ARCHAEOLOGICAL BUILDING SURVEY AND WATCHING BRIEF AT LOXBEARE BARTON, LOXBEARE, DEVON

by

C.S. Wakeham

Exeter Archaeology

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1. INTRODUCTION

This report presents the results of a programme of archaeological investigation, including building recording and a watching brief, undertaken at Loxbeare Barton, Loxbeare, Devon. The work was commissioned by Roland Blake, and carried out by Exeter Archaeology (EA) in 2006-7, to fulfil conditions attached to the grant of planning permission (No. 05/01050/FUL, Mid Devon District Council) for the conversion of farm buildings into dwellings and associated garaging. A brief for the investigations was provided by the Devon County Council Historic Environment Service (DCHES), and the scope of the works presented in a method statement produced by EA (Gent 2006).

2. THE SITE.

Loxbeare Barton (NGR SX 91250 15875) is located to the south of the centre of the village of Loxbeare, near Tiverton, Devon (Fig. 1). The site has been terraced into a gentle south-facing slope. The historic (pre c. 1914) buildings include a large, multi-phased farmhouse overlooking a rectangular garden and courtyard area to the south. This is flanked to the east and west by square farmyards. This report describes the eastern yard and buildings (Fig. 1).

Nineteenth-century maps (Figs 3 and 4) indicate former ponds, two to the west of the yard in 1840, and a third possible pond added to the north of the eastern yard by 1888. Numerous watercourses and orchards are shown, together with a number of structures which have now been removed. Most of these features appear to be unrelated to the surveyed buildings, although the pond, added between 1840 and 1888, appears to be supplying water to the complex..

3. PROJECT BRIEF

A brief for the project required:

- the production of a written, photographic and drawn record of the buildings to be converted (to Level II: English Heritage 2006);
- the monitoring and recording of archaeological deposits and features exposed during the groundworks; and
- the production of a report, and a project archive.

4. METHOD

The record of the buildings included a detailed written description, supplemented by the annotation of architect's drawings. A photographic record of the exterior and interior elevations in black and white print, colour slide and digital formats was also produced.

An archaeological watching brief was maintained during the groundworks for the redevelopment, which included excavation of trenches for foundations and services.

5. BUILDING SURVEY

The eastern yard (Fig. 1) is arranged in the form of a quadrangle of adjoining buildings. Before conversion, these included a threshing barn, cattle shed, root house, an L-shaped linhay and stable. Additions had been attached to the stable and threshing barn. The following provides a description of the buildings before conversion.

5.1 Stable

The stable occupied the north-western corner of the farmyard. It was a two storey, symmetrically fenestrated building measuring 12.4m x 4.6m internally. It was largely of 18th/19th-century construction, although the northern elevation appeared to have been built in the 17th century. The stable was built predominantly from randomly coursed angular slate and volcanic rubble with volcanic (Washfield stone) quoins and brick dressings. Some cob had been used at loft level in the western wall. The northern end wall was comprised mainly of coursed, dressed volcanic stone (outside) and coursed angular rubble (inside), representing an earlier construction phase.

Northern elevation

This elevation (plate 1) contained the oldest fabric within the farmyard complex, probably of 17th-century date, although a small amount of 18th/19th-century rubble was added to raise the roofline by c. 0.3m. The older masonry was bonded with a pinkish mortar and re-pointed with one of sandy white colour. The wall contained five putlog holes, three at 2.5m above floor level and two at 3.6m. The two easternmost holes were infilled.

The elevation extended beyond the stable to the west to attach to the house and provide a lintel to the garden entrance. This entrance has a low, chamfered cranked arch with a drip mould. Not including the garden entrance, the elevation had three doorways, one to the stable, one above to the loft, and the third, to the east, to the cart shed described below (5.2). The two westerly stable doors were fitted with wooden lintels and doorframes with inward opening doors. The stable doorway was 1.9m wide and located at the eastern end of the elevation. It had a ledged and battened door, hung by two long strap hinges on the inner face. The original planks of the door were covered in carved graffiti. Most were initials, although there were two numbers, 1104 and 1881, the latter possibly a date. Above the doorway was a drip mould comprised of a number of chamfered short volcanic stones, similar to the one over the garden entrance. The turned down ends were still in situ, which implies that the opening was at its original width.

The loft doorway was 1.8m high, and offset to the west of centre of the elevation. Immediately above the lintel was a second drip mould. This extended across the full extent of the original masonry and was chamfered down at the eastern end, where it reached the original slope of the half-hipped roof. This is indicative of an original feature and shows that most of the northern elevation was retained to its full height. Above the drip mould was an area of heavily rendered stonework and the eastern side of the wall contained a section of later stonework, implying an alteration to the roofline.

Eastern elevation

The eastern elevation represented the 18th/19th-century frontage (plate 2). This wall was symmetrically fenestrated with a window positioned to either side of a central door. These were fitted with louvres. A small loading hatch was situated directly over the door. All openings had volcanic stone quoins and were fitted with wooden frames.

The ground floor openings all had identical segmental red brick arches, the doorway formerly being a central window. As a result of the conversion, the volcanic stone quoins to the door varied in colour and size above and below the level of the earlier window. This doorway was c. 2.4m high and boarded up during the 20th century. The threshold was over 0.8m above the level of the yard. A shallow recess, c. 0.4m beneath, was probably the result of the removal of either stone steps or a ramp.

The colour and texture of the stone of the quoins and facework varied across the elevation, resulting in visible horizontal banding. As the whole wall was bonded with a pinkish mortar, suggesting that repair had not taken place, this banding is thought to be the result of differential wear to bands of stone of differing quality.

Due to the slope of the yard, the floor level of the stable at the south-east corner was c. 1.7m above the ground outside. Here two small drainage holes were present at floor level, one near the south-eastern corner, the other between the doorway and the northern window.

Southern elevation

The southern elevation was largely masked by the adjoining linhay, the loft floor beams, purlins and ridge piece of which had been inserted into this wall. There were no noticeable breaks within the masonry where this occurs, suggesting that stable and linhay were built at the same time.

Two small holes were present, one immediately over the apex of the linhay roof, the other about 0.3m to the east. The positions suggest that the holes accommodated two purlins at the apex of an earlier linhay roof, although there were no other traces, such as variations in the weathering of the stonework, to support this.

Western elevation

The western wall was built in coursed rubble, with a 9.1m long band of cob extending from the northern wall. A series of at least 12 circular joist holes (c. 0.1m diameter and 0.3m apart) was situated within the cob at heights of between 2.9m and 3.1m above ground level. At this height they would not have provided a floor that could serve the current cart shed.

There were also two holes in the cob that ran right through the wall, the largest measuring $0.4 \text{m} \times 0.4 \text{m}$. These holes were positioned c. 4m from each end of the building and perhaps held earlier projecting floor beams.

The southern end of the wall is continuous with the build of the linhay. At the northern end it abuts the c. 17th-century north wall.

Interior

The interior of the stable appeared to have been laid out during the 19th century to accommodate between four and six stalls along the western wall. Little of the woodwork for the stalls remained, although three posts (about 2m in height) were retained and incorporated into a 20th-century concrete and brick feed trough running the length of the building. Four small slots were situated along the western wall, two of which contained small wooden corbels. These corresponded with the position of the posts, possibly located to secure the divisions.

A wooden hayrack, presumably of 20th-century origin, was situated above the feed trough. This hayrack superseded an earlier rack, of which two-fifths of the top bar had survived. It was nailed to the floor beams and given extra support from two surviving wooden brackets, nailed to the joists and cut to accommodate the profile of the hayrack bar.

The floor of the stable had been partly concreted over, although a large area of square sets remained exposed along the western wall. This had a north-south aligned surface gulley at its

eastern edge. Evidence of post settings for stalls for four horses survived in the incomplete floor surface, although the earlier hayrack extended as far as the southern wall, implying that there were originally stalls all along the western wall. The area to the east of the square sets was cobbled and these continued under the concrete at the northern end of the building.

Four loft floor beams sat on timber wall pads, themselves set on 0.35m high stone piers built into the external walls (Fig. 5). These piers were evenly spaced (just over 2.m apart) and alternate with unevenly spaced piers of similar height, presumably from an earlier floor.

The loft was accessed from within the stable by a fixed ladder and a square hole through the loft floor near the north-eastern corner. This ladder was of late 20th-century date, although the access hole appeared to be contemporary with the loft floor. A feedhole for the hayrack extended along the length of the western wall.

Roof

The slate roof rose to a full gable at the southern end and was half hipped to the north. It was supported by four tie-beam trusses with kingposts and queen struts. The trusses appeared to sit on separate wooden pads rather than a continuous wall plate. The kingposts were bolted onto the tie beam and had spanner slots on their northern faces. This truss type was the most common throughout the range (plate 3). The trusses supported a purlin to either side, and a narrow ridge piece at the apex, above which were the rafters. The roof was lined during the late 20th century.

Watching brief

On removal of the cobbles, the undisturbed red brown clay geology was exposed to a distance of c. 4m from the northern end of the building. This was overlain at the southern end of the building by a dirty reddish brown clay with frequent volcanic stone inclusions and occasional scraps of metal. There were no other finds. This material produced a level surface for the floor. At the south wall the introduced material had a maximum depth of 0.7m.

To the north of the doorway, the footings of the eastern wall projected 0.1m into the building at a depth of 0.13m below floor level. Large rocks, set in clay, were also present beneath the doorway in the north wall although it was unclear whether these were *in situ* or introduced to act as foundations.

5.2 Cart shed

The cart shed was a small lean-to structure adjoining the northern end of the west elevation to the stable, measuring 6.4m x 2.5m internally. It was composed of volcanic and limestone rubble with a dressed stone exterior, built onto an existing northern wall described above. The building was entered via a wide arched doorway in the north and had a monopitch roof sloping down to the west.

Elevations

In the northern elevation, the quoins of the eastern jamb of the cart shed entrance were predominantly purplish grey and appeared to be original. Those on the western side were more reddish brown in colour and snecked, suggesting that they are later, and probably contemporary with the building of the cart shed, and a widening of the entrance. The entrance was c. 2.5m wide and 2.5m high. It was fitted with a wooden doorframe and two modern inward opening, ledged and battened doors.

The western wall was finished in snecked dressed stone with quoins on the corners. It contained a single timber-framed window, with a rendered sill at the centre of the elevation.

The southern end elevation was of snecked dressed stone, contemporary with that of the western wall, and it abutted the rear wall of the stable.

Interior

The interior stonework was of angular rubble, coursed in the western wall and more random to the south. All walls were whitewashed up to the base of the joist holes in the cob along the western wall of the stable. This might suggest that the whitewash was contemporary with a plastered ceiling on the underside of the joists. The floor of the cart shed was not exposed.

Roof

The slate monopitch roof was comprised of two diagonal principal rafters supporting two purlins and the common rafters. The upper purlin rested on the principal rafters, whilst the lower sat within the purlins. The principals had a less weathered appearance than the rest of the roof structure, and their alignment in relation to the rest of the roof suggests they are a later addition, perhaps added following the removal of the ceiling and/or loft floor.

5.3 Threshing barn

The threshing barn (plate 4) was a large east-west aligned building on the northern side of the yard, with wide opposing doorways at each end. Internally the barn measured $19.1 \text{m} \times 5.9 \text{m}$, with walls c. 0.5 m wide. These were mainly of volcanic stone and random slate rubble, the latter particularly common on the interior. The western external elevation was finished with snecked dressed stone. Bricks had been used to construct the arch in the western elevation and to block an opening in the northern elevation. The eastern elevation had been completely rebuilt in concrete blocks.

Western elevation

The 2.6m wide doorway at the centre of the elevation had a thick segmental arch comprised of alternating brick/half brick combinations. The doorway was fitted with a timber doorframe and double doors. The southern door was ledged and battened with repairs at the bottom. The northern one was a stable door. Both were hung on strap hinges on the inner face. Three planks filled the gap between the doorframe and the arch. The quoins on both the doorjambs and the corners of the elevation were relatively small, and often no taller than the adjacent stone courses.

Northern elevation

The northern elevation had an angular rubble stone finish, with a thick pinkish mortar flush pointing. Within the adjoining buildings this pointing was often inscribed to imitate a squarer finish to the stonework.

The central doorway projected 0.3m beyond the wall, a feature not repeated on the southern elevation. Together with a short length of wall, the eastern jamb had been partly rebuilt in stone and concrete block. There were two hinges for a single leaf door on the eastern doorpost and four hinges for a stable door on the western post.

A loft door or loading hatch in the western half of the elevation had been bricked up and was partly obscured by 20th-century looseboxes (5.4 below). The eastern half contained a

doorway into the adjoining mill building/shed (5.5), which had a chamfered eastern interior jamb. Either side of the doorway, at 2.9m above the floor, beam slots presumably once held a loft floor within that building.

Eastern elevation

This elevation was rebuilt in the 20th century in concrete blocks with vertical galvanised metal sheets in the gable. It contained a 1.9m wide doorway/loading hatch at loft level.

Southern elevation

Although predominantly of random and randomly coursed rubble, an area of coursed dressed stone beneath the central doorway, and a patch of coursed hammer dressed stone facing into the western lean-to (5.6), probably reflect a repair. The doors of the wide central entrance were similar to those to the west. A loft door or loading hatch opened up into the adjoining cattle shed at the eastern end (5.8).

Interior

All of the original stonework bore the remains of a lime-based, whitewash render.

The western part of the floor had a part rubble, part lime-based surface with a 20th-century concrete mounting block. This was set against a raised concrete floor section laid at the centre of the building between the opposing doorways.

The south-west corner contained a small loft area created by joists extending from the southern wall to three central posts. Two possible beam slots, which do not align with anything, and the bricked up loft door in the northern elevation, suggest that the whole of the western half of the building was formerly lofted.

A 20th-century metal barrier, for use as an animal pen, partitioned off the eastern end of the barn. The floor was concreted, and c. 0.18m lower than the central area.

A 0.38m high hole in the southern wall, beneath the loft level doorway/loading hatch, and a possible blocked hole (0.2m high) in the opposing northern wall, may represent beam holes for the loft floor over the eastern end of the building.

At least thirteen inscribed circles of varying diameters were recorded to the east of the central doorway. Several contained four symmetrically placed lozenges. Similar symbols, containing six lozenges and described as 'daisy wheels', have been noted in a variety of buildings throughout the country, in contexts from the early 17th to the early 18th century, and interpreted as devices to ward off evil (Hall 2005, 150-153). Two wooden brackets were set 0.75m above the doorway were between 0.8m and 1m from the doorjambs. These projected through into the adjoining calf house (5.7). The remains of two opposing brackets were also seen above the northern central doorway.

Roof

The slate roof rose to a full gable at both ends of the building. It was interrupted along both the northern and southern aspects by the perpendicular roofs of the mill building/shed (5.5) and the cattle shed (5.8). The space between the southern slope and the roof of the adjoining cattle shed had been infilled with a timber-framed, rendered partition. The roof structure was similar to that of the stable and the linhay (albeit supporting two purlins per side). Here the trusses were all embedded within the tops of the northern and eastern walls.

Watching brief

Removal of the floor at the western end of the building revealed a 0.3m depth of made ground, which included soft areas of compact straw. There were no finds.

The removal of the concrete in the centre of the building exposed two lengths of mud bonded rubble wall, 0.25m wide, extending from the northern and southern walls. These were 2.3m and 1.7m long respectively, and interpreted as footings for a raised timber threshing-floor.

Stone footings for the doorway were exposed at a depth of 0.3m, extending eastward from the western jamb. These appear to have been removed from the eastern side during the rebuilding of the doorjamb.

A 0.3m wide test pit, situated 1.3m to the east of the northern doorway, revealed the foundations of the northern wall, projecting 0.08m into the building at 0.13m below floor level. This projecting foundation cut through the natural ground to a depth of at least 0.6m (0.3m beneath floor level). The cut for this foundation was tight against the wall.

5.4 Looseboxes

Looseboxes had been added to northern elevation of the threshing barn at the western end. Internally these measured 3.95m x 5.4m. They were composed entirely of machined bricks laid in a Flemish bond. All of the exposed corners of the building, including the door jambs, had bull-nosed bricks. The roof continues eastward to create an additional 2.2m wide awning.

Elevations

The centre of the north elevation contained two inward opening, ledged and battened, stable doors.

There was a louvred vent set high at the southern end of the western elevation and a small drain hole at the base of the wall in the northern corner. A quoin in the corner of the threshing barn (5.3) had been removed to tie the brickwork of the lean-to to the barn.

There was an identical louvred vent at the southern end of the eastern elevation. The roof continued eastwards to enclose a small storage area with a concrete floor.

Interior

The concrete floored interior was divided into two looseboxes by a timber partition. The western loosebox had a 0.75m high brick-built feed trough in the south-western corner, with two further bricks lying 0.9m to the east, suggesting some further fittings were inserted along the southern wall.

The eastern loosebox had a 0.49m high rendered brick trough in the north-east corner, and some projecting brickwork in the south-east corner (perhaps for a taller feed trough as next door). An iron tethering ring was fixed to the southern wall, 0.8m above the ground.

Roof

The roof was a monopitch slate cover sloping down toward the north. The supporting structure comprised rafters and battens sitting on a central purlin. This rested on a single

principal rafter, which was in turn supported by three upright posts along the internal partition.

5.5 Mill building/shed

A single-storey building at the eastern end of the northern elevation to the threshing barn, perpendicular to it, and measuring 6.9m x 6.6m internally. It was constructed of randomly coursed angled slate, limestone and volcanic rubble, bonded with a light-reddish brown mortar with some sandier brown re-pointing. Some bricks had been used within later alterations.

Western elevation

The western elevation held the ends of two iron crossties, but was otherwise devoid of features. The quoins at the northern end of the elevation were relatively small, and comparable to those at the western end of the threshing barn.

Northern elevation

This was a two-phase elevation comprised of two short original sections at either end with a later stone infill in the centre. The original walls were 0.5m wide and extend for c. 1m towards the centre of the elevation. The western section had some small quoins at its eastern end

The main infill of the elevation was comprised of randomly coursed rubble, 2.7m high, with a doorway in the centre and a window high up at the eastern end. The western jamb of the second opening was brick, which suggests it postdates the insertion of the infill walling. Both openings had wooden lintels and the doorway was fitted with a wooden doorframe and an inward opening door. A horizontal wooden beam was mounted over the doorway and extended from the western break in the masonry to the window in the east. A part-rendered timber framework with chicken wire filled an exposed area at the top of the wall.

Eastern elevation

The eastern wall held the end of a single iron crosstie and two holes blocked with pieces of wood. The two holes were both c. 1.9m from the ground, less than 0.2m in height and width and extended through the wall. The southern hole had a wooden plate at the bottom.

Interior

The building appeared to have been given a thin skim of a lime-based render, much of which was worn away. The purpose of three holes in the southern elevation, at 2.9m from the ground, was unclear, but may have held beams for a loft insertion.

Brick built feed troughs were installed along the eastern wall and at the northern and southern ends of the western wall. A north-south aligned surface drain was set into the concrete floor on the eastern side of the opposing doorways. A small hole to the north of the doorway into the barn was roughly in line with the western jamb, but its purpose was unclear. A series of later posts, low timber and galvanised sheet partitions and re-used wooden pallets were inserted to create five pens (three in the east and two in the west). Some of the posts aligned with partitions within the troughs, although much of the material appeared to be a substitution for an earlier outlay.

The builders reported exposing walling for a possible wheel pit during the excavation of the floor.

Roof

The slate roof had a full gable at the northern end and extended to the barn roof to the south. The apex and eaves of the roof were all notably lower than that of the threshing barn, which suggests the building was added to it.

The roof structure was originally based on the tie beam truss style, supporting two purlins per side, as used in the threshing barn, although the trusses have both been modified. Further support for the roof was provided by the framework over the northern wall. The modification of the trusses and the subsequent increase in weight on the walls, accounts for the use of the iron cross ties. The trusses were set into the eastern and western walls on wooden pads.

The northern truss had its eastern queen strut removed. The original tie beam only extended a short distance eastward beyond the kingpost (where it had been cut off at an angle) and was supported by an added beam. A later horizontal beam had been added above the tie beam to act as a collar, and a vertical post was placed between this and the principal rafter on the eastern side.

The southern truss had its tie beam sawn off c. 0.7m from the wall at each end, and was bolted to two vertical posts added to the northern side of the principal rafters. A later horizontal beam was also added c. 0.3m above the original tie beam. The queen struts were replaced with vertical posts nailed to the northern side of the horizontal beam.

At the eastern end of the southern truss were the remains of three planks, nailed to the northern elevation, and further nails extended to the west along the principal rafter.

5.6 Lean-to

This lofted lean-to was attached to the southern elevation of the threshing barn at the western end (plate 5). The interior of the building measured 3.15m x 5.85m. Constructed in randomly coursed angular slate, volcanic and limestone rubble, the structure was bonded with a pinkish brown mortar. Quoins were only used occasionally on the jambs of the loft loading hatch. Some brick repairs had been carried out on the eastern side of the doorway.

Elevations

The eastern wall had some rectangular marking of secondary grey mortar to imitate more regular stone coursing.

The southern elevation had a central doorway with a large concrete step and a timber doorframe for an outward opening door with a window or vent above. The window on the eastern side of the elevation had a timber lintel and, formerly, a timber frame.

The west elevation had a loading hatch at loft height, with an inward opening ledged and batten door within a timber frame. The northern jamb of the hatch was 0.65m from the wall of the threshing barn. There may have been a feedhole along the northern elevation (there is a gap between the remaining floorboards and the threshing barn at the western end), which may account for this position.

Interior

The lean-to had a raised cobbled floor, with a patch of concrete on the western side. A 20th-century brick-built feed trough extended along the western wall.

A loft floor appears to have filled most of the building, set on north-south aligned joists. Floorboards remained in the eastern half, although only a couple remained to the west. The remnants of a lath and plaster ceiling were also noted in the eastern half of the building.

Roof

The monopitch slate roof continued down from the threshing barn roof in the form of a catslide. It was supported by three purlins holding the common rafters and battens.

5.7 Calf house

Built against the threshing barn, this building was created by infilling the existing roofed space between an adjacent lean-to (5.6) and the cattle shed (5.8). The interior of the building measured 3.45m x 6.6m. The external southern wall was concrete block-built, whilst the partition against the perpendicular lean-to at the eastern end were of timber.

Southern elevation

This elevation was fitted with a low outward opening door in a timber frame with a metal top-tilting window above. The floor level of the calf house was higher than that of the yard and the doorway was therefore elevated by over 0.5m.

Interior

A 20th-century concrete feed trough was inserted along the western wall, with a timber-framed, iron mesh hayrack above. A small concrete step was inserted against the lower eastern corner of the wide threshing barn doorway. The doorway was c. 0.5m above the floor level of the lean-to.

Roof

Two purlins supported the rafters and battens. Slates continued from those on the barn and western lean-to as an extension of the catslide.

5.8 Cattle shed

The three-bay, two-storey building was originally constructed from random angular slate and volcanic rubble, with stone and concrete alterations and repairs. The western wall appeared to be continuous with the root house to the south (5.9). The shed had fallen into a significant state of disrepair, and was completely demolished during the construction work.

Eastern elevation

This elevation appeared to have formerly been open-fronted as it contained two evenly spaced upright posts between the bays. The northern end was hurdled by a late 20th-century metal feeder. The central section was infilled with concrete blocks and the southern section had a ruined rubble wall infill.

Southern elevation

The ruinous nature of the adjoining root house prohibited a thorough inspection of this dividing wall. A vertical break on the southern side, in the eastern elevation, suggests that this may originally have been an external wall. Only c. 0.85m of the western part of the original wall survived. The remainder had been replaced with concrete blocks, and a raised doorway was located at the eastern end.

Western elevation

This elevation was built with angular slate and volcanic stone with a large area of cob. The northernmost of two doorways led to the 20th-century calf house (5.7) and had a timber lintel and doorframe. The southern jamb had been rebuilt with concrete blocks. The southern doorway opened into the adjoining open-fronted lean-to (5.10). This doorway was initially c. 2.1m wide, but reduced in width to 1.5m by the insertion of coursed volcanic rubble, some of which was hammer dressed, and topped by concrete blocks against the northern jamb. The southern jamb had been repaired with red bricks.

Interior

A 20th-century brick and concrete trough extended the full length of the northern elevation, while a concrete trough did the same to the south. This latter trough appeared to be contemporary with the rebuilding of the southern wall. Much of the floor of the building was obscured, although patches of concrete were visible.

Near the centre of the building, two east-west aligned beams projected through the western elevation into the adjoining lean-to (5.10), where they were held in place by horizontal pins. These pins bore on vertical chocks to spread the pressure. A few north-south aligned loft floor joists remained. The ends of three slotted beams, supporting the front posts of the adjacent lean-to (5.10), projected back into this building.

Roof

The roof was slate covered to the west, with galvanised and profile metal sheets to the east. Three nailed A-frame trusses, with curving collars, supported two original purlins on each side. Above these were common rafters, battens and a thin ridge piece, held in brackets on the truss apexes. The roof appeared to have originally continued across the ruined root house to the south (plate 6).

5.9 Root house

This building was located at the south-eastern corner of the yard. The walls were composed of a mixture of stone and cob, generally 0.55m thick, with some machined bricks used on corners and doorjambs. By the time of the survey it was roofless and had all but collapsed. Further elements, notably the cob walling, were demolished during the course of the construction work.

Eastern elevation

This had a 2.4m wide central doorway with a timber lintel. Collapsed rubble walling survived to the north and cob on stone footings to the south. The southern jamb for a first floor opening was noted in the southern half. The collapsed stone walling contained a 0.66m wide concrete block infill of a possible opening.

Airbricks on the southern jamb of the doorway are set in a narrow strip of strap pointed volcanic and slate rubble bonded with a sandy coloured mortar. The northern side of the jamb was composed of machined bricks, which projected 0.25m to the east. There were also signs of adjoining concrete blocks amongst the rubble.

At first floor level, the cob walling contained a jamb for an opening, probably a loading hatch (plate 7). Machined red bricks had been arranged along the south-eastern corner in a pattern similar to that used in the western arch of the threshing barn.

Southern elevation

This elevation was composed of coursed limestone, slate and volcanic rubble. The stones tended to be larger and squarer than those used elsewhere on the site. There were no notable features and little of the slope of the gable remained to indicate the character of the roof. The western end of the wall continued along the end of the adjoining lean-to (5.10).

Western elevation

The remnants were composed of rubble, although the southern half had largely collapsed. The remains of a projecting northern door jamb were seen, although the southern jamb, perhaps 2m away, was obscured by rubble.

Roof

The roof had completely collapsed by 2006, although it appears to have been a continuation of that over the cattle shed to the north. A section of galvanised sheeting attached to some rafters and battens suggest the character of the last cover.

Watching brief

Clearance of rubble revealed a floor level of compacted soil over buried 20th-century hardcore. The footings for the southern wall extended 0.25m wider beyond the facework above (plate 8).

5.10 Open-fronted lean-to

An open-fronted lean-to extended along the western side of the cattle shed and root house (5.8/9). This building was part open-fronted (based on upright wooden posts) and part stone-faced (a continuation of the eastern end wall of the linhay). Internally it measured 2.6m x 20.4m.

Elevations

The western elevation was based on a row of perhaps seven upright timber posts, only four of which survived. The southernmost 4.5m of the elevation was a projection of the eastern end wall of the linhay, although only the footings survived. This had been extended further to the north in concrete

The short southern wall was a continuation of the root house wall. This section had been largely rebuilt with concrete blocks, although the stone footings survived, and were overlain by the adjoining linhay wall.

Interior

The exposed northern part of the floor was of rubble. This end of the building had a horizontal plank partition c. 5m from the northern end. This had a ledged and battened door. A 20th-century concrete feed trough, with a timber-framed iron mesh hayrack above, was installed against the wall of the root house. Another concrete trough extended along the southern wall.

Roof

The rafters of the cattle shed extended to support a slate-covered catslide.

5.11 Linhay

The linhay was a two-storey L-shaped building occupying the south-west corner of the yard, adjoining the southern end of the stable (5.1). The rear walls of the linhay were principally

composed of randomly coursed angular volcanic stone and slate bonded with a reddish mortar. A section of cob survived along the southern elevation. The posts and walls along the front, and the internal partitions, were all of timber.

Eastern and northern frontages

The frontage was formerly open-fronted at loft level and enclosed at the ground floor. The basic structure was composed of evenly spaced vertical posts to support the tie-beam trusses. These sat on stone post pads, five along the eastern face and seven to the north. Shorter posts, only reaching to loft floor level, were located between these tall posts. By 2006, only three of these shorter posts remained. The majority of the taller posts had a series of five slots cut along one of their outer corners and hinges on the other. These accommodated five-bar wooden fenced pens, 1.25m high, with outward opening gates, latched to the shorter posts.

Some horizontal and vertical planking remained, attached to the exterior of these pens. Originally, this probably continued around the entire ground floor. The boarding was a secondary feature and not continued to loft level. Two access passages to the feed passage were located at the extremities of the building, both fitted with a door

Western elevation

This rear elevation consisted mostly of coursed volcanic, limestone and slate rubble, bonded with a sandy pink mortar. A 9.5m long section of cob, about 1.15m tall, extended along the top of the wall at the northern end, 0.2m from the end of the stable. The stonework appeared to be continuous with that of the western wall of the stable. A doorway at this end of the building was accessible via a short flight of steps down from the garden, which was notably higher (about 1m) than the interior of the building and yard level.

Southern elevation

This elevation was built with randomly coursed angular volcanic stone and slate, bonded with a reddish brown mortar, with quoins at both ends. A sub-rectangular patch of cob near the western end of the elevation may well have represented a repair. The purpose of a 0.6m wide hole, c. 12.3m from the west end of the elevation, was not ascertained.

Interior

The linhay was fitted out as a shippen, and divided into eleven compartments, separated by timber partitions. A subdivided brick feed trough, with a timber finished top surface and feed passage, extended around the back of the building. The feed passage was accessed via two short passageways at either end.

The access passage at the north end of the north-south range connected the two external doorways. The passage floor sloped down towards the yard, and a line of bricks had been placed along its southern side against the end of the feed passage to channel any rainwater entering the building from the garden.

To the south of the access passage were five compartments. The northernmost had a cobbled floor. The rest had a common concrete floor and raised cattle standings. Some metal chains for tethering the cattle remained, attached to the timber partitions.

Five more compartments were located along the other range. Two groups were isolated by a small area separated by a timber-framed and galvanised sheet partitioning. It contained two

small concrete mounting blocks, both under 0.4m in length. The purpose of these blocks is unclear, although probably related to dairying. This compartment was presumably entered via an internal doorway in a partition wall on its western side (since removed).

A long brick-built feed trough was located between cattle standings and feed passage. This was subdivided into three sections per compartment, suggesting that they were used for both water and fodder.

Roof

The roof was of slate with a gable at each end and a hipped corner. It was supported by a total of ten tie-beam trusses with kingposts and queen struts. The trusses supported the ridge piece, and a purlin either side, with the rafters above. A 20th-century lining has been added to the underside of the slates. The ends of the tie beams sat in socket holes in the upright beams along the front of the elevation. At the back of the building, most of the ends sat on wooden pads on top of the wall. The northernmost three tie beams, located within a cob section of walling, had also been built over.

Watching brief

A 1.1m deep trench was excavated through the east-west range of the linhay, and on to the stream. Beneath the floor of the linhay, this exposed a 0.2m depth of loose rubble and dirty clay soil over the undisturbed natural clay. Late post-medieval pottery and tile, and a sherd of South Somerset courseware of 15th/16th-century date, were recovered from the dirty clay.

5.12 Small lean-to

This small building was created by adding two walls to a corner between the linhay and the ruined root house. It was constructed from coursed slate and volcanic rubble, bonded with a light reddish brown mortar, and appears to have been strap pointed. The building was ruinous when surveyed, and demolished completely during the building work.

Elevations

Following the concrete block repair of the western end of north wall, the east elevation was slightly separated from it. The wall contained a timber-framed window with a slate sill. The southern elevation had a doorway at its eastern end.

Interior

The interior of the building was coated in a whitewashed lime-based render, which survived on the original walls. The floor had been excavated prior to the survey.

Roof

The lean-to had remains of a galvanised-sheet monopitch roof extending off the adjoining linhay.

6. ADDITIONAL GROUNDWORKS

A 0.4m wide, 0.75m deep pipe trench was excavated from the yard, through the east-west range of the linhay (Fig. 2), to the stream at the bottom of the valley. This revealed c. 0.5m of topsoil and subsoil over the natural clay. Finds from the topsoil included pottery of 20th-century date.

7. DISCUSSION

The rectangular layout of the yard is suggestive of a planned farmstead that has undergone subsequent alteration. The shared north wall of the stable, and potentially the footings of the root house, probably represent the earliest structures on the site.

The stable north wall has a 17th-century appearance. The dressings are fairly ornate and the doorway is perhaps wider than might be expected to serve the building, suggesting a different earlier function. There are breaks and alterations at the eastern end of the farmhouse that suggest it was also remodelled, and it is possible that the stable wall represents a continuation of the northern wall of the farmhouse, which was severed and remodelled during the 18th or 19th century. Conversion of the central window of the eastern elevation to a doorway provided direct access to the yard.

The wide footings at the southern end of the root house, and their continuation under the linhay wall, indicate that a building, probably in cob, predated the significant 18th-/19th-century remodelling of the yard. This may share a date with the early remains at the north end of the stable.

Elements of the construction of the threshing barn suggest it is broadly contemporary with the rebuilding of the stable and the construction of the linhay range. All three feature the same truss style, and both stable and threshing barn have brick dressings. The projection of the threshing barn beyond the northern wall of the stable may be a deliberate, allowing easy access into the western end of the barn without needing to enter the yard.

Although the upper courses of the cattle shed west wall appear to have been built against the south wall of the threshing barn, therefore postdating it, this masonry was probably added when the adjoining lean-to roof was built. No break was evident along the rest of the joint, suggesting that the two buildings were contemporary.

Together with the threshing barn, the stable and the linhay, the root house, the lean-to against the south wall of the barn and cattle shed all seem to be represented on the 1843 parish tithe map (Fig. 3). The shed to the north-east of the threshing barn is not depicted however, and must dated from between 1843 and 1888 when it is first shown on a map (Fig. 4). Its position against the barn suggests it housed some form of power source. Typically such a building might have housed a horse engine for a threshing machine, particularly as the northern elevation of the shed was originally open and would have provided significant ventilation. However, there is no sign of a beam for such an engine and the only opening into the barn is the single doorway, which would appear to be too low set. Based on information supplied by the builders, a waterwheel had been housed within the building, and Mr Heywood, the previous owner, had informed them that it ran a small mill. A working mill would benefit from the good ventilation of the building, and the door between the threshing barn and the shed allow for easy movement between the two.

It is understood from Mr Heywood that the building was used post WWII to house pigs, when the farm participated in a grant scheme to purchase a boar. This would account for the initial layout of pens and the brick troughs. The later pallets and barricading of some of the troughs appear to date from another change of use, such as for lambing pens.

The anomalies within the construction of the root house and cattle shed are indicative of several phases of rebuilding and alteration. These evidently weakened the structure. The last obvious alteration of these buildings probably took place during the late 19th-century, judging by the use of brick quoins.

It is notable that the tithe map of 1843 shows an unroofed area near the centre of the range on the eastern side. The area appears to match the location of the cob walling and altered doorway. The 19th-century trusses here would accord with the unroofed area being covered by 1888 (Fig. 4). This would also suggest that there was a return of the wall across the interior of the cattle shed from the northern jamb of the altered doorway.

Map evidence indicates that the lean-to cart shed was built between 1843 and 1888. The use of a different style of stonework may be attributed to the cart shed being built to blend in with the northern end of the stable, and the fact that it faced the house.

The lean-to looseboxes on the northern side of the threshing barn have brick built walls, and do not feature on the 1904 OS map (Fig. 6). As such, they may be identified as the latest construction on site, most likely dating to the early-mid 20th century.

The concrete block infilling of the southern side of the calf house took place in the mid-late 20th century, and probably replaced an earlier wall shown on the 1889 OS map. The block work appears to be broadly contemporary with the rebuilding of the east end of the threshing barn and the remodelling of the cattle shed.

8. CONCLUSION

The initial impression of the complex is of a planned stockyard of the late 18th/early 19th century. Closer inspection reveals a more complex history, and traces of both earlier and later work survived. The origins of the yard, notably surviving in the stable, and perhaps also the root house, are *c*. 17th-century. The northern stable wall was probably connected to the eastern end of the farmhouse prior to remodelling in the first half of the 19th century.

Variations in construction, such as the use of varied brick patterns, and different methods of positioning the trusses, indicate more than one construction phase within the pre-1843 layout (which consisted of the larger buildings forming the main quadrangle and the first of the leantos on the inner circuit). The mill building was added by 1888, reflecting increasing mechanisation during the late 19th century. Similarly, the use of the stable for cattle reflects, in part, the demise of horsepower during the 20th century. It is also indicative of increasing stock levels, a common factor following WWII.

The final smaller lean-to additions were made during the 20th century, with the northern loose boxes added post 1904 and the concrete frontage to the calf house added during the mid-late 20th century. The last main alteration consisted of the restructuring of what became the cattle shed during the late 20th century. The site, through its continued evolution into the late 20th century, is, in essence, typical of many farmsteads which have survived.

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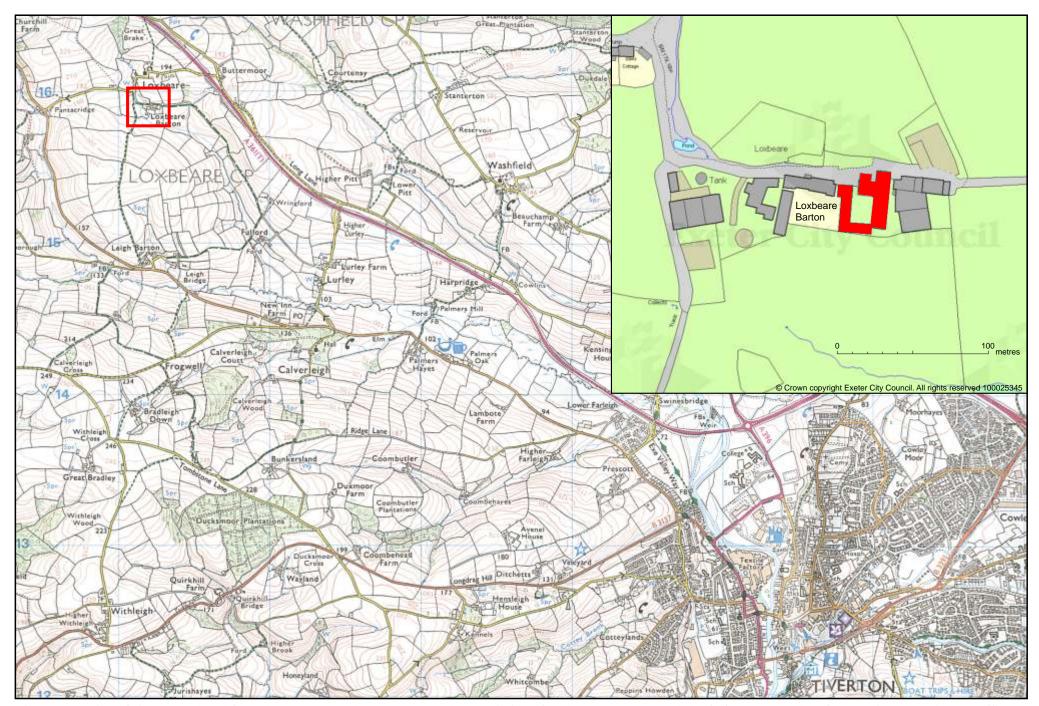


Fig. 1 Location of site. Reproduced from the 1:25000 ExplorerTM map 114 by permission of Ordnance Survey® on behalf of The Controller of Her Majesty's Stationery Office. © Crown copyright 1997. All rights reserved. Licence No. AL 100016685.



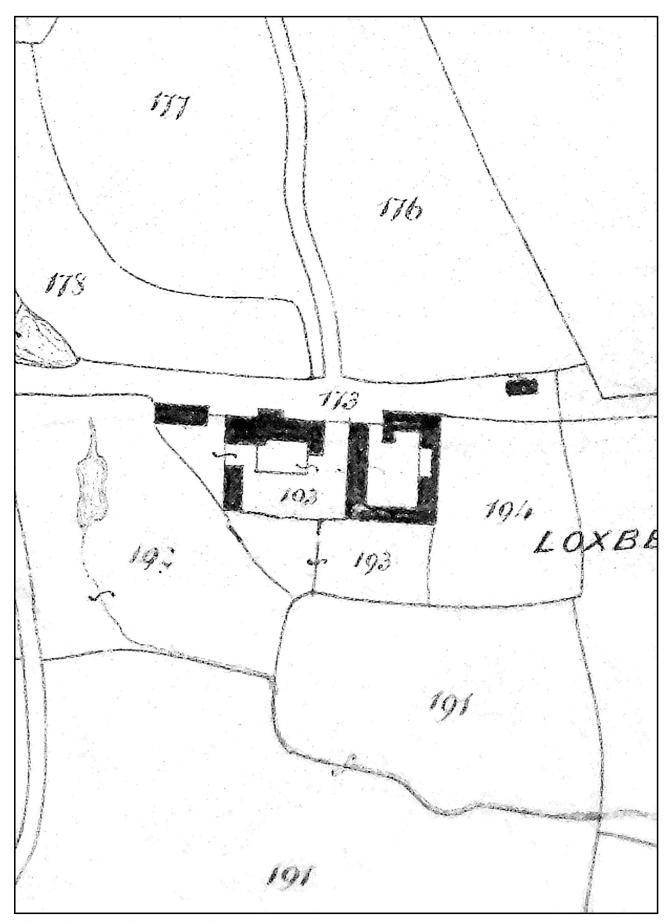


Fig. 3 Tithe Map of Loxbeare parish, Devon 1843.

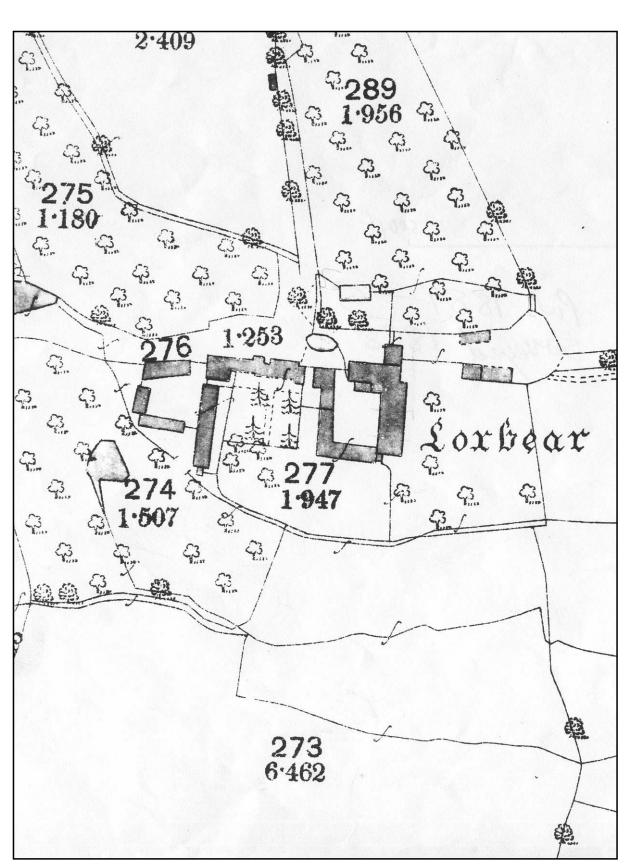


Fig. 4 1st edition OS map 1:2500 Devon sheet XXXIV 13, 1889 (surveyed 1888).

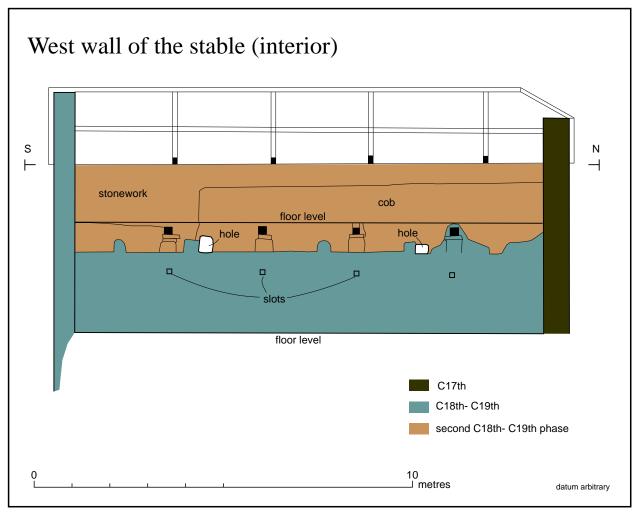


Fig. 5 Interior elevation of the west wall of the stable.

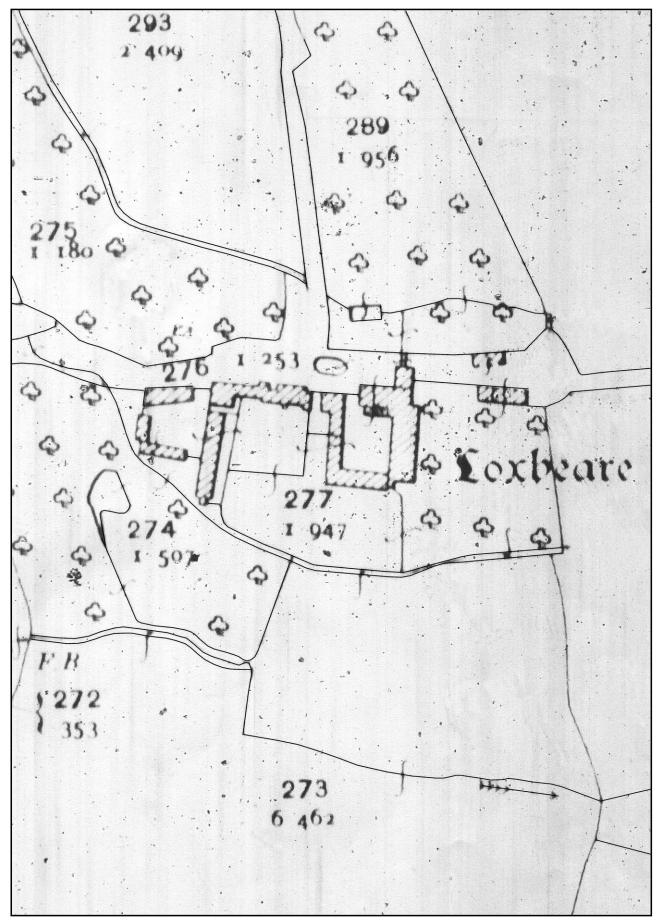


Fig. 6 2nd edition OS map 1:2500 Devon sheet XXXIV 13, 1904 (revision of 1903).



Plate 1 Northern elevation of the stable with adjoining cart shed, arched entrance to garden and eastern end of house on right.



Plate 2 Eastern end of the stable and adjoining linhay on the left.



Plate 3 Tie-beam trusses with kingposts in the linhay.

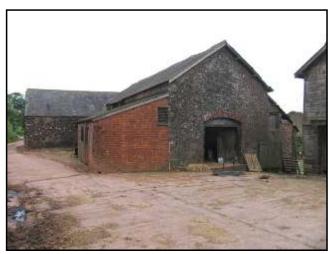


Plate 4 Threshing barn with appendages - late looseboxes on the left, with mill building beyond and another lean-to to the right.



Plate 5 Lean-tos along the front of the threshing barn and the remains of the cattle shed.



Plate 6 The surviving A-frame roof trusses within the ruined cattle shed.



Plate 7 Root house and cattle shed, showing first floor level jamb in the cob walling.



Plate 8 The southern end of the root house after removal of the rubble and demolition of the cob walling.