Historic Building Record

Boyton Mill
Northcott
Boyton
Devon

Deborah Laing-Trengove

Historic Building Record

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Northcott
Boyton
Devon

For

Mr & Mrs Sims

By

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Acknowledgements

Mr & Mrs Sims, the owners, for access to the property
Andy Paton, Agent
Stephen Reed, DCC Senior Historic Environment Officer
Martin Watts for his expertise

1. Introduction

1.1. Project Background

Deborah Laing-Trengove carried out building recording at Boyton Mill, Boyton, Devon PL15 9RG. The work was commissioned by Mr Andy Paton (Agent) on behalf of Mr & Mrs Sims (Owners) and required as a condition of planning consent, Planning ref: 1/0948/2015/FUL - *Conversion of Mill to create residential annexe resubmission of 1/1339/2014/FUL (Affecting a Public Right of Way)*. Condition No. 3 states that:
No development to which this permission relates shall commence until an appropriate programme of historic building recording and analysis has been secured and implemented in accordance with a written scheme of investigation which has been submitted to and approved in writing by the local planning authority. The development shall be carried out at all times in strict accordance with the approved scheme, or such other details as may be subsequently agreed in writing by the District Planning Authority.
Reason: To ensure, in accordance with paragraph 141 of the National Planning Policy Framework (2012) and Policy ENV4 of the Torridge Local Plan, that an appropriate record is made of the historic building fabric that may be affected by the development.

The recording work and subsequent report were carried out and produced to provide a record of the building prior to conversion works. The work has specifically focussed on the fabric of the mill building as required by the planning condition, the mill wheel and gearing has been recorded and described in the context of the development of the building but is not discussed at length in specific technical detail as this is to be retained *in situ* and not impacted by the conversion works.

1.2. Location

Boyton Mill is situated to the east of the village of Boyton, separated from the bulk of the parish by the county boundary, the River Tamar, and located approximately 9 miles (14.5km) south of Holsworthy and 6 miles (9.7km) north of Launceston (Fig.1). The mill is accessed via a private road to the south-east of the minor road leading eastward from Boyton village, immediately after crossing Boyton Bridge, over the Tamar, situated on the Braggs Hill road. The mill building is set at a right angle and to the north of the domestic mill house. The mill and associated mill house are set on rising ground to the base of a steep west facing slope which appears to have been quarried away, on the edge of the floodplain to the east of the River Tamar. The bedrock geology consists of the mudstone and siltstone of the Crackington Formation, with superficial deposits of alluvium (http://mapapps.bgs.ac.uk/geologyofbritain/home.htmla Formation).

1.3. Methodology

The building recording was undertaken by D. Laing-Trengove prior to works on 7th December 2015. The recording work consisted of a detailed written description (Appendix 3) and digital photography (Appendix 4). Architects drawings were utilised to produce schematic phased plans. The work was carried out in accordance with a Written Scheme of Investigation (Appendix 1). The desk-based work was undertaken in accordance to Standard and Guidance for historic environment desk-based assessment - IfA 2012, and to Devon County Historic Environment Service (DCCHES) specifications.

The building recording conformed to Level 2-3 of recording levels as set in Understanding Historic Buildings: A guide to good recording practice - English Heritage 2006, and to Standard and guidance for the archaeological investigation and recording of standing buildings or structures – CIfA 2014. The work was monitored by Stephen Reed of DCCHES.

Figure 1: Location of Boyton Mill.

1.4. Non-Technical Summary

Records indicate that Boyton Mill may be located on a medieval mill site. The existing, mainly 19th century, building was rebuilt in the early 19th century on the footprint of an earlier structure and retaining some of the older fabric. The documentary and cartographic evidence suggests that it was formerly a double mill, with two millwheels aligned against the north wall driving four pairs of millstones. Little exterior structural evidence remains from this earlier period, but the interior ground floor fireplace and flue, and some timber elements at the existing first floor level support this interpretation. In the late 19th century a single storey open fronted cart shed was added to the west end and the building was raised and internally altered to accommodate the current layshaft drive and two pairs of millstones, with the eastern side of the building retaining this arrangement. In the early part of the 20th century a single storey extension was added to the east end. The western end of the building was substantially rebuilt and the interior modified in the later 20th century, with the ground floor infilled with rubble.

2. Historic Background

2.1. Boyton Mill Documentary History

The following is a summary of documentary information relating to the mill building published on the Boyton Mill website (http://www.boytonmill.com/history-of-boyton-mill.html). For document references see website text.

Boyton Mill, situated on the Devon side of the Tamar, close to the hamlet of Northcott, was originally located within the medieval manor of Northcott rather than associated with Boyton situated on the Cornish side of the divide. The first documentary reference to Northcott manor appears in 1262 when Jordan de Loghyncote and Alice his wife relinquished their interest in 'two mills and ten acres of marsh in Northcote' to John Beaupe.

By the 15th century Northcott manor was in the possession of the Bonville family, and in 1460 listed in the estates of William Bonville who was killed at the Battle of Wakefield. The manor passed to William's daughter Cecily and in 1525 a survey of her estates detailed the tenements and tenants of the manor. The manor mill is listed with an orchard adjoining and three acres of pasture and meadow tenanted by John Lacke, along with a tenement with five acres of pasture.

The next documentary reference to the mill is in the will of Christopher Trick of Northcott Hamlet, miller, dated 1623, which records 'ye tenement and Grist mill which I hold called Northcott mill or Trick's mill'. The Muster Rolls for Boyton dated 1569 suggest that the Trick family may have taken over the mill in the 1560s. Later records, predominantly in the form of various family wills dating from the early part of the 18th century and later land tax returns show that the family's tenancy continued throughout most of the 18th century, apparently terminating in 1783 with the death of Christopher Trick. In 1785 the ownership of the manor passed to Lady Lavinia Luther and in 1805 it was advertised for sale including 'The Mill and Tenement adjoining'. The mill appears to have been purchased by Digory Baker who remained as owner until 1819 when Land Tax records show William Moyse as owner.

From the death of Christopher Trick the mill was variously occupied by a number of short lived tenants. Until 1792 by Samual Fice, thereafter by the Sheperds until 1807, then until 1811 by John Hobbs, then Peter Stanbury up until 1815. In 1813, then again in 1814 the mill was advertised for sale, the mill building, the machinery and other buildings, but not the residential accommodation, described as being newly erected six years before (i.e. circa 1808). The mill was left unsold until 1832 when the then tenant, John Oliver, purchased the property. The mill remained in the ownership of the Oliver family until 1897, followed by Thomas and then Frank Yeo, then Jack Cole the last person listed as miller, who sold the mill in 1951 to a Mr Hill who 'modernised the premises'. The property and 25 acres of land was again put up for sale in 1971, the mill building advertised as repaired, with the millstones and machinery retained. (Higgens, J. 1985)

My thanks to Martin Watts for providing the text of sale notices from 1812 and 1814, that give further insight into the layout and workings of the mill in the early part of the 19th century.

In 1812 the mill was advertised for sale as *'all those Desirable and Well-accustomed GRIST MILLS, called BOYTON MILLS, otherwise NORTHCOTT HAMLET MILLS, comprising four pair of millstones, with a dwelling, all other necessary buildings, about 18 acres of meadow and orchard land, and about 2 acres of thriving coppice, (with a right of common on Chapmanwell Down) situate in*

Northcott Hamlet aforesaid, in the county of Devon. The mills and outhouses have been entirely rebuilt within the last four years. The mills are well supplied with water, situate in a populous neighbourhood...' (Sherborne Mercury, 21 September 1812).

In 1814 the mill was advertised as *'all those capital Water-Grist Mills, called BOYTON MILLS, otherwise NORTHCOTT HAMLET MILLS, with the Dwelling-House, Barn, Stable, and other outhouses thereto belonging, and about one acre of orchard, two acres of coppice wood, and fifteen acres of rich arable, meadow and pasture land, contiguous with the same... now in the occupation of Mr Peter Stanbury, who holds the same for the remainder of a term of 14 years, which commenced on Lady-day, 1812. These mills, most eligibly situate on the banks of the Tamar, which supplies a never-failing stream, contain three pairs of stones and are admirably calculated for carrying on an extensive corn and flour trade. The mill-house, with the whole of the machinery, and also the barn and other buildings, excepting the dwelling-house, were erected about six years ago...'* (Exeter Flying Post, 22 December 1814, 1b).

2.2. Cartographic Record

Boyton Mill is depicted on the Boyton (Northcott) tithe map of 1839 (Fig. 2).

Figure 2: Boyton Mill (Tricks Mill) as depicted on the 1839 tithe map.

In general domestic buildings only are coloured pink on tithe maps, but here the mill is coloured as the mill house. The mill is depicted as a single structure in its current location, without either of the extant single storey extensions. The leat carrying water to and from the waterwheel is shown

(coloured blue), as is the existing lane leading to the property from the north-west and track to the north-east formerly giving more direct access to the mill from Northcott hamlet. A former building is also shown directly to the west of the domestic mill house range. The Apportionment gives William Oliver as the owner and occupier of Tricks Mill Tenement, with numbers 193-212 giving the extent of the holding.

By the late 19th century and production of the 1st Edition Ordnance Survey map (Fig. 3) the mill building has acquired an extension to the western end. Marked as a corn mill, the building is shown as projecting over the mill race for the length of the original building, possibly suggesting that the north side of the building carried two waterwheels at this time. A sluice is marked to the north indicating a sluice gate which could be employed to stop the flow of water to the mill, channelling it round to meet the leat below and to the west of the building. The mill house has acquired a central extension to the east.

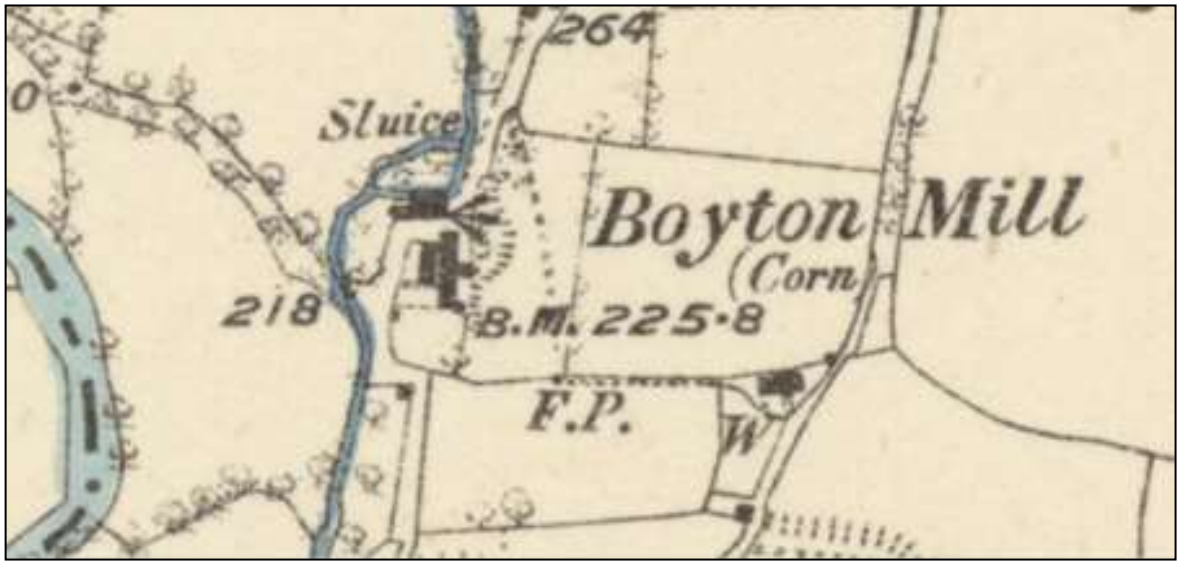

Figure 3: Extract from the 1st Edition Ordnance Survey map surveyed 1883, published 1884 (scale: 6inch – 1:10560).

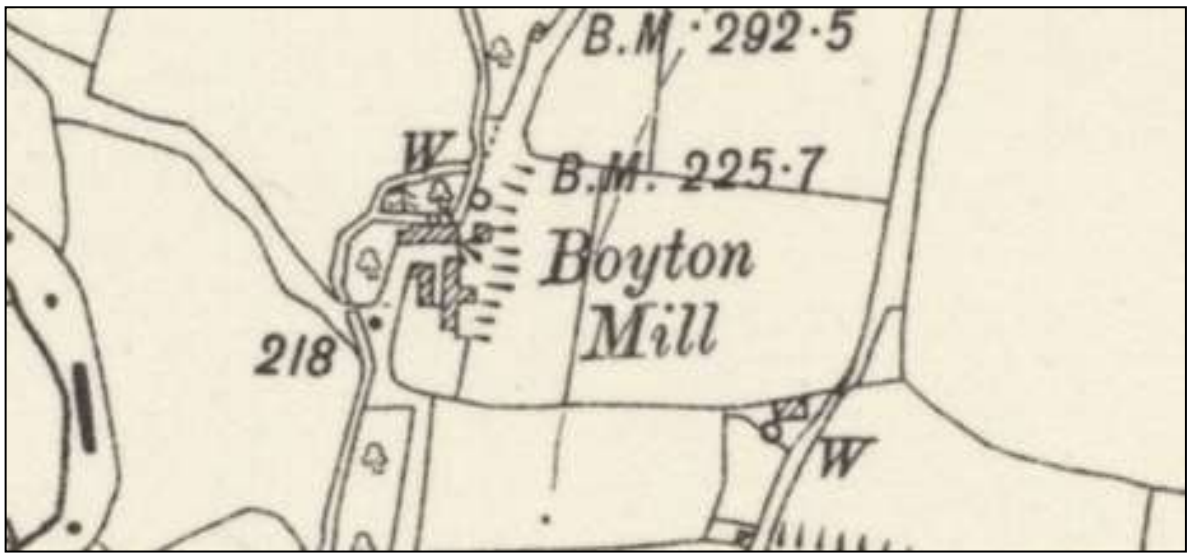

Figure 4: Extract from the 1905 Second Edition OS Map (scale: 6inch – 1:10560).

The 1906 Second Edition OS map shows little change to the mill building (Fig. 4). A small square building is now located to the east of the mill.

3. The Building Survey

3.1. Brief Exterior Description

For a detailed description see Appendix 3.

The south facing mill building is positioned on ground that slopes up to the east, and is built into the slope at the east end (Fig.5). With a mid-late 19th century open fronted rubble stone extension to the west, with pitched slate roof, raised in concrete block and reroofed in the late 20th century (see Appendix 4, Figs. 18 & 19). Against the east wall is a 20th century rubble stone lean-to with monopitch slate roof, with a small modern open fronted log store in the angle between the south end of the east wall of the mill and south wall of the lean-to, with, in the north-west corner a possible chimney or flue projecting from the east wall of the mill building (see Appendix 4, Figs. 22 & 23). A cast iron overshot millwheel, timber launder and penstock are set against the eastern end of the north wall (Fig. 6 & Appendix 4 Figs. 27, 29 & 30).

Figure 5: The south elevation of the mill building, viewed from the south-west.

The main mill building is constructed of earth bonded random rubble stone at the lower level to the south-east, east and north-west, with semi-coursed stonework above, raised in brick to the eaves, under a reused slate roof, hipped to east and west. The masonry of the north wall descends to below ground level into the exterior wheel pit and mill race and is partly obscured by vegetation (Fig.6). All rubble stone elevations were formerly slate hung at first and second floor levels, with a few slates remaining to south, probably protecting the feet of the roof trusses, and to north covering a former opening (see Appendix 4, Figs.20, 21, 28, 29, 30 & 31).

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The western end of the south elevation has been rebuilt in the late 20th century in concrete block, rendered and painted to the exterior (Fig. 5). To the interior the ground floor at this end is infilled with rubble, capped with cement forming the floor at first floor level. There is a former door opening at ground floor level, roughly central in the exterior west elevation, formerly giving access to this end of the building, blocked with stone rubble set in modern cement (Fig.7 & see Appendix 4, Fig. 36). The masonry of the southern end of this wall is disturbed and has been repaired in hard grey cement with the date 1947 etched into it. Below ground level toward the north end of the west wall is a small square opening, blocked to the interior (Fig. 6 & see Appendix 4 Fig. 33)

Figure 6: The north and west elevations of the mill, views from the north-west.

Figure 7: Blocked door opening in the west elevation of the mill, viewed from the west (2m scale).

The central door opening and window opening above in the south elevation have been rebuilt and reset in the 20th century, with modern machine-made brick to the door jambs and window reveals, set in reused rubble stone and orange brick bonded with modern cement (Figs. 5 & 8 & Appendix 4, Figs. 18 & 38). The wall to the east of the door is disturbed and the extant late 19th century ground floor window opening is set within an earlier, larger opening with the earlier timber lintel visible to the exterior and internally (Fig. 8 & see Appendix 4, Figs.18, 20, 46 & 48).

Figure 8: The eastern portion of the southern ground floor elevation, with repaired door opening and blocked former larger window opening, viewed from the south (2m scale).

There are further modern repairs to the structure in the western portion of the north elevation below and between the extant large window opening at upper ground floor level and the blocked opening (now slate-hung) to the east of this (Fig.6 & see Appendix 4, Figs. 28, 30 & 31). All windows are fixed, unframed and with the exception of the ground floor opening to the south (Fig. 8& see Appendix 4, Fig. 43), are modern. The late 19th century door opening at the north end of the east wall giving access to the eastern upper ground floor has a reused timber lintel to the interior (see Appendix 4, Figs.47 & 51).

3.2 Brief Interior Description

The interior eastern lower ground floor retains the late 19th century layshaft drive mill gearing and hurst (see 3.2 below), now set on cement plinths resting on an earth floor (Fig. 9 & see Appendix 4, Figs. 39, 40, 41 & 42). The walls to east and south are earth bonded and there is a recess toward the south end of the east wall, probably a former fireplace (Fig. 10 & see Appendix 4, Fig.39).

The first floor above (the stone floor) has the bedstones set into the floor boards (Fig. 11), and is open to the west, with most of the timber framework dating to the late 19th and 20th centuries (Fig. 12 & see Appendix 4, Figs. 37, 38, 46 & 50). The south and east walls have a ragged step to the base with thinner, later masonry walls above probably dating to the early 19th century 'rebuilding' (Figs. 11-12 & Appendix 4, Figs. 46 & 47). The lintel of the former opening in the south wall is visible in the earlier masonry (Appendix 4, Fig. 48). To the east a heavy timber is set into the earlier masonry just above floor level (Appendix 4, Fig. 49), which probably relates to an earlier arrangement of the mill machinery (see 3.2 below). Likewise, notches in the ceiling beams to the west suggest a former arrangement (see Appendix 4, Fig.50).

Figure 9: The hurst and gearing, viewed from the south-west (2m scale).

Figure 10: Left - Former fireplace in the ground floor east wall, viewed from the west.
Figure 11: Right - Bedstones set into the floor at first floor level above the gearing, viewed from the north-west.

Figure 12: View into the eastern ground and second floors, viewed from the south-west (2m scale).

The first floor room to the west is modern, with all structural elements, with the exceptions of the west and parts of the north walls, dating to the 20th century (Fig.13 & see Appendix 4, Figs. 44 & 45).

Figure 13: The modern western first floor room, viewed from the north (2m scale).

The four bolted roof trusses of the five bay second floor loft date to the late 19th century, although some timbers have been reused and the collars and purlins reinforced or replaced with later timbers (Fig. 14 & Appendix 4, Figs. 52, 53, 54 & 55). The building has been reroofed in the late 20th century; all rafters are modern, with modern felting above. The walls have been raised in brick probably in the late 19th century, with the feet of the truss blades of the three roof trusses to west set into the brickwork, or modern concrete block to the south west, with the timbers of the eastern truss resting on timber pads set into the wall at the height of the former wall head (Appendix 4 Figs. as above). The floor to west is modern chipboard, with that to east timber planks set at a lower level, probably contemporary with the brick wall tops. At this end a timber sack hoist, fixed to the roof timbers, and a freestanding stone cover remain (Fig. 14 & Appendix 4, Figs. 54 & 56) .

Figure 14: The hipped end of the roof structure, with remaining hoist in foreground and stone case, viewed from the west (2m scale).

3.2. Discussion

Comments on the Development of the Mill by Martin Watts

The description and use of the plural 'mills' in the 1812 advertisement strongly suggests that Boyton was then a double mill, with two waterwheels each driving two pairs of millstones. This was a fairly common layout in the south-west counties in the post-medieval period. It is quite feasible to have two overshot wheels in line, fed from a common launder. If run together, the upper wheel will tend to be the more efficient as it has first call on the water. Although this arrangement was found in Cornwall, Devon and west Somerset, it is now rare: the mill at Dunster (Somerset) is the best surviving example with two working wheels. More local examples where the arrangement can be seen are Ridgegrove Mills, Launceston, and, in part, Bridge Mill, Bridgerule.

It was also not unusual for the lower wheel (being the less powerful even if there was enough water to run both wheels) to end up working only a single pair of stones. This seems to have happened at Boyton by 1814. Frequent changes in ownership or tenancy can indicate that business was not good, or that the mill machinery was in need of updating or repair. A lot of mills in Devon seem to have been rebuilt or refitted in the early 1800s, to take advantage of the increased demand for milling capacity during the Napoleonic war, only for this to be short-lived, the second decade of the 19th century being one of recession following the end of the war in 1815.

Because of the length of the launder - essentially a timber trough - and its supports, it again was not unusual for the lower wheel to fall out of use before the upper. Sometimes a new, larger (so more powerful) wheel was put on the upper mill and the lower wheel was done away with. The

main problem with this interpretation at Boyton is the lack of evidence for a wheelshaft opening for the lower mill, but parts of the pit wall could have been rebuilt a long time ago.

The surviving gear layout, with an iron layshaft driven off a large diameter spur pitwheel, appears to be a late 19th century introduction. My colleague and I thought it was probably the work of a local iron-founder and/or millwright, perhaps from Launceston or at least the Cornish side of the Tamar, as it has a Cornish 'feel' to it. We couldn't see any identifying marks or names on any of the castings. It's interesting that the millwright chose to alter the layout so completely, moving the millstone positions at right angles to their earlier locations. There doesn't seem to be a clear reason for this, but...

...the possible end of the hurst front upper beam built into the end wall above the present floor level suggests that the millstone level was slightly higher than at present. I would suggest that earlier layout with the hurst along the inside of the pit wall placed the millstones on a sort of mezzanine level, the stones being approached by steps up from the ground floor. Again, this was once a common regional feature. There may have been an upper floor for grain storage. When the machinery and millstones were repositioned it seems likely that the walls were raised to fit in three floors, the upper being a loft for grain storage. It's possible that the earlier hurst was rather decayed and the whole was simply scrapped and a new layout to suit the 'modern' gearing was introduced. It does appear all of an age, with timbers bolted rather than jointed and cast-iron bridges supporting the millstone spindles. The gear pitches (distance between centres of two teeth) are very fine, so the gearing might be as late as the 1880s. This was, a bit surprisingly, a time when a lot of traditional Devon watermills were rebuilt or refitted - Bridge Mill at Bridgerule is a good local example, but there are others throughout the county.

The recess in the upstream corner can be reasonably confidently identified as a former fireplace. It was again not uncommon for west country watermills to have fireplaces at ground floor level. The risk of fire in damp draughty mills is somewhat over-estimated, particularly when compared with the miller's comfort! The ground floor was where the miller spent most of his working day when the mill was running. (Watts, M. 18.01.2016)

4. Conclusions

4.1. Conclusions

The documentary evidence states that there has been a mill or mills within the manor of Northcott since at least the 13th century. It is possible that Boyton Mill occupies one of these early sites. 16th century records suggest that the Trick family may have tenanted Northcott mill from as early as 1560, after which time the mill became known as Tricks Mill; a name that endured into the 19th century. Fluctuations in the viability of the mill during the Napoleonic war period, leading to frequent changes of both owner and tenant in the early 19th century, give a context for a rebuilding of the mill with two waterwheels and four pairs of stones early in the century, followed only a few years later with the building offered for sale with only three pairs of millstones.

The existing building retains some of the fabric from the period before the early 19th century when the mill appears to have been rebuilt on the footprint of an earlier structure. Although there is no clear evidence for the building housing two mills prior to this time, elements within the earlier remaining structure, such as the interior ground floor fireplace and flue and some timber elements at the existing first floor level support an early internal arrangement of the mill gearing against the north wall. In the later 19th century, circa 1880, during the ownership of the Oliver family, a single storey open fronted cart shed was added to the west end and the building was raised. Internally, at the eastern end, the building was altered to accommodate the current layshaft drive with the stone floor above lowered to accommodate the two pairs of millstones. A larger loft space was formed with the raising of the walls and new roof structure was formed, reusing some early 19th century timbers.

In the early part of the 20th century a single storey extension was added to the east end of the mill building, this was repaired and reroofed in the late 20th century. The western end of the building was substantially rebuilt and the interior modified at this time, with the ground floor infilled with rubble, a ramp built up to first floor level and a raised floor added to the loft space above. The roof structure was strengthened with added timbers and new rafters fitted under reused slates.

The proposed works will have only a minimal impact on the remaining historic fabric of the building, as the majority of historic elements are located within the eastern end of the building at ground and first floor level which are to remain.

4.2. Boyton Mill Phased Plans

The following phased plans have been compiled from a visual inspection and photographic record of the building and are based on the architects plans provided by the Agent (A.J. Design 2015). Joints in the fabric represented by staggered lines are conjectural and based on the visual evidence available at the time of the survey.

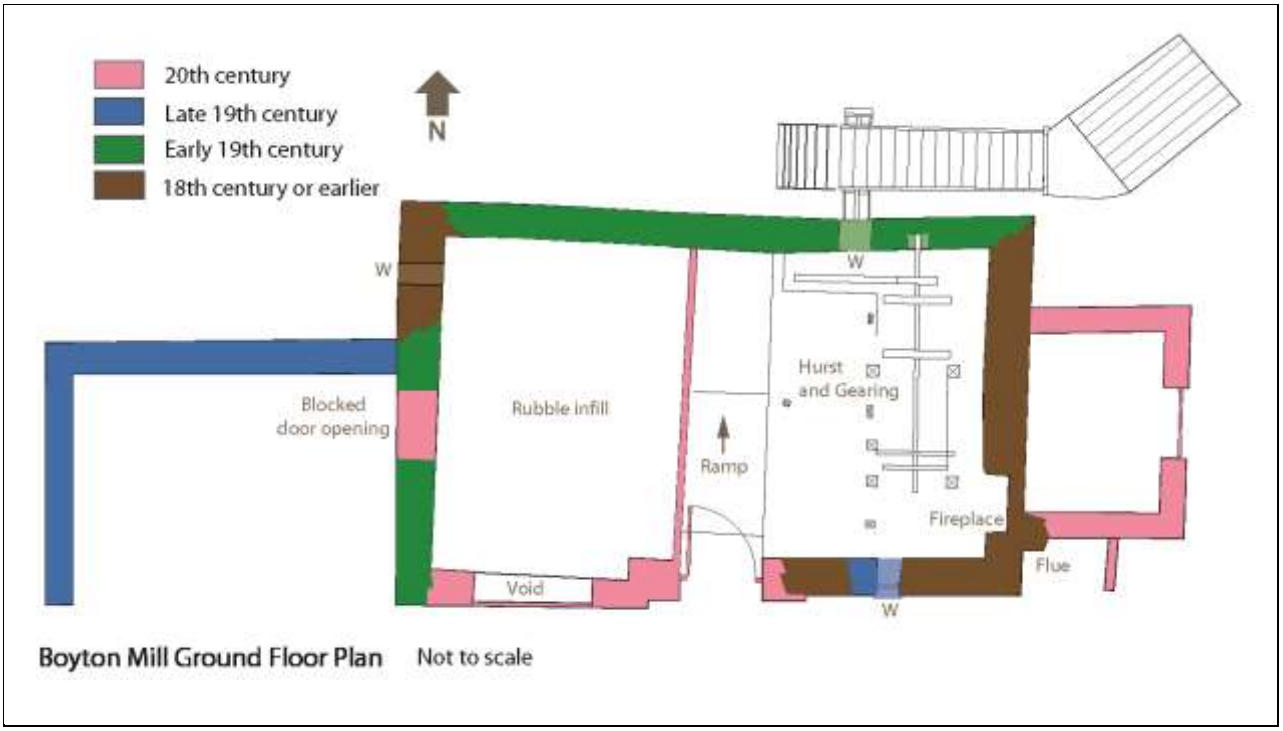

Figure 15: Phased ground floor plan.

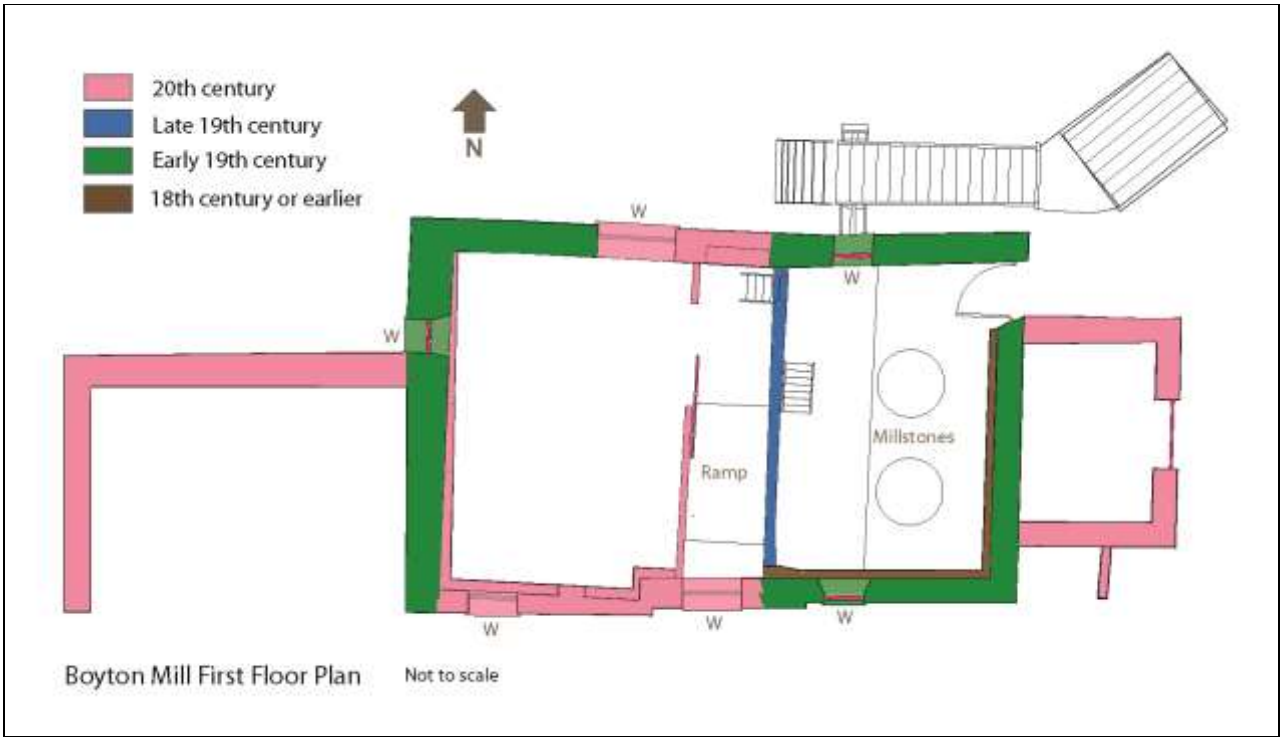

Figure 16: Phased first floor plan.

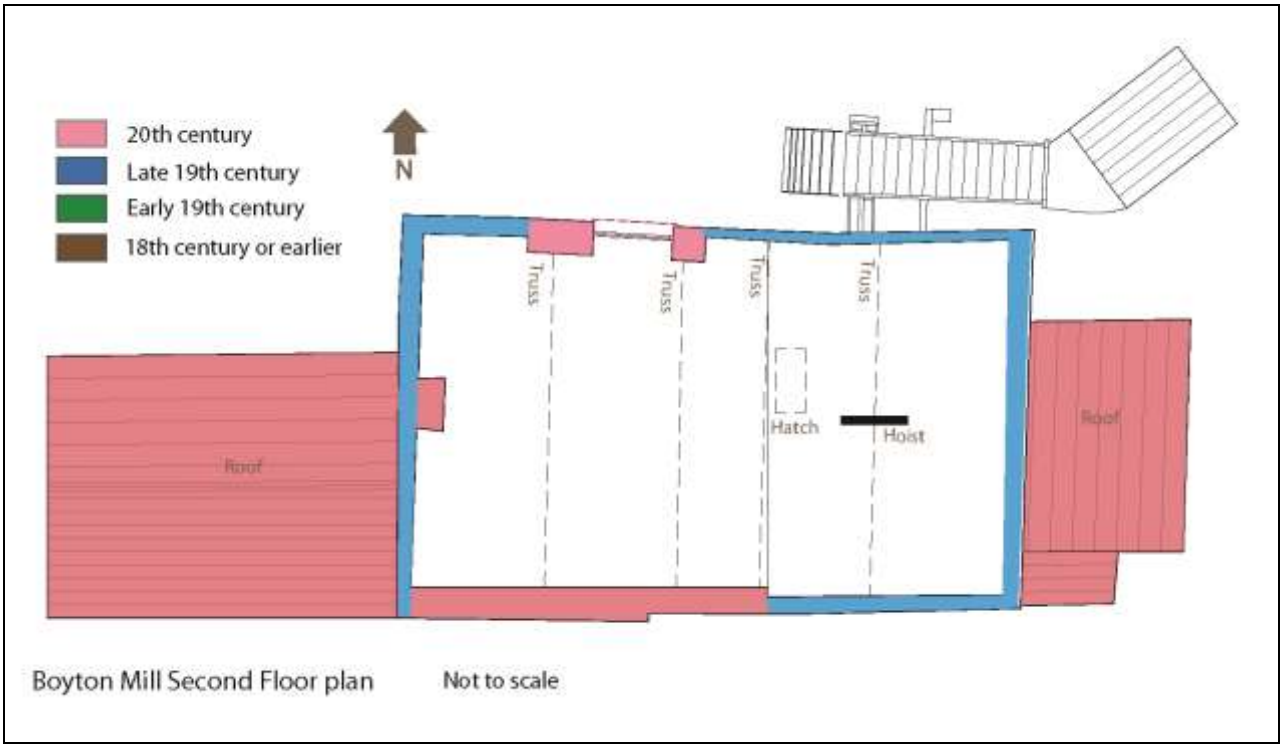

Figure 17: Phased second floor plan.

5. Bibliography & References

5.1. Published Sources

2

English Heritage 2006: *Understanding Historic Buildings A Guide to Good recording Practice.*

Institute of Field Archaeologists 1994 (Revised 2001 & 2008): *Standard and Guidance for Archaeological Desk-based Assessment.*

Institute of Field Archaeologists 1996 (Revised 2001 & 2008): *Standard and Guidance for Archaeological Investigation and Recording of Standing Buildings or Structures.*

Institute of Field Archaeologists. *2001 (Revised 2008): Standard and Guidance for the collection, documentation, conservation and research of archaeological materials.*

Watts, M. 2006: Water Mills (Shire)

Watts, M. 2005: Water and Wind Power (Shire)

5.2. Internet Resources

https://new.devon.gov.uk/historicenvironment/development-management/specifications/historic-building-recording/

https://content.historicengland.org.uk/images-books/publications/understanding-historic-buildings/understandinghistoricbuildings.pdf/

http://www.archaeologists.net/sites/default/files/CIfAS&GBuildings_1.pdf

http://www.boytonmill.com/history-of-boyton-mill.html

http://www.devon.gov.uk/tithemaps.htm

http://mapapps.bgs.ac.uk/geologyofbritain/home.html

http://www.historicengland.org.uk/listing/the-list/list-entry/1333038

http://www.heritagegateway.org.uk/Gateway/Results

Appendix 1

Written Scheme of Investigation for Historic Building Recording

Address: Boyton Mill, Boyton, Launceston, Devon PL15 9RG
NGR: SX3306392118
Planning ref: 1/0948/2015/FUL
Proposal: Conversion of Mill to create residential annexe resubmission of 1/1339/2014/FUL (Affecting a Public Right of Way):
Agent: Mr Andy Paton - AJ Design 16 Treburley Close Treburley Launceston Cornwall PL15 9PG
Client: Mr & Mrs Sims
Historic Environment Team ref: ARCH/DM/TO/28553
Historic Environment Officer: Mr Stephen Reed
Document ref: WSIBM15D
Date: 23.11.2015

1.0 Introduction

This document forms a Written Scheme of Investigation (WSI) for historic building recording and reporting to be undertaken prior to development works at Boyton Mill, Boyton, Launceston, Devon PL15 9RG. The WSI has been commissioned by Mr Andy Paton (the Agent) on behalf of Mr & Mrs Sims (the Clients), and has been devised in consultation with Stephen Reed, Senior Historic Environment Officer, DCCHET.

The WSI and scheme of work detailed herein has been produced to fulfil a planning condition imposed on the planning consent for the above works. The condition (No. 3) states that:

No development to which this permission relates shall commence until an appropriate programme of historic building recording and analysis has been secured and implemented in accordance with a written scheme of investigation which has been submitted to and approved in writing by the local planning authority. The development shall be carried out at all times in strict accordance with the approved scheme, or such other details as may be subsequently agreed in writing by the District Planning Authority.

Reason To ensure, in accordance with paragraph 141 of the National Planning Policy Framework (2012) and Policy ENV4 of the Torridge Local Plan, that an appropriate record is made of the historic building fabric that may be affected by the development.

2.0 Background

Boyton Mill is situated to the east of the village of Boyton, and separated from the bulk of the parish by the county boundary, the River Tamar. Lying on the Devon side, historically it comprised part of Northcott hamlet situated further to the east, and was known as Northcott Mill. The mill building itself is a Grade II listed building lying to the north of the domestic range and former miller's house. Although records indicate the existence of a mill at Northcott from the 13th century, the present building, with 20th century work and additions, is thought to predominantly date from the early 19th century. However, a documented 'rebuilding' of the mill at this time may have incorporated elements of an earlier building on the site. An overshot water wheel sits against the east end of the north wall and there is extant machinery to the interior.

3.0 Aims

The work to be undertaken includes:

i. Desk-based research to establish a context for the building;
ii. Historic Building Recording to identify and record architectural elements affected by the works;
iii. Production, submission & archiving of a report.

4.0 Methodology

4.1 Desk-based Research

A limited desk-based study will be undertaken to establish a historic context for the property. This work will be based on historical research already undertaken; accessible at http://www.boytonmill.com/history-of-boyton-mill.html, and will include map regression based on the Tithe map and Apportionment, early Ordnance Survey maps and any other available cartographic sources as appropriate. Online resources may be utilised as well as records held by the Devon Records Office. The work will be undertaken in accordance to *Standard and guidance for historic environment desk-based assessment* - IfA 2012, and to DCCHES specifications (https://new.devon.gov.uk/historicenvironment/development-management/specifications/historic-building-recording/)

4.2 Historic Building Recording

A record will be made of the historic fabric of the buildings affected by the conversion works. The recording work will include a general survey of the building as a whole as well as focus on the elements of the structure to be impacted by the proposed works.

The work shall conform to Level 2-3 of recording levels as set in *Understanding Historic Buildings: A guide to good recording practice - English Heritage 2006* (https://content.historicengland.org.uk/images-books/publications/understanding-historic-buildings/understandinghistoricbuildings.pdf/):

*Level 1 is essentially a **basic visual record**, supplemented by the minimum of information needed to identify the building's location, age and type. This is the simplest record, not normally an end in itself but contributing to a wider aim. Typically it will be undertaken when the objective is to gather basic information about a large number of buildings – for statistical sampling, for area assessments or historic landscape characterisation, for a pilot project, to identify buildings for planning purposes, or whenever resources are limited and much ground has to be covered in a short time. It may also serve to identify buildings requiring more detailed attention at a later date. Level 1 surveys will generally be of exteriors only, although they may include superficial interior inspection for significant features. Only if circumstances and objectives allow will any drawings be produced, and these are likely to take the form of sketches.*

*Level 2 is a **descriptive record**, made in circumstances similar to those of Level 1 but when more information is needed. It may be made of a building which is judged not to require any fuller record, or it may serve to gather data for a wider project. Both the exterior and the interior will be viewed, described and photographed. The record will present conclusions regarding the building's development and use, but will not discuss in detail the evidence on which these conclusions are based. A plan and sometimes other drawings may be made but the drawn record will normally not be comprehensive and may be tailored to the scope of a wider project.*

*Level 3 is an **analytical record**, and will comprise an introductory description followed by a systematic account of the building's origins, development and use. The record will include an account of the evidence on which the analysis has been based, allowing the validity of the record to be re-examined in detail. It will also include all drawn and photographic records that may be required to illustrate the building's appearance and structure and to support an historical analysis. The information contained in the record will for the most part have been obtained through an examination of the building itself. If documentary sources are used they are likely to be those which are most readily accessible, such as historic Ordnance Survey maps, trade directories and other published sources. The record will not normally discuss the building's broader stylistic or historical context and importance at any length. It may, however, form part of a wider survey – thematic or regional, for example – of a group of buildings, in which additional source material contributes to an overall historical and architectural synthesis. A Level 3 record may also be appropriate when the fabric of a building is under threat but time or resources are insufficient for detailed documentary research, or where the scope for such research is limited.*

The work shall conform to *Standard and guidance for the archaeological investigation and recording of standing buildings or structures* – CIfA 2014 (http://www.archaeologists.net/sites/default/files/CIfAS&GBuildings_1.pdf). And to DCCHES specification for historic building recording (see 4.1 above).

4.2.1 Previously prepared architect's plans will be used as the basis of any historic building fabric recording, if of adequate scale and accuracy.

4.2.2 A photographic record of the historic building will be compiled and included in the resulting report. This will include digital photographs illustrating the principal elements, architectural features and any finds discovered, in detail and in context. All photographs of architectural/historical detail will feature an appropriately-sized scale.

5.0 Report

5.1 Upon completion of the fieldwork an illustrated report will be prepared. The report will collate the written, graphic, visible and recorded information outlined in section 4.2 above.

The report will include:

5.1.1 A summary of the project's background;

5.1.2 A description and illustration of the buildings location;

5.1.3 A methodology of all works undertaken;

5.1.4 Maps and reports of all documentary and other research undertaken;

5.1.5 A description of the project's results;

5.1.6 An interpretation of the results in the appropriate context;

5.1.7 A site location plan at an appropriate scale on an Ordnance Survey, or equivalent, base-map;

5.1.8 The results of the historic building recording including a written description and analysis of the historic fabric of the building, appropriately illustrated;

5.1.9 Photographs showing the general site layout and exposed significant features of historic or architectural significance that are referred to in the text. All photographs will contain appropriate scales, the size of which will be noted in the illustration's caption;

5.1.10 A consideration of evidence within its wider context;

5.1.11 Any specialist assessment or analysis reports that were undertaken;

5.2 A draft report will be submitted to Stephen Reed of DCCHES for assessment and comment prior to its formal submission to the Local Planning Authority by the Client or their Agent. The DCCHET Officer can expect to receive the report within three months of completion of fieldwork. If a delay is anticipated then the Officer will be informed of this and a revised date for the production of the full report agreed.

6.0 Archive

6.1 On completion of the final report, in addition to copies required by the Client, a copy of the report shall be supplied to the Historic Environment Team on the understanding that it will be deposited for public reference in the HER. In addition to any hard copies of the report, one copy shall be provided to the County Historic Environment Team in digital format - in a format to be agreed in advance with the HET - on the understanding that it may in future be made available to researchers via a web-based version of the Historic Environment Record.

6.2 An online OASIS (Online AccesS to the Index of archaeological investigationS) form in respect of the work will be completed. This will include a digital version of the report.

7.0 Personnel

The work will be carried out by Deborah Laing-Trengove. Specialists, as appropriate, to include Martin Watts (mdcwatts@btinternet.com).

Appropriate Health and safety regulations will be adhered to.

Deborah Laing-Trengove
Historic Building Specialist
Contact details: Email: deblt@btinternet.com
Telephone: 01837810310

Appendix 2

Boyton Mill Listing Text
Name: MILLBUILDING ABOUT 15 METRES NORTH OF BOYTON MILL
List entry Number: 1333038
Grade: II
Date first listed: 09-Jan-1986
Details
Mill building. Early C19, some rebuilding of the late C20. Stone rubble with hipped slate roof, some brick courses under the eaves, the left end partly rebuilt in concrete block. The right-hand of the building contains the machinery powered by an overshot water wheel on the rear of the building. The left-hand end, which has been partly rebuilt in the C20 and converted to a workshop, was a covered area for waggons collecting flour and delivering grain. 3 storeys to the right, 2 to the left. The front elevation has 2 ground floor entrances and 2 first floor windows, the left-hand window C20, the right-hand window probably C19 with a timber lintel. Interior 3 floors of surviving machinery. Collar rafter roof trusses. The mill is documented as having been "rebuilt" in the early C19. The present owner has a full history of the mill which was formerly called Northcott Mill.
Listing NGR: SX3306392118

Appendix 3

Boyton Mill Detailed Description

Exterior

Main Building South Elevation

Constructed predominantly of rubble stone to east, cement rendered and painted to west, with the upper portion raised with 7 courses of Flemish bond brick to the east, with a few hung slates remaining (over truss blade feet?). At ground floor level the stonework to the east includes larger blocks and is uncoursed and bonded in earth, above, smaller stone rubble has been utilised, which appears semi coursed and is set in a lime mortar.

The ground floor has a wide central door opening, with modern brick jambs, modern lintel above and partially reused stable-type door. To the east of the door opening the lower portion of the wall projects from the wall face further to east and is edged with orange brick. To east of this is a small single light window opening, set into a former larger opening now infilled with rubble stone and some brick to the west of the opening, with a weathered timber lintel set at a higher level above. The existing sill height appears correct for the earlier opening as this consists of a slim slate that spans the earlier opening width. To the west are fixed timber double doors painted and hung on reused 19th century strap hinges to the base and modern hinges above. A probable 19th century water pump with timber casing is set into the modern render just to the west of the central door opening, with granite trough below. To the east of the door a flower bed abuts the wall at its base with an enclosing dwarf wall of rubble stone set in modern cement.

To the first floor are three window openings, irregular in size but all set at a similar height in the elevation, all modern with modern timber lintels. The eastern and western openings have slim slate sills, with the reveals of the eastern opening ragged rubble stone set in modern cement. The central window opening is set above the ground floor door opening but is offset, it has a thicker stone slab sill, modern brown brick reveals, as to the door opening below, and is set in stonework pointed with modern cement. The unrendered portion of the first floor elevation to the east was apparently formerly slate hung, with a few slates remaining to the handmade brick coursed upper and with some forged nails remaining to both this and the rubble stone wall beneath. This portion appears to have had a coating of a paler lime mortar with grit inclusions, applied in association with the slate-hanging, probably in the later 19th century.

The slate roof has 20th century guttering to the eaves.

East Elevation

A hipped gable end wall of rubble stone, with 10 courses of orange Flemish bond brick to the upper portion, with a single course of slate hung immediately below the eaves. The eaves of the slate roof of the hip are set at a higher level than to north and south and the wall ends are angled accordingly.

A later single storey rubble stone lean-to extension, with orange machine-made brick to corners and door jams, and a mono pitch slate roof sloping down to the east abuts the central portion of the elevation. With white washed walls to the interior, modern timber roof timbers, wall plate, door and door frame and slate roof fixed with modern galvanised nails. The interior west wall (mill building east wall) was obscured at the time of the survey by stacked logs.

To the south within the angle between the east wall of the main mill building and the south wall of the lean-to a small open fronted modern lean-to wood store has been added. Within the western corner of this is a slim half-height plinth, appearing not unlike a chimney or flue. To the northern end of the elevation is a wide single door opening with a timber lintel and timber lacing to the jambs. The southern door jamb is set back from the face of the north wall of the lean-to suggesting a late 19th century date for the opening.

North Elevation

Constructed of rubble stone, with what appear to be larger blocks at the lower level to the base of the wheel pit, and possibly beyond to the west but is obscured by vegetation growth, with 6 courses of handmade brick to the upper portion to east and west. The overshot water wheel is situated to the east end, with the wheelshaft entering the building through a rectangular opening at interior floor level. The lower level of the elevation is below ground level and much is obscured by vegetation. To the east a small patch of hung slate remains on the upper brick courses with a single light window opening just below and to the west, with a modern timber window, timber lacing to the

reveals, a reused timber lintel and a thick stone slab sill. The central portion of the elevation at first floor level has 13 courses of hung slate, with each course of between 2-5 slates of varying length with, to the west, a portion of semi-coursed masonry (no brickwork) to the eaves, separating this from a full length window opening. The stonework below the slate hung portion is disturbed with an uneven face. The large window opening contains a fixed modern 6 light timber window, with no visible frame and a composite slate sill. Below the opening the stonework is semi-coursed and appears to have been repointed or set into modern cement. Much of the masonry at the west end of the building is semi-coursed. Just to the west of the window sill and set at a slightly lower level, the wall projects outward with slate coping to the step out. At the western end of the elevation the level of this step rises. Much of this end of the elevation appears to have been repointed during the 20th century or later.

West Elevation

The roof is hipped as to the east. The elevation is of rubble stone construction with 10 courses of Flemish bond brick above as to east. Much of the elevation forms the east wall of a single storey extension open to the south, with a pitched slate roof gabled to the west, with the walls rendered with modern cement (see below). At the northern end of the elevation there is a line/break in the stonework at the level of the upper slate coping in the west end of the north elevation suggesting two phases of build, with random rubble below and semi-coursed rubble above. With a small square opening at the lower north end with a slate slab lintel and blocked with rubble and concrete block set in cement visible to the interior. To the south of this at first floor level there is a slim window opening with a modern fixed 3 pane timber window and a thick cracked slate sill. Roughly central in the elevation, at ground floor level, there is a former door opening, with a timber lintel, blocked with semi-coursed stone rubble set in modern cement. To the south the stonework is partially rendered and painted with the stonework at ground floor level disturbed with a ragged line possibly denoting phases of build, and pointed with smooth hard grey cement. A date scratched into the mortar of 1946 probably gives the date of this repair.

The north and west walls of the open-fronted extension have been raised with concrete block, with thicker, probably rubble stone walls below, now rendered and painted to interior and exterior. There is a line visible in the west elevation of the mill showing the line of a former lower pitched roof. The current roof is modern. The floor is cement.

Exterior Roof

The building is covered with reused slates with terracotta (or later cement) ridge tiles to the ridge and hips.

Interior Description

Ground Floor East

Situated to the east of the central door opening in the south elevation, housing the mill layshaft drive. From the door, a modern concrete block and cement ramp, against the western modern partition set on a concrete block plinth wall, rises to first floor level. To the east a cement and stone slab floored walkway, set at a lower level to the threshold, runs transversely between the ramp to the west and the iron mill gearing and the associated hurst supporting the two pairs of millstones above to the east. To the north the walkway terminates at the interior stone lined pit containing the iron pitwheel, an upright timber set into the floor toward the north end supports the western timber ceiling beam. The associated machinery is not described in detail here as it is not to be impacted by the works but to be retained *in situ* (see 3.2 above for comments on the layout and development of the mill gearing). The timber hurst is set on cement plinths to east and west, on an earthen floor, within a depression below the surrounding earthen floor level, with stonework projecting from the base of the wall to the east suggesting a former slightly higher floor level.

The walls to south, east and north are unplastered rubble stone. To the north the millshaft enters the building via a tall slim opening with ragged rubble stone reveals, a stone lintel set back from the opening, and with a part of a reused millstone set into the masonry above. To the east a metal box set into the wall holds a shaft associated with further iron gearing and above 3 rubble stones of unknown function and spaced approximately .75m apart project from the wall face. There is modern cement mortar around the opening for the wheelshaft with lime mortar to the stonework above.

To the east the random rubble stonework is earth bonded with patching to the pointing in lime mortar as well as modern cement. To the south end is a full height recess with a metal lintel with cement above to the front of the opening which formerly continued upward, now blocked with rubble and reused roofing slate set in cement. The recess appears to slope back to the east in the upper north corner with some dark staining to the stonework. To the

base, part of a former millstone is set into the back of the recess. Some earth bonding is visible to all sides but also patching in lime mortar and cement. The association of this feature with the rubble stone plinth to the exterior within the open-fronted log store is suggestive of a former fireplace.

The south wall appears earth bonded at the base but is pointed or mortared with a lime mixture to the upper portion. The wall contains a fixed single light window opening within the eastern portion of this room, high up and close to the ceiling level with a chamfered timber window, slim timber lintel and some planking above and to the north reveal. The timber ceiling joists and boards are set at a lower level over the gearing than to the west over the walkway. To the west the south wall is open to first floor ceiling level with the wide door opening and 4 light window above set in cement mortared rubble stone with modern brown and earlier orange brick to the eastern window reveal and modern brown brick to the eastern door jamb below. The window opening has a cement sill and modern timber lintel with no exterior framing to the window. The door opening has a timber frame and lintel with a composite stable type door. The upper leaf is comprised of three wide unevenly cut planks with a slim partial plank to the east, ledged and with 2 modern locks. The lower leaf is comprised of 6 slim pine planks, ledged and with a timber latch and modern cat flap inserted toward the base.

The ceiling of the mill floor rests on three transverse beams but is in two distinct parts, with the western beam, against the ramped area, supporting slim axial joists over the walkway that are set into the squared central beam, forming the front rail of the hurst, with transverse boards above. The two eastern hurst timbers directly support the axially laid boards above the machinery to the east which are laid flush to the bedstones retained above. All timbers of the hurst frame are bolted; the central beam or hurst rail retains a number of round convex headed bolts fixing the vertical members of the structure, elsewhere less decorative bolts are used.

Ground Floor West

This has been infilled with rubble in the late 20th century, with the south wall rebuilt in concrete block, with fixed double timber doors to the exterior and a slim void between them and an interior cemented wall retaining the infill.

First Floor West

The east wall, against the ramp is a modern partition, with glazed upper and sliding portion to the north end.

The south wall has a projecting plinth of masonry with brick to the corners at the east end with concrete block above supporting the heavy pine ceiling beam. The rest of the wall is painted concrete block, a single block thick, with a central projecting double block pilaster supporting a second pine beam. At the lower level boarding covers the head of the double door opening fixed to the exterior. Above and to the west is a fixed single light 3 pane modern window.

The west wall steps in at approximately 1.3m high; with modern cement applied to the lower level possibly to strengthen and/or straighten the wall face. An unrendered portion of semi-coursed rubble stonework with timber lintel over is left exposed to roughly the centre of the wall showing a pronounced slope to the base. Toward the north end is a slim window opening with a fixed modern single light 3 pane window.

The north wall is plastered with a covering of cement, and slopes outward slightly from the base. Toward the east end is a large modern 3 light/6 pane window. The north wall of the small landing to the east, at the same level, has a former opening now blocked with timbers and boarding with a rubble stone reveal to the east and modern concrete block to the west, with a partially remaining rustic timber frame (round timbers) and worn timber sill, with the wall plastered with modern cement below.

The ceiling is comprised of modern axial joists set into 2 large rounded transverse pine beams, built into the wall to north and resting on concrete block pilasters to the south. The ceiling continues over the east partition into the landing, ramp and door threshold to east. The floor is modern cement over a rubble infill, raised in the later 20th century.

First Floor East

Set at a higher level than to west, the room is accessed via a small, simple, open 5 step timber stair against the north wall. To the west is open timber framing with two stained pine timbers bolted, with round convex headed bolts (as below) to the western face of the ceiling beam below and angled to the west to meet the western face of the ceiling beam above. These timbers both have rebates to the western face for a heavier rail formerly fixed between the extant central and upper rail. At the top and to the south of the stair a modern timber upright has been inserted with three modern timber rails nailed to the eastern face of this and the earlier uprights to south, with, at the south end,

five slim horizontal timbers between the second earlier timber and a final southern upright now partially set into the plaster/render of the south wall and resting on the top of masonry projecting from the base of the wall. Toward the north end a further simple open timber stair rises to a hatch in the ceiling giving access to the second (loft) floor above.

To the base of the south wall the masonry projects into the building forming a ragged step with the plastered/rendered (now with modern Artex over) upper portion set back, suggesting separate phases of build, with the remaining timber lintel (also visible to the exterior – see above) and the blocky fill of a former opening below. This masonry is earth bonded. Above is a single light window opening, with splayed reveals, composite timber lintel and modern 4 pane window.

The east wall also has earlier earth bonded masonry projecting raggedly from the base and is plastered/rendered with an Artex covering above. Roughly central and just below ceiling level a v-shaped timber of unknown function is fixed to the wall, and below to the north a heavy oak block is mortared into the earlier masonry immediately above floor level. To the north end is a wide door opening with a rough circular sawn plain frame and plank ledged door hung on reused spear ended strap hinges, with metal latch and modern metal bolt. The jamb to the south is ragged.

The north wall is plastered/cement rendered with an Artex covering with a small rectilinear recess just above floor level to the centre and a single light window opening to the west with a slim painted lintel above and modern single pane window. The Artex covering was apparently added in 2005.

The floor is split level; that to east is slightly lower and with axial boards, the floor to west over the walkway below has boards laid transversely and slopes slightly down to the east. In the portion of the floor to east the bedstones are set.

The heavy axial ceiling joists rest on two heavy rounded transverse beams, set into the wall to north and south. The joists have notches and rebates indicating that they may have been reused or relate to an earlier arrangement. The south end of the western beam sits on the eastern end of the window lintel in the south wall.

Second (Loft) Floor

The loft is accessed via a 7 step open stair through a timber ledged plank hatch against the western ceiling beam of the eastern first floor room. Above the hatch is a timber sack hoist (to be retained). The loft is open for the entire length of the building and of 5 bays. The roof structure is comprised of four A-frames, with two purlins per pitch, and hipped to east and west, with modern rafters and roofing felt above under reused slates. There are numerous later, modern timbers, including purlins, collars and miscellaneous reinforcing timbers nailed to the primary structure. Most of the primary timbers are half round, some with bark still attached and all bolted, with the two trusses to the west with cranked collars. A number of the bolts used are round convex headed (see above) and are seen in the second truss from the west within the rebates for an earlier collar. The feet of the truss blades are set into the walls, except to the east where they are set onto pads set into the wall to north and south. The timbers of the hipped ends are set into the top of the brickwork. The feet of the rafters sit on the wall tops on modern timber wall plates.

The floor is set at the level of the earlier masonry wall heads. The remaining mainly brick courses form the short walls, except to the west where the top of the tall window in the north wall of the western first floor room projects from the floor below, with masonry reveals, and to the western end of the south wall which is constructed of modern concrete block as below.

The modern floor to the west is raised, with modern boarding and a modern timber two leaf hatch in the centre to the east. The eastern two bays have a lower, earlier floor made up of dark stained boards of varying length and width.

Within the east end is an octagonal timber stone case, presumably formerly covering one of the two pairs of millstones on the floor below.

Appendix 4

Photographic record

Figure 18: South elevation, with mill house to the east, from the south.

Figure 19: Western single storey extension, from the south.


Figure 20: Left – First floor (ff) south elevation, east end, showing ff window & lintel of former ground floor (gf) opening, from the south.
Figure 21: Right – South elevation, east end, second floor (sf) brickwork with slate hanging nails remaining, from the south.


Figure 22: Left – South elevation, east end, single storey modern log store, from the south.
Figure 23: Right – Former flue in north-west corner of log store, from the south-east.


Figure 24: Left – East elevation, early 20th century single storey extension, from the east.
Figure 25: Right – Eastern extension, north wall, from the north.


Figure 26: Left – East elevation, north end, from the east.
Figure 27: Right – As above, showing launder and penstock, from the east.

Figure 28: North elevation, from the north-east.


Figure 29: Left – North elevation, east end, with waterwheel and launder, from the north.

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Figure 30: Right – As above, showing blocked opening and modern window, from the north-west.

Figure 31: Left – North elevation west end, from the north.
Figure 32: Right – West elevation, north end showing gf opening, from the north-west.

Figure 33: Left – As above, close up of opening, from the west.
Figure 34: Right – West wall of western extension, from the south-west.

Figure 35: Left –As above, interior west wall, from the south-east.
Figure 36: Right – As above, interior east wall, from the south.


Figure 37: Left – Interior ramp from central door opening, from the south.
Figure 38: Right – As above from the north.


Figure 39: Left – Gf east, south wall and south end of hurst, with recess in the east wall behind, from the west.
Figure 40: Right – As above, north wall with wheelshaft, from the south.


Figure 41: Left – view into the north-east corner of the eastern ground floor area, showing stones projecting from the north wall, from the west.
Figure 42: Right – Cement plinth under the hurst from the west.

Figure 43: Late 19th century window in the east wall of the mill floor.

Figure 44: Left – Western first floor room, west wall, from the east.
Figure 45: Right – As above, north-east corner, from the south-west.

Figure 46: Left – Eastern first floor stone floor, with earlier masonry projecting from the base of the south wall, from the north.
Figure 47: Right – As above, north-east corner, from the south-west.

Figure 48: Left – Detail of Fig. 46 above, timber lintel with blocking below of former opening at first floor level, from the north.
Figure 49: Right – Timber set into east wall of the stone floor, from the west.

Figure 50: Left – North wall of stone floor, notches in the ceiling timbers just visible top left, from the south.
Figure 51: Right – Door at the north end of the first floor stone floor, from the west.

Figure 52: The western end of the roof structure, from the east.

Figure 53: Roof timbers, north-west corner of the second floor loft, from the south-east.

Figure 54: Roof structure, north-east corner of the loft floor, from the south-west.

Figure 55: Left – Detail of face of third roof truss from the east, with rebate for former collar reused in later 19th century, from the west.
Figure 56: Right – Detail of timber hoist above hatch in floor at the east end of the loft, from the west.