



# **Crump Weir, Little Bollington, Cheshire**

## **Evaluation Report**

**Oxford Archaeology North**



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## SUMMARY

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In October 2008, Royal Haskoning UK Ltd, acting on behalf of the Environment Agency, commissioned Oxford Archaeology North to carry out a programme of archaeological evaluation on land owned by The National Trust adjacent to Crump Weir on the River Bollin at Little Bollington, Cheshire (centred on SJ 7304 8704). The evaluation was required by The National Trust to establish the presence or absence of any buried remains of archaeological interest prior to the proposed construction of a fish passage.

Crump Weir formed part of the water-management system for Little Bollington Mill, which occupies a site on the west bank of the River Bollin, within the county of Cheshire. Little Bollington Mill lies on the east bank of the River Bollin, in the county of Greater Manchester, and is entered on the Greater Manchester Historic Environment Record (HER No 3726).

The archaeological evaluation comprised the excavation of a single trench, measuring 9.6 long and 1.8m wide. No archaeological deposits or features were encountered in the excavated trench, the simple stratigraphic sequence comprising the natural clay geology, mottled sand subsoil, and topsoil. It is concluded that the construction of the proposed fish passage will not have any impact on any sub-surface archaeological resource of the area between the west bank of the River Bollin and Sutt Brook. In accordance with the agreed project design, however, an archaeological watching brief should be maintained during the construction of the fish passage. This should be targeted on the bank of the River Bollin, and is intended to make an adequate archaeological record of any stonework that lines the river channel.

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## ACKNOWLEDGEMENTS

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Oxford Archaeology North (OA North) would like to thank Jamie Gardiner, of Royal Haskoning UK Ltd, and Joanne Nordovics and Philip Catherall, of the Environment Agency, for commissioning and supporting the project. Thanks are also expressed to Jamie Lund and Carolanne King of The National Trust for their advice and support.

The evaluation was directed by Will Gardner, who also compiled the report. The historical research was carried out by Kathryn Blythe, and Marie Rowland produced the illustrations. The report was edited by Ian Miller, who was also responsible for project management.

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## 1. INTRODUCTION

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### 1.1 CIRCUMSTANCES OF THE PROJECT

- 1.1.1 In November 2008, Oxford Archaeology North (OA North) was requested by J Gardiner, of Royal Haskoning UK Ltd, acting on behalf of The Environment Agency, to carry out an archaeological evaluation of land owned by The National Trust adjacent to Crump Weir on the River Bollin at Little Bollington, Cheshire. The evaluation was required to assess the presence, extent, character, date and significance of any buried archaeological remains within the footprint of a proposed fish passage. The construction of the fish passage will necessitate the excavation of a narrow channel across a short section of the field immediately to the east of the weir, connecting the River Bollin with Sutt Brook.
- 1.1.2 The manor of Little Bollington is mentioned in the Domesday Survey of 1086, whilst documents dated to 1353 refer to a manorial corn mill in the locale (Nevell 1997, 42). The precise location of this mill, however, is uncertain; whilst a brick-built corn mill of a post-medieval date survives immediately to the east of Crump Weir (Plate 1), it is unknown whether this structure was built on the site of an earlier mill. The archaeological evaluation was thus required to establish the presence or absence of any buried remains of the documented medieval mill within the footprint of the proposed fish passage.
- 1.1.3 The evaluation was carried out in November 2008, and conformed to a specification detailed in a project design that was agreed and approved by the Jamie Lund, The National Trust Archaeologist, and the Environment Agency. The fieldwork was coupled with a programme of limited historical research.

### 1.2 SITE LOCATION, TOPOGRAPHY AND GEOLOGY

- 1.2.1 Little Bollington is a village and civil parish in the Borough of Macclesfield. Crump Weir formed part of the water-management system for Little Bollington Mill, which occupies a site on the west bank of the River Bollin, within the county of Cheshire (centred on SJ 7304 8704).
- 1.2.2 In broad terms, Little Bollington is situated within a region classified as the Mersey Valley, a distinctive river-valley landscape focusing on the Mersey, its estuary and associated tributaries. The topography of the region is defined largely by its generally low-lying, low relief topography (Countryside Commission 1998, 141).
- 1.2.3 The solid geology of the area comprises Permo-triassic sandstone, which was formed some 220 million years ago. The surface geology consists principally of a mantle of glacial boulder clay with pockets of sand and gravel (Hains and Horton 1969).



*Plate 1: Aerial view of the study area*

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## 2. METHODOLOGY

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### 2.1 EVALUATION TRENCH

- 2.1.1 A single trench, measuring 9.6m long and 1.8m wide, was excavated across the route of the proposed fish passage (Fig 1). The uppermost level of the trench was excavated by a machine fitted with a toothless ditching bucket, thereafter the excavation of other remains, was undertaken manually.
- 2.1.2 All information was recorded stratigraphically with accompanying documentation (plans, sections and both colour slide and black and white print photographs, both of individual contexts and overall site shots from standard view points). Photography was undertaken with 35mm cameras on archivable black-and-white print film, as well as colour transparency, all frames including a visible, graduated metric scale. Digital photography was used extensively throughout the course of the fieldwork for presentation purposes. Photographic records were also maintained on special photographic *pro-forma* sheets.

### 2.2 FINDS

- 2.2.1 Finds' recovery and sampling programmes were carried out in accordance with best practice (following current Institute of Field Archaeologists guidelines), and subject to expert advice in order to minimise deterioration. No artefacts recovered from the evaluation trench were retained.

### 2.3 ARCHIVE

- 2.3.1 The results of all archaeological work carried out will form the basis for a full archive to professional standards, in accordance with current English Heritage guidelines (*Management of Archaeological Projects*, 2nd edition, 1991). The original record archive of project will be deposited with the National Trust and the Cheshire Historic Environment Record.
- 2.3.2 The Arts and Humanities Data Service (AHDS) online database *Online Access to index of Archaeological Investigations* (OASIS) will be completed as part of the archiving phase of the project.



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### 3. HISTORICAL BACKGROUND

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#### 3.1 HISTORICAL BACKGROUND

- 3.1.1 The earliest known archaeological activity in the Little Bollington area dates to the Bronze Age, the evidence for which was provided by an archaeological excavation carried out at Fairy Brow by the South Trafford Archaeological Group in 1983. The excavation revealed a burial pit, which contained cremated human bones and a tanged knife. The remains were subject to radio-carbon assay, which provided a date for the burial of *c* 1500 BC (Faulkner 2005).
- 3.1.2 The manor of Little Bollington is mentioned in the Domesday Survey of 1086, which notes that it was owned by the Saxon thegn Aelfward. Over 5000 mills are recorded in the Domesday Survey of 1086, with under 30 of these located in Cheshire. No mill is mentioned for Little Bollington at this time, with the closest mill being in Bowden (Faulkner 2005, 25). A miller is first mentioned in the locale in a Chester County Court Roll of 1260 in association with one of two murders in Bollington that year: 'A house at Bolinton was broken into and the host and his wife killed. Osbert de Barthomley was charged with unjustly accusing Hiche the miller of breaking into his house and he cut off his head' (Chester County Court Roll (1260) held by Chester Record Office, cited in Faulkner 2005, 5).
- 3.1.3 A gift of land from *c* 1312/8 outlines an area of land on the south side of the River Bollin, and uses the weir as a landmark:
- 'Gift by William son of Nicholas de Bolynton to John de Legh and Elena his wife of all his lands with appurtenances, in the vill of Bolynton within the following bounds: beginning at le Were, then following the middle of the channel of the Bolyn, ascending as far as the bounds of le Hewode (excepting two acres which dominus Peter de Dutton holds), from there to the new acre of John de Legh, thence following a certain ditch to le stanybrok, descending stanybrok to the land of Ralph de Clayton under le leghmos, then to le pekesmedusyde, following this as far as le Cropptedholler, and from there to le Were; together with a meadow called Ellotsmedu, between the meadow of William del Mere and the meadow of Ralph de Clayton, and with all the land, with appurtenances, which Matilda, formerly wife of Richard, his son, holds as dower within the said bounds.' (Handlist of Arley Charters - John Rylands Library, Manchester, cited in Faulkner 2005, 23).
- 3.1.4 This document is of importance to the present study, as it not only establishes the existence of a weir by the early fourteenth century, but also, according to the interpretation of the location of this piece of land by Faulkner, which assumes that the weir mentioned is in the same location as the present weir (see Plate 2 below), includes the study area (Faulkner 2005, 23). Although the gift includes land 'with appurtenances', it is highly unlikely that a mill was

located on this piece of land at this time, as the conveyance of a mill would have been the subject of the gift, rather than the land, if that were the case.

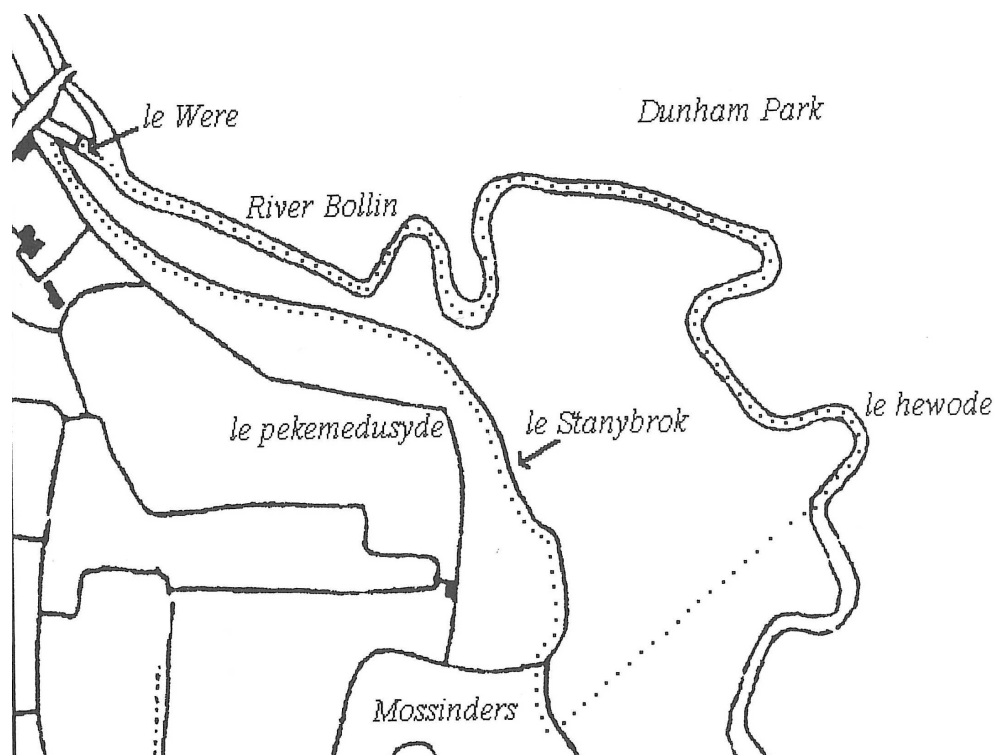


Plate 2: Suggested boundary outlined in c 1312/8 (after Faulkner 2005, Fig 1, page 23)

- 3.1.5 Documents in the Earl of Stamford's papers list several mills within the Barony of Dunham Massey in 1374, including Bollington Mill (EGR 2/1/1/1 and 2/1/1/2 - John Rylands Library, Manchester, cited in Faulkner 2005, 25). In 1380, there is a detailed account of the cost of Bollington Mill, suggesting either that the existing mill was being renovated or reconstructed, or possibly that this was a new structure in a new location. The document includes costs for 'parts, for building and cutting and working on the guides of the wheels of the said mill'; 'work on the weir'; and for the manufacture of a new hopper. The costs listed also include 'making four traps for the fishery at Bolynton' and 'salt bought for eels', indicating the association of the mill with fish traps (*ibid*). In the fifteenth century, the mill and the associated fishing rights were held by Henry de Mascy, the bailiff of the manor and lordship of Dunham Massey (EGR 2/1/1/3/1 - John Rylands Library, Manchester, cited in Faulkner 2005, 26).
- 3.1.6 Further building work at the mill is evident in 1413, with a document listing costs, including: 'for excavation for the mill and for transport of timber and for work on making and transport of the millstones and also for mowing the heath land', and 'for roofing the said mill', suggesting a major rebuild of the mill (EGR 2/1/2/2 - John Rylands Library, Manchester, cited in Faulkner 2005, 11 and 28). The mill was also repaired in 1416-7, as a document lists a cost for this and for land purchased for the repair, possibly as a way of supplying the timber required for the repairs (EGR 2/1/2/5 - John Rylands Library, Manchester, cited in Faulkner 2005, 11 and 28).

- 3.1.7 An indenture of the exchange of a piece of land in Little Bollington in 1628 between William Leigh of Norbury Booths and Sir George Booth of Dunham Massey, mentions both the mill and mill leat (Milne fflame):

‘all that part and parcell of one close or parcell of land lying near or adjoining to the Millnes of the sd Sir George Bouthe aforesaid called or known by the name of huitteholme and extending westwards (as the fliam of the same Millnes runneth) soe far as the land of the same William Leigh (in the foresaid close) reacheth and extendeth it selfe together with the same fflame beneath one ash tree nowe growinge upon the sd close of huitteholme, with one little parcel of land lying beneath the Ould Milne hill and in Bollington aforesaid Between the Milne fflame and the River of Bollin conteyninge in all fifteen square roodes of land or thereabout, bee it more or lesse, beinge parcells of the Inheritance of the sd William Leigh and now in the tenure or occupation of the sd Sir George Booth...’ (EGR 1/1/4/13 - John Rylands Library, Manchester, cited in Faulkner 2005, 24).

- 3.1.8 This document also mentions a piece of land named ‘Ould Milne hill’ (*ibid*), which indicates that an earlier mill may have been located in a different part of Little Bollington. Unfortunately, the location of this land is not known, although Faulkner suggests it is on the north side of the road from Little Bollington across the Bollin, in the area of the inn (Faulkner 2005, 24).
- 3.1.9 Three paintings from c 1751 by John Harris, show a mill and leat in the same location as the current Little Bollington Mill and leat, although the mill building is shown adjacent to the leat rather than straddling it, therefore suggesting that there was an external waterwheel at this time (Faulkner 2005, 29; Plate 3). This, then, is the earliest evidence for the mill in Little Bollington being located on the same piece of land as the current mill building.



Plate 3: A painting by John Harris, c 1751, showing the mill and leat (Dunham Massey, The Stamford Collection, The National Trust)

3.1.10 A map from 1757, marking the proposed route of the Duke of Bridgewater's canal through Little Bollington (Fig 2), shows the mill leat, but no mill building. Buildings do not appear to be depicted on this map at all, however, so it is entirely possible that a mill was still extant on the site at this time. A watermill is depicted on the west side of the River Bollin on Burdett's map of 1777 (Fig 3), and on the east side of the river on Swire and Hutchins' map of 1829 (Fig 4). However, these early large-scale maps are not accurate in detail (for instance the mill leat is not depicted on either), and therefore should be used with caution. The most important information gained from consulting these early maps and paintings is that there was a watermill in this area by 1751.

3.1.11 A lease from 1790, gives some detail of the mill buildings and associated structures at this time, and identifies the fact that Little Bollington Mill comprised two mills, a wheat mill and a meal mill:

'...all that watercorn mill of him the said George Harry Earl of Stamford situate standing and being in Dunham Massey in the said county of Chester on the Banks of the River Bollen and commonly called or known by the name of Bollington Mills together with the waterwheels and other wheels Five pair of stones Malt Rollers Dressing Mills Bolting Mills Machinery Implements Tools and Tackle therein and thereunto belonging And also all and every the usual and accustomed Soak Suit Grist Toll and Mulcture to the said Watercorn Mill belonging and the profits thereof And also all that drying kiln standing near to the said watercorn mill and therewith now occupied And also all that cottage or Dwellinghouse with the garden and Appurtenances thereto belonging situate and being in Bollington in the said county of Chester usually demised and leased along with the said watercorn mill'.

'The Waterwheel at the Wheat Mill end is 15' diameter, the shaft is 7 ½' long and 21" diameter at the outside end, the ladles are 20" deep and 3'5" long, a pit wheel is fixed on the shaft 9'0" Diameter. The Hood Wheel adjoining is 12' Diameter, the shaft is 6'10" long and 2' diameter, and the ladles 2'6" deep and 3'2" long. A pit Wheel is fixed thereto containing twelve iron segments with ten cogs in each segment, which works into a spur wheel to turn the tumbling shaft containing 6 iron segments with 10 cogs in each segment. Tumbling shaft 14' long with a face wheel therein 7' diameter. Upright shaft 15' long which works with a face wheel and a crown fly-wheel and face wheel thereon. One pair of French burr stones each 4'6" diameter, the lying stone is 7½" thick above the stone binding and the Upper stone 10½" thick both upon the hem or outside edge'.

'The waterwheel at the Meal Mill end is 15' Diameter, the shaft 8'10" long and 2' Diameter, the ladles 20" deep and 3'5" long.' (EGR 14/5/2/1 - John Rylands Library, Manchester, cited in Faulkner 2005, 29).

3.1.12 The tithe mapping of this area was consulted for field name evidence of a former mill in the area (Fig 5). Three tithe maps were consulted: the Dunham Massey township tithe of 1839 (EDT 144/2); the undated (but approximately contemporary) Rostherne township tithe (EDT 55/2); and the Bollington

township tithe of 1839 (EDT 54/2). Table 1 lists the information recorded in the tithe awards for the area of the putative mill.

Tithe	Field no.	Owner	Occupier	Field name
Bollington	96	Earl of Stamford, Robert Leather	Robert Leather	Long Meadow
Bollington	95	Earl of Stamford, Robert Leather	Robert Leather	Sound Field
Bollington	92	Earl of Stamford, Robert Leather	Robert Leather	Round Meadow
Bollington	102	Earl of Stamford, Robert Leather	Robert Leather	House, orchard
Bollington	103	Earl of Stamford	William Toft	House and garden
Rostherne	95	John Mills (lessee), Samuel Mills (lessee), Earl of Stamford	William Lomax	Meadow by Mill
Rostherne	92	Earl of Stamford, (lessee) John Hardy	Widow Walker	Orchard
Rostherne	94	Earl of Stamford	James Evans	Cottages and garden
Dunham Massey	740	Earl of Stamford	Earl of Stamford	Big Meadow
Dunham Massey	740a	Earl of Stamford	Martha Walker	Bollington Mill Field
Dunham Massey	739	Earl of Stamford, Hannah Richmond	Thomas William Butterfly	Bollin Meadow
Dunham Massey	738	Earl of Stamford, Samuel Starkey	Samuel Starkey	Little Meadow

*Table 1: Information from the tithe awards for the Dunham Massey, Rostherne and Bollington*

3.1.13 It is clear from the tithe awards that the Earl of Stamford owned much of the land in this area by this time. The tithe mapping shows a mill in the location of Little Bollington Mill, within field 740a ‘Bollington Mill Field’, in Dunham Massey township. The mill comprises a rectangular building aligned approximately north/south, with a second rectangular building perpendicular to the first, located just north of centre on its east side, and extending over the mill leat. Field 95, to the west of the mill is recorded as ‘Meadow by Mill’ in the Rostherne township, and is presumed to refer to this mill, or an earlier building in this location. None of the other fields shown on the tithe mapping on either side of the Bollin have names which indicate the former location of a mill, and there is no ‘Old Mill Hill’.

- 3.1.14 The mill burned down in *c* 1845, and was then replaced by the present building (Faulkner 2005, 30). The Ordnance Survey first edition 6" map of 1872 (Fig 6) depicts the mill as an 'L'-shaped building, labelled 'Bollington Mill (corn)'; the mill race and weir are also labelled. By the time of the Ordnance Survey first edition 25" map of 1910 (Fig 7), another range of buildings are depicted at the mill, on the west bank of the mill leat.
- 3.1.15 The mill continued producing flour until the middle of the twentieth century, and was modernised in 1938, and was in constant use during World War Two. After the war the mill was used for provender (animal feed) production, and then became a cheese warehouse. Following this, the mill was empty for a time until being converted to its present residential use in the 1990s (Faulkner 2005, 30).
- 3.1.16 In summary, no mill is listed in Little Bollington in the Domesday Survey of 1086, but a miller is mentioned in 1260. A weir is first mentioned in *c* 1312/18, and a mill is first mentioned in 1374. From 1374 onwards, various documents indicate the continued presence of a mill in Little Bollington. However, the location of a mill is not known until 1751, when it is shown on a painting in the location of the present mill building. An area or field named 'Ould Milne Hill' on a document from 1628, suggests that there was an earlier mill located in a different area to the one standing in 1628, however it is not known where Old Mill Hill was, or where Bollington Mill stood in 1628. A detailed description from *c* 1312/18, of a piece of land located on the south side of the River Bollin, is likely to include the study area; there is no mention of a mill on this land at this time. Therefore, whilst the evidence for Old Mill Hill suggests that there may have been at least two locations of mills in Little Bollington, there is no evidence to suggest that a mill was ever located within the study area.

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## 4. EVALUATION RESULTS

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### 4.1 INTRODUCTION

- 4.1.1 A single trench, measuring 9.6m long and 1.8m wide, was placed along the footprint of the proposed fish passage, some 5m to the west of the river bank. The trench was aligned broadly north-east/south-west, and was excavated to a maximum depth of 1m (Fig 8). No features or artefacts of archaeological interest were identified within the excavated trench.

### 4.2 RESULTS

- 4.2.1 A homogeneous deposit of blue and light brown clay, containing no coarse components, was encountered at a depth of 0.5m beneath the modern ground surface. This deposit was seemingly of natural origin, representing the undisturbed drift geology; this was corroborated by limited deeper excavation at the south-western end of the trench, which was intended to confirm that the clay did not represent the re-deposition of material associated with the remodelling of the raised river bank.
- 4.2.2 The natural clay was overlain by a deposit of mottled dark grey/light brown sand, measuring 0.27m thick, and containing few coarse components. The top of this horizon was exposed at a depth of 0.2m beneath the modern ground surface (Plate 4). The layer was sealed by a deposit of mixed, mid-brown sandy-clay, representing the topsoil (Plate 5). The topsoil had been disturbed at the south-western end of the trench, which contained several fragment of concrete and broken, machine-pressed bricks, indicative of a modern date.



*Plate 4: Section of the excavated trench*





*Plate 5: Section of the excavated trench*



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## 5. CONCLUSION

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### 5.1 CONCLUSION

- 5.1.1 The results obtained from the archaeological evaluation have confirmed that the proposed route of the fish passage does not contain any archaeological remains. Whilst this does not preclude the possibility that remains of archaeological significance may survive in the vicinity, it is concluded that the construction of the fish passage will not have an impact on any sub-surface archaeological resource of the area between the western bank of the River Bollin and Sutt Brook.
- 5.1.2 In accordance with the agreed project design, however, an archaeological watching brief should be maintained during the construction of the fish passage. This should be targeted on the bank of the River Bollin, and is intended to make an adequate archaeological record of any stonework that lines the river channel.

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## 6. BIBLIOGRAPHY

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### CARTOGRAPHIC SOURCES

Burdett, PP, 1777 *Survey of the County Palatine of Chester*

Bryant, A, 1831 *Map of the County Palatine of Chester*

Ordnance Survey 6": 1 mile, published 1872

Ordnance Survey 25": 1 mile, revised 1897, published 1898

Ordnance Survey 25": 1 mile, revised 1905-8, published 1910

Ordnance Survey 25": 1 mile, revised 1937, published 1937

### CHESTER AND CHESHIRE RECORD OFFICE

EDT 54/2 - Bollington township tithe, 1839

EDT 55/2 - Rostherne township tithe (undated)

EDT 144/2 - Dunham Massey township tithe, 1839

### SECONDARY SOURCES

Countryside Commission, 1998 *Countryside Character; the Character of England's Natural and Manmade Landscape*, vol 2: *the North West*, Cheltenham

English Heritage, 1991 *Management of Archaeological Projects*, 2<sup>nd</sup> edn, London

Faulkner, P (ed), 2005 *Bolynton: A Historical and Archaeological Survey of Little Bollington*, South Trafford Archaeology Group

Hains, BA, and Horton, A, 1969 *British Regional Geology*, London

Nevell, M, 1997 *The Archaeology of Trafford*, Manchester

UMAUI, 2000 *Little Bollington Mill Race and Weir, Trafford, Greater Manchester*, unpubl rep

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## APPENDIX 1: PROJECT DESIGN

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November 2008

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### CRUMP WEIR, LITTLE BOLLINGTON, CHESHIRE



### ARCHAEOLOGICAL EVALUATION PROJECT DESIGN

#### ***Proposals***

*The following project design is offered in response to a request from J Gardiner of Royal Haskoning UK Ltd, acting on behalf of the Environment Agency, for an archaeological evaluation in advance of the construction of a fish passage on the River Bollin at Little Bollington, Cheshire.*

## **1 BACKGROUND**

### **1.1 CIRCUMSTANCES OF PROJECT**

- 1.1.1 In October 2008, Oxford Archaeology North (OA North) was requested by J Gardiner, of Royal Haskoning UK Ltd, acting on behalf of The Environment Agency, to submit a costed project design for an archaeological evaluation of land adjacent to Crump Weir on the River Bollin at Little Bollington, Cheshire (centred on SJ 7304 8704). The work is required in advance of the construction of a proposed fish passage, which will necessitate the excavation of a narrow channel across a short section of the field immediately to the east of the weir. The evaluation aims to assess the presence, extent, character, date and significance of any buried archaeological remains that may survive within the footprint of the fish passage.
- 1.1.2 The field evaluation will be coupled with a limited programme of historical research, designed to place the results of the evaluation in an historical context. In addition, an archaeological watching brief will be maintained during the construction of the fish passage. This will be targeted on earth-moving works through the raised bank of the River Bollin, and is intended to make a record of the stonework that is thought to line the river channel in this location.
- 1.1.3 Crump Weir formed part of the water-management system for Little Bollington Mill, which occupies a site on the west bank of the River Bollin (Figure 1), within the county of Cheshire. Little Bollington Mill lies on the east bank of the River Bollin, in the county of Greater Manchester, and is entered on the Greater Manchester Historic Environment Record (SMR No 3726) as a site of archaeological interest.
- 1.1.4 The manor of Little Bollington is mentioned in the Domesday Survey of 1086, whilst documents dated to 1353 refer to a manorial corn mill in the locale (Nevell 1997, 42). The exact location of this mill remains uncertain; the present mill, situated on Brick Kiln Lane on the east bank of the river, is a five-storey, brick-built mill, powered by an undershot waterwheel. This mill was erected in the 1860s, although elements of the associated mill leat have been dated to the late eighteenth century (UMAU 2000), suggesting that the site may have been occupied by an earlier mill. The extant mill was designated a Grade II Listed Building in 1974.
- 1.1.5 An archaeological watching brief was carried out on the mill race and weir in 1999, in conjunction with the erection of a flow-measuring station on the River Bollin (UMAU 2000). This work concluded that the structure of the mill leat comprised ashlar-faced sandstone blocks.

### **1.2 OXFORD ARCHAEOLOGY**

- 1.2.1 Oxford Archaeology has over 30 years of experience in professional archaeology, and can provide a professional and cost effective service. We are the largest employer of archaeologists in the country (we currently have

more than 300 members of staff) and can thus deploy considerable resources with extensive experience to deal with any archaeological obligations you or your clients may have. We have offices in Lancaster, Cambridge and Oxford, trading as OA North, OA East, and OA South respectively, enabling us to provide a truly nationwide service. Watching briefs, evaluations and excavations have taken place within the planning process, to fulfil the requirements of clients and planning authorities, to very rigorous timetables.

- 1.2.2 OA North has the professional expertise and resources to undertake the project detailed below to a high level of quality and efficiency. OA North is **an Institute of Field Archaeologists (IFA) registered organisation, registration number 17**, and all its members of staff operate subject to the IFA Code of Conduct.

## 2 AIMS AND OBJECTIVES

### 2.1 ACADEMIC AIMS

- 2.1.1 The main research aim of the investigation will be to establish the presence or absence of any buried remains of archaeological interest within the route of the proposed fish passage. Should any such remains prove to be present, then the evaluation will seek to characterise their character, extent, level of preservation, and significance. The results from the evaluation will provide information as to whether further investigation is required prior to the construction of the fish passage. The required stages to achieve these ends are as follows:

- to excavate a single trench along the route of the proposed fish passage;
- to carry out a limited programme of historical research, which will focus on any surviving documentary evidence pertaining to the study area;
- to produce a written report that will assess the significance of the data generated by the above fieldwork programme within a local and regional context;
- to facilitate the implementation of a strategy that will take account of the archaeological resource of the site in the final design proposals, and satisfy the requirements of the curatorial archaeologist;
- to maintain an archaeological watching brief during the excavation of the river bank as part of the construction of the fish passage. The watching brief is intended to make an adequate record of any stonework that lines the river channel.

### 3 METHOD STATEMENT

3.1 The following work programme is submitted in line with the aims and objectives summarised above.

#### 3.2 FIELDWORK

3.2.1 The evaluation will establish the presence or absence of any previously unknown archaeological deposits and, if established, will then test their date, nature, depth and quality of preservation. The site will be investigated via a single trench, placed in the position of the proposed fish passage (Figure 1). The trench will have a maximum total length of 10m, and a minimum width of 2.0m, although may be stepped out for Health and Safety reasons if deep stratigraphy is encountered; the trench will not be continued into the raised embankment that flanks the river.

3.2.2 Excavation of the uppermost levels of modern overburden/demolition material will be undertaken by a machine fitted with a toothless ditching bucket to the top of the first significant archaeological level. The work will be supervised by a suitably experienced archaeologist. Spoil from the excavation will be stored adjacent to the trench, and will be backfilled upon completion of the archaeological works.

3.2.3 Machine excavation will then be used to define carefully the extent of any surviving foundations, floors, and other remains. Thereafter, all remains will be cleaned manually, using either hoes, shovel scraping, and/or trowels depending on the subsoil conditions, to define their extent, nature, form and, where possible, date. All features of archaeological interest will be investigated and recorded. Any investigation of intact archaeological deposits will be exclusively manual. Selected pits and postholes will normally only be half-sectioned, linear features will be subject to no more than a 10% sample, and extensive layers will, where possible, be sampled by partial rather than complete removal. It is hoped that in terms of the vertical stratigraphy, maximum information retrieval will be achieved through the examination of sections of cut features.

3.2.4 All information identified in the course of the site works will be recorded stratigraphically, using a system adapted from that used by the Centre for Archaeology Service of English Heritage, with sufficient pictorial record (plans, sections and both black and white and colour photographs) to identify and illustrate individual features.

3.2.5 Results of the evaluation will be recorded on *pro-forma* context sheets. The site archive will include both a photographic record and accurate large-scale plans and sections at an appropriate scale (1:50 and 1:20). All artefacts and ecofacts will be recorded using the same system, and will be handled and stored according to standard practice (following current Institute of Field Archaeologists guidelines) in order to minimise deterioration.

3.2.6 A full and detailed photographic record of individual contexts will be maintained and similarly general views from standard view points of the

overall site at all stages of the evaluation will be generated. Photography will be undertaken using 35mm cameras on archivable black and white print film as well as colour transparency, and all frames will include a visible, graduated metric scale. Extensive use of digital photography will also be undertaken throughout the course of the fieldwork for presentation purposes. Photographs records will be maintained on special photographic *pro-forma* sheets.

- 3.2.7 ***Finds policy:*** all finds will be exposed, lifted, cleaned, bagged and boxed in accordance with the United Kingdom Institute for Conservation (UKIC) *First Aid For Finds*, 1998 (new edition). All identified finds and artefacts will be retained, although certain classes of building material can sometimes be discarded after recording if an appropriate sample is retained.
- 3.2.8 ***Environmental Sampling:*** environmental samples (bulk samples of 30 litres volume, to be sub-sampled at a later stage) will be collected from stratified undisturbed deposits of anthropogenic origin, and will particularly target any negative features (gullies, pits and ditches). An assessment of the environmental potential of the site will be undertaken through the examination of suitable deposits by the in-house palaeoecological specialist, who will examine the potential for further analysis. The assessment would include soil pollen analysis and the retrieval of charred plant macrofossils and land molluscs from former dry-land palaeosols and cut features. In addition, the samples would be assessed for plant macrofossils, insect, molluscs and pollen from waterlogged deposits. The costs for the palaeoecological assessment are defined as a contingency and will only be called into effect if good deposits are identified and will be subject to the agreement of archaeological curator and the client.
- 3.2.9 ***Treasure:*** any gold and silver artefacts recovered during the course of the evaluation will be removed to a safe place and reported to the local Coroner according to the procedures relating to the Treasure Act, 1996. Where removal cannot take place on the same working day as discovery, suitable security will be employed to protect the finds from theft.
- 3.2.10 ***Human Remains:*** any human remains uncovered will be left *in-situ*, covered and protected. No further investigation will continue beyond that required to establish the date and character of the burial. If removal is essential, the exhumation of any funerary remains will require the provision of a Home Office license, under section 25 of the Burial Act of 1857. An application will be made by OA North for the study area on discovery of any such remains and the removal will be carried out with due care and sensitivity under the environmental health regulations.
- 3.2.11 ***Reinstatement:*** it is understood that there will be no requirement for reinstatement of the ground beyond backfilling. The ground will be backfilled, and the ground will be roughly graded with the machine.

### 3.3 ARCHIVE PREPARATION AND REPORT PRODUCTION

- 3.3.1 **Archive:** the results of all archaeological work carried out will form the basis for a full archive to professional standards, in accordance with current English Heritage guidelines (*Management of Archaeological Projects*, 2nd edition, 1991). The project archive represents the collation and indexing of all the data and material gathered during the course of the project. It will include summary processing and analysis of all features, finds, or palaeoenvironmental data recovered during fieldwork, which will be catalogued by context.
- 3.3.2 The deposition of a properly ordered and indexed project archive in an appropriate repository is considered an essential and integral element of all archaeological projects by the IFA in that organisation's code of conduct. OA North conforms to best practice in the preparation of project archives for long-term storage. This archive will be provided in the English Heritage Centre for Archaeology format and a synthesis will be submitted to the Cheshire HER (the index to the archive and a copy of the report). OA North practice is to deposit the original record archive of projects with the appropriate County Record Office.
- 3.3.3 The deposition and disposal of any artefacts recovered in the evaluation will be agreed with the legal owner and an appropriate recipient museum.
- 3.3.4 Except for items subject to the Treasure Act, all artefacts found during the course of the project will be donated to the receiving museum.
- 3.3.5 **Historical Research:** relevant archaeological data, historic mapping and secondary sources will be consulted in the County Record Offices in Chester (CRO(C)) and Manchester (CRO(GM)), records held by The National Trust, and OA North's extensive library and archive.
- 3.3.6 **Report:** a draft copy of a written synthetic report will be forwarded to the archaeological curator for comment and approval. Thereafter, one bound and one unbound copy of the report will be submitted to the client, and a further three copies submitted to the Cheshire HER within eight weeks of completion. The report will include:
- a site location plan related to the national grid;
  - the dates on which the fieldwork was undertaken;
  - a concise, non-technical summary of the results;
  - a description of the methodology employed, work undertaken and results obtained;
  - plans and sections at an appropriate scale showing the location and position of deposits and finds located;
  - a list of and dates for any finds recovered, and a description and interpretation of the deposits identified;



- an assessment of the likely impact of the proposed fish passage on areas of known and predicted archaeology;
  - a copy of this project design, and indications of any agreed departure from that design.
- 3.3.7 The Arts and Humanities Data Service (AHDS) online database project *Online Access to index of Archaeological Investigations* (OASIS) will be completed as part of the archiving phase of the project.
- 3.3.8 **Confidentiality:** the final report is designed as a document for the specific use of the client, and should be treated as such; it is not suitable for publication as an academic report, or otherwise, without amendment or revision. Any requirement to revise or reorder the material for submission or presentation to third parties beyond the project brief and project design, or for any other explicit purpose, can be fulfilled, but will require separate discussion and funding.

### 3.4 OTHER MATTERS

- 3.4.1 **Health and Safety:** OA North provides a Health and Safety Statement for all projects and maintains a Unit Safety policy; further details are presented in *Appendix I*. All site procedures are in accordance with the guidance set out in the Health and Safety Manual compiled by the Standing Conference of Archaeological Unit Managers (1997). A written risk assessment will be undertaken in advance of project commencement and copies will be made available on request to all interested parties. OA North uses a CAT-Scan device prior to any excavation to test for services as a matter of course, and will pay particular attention to the service information supplied by the Client. All OA North staff will be equipped with hard hats, safety boots, and high-visibility jackets.
- 3.4.2 **Access:** access to the study area will be afforded via the farmyard of Bollington House Farm, along the concrete-surfaced track, and across the stone-built culvert over Sutts Hollow Brook. It is assumed that the Environment Agency/National Trust will liaise with the tenant farmer regarding access.
- 3.4.3 **Fencing:** the costings have not allowed for the installation of secure fencing. OA North can supply and erect appropriate fencing if required, although this will be subject to additional costing.
- 3.4.4 **Insurance:** the insurance in respect of claims for personal injury to or the death of any person under a contract of service with the unit and arising out of an in the course of such person's employment shall comply with the employers' liability (Compulsory Insurance) Act 1969 and any statutory orders made there under. For all other claims to cover the liability of OA North, in respect of personal injury or damage to property by negligence of OA North or any of its employees, there applies the insurance cover of £2m for any one occurrence or series of occurrences arising out of one event.

## 4 WORK TIMETABLE

- 4.1 A one-day period should be allowed to excavate, record and backfill the evaluation trench.
- 4.2 Two days will be required to carry out the historical research.
- 4.3 The duration of the watching brief will be dependent upon the timetable of the construction works associated with construction the fish passage. However, it is not envisaged that an archaeological presence will be required for more than two days, whilst a trench is excavated through the bank of the River Bollin.
- 4.4 A report will be submitted within six weeks of the completion of the fieldwork.

## 5 STAFFING PROPOSALS

- 5.1 The project will be under the overall charge of **Ian Miller BA FSA** (OA North Senior Project Manager) to whom all correspondence should be addressed.
- 5.2 The evaluation will be undertaken by **Sean McPhillips** (OA North Project Officer). Sean has considerable experience of archaeological evaluations and excavations, and has directed numerous such projects throughout the North West. Sean will be assisted by at least one technician, although extra staff can be called upon if required.
- 5.3 Assessment of the finds from the evaluation will be undertaken by OA North's in-house finds specialist **Christine Howard-Davis** (OA North Finds Manager). Christine acts as OA North's in-house finds specialist, and has an extensive knowledge of all finds of all periods from archaeological sites in northern England.
- 5.4 Assessment of any palaeoenvironmental samples will be undertaken by, or under the auspices of **Elizabeth Huckerby MSc** (OA North Project Officer). Elizabeth has extensive knowledge of the palaeoecology of the North West through her work on the English Heritage-funded North West Wetlands Survey.

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## ILLUSTRATIONS

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### LIST OF FIGURES

Figure 1: Site location

Figure 2: Proposed route of the Duke of Bridgewater's Canal through Little Bollington, 1757 (National Trust)

Figure 3: Burdett's map of the County of Cheshire, 1777

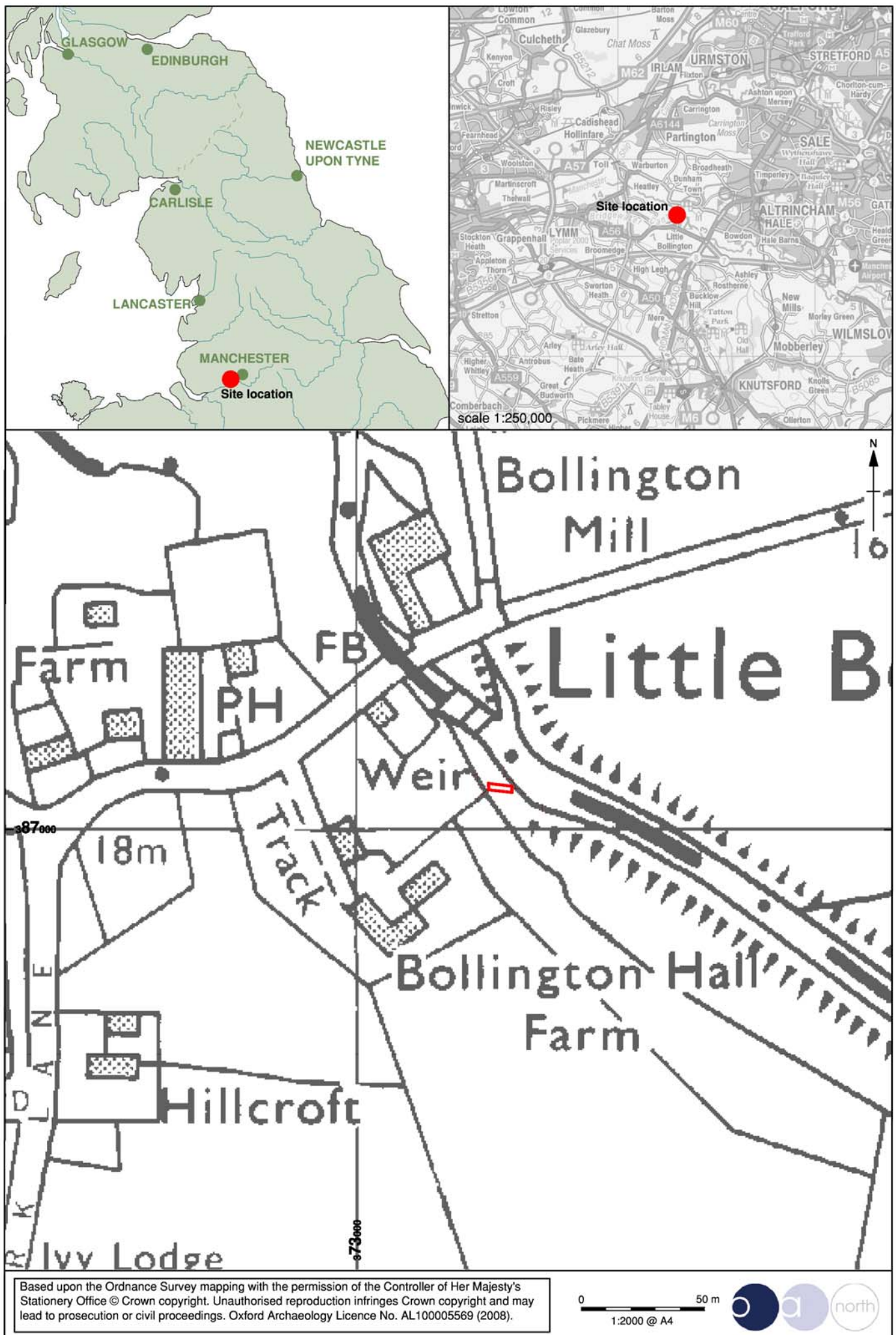
Figure 4: Swire and Hutchins map of the County of Cheshire, 1829

Figure 5: Tithe maps for Dunham Massey, Rostherne and Bollington, c1830s

Figure 6: Site location shown on the Ordnance Survey 6" map, 1872

Figure 7: Site location shown on the Ordnance Survey 25" map, 1910

Figure 8: North-west-facing section of the trench



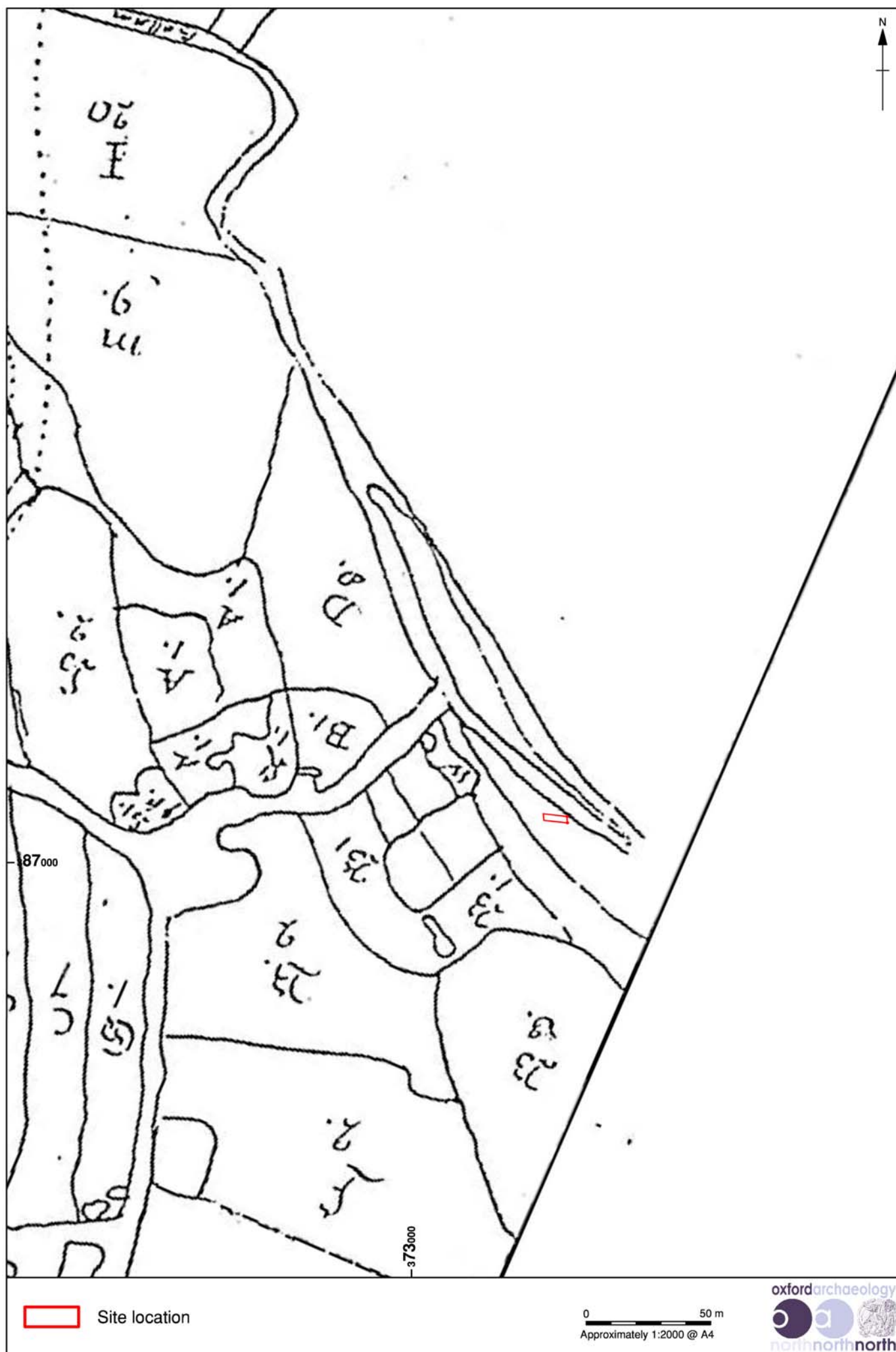


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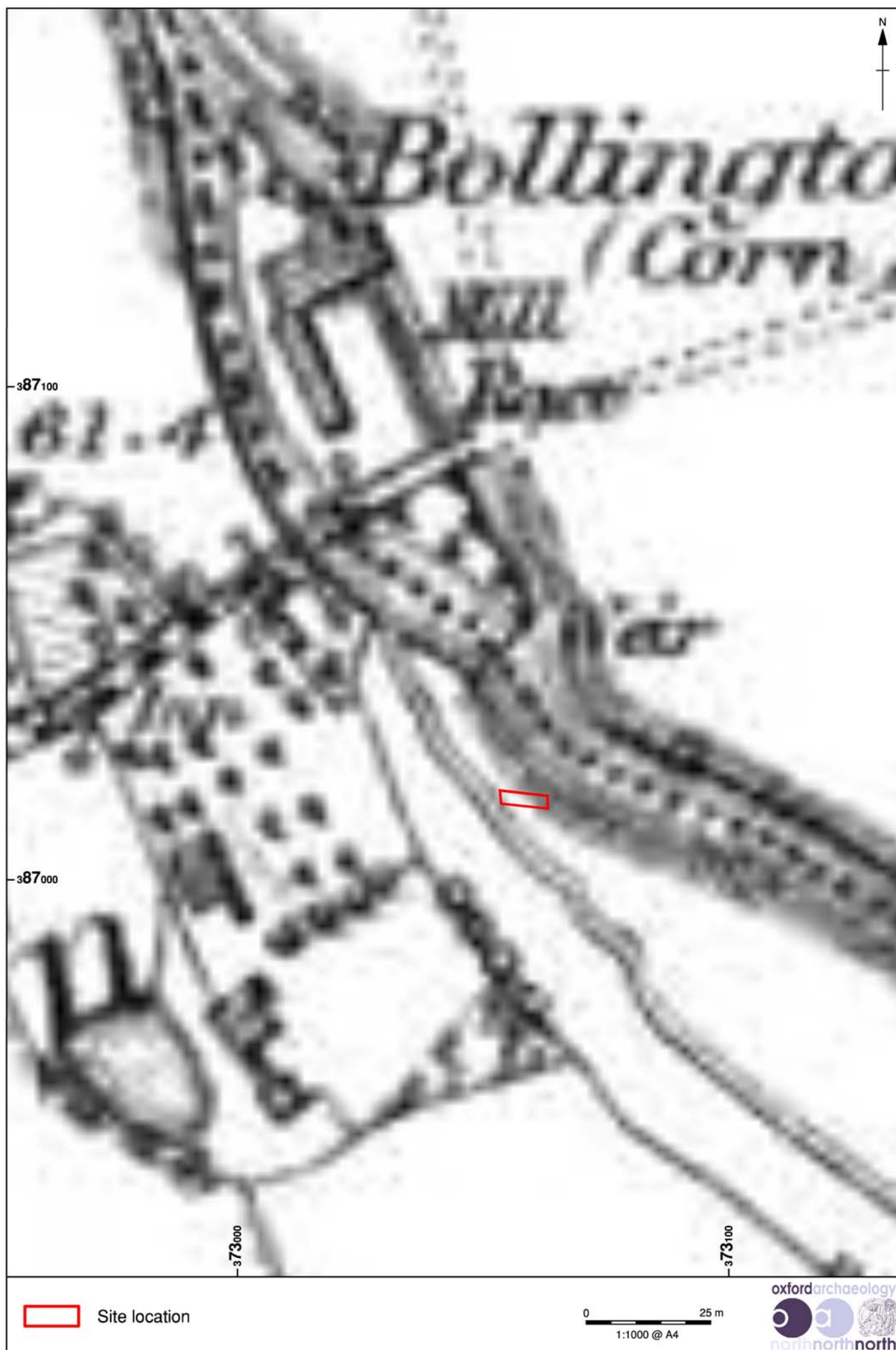


Figure 6: Site location shown on the Ordnance Survey 6" map, 1872

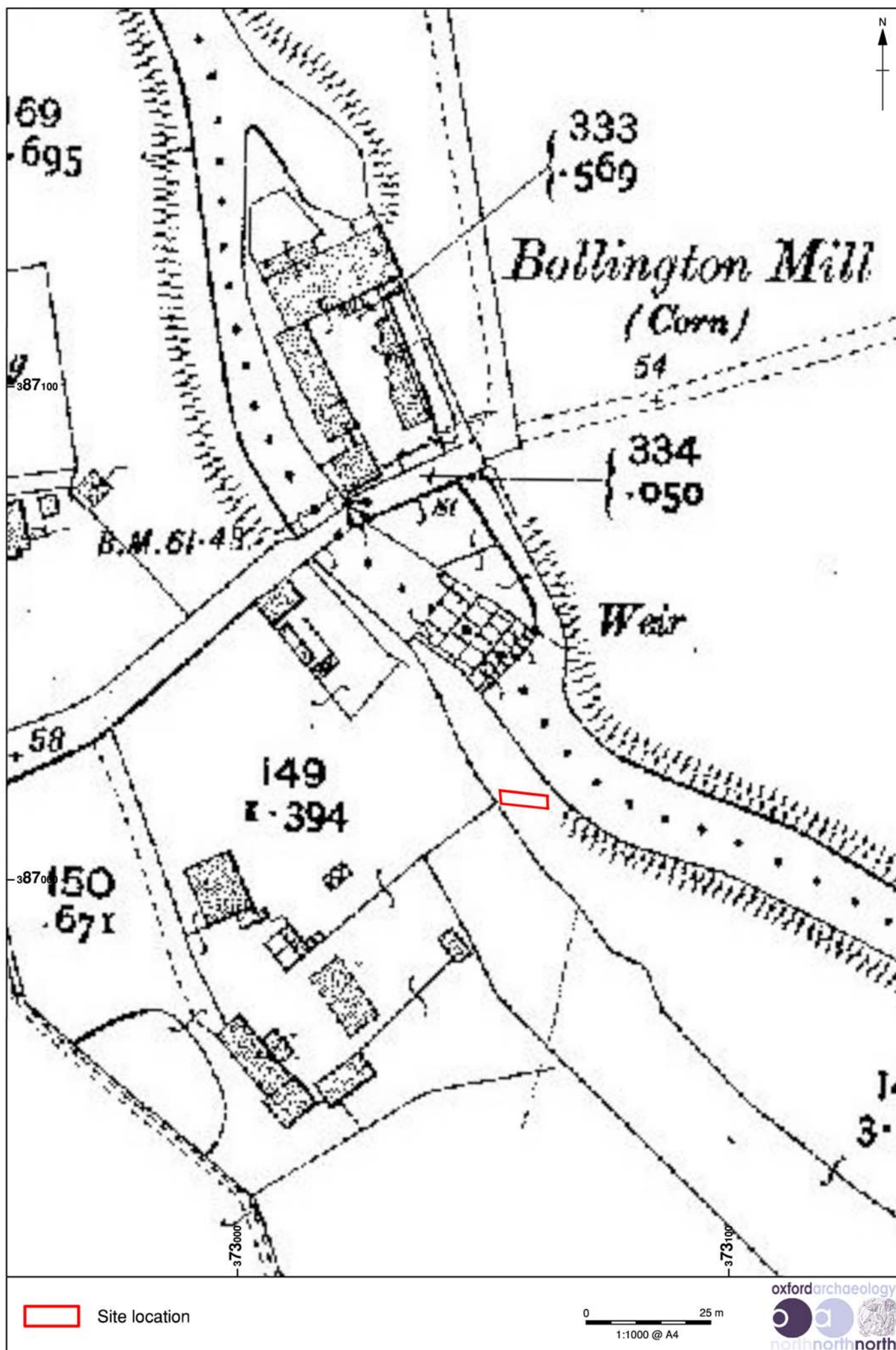


Figure 7: Site location shown on the Ordnance Survey 25" map, 1910

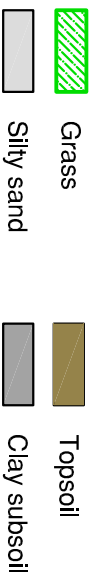
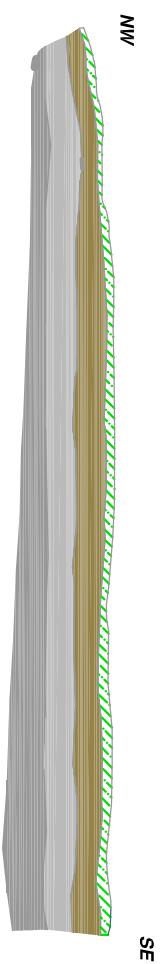


Figure 8: South-west-facing section of the trench