ARCHAEOLOGICAL PHOTOGRAPHIC SURVEY OF BUILDINGS AT WEST STREET/GEORGE STREET, BOSTON, LINCOLNSHIRE (BWG02) APS SITE CODE (WS602) CCM SITE CODE

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ARCHAEOLOGICAL PHOTOGRAPHIC SURVEY OF BUILDINGS AT WEST STREET/GEORGE STREET, BOSTON, LINCOLNSHIRE (BWG02) APS SITE CODE (WSG02) CCM SITE CODE

> Work Undertaken For Corstorphine and Wright

> > July 2002

Report Compiled by Gary Taylor MA

National Grid Reference: TF 3247 4385 Planning Reference: B/01/0030/FULL

ARCHAEOLOGICAL PROJECT SERVICES



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1. SUMMARY

of A programme archaeological photographic recording of buildings was undertaken at West Street/George Street, Lincolnshire. Boston. The recorded buildings are of historic interest and important in terms of industrial archaeology. One of the buildings, one of the former Phoenix corn mills, is a steam mill dating from 1889 and the second is the former Boston Guardian building, erected in 1887.

The whole of the mill was photographically recorded. This indicated that the mill had been little changed from its original construction. Blocked windows were noted and cast iron support columns were recorded on all floors of the mill. It was established that the mill was divided into two parts. The smaller part of the building was probably used as the milling area, while extensive, open floors suggest that the other, larger part of the mill functioned as a warehouse. Cast iron surrounds and supports for an external walkway were recorded at 2nd floor level, this walkway providing the only access between the two parts of the mill building. In part of the building were pulley wheels and shafts and trapdoors for a sack hoist, though the mill machinery has been removed in the past.

Only the façade of the Boston Guardian building was recorded. Particular features of note included brick hood moulds above the windows, the shaped gable and construction date 1887 marked in bricks.

2. INTRODUCTION

2.1 Definition of Archaeological Building Recording

Building recording is defined as:

"... a program 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 1996).

2.2 Planning Background

Archaeological Project Services (APS) was commissioned by Corstorphine and Wright to undertake a programme of photographic recording of historic buildings at West Street/George Street, Boston, Lincolnshire. Planning permission (B/01/0030/FULL) has been granted for retail development of the site, subject to conditions including the implementation of an archaeological scheme of works, to include building recording and trial trench evaluation. The building recording aspect of the investigation was carried out between 19th-28th June 2002 in accordance with a specification designed by APS (Appendix 1) and approved by the Boston Community Archaeologist. The results of the trial trenching aspect of the investigation will be reported separately.

2.3 Topography and Geology

Boston is located approximately 45km southeast of Lincoln and 7km from the northwest coast of The Wash, in the fens of south Lincolnshire (Fig. 1). The site is located just west of the medieval core of Boston, on the western side of the River Witham. Located on the east side of George Street, the site is at national grid reference TF 3247 4385 and is bounded on the north by West Street and the south by Fydell Crescent and is partially split by Mill Lane, which runs eastward off George Street (Fig. 2).

The site is a rectangular block of land approximately 0.57ha in extent, currently built upon and with a mix of land uses. The recorded buildings are the remaining member of the former Phoenix Mills off Fydell Crescent and the former Boston

Guardian building on West Street, Boston (Fig. 3).

The natural soil at the site comprises the Wisbech Association, coarse silty calcareous soil, overlying marine alluvium (Hodge *et al.* 1984, 361). The site is on a gentle rise eastward toward the river and has a height of approximately 4m OD.

2.4 Archaeological Setting

Boston rose to prominence during the medieval period when it developed into an important port and one of the largest wool exporting centres in England. It was also a major religious centre for a church and four religious houses were established in the town during the medieval period. One of these, a Carmelite Friary, was situated just to the east of the investigation area, though its exact location and extent is previous unknown. However, investigations about 100m to the east identified quantities of medieval ecclesiastical masonry, almost certainly from the friary, reused as foundations for later buildings (Archaeological Project Services 1994).

A well or cistern containing pottery of $12^{th}-16^{th}$ century date was discovered beneath a cellar on West Street, to the east of the investigation site. Slightly further east, on High Street, are 15^{th} century half-timbered buildings. An investigation on High Street identified medieval deposits containing well-preserved organic objects including wood, leather and plant remains. Additionally, medieval structural remains, including wooden stakes and part of a brick structure, were also revealed. These medieval remains occurred beneath cellars at a depth of *c*. 3.7m below ground level (Archaeological Project Services 1996).

West Street was formerly known as Ford-End, or Further End Lane and is recorded as early as 1575 (Thompson 1856, 254; 257). Hall's map of Boston dating from 1741 shows a building on the West Street frontage of the site, though most of the investigation area was open ground at that time (Hall 1741). Later maps indicate that development of predominantly industrial nature filled the northern part of the site by 1829 (Wood 1829), but the area south of Mill Lane was vacant until the second half of the 19th century when the Phoenix corn mills were erected (Ordnance Survey 1887). The first of the Phoenix Mills was built on the immediate south side of Mill Lane. The surveyed structure is just south of the original Phoenix Mill and is a slightly later addition to, or rebuild of, the mill complex. The mill was latterly used as a machinery parts store.

3. AIMS

In accordance with the specification, the aims of the work were to provide a photographic record and brief written summary of industrial structures, the steam mill building and façade of the Boston Guardian building, on the site.

4. METHODS

Recording of the building was undertaken approximate Level 1 standard, according to the Royal Commission specification. This involves the production of a dimensioned sketch plan (Fig. 4); general photographic views of the exterior of the buildings; photographs of the overall appearance of principal rooms and circulation areas: and detailed photographic coverage of the external appearance and effect of the design of the buildings. Additionally, photographs were taken of the internal and external structural and decorative details relevant to the design, development and use of the buildings (RCHME 1996).

Photographic recording was undertaken with a manual 35mm camera fitted with a 28-70mm macro lens. Colour slide film was used. Where appropriate, particularly

for internal views of the building, a flashgun was used. An index of the photographs was compiled on Archaeological Project Services pro forma recording sheets.

5. **RESULTS**

5.1 The Mill

Exterior

The mill is a 5-storey brick-built structure with a pitched roof (Plates 1 and 2). Elongated north-south, it is six windows long and three wide and the windows and doors have segmental arches in creamcoloured brick. Some of the window-sills, particularly on the east face, are in sandstone.

In its south elevation, there is a central sequence of doors at each storey, with the ground floor doorway providing access to this part of the mill. Several of the doors in this sequence are blocked-up. Between the second and third storey doors is a sandstone date stone (Plate 3) that reads:

] J. BEDFORD 1889

An external platform is located outside the top door and is supported on decorative cast iron mounts (Plate 1).

The eastern elevation is entered by a centrally-placed ground floor doorway. The most southerly ground floor window in this elevation is bricked-up and there is a modern brick lean-to attached to the elevation, partially overlapping the blocked window. There is a further blocked ground floor window entirely behind this recent lean-to (Fig. 4).

At third storey level there is an external walk-way that connects two doors in the southern half of the wall (Plate 1). This walk-way has a flagstone base and is supported on decorative cast iron mounts (Plate 4). The northern gable has a central doorway at second storey level and a blocked round window immediately below the roof apex (Plates 5 and 6). Otherwise, there are sets of three windows at first, fourth and fifth storey levels. At second storey level are two windows, one either side of the door. There are no windows it the third storey north wall. A cast iron wall box is set into the wall to the left of the ground floor left window (Plate 5).

The western elevation is similar to the eastern, except there is no external gangway and no doors, and the lower two storeys are concealed by a modern lean-to structure (Plate 2).

The roof is of corrugated material and between the second and third windows from the southern end of the building there is a wall that extends upwards above the roof line (Plate 7).

Interior

The wall that extends above the roof line (see above) divides the building into two compartments (Fig. 4).

The ground floor is based with concrete, all other storeys are floored with timber.

Windows in both parts of the building have internal catches in a cockspur or teardrop form (Plates 8 and 9). All the windows are wooden-framed, with four lights.

Northern Part of Building

There is a chimney or fireplace flue in the middle of the ground floor north wall (Plate 10). A small hole in the northern wall exits to the wall box evident on the exterior (see above).

In the northern part of the building, each storey has cast iron columns set longitudinally down the centre of the rooms and which support the beams for the floors above (Plates 11 and 12). These

columns bear the manufacturer's details 'T & W BRADLEY NEWARK' (Plate 13). Each floor of this northern section of the building is fully open, with no internal divisions except for some modern surrounds enclosing the stair well on a couple of floors. The stairway is of timber (Plate 14). Each level of the stairway in this part of the building is located at the southwest corner of the rooms.

The upper storey is open to the roof and reveals iron/steel roof trusses (Plate 15). There is a modern, caged goods lift that runs through this part of the building and retains its driving mechanism on the upper storey (Plate 15).

Bricked-up windows, including one that was first reduced in size and then completely blocked are evident on the interior of the west wall at second storey level (Plate 16).

Southern Part of Building

The southern part of the building is smaller than the northern section, though is generally similar at lower levels and has a comparable wooden stairway. Each level of this stairway is located in the southeastern corner of the rooms.

Cast iron columns, set traversely across the room, support the cross beams at ground floor level (Fig. 4). One of the beams has been sawn through at three points and sections removed. On the second storey one beam is supported on cast iron columns, while the other beam rests on timber stanchions (Plate 17). There is also a cast iron wall box built in to the second storey north wall. On the third to fifth storeys, however, this part of the building lacks the cast iron support columns and contains much timber panelling. Some of this panelling is against the walls but other sections form compartments, or boxes around some of the mill machinery (Plates 18 and 19).

On the top floor of this part of the building are the remnants of some of the mill machinery. Two lay (or line) shafts with pulley wheels are located near the ceiling (Plate 20). The lay shafts transferred power from the main drive shaft and were fitted with toothless pulley wheels. The pulley wheels would have driven belts that provided motion for ancillary machinery, such as the sack hoist. The drive belts are no longer extant.

Trap doors for a sack hoist are evident on several levels of the southern part of the building, from the top floor down (Plate 21).

At the very top of the southern side of the mill is an attic space. Within this attic is a displaced pulley wheel from the mill machinery. Queen post timber trusses support the attic roof (Plate 22).

5.2 The former Boston Guardian building

This is a brick, three storey building of three bays. The central part of the façade extends above the eaves line to form a pseudo-gable. This is quite ornate and is in a hybrid form showing elements of shaped, Dutch and crow-stepped gables (Plates 23 and 24). The base of this is formed from large tiles moulded with floral scrollwork. A little below the apex of the pseudo-gable is a circular window and, beneath this, the construction date 1887 marked in bricks (Plates 24 and 25).

Below the eaves line, at second floor level, is a set of three windows with hood moulds in brick (Plate 26). These are all four-centred windows, as are those at firstfloor level in the two outer bays. The central window on the first floor is an oriel window, made of wood. Above the oriel is the legend:

The BOSTON GUARDIAN produced in ?encaustic tiles (Plate 27).

The ground floor exterior is largely boarded up but there is a central doorway with windows either side.

6. DISCUSSION

The mill, elongated north-south, is divided into two parts by an east-west wall that extends across the building up to, and through, the roof line. To the north of this dividing wall the building comprises large, open floor spaces with cast iron columns supporting the upper storeys. This openplan arrangement perhaps suggests that this part of the building functioned as a warehouse.

Manufacturer's details noting 'T & W BRADLEY NEWARK' occur on the cast iron supports. These signify that the stanchions were products of the Bradley foundry, also known as the Wellington foundry, set up in 1814 on Northgate, Newark (Sheppard *et al.* 1993, 30).

It is likely that the smaller, southern part of the building operated as the mill. This part of the building has much internal timber panelling/cladding. Passing through the floors, to storeys below, are several small ducts. These are the remnants of elevators that carried grain from the top floor through different levels of the mill to where grinding took place (cf Major 1975, pls 23, 24). Additionally, there is a sequence of trap-doors for a sack hoist, running through several levels of the building.

Two cast iron wall boxes were noted, one internal and one external. These would have housed parts of the milling machinery (cf Fitzgerald 1988, 227-9, fig 13). The external wall box is accompanied by a hole in the internal wall and probably took the end of a drive shaft.

There is a centrally-positioned series of doorways in the southern gable, one at each floor level, with an external platform at the top, fifth storey. Together, these suggest that there was a crane/hoist for loading or unloading of materials through the doors, though there are no obvious signs of a jib above the topmost door.

The external, second floor, gangway provided access between the two separate parts of the building at this level. This appears to have been the only aboveground access between the two parts of the building, there being no obvious blocked or open doorways in the dividing wall. It is possible that the division of the building was for safety purposes.

Some alterations to the building are evident in the form of blocked doors and windows. Many of these blockings are where recent lean-to extensions had been erected, making the openings redundant.

Other than the wall boxes, the elevator ducts and the pulley wheels on their lay shafts, there are no in situ mechanical remains of the milling apparatus. Moreover, the mill was a steam mill and there are no clear indications of the locations of the engines that provided the steam power for the mill, nor for any chimneys for the steam engines. However, with the exception of the removal of the milling apparatus, the building largely retained its structure and form from its original construction in 1889 to the present day. The mill appears to have functioned solely as a grain mill until the buildings taken over for use as a machinery parts store.

Located on the south side of West Street is the former Boston Guardian building. This newspaper operated between 1854 and 1958 (Wright 1986, 118). The façade of the building is quite ornate, with a hybrid shaped-cum-crow stepped pseudo-gable. This is perhaps intended to be a loose copy of the Dutch and other ornate gables evident elsewhere in Boston. An early, probable late 19th-early 20th century, illustration of the building indicates that

the upper storeys have survived unchanged to the present day (*ibid.*, 123).

7. CONCLUSION

Building recording was undertaken at West Street and George Street, Boston, because structures were of significance in terms of local history and industrial archaeology.

The photographic survey has successfully provided a record of the appearance of the buildings, together with details of alterations, fixtures and fittings. Date markers for both buildings were also recorded. Additionally, cast iron supports made in the region (Newark) were also identified and recorded.

8. ACKNOWLEDGEMENTS

Archaeological Project Services wish to acknowledge the assistance of Mr Brian Hartley of Corstorphine and Wright who commissioned this work. Thanks are also due to Mr D. Humphrey of David Humphrey & Son for assisting with access to the site.

9. PERSONNEL

Project Coordinator: Gary Taylor Site Supervisor: Gary Taylor Site Assistant: Robert Siddaway Photographic reproduction: Sue Unsworth CAD Illustration: Rachael Hall Analysis and reporting: Gary Taylor

10. BIBLIOGRAPHY

Archaeological Project Services, 1994 Archaeological Watching Brief at 35 Paddock Grove, Boston, Lincolnshire Archaeological Project Services, 1996 Archaeological Evaluation at 17-19 High Street, Boston, Lincolnshire (BHS96)

Fitzgerald, R.S., 1988 Ashton Mill, Manchester, *Industrial Archaeology Review* vol X, no. 2

Hall, R., 1741 A Plan of the Borough & Port of Boston in the County of Lincoln

Hodge, C.A.H., Burton R.G.O., Corbett, W.M., Evans, R. and Seale, R.S., 1984 *Soils and their Use in Eastern England*, Soil Survey of England and Wales **13**

IFA, 1996 Standard and Guidance for the Archaeological Investigation and Recording of Standing Buildings or Structures

Major, J. K., 1975 Fieldwork in Industrial Archaeology

Ordnance Survey, 1887 *Lincolnshire Sheet CIX.9*, 25inches to 1 mile

Royal Commission on the Historical Monuments of England, 1996 *Recording Historic Buildings, A Descriptive Specification* (3rd ed)

Sheppard, R., Walker, J. S. F. and Walker, L., 1993 Newark's Industrial Archaeological Resource, Trent & Peak Archaeological Trust

Thompson, P., 1856 The History and Antiquities of Boston and the Hundred of Skirbeck

Vince, J., *Mills and Millwrighting*, Shire Album 33

Wood, J., 1829 Plan of Boston and Environs

Wright, N. R., 1986 The Book of Boston

11. ABBREVIATIONS

- IFA Institute of Field Archaeologists
- OD Ordnance Datum (height above sea level)
- RCHME Royal Commission on the Historical Monuments of England



Figure 1: General Location Plan

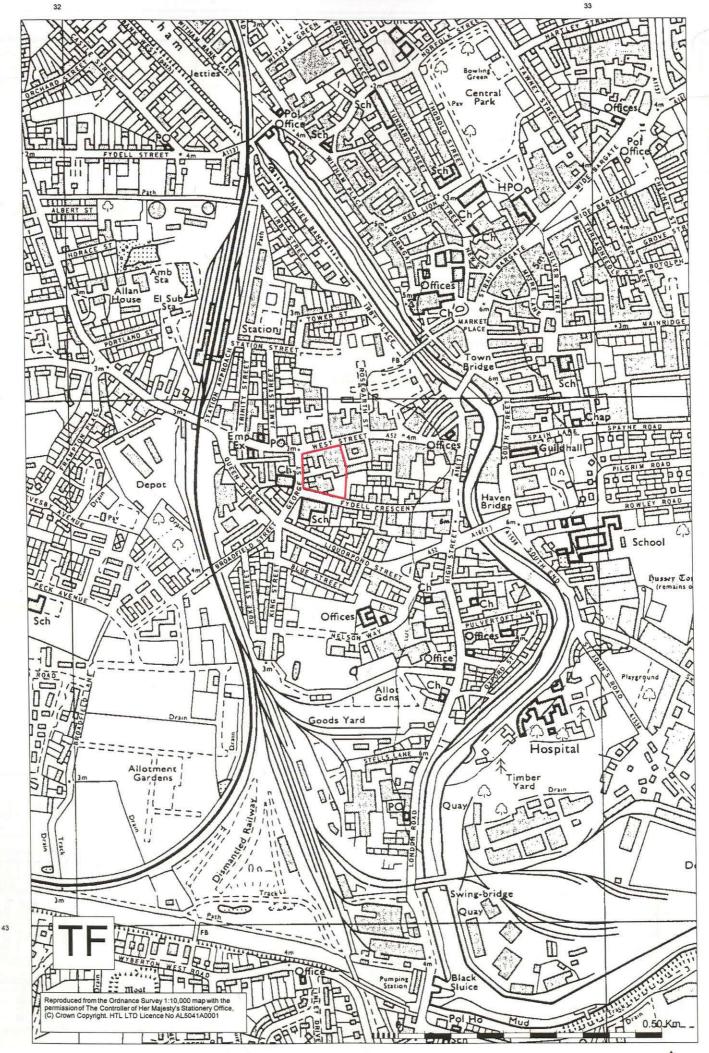


Figure 2 Site location map

North

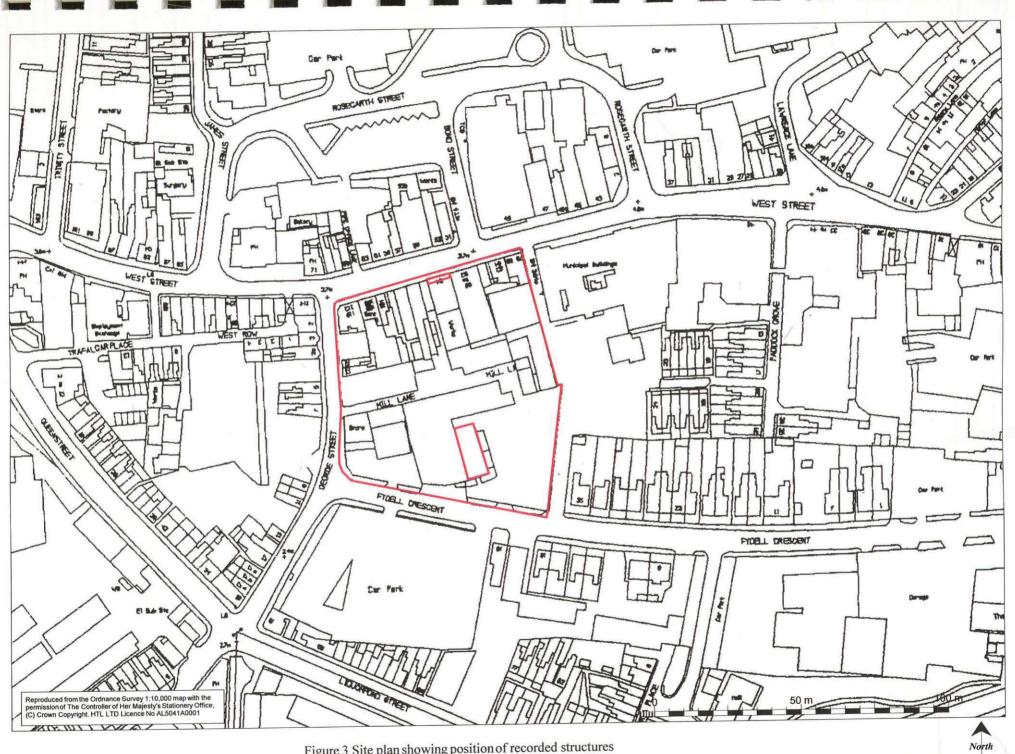


Figure 3 Site plan showing position of recorded structures

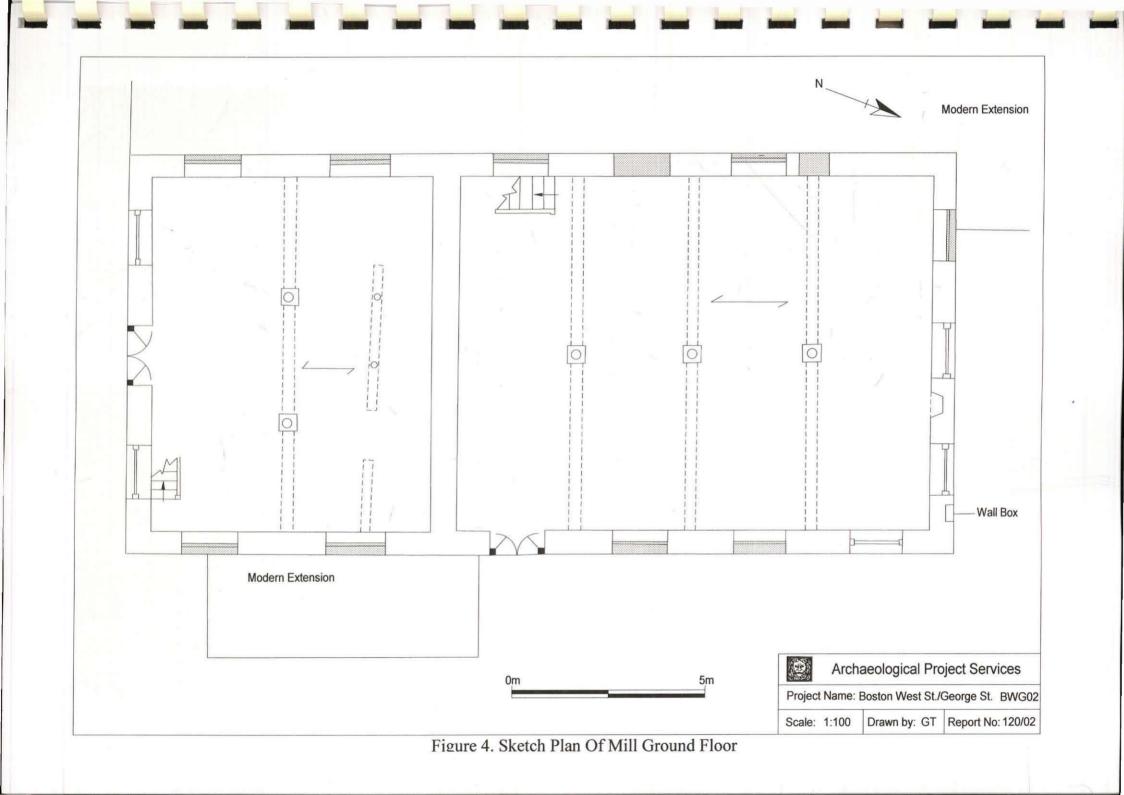




Plate 1 Mill building, south and east elevations



Plate 2 Mill building, south and west elevations

Plate 4 Detail of external walk-way, east wall of mill

Plate 3 Date stone in south wall of mill





Plate 5 Mill northern elevation, lower part



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Plate 6 Mill northern elevation, upper part



Plate 7 Mill, western elevation, showing dividing wall extending above roof line



Plate 8 Mill ground floor, northern part, looking north



Plate 9 Cockspur window catch



Plate 10 Teardrop window catch

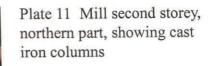




Plate 12 General view, 4th storey, northern part of mill



Plate 13 Detail of maker's name on cast iron column

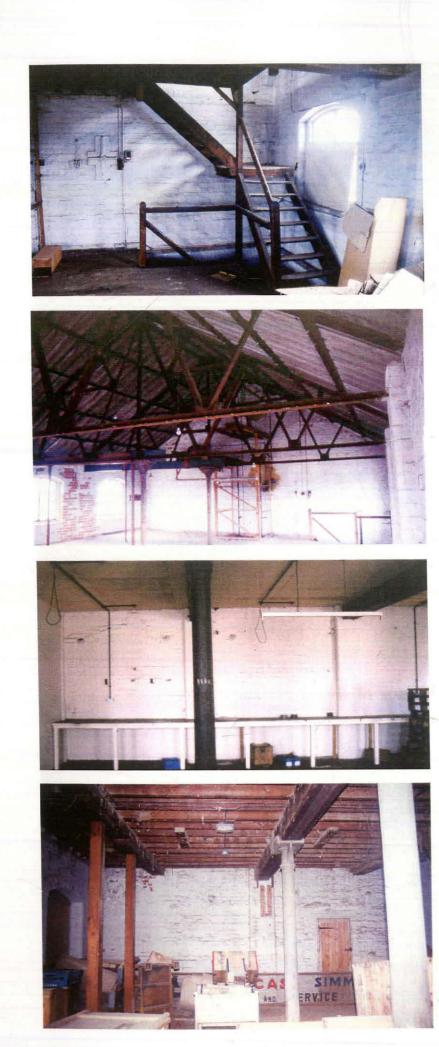


Plate 14 Detail of stairway, northern part of mill

Plate 15 Cast iron roof trusses in northern part of mill

Plate 16 Mill west wall, showing blocked windows

Plate 17 Mill southern part, showing timber and cast iron supports



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Plate 18 Timber panelling, 3rd storey. Note elevator duct in ceiling



Plate 19 Panelling, 5th storey. Note pulley wheel and shaft behind panelling, centre



Plate 20 Detail of pulley wheel



Plate 21 Mill southern part, 4th storey, showing trap door for sack hoist and elevator ducts

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Plate 22 Queen post roof truss, mill southern part



Plate 23 Façade of Boston Guardian building



Plate 24 Boston Guardian, upper part of façade

Plate 25 Boston Guardian, date marker in brick



Plate 26 Boston Guardian building, windows with brick hood moulds



Plate 27 Boston Guardian building, showing name and first floor oriel window

Appendix 1

SPECIFICATION FOR **ARCHAEOLOGICAL EVALUATION**

WEST STREET/GEORGE STREET **BOSTON, LINCOLNSHIRE**

PREPARED FOR

CORSTORPHINE & WRIGHT

MAY 2001

1 SUMMARY

- 1.1 This document comprises a specification for trial trenching and a programme of photographic standing building recording on land at West Street/George Street, Boston Lincolnshire.
- 1.2 The site is located just east of the historic core of the Boston, an important port and market town in the medieval period. A medieval Carmelite friary was situated to the east of the investigation area, though its exact location and extent is unknown. However, medieval dressed masonry from the friary has been found about 100m east of the investigation area. Other medieval remains have been found a little further to the east.
- 1.3 The investigation site currently comprises standing buildings fronting onto West and George Streets as well as a number of structures filling the area to the rear of these properties. Mill Lane enters the site from George Street and runs to the rear of the building fronting onto West Street. A building which once housed the gear for a nineteenth century steam mill still stands on the site and a map of 1829 shows a windmill on Mill Lane.
- 1.4 As part of the archaeological investigation a comprehensive photographic record of the standing building which housed the 19th century steam mill will be undertaken. A programme of trial trenching to investigate buried remains will be undertaken after demolition of those standing building which will not be incorporated into the new development. One of the trenches will be positioned to investigate the site of a windmill which is thought to have stood on Mill Lane.

2 INTRODUCTION

- 2.1 An archaeological evaluation is defined as 'a limited programme of non-intrusive and/or intrusive fieldwork which determines the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts within a specified area or site. If such archaeological remains are present Field Evaluation defines their character and extent, and relative quality: and it enables an assessment of their worth in a local, regional, national or international context as appropriate' (IFA 1994).
- 2.2 This document contains the following parts
 - 2.2.1 Overview
 - 2.2.2 The archaeological and natural setting
 - 2.2.3 Stages of work and methodologies to be used
 - 2.2.4 List of specialists
 - 2.2.5 Programme of works and staffing structure of the project

3 SITE DESCRIPTION

3.1 Boston is located approximately 45km southeast of Lincoln and 7km from the northwest coast of the Wash, in the fens of south Lincolnshire. The site is located just west of the medieval core of Boston, on the western side of the River Witham. Located on the east side of George Street, the site is bounded on the north by West Street and the south by Fydell Crescent and is partially split by Mill Lane, which runs eastward off George Street.

3.2 The site is a rectangular block of land approximately 0.57ha in extent, currently built upon and with a mix of land uses.

4 PLANNING BACKGROUND

4.1 Planning permission (B/01/0030/FULL) has been granted for retail development of the site, subject to conditions including the implementation of an archaeological scheme of works. This document comprises such a scheme of works.

5 SOILS AND TOPOGRAPHY

5.1 The natural soil at the site comprises the Wisbech Association, coarse silty calcareous soil, overlying marine alluvium. The site is on a gentle rise eastward toward the river and has a height of approximately 4m OD.

6 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

- 6.1 The earliest archaeological activity currently known in the Boston area is of the Roman period. Excavation at Boston Grammar School revealed *in situ* Roman industrial material, probably the remains of salt manufacturing. Roman period pottery sherds have been found at a variety of locations throughout the town, notably at the General Hospital in South End and from the Hussey Tower, in the town centre. It is possible that Boston is the site of a Romano-British small town.
- 6.2 Boston rose to prominence during the medieval period when it developed into an important port and one of the largest wool exporting centres in England. It was also a major religious centre for a church and four religious houses were established in the town during the medieval period. One of these, a Carmelite Friary, was situated just to the east of the investigation area, though its exact location and extent is unknown. However, previous investigations about 100m to the east identified quantities of medieval ecclesiastical masonry, almost certainly from the friary, reused as foundations for later buildings (Archaeological Project Services 1994).
- 6.3 A well or cistern containing pottery of 12th-16th century date was discovered beneath a cellar on West Street, to the east of the investigation site. Slightly further east, on High Street, are 15^{th} century half-timbered buildings. An investigation on High Street identified medieval deposits containing well-preserved organic objects including wood, leather and plant remains. Additionally, medieval structural remains, including wooden stakes and part of a brick structure, were also revealed. These medieval remains occurred beneath cellars at a depth of *c*. 3.7m below ground level (Archaeological Project Services 1996). Hall's map of Boston dating from 1741 shows a building on the West Street frontage of the site, though most of the investigation area was open ground at that time.

AIMS AND OBJECTIVES

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- 7.1 The aim of the evaluation will be to assess the presence/absence, extent, condition, character, quality and date of any archaeological deposits on the site, enabling the Community Archaeologist, Boston Borough Council, to provide detailed recommendations to Boston Borough Council Planning Committee.
- 7.2 The objectives of the work will be to:
 - 7.2.1 Provide a photographic record and brief written summary of industrial structures (the steam mill building) on site.

- 7.2.2 Establish the type of archaeological remains that may be present within the site.
- 7.2.3 Determine the likely extent and survival of archaeological remains present within the site.
- 7.2.4 Determine the spatial arrangement of the archaeological remains present within the site.
- 7.2.5 Identify the extent to which surrounding archaeological remains extend into the site.
- 7.2.6 Determine the way in which the archaeological remains identified fit into the pattern of occupation and land-use in the surrounding landscape.
- 7.2.7 Determine the function of the archaeological remains present within the site.
- 7.2.8 Determine the date of the archaeological remains present on the site
- 7.2.9 Determine the extent to which there may be survival of waterlogged and environmental material.

8 PHOTOGRAPHIC RECORD OF INDUSTRIAL BUILDING

- 8.1 <u>Recording</u>
 - 8.1.1 A comprehensive photographic record of the 19th century steam mill will be made prior to its demolition. This record will be undertaken to Level 1 standard, as defined by the Royal Commission on the Historical Monuments of England (1996).
 - 8.1.2 The survey will consist of establishing the precise location and address of the building; production of a descriptive summary of the buildings type/purpose, with reference to materials and date; a dimensioned sketch plan; and general photographic views of the exterior of the building and internal principal rooms and circulation areas.

8.2 Report

8.2.1 The results of the survey will be incorporated with the evaluation report. The survey report will consist of details of precise location of the buildings; details of when the record was made, and by whom; and a summary statement describing the building's type or purpose; materials and possible date, as far as these area apparent from a superficial examination. This will be accompanied by a dimensioned sketch plan and a selection of photographs of the building.

9 LIAISON WITH THE COMMUNITY ARCHAEOLOGIST

9.1 Prior to the commencement of the trial trenching the arrangement of the excavations will be agreed with the Community Archaeologist for Boston Borough Council, to ensure that the proposed scheme of works fulfils their requirements.

10 TRIAL TRENCHING

- 10.1 Reasoning for this technique
 - 10.1.1 Trial trenching enables the *in situ* determination of the sequence, date, nature, depth,

environmental potential and density of archaeological features present on the site.

10.1.2 The trial trenching will consist of the excavation of a 2% sample of the evaluation area. If archaeological deposits extend below a depth of 1.2m the trench sides will be stepped in, or shored, as appropriate. Auguring may be used to determine the depth of the sequence of deposits present.

10.2 General Considerations

- 10.2.1 All work will be undertaken following statutory Health and Safety requirements in operation at the time of the evaluation.
- 10.2.2 The work will be undertaken according to the relevant codes of practice issued by the Institute of Field Archaeologists (IFA). Archaeological Project Services is an IFA registered organisation (no. 21).
- 10.2.3 Excavation of the archaeological features exposed will only be undertaken as far as is required to determine their date, sequence, density and nature. Not all archaeological features exposed will be excavated. However, the evaluation will, as far as is reasonably practicable, determine the level of the natural deposits to ensure that the depth of the archaeological sequence present on the site is established.
- 10.2.4 Open trenches will be fenced off. Subject to the consent of the Community Archaeologist, Boston Borough Council and following the appropriate recording, the trenches, particularly those of any depth, will be backfilled as soon as possible to minimise any health and safety risks.

10.3 Methodology

- 10.3.1 Removal of the topsoil and any other overburden will be undertaken by mechanical excavator using a toothless ditching bucket. All machine excavation will be supervised by Archaeological Project Services. On completion of the removal of the overburden, the nature of the underlying deposits will be assessed by hand excavation before any further mechanical excavation that may be required. Thereafter, the trenches will be cleaned by hand to enable the identification and analysis of the archaeological features exposed.
- 10.3.2 Investigation of the features will be undertaken only as far as required to determine their date, form and function. The work will consist of half- or quarter-sectioning of features as required and, where appropriate, the removal of layers. Should features be located which may be worthy of preservation *in situ*, excavation will be limited to the absolute minimum, (*ie* the minimum disturbance) necessary to interpret the form, function and date of the features.
- 10.3.3 The archaeological features encountered will be recorded on Archaeological Project Services pro-forma context record sheets. The system used is the single context method by which individual archaeological units of stratigraphy are assigned a unique record number and are individually described and drawn.
- 10.3.4 A drawn record will be made of all significant features on the evaluation. Generally, plans will be produced at a scale 1:20 and sections at a scale of 1:10. Larger scale illustrations may be produced, if deemed necessary.

- 10.3.5 A photographic record will be made of the evaluation. The record will consist of black and white prints (reproduced as contact sheets) and colour slides. The photographic record will consist of:
 - 10.3.5.1 the site before the commencement of field operations.
 - 10.3.5.2 the site during work to show specific stages of work, and the layout of the archaeology within individual trenches.
 - 10.3.5.3 individual features and, where appropriate, their sections.
 - 10.3.5.4 groups of features where their relationship is important.
 - 10.3.5.5 the site on completion of field work
- 10.3.6 Should human remains be encountered, they will be left *in situ* with excavation being limited to the identification and recording of such remains. The appropriate Home Office licences will be obtained and the local environmental health department and the police informed.
- 10.3.7 Finds collected during the fieldwork will be bagged and labelled according to the individual deposit from which they were recovered ready for later washing and analysis.
- 10.3.8 A metal detector will be used during initial mechanical excavation and subsequent manual investigation to assist artefact recovery. Buried objects identified by metal detection will be excavated by standard archaeological method, in stratigraphic sequence.
- 10.3.9 The spoil generated during the evaluation will be mounded along the edges of the trial trenches with the top soil being kept separate from the other material excavated for subsequent backfilling.
- 10.3.10 The precise location of the trenches within the site and the location of site recording grid will be established by an EDM survey.

11 ENVIRONMENTAL ASSESSMENT

- 11.1 During the evaluation specialist advice will be obtained from an environmental archaeologist. The specialist will visit the site and will prepare a report detailing the nature of the environmental material present on the site and its potential for additional analysis should further stages of archaeological work be required. The results of the specialist's assessment will be incorporated into the final report.
- 11.2 Waterlogged layers and artefacts are frequently present in Boston and such remains have previously been found at several locations on High Street, about 200m to the east of the site. Waterlogging results in enhanced preservation of wood, leather and other organic materials. A contingency will be specified for the event of waterlogged material being encountered. The contingency will only be activated by the Community Archaeologist of Boston Borough Council.

12 POST-EXCAVATION AND REPORT

12.1 Stage 1

- 12.1.1 On completion of site operations, the records and schedules produced during the trial trenching will be checked and ordered to ensure that they form a uniform sequence constituting a level II archive. A stratigraphic matrix of the archaeological deposits and features present on the site will be prepared. All photographic material will be catalogued: the colour slides will be labelled and mounted on appropriate hangers and the black and white contact prints will be labelled, in both cases the labelling will refer to schedules identifying the subject/s photographed.
- 12.1.2 All finds recovered during the trial trenching will be washed, marked, bagged and labelled according to the individual deposit from which they were recovered. Any finds requiring specialist treatment and conservation will be sent to the Conservation Laboratory at the City and County Museum, Lincoln.

12.2 Stage 2

- 12.2.1 Detailed examination of the stratigraphic matrix to enable the determination of the various phases of activity on the site.
- 12.2.2 Finds will be sent to specialists for identification and dating.
- 12.3 Stage 3
 - 12.3.1 On completion of stage 2, a report detailing the findings of the evaluation will be prepared. This will consist of:

12.3.1.1 A non-technical summary of the findings of the investigation.

- 12.3.1.2 A description of the archaeological setting of the site.
- 12.3.1.3 Description of the topography and geology of the investigation site.
- 12.3.1.4 Description of the methodologies used during the investigation and discussion of their effectiveness in the light of the results.
- 12.3.1.5 A text describing the findings of the investigation.
- 12.3.1.6 Plans of the trenches showing the archaeological features exposed. If a sequence of archaeological deposits is encountered, separate plans for each phase will be produced.exposed. If a sequence of archaeological deposits is encountered, separate plans for each phase will be produced.
- 12.3.1.7 Sections of the trenches and archaeological features.
- 12.3.1.8 Interpretation of the archaeological features exposed and their context within the surrounding landscape.
- 12.3.1.9 Specialist reports on the finds from the site.
- 12.3.1.10 Appropriate photographs of the site and specific archaeological features or groups of features.

12.3.1.11 A consideration of the significance of the remains found, in local, regional, national and international terms, using recognised evaluation criteria.

13 ARCHIVE

13.1 The documentation, finds, photographs and other records and materials generated during the evaluation will be sorted and ordered into the format acceptable to the City and County Museum, Lincoln. This sorting will be undertaken according to the document titled *Conditions for the Acceptance of Project Archives* for long term storage and curation.

14 REPORT DEPOSITION

14.1 Copies of the evaluation report will be sent to: the client; the Community Archaeologist, Boston Borough Council; Boston Borough Council Planning Department; and the Lincolnshire County Sites and Monuments Record.

15 PUBLICATION

15.1 A report of the findings of the evaluation will be submitted for inclusion in the journal *Lincolnshire History and Archaeology*. Notes or articles describing the results of the investigation will also be submitted for publication in the appropriate national journals: *Medieval Archaeology*; *Post-medieval Archaeology* and *Journal of the Medieval Settlement Research Group* for medieval and later remains, and *Britannia* for discoveries of Roman date.

16 CURATORIAL MONITORING

16.1 Curatorial responsibility for the project lies with Community Archaeologist, Boston Borough Council. Seven days notice in writing will be given to the curator prior to the commencement of the project to enable them to make appropriate monitoring arrangements.

17 VARIATIONS TO THE PROPOSED SCHEME OF WORKS

- 17.1 Variations to the scheme of works will only be made following written confirmation from archeological curator.
- 17.2 Should the archaeological curator require any additional investigation beyond the scope of the brief for works, or this specification, then the cost and duration of those supplementary examinations will be negotiated between the client and the contractor.

18 SPECIALISTS TO BE USED DURING THE PROJECT

18.1 The following organisations/persons will, in principal and if necessary, be used as subcontractors to provide the relevant specialist work and reports in respect of any objects or material recovered during the investigation that require their expert knowledge and input. Engagement of any particular specialist subcontractor is also dependent on their availability and ability to meet programming requirements.

Task

Body to be undertaking the work

Conservation

Conservation Laboratory, City and County Museum, Lincoln.

Pottery Analysis

Other Artefacts

Human Remains Analysis

Animal Remains Analysis

Environmental Analysis

Dendrochronological dating

Radiocarbon dating

Prehistoric: Dr D Knight, Trent and Peak Archaeological Trust

Roman: B Precious, independent specialist

Anglo-Saxon: J Young, Lindsey Archaeological Services

Medieval and later: H Healey, independent archaeologist, or G Taylor, APS.

J Cowgill, independent specialist, or G Taylor, APS.

R Gowland, independent specialist.

Environmental Archaeology Consultancy

Environmental Archaeology Consultancy

Beta Analytic Inc., Florida, USA

University of Sheffield Dendrochronology Laboratory

19 PROGRAMME OF WORKS AND STAFFING LEVELS

- 19.1 Fieldwork is expected to be undertaken by up to 5 staff, a supervisor and up to 4 assistants, and to take ten (10) days.
- 19.2 Post-excavation analysis and report production is expected to take 18 person-days within a notional programme of 15 days. A project officer or supervisor will undertake most of the analysis, with assistance from the finds supervisor and CAD illustrator. Two days of specialist time are allotted in the project budget.

19.3 Contingency

- 19.3.1 Contingencies have been specified in the budget. These include: environmental sampling/analysis of waterlogged/other environmental remains and samples (some level of sampling expected but necessity/amount can not be pre-determined); pump (possible, low-lying ground); Roman pottery (none expected); Anglo-Saxon pottery (not expected); Medieval and later pottery- large quantities (moderate amount expected and allowed for); faunal remains -large quantities (moderate amounts expected and allowed for); Conservation and/or Other unexpected remains or artefacts.
- 19.3.2 Other than the pump, the activation of any contingency requirement will be by the archaeological curator, not Archaeological Project Services.

20 INSURANCES

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

21 COPYRIGHT

- 21.1 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.
- 21.2 Licence will also be given to the archaeological curators to use the documentary archive for educational, public and research purposes.
- 21.3 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.
- 21.4 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.

22 BIBLIOGRAPHY

Archaeological Project Services, 1994 Archaeological Watching Brief at 35 Paddock Grove, Boston, Lincolnshire

Archaeological Project Services, 1996 Archaeological Evaluation at 17-19 High Street, Boston, Lincolnshire (BHS96)

Hodge, CAH, Burton, RGO, Corbett, WM, Evans, R, and Seale, RS, 1984 Soils and their use in Eastern England, Soil Survey of England and Wales 13

Royal Commission on the Historical Monuments of England, 1996 Recording Historic Buildings, A Descriptive Specification (3rd ed)

Specification: Version 1, 28/5/01

Appendix 2

GLOSSARY

Alluvium	Deposits laid down by water. Marine alluvium is deposited by the sea, and fresh water alluvium is laid down by rivers and in lakes.	
Crow-stepped gable	Gable formed of small, horizontally-topped steps that rise to a step pinnacle. Common in the Low Countries and Scandinavia and influenced building design in eastern Britain.	
Dutch gable	Tall gable with sweeping curved sides, crowned by a triangular section (pediment).	
Elevator	Small boxed-in shaft that passed through mill floor/ceilings, transporting grain to different levels through the mill.	
Encaustic tile	Ceramic tile decorated with a pattern formed with different coloured clay inlaid in to the tile face.	
Hood mould	Projecting cover above an aperture (window, doorway) to protect it from the weather.	
Jib	Arm of a crane.	
Lay (line) shaft	A secondary drive shaft that obtained power, via a bevel gear, from the main shaft. The lay shaft would have contained a number of pulleys $(q.v.)$	
Medieval	The Middle Ages, dating from approximately AD 1066-1500.	
Oriel	Large bay-window projecting from a wall face on an upper storey.	
Post-medieval	The period following the Middle Ages, dating from approximately AD 1500-1800.	
Pulley wheel	Toothless wheel which drove belts that provided motion for mill equipment, such as a sack hoist. A pulley wheel would be located on a lay or line shaft $(q.v.)$.	
Shaped gable	Gable with sides formed of concave and convex curves, with a semi-circular top.	
Wall box	Rectangular metal container, built in to a wall, used as support for mill machinery, such as a drive shaft, or allowing a drive shaft to pass through walls thereby permitting power to be transferred from the engine to other parts of the building.	

Boston, West Street/George Street (BWG02)

Appendix 3

The Archive

The archive consists of:

1 Drawing sheet

2 Daily record sheets

1 Plan record sheet

3 Photographic record sheets

All primary records and finds 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:

Lincolnshire City and County Museum 12 Friars Lane Lincoln LN2 1HQ

The archive will be deposited in accordance with the document titled *Conditions for the Acceptance of Project Archives*, produced by the Lincolnshire City and County Museum.

Lincolnshire City and County Council Museum Accession Number:	2002.315
Lincolnshire City and County Council Museum Site Code:	WSB02
Archaeological Project Services Site Code:	BWG02

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.

Archaeological Project Services

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