

**HERITAGE ASSESSMENT
LOWER MILL BUILDING, BUCKFAST, DEVON**

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CONTENTS

1. Introduction	1
1.1 Site description	1
1.2 Aims and methods	1
2. Statutory and other designations	1
3. Background	1
3.1 Summary of the historic development of the building and documentary evidence	1
3.2 Cartographic evidence	4
4. The building	5
4.1 The north range	5
4.2 The south range	7
5. Discussion	8
6. Conclusions	10
Sources consulted	11

Illustrations

Fig. 1 Site location.

Fig. 2 Location of assessment building and Lower Leat.

Fig. 3 OS surveyors' Two-inch drawing, surveyed 1802-03.

Fig. 4 The Buckfastleigh Tithe Map, c. 1843.

Fig. 5 Extract from a 'Rude sketch of ground forming Buckfast Abbey tenement and boundaries...'. c. 1870.

Fig. 6 OS 1:2,500 map, 1887.

Fig. 7 OS 1:2,500 map, 1905.

Fig. 8 OS 1:2,500 map, 1955.

Fig. 9 OS 1:2,500 map, 1961.

Fig. 10 Simplified phase plan.

Fig. 11 West elevation construction phases.

Photo. 1 The west elevation, looking north-east.

Photo. 2 The east elevation, looking NNW.

Photo. 3 The north range and tower, looking east.

Photo. 4 The leat outlet at the north-east corner of the south range, looking south-west.

Photo. 5 The archway at the base of the tower, looking east.

Photo. 6 The pintle within the tower entrance arch, looking south.

Photo. 7 The north wall, ground floor, north range, showing the modern entrance to the tower on the left, and the doorway to the lavatory on the right.

Photo. 8 The upper room in the tower, showing the blocked light, modern door (in an original opening) and the sawn off floor joists, looking west.

Photo. 9 North range roof, looking north.

Photo. 10 North range first floor, showing window and second-storey floor details, looking south-west.

Photo. 11 North range, first floor lavatory doorway.

Photo. 12 North range, first floor lavatory interior.

Photo. 13 Lavatory entrance on the second floor of the north range.

Photo. 14 Basement of the north range, looking south-west.

Photo. 15 Tunnel entrance in north-west corner of the north range basement.

Photo. 16 South range roof, looking north-east.

Photo. 17 Junction between the north and south ranges on the west side, showing the blocked entrances on the south range north elevation, looking SSE.

Photo. 18 The power transmission retaining bolts and cutout floor bearer in the basement of the south range, looking SSW.

Photo. 19 The north wall of the south range (formerly the south elevation of the north range), showing the blocked archway to the left, close to the modern lift, looking north.

1. INTRODUCTION

An assessment of Lower Mill building (SX 7417 6726; Fig. 1) on the former Buckfast Spinning Co. Ltd site, was carried out in June 2014. The work was commissioned by Buckfast Abbey, which has recently acquired the site. The building lies within Dartmoor National Park. An assessment of the Buckfast Spinning Co. Ltd site was undertaken in 2013.¹

1.1 Site description

The building is a multi-storey, brick and stone structure, stood immediately alongside Lower Leat at the north-east corner of the former Buckfast Spinning Company works. This study does not include the 20th-century addition to the south.

1.2 Aims and methods

The assessment aims to establish the date and heritage significance of the Lower Mill building, with a view to better informing decisions regarding any subsequent redevelopment of the area. A documentary and cartographic study has been undertaken in order to understand how the building and surrounding area has developed.

Sources consulted included the following:

- Devon Heritage Centre (DHC) (Record Office and local studies library);
- Dartmoor National Park Authority Historic Environment Record (HER);
- English Heritage (EH) National Heritage List for England (Scheduled Monuments, Listed Buildings and other statutorily designated sites);
- Archaedia archives

2. STATUTORY AND OTHER DESIGNATIONS

There are no heritage statutory designations associated with the building. The nearby South Gate of Buckfast Abbey is a Grade II listed building.² To the north in the abbey grounds, the North Gate and part of the precinct of the abbey form a Scheduled Monument,³ which includes the Farmhouse, Guest House and North Gate (which are also listed Grade II). The Church of St Mary and Buckfast Abbey Main Block are Listed Grade II*,⁴ and there are other Grade II buildings within the precinct.

3. BACKGROUND

3.1 Summary of the historic development of the building and documentary evidence

The Lower Mill building forms the eastern of two woollen mills within the Lower Mills site, the western mill (adjacent to the road) being known as Higher Mill,⁵ or Little Mill. The mills lie within what would have been the outer court of the medieval Buckfast Abbey and both mill sites are potentially of medieval, or late medieval, origin. Lower Mill is likely to be close, or even on the same site, as a mill mentioned in a royal grant of abbey land to Sir Thomas Denny in 1540.⁶

The Lower Mill building was powered from two leats. To the east, Lower Leat supplied a wheel on the eastern side of the building, while to the west Higher Leat (after running through Higher Mill) fed a pond that supplied a wheel to the south. Higher Leat originated at

¹ Gent and Manning 2013.

² English Heritage (EH) list entry 1209042.

³ EH list entry 1019607.

⁴ EH list entry 1209774 & 1292865.

⁵ distinct from Buckfast Higher Mill to the west of the abbey.

⁶ Brown 2013, p. 32.

Holy Brook, a stream just above the abbey, and Lower Leat was taken off the River Dart at a weir to the north of the mill.

In addition to the woollen mills, there are references in 19th-century documents to a grist mill forming part of the Lower Mills property. A sale notice of 1814 describes a 'Worsted Mill or factory, and Grist Mill adjoining ...',⁷ a document of 1827 refers to 'a certain mill or factory and grist mill called the lower factory',⁸ and a grist mill still formed part of the property in 1868.⁹ It may be that grist milling was carried out at either Lower or Higher Mill, but by 1837 the former was insured as a worsted mill and the latter as a blanket mill (see below). Lower Mill was rebuilt shortly before 1800 seemingly as a woollen mill factory, but the building did have two wheels, which can reflect the need for additional power, or separate wheels for different functions, such as corn milling and fulling.¹⁰

Lower Mill has been identified with a mill documented in 1800, which is described as 'lately newly erected, anciently a tucking mill ...', the earlier mill seemingly also referred to in a deed of 1769.¹¹ In 1813 what must be the Lower Mills site appears as Lot 1 of a sale notice, which describes 'All that substantial and extensive WORSTED MILL ... Together with upwards of 1000 Worsted spindles, and all necessary Frames and other Machinery therein. This mill is supplied with water from the River Dart, and another stream, neither of which ever fails [therefore Lower Mill, the only mill known to have been fed by both Higher and Lower Leat]; and has also a Fulling-Mill and Grist-Mill belonging to, and sold with it; ... With this lot will be sold the Mill-Pond adjoining the mill, and the Ground round it, and the Leat from the Dart to the mill'.¹² It is not known if the 'fulling mill' here, or perhaps combined 'fulling mill and grist mill', depending on the reading, refers to the Higher of the Lower Mills. Higher Mill is mentioned by name from at least 1825.¹³

In addition to the buildings mentioned above, a document of 1827 deals with a grant of land that includes a lately erected 'wing of a mill called Lower Mill and a small portion of the mill itself', on part of a plot called Abbey Orchard or Churchyard Orchard.¹⁴ It is unclear if the 'small portion of the mill' is lately erected along with the wing, or just part of the grant.

The location of the new wing is not known, but as a map of 1815¹⁵ shows Abbey Orchard to the north of the east-to-west lane leading to the mill, the wing may have been to the north of the current site. Alternatively, as the tithe map (c. 1843) appears to show the lane further south in relation to the mill, it is possible that the north end of the mill extends into what was formerly part of Abbey Orchard, either representing the newly erected 'small portion' or the wing; it is not known if a building shown to the west is related. It is possible that the new wing was in response to a fire of 1825 (see below).

A fire assurance register for 1837/1838 describes Lower Mill as a 'worsted and [?]Abb Mill' and insures the building, wheel (only one is mentioned), and machinery for preparation and spinning of wool and worsted, including two pairs of fulling stocks and spinning frames, but does not indicate combing and weaving.¹⁶ At the same time Higher Mill, described as a blanket mill, and formerly called Tucking Mill, was insured separately by the same owners,

⁷ Exeter Flying Post 27.10.1814, 1c.

⁸ Travers 2005, p. 44 citing DHC document 924B/E/1/8.

⁹ Travers 2005, p. 46.

¹⁰ Watts 2006, p. 30.

¹¹ Travers 2005, p. 15 & 40.

¹² The newly built Higher Buckfast Mill (west of the abbey) forms Plot 4 of the sale.

¹³ Travers 2005, p. 42, citing DHC document 924B/E1/6.

¹⁴ Travers 2005, p. 43-44 citing DHC document 924B/E/1/8 (1827) and also R2372A/C50 (1830).

¹⁵ DHC document Z2/9, 'A map of Buckfast Abbey ... ' 1815.

¹⁶ DHC document 924B/B9/1, policy 740399; Williams 2013, p. 105.

as was a range of buildings in four tenements with a store adjoining and an air drying loft over the whole.¹⁷

An 1852 fire policy states that 'Buckfast Lower Mill' was then formed of 'Mill No. one' (the larger), 'Mill No. two' (presumably Higher Mill) and building 'No. 3', described as a comb shop, packing room, dwelling rooms and air drying lofts over. The occupier was John Berry.¹⁸ Millwrights work (although a wheel is not mentioned separately) was insured for Mill No. 1 only.

The mills were developed by John Berry and Son, serge and blanket manufacturer, who continued on the site until 1950. By c. 1870 the southern range of Lower Mill had been built (see below) and later 19th-century expansion included several phases of steam powered sheds and mills.¹⁹ Lower Mills were the largest woollen mills in the parish in 1877.²⁰ By 1887 there were two turbines on Lower Leat (see below), the northern of which appears to have replaced the former eastern waterwheel.²¹

There were serious fires on the Lower Mills site in 1825, 1877 and 1967,²² although it is not certain if all the buildings on the site suffered equally in each case, or at all. The 1825 fire 'in the woollen factory of Mr John Lavers ... burnt with such violence that the whole of the machinery and stock, to a considerable amount, were destroyed'.²³ The 1877 fire, in which most of the mill was destroyed,²⁴ displaced 450 mill workers,²⁵ but the mills were 'rapidly being rebuilt' in 1878,²⁶ and employing about 400 hands again in 1897.²⁷ In 1967 it was reported that the wool store was gutted by fire.²⁸

The 1910 Inland Revenue field survey book gives details of the structures comprising the mill site at that time (Lower Woollen Mills, John Berry & Sons Ltd) and the machinery and equipment contained in them. As only one building is described as having four floors, it seems likely that this represents both the north and south ranges of the current Lower Mill building; it is described as being built of stone and slate. The following information is given: Ground floor combing shop, six combs, three sets of preparers and three sets of finishers; 1st floor spinning shop, ten frames, two twisters; 2nd floor two sets of drawing machines, three spinning frames, two twisters; 3rd floor three spinning frames.²⁹

John Berry went into receivership in 1950, when the property was conveyed to the Urban District Council, and then to the Buckfast Spinning Co. Ltd in 1960.³⁰

¹⁷ DHC document 924B/B9/1, policies 740397 & 869501 (blanket mill), & 740398 (range); Travers 2005, p. 45.

¹⁸ DHC document 924B/B9/1, policy 1036651.

¹⁹ Williams 2013, p. 105.

²⁰ White's Directory 1878, p. 195.

²¹ Brown 2011, p. 4.

²² Travers 2005, p. 42, 46 & 50.

²³ Exeter Flying Post 18.8.1825 4c, cited Travers 2005, p. 43.

²⁴ Travers 2005, p. 46.

²⁵ Beard 1991, p. 41.

²⁶ White's Directory 1878, p. 195.

²⁷ Kelly's Directory 1897, p. 106.

²⁸ Travers 2005, p. 50.

²⁹ listed in Travers 2005, p. 48.

³⁰ Travers 2005, p. 49.

3.2 Cartographic evidence

Lower Mill is indicated on the OS two-inch map of 1802-3 (Fig. 3) together with what may be the tail race to the east, although neither Higher Leat or Lower Leat are shown. To the west Higher Mill, or a building in the same position, also appears to be represented.

An estate map of 1815³¹ shows Lower Mill (schematically represented as a simple rectangle) and Lower Leat, and a large pool of water against the east side of the mill; a curved tail race runs eastward to the river.

The Tithe Map (c. 1843, Fig. 4) depicts the Lower Mill building in some detail, showing projections at the north and south ends. To the east is Lower Leat, the pool of water and the tail race, the latter of which appears to have been straightened since the 1815 map.³² A further tail race runs to the south. The mill pond shown to the south-west was fed by Higher Leat, which can be seen to the west of the road, but disappears on the Lower Mills site, where it was presumably culverted. It is just possible that the leat is represented on the site by the single line that passes to the south and east of the pond and joins the tail race, but this is probably just a field boundary. The mill pond was associated with a wheel at the south end of the building, evidence of which has been found (see below).

A rough sketch of c. 1870 (Fig. 5) shows Lower Mill with an extension or proposed extension marked 'additional building', to the south, and a mill wheel to the east. The wheel at the south end of the northern building would have been displaced by the extension. To the east again, the tail race is marked 'old leat to be silted up', seemingly having been made redundant. The southern leat, however, is marked as a substantial '16 feet wide', suggesting that it had been, or was to be, altered. It is shown as a broad feature on the 1887 map (Fig. 6), and appears to represent the present rock cut channel.³³ The drop in level between Lower Leat and the bottom of the cut channel is sufficient to turn a large breast-shot or overshot wheel as shown on the c. 1870 sketch.³⁴

The old mill (the present northern range) and its new southern extension (southern range) are shown on the OS map of 1887 (Fig. 6), by which time there was a further building attached to the south again (beyond the building under discussion). The stepped profile at the north end of the mill is still evident, and there are small projecting structures or features along the western wall. Both Lower Leat and the southern tail race are depicted as broad channels, perhaps altered since the tithe map.

The 1887 map depicts two features projecting into the leat from the east side of the mill, which are thought to be turbine houses that survived until 2011. The southern turbine was built on the site of the eastern mill wheel as shown on the sketch of c. 1870.³⁵ Turbines were commonly fitted to mills from the 1870's onwards, often replacing waterwheels.³⁶ To the west of the mill further buildings are shown on the site of the former mill pond; the leat had been culverted (see below). There were no apparent changes to the buildings on the map of 1905 (Fig. 7).

By 1955 (Fig. 8) some of the small features against the western wall of the mill building had been removed, and the northern turbine house within the leat had been enlarged. By 1961 (Fig. 9) what appear to be steps are shown against the western wall of the mill, and the

³¹ 'A Map of Buckfast Abbey Estate...' 1815, DHC Z2/9.

³² This tail race may have been designed to carry away water released from the pond when the wheel was started, Brown 2011, p. 3.

³³ Brown 2011, p. 3.

³⁴ Brown 2011, p. 3-4.

³⁵ Brown 2011, p. 4.

³⁶ Brown 2011, p. 5, citing information from Martin Watts.

building to the south had been removed. The 1955 and 1961 maps show no change to the large building abutting the south end of the south range since 1905, but interestingly, a photograph of the gas works in c. 1950³⁷ shows only a tall narrow building, or tower, in this position, perhaps housing stairs to the south range.

4. THE BUILDING

The building is a multi-storey, stone and brick structure under a slate roof. It comprises two distinct ranges of rectangular plan, the southern range slightly wider and shorter than the range to the north. A stone tower is attached to the northern end of the north range.

Both ranges are four storeys in height, with windows to only three floors, referred to as the ground, first and second floors, visible from the west (Photo. 1). The elevation overlooking Lower Leat to the east (Photo. 2) also contains windows to a lower, or basement, floor in both ranges.

4.1 North range

The north range is built, in the main, from limestone rubble bonded with lime mortar. The only variation is at second-floor level, where the east and west elevations are constructed from machine-made red brick, with yellow, ball-clay brick details to the west (Photo. 3).

Window opening details vary. Where visible at basement and ground floor levels, these have arches of hand-made red brick, granite sills, with jambs formed by the limestone walls themselves. However, almost all the windows to these floors have had these original details obscured by cement render covers.

All windows, unless blocked, are modern, and many of the brick sills on the upper floors have been raised to accommodate slightly smaller frames.

Each floor, of ten bays, would have been lit originally by ten windows on each side, although doorways, including the access from a former overhead walkway, have been created on all floors on the west side.

Two arched apertures are present below the level of the basement windows on the eastern elevation. The southern aperture (Photo. 4), arched in yellow brick, is situated below the north-east corner of the south range, and is known to have formed the outlet for a leat (from a mill pond to the west of the mill, itself fed by Higher Leat). The second aperture, arched in stone, is located a short distance to the north, below the second to last window, all but completely obscured by vegetation. Large, dressed limestone blocks form the corner quoins to the north range above the larger aperture. These do not, however, extend to the exposed natural geology, but are separated by a small area of limestone rubble that surrounds the aperture itself.

Tower

A limestone tower (Photo. 3) represents an original element of the north end of the north range. The tower is in two conjoined parts, both extending beyond the roof height of the main range. The roof to both sections is modern. The main, western part of the tower is approximately square in plan, with a large stone arched opening (Photo. 5) near ground level on the west elevation. Two iron lower door pintles (Photo. 6) survive within the inner jambs to this archway. A circular light, now blocked, pierces the upper part of this elevation, with doorways at first and second floor level below, one blocked, the other with a modern door reached by a modern steel external staircase.

³⁷ Beard 1991, p. 49.

Internally, a large, modern doorway provides access from the main body of the tower to the ground floor (Photo. 7), the original doorway blocked to one side. An original doorway, with replaced modern door, still provides access to the second floor, from a room accessed by way of the modern external stairway. Internal floors to this part of the tower are modern, and recent steel and brick additions reinforce the lower levels. Sawn off floor joists (Photo. 8) indicate the former presence of a room or attic space above the current upper room.

The eastern part of the tower is comparatively small, rectangular in plan, and is accessed only from the ground, first and second floors of the main range. A small window lights the lowest floor on the east side and there is a further window (blocked) at top floor level. A ceramic pipe section, now blocked, is exposed at ground floor level in the north external elevation, with small blocked apertures at first and second levels.

The roof

The roof (Photo. 9) was originally double ridged, the two longitudinal sections supported by ten pairs of king-post trusses. The intervening valley has since been infilled with timber bracing, and the whole range covered with a new roof. All timbers, including the underside of the roof, are whitewashed. The central beam supporting the inner end of each truss, itself supported by modern steel columns, appears to have been inserted into the limestone end walls as a later addition.

Timber floors

Other than at ground floor level, all floor construction is essentially identical, with massive timber bearer beams extending the full width of the building. These and many of the original joists have been whitewashed (Photo. 10). Both timber and steel reinforcement of the floor joist supports, and joist doubling up, can be seen at all floors. Modern steel columns support the first and second floor bearers. Floorboards, where visible, are usually replacements, and in some cases, obviously modern.

Individual storey details

Internally, the window openings on the ground, first and second floors are splayed slightly on each side, with steeply sloping sills (Photo. 10). Internal walls have been plastered and painted.

A small fireplace at the centre of the first floor north wall has been blocked. A small, unfurnished doorway, to the east of the fireplace, leads from the first floor to the smaller, eastern part of the north tower (Photo. 7). The lintel to this aperture comprises a number of reused, drilled timbers (Photo. 11). One of these drilled holes is threaded. The tiny rectangular space within this part of the tower has a narrow plastered plinth at the farthest end, partly encasing a jointed ceramic pipe that projects through the ceiling above (Photo. 12).

At the second floor, a similar space within this tower is accessed by another unadorned doorway, although this access has no lintel, and modern, hardboard blocking fills an open void that extends above to roof height (Photo. 13).

The upper storey brick west and east wall interiors are un-plastered, and painted pale yellow.

The ground floor has been sub-divided by breeze-block and timber partitions to produce a number of separate spaces and rooms. One of these, on the west side, contains the stumps of steel girders, once set vertically in the concrete floor, and now cut off flush with it. These may have supported a diesel engine or generator.

The interior to the open basement of this range (Photo. 14), accessed by a modern staircase with double steel safety doors at the northern end, has been substantially rebuilt. Although modern plaster covers all surfaces, it would appear that all columns are modern steel or reinforced concrete replacements. These support joists of probably similar construction. The only notable feature within this lowest floor is a short tunnel through and beyond the western wall, originally arched with brick, but now closed by another steel safety door with an overhead steel valve (Photo. 15). The internal walls are plastered, with the end blocked by modern red brick.

4.2 South range

The south range is constructed in limestone bonded with lime mortar, with window opening details (arches, jambs and sills) in red brick. All windows, unless blocked, are modern, and many of the brick sills, particular on the east side date to the installation of at least one phase of these replacement windows.

Each floor, of seven bays, would have been lit originally by six windows on the east side (seven on the ground floor) and up to seven to the west (Photo. 4). At least two windows to the basement floor would have been visible in the earliest form of the building on the western elevation. These are now obscured by a modern stair tower.

All of the southernmost windows in the east elevation have been blocked by a modern breeze-block rebuilding of this corner of the range (Photos 2 and 4), and windows at the southern end of the west elevation have either been blocked with brick or enlarged to form doorways leading to the modern stair tower.

The roof

The roof (Photo. 16) is apparently identical in material and design to that in the north range. Again, the intervening valley has since been infilled with timber braces and the whole range covered with a new roof. All timbers, including the underside of the roof, are also whitewashed. The central beam has though been replaced by a steel girder, itself supported by steel columns.

Timber floors

All timber floors appear to be identical to those in the north range, although, with the additional width of the range, the main bearers are even more impressive single timbers. Similar reinforcement in timber and steel as seen in the north range, is found throughout this part of the building.

Individual storey details

As in the north range, the internal window openings on the ground, first and second floors are splayed slightly on each side, with steeply sloping sills, although the sill slope is less steep (Photo. 10). Internal walls have been plastered and painted.

Access to each floor from the north range is provided by modern openings in the intervening limestone wall. Similar opening in the opposing wall lead to the modern range immediately to the south. A modern stair turret can also be reached from each floor by way of doorways using enlarged window apertures close to the south-west corner.

A modern lift shaft, serving all floors, has been inserted in to the north-west corner. This has required the breeze-block infilling of original large doorways that originally pierced the limestone elevation projecting beyond the line of the north range (Photo. 17). These entrances may have functioned as goods access points, possibly served by a pulley system supported in the parapet wall (now cement rendered) overhead.

Although iron bolts survive in a number of locations, projecting from the base of main floor joists on different floors, no other power transmission features remain. An arched cut-out on the lower side of a bearer beam on the ground floor (Photo. 18), situated between a set of bolts, shows where a ?belt-wheel once hung close to the timber.

The only other feature of note is a small blocked aperture with a stone arch (Photo. 19), visible in the limestone north wall at basement floor level (originally the south elevation of the north range). This may represent a drive-shaft opening from an earlier water wheel known to have stood at this end of the north range.

5. DISCUSSION

Documents indicate that a mill was built on the site of the north range shortly before 1800. This is believed to have replaced a fulling (tucking) mill of unknown date, but potentially on or near the site of a medieval mill.

A building is shown in the position of the north range on the OS surveyors' drawing of 1802-03 (Fig. 3), although not in any useful detail. A building is shown in greater detail on the c. 1843 Buckfastleigh Tithe Map (Fig. 4). The stepped form of the north end is identical in plan to this end of the current building, representing the surviving two-part tower. This stepped end is evident in all subsequent OS maps. It is thought very likely therefore that this north range is the same building, predating the 1840s, and probably representing the mill constructed at the turn of the century. It is difficult to know how to interpret the 1827 documentary evidence for a wing and possible building of a small section of the mill itself. No indication of alteration was evident in the current building.

The north tower and limestone northern elevation were built as one, and this earliest stone fabric appears to continue unbroken along the ground and first floor elevations to east and west, to include the southern elevation that now divides the two ranges. The parapet between the two current ranges may date to this period, although it is possible that it represents a fire break between the two roofs. The window openings to the two lower storeys - brick arched, with limestone jams and granite sills - are thought to be original features of this primary build. The use of brick to produce window opening details and the circular tower light surround would, therefore, be early.

It is likely that the main western part of the tower formed a stair turret, although no evidence of an internal staircase was evident following significant alteration. The smaller eastern section is thought to have provided lavatories at each floor. A waste pipe survives, passing through what may be a former lavatory seat structure (now plastered over), and exits the tower at first floor level on the north side.

An earlier study of the Lower Leat area, conducted by Stewart Brown, concluded that the smaller aperture at leat level on the east side of the building represented a culvert opening, part of the original design of the north range, and was probably used to remove waste liquids from the building.³⁸

This earlier archaeological work, undertaken during preparations for the construction of the 'Archimedes screw' water turbine within Lower Leat, showed that two successive water-wheels formerly stood at the southern end of the north range. It has been suggested that the earliest wheel powered the former fulling mill on the site. It is suspected that the extension shown on the tithe map at this end of the building is either a wheelhouse or a structure associated with a possible grist mill. No evidence of this former extension was visible in the wall above ground level (now the north wall to the south range), but a stone-

³⁸ Brown 2011, p. 6.

arched, and now blocked, aperture at basement level may represent a former shaft run, taking power into the main building.

The 'Rude sketch' of c. 1870 (Fig. 5) indicates the position of a southern range, either proposed or under construction. The existing southern range is believed to represent this building. The timber floors and the roof appear identical to those within the range to the north. The window openings are also identical in detail to those on the first floor of the north range and it is suggested that a major refitting of the north range took place in the 1870s, at the time the southern range was built. This may have followed a fire, known to have taken place within the wider mill property in 1877, or simply reflect a need to reinforce the floors within the north range in response to more modern and heavy machinery or changes in the technology used or processes being carried out.

This refit of the north range included a rebuilding of the main east and west elevations from first floor windowsill level, with the granite sills left in situ. A break in build is visible in the adjoining limestone walling.

Although the subsequent brick rebuilding of the uppermost floor of the north range might reflect a response to a further fire, the apparent survival of the roof stands against this. A more plausible suggestion, which would also explain the neat junction between the brickwork and the limestone below it, is that the top floor was formerly a dry loft, with timber clad sides and probable opening louvres. A dry loft is documented elsewhere on the site in 1852, and such lofts, associated with wool drying and combing, survive at Buckfast Higher Mill, Buckfastleigh and Ashburton.³⁹ Aerial photographs indicate that this alteration took place before 1930,⁴⁰ at which date upper windows are visible, with the brickwork suggesting a later 19th-century or early 20th-century date.

Two small extensions are shown on OS mapping of 1887 (Fig. 6), attached to the exterior of the mill at basement level on the Lower Leat side. These were identified by Stewart Brown as electricity turbine houses. These were removed in 2011. The limestone rubble surrounding the Higher Leat outlet may represent underpinning of this corner of the north range during the installation of the southern turbine house.

A further range was added to the south of the south range by 1887. Access to this range was provided by openings made in the south range south wall. Although the latest range was removed between 1955 and 1961, the openings in the south wall were reused following the construction of an adjoining modern range that stands to the south today.

On the basis of aerial photography evidence, the alterations to the roof, infilling the space between the ridges, appears to have taken place after 1947.⁴¹

Considerable modern subdivision of the two ground floors has taken place. The ground floor and supports within the basement of the north range have been replaced by modern materials.

Much of the refurbishment and rebuilding of the basement floor of the north range must represent recent improvements, possibly in response to the new Archimedes screw turbine built alongside. The steel safety doors may have been installed as part of an earlier electricity production phase of the building. The function and former extent of the blocked tunnel, extending to the west of the basement floor, is not known at present, but may well have been related to the provision of water to the building.

³⁹ Williams 2013, p. 103-4.

⁴⁰ www.britainfromabove.org.uk: 'St Mary's Abbey & the Lower Buckfast Woollen Mill, Buckfast, 1930'.

⁴¹ www.britainfromabove.org.uk: 'St Mary's Abbey, Buckfast, 1947', on which the gabled roofs are still visible.

6. CONCLUSION

In terms of heritage significance Lower Mill represents two ranges, apparently built specifically as a woollen or worsted mill. The northern range was built just before 1800 on the site of a tucking mill of unknown date. No evidence has been seen to suggest that the current building incorporates fabric from the earlier mill, although elements may survive below ground level. There is no machinery or other equipment within the building. A few features, such as bolts, which may be associated with the power transmission system, survive on the roof timbers. The mill had water wheels on its east and southern sides, and was fed from both Higher and Lower Leats. The whereabouts of a grist mill mentioned in the 19th century is unclear, but if it formed part of the north range it is possible that it was associated with the southern wheel.

The southern range was added in about the 1870s. This enhancement of the mill included the complete re-flooring and re-roofing of the north range, requiring the rebuilding of the longer elevations on both sides from first floor sill level. Later alterations include rebuilding the east and west walls of the north range upper floor in brick, perhaps replacing timberwork associated with a drying loft.

Implications

The building represents a former woollen mill of two main phases, in which almost all the structural fabric, including a north tower, date either from the turn of the 18th and 19th centuries (north range) or the 1870s (south range). Although all windows and doors have been replaced, the window openings date to these periods. The roof and the floors to all levels but the ground floor in the north range date to the 1870s.

It is suggested that any future alterations to this building avoid any removal or disturbance of these walls, window openings, floors or roofs. However, the character of the building would benefit from some modifications. These include:

- Replacement of all windows with age-appropriate substitutes and the unblocking of modern infilling. This would include the removal and lowering of modern brick sills to the level of the original sills.
- Replacements of modern doors, in particular the example at second floor level in the tower with something more suited to the building.
- If it was deemed appropriate, the building would also benefit from the removal of the modern concrete and steel structure obscuring the north-west corner of the building, principally the tower.

The removal of the modern stair turret at the south-west corner of the building might be considered.

Other features where retention should be considered, include the steel 'safety' doors leading to the north range basement, and the steel fittings covering the basement tunnel.

While the internal roof timbers should be retained undisturbed, the outer cover, being of post-1950s date, could be replaced if deemed necessary.

It should be noted that all observations and suggestions made in this last section are the opinion of Archaedia only, and any alterations to the building should be made in consultation

with the Local Planning Authority.

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1:2500 map Sheet 114.7: 1887 & 1905.

1:2500 Plan SX7467, 1955.

1:2500 Plan SX7467 & 7567, 1961.

1:10 560 Sheet 114NE, Revision of 1904 with additions in 1938.

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The National Heritage List for England (Listed Buildings and Scheduled Monuments):

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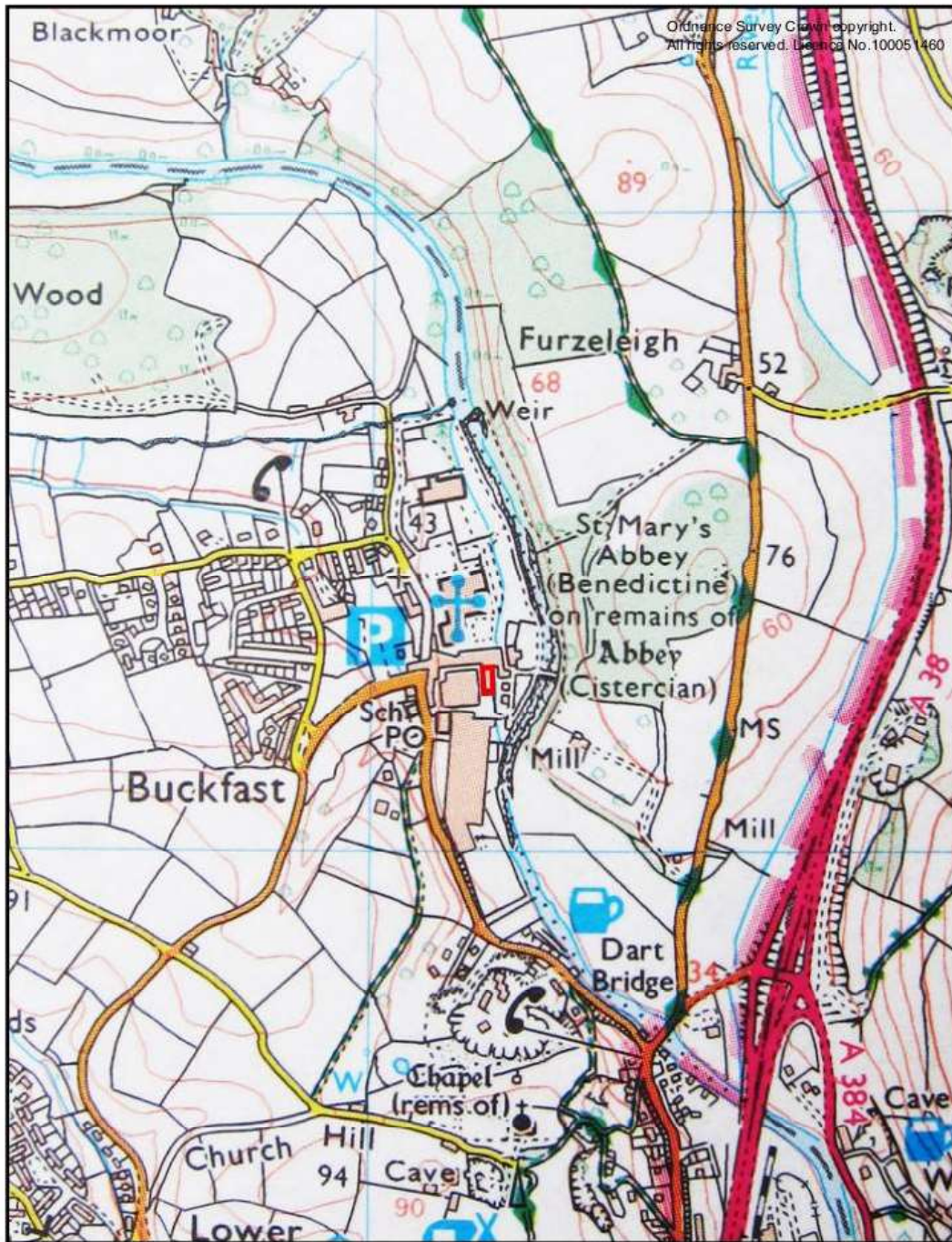


Fig. 1 Building location.

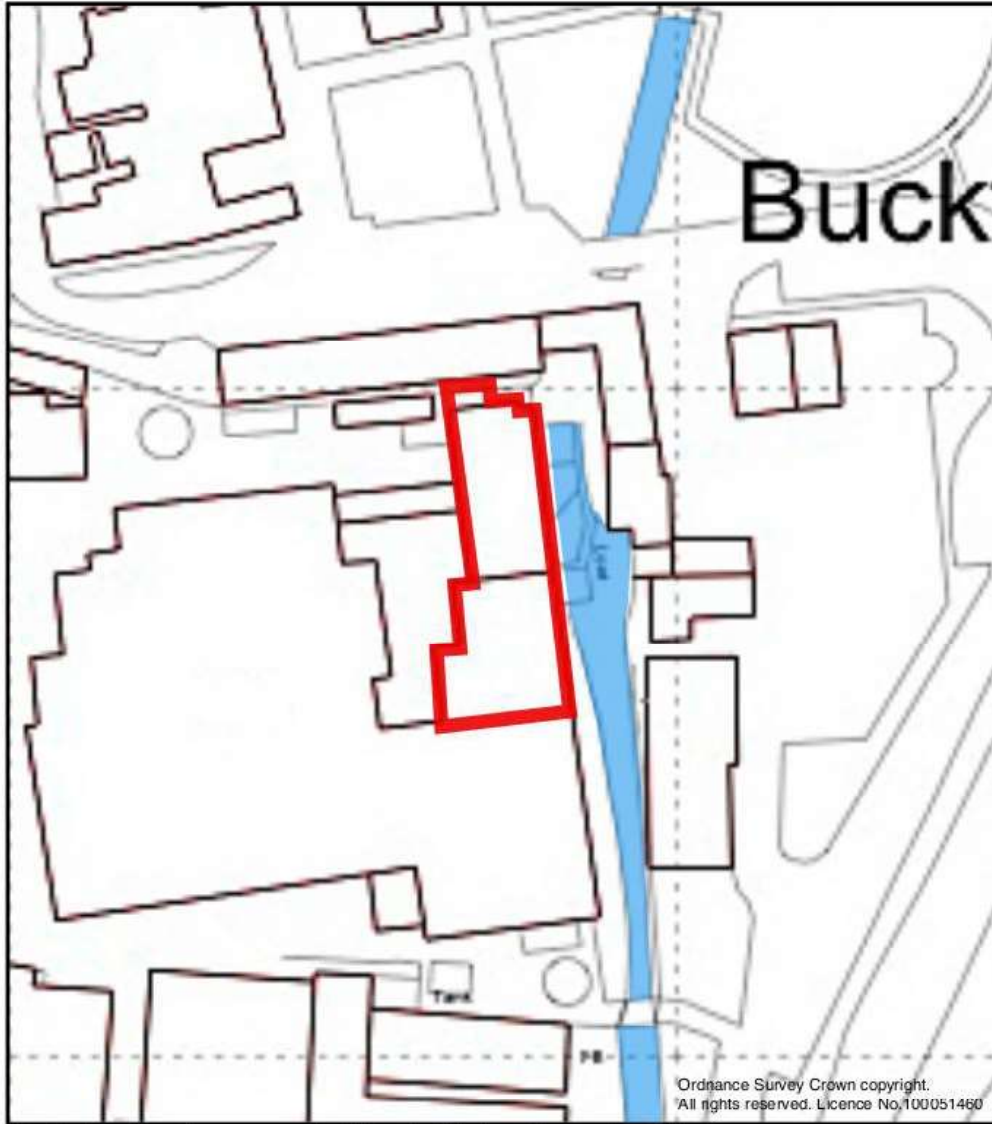


Fig. 2 Location of assessment building (red line) and Lower Leat (blue).



Fig. 3 OS surveyors' Two-inch drawing, surveyed 1802-03.

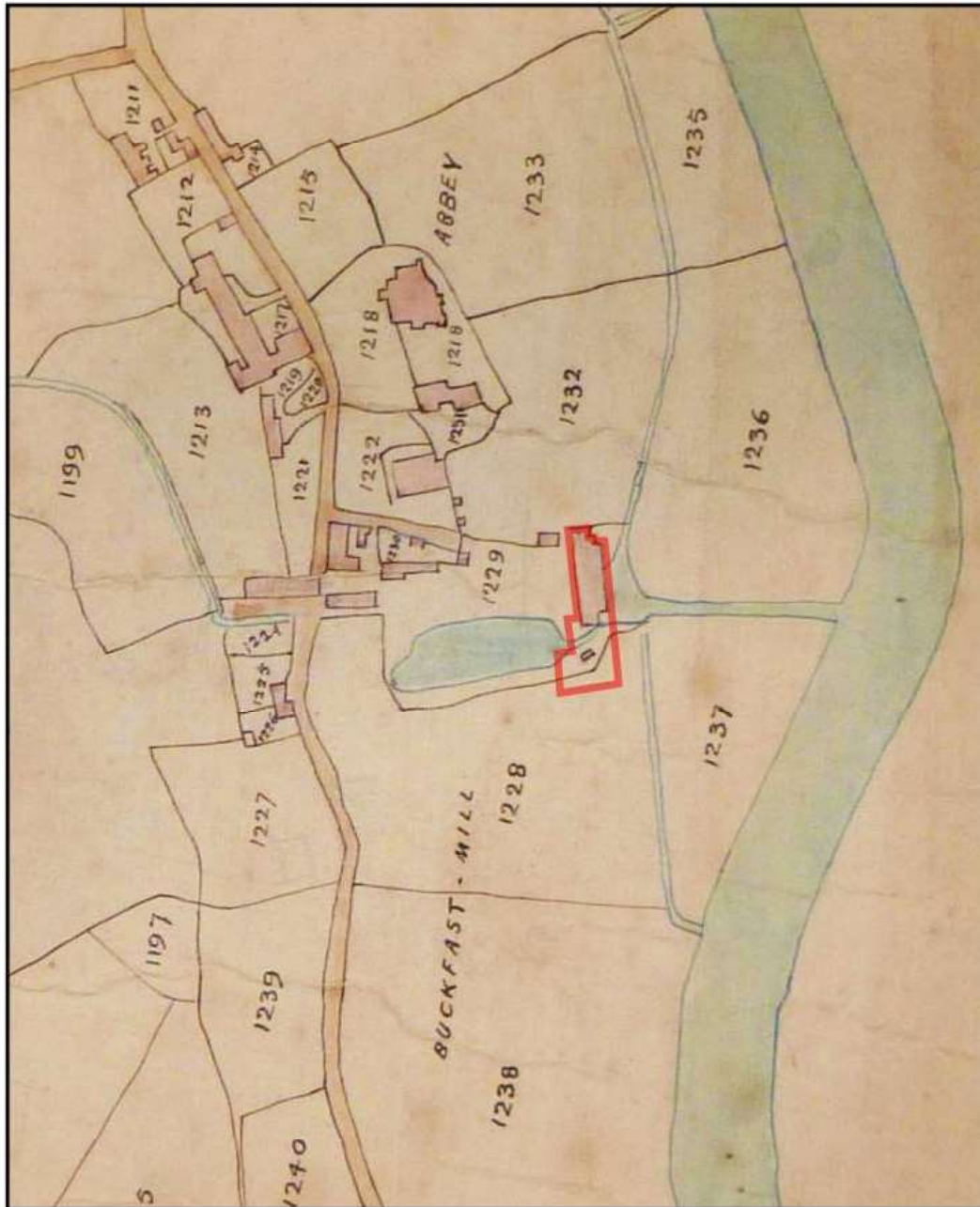


Fig. 4 The Buckfastleigh Tithe Map, c. 1843.

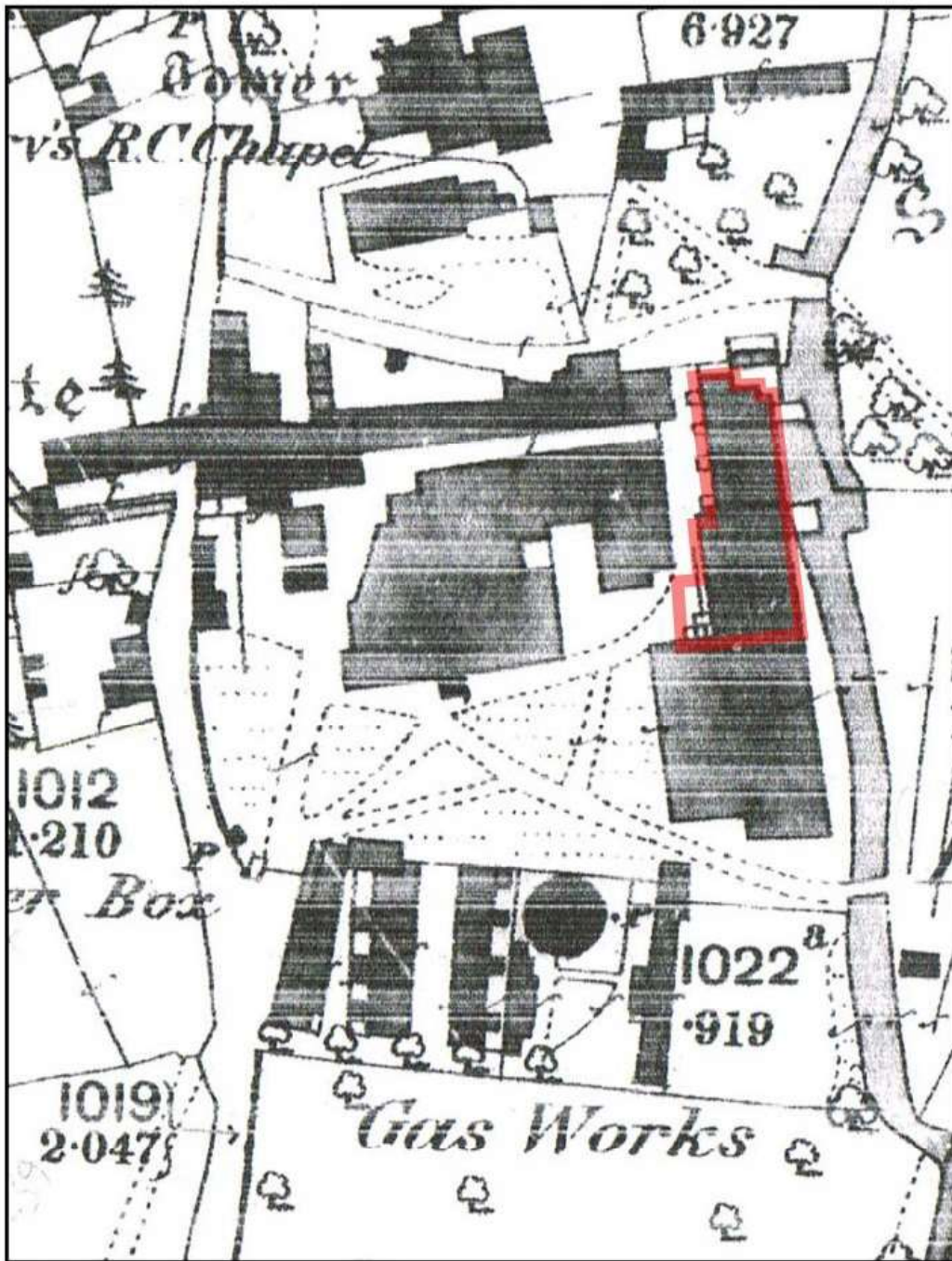


Fig. 6 OS 1:2,500 map, 1887.

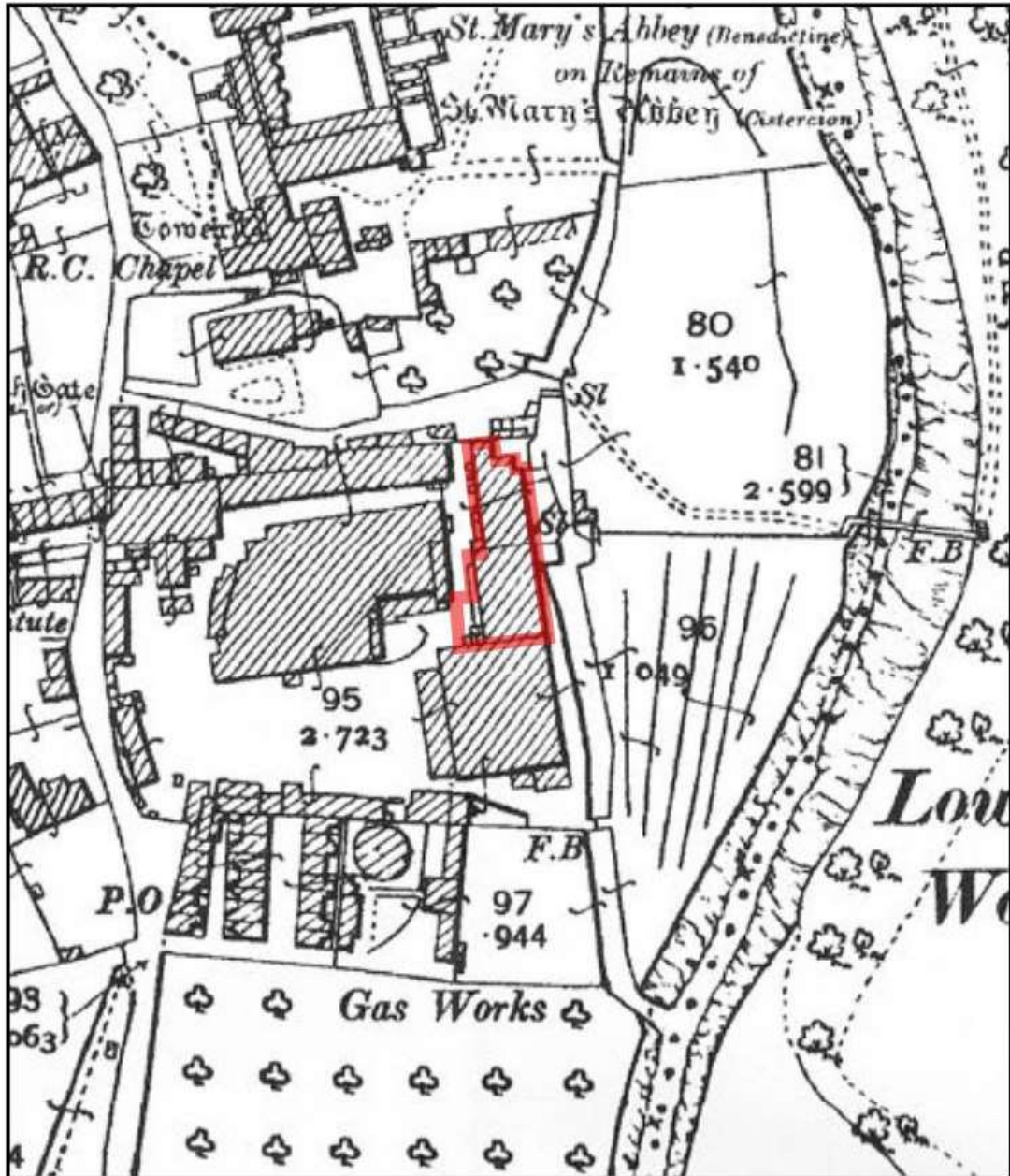


Fig. 7 OS 1:2,500 map, 1905.

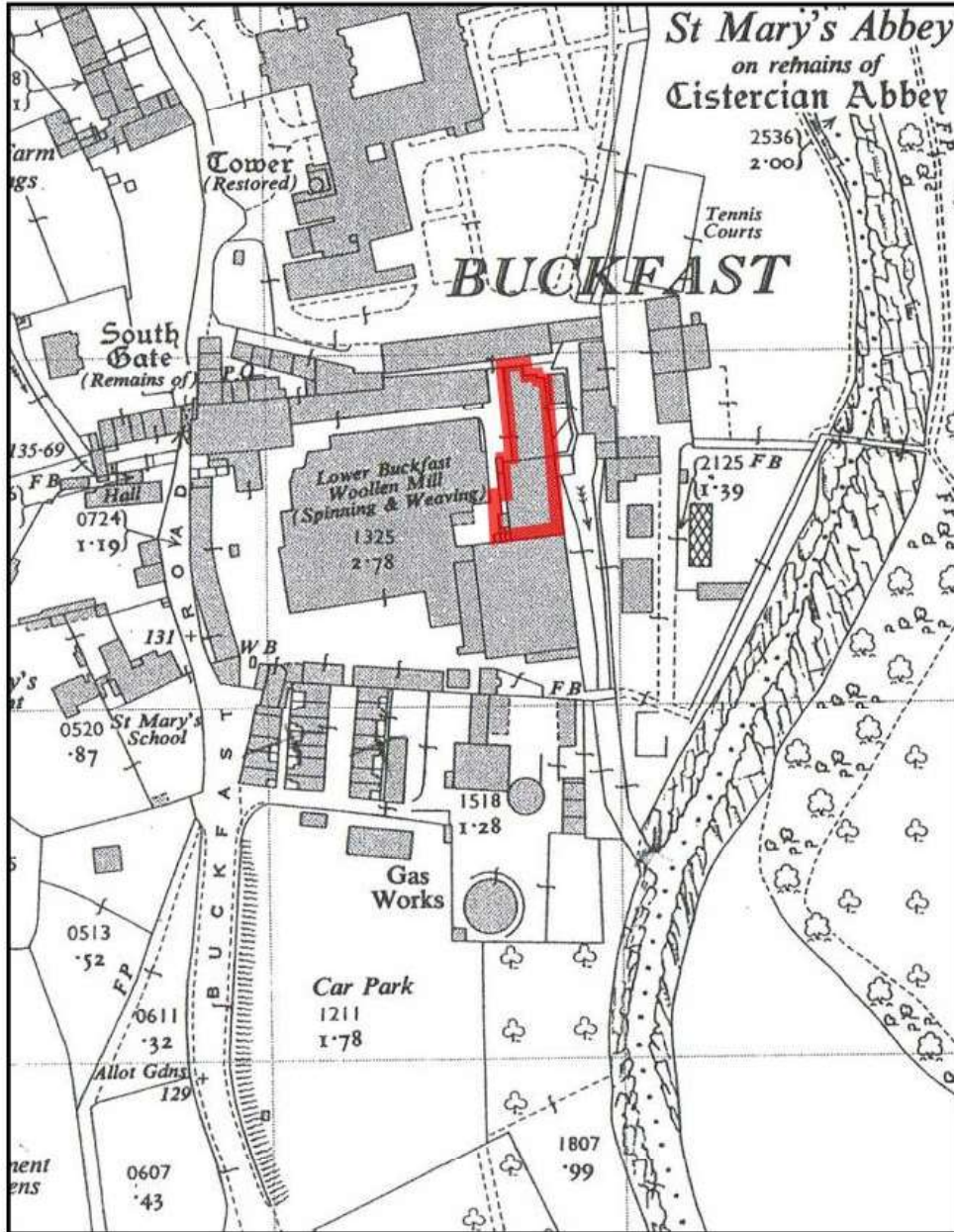


Fig. 8 OS 1:2,500 map, 1955.

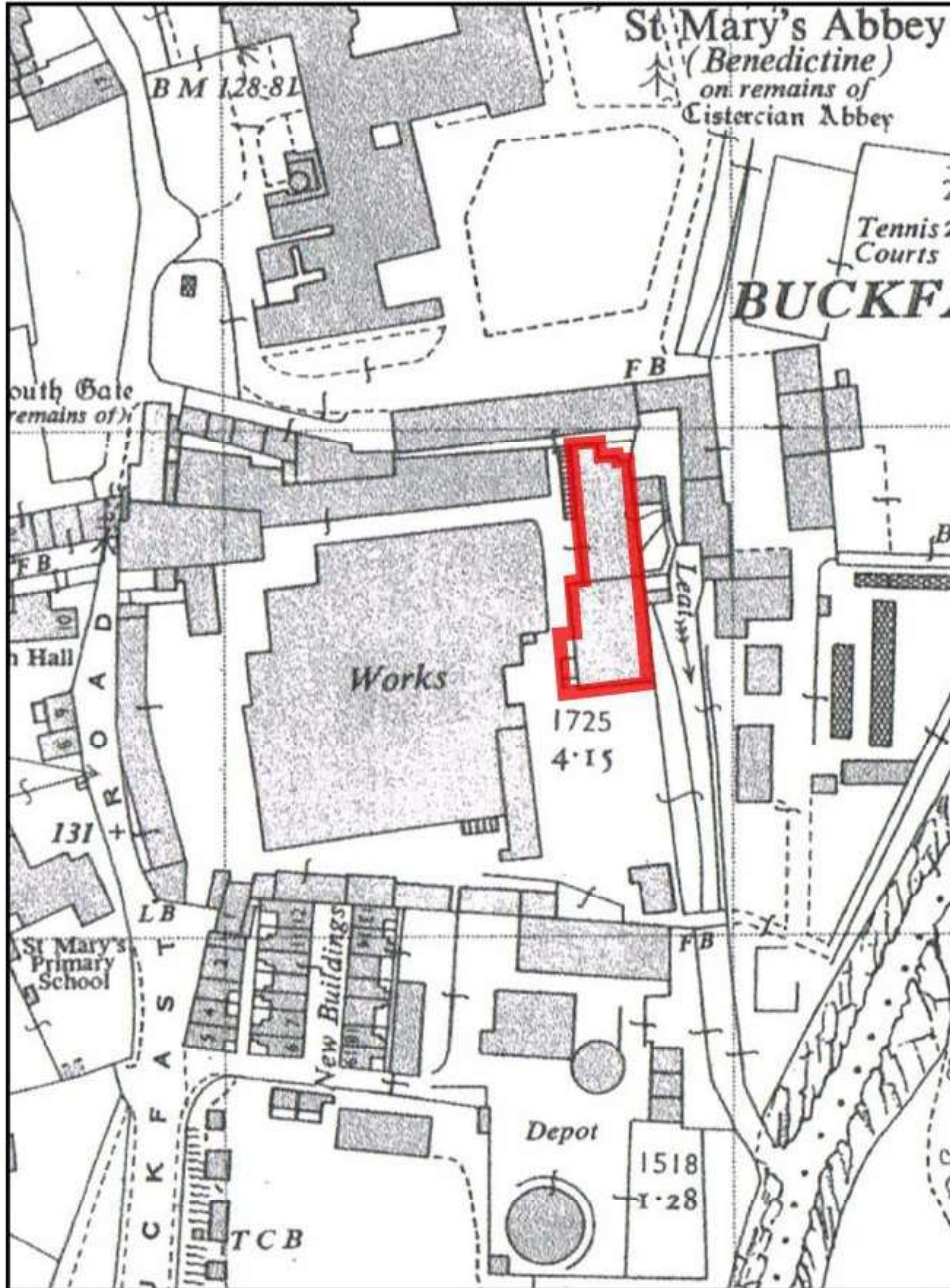


Fig. 9 OS 1:2,500 map, 1961.

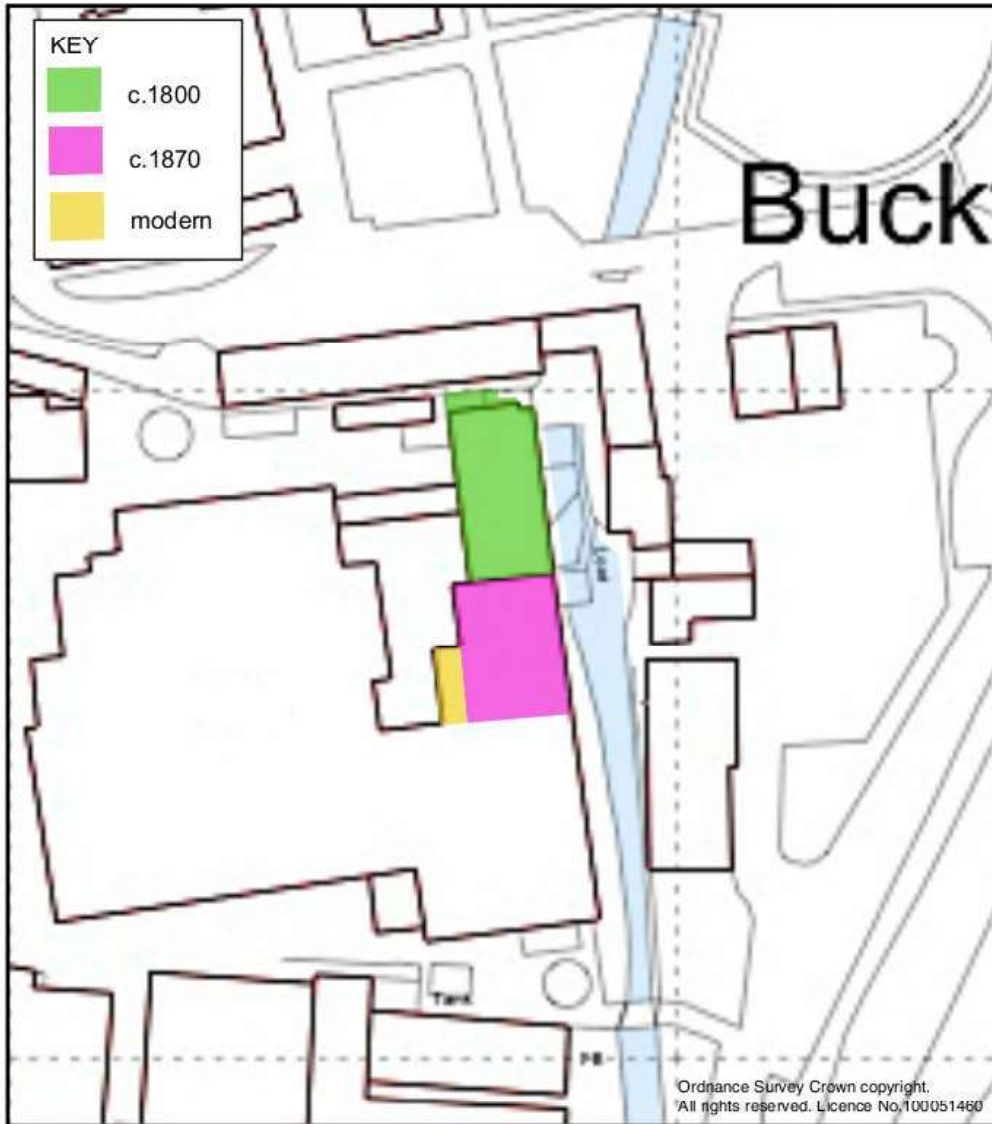


Fig. 10 Simplified phase plan.



Fig. 11 West elevation construction phases (windows are shown as modern to denote recent replacements, not modern openings).



Photo. 1 The west elevation, looking north-east.



Photo. 2 The east elevation, looking NNW.



Photo. 3 The north range and tower, looking east.



Photo. 4 The leat outlet at the north-east corner of the south range, looking south-west.



Photo. 5 The archway at the base of the tower, looking east.



Photo. 6 The pintle within the tower entrance arch, looking south.



Photo. 7 The north wall, ground floor, north range, showing the modern entrance to the tower on the left, and the doorway to the lavatory on the right.



Photo. 8 The upper room in the tower, showing the blocked light, modern door (in an original opening) and the sawn off floor joists, looking west.



Photo. 9 North range roof, looking north.



Photo. 10 North range first floor, showing window and second-storey floor details, looking southwest.



Photo. 11 North range, first floor lavatory doorway.



Photo 12. North range, first floor lavatory interior.



Photo. 13 Lavatory entrance on the second floor of the north range.



Photo. 14 Basement of the north range, looking south-west.



Photo. 15 Tunnel entrance in north-west corner of the north range basement.



Photo. 16 South range roof, looking north-east.



Photo. 17 Junction between the north and south ranges on the west side, showing the blocked entrances on the south range north elevation, looking SSE.



Photo. 18 The power transmission retaining bolts and cutout floor bearer in the basement of the south range, looking SSW.



Photo. 19 The north wall of the south range (formerly the south elevation of the north range), showing the blocked archway to the left, close to the modern lift, looking north.

