Former Corn Mill Mill Lane, Low Bradley, North Yorkshire: Historic Building Recording



May 2010

STEPHEN HAIGH

Buildings Archaeologist

Tel/Fax: 01535 658925

11 Browcliff Silsden Keighley West Yorkshire BD20 9PN Mobile: 07986 612548 www.stephenhaigh.co.uk enquiries@stephenhaigh.co.uk

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SUMMARY

The former corn mill in Low Bradley (NGR: SE 00434871), which is listed (grade 2), is largely 18th century, with later additions and alterations, one of which was its conversion to a shippon in the early 20th century. These changes left few fixtures relating to its original purpose, but they do include the hurst, which is 19th century; the wheel-pit, enclosed within a wheel-house, is largely infilled. Historic building recording and a watching brief were carried out in April 2010 for the owner and developer Mr Paul Anderson, as a condition of planning consent for the site, and this record includes measured drawings, photographs, and a written description, supplemented by the results of brief historical research.

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FORMER CORN MILL, MILL LANE, LOW BRADLEY, NORTH YORKSHIRE:

HISTORIC BUILDING RECORDING

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FORMER CORN MILL, MILL LANE, LOW BRADLEY, NORTH YORKSHIRE:

HISTORIC BUILDING RECORDING

1 Introduction

- 1.1 This report presents the results of historic building recording and a watching brief at a former water-powered corn mill at Low Bradley, near Skipton in North Yorkshire. The work was carried out in April 2010 for the owner and developer, Mr Paul Anderson, to discharge a condition attached to planning consent for the conversion of the building (which is listed, grade 2), to residential use.
- 1.2 The former corn mill in its present form probably dates to the 18th century but may occupy the site of an earlier, perhaps medieval mill. It has been extended and altered at various times and was converted to a shippon in the early 20th century.
- 1.3 The work was carried out in accordance with a written scheme of investigation (Appendix 2), and involved photographic, drawn and written recording, before and during development, which was informed by historical research previously carried out for an assessment of the site. This report will be submitted to the client, the North Yorkshire Historic Environment Record, the North Yorkshire County Record Office, the English Heritage National Monuments Record, and published on the internet via the Oasis project.

2 Location and current use

- 2.1 The building stands 200m north-east of the centre of Low Bradley, at NGR: SE 00434871, about 3km south of Skipton. It stands on the north-west side of Mill Lane, adjacent to a public footpath, and is aligned with its long axis running from south-east to north-west (Figures 1 to 3).
- 2.2 The building is disused and has clearly been so for many years, following its last use as a shippon. To enable recording it was cleared of debris, shortly before conversion works began.

3 Planning background

3.1 The former corn mill is listed as having special architectural or historic interest (grade 2), and the entry in the list is reproduced in Appendix 1. Planning consent for the conversion of the building to a dwelling and workspace (application no:

¹ Stephen Haigh 2009 Former Corn Mill, Mill Lane, Low Bradley, North Yorkshire: Historic Building Appraisal and Impact Assessment Unpublished report previously submitted to Craven DC and the North Yorkshire Historic Environment Record

11/2009/9374) was granted by Craven District Council on 22 June 2009, with one of the attached conditions requiring a programme of archaeological work to be carried out during development (on the advice of the Heritage and Environment Section of North Yorkshire County Council), which this report and the project archive are intended to summarise.

4 Previous investigations

- 4.1 As noted above, the present author produced an appraisal report on the building in 2009. The corn mill had also been investigated by Alison Armstrong of the Yorkshire Vernacular Buildings Study Group (YVBSG) in 1995, although her report on the site was not completed until 2008². This valuable study comprised an account of the present building and an interpretation of its development, as well as the associated landscape features, accompanied by sketch drawings and some historical information.
- 4.2 The account of the building provided for its designation as a listed building³ is also useful and gives a fairly detailed account of its principal features, as well as some of its historical background, although much of this is derived from Armstrong's report.

5 Historical background

- There are references to a mill at Bradleys Both (the collective name for Low and High Bradley) from the medieval period, for example from 1314 when repairs to it were recorded in the Bolton Priory Compotus account, and although it cannot be ascertained whether this mill was on the site of the present building, it is very commonly the case that investment in water management (in the form of dams, ponds and leats) resulted in the continuous occupation of mill sites, albeit with successive rebuilding. Manorial documents of the 17th century also refer to a corn mill in the township⁴.
- 5.2 The earliest known depiction of the site on a historic map is from 1791 when the enclosure map shows a rectangular building named as "Corn Mill" on the site, served by a long narrow pond to the north (Figure 4). This no doubt represents the present building, although it may have changed in size since.
- 5.3 In the following 50 years, and by 1842 when the tithe map of Bradleys Both was surveyed, the water supply was altered and two separate ponds are evident

² YVBSG report by A C Armstrong, 2008, deposited at the North Yorkshire Historic Environment Record

³ Department of Culture, Media and Sport, 22 Jan 2009: *Old Corn Mill, Low Bradley* (Listed building no: 505158); reproduced here in Appendix 1

⁴ Armstrong 2008, p3

(Figure 5). The mill building itself (still named "Corn Mill" on the map) was served by a head race running parallel to its north-east side, and appears to comprise three different parts. Its outline differs from the present one in the fact that at that date, the wheel-house appears to have been shorter than at present, possibly suggesting that the wheel was then centred further to the south-east. However, it is possible that the map is schematic to some extent and should not be taken as a wholly accurate record. It is worth noting that the tithe award lists enclosure 235 as "Corn Mill and two reservoirs", owned by George Greenwood Esq, and occupied by Jonas Sugden⁵. The nearly contemporary 6" to the mile Ordnance Survey map, surveyed in 1850, gives no additional information, and is of too small a scale to allow accurate comparison (Figure 6).

- 5.4 The earliest detailed depiction of the building was made in 1889 (Figure 7). At this time the mill was almost certainly still working (it is named "Bradley Mill (Corn)"). The two ponds are still extant and the outline of the building is the same as at present, with the addition of an appendage on the north-east side, which is no longer present. During the following 18 years the buildings and water supply did not change (Figure 8), but the map of 1907 does not name the building, perhaps an indication that milling ceased during this time. By 1938 the buildings did not change except for the demolition of the north-east structure, but the ponds and leats were removed or filled, so it is clear that the building was no longer in use as a mill (Figure 9).
- 5.5 Two local histories of Bradley make anecdotal references to the former corn mill. One notes that the mill was used up to the end of the 19th century⁶, while the other (published in 1987) mentions local inhabitants who could remember it working, and that two or three horse wagons were in constant use transporting flour and grain to and fro. It also notes that when last working its owner was John George Mattock of Skipton, and that between the two world wars, the remains of the waterwheel could be seen lying around at the site⁷.

6 Recording methodology

- 6.1 The building recording was carried out on 15 April 2010 and in a number of subsequent site visits as development proceeded, in accordance with the method statement approved by Craven District Council (Appendix 1). The recording comprised drawn, photographic, and written records of the building.
- 6.2 The drawn record involved the production of floor plans of the building at 1:100 scale (based on an existing survey by Sterling Surveys Ltd), and a section

⁵ NYCRO MIC 1772/461-467

⁶ Green, J 1965 History of Bradley, p16

⁷ Throup, M 1987 Bradley Long Since p35

- drawing at 1:50 scale, showing all significant archaeological detail, with conventions based on those specified by English Heritage⁸.
- 6.3 The photographic record was made using a medium format camera with perspective control and other lenses, and black and white film for archival permanence. External and internal photographs were taken, in most cases using either a 1m or 2m ranging pole marked with 0.5m graduations as a scale, and their locations are shown on copies of the plans. A total of 71 individual photographs were taken, all of which have been printed to a size of 5 x 4". A selection of the photographs are copied in this report, where they are referred to by numbers in **bold**.

7 Description of the site and building

- 7.1 The site comprises a single range of four adjoining components: the main part of the building, which measures 16.2m long and 7.3m wide; the narrow wheel-house along its north-east side; an added store at the north-west end, about 5.1m by 6.0m in plan; and a smaller added store at the eastern corner.
- 7.2 The main building is of two storeys and has walls of flaggy sandstone, with edge-laid quoins to the lower parts (1,2), and the upper extent of these coincides with a clear change in the masonry about 1.8m below the present eaves, where the upper stonework is more random and lacks quoins, thereby showing how the building has been heightened to its present size. This change is thought to have taken place in the 18th or 19th century, but it begs the question as to whether the building was formerly tall enough to accommodate milling machinery, and it may be that the upper parts of the building were dismantled as part of this change, perhaps because of a fire in its roof.
- 7.3 The present arrangement of openings in the front, south-west elevation is clearly not original to the building: what seems at one time to have been the principal entrance in this area has been partly blocked to form a window. It has tie-stone jambs, and a stone lintel with two slots in it, perhaps derived from a sluice (3,4). Next to it a three-light window has flat-faced mullions characteristic of the late 18th or early 19th century, with traces of horizontal bars which were a means of securing the building (5), and bars are also fitted to a small window to an office at the right-hand end of the building. The present entrance between these appears to be an insertion, and has only a plain lintel and no other dressings: a pair of small, blocked openings level with the lintel are unexplained. Near the north-west end of the elevation there is another plain ground floor window, within an area of what appears to be rebuilding (6). The openings on the first floor are all contemporaneous with the building's heightening, the sills of the windows

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⁸ English Heritage 2006 *Understanding Historic Buildings: A guide to good recording practice*

being approximately at the supposed earlier eaves level, but the taking-in door has been cut down into the earlier stonework; all the openings at this level have plain, square-faced stone surrounds.

- 7.4 The mill's south-east gable also clearly shows the two phases, with later, more random masonry above the neater apex of the original gable (7,8). Openings within this wall include an original, wide cart entrance with segmental arch (9), and a small window to the later, higher level masonry. There is also the pipe for a stove flue, close to the south corner. A pair of harr-hung, ledged plank doors which were formerly fitted to the cart entrance had been removed by the time this recording took place (and are intended to be restored and re-fitted). A later wall within the building, again probably dating from the conversion to a shippon, means that this doorway could no longer be used for carts, but previously it would have allowed vehicular access into the mill.
- 7.5 The north-west gable of the main building is for the most part now within the later store, where the stonework is of a rather different character, being largely of random rubble: this may indicate it is earlier than the other elevations, or perhaps was considered less important. However it clearly shows the same different building phases near the roof, as well as various openings, some of them blocked (10,11). They include a brick-lined, arched opening at ground floor level, no doubt of 19th century date, and a substantial beam end within the wall, which appears to be the end of the surviving hurst's longitudinal member (see below). At first floor level, there is a blocked doorway at the left side and two smaller openings (one blocked), presumably used to pass materials between the upper parts of the building.
- 7.6 The main building's north-east wall, now facing into the wheel-house, is of flaggy sandstone similar to that used elsewhere, and also displays the change to a more random rubble near the top. The principal feature in this wall is a low, narrow doorway, which formerly served as the bearing for the waterwheel axle (12), but there is also a low recess at the north-west end of this wall at present ground level, next to a large block with holding-down bolts, at the end of the wheel-pit (13).
- 7.7 The internal arrangements within this part of the mill have been altered considerably. There is a cross-wall which divides the south-east bay from the remainder, the wall having been built directly under a first floor beam which, intriguingly, does not continue to the north-west side of the building. The earliest part of this cross-wall is a square stone pier, perhaps put in to support the beam, and subsequently, this was used as the corner of a small office, created by the insertion of two thin walls, one of brick and one of stone (14). At a later date, probably in the early 20th century when the shippon was created, a thicker stone wall, incorporating a doorway, was built on the same alignment below the first

floor beam. The south-east bay now forms an entrance area with the small office to one side (15,16), the latter having a low ceiling of stone flags and formerly a small stove in the corner, to make a warm room. The doorway from the entrance area into the rest of the building has a plank door on which pencilled graffiti seems to record weights of materials (17,18).

- 7.8 The main part of the ground floor is occupied by the early 20th century shippon, comprising a row of paired stalls facing onto a feeding passage, the floor being of concrete with a stone kerb, and the stall dividers or boskins being of squaresawn softwood, set in stone footings (19-21). Timber palings set on top of a low brick wall divide the stalls from the feeding passage to the north-east, which has a flagged floor, and although the arrangement is clearly very convenient for this purpose of housing cows, it has been contrived around some remains of the milling structure in the north corner of the building. Here, an area of thicker masonry survives low down in the north-east wall, perhaps earlier remains which pre-date the 18th century building (23), and next to it is the 19th century hurst, a frame which would have held the millstones, shafts, gearing, and related items (24). This is a horizontal timber structure, with a total of eight short timbers projecting from the long wall, bolted to a massive pine beam at their south-west ends (the beam having moulded arrises to indicate that it had a previous use), and with a number of shorter, intermediate longitudinal members (25-28). Four cast iron posts support this beam, these too no doubt re-used from another building or structure (29,30). The peripheral timbers of the hurst survive in good condition, but the shorter cross beams which might have provided a good picture of the milling arrangement are in a much worse state, and some of them have been supported with iron rails (31,32), so that there is little further information to be gleaned from them. The floor below is of flagstones, re-laid during the building's conversion to a shippon, so unable to provide any information regarding milling.
- 7.9 The low doorway which seems to have been the position of the waterwheel axle is located at the end of the thicker wall, and a horizontal shaft would have run through the wall here, to be linked by gearing to the millstones and associated equipment. Next to it is a Jacob's ladder, perhaps a survival from the mill phase of the building (33,34), and further to the south-east in this wall are a number of larger stones which run through it, and may also have had a purpose related to the waterwheel, now unknown (35,36).
- 7.10 The first floor of the mill is for the most part constructed of oak beams, and joists, with wide softwood planks; in some cases the beams have red chalk marks surviving from the setting-out of the joist sockets (37). Except in the south-east bay, the first floor has been lowered by 0.8m, as can clearly be seen from the redundant sockets in the long walls, and by the fact that the taking-in door to the south-west is at a higher level than the floor, and this change appears to have

taken place in the early 20th century (38-39); the result was to allow the hurst to support the floor, whereas previously the first floor beams were independent of it. The floor level over the hurst itself is therefore lower still, as its framework forms the first floor (40). Most recently this upper floor must have served as a hay loft, but when the building was in use as a mill, most of it would have been for storage of unprocessed or milled grain.

7.11 The present bolted king post roof trusses are formed entirely of square-sawn softwood and are 19th century (41,42); they may have replaced earlier trusses in the same position, as alterations in the adjoining stonework can be seen inside and outside the building.

Wheel-house

- 7.12 The long narrow wheel-house appears to have been added to the north-east side of the mill at the same time as, or after, that building was raised to its present height; it is therefore likely to be early 19th century (43,44). Previously, the wheel-pit would have been open to the elements, and the construction of this roofed lean-to was probably intended to protect it from the drying effects of the sun as much as for any other reason. The building has good squared gritstone quoins but the main walling is of more random rubble, although much of the exterior of the building is presently hidden by trees. It is shorter than the main building at both ends, but has been extended to the south-east by a later store.
- 7.13 The 1842 tithe map suggests that at that date the wheel-house was shorter than at present and has been extended to the north-west since, but no evidence for this was observed in the building, so this may well arise from inaccurate mapping.
- 7.14 Openings in the outer walls of the wheel-house include a window and blocked doorway in the north-east side, the latter on the line of the axle (45,46), but there is no readily visible evidence of the former adjoining building which is shown on the maps of 1889 and 1907, and its purpose remains obscure. The wheel-house also has a doorway with good dressings in its south-east end, now communicating with the later building there, and with its threshold disturbed (47); the tail race would have run through below this opening before it was filled in. The doorway's lintel is very similar to the slotted stone used in the doorway in the front elevation (48), suggesting re-use of materials from an earlier structure, and many of the stones in its jambs are marked with the letter "I", probably the mark of the mason who cut them (49).
- 7.15 The wheel-pit is filled in with debris but its north-east edge is visible as a somewhat eroded step running the full length of the building, close to present ground level (50), and a large stone block with at least two embedded fastening

bolts marks its north-west end (51). As noted previously, this aligns with a low recess in the adjacent wall, but it is not known what function these components had. Over this end of the wheel-house is a large stone block and a number of timber beams (the latter in poor condition, so the stone may have been inserted as a substitute) (52,53), which conceivably carried a launder supplying the head-race to a breast-shot wheel. Despite there being no clear indication of any opening in the end wall of the wheel-house through which the head-race may have passed, excavation of the adjacent ground during the present development revealed the remains of a dry-stone buttress, or truncated wall on the outside of this building (54-57), which may have been the support for a launder running from the dam, a short distance to the north-west. The character of the stonework of this north-west end of the wheel-house is varied, the upper part being of better quality than the lower, suggesting there has been some rebuilding, which probably accounts for the lack of evidence relating to the water supply through it.

7.16 The wheel-pit is approximately 8.8m long (about 28 feet), so the waterwheel would have been smaller than that in diameter, and is reported to have been of iron with wooden buckets. Although provision was made for a watching brief to be carried out during the excavation of the wheel-pit during the 2010 development, in the event a new floor was laid over the existing fill, obviating the need to record its removal. This means no further information is available regarding the depth or composition of this material, which remains undisturbed.

South-east store

7.17 An addition was made to the mill in the construction of a two storey corner extension, in the angle between the wheel-house and the main building, perhaps in the early 19th century (it is shown on the 1842 map, but must have been built after the main building was heightened) (58-60). It has an entrance and window in the south-east side, the former with monolithic jambs and containing what is probably the original plank door (61,62), and there are two windows to the first floor, the upper one perhaps secondary. There is also a first floor window to the north-east side, now blocked with a flagstone. The ground floor room forms little more than a small store or perhaps workshop, with a loft over; they provide such small areas that their use must have been limited. The lower room has a floor of pitched stone, which must be the upper surface of a culvert taking the tail-race from the wheel-pit to the beck (63).

North-west store

7.18 The small addition at the north-west end of the range is two bays long and two storeys high, and appears to have been made into a tractor or implement shed during the 20th century (64). The masonry is distinct from the main building so it is clearly later than it, and indeed must have been built after the mill was

heightened, but the historic maps do not allow an accurate date for its construction, other than to indicate that it was present by 1842. The existing wide doorway with steel lintel has been inserted and there was probably only a pedestrian doorway here originally (65); another recent change is the rebuilt west corner. Two small windows light the first floor and there are blocked openings in the north-west and north-east elevations at that level (66-69).

7.19 The interior of this store is unremarkable, partly because in the 20th century the ground floor was laid with concrete and the upper floor removed. The building has one pegged king post roof truss, of oak, and probably early 18th century (70), but this has clearly been re-used from another building, as it is too long for the building's span, and has been placed off-centre to allow for this anomaly. This small building is likely to have been a store associated with the mill, perhaps also used as an office, stable, or for some ancillary processing function.

The surrounding site

7.20 Clearly the mill was formerly part of a wider site, in which water management features (ponds and sluices etc) were crucial components, but these appear to survive only as earthworks or buried remains, outside the development area. During the present works some excavation took place around the north-west end of the building, to reduce ground levels, and this was monitored. It was observed that the material removed was homogeneous in nature and appeared to comprise back-fill, probably of early 20th century date, which raised the ground levels considerably at that end of the building. An unattached section of cast iron pipe, 150mm in diameter, was present in the back-fill (71). It appears that once the building ceased to be used as a mill, and the garden of the adjacent house was created in the area of the mill pond and dam, some major earth-moving and landscaping was carried out, destroying any evidence for the water supply to the wheel-house, which may have survived up to that date.

8 Conclusion

8.1 The mill at Low Bradley is a largely 18th century building which may occupy the site of a medieval mill, but nothing of medieval date was identified during the survey, and in fact much of the present building is 19th century, including the remains of the hurst, while the cattle stalls were put in in the early 20th century after the building ceased to be used for milling. There is little evidence of the precise means of water supply, or for the form of the waterwheel, and only the relatively modern hurst survives to indicate the location of the millstones. However, the group of buildings as a whole is significant as a rural, industrial site of various phases of construction.

The author would welcome any relevant additional information or notice of inaccuracy in this report.

Appendix1: Listed building entry

LBS no: 505158

First listed 22 January 2009

Old Corn Mill

Corn watermill, C18 with early C19 alterations, probably medieval origins, converted to a cow byre in the early C20.

MATERIALS

Mostly local thin-bedded Millstone Grit rubble sandstone used for walling with larger flags used for roofing, some areas of walling employ coarser rubble. Massive, dressed gritstone used for quoins and lintels. Dressed stonework of the wheelhouse carry masons' marks. Interior timber includes oak beams and later imported softwood.

PLAN

North-west to south-east orientated 2 storey, 5 bay mill with gable end cart opening to the south-east and a 2 storey, 2 bay cart house/store to the north-west. An enclosed waterwheel house is on the side beneath a catslide roof. Extending to the south-east of the wheelhouse there is a later 2 storey extension above the culverted tailrace.

EXTERIOR

South-west elevation: Slightly scattered fenestration to the mill building. First floor has 4 openings, the second from the left being a taking-in door, the other three all being windows formed with plain stone surrounds. These stone surrounds are dressed with broad tooling said to be typical of Georgian date. The windows retain remains of joinery showing that they were 9 pane fixed lights with narrow glazing bars. The cills of the windows are all just above a building break marking the original wall top before the roof was raised. The lower stonework is more uniformly coursed and built of flagstones; the upper stonework includes some flags but is mainly coarser rubble, including a number of large, minimally dressed stones. The ground floor has 5 main openings. It has a nearly central, stone-framed doorway, its lintel being a well dressed stone incorporating mortice slots cut in its current front face. This lintel is a re-used stone and may have originally been part of a sluice, one of several similar reused stones in the building. To the left there is a three light mullioned window with a flat faced stone surround that is channelled, possibly to receive horizontal iron bars. This window also retains the remains of multi-paned joinery. A smaller undivided window lies to the left flanked by stone framed ventilation holes. Similar, blocked ventilation holes flank an inserted doorway to the right of the central entrance. This inserted doorway is unlike the other openings as it lacks stone framing to the sides. To the right of the inserted doorway is the final window. This is stone framed, but is more rectangular than the almost square windows on the first floor. This window also retains the remains of joinery.

Adjoining to the left of the mill building, slightly set back, is a 2 storey, 2 bay cart shed/store. This has 2 stone-framed windows retaining remains of joinery at first floor and a large cart opening below to the right with a replacement steel lintel. This building may also be of more than one phase as the upper walling uses more uniformly sized and flagstone-like stones than the lower part that is poorly coursed and includes a number of large undressed stones.

South-east gable: There is a central inserted cart opening formed by a segmental arch of flags with large spring-stones above quoined jambs. At the time of the inspection one of the oak planked and ledged doors remained on its hinges, the other lay fallen to the side. Above to the right there is a window at first floor level that cuts the line of the original, slightly lower roof line. The gable end is quoined up to the original height of the sidewalls. To the right there is a 2 storey extension infilling the corner between the gable end of the mill and the end of the set back waterwheel house. This extension is built of a single leaf of

stonework, has a stone framed doorway to the left and a roughly inserted window to the right. Above there are 2 further windows. One to the right is stone framed and retains a timber, multi-paned casement; that to the left is at a higher level and appears to be inserted. It also retains joinery, a six paned fixed light.

North-east elevation: This mainly consists of the wheelhouse which is quoined and is blind apart from a now blocked, stone-framed opening marking the axle position of the waterwheel, and an inserted window at the southern end of the wheel pit which would have lit the start of the tailrace. This window was probably inserted following the construction of the 2 storey extension infilling the corner between the wheelhouse and the gable end of the mill. This extension covers a large opening in the end of the wheelhouse that now forms an internal doorway.

North-western gable: This is mainly covered by the rising ground of the former mill pond dam. There is one window high in the gable end of the store room.

INTERIOR

Mill: The ground floor of the south eastern bay of the mill building is divided off with an inserted wall including an internal doorway, with the area to the south of the gable end cart entrance separated off by a further inserted wall to form a small office. The rest of the mill building was undivided except for the early C20 timber built cattle stalls. These cattle stalls, although both well built and preserved, are not considered to be of special interest in a national context. The upper floor is supported by 4 substantial, roughly hewn oak beams which support joists and wide floor boards. The ceiling in the northern corner is lower and reinforced with massive softwood beams supported by H section iron posts. This is the site of the milling machinery with probably two sets of mill stones on the floor above. Various sockets, notches and other features in the surrounding walls and timberwork provide evidence of the arrangement of mill machinery. This includes a blocked circular opening through to the cart shed/store to the north west, possibly to allow for a drive belt to power a winch to the upper floor of the store. A low doorway through the north eastern wall is the position of the axle of the waterwheel. Next to it is a Jacob's ladder fixed to the wall to provide access to the upper floor. This upper floor is on three slightly different levels, with the milling floor forming the northern quarter being slightly lower and the south eastern bay, bound by the ground floor inserted wall, is slightly higher. The gable wall to the cart shed/store to the north west has a couple of window openings, one being blocked, and also a blocked taking-in doorway. The roof structure of the mill building is early C19 of imported sawn softwood kingpost trusses supporting ridge and double purlins.

Cart shed/store: This has openings through to the mill building, most of which have been blocked and are noted above. The wall also includes a couple of exposed, sawn off substantial oak beams that are considered to relate to staging for former milling machinery. The building formerly had an upper floor as evidenced by joist holes. The roof structure has a single roof truss supporting ridge and double purlins. It is a traditionally jointed kingpost truss of partially hewn timber.

Wheelhouse: This encloses a largely infilled waterwheel pit approximately 7m by 2m with additional space around the pit to provide maintenance access. Due to the conditions at the time of the inspection it was not possible to determine the position of the head race (which will be through the north western wall) to determine the type of wheel. The infilling of the wheel pit may preserve remains of the wheel and may also include dumps of milling equipment cleared during the conversion of the mill into a cow byre. Any such archaeological remains will be of significance. The south eastern end of the wheelhouse has a doorway through to the extension. This opening has a re-used stone for a lintel incorporating mortice slots (interpreted as part of a former sluice). It appears to have been an original opening into the wheelhouse and would have been designed to provide light for maintenance work on the wheel and for clearing debris from the start of the tailrace. The extension retains its upper floor accessed via a ladder.

ADDITIONAL ITEM

Immediately adjacent to the western corner of the cart shed/store there is a stone post marking a footpath. This post is another morticed stone interpreted as part of a former sluice.

HISTORY

The current mill building is believed to be on the site of the medieval manorial mill for High Bradley, serving both High and Low Bradley with the merger of the townships in circa 1284 to form Bradleys Both. The Bolton Priory Compotus accounts for 1314 record repairs to the mill at Bradleys Both and a manorial mill is again noted in the early C16. In 1752 J and T Barret are listed as millers, in 1804 it is Jonas Sugden, Cooper and Sugdon in 1822 and in 1838 Jonas Sugden junior. The mill is shown on the Enclosure map of 1791 together with a narrow mill pond to the north east. The Tithe Award map of 1843 illustrates a number of alterations including a new triangular mill pond to the north of the mill, the shortening of the earlier mill pond, as well as the addition of the wheelhouse and an attached building (thought to have been a store room) to the original mill. The 1854 Ordnance Survey map (surveyed 1848) shows this arrangement together with a new leat feeding the original reservoir from Bradley Gill to the south east. The building is labelled Bradley Mill (corn) and it is still named as such on the 1891 map, but by the time of the 1909 Ordnance Survey map the mill had probably ceased operation as it is no longer labelled. It is believed that by this time it was owned by the Chester family of the nearby Ghyll Farm who converted the building into a cow byre with feed storage above. The store room on the north side of the building was ruinous by the 1938 map with only two walls still depicted which were cleared later in the C20.

REASON FOR DESIGNATION

The old corn mill is designated at Grade II for the following principal reasons:

- * It is an example of well preserved pre-1840s vernacular architecture.
- * It is a nationally rare surviving example of a water powered cornmill that still retains evidence of the arrangement of the milling machinery
- * For the additional interest that the building is multiphased and preserves evidence of earlier mill buildings on the site

Appendix 2: Written scheme of investigation

 The former water-powered corn mill at Low Bradley is an 18th century building, listed grade II, which may incorporate some fragmentary medieval remains. Condition no 2 of the listed building consent for the site, granted by Craven District Council (application no: 11/2009/9374), states that:

"No development shall take place within the application area until the applicant has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation which has first been submitted by the applicant and approved in writing by the Local Planning Authority. The development shall then be carried out in accordance with the approved details."

The following paragraphs set out the proposed scheme of investigation, which takes account of the advice given by the NYCC Heritage & Environment Section to Craven DC.

- The investigation would be carried out before and during development work. Initially, a "Level 3 record" would be made of the building as it exists. This would include a written record, external and internal photographs, floor plans, and sections. Subsequently, a watching brief would be undertaken during any excavation in the wheelpit, or in adjacent external areas which may contain evidence for water management features, to observe and record any hitherto buried features or remains.
- Following the completion of the investigation, a written and illustrated report would be produced, incorporating historical evidence, which would be submitted to the local planning authority, the North Yorkshire Historic Environment Record, and the English Heritage National Monuments Record, as well as to the client. The project archive would be deposited at the North Yorkshire County Records Office.

Stephen Haigh, Buildings Archaeologist
11 Browcliff
Silsden
Keighley
BD20 9PN
01535 658925

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⁹ As defined by English Heritage in *Understanding Historic Buildngs: A Guide to Good Recording Practice* (2006)

Appendix 3: Contents of the project archive

To be deposited with the North Yorkshire County Record Office

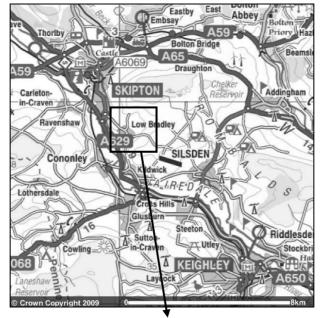
Archive contains:

- a copy of the report
- full set of black and white photographs and negatives
- site notes (annotated plans etc)

Complete list of photographs taken, in film order

Photo	Film	Frame	Subject
16	1	3	Office in mill, from the north-east
15	1	4	Entrance area in mill, from the south-west
17	1	6	Inserted cross-wall in mill, from the south
18	1	7	Graffiti on door in inserted cross-wall
30	1	8	The hurst, and later feeding passage, from the south-east
31	1	10	The hurst, and later feeding passage, from the north-west
33	1	11	Doorway at former waterwheel bearing, and Jacob's ladder
34	1	12	Doorway at former waterwheel bearing, and Jacob's ladder
23	1	13	North corner of the mill, below hurst, showing thicker wall to right
19	1	15	The shippon occupying the ground floor of the mill
20	1	16	The shippon occupying the ground floor of the mill
14	1	17	Inserted cross-wall in mill, from the north-west
22	1	18	Internal side of south-west wall of mill, showing former entrance
61	2	1	Door to added store (outer face)
2	2	3	General view of the mill, from the south-west
1	2	4	General view of the mill, from the south
8	2	5	South-east gable
7	2	6	General view of the mill, from the south-east
58	2	7	Added building at east corner of the range
59	2	9	Added building at east corner of the range, from the north-east
9	2	10	Cart entrance in south-east gable
3	2	11	Front elevation (south-east end)
67	2	12	Added store: north-west gable
56	2	13	North-west end of wheel-house after excavation, showing buttress or launder support
68	2	15	Added store: north-east side
69	2	16	Added store: north-east side
54	2	17	The wheel-house, from the north-west
44	2	18	The wheel-house, from the north
45	3	1	The wheel-house, from the east
43	3	3	The wheel-house, from the north-east
60	3	4	Wheel-house and added store, from the east
65	3	5	Added store at north-west end of range
64	3	6	Added store at north-west end of range
6	3	7	Front elevation (north-west end)
5	3	9	Detail of three-light window in front elevation
4	3	10	Detail of entrance in front elevation, with slotted lintel
66	3	11	Added store at north-west end of range
10	3	12	North-west gable of main building, within later store (ground floor)

11	3	13	North-west gable of main building, within later store (first floor)
70	3	15	Added store: roof truss
52	3	16	Interior of wheel-house, from the south-east
50	3	18	Interior of wheel-house, from the north-west
21	4	1	Detail of boskin in shippon
37	4	3	Underside of the first floor in mill, from the south-east
25	4	4	The south-west side of the hurst
26	4	5	The south-west side of the hurst
28	4	6	The beam forming the south-west side of the hurst
27	4	7	Underside of part of the hurst
29	4	8	Iron post supporting the hurst
32	4	10	Underside of the hurst, from the north-west
40	4	11	First floor of mill: the north-west end
39	4	12	First floor of mill: taking-in door in south-west side, showing former floor level
38	4	13	First floor of mill: the south-east bay
42	4	14	Roof truss in mill, from the east
47	4	17	Lower part of doorway in south-east end of wheel-house, within later store
63	4	18	Floor of pitched stone in added store, over culvert of tail-race
46	5	1	Blocked door in north-east side of wheel-house, from the south
12	5	3	Doorway at position of waterwheel axle bearing, north-east side of mill
48	5	4	Underside of doorway lintel with slots, south-east end of wheel-house
51	5	5	Stone block with fastening bolts at north-west end of wheel-pit
13	5	6	Low recess at north corner of mill, in wheel-house
53	5	7	Stone block and timbers above north-west end of wheel-pit
71	5	10	Cast iron pipe section recovered during excavation at north-west end of the range
55	6	1	North-west end of wheel-house after excavation, showing buttress or launder
55	- 6	1	Support North-west end of wheel-house after excavation, showing buttress or launder
57	6	2	support
41	6	4	Roof trusses in mill, from the south-east
36	6	5	Large stone in wall between mill and wheel-house (from the south)
24	6	6	The hurst, after the removal of the shippon fixtures
35	6	7	Large stone in wall between mill and wheel-house (from the north)
49	6	8	Mason's mark (I) on door jamb, south-east end of wheel-house
62	6	10	Door to added store (inner face)



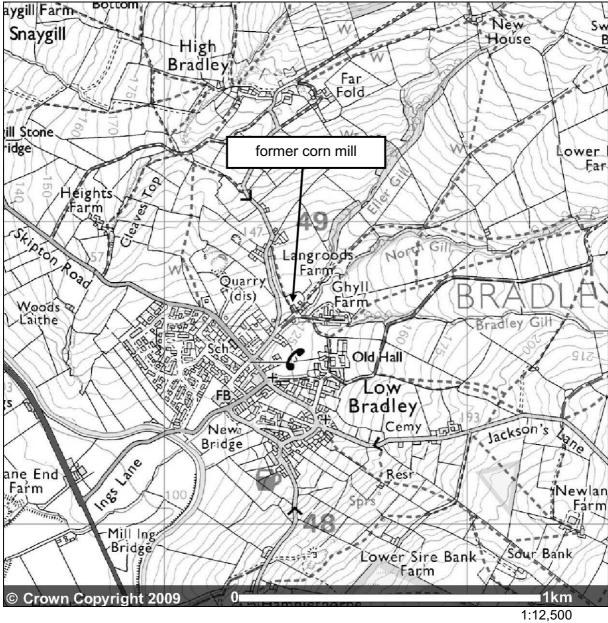


Figure 1: Location maps

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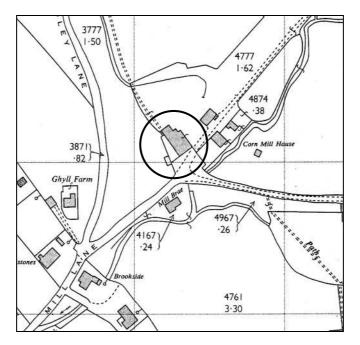
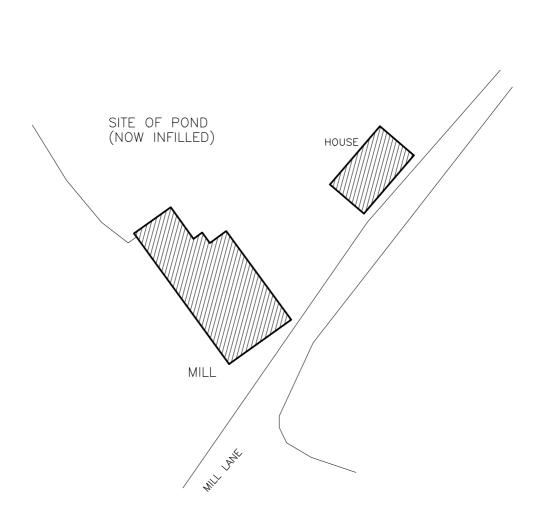


Figure 2: Detailed location map (1:2500)

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Map sheet: SE0048/0148, published 1965



FORMER CORN MILL MILL LANE, LOW BRADLEY NORTH YORKSHIRE (NGR: SE00434871): HISTORIC BUILDING RECORDING

FIGURE 3: SITE PLAN

SCALE: 1:500

DATE OF SURVEY: APRIL 2010

STEPHEN HAIGH Buildings Archaeologist



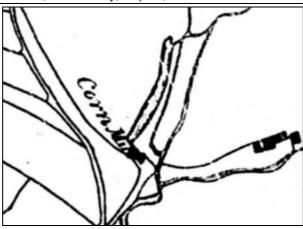


Figure 4: Extract from the 1791 enclosure map of Bradley (NYCRO MIC 604) Shows a rectangular building with long pond running to the north

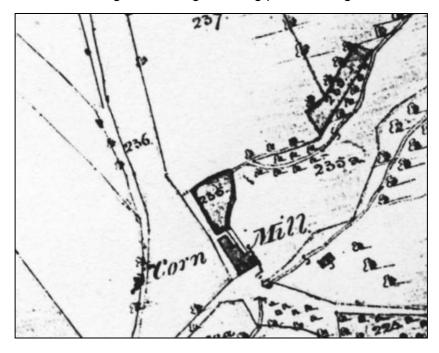


Figure 5: Extract from the 1842 tithe map of Bradleys Both, by Sam Swire (NYCRO MIC 1772/461-467) Shows a more irregular building, with the head race apparently leading to a shorter wheel-house, and two separate ponds



Figure 6: Extract from the Ordnance Survey 1st edition 6" to the mile map, surveyed 1850, published 1854 (Yorkshire, sheet 168) (here enlarged)

Shows essentially the same arrangement, but in less detail than the tithe map

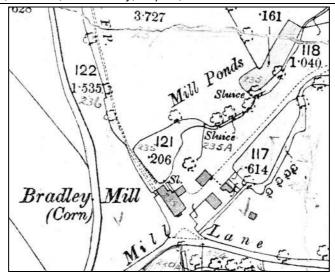


Figure 7: Extract from the Ordnance Survey 1st edition 1:2500 map, surveyed 1889, published 1891 (Yorkshire, sheet 168.13)

Shows a slightly shorter head race and longer wheel-house, possibly attributable to the larger scale. Also note the building on the north-east side which is no longer extant.

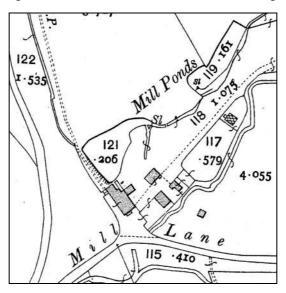


Figure 8: Extract from the Ordnance Survey 1:2500 map, revised 1907, published 1909 (Yorkshire, sheet 168.13)

The map shows no significant changes except the absence of a name for the building, possibly suggesting it had fallen out of use.

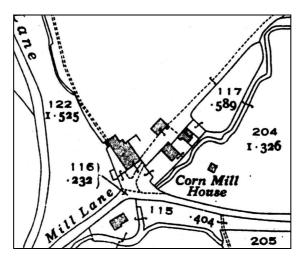
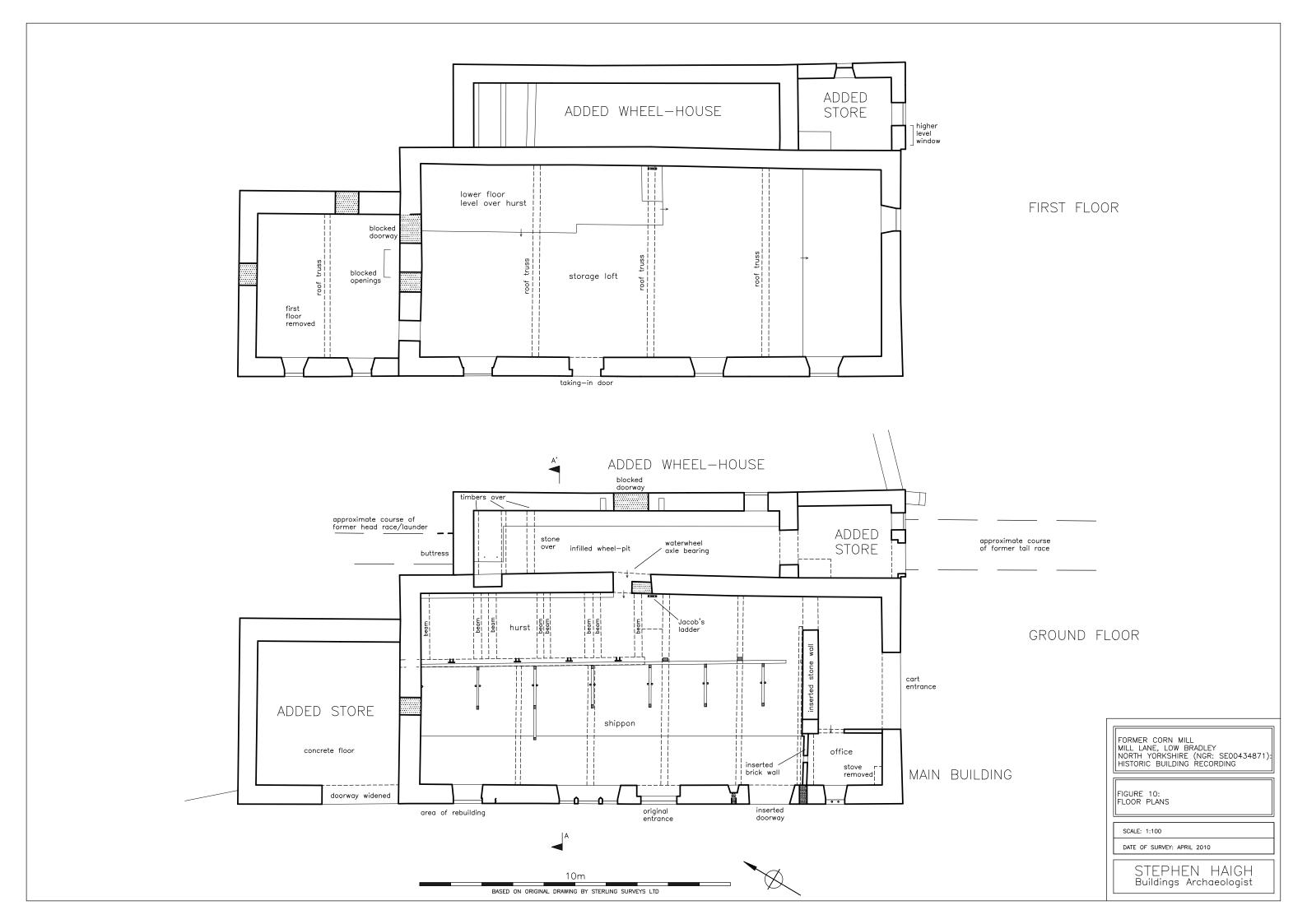
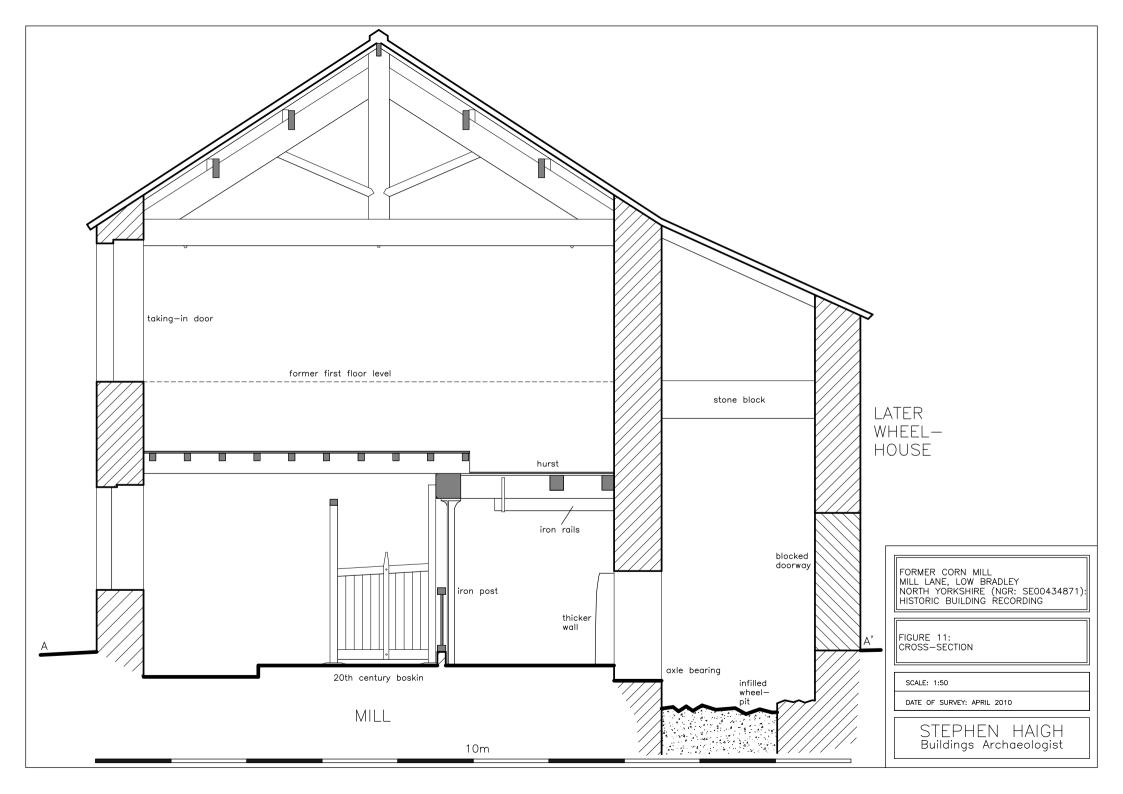
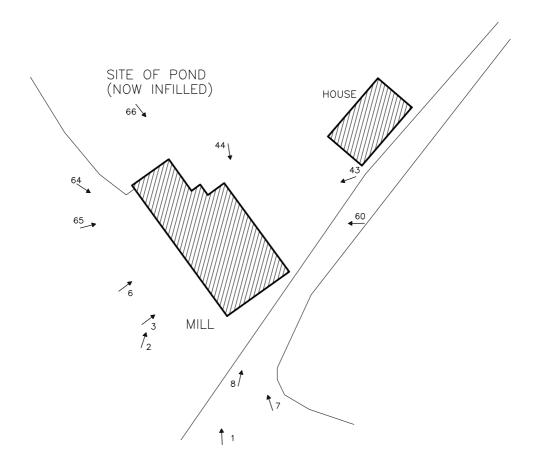


Figure 9: Extract from the Ordnance Survey 1:2500 map, revised and published 1938 (Yorkshire, sheet 168.13)

By this date the ponds and head race were no longer present and the north-east building demolished. The mill was evidently no longer in use at this time.







✓ 1: photograph direction and number

FORMER CORN MILL MILL LANE, LOW BRADLEY NORTH YORKSHIRE (NGR: SE00434871): HISTORIC BUILDING RECORDING

FIGURE 12: SITE PLAN WITH KEY TO PHOTOGRAPHS

SCALE: 1:500

DATE OF SURVEY: APRIL 2010

STEPHEN HAIGH Buildings Archaeologist



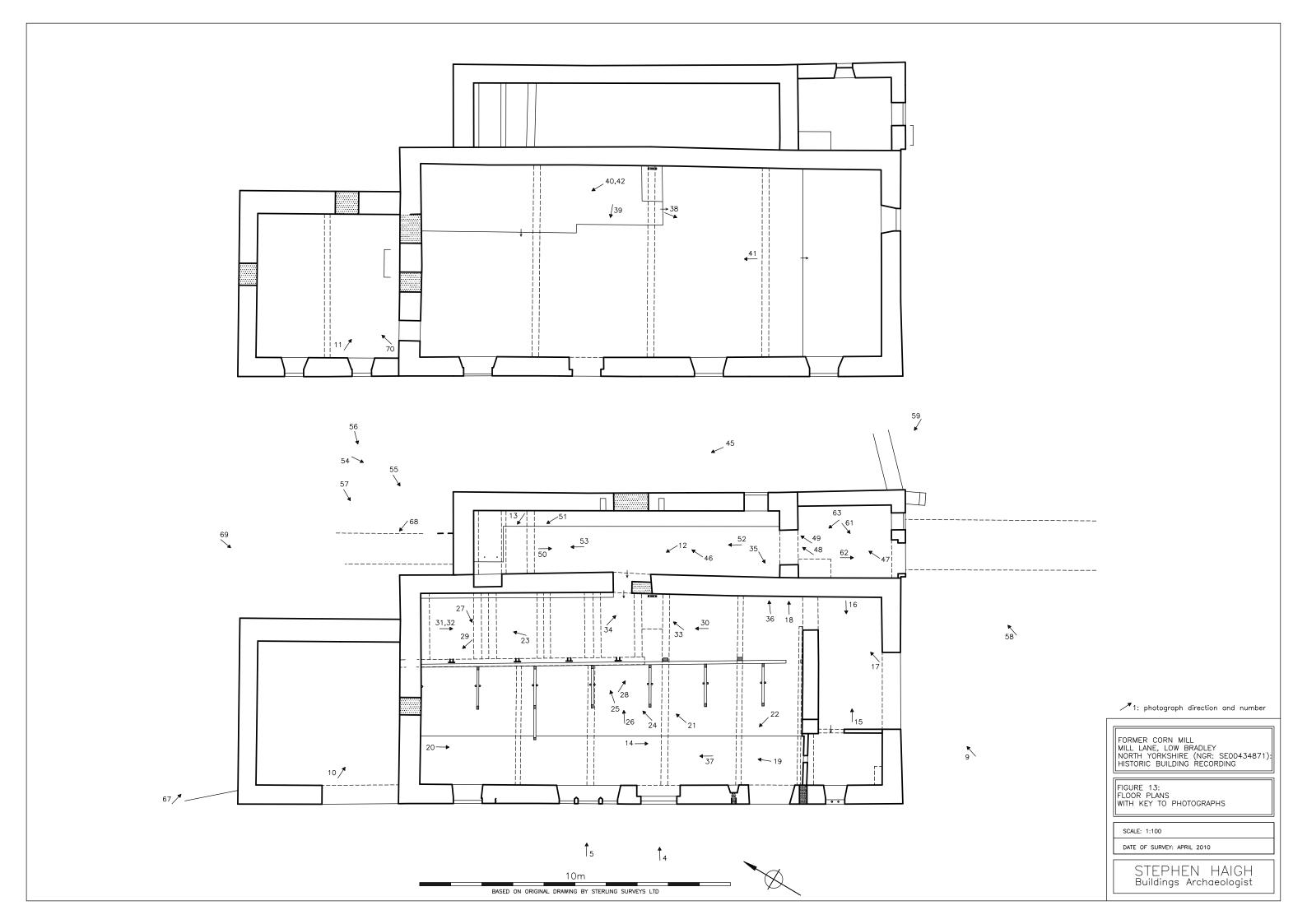




Photo 1: General view of the mill, from the south



Photo 2: General view of the mill, from the south-west

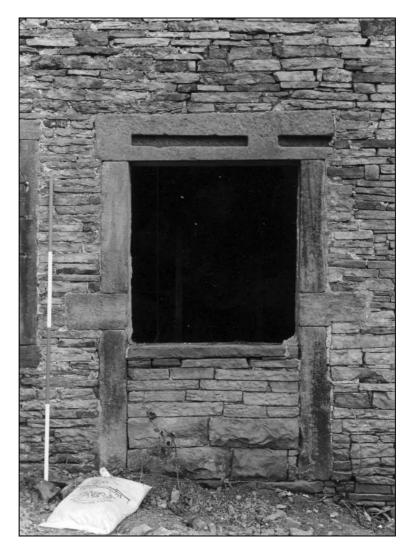


Photo 4: Detail of entrance in front elevation, with slotted lintel

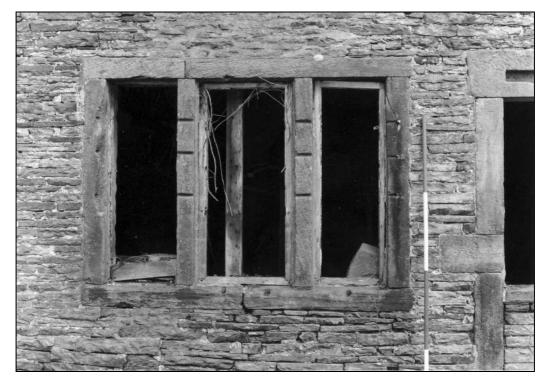


Photo 5: Detail of three-light window in front elevation

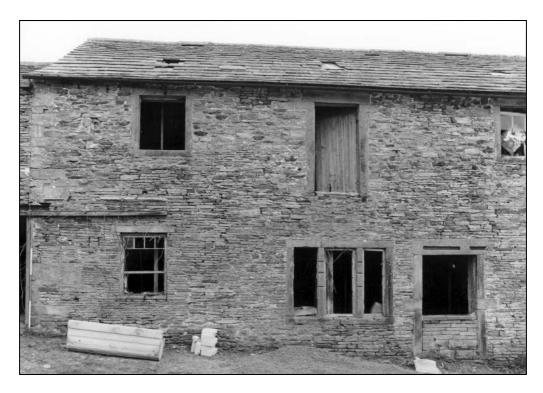


Photo 6: Front elevation (north-west end)

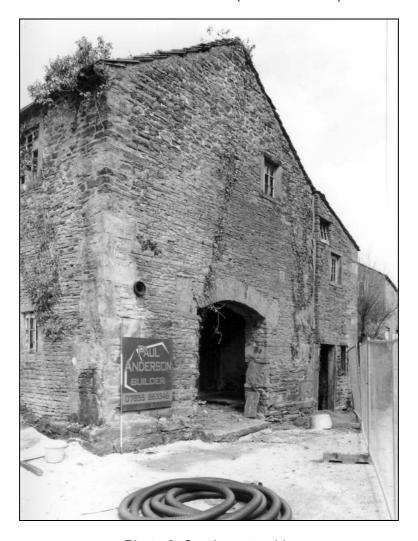


Photo 8: South-east gable



Photo 10: North-west gable of main building, within later store (ground floor)

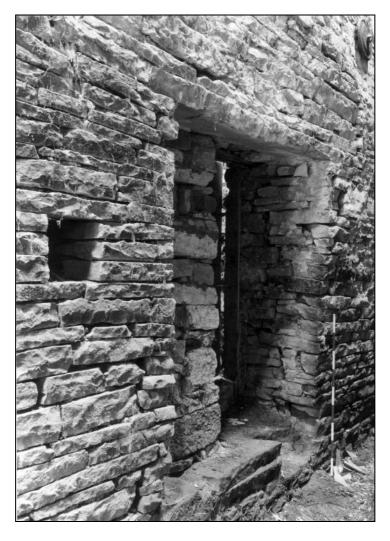


Photo 12: Doorway at position of waterwheel axle bearing, north-east side of mill

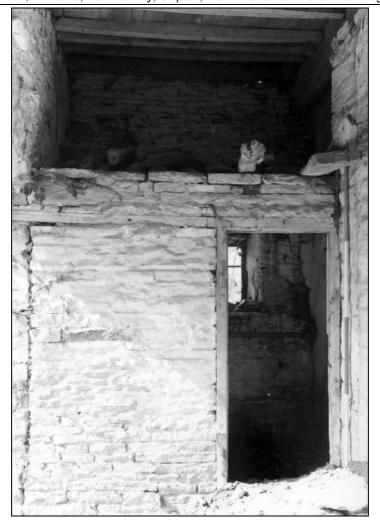


Photo 16: Office in mill, from the north-east

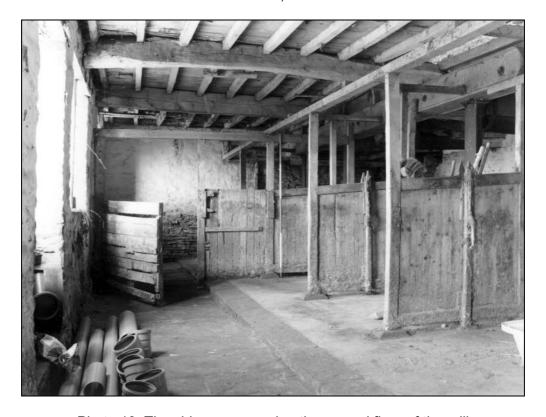


Photo 19: The shippon occupying the ground floor of the mill

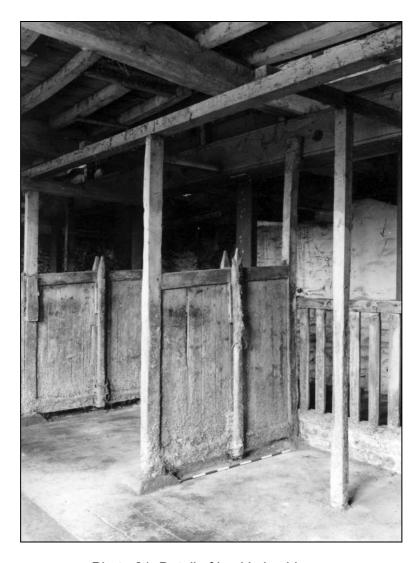


Photo 21: Detail of boskin in shippon

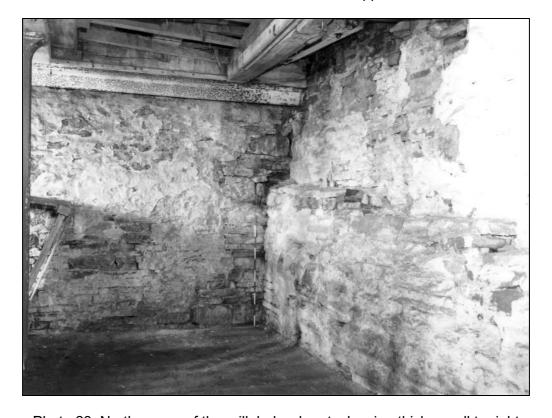


Photo 23: North corner of the mill, below hurst, showing thicker wall to right

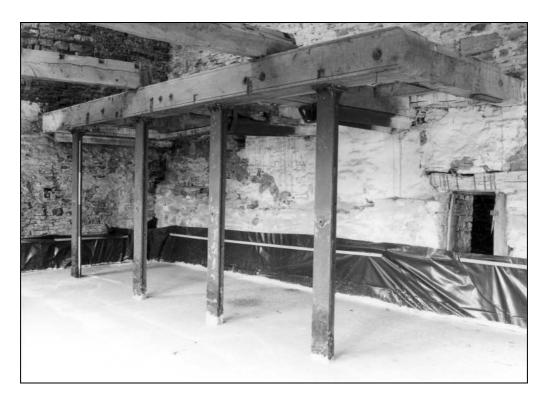


Photo 24: The hurst, after the removal of the shippon fixtures



Photo 28: The beam forming the south-west side of the hurst

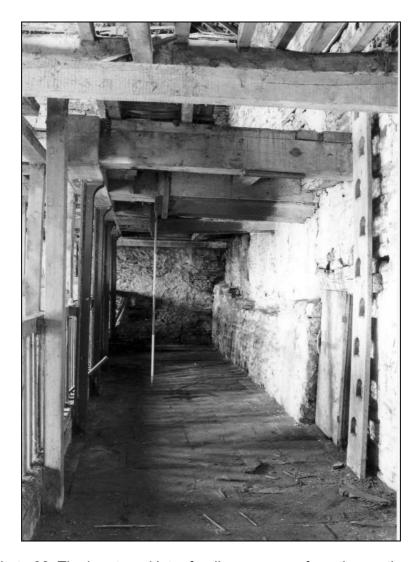


Photo 30: The hurst, and later feeding passage, from the south-east



Photo 32: Underside of the hurst, from the north-west



Photo 33: Doorway at former waterwheel bearing, and Jacob's ladder



Photo 37: Underside of the first floor in mill, from the south-east



Photo 38: First floor of mill: the south-east bay

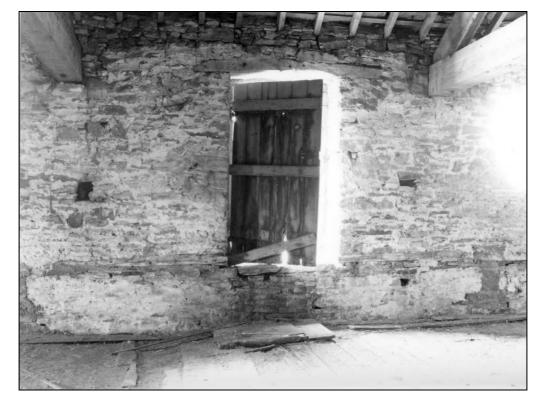


Photo 39: First floor of mill: taking-in door in south-west side, showing former floor level



Photo 40: First floor of mill: the north-west end

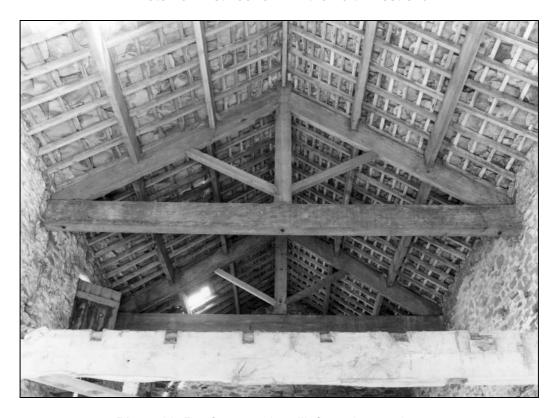


Photo 41: Roof trusses in mill, from the south-east

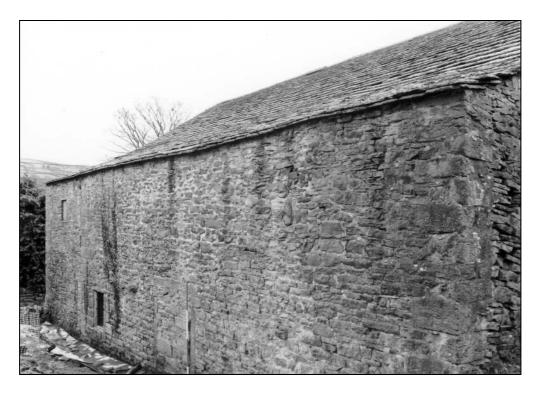


Photo 44: The wheel-house, from the north

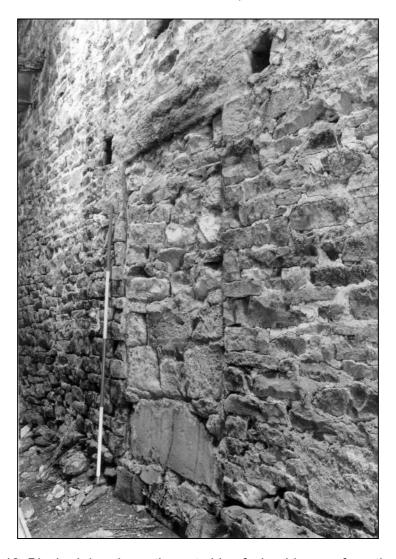


Photo 46: Blocked door in north-east side of wheel-house, from the south

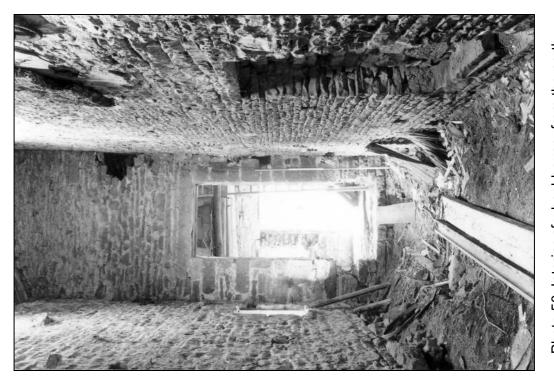


Photo 50: Interior of wheel-house, from the north-



Photo 47: Lower part of doorway in south-east end of wheel-house, within later store



Photo 51: Stone block with fastening bolts at north-west end of wheel-pit

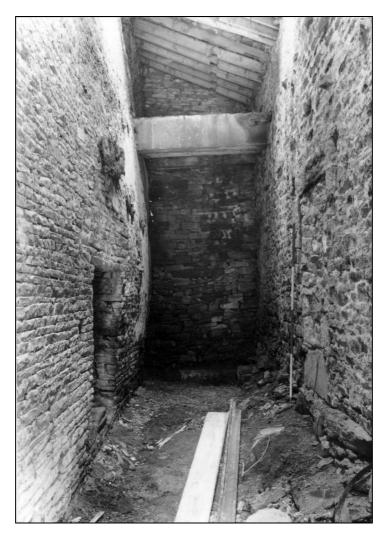


Photo 52: Interior of wheel-house, from the south-east



Photo 53: Stone block and timbers above north-west end of wheel-pit



Photo 55: North-west end of wheel-house after excavation, showing buttress or launder support

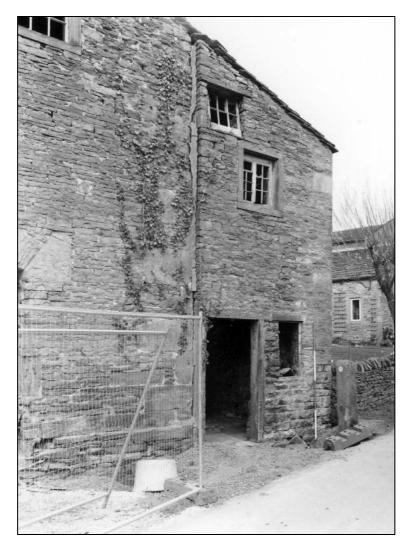


Photo 58: Added building at east corner of the range

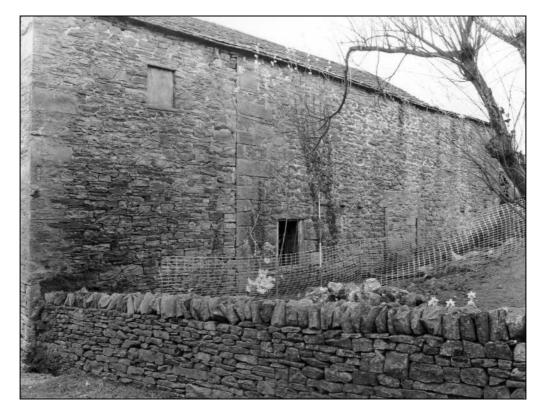


Photo 60: Wheel-house and added store, from the east



Photo 62: Door to added store (inner face)



Photo 64: Added store at north-west end of range

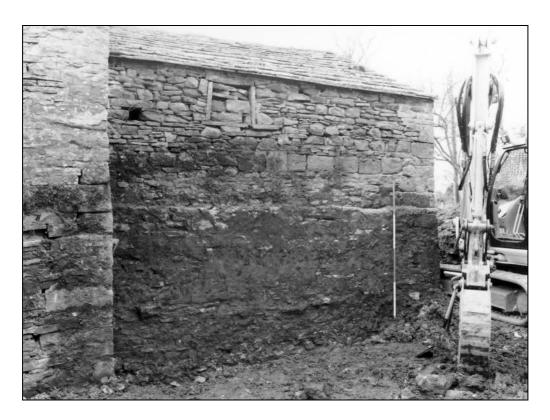


Photo 68: Added store: north-east side



Photo 70: Added store: roof truss