

**SURVEY OF BUILDINGS AT
THE CORN MILL,
1 LOXLEY ROAD,
MALIN BRIDGE,
SHEFFIELD,
SOUTH YORKSHIRE
(SHCM06)**

Work Undertaken For
Bagley UK Ltd

MAY 2007

Report Compiled by
Gary Taylor BA(Hons), MA

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National Grid Reference: SK 32520 89390
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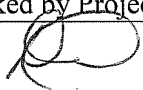

A.P.S. Report No. **68/07**

ARCHAEOLOGICAL PROJECT SERVICES



Quality Control
 Historic Building Recording
 The Corn Mill, Malin Bridge,
 Sheffield,
 South Yorkshire
 SHCM06

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Date: 25-05/07	Date: 25-05-07

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SURVEY OF BUILDINGS AT THE CORN MILL, LOXLEY ROAD, MALIN BRIDGE, SHEFFIELD, SOUTH YORKSHIRE

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1. SUMMARY

A programme of historic building recording was undertaken on a former watermill prior to redevelopment at Loxley Road, Malin Bridge, Sheffield. The recorded buildings are of historic interest and important in terms of local industrial and vernacular architecture.

The buildings, which form an L-shaped arrangement on the north side of the river, were photographically recorded and plans, sections and elevations were produced. Several phases of development were noted, along with the remains of functionally-specific features.

The earliest phase of the recorded buildings was the eastern block of the east-west arm of the complex. Probably constructed in the early-mid 18th century, this was a range of four bays comprising ground, first floor and roof space. The waterwheel survives on the exterior and inside the building, within a small basement, is the pit wheel. However, none of the other wheel machinery and gearing remains. Loading doors in the east and west gables, and a jib over the eastern door, indicate the roof space previously functioned as a storage floor.

Subsequently, though probably still in the 18th century, the block was extended to the west by a narrower range of five bays. A wide opening on the north side perhaps provided for vehicular access and loading. Within the roof space are some supports for drive shafts that would have carried pulley wheels. However, there are no other surviving indications of the original use of this range.

Later, probably in the 19th century, an extension was made on the north side. This comprised two ground floor rooms, one with a wide street-front door that suggests it was used for loading or storage.

The fourth phase of construction, most likely dating from the mid 20th century, was represented by a first floor timber gallery on the east side of the complex, overlooking the street. Additionally, new floors were installed in the east-west range.

2. INTRODUCTION

2.1 Definition of Archaeological Building Recording

Building recording is defined as:

'... a programme of work intended to establish the character, history, dating, form and archaeological development of a specified building, structure, or complex and its setting, including its buried components on land or under water.' (IFA 1999).

2.2 Planning Background

Archaeological Project Services (APS) was commissioned by Bagley UK Ltd to undertake a programme of historic building recording of a former watermill at Loxley Road, Malin Bridge, Sheffield. Full planning permission (Application 05/02844/LBC) for residential development and renovation of existing buildings on the site has been granted by Sheffield City Council, subject to conditions including the undertaking of building recording prior to and during the conversion works.

The building recording was carried out between 22nd March and 24th April 2007 by G. Taylor and M. Peachey of Archaeological Project Services in accordance with a brief (Appendix 1) issued by the South Yorkshire Archaeology Service (SYAS) and a specification designed by APS (Appendix 2) and approved by SYAS.

2.3 Site Location

The City of Sheffield forms the southwest part of the metropolitan county of South Yorkshire (Fig. 1).

Malin Bridge lies in the northern part of the district, on the west side of the main urban area of Sheffield city. The recorded buildings are at 1 Loxley Road, immediately adjacent to its junction with Stannington Road, in the centre of Malin Bridge, centred on National Grid Reference SK 32520 89390 (Fig 2). At the southeast corner of this area stand the existing L-shaped mill buildings, with the longest axis adjacent to the River Loxley, where the mill race and existing undershot water wheel are located (Fig 3).

2.4 Historical Setting

The earliest documentary reference to the site dates to 1739 wherein a weir belonging to the 'Malin Bridge Wheel' is mentioned in a lease of the next mill downstream. A map of Owlerton manor dating to 1777 has a note in accompanying text which mentions the 'new wheel' at Malin Bridge.

In 1787 the property was referred to as a cutlers' grinding wheel and it continued to be leased to named cutlers to 1808, and a grinder in 1815. When advertised to let in 1819 the property was described as then being used as a casting house but it had previously been a grinding wheel.

There are various references to the mill during the 19th century including a claim for damages caused by a major flood in 1864. The building marked on the six inch Ordnance Survey map of 1855 appears smaller and lacks the current northern wing. No other buildings are present on the site. From the early 20th century the property operated as a corn mill but by the 1970s the buildings were used as an electrical retail outlet. The wheel was restored and the

building was converted for use as a restaurant and later a warehouse (ARCUS 2003).

3. AIMS

In accordance with the brief and specification, the aim of the work was to provide a record of the buildings prior to conversion works.

4. METHODS

Recording of the buildings was undertaken to Level II standard, according to the English Heritage guidelines, and in line with recommendations by the Association of Local Government Archaeological Officers. This involved:

- the production of dimensioned plans of all accessible floors
- the production of dimensioned cross-sections, long-sections and selected elevations of the buildings
- general photographic views of the exterior of the building and the overall appearance of principal circulation areas
- a written record of the building's type, materials, possible dates
- photographic coverage of the external appearance and effect of the design of the buildings.
- photographic coverage of internal and external structural and decorative details relevant to the design, development and use of the buildings (English Heritage 2006; ALGAO 1997)

Photographic recording was undertaken with a medium format camera and manual 35mm camera fitted with a 28-70mm macro lens. Black and white print film was used, supplemented by colour images. An

index of the photographs was compiled on Archaeological Project Services pro forma recording sheets.

5. RESULTS

The recorded structures form an L-shaped arrangement of buildings located immediately adjacent to the river. Although extensive sections are obscured by render the buildings appear to be of stone (both ashlar and rubble) and have slate roofs (Fig. 3; Plates 1 and 2).

N-S Range

Interior (Figs. 4, 5, 9 and 10)

The ground floor comprises two rooms each with modern internal partitions. Two doors on the west side give access to each of the two rooms and there is an entry in the dividing wall between the two rooms. A recess in the north wall marks the location of a blocked window. On the south side two doors give access to the east-west range.

The first floor is one large room with modern internal partitions. Two tie-beams, both boxed-in plain timbers, cross the room and carry suspended king-post roof trusses (Plate 3) with inclined braces and a housed ridge plank (cf. Campbell 2000). There are four small windows, set in two pairs, in the northern wall and three larger windows equally spaced in the eastern elevation. All the glazing is 20th century.

Exterior (Figs. 6 and 7)

The western elevation is rendered and has two doors on the ground and two windows on the first floor. The northern gable is exposed ashlar and has a blocked window on the ground floor and a row of four small windows in two pairs on the upper storey (Plate 4). A section of stone wall, two storeys high and from a previously attached building, extends northward from the northwest corner of the gable.

Also of ashlar, the eastern elevation contains, at ground floor level, a planked door, a blocked window and a double-height, double-width door, also blocked. In the upper storey is a row of three windows (Plate 1).

E-W Range

Interior (Figs. 4, 5, 8, 9 and 10)

The east-west range comprises two linked blocks, the eastern being wider and taller than the western (Plates 2 and 5). At the western end of the west block is a stairwell with concrete stairs to the upper storey. A doorway in the west wall provides egress to the exterior while another doorway in the opposite, east, wall of the stairwell gives access to the main room of this block.

Two bridging beams cross the room and are supported on stanchions at their centre (Plate 6). These beams and stanchions are all boxed in but holes in the boxing show the beams and stanchions all to be plain square-cut timbers.

In the south wall is a row of blocked windows.

At the eastern end of the room is a 4m wide entry to a further compartment. This room joins, at a slight angle, the eastern block of the range and has access to that section by another 4m wide opening. Above both entries to the compartment are boxed-in beams. The main entry to the entire east-west range is from the courtyard and through a 3.2m wide opening in the north wall of the compartment.

The eastern block (Plate 7) has a modern stairwell on the north side and a series of blocked windows in the south wall. Two bridging beams cross the room parallel to the angled west wall (not square with the rest of the range). These beams are supported on stanchions. Further beams

run longitudinally down the room between the stanchions, and half-way across the room to the longitudinal member.

Near the northeastern corner of the room are doors that give access to the attached north-south range.

On the south side of the room is a trap-door to a below-ground compartment that houses the mill pit wheel. The common axle for the pit wheel passes through a hole in the south wall to the waterwheel on the outside of the building. Alongside and at right angles to the pit wheel is a base for a horizontal axle. There were no surviving indications of the location of the vertical main shaft and wallower.

Like the ground level rooms, the first floor is basically split into two blocks, the eastern being wider than the west, with a stairwell at the western end. The western block (Plate 8) is essentially a single room with some modern plasterboard partitions. Four tie-beams, all boxed-in but of square-cut timber supported by rolled steel joists, cross the room. These tie-beams carry king post trusses, with housed ridge planks but without inclined braces and flanked by vertical struts (Plate 9). There is a series of windows in the south wall and the room has a modern suspended ceiling (Plate 10).

As on the ground floor, the junction between the western and eastern blocks is at a slight angle, not square to the remainder of the range. There is a 4m wide entry in this dividing wall (Plate 11), with a boxed-in rolled steel joist (RSJ) over. A series of three other boxed tie-beams, some timber, others RSJs, crosses the eastern block, again parallel to the angled dividing wall. There are four windows in the south wall and one in the east.

The dividing wall between the west and east blocks extends upwards as a stone wall in the roof space. Centrally located

within this wall is a doorway (Plate 12). To the south of the doorway are occasional supports for a layshaft, while a hole through the wall probably accommodated a layshaft. The east gable extends into the roof space, and contains a door and a tall narrow window (Plate 13).

Exterior (Figs. 6 and 7)

The northern elevation is rendered (Plate 2). At ground floor level it has two wide openings near the centre, another normal size doorway near the eastern end and a blocked doorway toward the west end. There is a row of five windows, all blocked, on the upper floor.

The western gable is of exposed coursed rubble and has a step at the eaves on its north side (Plate 14). There is a modern door with a concrete lintel at ground level and a window with a concrete lintel and stone sill on the first floor. North of the doorway is a vertical slot, half a brick wide and about 2m high, filled with brick. Approximately 2.5m above the door is a small (c. 0.4m x 0.25m) rectangular feature, infilled with stone. Some suggestions of straight joints to the south of the door may indicate the position of an infilled window at ground floor level.

Extending westward from the southern edge of the gable is a stone boundary wall. Directly above this is a small area of brick patching.

The southern elevation is in two parts. The western section is rendered (Plate 15) while the eastern is of exposed coursed rubble (Plate 5). The entire elevation is much taller than the others, due to it extending down alongside the mill race (Plate 16).

Within the western section of the elevation, at ground floor level, are a row of four windows and a door that leads out on to a cast iron bridge over the mill race.

On the upper storey level is a row of five windows.

Projecting from the eastern section of the elevation is the undershot waterwheel (Plate 16) with its axle passing through a hole low in the wall, below ground level, to the building interior. At ground and first floor level are two rows of four windows. Between the first and second windows from the east, right, side at ground floor level is a single straight join that is approximately 2m high (Plate 17). At the base of this is a 1.4m long stone sill that extends 0.2m east of the straight join.

At the eastern end of the elevation of the main range is a straight join and then a short wall extending east at street level. Above, and supported by, this walling is wooden panelling forming the side of a gallery with a pitched roof (Plate 5; see details of eastern elevation, below). A street-side boundary wall runs south from the gallery support wall. This boundary extends below ground level and is founded on a pier that goes to the base of the mill race.

The east gable of this range is set back slightly from the eastern elevation of the north-south block (Plate 18). In the middle of the ground floor is a doorway flanked by two sets of concrete steps. To the north is a window, boarded over. At first floor level there is a doorway toward the south end and a window to the north. In the angle of the gable is a doorway and, alongside, a fairly tall narrow window. Centrally above this door and projecting from the wall is a timber jib for a sack hoist (Plate 19). A chimney crests the gable.

At the south end of the gable is a projecting section of stone walling up to the first storey. This wall supports a timber gallery at first floor level.

Additional Features

Just by the southwest corner of the building are sluice-gates to the mill race (Plate 20). The mill race west of these, branching from the river, is infilled and overgrown.

6. DISCUSSION

The recorded mill buildings form an L-shaped arrangement alongside the river.

Constructed of coursed rubble, the east-west range forms the earlier sections of the mill complex, with the north-south range, of ashlar, being a later addition.

The east-west range alongside the river comprises two linked units, that to the east being wider and taller than the western section. In the roof space at the western end of the eastern section, that is, at the junction between the two blocks, is walling that contains a doorway. This walling is probably part of the original gable of the block and provides evidence that this eastern section is the earlier of the two cells. The doorway in this wall was probably a loading portal, comparable to that seen in the eastern gable of this same block. These loading portals indicate that the attic space of the block was used for storage.

Other than the portals there are virtually no architectural features that indicate any of the original or subsequent functions of the building.

The only parts of the waterwheel mechanism that survive, other than the waterwheel itself, are the pit wheel and common axle. All other parts of the mechanism, which might have included the wallower and vertical main shaft, great spur, crown and bevel wheels, lay (or line) shafts and pulleys (Vince 1978, 13), have been removed. Some of these sections of

mechanism are only speculative, though it seems certain that there had been a wallower (to convert the power of the waterwheel vertically through the mill) and drive shaft. The loading portals in either gable also strongly suggest that the drive shaft passed up through the building and had a crown wheel that turned bevel wheels attached to lay shafts that operated sack hoists (cf Major 1975, 118). No lay shafts remain, though there are a few supports for such in the roof space. Also, the jib over the eastern loading door was almost certainly powered by lay shaft pulleys.

Architecturally, there is little to indicate the date of the building. However, a degree of symmetry in the fenestration of the southern elevation is fairly typical of the Georgian period (Avery 2003, 7) and a construction date in the 18th century, probably the early to middle part of the century, can be suggested.

Subsequently, though probably still in the 18th century, the building was provided with an extension to the west. This extension, also in coursed rubble, was lower and wider than the original block

The external waterwheel and the few remaining sections of internal machinery illustrate the industrial use of the building, but no traces remain to indicate the specific functions. Therefore, only the documentary evidence records the historical use of the building as a cutlery and later corn mill.

Later, probably in the second half of the 19th century, a slightly offset extension was added on the north side. Cartographic evidence indicates the construction of this range sometime subsequent to 1855. Here too, relatively recent alterations have eradicated evidence of original functions. However, a large doorway in the street frontage perhaps served for vehicular

loading and suggests that at least part of this range was used for storage.

A final major phase of construction, probably dating from the mid-20th century, is represented by the timber first floor gallery on the east side of the complex. This gallery would have obstructed the use of the jib and thus indicates that the hoist and loading door were redundant by the time the gallery was constructed.

Also of probable mid or later 20th century date is the replacement of internal floors and installation of suspended ceilings, these operations having largely led to the removal of functionally-specific industrial features.

7. CONCLUSIONS

Recording was undertaken on former mill buildings at Loxley Road, Malin Bridge, Sheffield, South Yorkshire, because the structure was a listed building and of significance in terms of local history and vernacular architecture.

The survey has successfully provided a record of the appearance of the mill buildings, together with details of alterations and fittings. There are indications that the building ranges were constructed separately with the section housing the waterwheel being the earliest, probably constructed in the early-mid 18th century. The mill was extended to the west probably in the later 18th century, and again to the north in the second half of the 19th century. Subsequently, probably in the mid 20th century, a first floor timber gallery was added to the street frontage and internal floors were replaced. Significant alterations have largely removed industrial components from the complex, though the waterwheel remains and within a basement of the building is the pit wheel.

8. ACKNOWLEDGEMENTS

Archaeological Project Services wishes to acknowledge the assistance of Bagshaws Residential and W. H. Brown who commissioned the work. Dale Trimble coordinated the project and this report was edited by Dale Trimble and Tom Lane.

9. PERSONNEL

Project Coordinator: Dale Trimble
Building Recording: Mark Peachey, Gary Taylor
Photographic reproduction: Sue Unsworth
CAD Illustration: Paul Cope-Faulkner, Sue Unsworth
Analysis and reporting: Gary Taylor

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Vince, J., 1978 *Mills and Millwrighting*,

Shire Album **33**

11. ABBREVIATIONS

ALGAO Association of Local Government Archaeological Officers

APS Archaeological Project Services

ARCUS Archaeological Research and Consultancy, University of Sheffield

DoE Department of the Environment

IFA Institute of Field Archaeologists

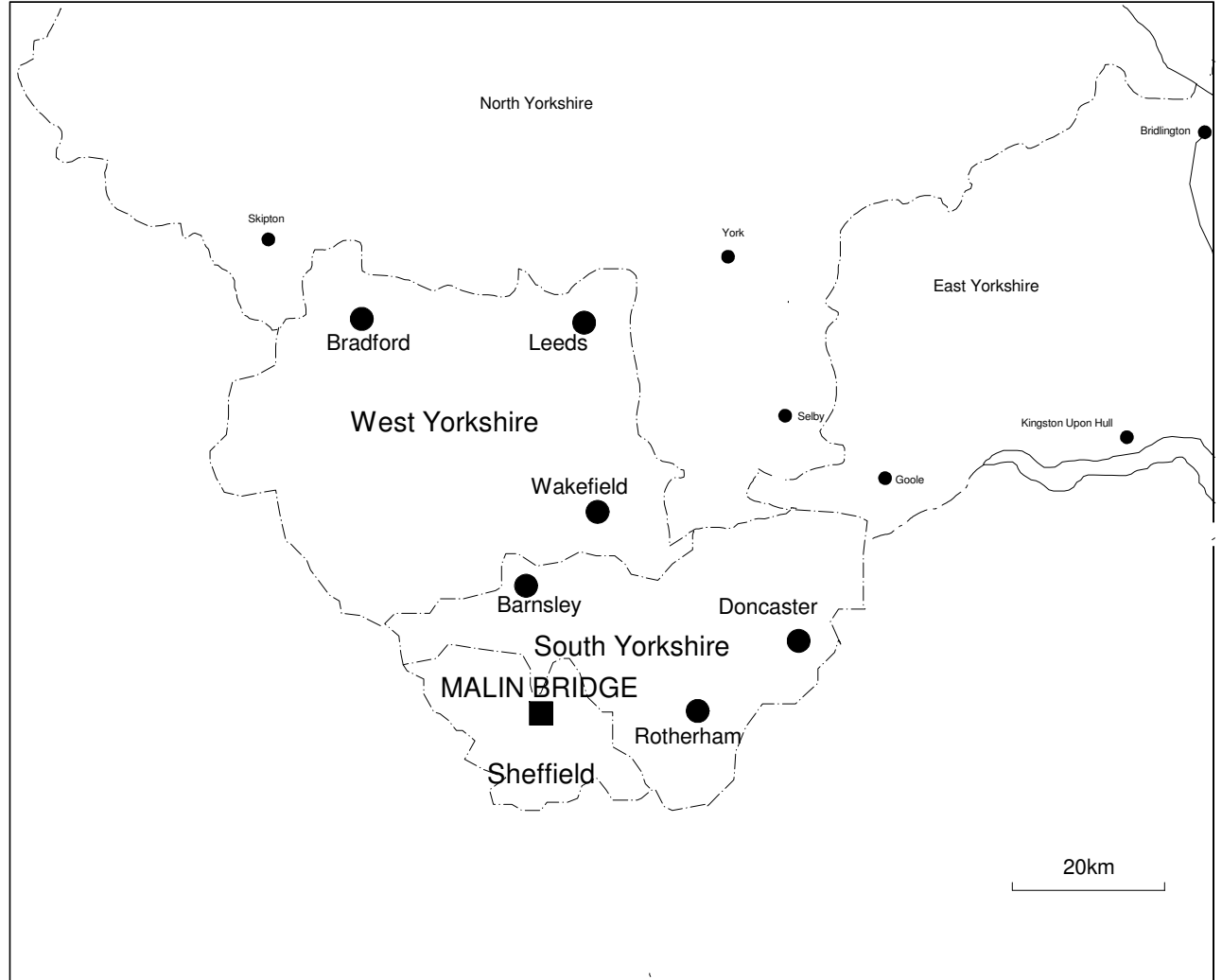
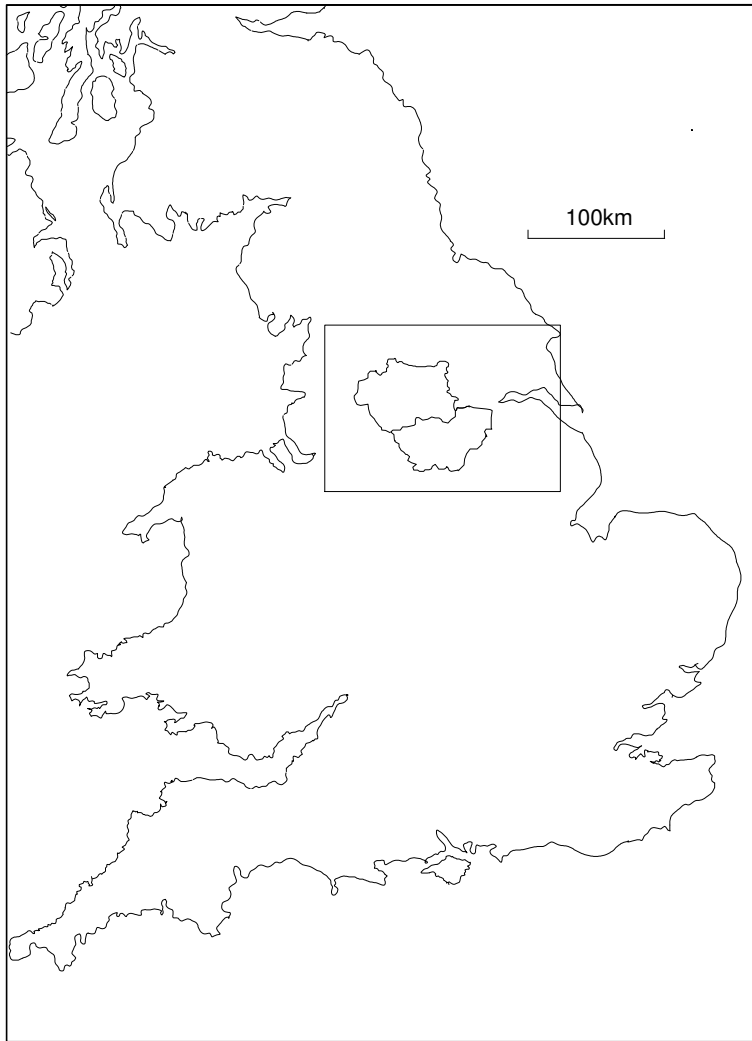


Figure 1 General Location Plan



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KEY

 SITE

 Area of Fig 3


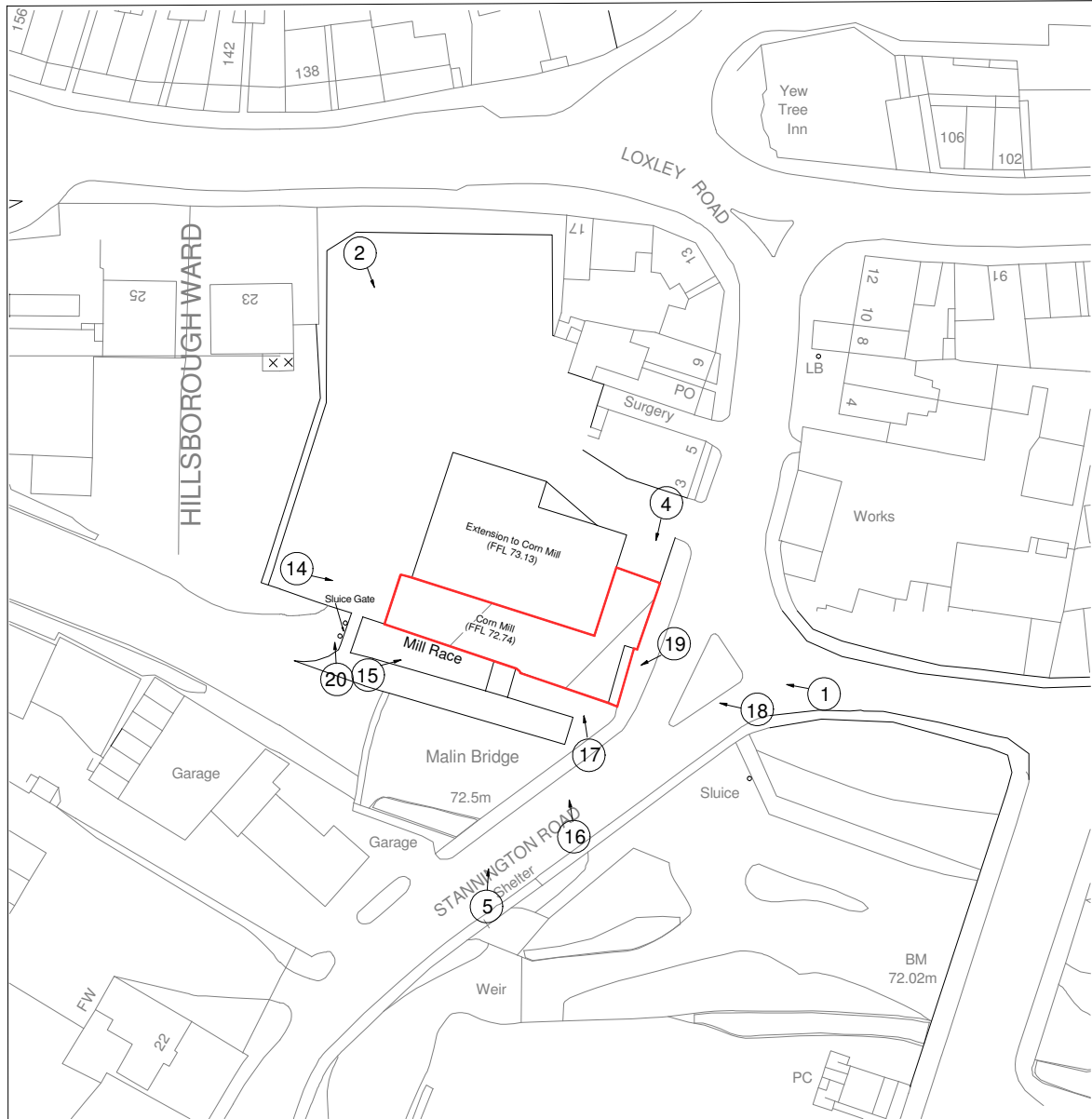
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Project Name: Sheffield The Corn Mill Malin Bridge	
Scale 1:10000	Drawn by: MJP Report No: 68/07

Figure 2 Site Location Map



KEY



Recorded Building



Plate number and direction of view




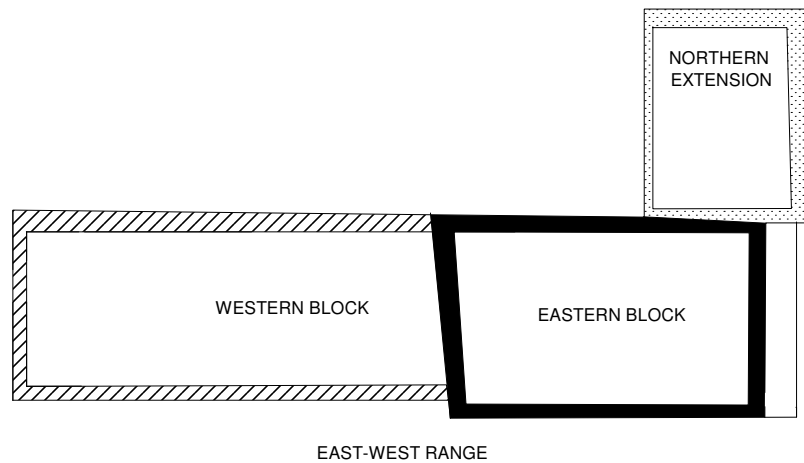
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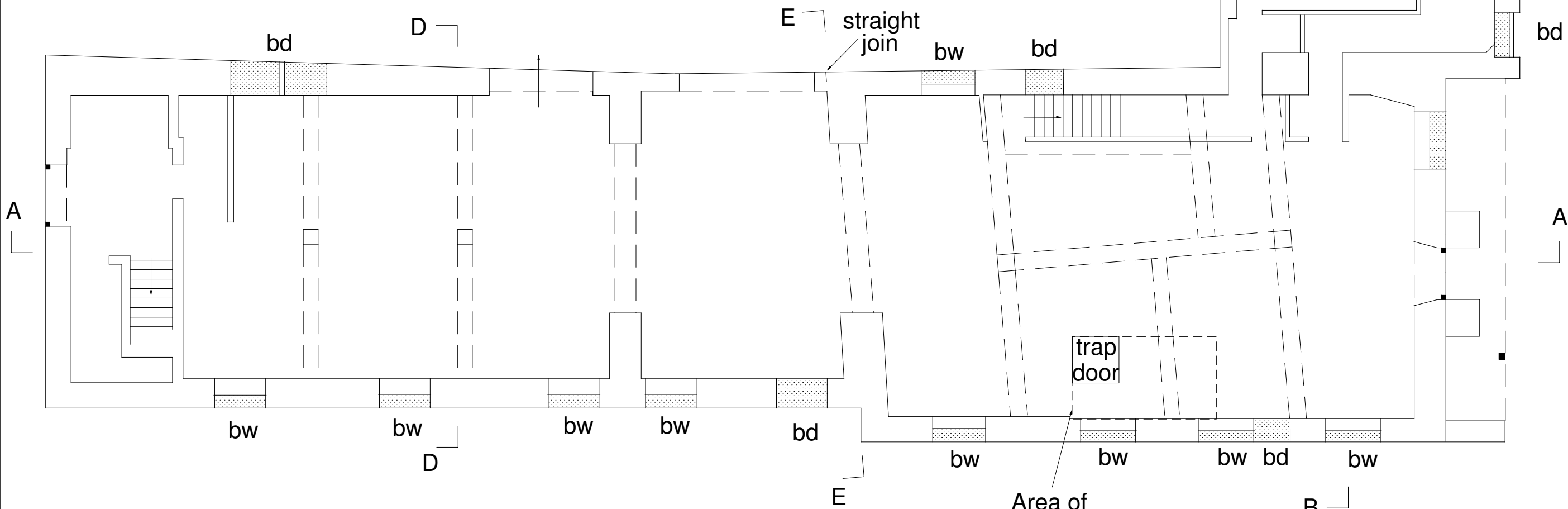
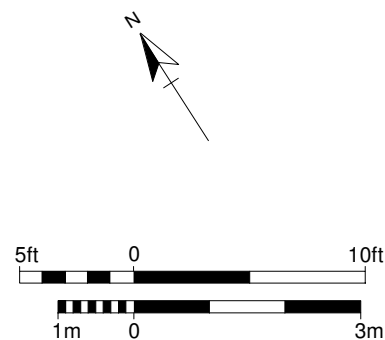
Figure 3 Site Layout Plan, showing recorded buildings

SCHEMATIC PLAN SHOWING PHASING OF SEPARATE SECTIONS OF COMPLEX

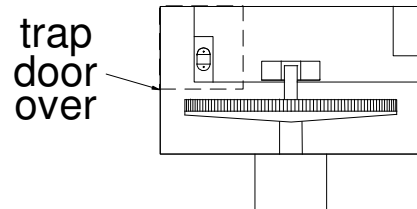


KEY

- Phase 1, Early-mid 18th century
- Phase 2, Late 18th century
- Phase 3, Late 19th century
- Phase 4, Mid 20th century



BASEMENT PLAN

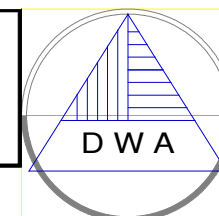


Area of Basement

Archaeological Project Services		
Project Name:	Sheffield Malin Bridge Corn Mill SHCM06	
Scale:	1:100	Drawn by: GT
		Report No: 68/07

Whincanton Distribution Centre
 Radford Road
 Nottingham
 NG7 7EA

DRAWING TITLE
 Proposed Development at
 Corn Mill
 Loxley Road
 Sheffield
 EXISTING PLANS of CORN MILL



3/5 The Highway, Hawarden
 Flintshire, Nr. Chester CH5 3DG
 Telephone: 01244 534 984
 Facsimile: 01244 539 609

Figure 4 Ground Floor Plan

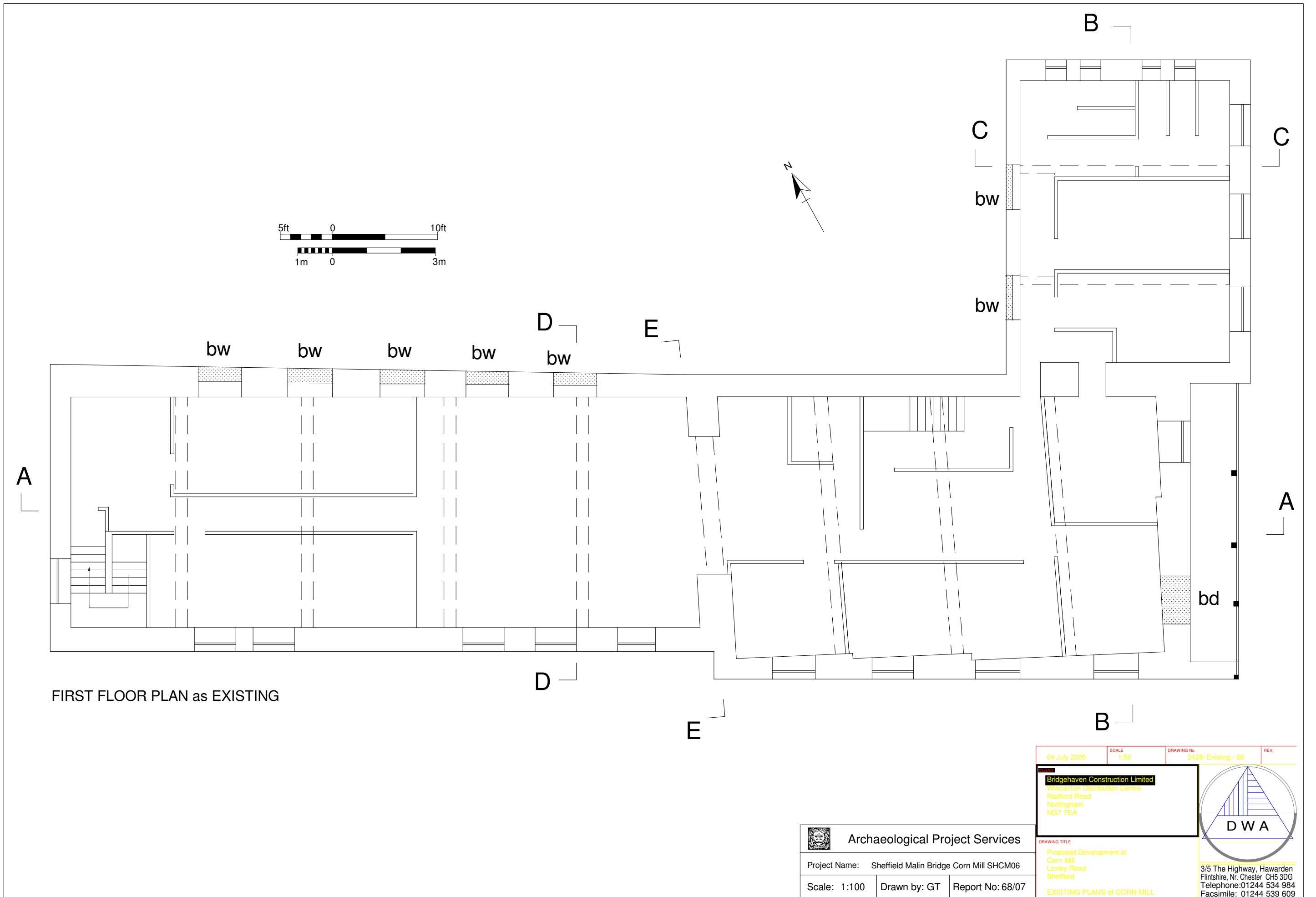
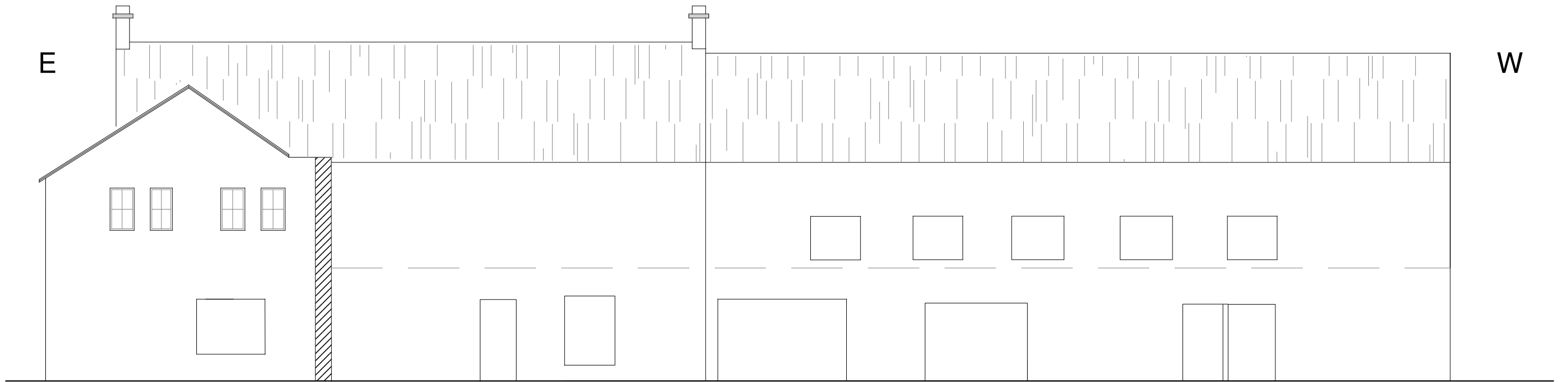


Figure 5 First Floor Plan




RIVER ELEVATION as EXISTING



COURTYARD ELEVATION as EXISTING



 Archaeological Project Services		
Project Name: Sheffield Malin Bridge Corn Mill SHCM06		
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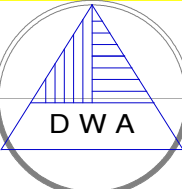
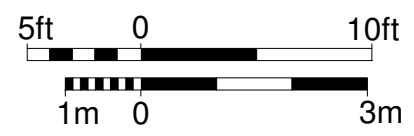
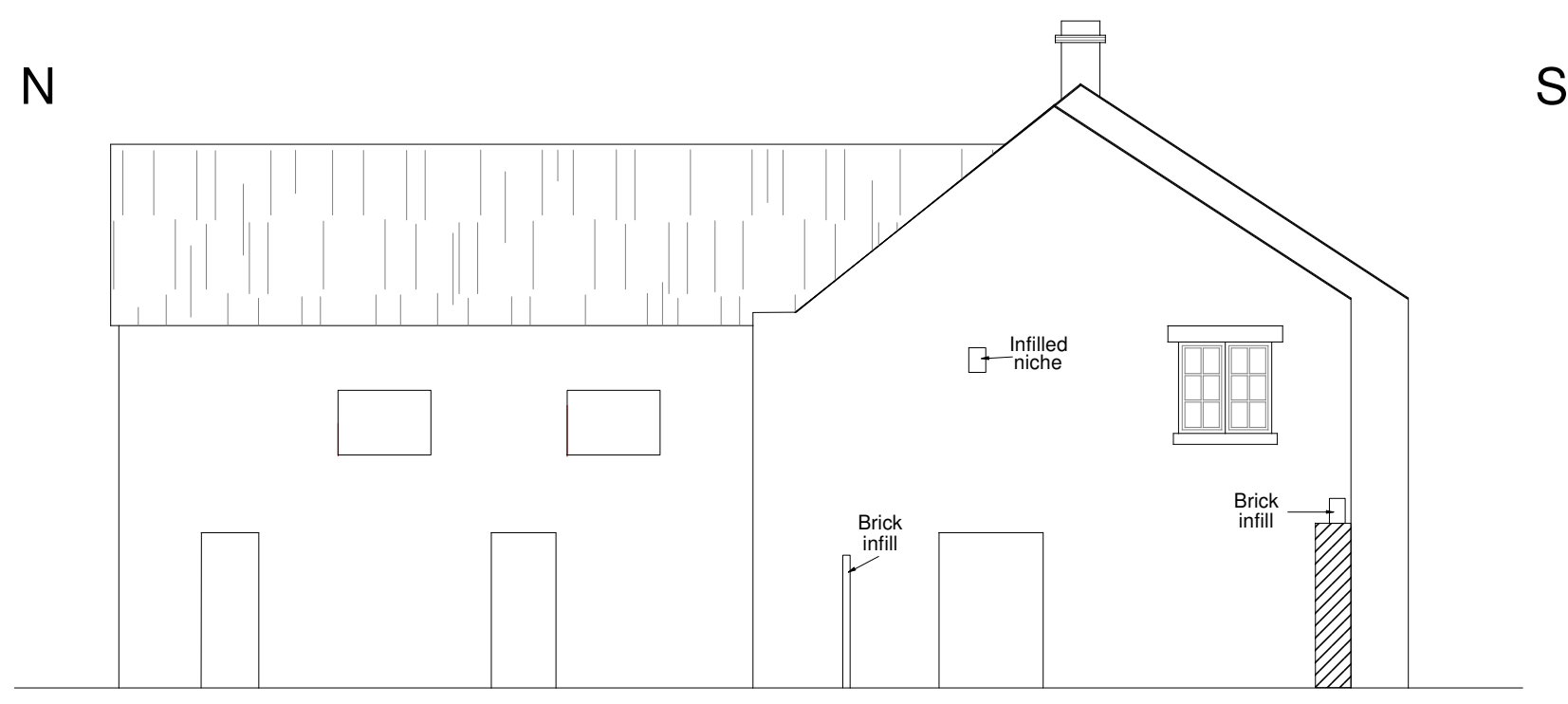
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Wincanton Distribution Centre Radford Road Nottingham NG7 7EA			 3/5 The Highway, Hawarden Flintshire, Nr. Chester CH5 3DG Telephone: 01244 534 984 Facsimile: 01244 539 609
DRAWING TITLE Proposed Development at Corn Mill Loxley Road Sheffield			
MILL ELEVATIONS AS EXISTING			

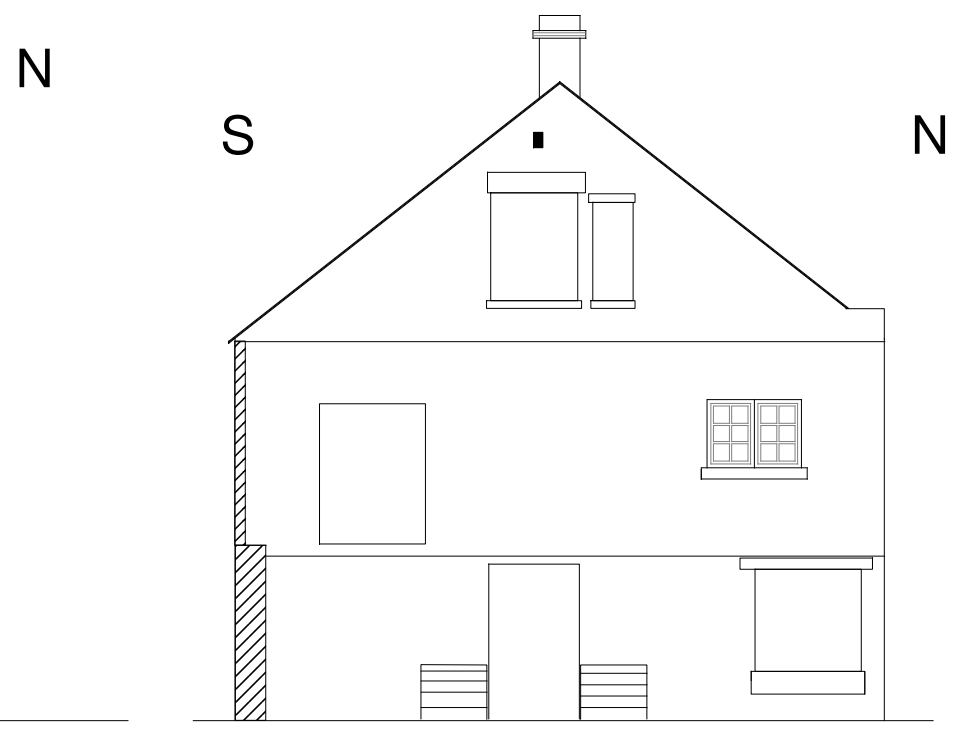
Figure 6 River and Courtyard Elevations



WESTERN COURTYARD ELEVATION as EXISTING



STANNINGTON ROAD ELEVATION as EXISTING



STANNINGTON ROAD ELEVATION, SOUTH GABLE, WITH GALLERY REMOVED

DATE	12 July 2005	SCALE	1:50	DRAWING No.	2428/Existing Elev/12	REV.	
 Archaeological Project Services		Project Name: Sheffield, Malin Bridge Corn Mill SHCM06				Wincanton Distribution Centre Radford Road Nottingham NG7 7EA	
Scale:	1:100	Drawn by:	GT	Report No.:	68/07	Proposed Development at Corn Mill Loxley Road Sheffield	
				MILL ELEVATIONS AS EXISTING		3/5 The Highway, Hawarden Flintshire, Nr. Chester CH5 3DG Telephone: 01244 534 984 Facsimile: 01244 539 609	

Figure 7 Western Courtyard and Stannington Road Elevations

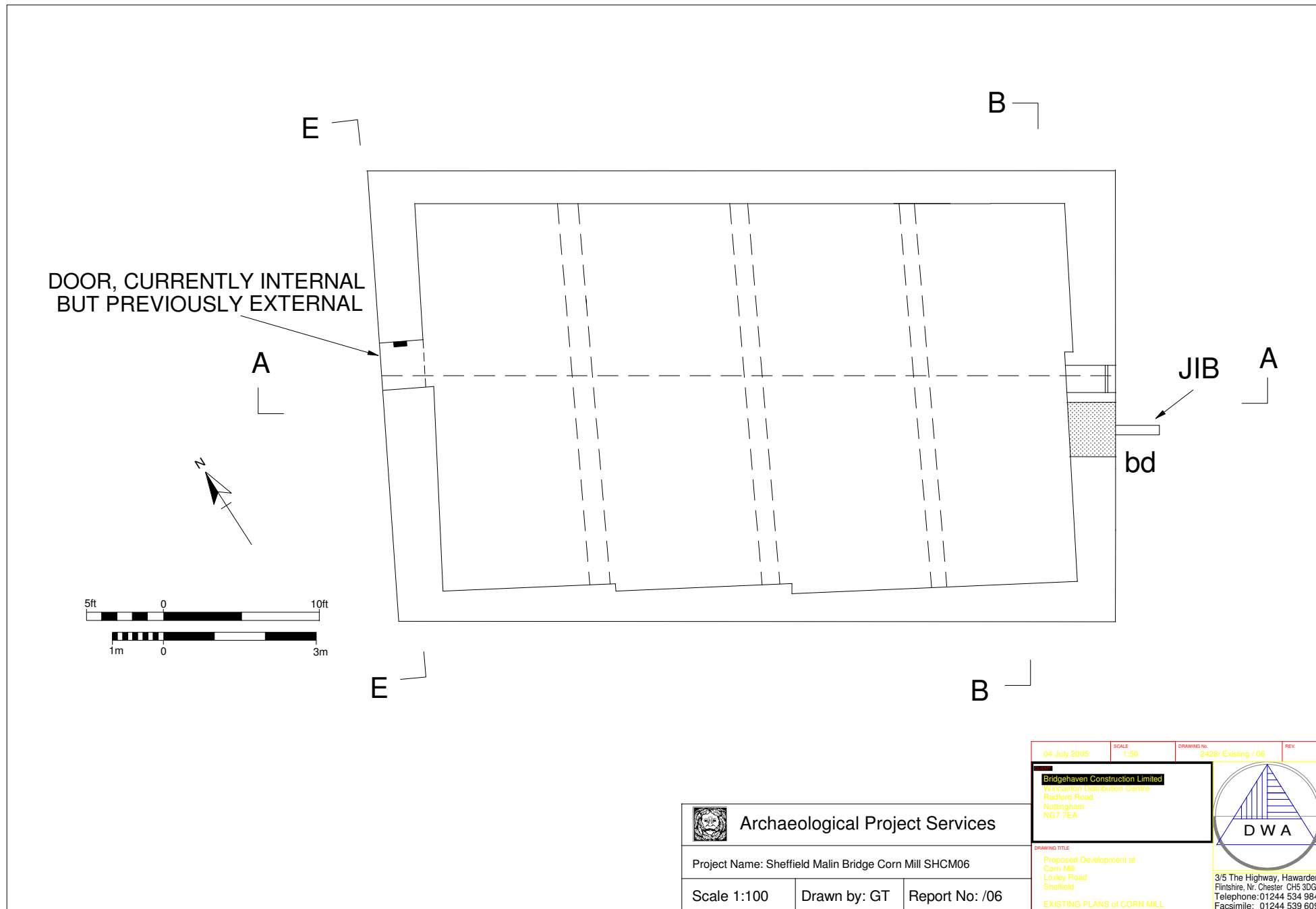
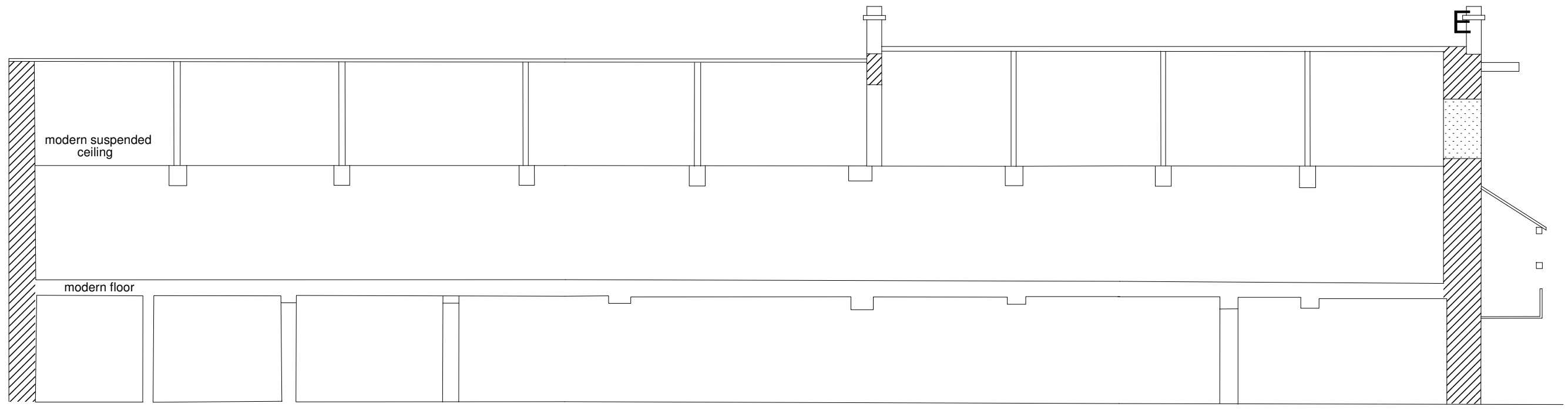
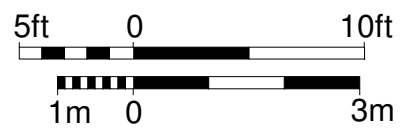


Figure 8 Roof Space Plan

W

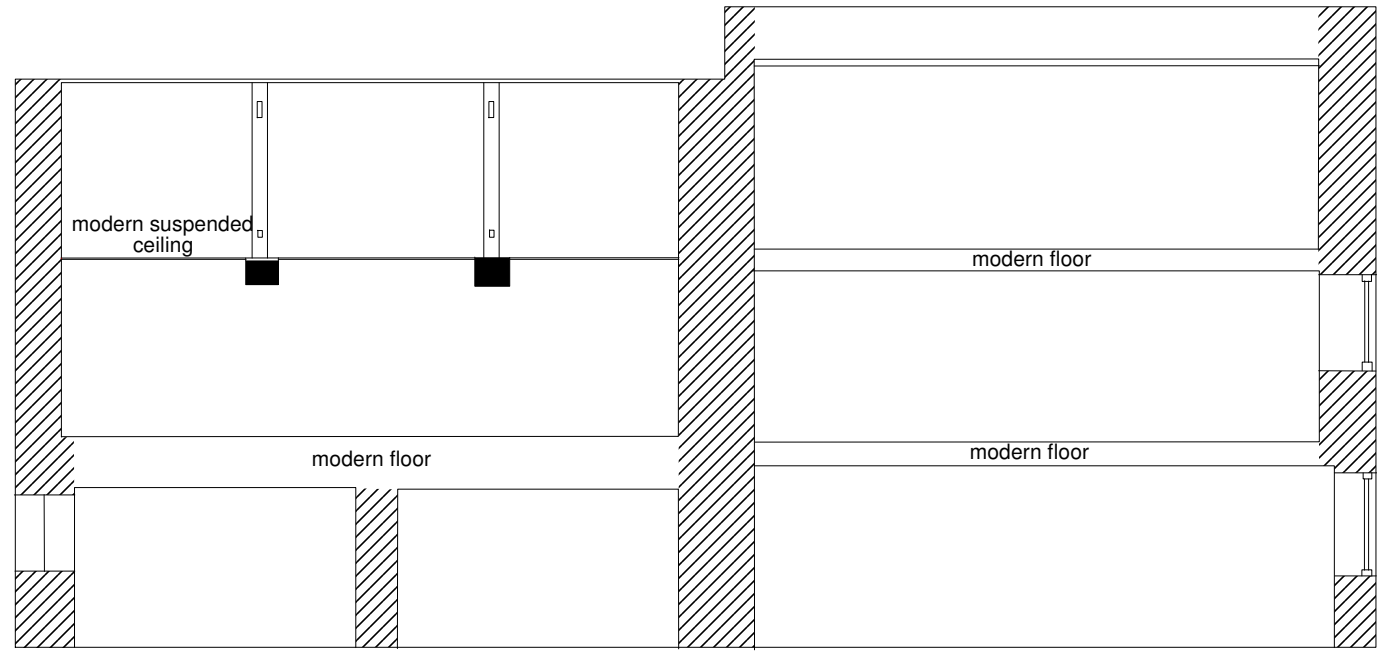


Section A-A



N

S



Modern partition walls omitted

Section B-B


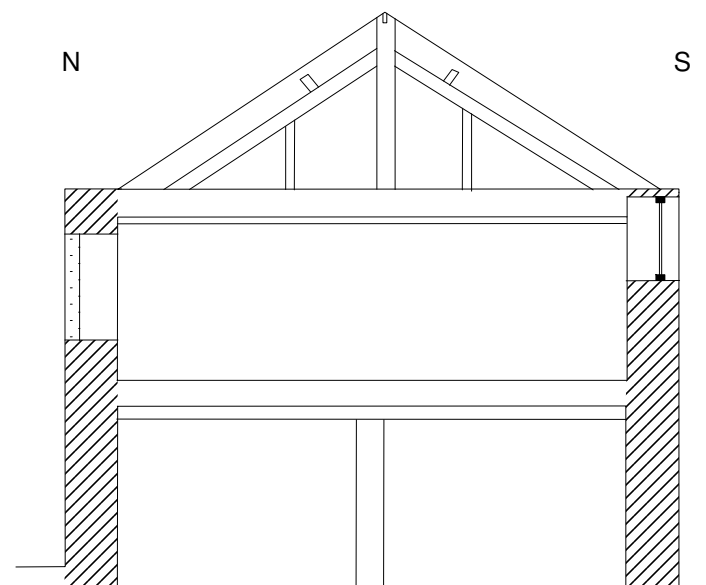
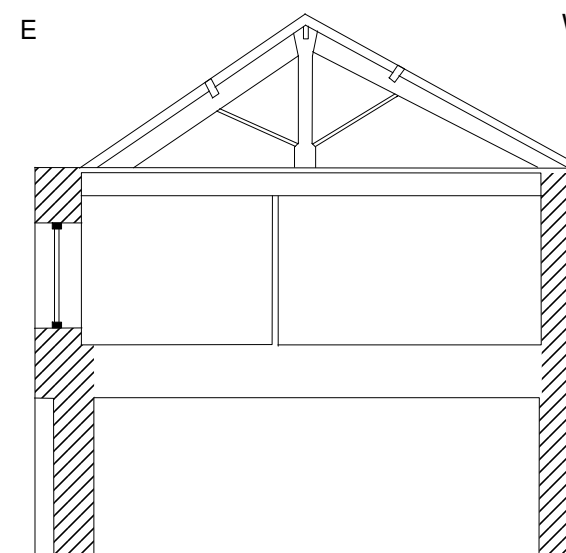
	Archaeological Project Services	
Project Name:	Sheffield Malin Bridge Corn Mill SHCM06	
Scale:	1:100	Drawn by: SU
		Report No: 68/07

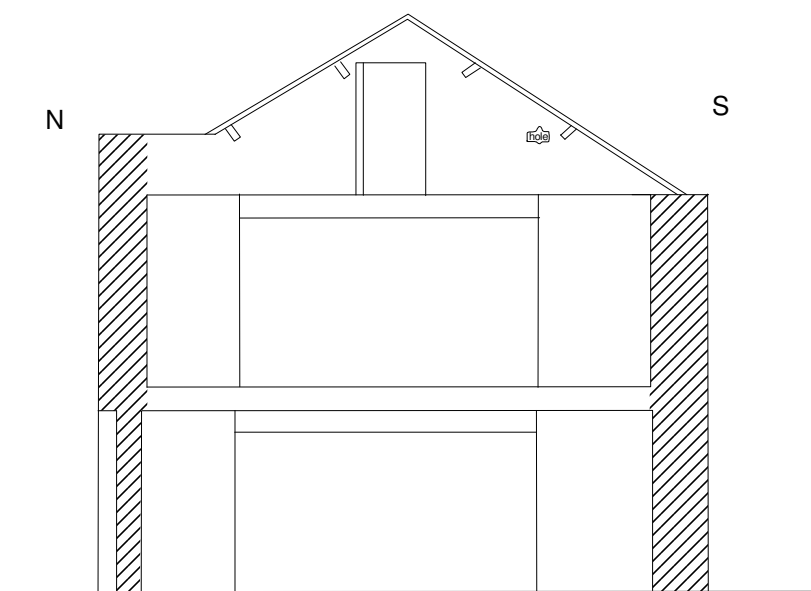
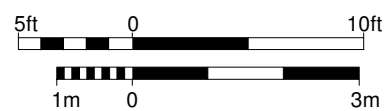
Figure 9 Longitudinal Sections Through Buildings



Section D-D



Section C-C



Section E-E



Archaeological Project Services

Project Name: Sheffield Malin Bridge Corn Mill SHCM06

Scale 1:100 Drawn by: SU Report No: 68/07

Figure 10 Cross Sections Through Buildings

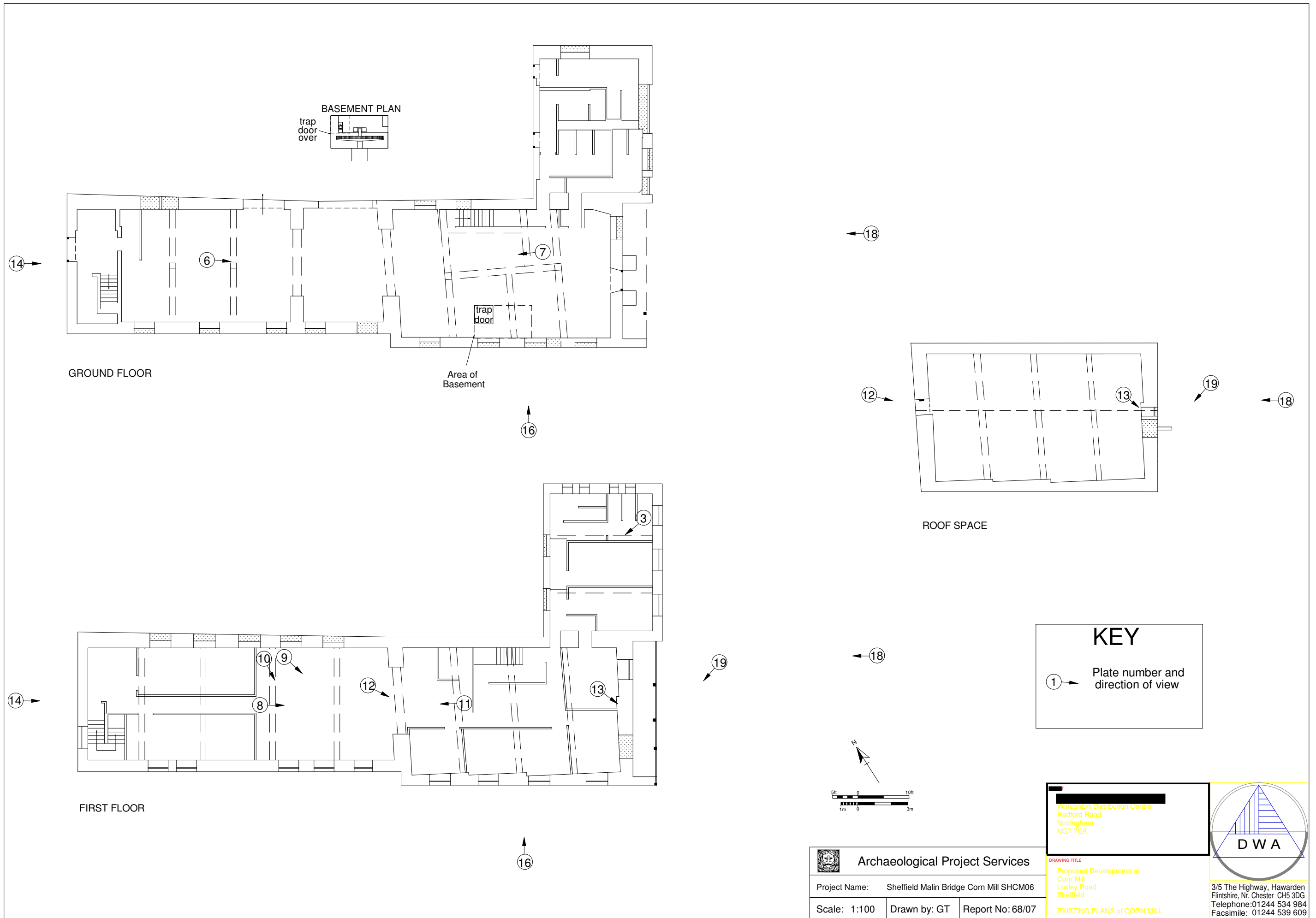


Figure 11 Floor Plans, showing plate arrangement



Plate 1 General Site View, showing recorded buildings, Loxley Road frontage, looking west



Plate 2 General Site View, showing recorded buildings, rear Courtyard area, looking southeast



Plate 3 King Post Roof Truss in N-S Range, looking southeast



Plate 4 North Gable of N-S Range, looking south



Plate 5 Southern Elevation of E-W Range, looking north



Plate 6 Ground Floor, West Room of E-W Range, looking east



Plate 7 Ground Floor, East Room of E-W Range, looking west



Plate 8 First Floor, West Room of E-W Range, looking east



Plate 9 King Post Roof Truss in E-W Range, looking east



Plate 10 First Floor, West Room of E-W Range, looking southeast



Plate 11 First Floor, East Room of E-W Range, looking west



Plate 12 First Floor, East Room of E-W Range, showing doorway in wall in roof space, looking east



Plate 13 First Floor, East Room of E-W Range, showing window in roof space, looking east



Plate 14 West Gable, E-W Range, looking east



Plate 15 Southern Elevation of E-W Range, showing western end, looking northeast



Plate 16 Southern Elevation of E-W Range, showing eastern end and waterwheel, looking north



Plate 18 Eastern Gable of E-W Range, looking west



Plate 17 Southern Elevation of E-W Range, eastern end showing straight join, looking northeast



Plate 19 Eastern Gable of E-W Range, upper part showing jib over loading door, looking southwest



Plate 20 Sluice Gates by southwest corner of mill, looking north

Appendix 1

Brief for Building Recording

South Yorkshire Archaeology Service

BRIEF FOR BUILDING RECORDING (DETAILED)

1 Summary

1.1 In advance and during the proposed redevelopment, a detailed record of the historic buildings is required. The alterations/demolition may lead to the loss of significant historic fabric, the loss of evidence for industrial processes, etc. A permanent record of the areas to be affected prior to any work is, therefore, required. The preliminary results will inform decisions on the need for any archaeological monitoring by the contractor during development works.

2 Photographic Recording

2.1 A general and detailed photographic record is to be made of the building.

2.2 General photographs of the interior and exterior of the building/complex are required, along with photographs of the site/setting of the building(s). These can be taken with a 35mm camera (Medium or Large Format cameras may also be used). Detailed photographs of areas to be affected are also required and are to be taken with a Medium or Large Format camera with perspective control. All photographs are to be black and white. All detailed photographs must contain a graduated photographic scale.

2.3 This basic photographic record is also to be supplemented by colour slide photography, especially where colour is an aspect that needs to be recorded, e.g. decorative finishes.

2.4 A photographic register detailing (as a minimum) location and direction of each shot must be completed.

2.5 The position and direction of each photograph is also to be noted on a copy of the building(s) floor plans.

3 Drawn Record

3.1 The building should be carefully examined prior to the commencement of recording, in order to identify all features relevant to the original and subsequent historical uses of the site. These features should then be incorporated into the final drawn record; RCHME drawing conventions will be followed. The following list should not be treated as exhaustive. However, items of interest would typically include:

- all structural elements (including posts, columns, etc)
- original staircases
- original fitted furniture including shelves and cupboards
- original doors and windows, including associated shutters or other fittings
- original and subsequent historical internal partitions
- any evidence for the generation or transmission of power
- any traps, hoists or lifting mechanisms
- original fireplaces or any other evidence for internal heating arrangements

3.2 The archaeologist on site should also identify and record:

- any significant changes in construction material, including significant changes in stone type and size
- any blocked openings
- Evidence for phasing, and for historical additions or alterations.

3.3 A scale plan of each floor of the building to be affected should be made. Existing plans (e.g. plans submitted with the planning application) may be used as the basis for the drawn record; it is the responsibility of the archaeological contractor to ensure the accuracy of any existing drawings and to make any necessary adjustments or corrections. The scale to be used will be discussed and agreed with the monitor.

3.4 The drawn record should comprise representative sections at a suitable scale (not smaller than 1:50). For costing purposes, SYAS proposes a maximum of two longitudinal sections and 4 cross sections for the existing L-shaped commill building. The final decision on number of sections to be drawn will be agreed in consultation with SYAS, following an initial inspection by the building recording archaeologist. With the exception of ephemeral, clearly modern features (e.g. plasterboard partitions), the structures should be recorded as existing.

3.5 The drawn record should include elevations of currently exposed and elevations to be exposed following demolition of later additions. The results of this work will aid in the reconstruction of internal functional arrangements and activity zones within the former commill

3.6 The record should also include drawings of decoration/fixtures/fittings. However, the ARCUS report demonstrates that few, if any of the historical fixtures and fittings survive.

3.7 Evidence for construction techniques and sequences should be annotated and described. Typical features of interest may include tool marks left over from the preparation of structural timbers, carpenters' marks, etc.

4 Health and Safety

4.1 The archaeological contractor on site will naturally operate with due regard to health and safety regulations.

5 Monitoring

5.1 The designated Local Authority's Conservation Officer and/or South Yorkshire Archaeology Service (SYAS) will be responsible for monitoring the contractor's work. The contractor must give a minimum of one week's notice of the commencement of fieldwork in order that arrangements for monitoring can be made.

5.2 The need for contingency work to be undertaken must be discussed with and agreed by the monitor whilst the recording work is ongoing. Any alterations to the agreed programme, found to be necessary during the work, are also to be discussed and agreed with the monitor.

5.3 In particular, the contractor should advise the monitor if archive material, i.e. paper records or artefacts relating to the use of the building being recorded, are found to be present; a contingency is to be allowed for specialist assessment of any such material identified. The monitor will then discuss the removal of this material off site, to an appropriate archive store, with the site owners. Evidence from such material will be used by the contractor to supplement their previous research.

5.4 The work shall be carried out by appropriately qualified and experienced staff. Details of staff and their relevant experience should be discussed and agreed with the monitor prior to the work being carried out.

6 Post-Recording Work and Report Preparation

6.1 Record photographs are to be printed at a minimum of 5" x 4".

6.2 A fully indexed field archive is to be compiled consisting of all primary written documents, plans, photographic negatives and a complete set of labelled photographic prints. Labelling should be in indelible ink on the back of the print and should include: film and frame number; date recorded and photographers name; name and address of feature/building; national grid reference. Photographic prints should be mounted in appropriate archival stable sleeves.

6.3 A written report will be produced detailing who undertook the recording, when the work was done, where the building/complex is located, what recording was undertaken and why the work was required. A discussion of the construction sequence and use of the building(s) should be included. The report will also include an analysis of the results that will allow an understanding of the building(s) historical and architectural significance to be established. The analysis will also place, and discuss the significance of, the building/complex within its environs.

6.4 The report illustrations should include as a minimum: a location map at not less than 1:2500; a site plan at not less than 1:500; photographs used to illustrate all key points and a complete set of site drawings, at an appropriate scale, executed to publication standard. All historic maps copied during the map analysis stage (section 5.0) should also be included within the report with the building(s) of interest clearly visible. The photographic record plan must also be included. In addition to those photographs used as illustrations, a complete set of all photographs, excluding duplications, are to be included in the digital copy of the report and referenced as necessary.

6.5 A copy of this brief should be bound into the back of the report.

7 Submission of Report

7.1 At least two copies of the printed report are to be submitted to the developer or their agent (or as many as have been agreed): one is for submission to the Local Planning Authority.

7.2 One copy of the printed report must be submitted direct to SYAS for incorporation into the South Yorkshire SMR.

7.3 One copy of the printed report must be submitted to the appropriate Local Authority Conservation Officer at Sheffield City Council.

7.4 A CD Rom containing the text of the report and illustrations (including all photos and slides taken), scanned at 300 dpi, is to be provided with each copy of the printed report.

8 Submission and deposition of Archive

8.1 The archive, including a copy of the report, will be compiled, indexed and then offered for deposition with the appropriate Local Authority archive.

8.2 The contractor will either arrange for copyright on the deposited material to be assigned to the archive, or will licence the archive to use the material, in perpetuity; this licence would allow the archive to reproduce material, including for use by third parties, with the copyright owner suitably acknowledged.

9 Publicity

9.1 A summary report of an appropriate length, accompanied by illustrations, must be prepared and submitted in digital format, for publication in the *Archaeology in South Yorkshire*.

9.2 Acceptable digital formats are:

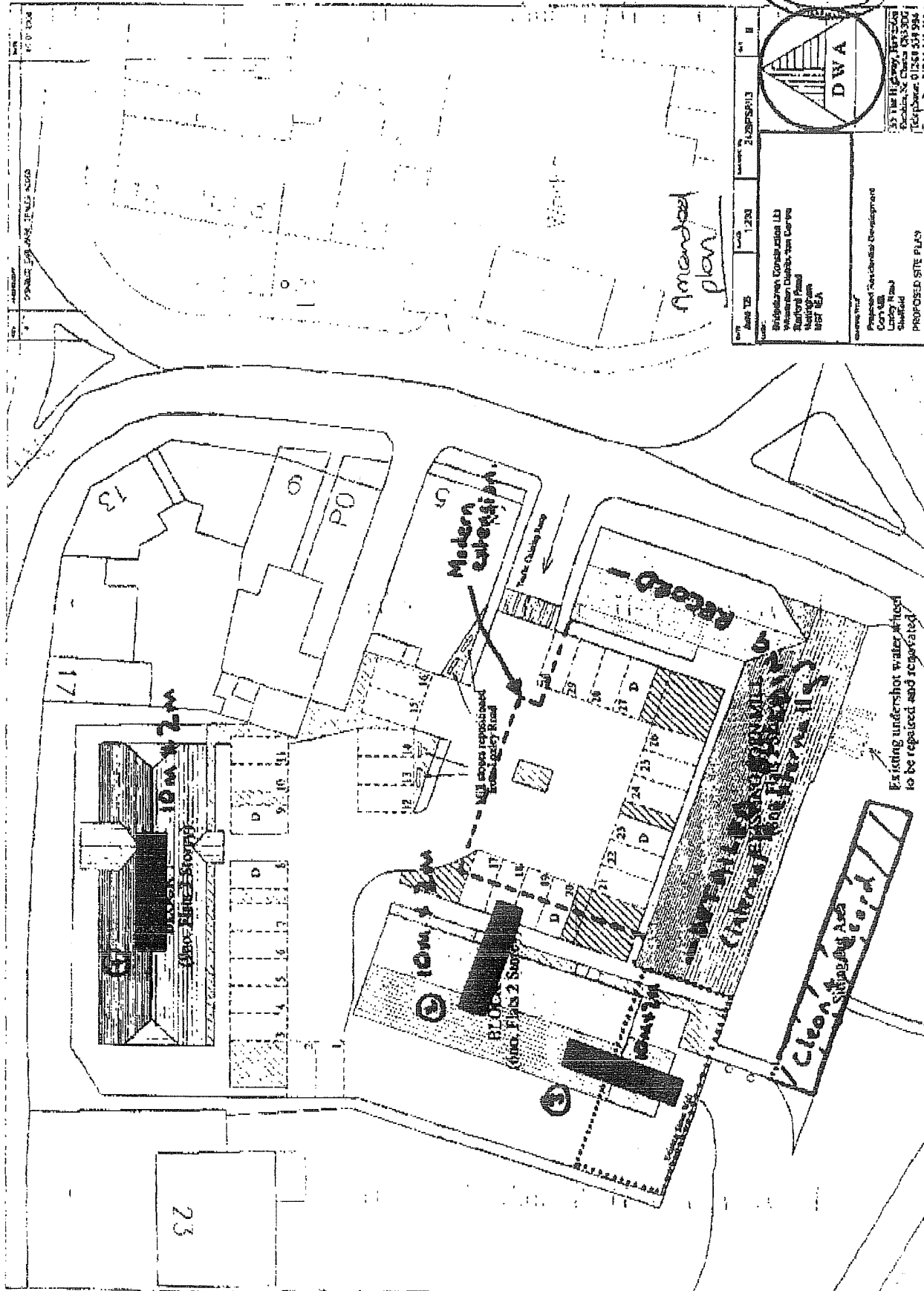
- text (Word and ASCII);
- images (.JPG at no less than 300 dpi. resolution).

9.3 Provision must be made for publicising the results of the work locally, e.g. by presenting a paper at South Yorkshire Archaeology Day and talking to local societies.

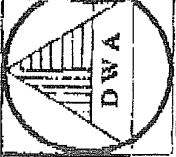
9.4 The archaeological contractor must complete the online OASIS form at <http://ads.ahds.ac.uk/project/oasis/>.

432520 / 389390

1:450



Amended plan

DATE: 01/25/2011	SCALE: 1:450	PROJECT: 432520 / 389390	72 JAN 2011
Prepared: Theobalds Development City Hall Ludlow Road Stafford Staffordshire ST16 3JY			
Prepared: Theobalds Development City Hall Ludlow Road Stafford Staffordshire ST16 3JY		25 THE HAYWAG, STAFFORD BRIDGEMAN CONSTRUCTION LTD WATERLOO CLAYTON WAY STAFFORD STAFFORDSHIRE ST16 4NU	
PROPOSED SITE PLAN		Tel: 01283 331984 Fax: 01283 331985	

Appendix 2

**THE CORN MILL,
MALIN BRIDGE,
SHEFFIELD,
SOUTH YORKSHIRE**

**SPECIFICATION FOR
BUILDING RECORDING**

**PREPARED FOR
ANDREW DAVIDSON AND WH BROWN**

**BY
ARCHAEOLOGICAL PROJECT SERVICES
Institute of Field Archaeologists'
Registered Organisation No. 21**

JANUARY 2007

1 SUMMARY

- 1.1 *A programme of building recording is required prior to the conversion of a former corn mill at Malin Bridge, Sheffield, South Yorkshire.*
- 1.2 *The building was first recorded in 1739 and is of architectural and historic interest.*
- 1.3 *The building recording will be undertaken prior to conversion of the structure. The structure, ground plan, external elevations and details will be recorded in writing, graphically and photographically.*
- 1.4 *On completion of the fieldwork a report will be prepared detailing the results of the investigation. The report will consist of a narrative supported by illustrations and photographs.*

2 INTRODUCTION

- 2.1 This document comprises a specification for historic building recording prior to conversion of a former mill building at Malin Bridge, Sheffield, South Yorkshire.
- 2.2 This document contains the following parts:
 - 2.2.1 Overview.
 - 2.2.2 Stages of work and methodologies.
 - 2.2.3 Programme of works and staffing structure of the project

3 SITE LOCATION

- 3.1 The site lies on the west side of the City of Sheffield, South Yorkshire at 1 Loxley Road, Malin Bridge, National Grid Reference 432520, 389390. Comprising an area of approximately 0.3hectares, the L-shaped proposed area of development extends between Stannington Road to the east and Loxley Road to the north. At the southeast corner of the this area stand the existing L-shaped mill buildings, with the longest axis adjacent to the River Loxley, where the mill race and existing undershot water wheel are located (Fig 1). A modern extension occupies the north side of the mill.
- 3.2 The earliest documentary reference to the site dates to 1739 when a weir belonging to the ‘Malin Bridge Wheel’ was mentioned in a lease of the next mill downstream. A map of Owlerton manor dating to 1777 has a note in accompanying text which mentions the ‘new wheel’ at Malin Bridge.
- 3.3 Reconnaissance of the building has indicated that the interior has been gutted and no significant structural or architectural detail survives internally, other than the mill gearing in a small compartment in the basement. However, the reconnaissance has shown that there are blocked openings and a hoist evident in the external elevations.

4 PLANNING BACKGROUND

- 4.1 Full planning permission (Application 05/02838/FUL) for residential development and renovation of existing buildings on the site has been granted by Sheffield City Council subject to archaeological conditions including building recording. A brief for recording of the mill building has been issued by the South Yorkshire Archaeology Service (Sykes 2006).

5 **AIMS AND OBJECTIVES**

- 5.1 The aim of the work will be to provide a record of the mill building on the site prior to alteration.

6 **BUILDING RECORDING**

- 6.1 Building Investigation will be undertaken prior to and during the demolition/alteration of the existing buildings. Survey of the standing building will conform to English Heritage (2006) guidelines. Subject to accessibility and Health and Safety considerations, the record will include:

6.1.1 A photographic survey showing the building in its context; details of the exterior; interior views of the principal rooms and circulation areas; and possibly structural or decorative details. The photographs will be catalogued on Archaeological Project Services pro forma recording sheets and their locations will be referenced to plans of the site. Contextual photographs will be taken with a 35mm camera; detailed views will be by medium format camera. Photography will be predominantly in monochrome print, supplemented by colour slide. Detailed views will include graduated photographic scales.

6.1.2 Dimensioned plans of each floor at 1:100. Any particularly intricate or small detail will be recorded at 1:50 or more appropriate scale.

6.1.3 Section drawings at 1:50. Two long and two cross sections will be drawn, their locations recorded on the plans of the building.

6.1.4 A written record providing an account of the building's use, materials and possible dates and developmental sequence.

7 **SITE OPERATIONS**

7.1 General considerations

7.1.1 All work will be undertaken following statutory Health and Safety requirements in operation at the time of the investigation.

7.1.2 The work will be undertaken according to the relevant codes of practise issued by the Institute of Field Archaeologists (IFA), under the management of a Member of the institute (MIFA). Archaeological Project Services is IFA registered organisation no. 21.

7.1.3 The building recording would be undertaken by staff with experience of such examinations up to RCHME Level 3 standard.

7.1.4 Any and all artefacts found during the investigation and thought to be 'treasure', as defined by the Treasure Act 1996, will be removed from site to a secure store and promptly reported to the appropriate coroner's office.

7.2 Due to the fact that the interior of the building has been gutted, internal recording will largely be restricted to checking and annotation of architects's plans, accompanied by photography. Recording of the mill gear will mainly be by photography, due to constraints on physical access and Health and Safety considerations. More formal recording procedures will apply to the exterior of the building, again subject to safe access and Health and Safety considerations.

8 REPORTING

8.1 On completion of the fieldwork, a report detailing the results of the building recording will be prepared. This will consist of:

A summary of the survey results.

A description of the history and historical setting of the building, including historic maps etc.

A text describing the results of the building survey.

Interpretation of the development and use of the building.

The report will be suitably illustrated with:

Location plans of the site and building.

Plan of each floor of the building.

Section/elevation drawings.

Appropriate photographs of the elevations, general interior views and specific features, supported by the photographic location plan(s).

9 REPORT DEPOSITION

9.1 Copies of the report will be sent to the: the client and the South Yorkshire Archaeology Service for incorporation into the Sites & Monuments Record. A digital copy of the report in PDF format will also be provided. The digital copy will include scanned versions of all photographs and slides taken (excluding duplicates), at 300 dpi (presuming that only some will have been used as illustrations), and the detailed photographic register.

10 ARCHIVE

10.1 The documentation and records generated during the recording will be sorted and ordered into the format acceptable to Sheffield City Archives for long-term storage and curation. The archive will include all primary written documents, photographic negatives and a complete set of labeled prints (at a minimum of 5"x 4").

11 PUBLICATION

11.1 Details of the investigation will be input to the Online Access to the Index of Archaeological Investigations (OASIS). A summary note and illustration at 300 dpi, will be prepared for publication in *Archaeology in South Yorkshire*.

11.2 If appropriate, notes on the findings will be submitted to the appropriate national journals: *Post-medieval Archaeology*; *Industrial Archaeology Review*; and *Vernacular Architecture*.

11.3 Allowance will also be made for publicising the results locally, e.g. by presenting a paper at South Yorkshire Archaeology Day, talking to local societies, etc.

12 CURATORIAL RESPONSIBILITY

- 12.1 Curatorial responsibility for the project lies with the South Yorkshire Archaeology Service. As much written notice as possible, ideally at least fourteen days, will be given to the archaeological curator prior to the commencement of the project to enable them to make appropriate monitoring arrangements.

13 VARIATIONS AND CONTINGENCIES

- 13.1 Variations to the proposed scheme of works will only be made following written confirmation of acceptance from the archaeological curator.
- 13.2 In the event of the discovery of any unexpected remains of archaeological/historical importance, or of any changed circumstances, it is the responsibility of the archaeological contractor to inform the archaeological curator.
- 13.3 Where important archaeological/historical remains are discovered and deemed to merit further investigation additional resources may be required to provide an appropriate level of investigation, recording and analysis.
- 13.4 Any contingency requirement for additional fieldwork or analysis outside the scope of the proposed scheme of works will only be activated following full consultation with the archaeological curator and the client.

14 PROGRAMME OF WORKS AND STAFFING LEVELS

- 14.1 The building recording will be undertaken prior to the conversion and during the archaeological evaluation phase and is expected to take about two days.
- 14.2 An archaeological supervisor with experience of building recording will undertake the work.
- 14.3 Analysis and report production will be undertaken by the archaeological supervisor, or a post-excavation analyst as appropriate, with assistance from an illustrator.

15 INSURANCES

- 15.1 Archaeological Project Services, as part of the Heritage Trust of Lincolnshire, maintains Employers Liability Insurance of £10,000,000, together with Public and Products Liability insurances, each with indemnity of £5,000,000. Copies of insurance documentation can be supplied on request.

16 COPYRIGHT

- 16.1 Archaeological Project Services shall retain full copyright of any commissioned reports under the Copyright, Designs and Patents Act 1988 with all rights reserved; excepting that it hereby provides an exclusive licence to the client for the use of such documents by the client in all matters directly relating to the project as described in the Project Specification.
- 16.2 Licence will also be given to the archive repository to use the documentary archive for educational, public and research purposes. This licence will allow the archive to reproduce material, including for use by third parties, with the copyright owner suitably acknowledged.
- 16.3 In the case of non-satisfactory settlement of account then copyright will remain fully and exclusively with Archaeological Project Services. In these circumstances it will be an infringement under the Copyright, Designs and Patents Act 1988 for the client to pass any report, partial report, or copy of same, to any third party. Reports submitted in good faith by

Archaeological Project Services to any Planning Authority or archaeological curator will be removed from said planning Authority and/or archaeological curator. The Planning Authority and/or archaeological curator will be notified by Archaeological Project Services that the use of any such information previously supplied constitutes an infringement under the Copyright, Designs and Patents Act 1988 and may result in legal action.

- 16.4 The author of any report or specialist contribution to a report shall retain intellectual copyright of their work and may make use of their work for educational or research purposes or for further publication.

17 **BIBLIOGRAPHY**

English Heritage, 2006 *Understanding Historic Buildings, A guide to good recording practice*

Sykes. R., 2006 *Brief for Building Recording (Detailed)* South Yorkshire Archaeology Service

Specification: Version 2, 08-03-07

Appendix 3

GLOSSARY

Ashlar	Masonry of large blocks worked to even faces and square edges.
Bay	Regular structural subdivision of a building; the bays may be marked by roof-trusses, beams etc.
Bridging beam	Transverse beam that bridges a lower floor, often supporting the floor timbers of an upper storey.
Fenestration	The pattern formed by windows in a building façade.
Georgian	Pertaining to the reign of the Kings George I to IV, dating from 1714 to 1830.
King post	Vertical timber standing on a collar or tie beam (<i>q.v.</i>) and rising to the apex of a roof to support a ridge piece (<i>q.v.</i>).
Lay (or line) shaft	Subsidiary drive shaft fitted with pulley wheels. The lay/line shaft received power via bevel gearing, and the pulley wheels operated belts that drove machinery.
Light	An aperture through which light may pass, such as a pane of glass (each separate pane of glass within a window).
Parapet	Low wall or barrier at the edge of a roof, rising above the eaves.
Pit wheel	Toothed wheel set parallel to, and on the common axle with, a waterwheel, placed within a pit inside the mill building. The pit wheel enmeshes with the wallower (<i>q.v.</i>) to transfer the power of the waterwheel to drive shafts within the building.
Post-medieval	The period following the Middle Ages, dating from approximately AD 1500-1800.
Purlin	Longitudinal timber giving support to the rafters of a roof.
Ridge piece	Longitudinal timber at the apex of a pitched roof where the rafters lean against it.
Straight join	Regular vertical junction between two sections of walling that shows one part was butted against the other.
Tie beam	Main transverse beam in a roof truss connecting the feet of the principal rafter and preventing the spreading of the two sides of a sloping roof.
Wallower	A toothed wheel set at right angles to, and enmeshed with, the pit wheel (<i>q.v.</i>) that transfers the horizontal motion of the common axle which connects the pit wheel and waterwheel, to vertical rotation of the main shaft.

Appendix 4

THE ARCHIVE

The archive consists of:

- 1 Plan record sheet
- 1 Section record sheet
- 10 Drawing sheets
- 11 Annotated architects drawings
- 2 Photographic record sheets
- 3 Daily record sheets

All primary records are currently kept at:

Archaeological Project Services
The Old School
Cameron Street
Heckington
Sleaford
Lincolnshire
NG34 9RW

The ultimate destination of the project archive is:

Sheffield Archives
52 Shoreham Street
Sheffield
S1 4SP

Archaeological Project Services Site Code: SHCM06

The discussion and comments provided in this report are based on the archaeology revealed during the site investigations. Other archaeological finds and features may exist on the development site but away from the areas exposed during the course of this fieldwork. *Archaeological Project Services* cannot confirm that those areas unexposed are free from archaeology nor that any archaeology present there is of a similar character to that revealed during the current investigation.

Archaeological Project Services shall retain full copyright of any commissioned reports under the *Copyright, Designs and Patents Act 1988* with all rights reserved; excepting that it hereby provides an exclusive licence to the client for the use of such documents by the client in all matters directly relating to the project as described in the Project Specification.