains.
- 7.23 If human remains are encountered, they will be cleaned with minimal disturbance, prior to recording and removal, following receipt of the required Ministry of Justice licence. Investigation and excavation of human remains will be undertaken by, or under supervision of, suitably experienced specialist staff and in accordance with former Institute of Field Archaeologists (IFA) guidelines *Excavation and Post-excavation Treatment of Cremated and Inhumed Human Remains* (McKinley and Roberts 1993) and the *Updated Guidelines to the standards for recording human remains* (Mitchell and Brickley 2017). Assessment of excavated human remains will be undertaken in line with English Heritage guidelines *Human Bones from archaeological sites: Guidelines for the production of assessment documents and analytical reports* (English Heritage 2004). The archaeological contractor will comply with all reasonable requests of interested parties as to the method of removal, re-interment or disposal of the

remains or associated items. Every effort will be made, at all times, not to cause offence to any interested parties.

- 7.24 If required a qualified and experienced osteoarchaeologist will undertake site visits to discuss the recording and assist in the removal of any human skeletal remains.

Scientific dating

- 7.25 Provision will be made to recover material suitable for radiocarbon, archaeomagnetic, dendrochronological and other scientific dating. Where material suitable for dating is recovered, sufficient dating will be undertaken to meet the aims of the evaluation.

Other finds

- 7.26 Finds will be exposed, lifted, cleaned, conserved, marked, bagged and stored in accordance with the guidelines set out in United Kingdom Institute for Conservation's Conservation Guidelines No. 2 (1990) and the ClfA guidelines *Standard and Guidance for the collection, documentation, conservation and research of archaeological materials* (2014b).
- 7.27 If required, conservation will be undertaken by approved conservators in line with the *First Aid for Finds* guidelines (Watkinson and Neal 1998). Significant iron objects, a selection of non-ferrous artefacts (including all coins), and a sample of any industrial debris relating to metallurgy should be X-radiographed before assessment.
- 7.28 Any finds of gold and silver will be moved to a safe place. Where removal cannot be undertaken immediately, suitable security measures will be taken to protect the artefacts from theft or damage. All finds of gold and silver, and associated objects, will be reported to the coroner according to the procedures relating to the Treasure Act 1996 (and the act's amendment of 2003).

Unexpectedly significant or complex discoveries

- 7.29 Should unexpectedly extensive, complex or significant remains be uncovered that warrant, in the professional judgment of the archaeologist on site, more detailed recording than is appropriate within the terms of the WSI, the scope of the WSI will be reviewed.
- 7.30 In the event of a review of the WSI being required, Lanpro will contact the client and CAPAS with the relevant information to enable them to resolve the matter. This is likely to require an on-site meeting between the relevant stakeholders to review the archaeological remains on-site and identify a way forward. Any variations to this WSI will be put in writing and agreed by the relevant stakeholders including CAPAS and the client.

Plant and equipment

- 7.31 The appointed archaeological contractor will be responsible for the provision of all required welfare and plant, together with the provision of necessary health and safety equipment for the fieldwork operators during the trial trenching.

8 POST-FIELDWORK

- 8.1 Upon completion of the evaluation fieldwork, the artefacts, soil samples and stratigraphic information will be assessed for their potential and significance for further analysis if required and the relevant parties notified accordingly. A report on the fieldwork will be produced within 4-6 weeks following completion.

Finds

- 8.2 Finds will be cleaned, conserved, marked, bagged and stored in accordance with the guidelines set out in United Kingdom Institute for *Conservation's Conservation Guidelines No. 2* (1990) and the ClfA guidelines *Standard and Guidance for the collection, documentation, conservation and research of archaeological materials* (2014b).
- 8.3 In accordance with appropriate procedures, significant iron objects, a selection of non-ferrous artefacts (including all coins), and a sample of any industrial debris relating to metallurgy will be X-radiographed before issue of the final report.
- 8.4 All material will be packed and stored in optimum conditions, as described in *First Aid for Finds* (Watkinson and Neal 1998). Any waterlogged organic materials will be dealt with in line with the English Heritage guidance documents, *Waterlogged Organic Artefacts. Guidelines on their Recovery, Analysis and Conservation* (2018) and *Waterlogged Wood. Guidelines on the recording, sampling, conservation and curation of waterlogged wood* (2010).
- 8.5 The preservation state, density and significance of material retrieved will be assessed, following the English Heritage guidelines *Environmental Archaeology: A guide to the theory and practice of methods from sampling and recovery to post-excavation* (2011).
- 8.6 Any finds for dating will be submitted to specialists promptly, so as to ensure that results are available to aid development of a project design for the analysis stage, if required.

Environmental Sample Processing

- 8.7 The processing of any palaeoenvironmental samples will be undertaken in line with the requirements of the English Heritage publications *Archaeological Science at PPG16 Interventions: Best Practice Guidance for Curators and Commissioning Archaeologists* (2006b) and *Environmental Archaeology: A guide to the theory and practice of methods from sampling and recovery to post-excavation* (2011).
- 8.8 The samples will be processed, and ecofacts collected and assessed with regard to the potential for detailed analysis of pollen, charred plant macrofossils, land molluscs, faunal remains (including small mammals and fish) and soil micromorphology. Samples suitable for radiocarbon, or other dating methods, will also be identified. The environmental assessment will be reported within the overall post-excavation assessment report for all phases of investigation and include proposals for full analysis if required. Unprocessed sub-samples will be stored in conditions specified by the appropriate specialists. Samples for dating will be

submitted to specialists promptly, so as to ensure that results are available to aid development of the project design for any further analysis stage if required.

Conservation

8.9 If required, conservation will be undertaken by approved conservators in line with the *First Aid for Finds* guidelines (Watkinson and Neal 1998). Material considered vulnerable will be selected for stabilisation after specialist recording. Where intervention is necessary, consideration must be given to possible investigative procedures (e.g. glass composition studies, residues in or on pottery, and mineral-preserved organic material).

Report

8.10 As a minimum the evaluation report shall contain the following information:

- A title page, with the name of the project, the name of the author(s) of the report, the title of the report and date of the report;
- A non-technical summary of the scope, methodology and results of the work;
- Introduction which includes site code/project number, dates when the fieldwork took place and grid reference;
- Description of the topography and geology of the site;
- Description of the archaeological background to the site;
- Description of the aims, methodology and extent of fieldwork completed;
- Factual assessments of stratigraphic, artefactual and environmental evidence;
- An assessment of the archaeological potential of the stratigraphic, artefactual and environmental records;
- Proposed programme for further analysis and reporting if required, including the identification of specialists;
- Conclusions;
- Plans and sections to include site and trench location plans displaying NGR co-ordinates;
- List of plans and sections;
- Details of archive location and destination (with the museum accession number), together with a catalogue of what is contained in that archive;
- Copy of the OASIS entry form and any entry updates;
- Appendices as appropriate; and
- References and bibliography of all sources used.

8.11 A draft copy of the evaluation report will be provided to CAPAS in PDF format for comment.

- 8.12 Following approval, copies of the final reports will be produced and submitted to the Cheshire HER in a PDF/A format.

9 ARCHIVING

- 9.1 The appointed archaeological contractor will contact the appropriate museum in advance of commencing any fieldwork to determine the preparation, and deposition of the archive and finds, and obtain an accession number for all archaeological works. The landowner will be encouraged to transfer ownership of the finds to the museum.
- 9.2 Adequate resources will be provided during fieldwork to ensure that all records are checked and internally consistent.
- 9.3 The archive will contain all the data collected during the archaeological works, including all digital and paper records, finds and environmental samples. The archive will be prepared in accordance with the ClfA guidelines detailed in *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives* (ClfA, 2014b). The preparation of the archive will also be informed by the *Guidelines for the preparation of Excavation Archives for long-term storage* (United Kingdom Institute for Conservation, 1990), *Standards in the museum care of archaeological collections* (Museums and Galleries Commission 1994), and in accordance with the museum's archive deposition guidelines.
- 9.4 Digital copies of the assessment report and associated data will be submitted to the Cheshire HER, together with OASIS and ADS to allow the results of the work to be accessible online to the wider archaeological community and general public.

10 TIMETABLE

- 10.1 The fieldwork is anticipated to be undertaken in the summer of 2021 and should take no more than one week on site to complete and 4-6 weeks for the report to be issued.
- 10.2 CAPAS will monitor implementation of the programme of archaeological works on behalf of Cheshire East Borough Council and evaluate the work being undertaken on site against the methodology detailed in this WSI and will be afforded the opportunity to inspect the site and all records of the appointed archaeological contractor at any stage of the work.

11 STAFFING

- 11.1 Emily Mercer (Principal Heritage Consultant, Lanpro) will be in overall charge of the management of the project on behalf of Taylor Wimpey (North West).
- 11.2 Once appointed the archaeological sub-contractor can provide CVs to relevant interested parties.

12 INSURANCE

- 12.1 The archaeological contractor will produce evidence of Public Liability Insurance to the minimum value of £5m and Professional Indemnity Insurance to the minimum of £5m.

13 HEALTH AND SAFETY

- 13.1 The management of all health and safety for the archaeological staff on site during the trial trenching will be the responsibility of the appointed archaeological contractor. All works will be undertaken by the contractor in compliance with the Health and Safety at Work Act (1974) and all applicable regulations and Codes of Practice.
- 13.2 All archaeological staff will undertake their operations in accordance with safe working practices and will be CSCS certified. At least one First Aider will be present on site at all times. A site-specific risk assessment will be produced by the appointed archaeological contractor, prior to the commencement of work on site, which will be subject to regular review.
- 13.3 Suitable Personal Protective Equipment (PPE) and welfare facilities will be provided by the appointed archaeological contractor, including hi-visibility coats/vests, hard hats, safety boots and gloves, as well as safety glasses if required.
- 13.4 All staff will receive a health and safety induction prior to starting work on site to be provided by the appointed archaeological contractor.
- 13.5 Regular audits of health and safety practices will be carried out during the course of the project by Lanpro and the appointed archaeological contractor in consultation with the site workforce. Toolbox talks on health and safety issues will be conducted at minimum weekly intervals and/or after changes in working practices or identification of new threats/risks. The risk assessment will be reviewed and updated as necessary. Control measures will be implemented as required in response to specific hazards.
- 13.6 Safe working will take priority over the desire to record archaeological features or remains, and where it is considered that recording is dangerous, any such features will be recorded by photography at a safe distance.
- 13.7 All areas of excavation will be scanned with a Cable Avoidance Tool (CAT) prior to ground works commencing. Necessary measures will be taken to avoid disturbing any services. There is an overhead high voltage line running through the area of the trial trenching, between Trenches 1 and 3 which needs to be considered in the use of plant during the fieldwork. A BT overhead also runs to the east side of Trench 1.
- 13.8 Plant operators will be required to produce evidence of qualification within an industry accepted registration scheme. Sub-Contractors health and safety performance will be kept under review and action taken if necessary. All spoil will be stored and managed safely in line with the standards of the *Construction Code of Practice for Sustainable Use of Soils on Construction Sites* (DEFRA 2009).

- 13.9 Site welfare accommodation and car parking should be located within the site and the location of these facilities will be agreed between the archaeological contractor, Lanpro and the client in advance of the commencement of work.

14 COPYRIGHT AND PUBLICITY

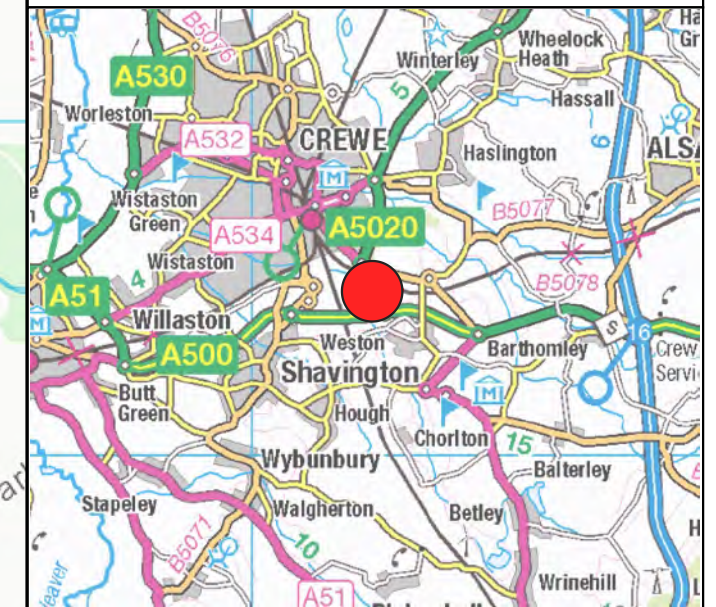
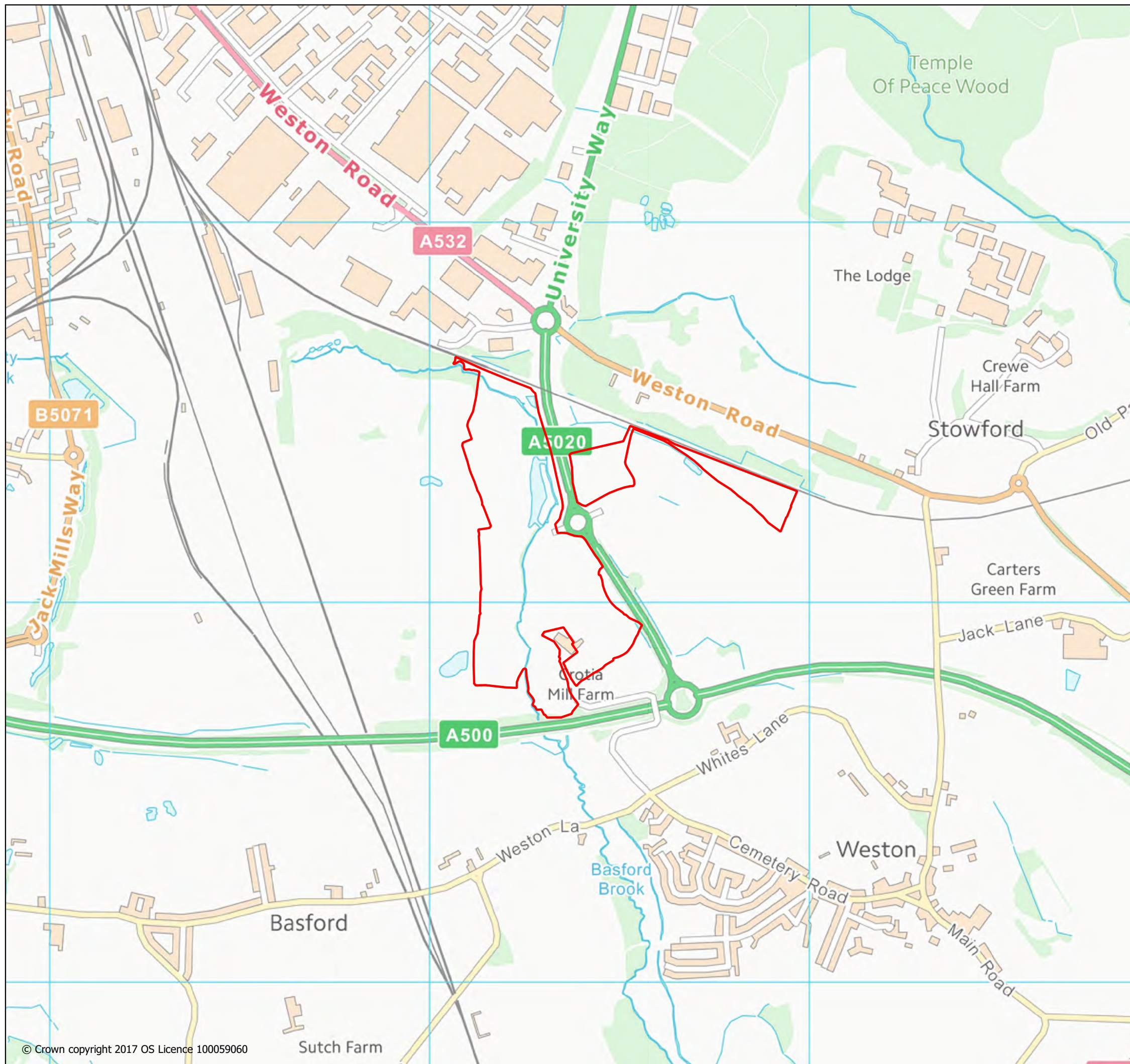
- 14.1 Copyright of the documentation prepared by the archaeological contractor and specialist sub-contractors should be the subject of additional licences in favour of the client and the Cheshire HER to use such documentation for their statutory and educational functions, and to provide copies to third parties as required.
- 14.2 Under the Environmental Information Regulations (EIR 2004), information submitted to the HER becomes publicly accessible, except where disclosure might lead to environmental damage, and reports cannot be embargoed as 'confidential' or 'commercially sensitive'.
- 14.3 It is recognised that the project may identify remains which are of interest to the public and these may be publicised through appropriate media. Any publicity for the project proposed by the appointed archaeological contractor should be approved by the client in advance.
- 14.4 The appointed archaeological contractor will not issue any information on the work through media, internet or social media without prior agreement of the client. Care will be taken to ensure that any publicity does not compromise the security of archaeological remains that may have been identified or recovered. Any approaches by the press to the archaeological contractor should be referred to the client in the first instance.


15 BIBLIOGRAPHY

- BGS, 2020, *British Geological Survey website*, www.bgs.ac.uk/data/mapViewers/home.html (last accessed 20th May 2021)
- Brennand, M. ed., 2006, *The Archaeology of North West England: an archaeological research framework for the north-west region. Volume 1: resource assessment*.
- CgMs, 2015, Land at East Basford, Crewe, Cheshire
- CIfA, 2014a, *Standard and guidance for archaeological field evaluation*
- CIfA, 2014b, *Standard and guidance for the collection, documentation, conservation and research of archaeological materials*
- English Heritage, 2004, *Human Bones from Archaeological Sites: Guidelines for Producing Assessment Documents and Analytical Reports*
- English Heritage, 2011, *Environmental Archaeology: A guide to the theory and practice of methods from sampling and recovery to post-excavation*
- Historic England, 2015a, *Management of Research Projects in the Historic Environment. The MoRPHE Project Managers' Guide*
- Historic England, 2015b, *Digital Image Capture and File Storage. Guidelines for Best Practice*

- Historic England, 2018, *Waterlogged Organic Artefacts: Guidelines on their Recovery, Analysis and Conservation*
- Mitchell, P.D. and Brickley, M., 2017, *Updated Guidelines to the Standards for Recording Human Remains*, Chartered Institute for Archaeologists
- MOLAS, 1994, *Archaeological Field Manual*
- MPRG, 2001, *Minimum Standards for the Processing, Recording, Analysis and Publication of Post Roman Ceramics*, Medieval Pottery Research Group Occasional Paper 2
- Museums and Galleries Commission, 1994, *Standards in the museum care of archaeological collections*
- North West Regional Research Framework (NWRRF), <https://researchframeworks.org/nwrf/>
- Society of Museum Archaeologists, 1993, *Selection, Retention and Dispersal of Archaeological Collections*
- Stephen Haigh, 2019, *An Archaeological Assessment of Crotia Mill Farm, Mill Lane, Weston, Crewe*
- United Kingdom Institute for Conservation, 1990, *Guidelines for the preparation of Excavation Archives for long-term storage*
- Watkinson, D. And Neal, V., 1998, *First Aid for Finds*

Figures



 Proposed development site

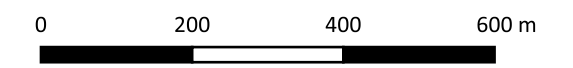
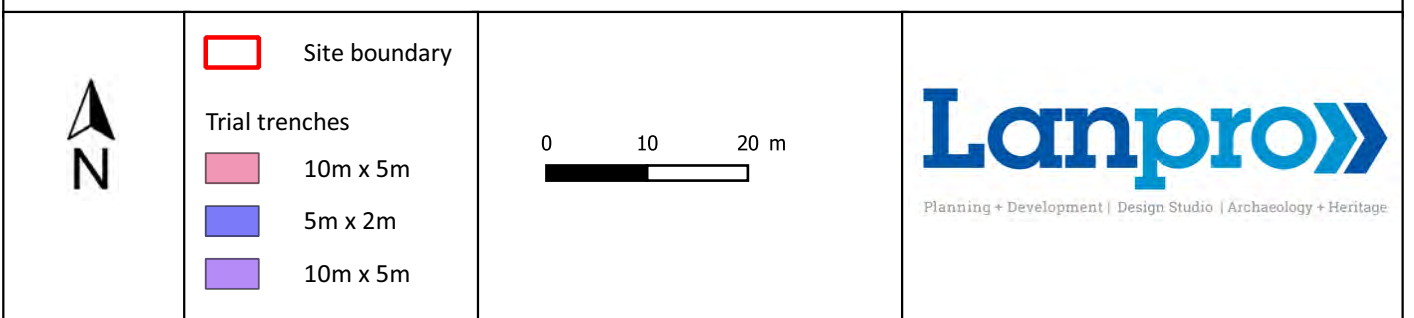


Figure 1. Location plan of the proposed development site



Figure 2. Location plan of the trial trenches overlying an aerial view



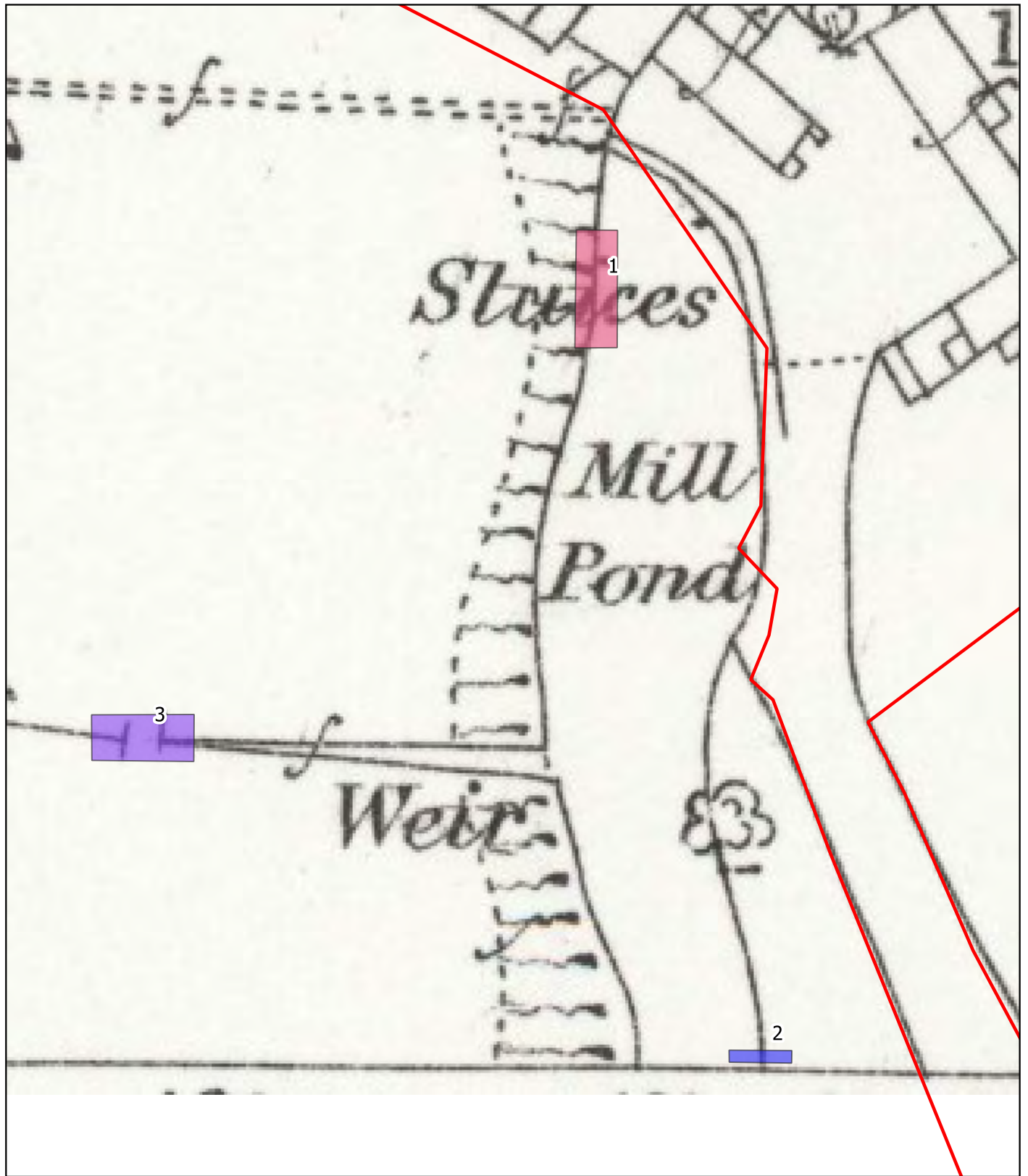
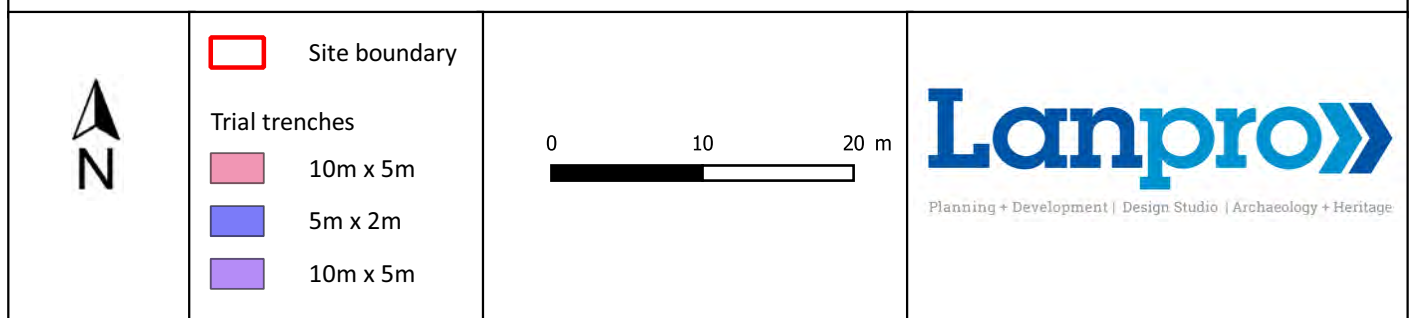


Figure 3. Location plan of the trial trenches overlying the OS map of 1877



Norwich:

Brettingham House
98 Pottergate,
Norwich
Norfolk
NR2 1EQ
01603 631 319

London:

70 Cowcross Street
London
EC1M 6EL
020 3011 0820

Retford:

Retford Enterprise Centre
Randall Way
Retford
DN22 7GR
01777 552 001

York:

Blake House
18 Blake Street
York
Y01 8QG
01904 803 800

Manchester:

Peter House
Oxford Street
Manchester
Greater Manchester
M1 5AN
0161 711 1740



info@lanproservices.co.uk

APPENDIX B TRENCH DESCRIPTIONS AND CONTEXT INVENTORY

Trench 1							
General description					Orientation		N-S
Topsoil overlaid the natural sand layer, first observed at a depth of 0.32m, at the north end of the trench. At the south end a construction cut was found cutting the natural layer. It was filled by wooden beams (possibly part of a sluice gate) and packing clay beneath the beams.					Length (m)		10
					Width (m)		5
					Avg. depth (m)		0.7
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
100	Layer		5	0.32	Topsoil. Dark brownish grey sandy silt.		
101	Layer		5		Natural. Mid orangish brown sand.		
102	Cut		1.5	0.32	Construction Cut. Channel carved into natural for wooden beams of sluice gate and clay packing.		
103	Structure	102	1.5	0.16	Other Structure. Possible sluice gate, part of water mill.		
104	Fill	102	1.5	0.16	Primary Fill. Mid purplish red clay used to pack around timbers/construction cut of the possible sluice gate structure.		
Trench 2							
General description					Orientation		E-W
Topsoil overlaid a sandy natural layer, first observed at 0.30m.					Length (m)		5
					Width (m)		2
					Avg. depth (m)		0.5
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
200	Layer		2	0.35	Topsoil. Dark brownish grey silt.		
201	Layer		2		Natural. Mid orangish brown sand.		

Trench 3							
General description					Orientation		E-W
Topsoil overlaid a peat layer, which sealed a wood peat layer, first observed at a depth of 1.2m.					Length (m)		10
					Width (m)		5
					Avg. depth (m)		1.2
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
300	Layer		5	0.25	Topsoil. Mid brownish grey sandy silt.		
301	Layer		5	0.95	Other Layer. Peat, dark black organic layer.		
302	Layer			2.00	Other Layer. Wood peat, dark black organic layer with large inclusions of wood throughout this layer. Full depth no known.		

APPENDIX C BIBLIOGRAPHY

Archaeological Research Services (ARS), 2006 *a watching brief on a pipeline diversion at Basford Sidings, Crewe*, unpubl rep

ARS, 2015 *An archaeological evaluation and watching brief on the Crewe Green Link Road South, Cheshire East*, unpubl rep

Brennand, M (ed.), 2006 *The archaeology of North West England: an archaeological research framework for the north-west region, volume 1: resource assessment*, Archaeology North West **18**

British Geological Survey (BGS), 2022 *BGS geology viewer*, <https://www.bgs.ac.uk/map-viewers/bgs-geology-viewer/> (accessed 02 November 2022)

CgMs, 2015 *Land at East Basford: archaeological desk-based assessment*, unpubl rep

Chartered Institute for Archaeologists (CIfA), 2020a *Standard and guidance for archaeological field evaluation*, revised edn, Reading

CIfA, 2020b, *Standard and guidance for the creation, preparation, transfer and deposition of archaeological archives*, revised edn, Reading

CIfA, 2022 *Code of Conduct: professional ethics in archaeology*, revised edn, Reading

Cranfield University, 2022 *Soilscapes* [Online] available at: <https://www.landis.org.uk/soilscapes/> (accessed 02 November 2022)

Department for Levelling Up, Housing and Communities, 2021 *National Planning Policy Framework (NPPF)* [Online] available at: <https://www.gov.uk/guidance/national-planning-policy-framework> (accessed 21 November 2022)

Haigh, S, 2019 *An archaeological assessment of Crotia Mill Farm, Mill Lane, Weston Crewe*, unpubl rep

Historic England (HE), 2015 *Management of research projects in the historic environment: the MoRPHE project managers guide*, London

Lanpro Services Ltd, 2021 *Written scheme of investigation for archaeological evaluation: land adjacent to Crotia Mill, David Whitby Way, Basford East, Cheshire*, unpubl rep

Research Frameworks, 2022 *North West Regional Research Framework* [Online] available at: <https://researchframeworks.org/nwrf/introduction/> (accessed 02 November 2022)

APPENDIX D SITE SUMMARY DETAILS

Site name:	David Whitby Way, Basford East, Cheshire
Site code:	DWW22
Grid Reference	SJ 72319 52844
Type:	Evaluation
Date and duration:	October 2022; 3 days
Location of archive:	The archive is currently held at OA, Mill 3, Moor Lane Mills, Moor Lane, Lancaster, LA1 1QD, and will be deposited digitally with the Archaeology Data Service in due course.
Summary of Results:	<p>A total of three trenches were investigated in the south of the wider development area, targeted upon features associated with Croatia Mill, as suggested by late nineteenth-century Ordnance Survey maps. Of these, one trench was found to contain archaeological remains comprising two poorly preserved timbers most probably representing the remains of a wooden sluice/gate associated with the mill. A small assemblage of finds, in conjunction with the historic mapping, indicate a late post-medieval date for this feature.</p> <p>No evidence of other mill-related structures, such as a weir or mill pond retaining wall, were encountered in the trenches. Significant peat deposits, however, were revealed underlying the topsoil in the west of the trenching area. No residual finds associated with the earlier phases of the mill were recovered.</p> <p>The limited evaluation results provide little insight into the location and character of water-powered mills.</p>



**Head Office/Registered Office/
OA South**

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