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Historic Places Investigation

Little Toller Farmhouse,Toller Fratrum, Dorset

Building analysis and survey

Helen Winton

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SUMMARY
Little Toller Farmhouse is a Grade II* building (NHLE 1228875) on the Heritage at Risk Register. A fire in July 2015 caused damage to the roof and first floor and subsequent investigation found structural issues. The Historic England regional Planning Team requested a survey and analysis of the building in order to provide a well-informed response in advance of repairs to the house. The roof structure is particularly noteworthy and comprises two slightly different forms of collar-rafter roof. This was designed to support a barrel-vaulted ceiling of which only fragments survive. Dendrochronological analysis established that the eastern and central part of the roof was constructed from timber felled in the mid-1550s. Although the fire caused damage to the central parts of the roof most of the original 16th century fabric is still in place.

CONTRIBUTORS
Jenny Chesher requested the work. Rebecca Lane and Helen Winton carried out the buildings analysis. Olaf Bayer and Rebecca Lane carried out a Total Station Theodolite survey of the exterior of the building. David Andrews and Jon Bedford carried out a laser scanning survey of the interior and exterior. Helen Winton prepared the plans with assistance from David Andrews and wrote the report. Rebecca Lane edited and commented on the report. All photographs are ©Historic England and are by James O Davies unless stated otherwise. Helen Winton completed the work as part of a placement for an MSt in Buildings History at the University of Cambridge. Thank you to the Historic England project team for their help and support, in particular Rebecca Lane.

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Thank you to the owners of Little Toller Farmhouse for access to the house during the survey. The Dorset History Centre gave permission for the reproduction of the Toller Fratrum tithe map. Thank you to Jenny Chesher for her advice and for commenting on the report.

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INTRODUCTION

Little Toller Farmhouse is a Grade II* building (NHLE 1228875) on the Heritage at Risk Register. A fire in July 2015 caused damage to the roof and first floor and subsequent investigation found structural issues. The Historic England regional Planning Team requested a survey and analysis of the building in order to provide a well-informed response in advance of repairs to the house. In particular, it was felt that the significance of the unusual roof structure needed to be understood to avoid it being compromised during repair. The Historic England List Description, partly based on The Royal Commission on the Historical Monuments of England (RCHME) Inventory of Dorset, states that Little Toller Farmhouse is of mid-16th century date with a 19th-century range at right angles at the south-west corner. The roof structure is particularly noteworthy and comprises two slightly different forms, both designed to support a barrel-vaulted ceiling. Dendrochronological analysis established that the eastern and central part of the roof was constructed from timber felled in the mid-1550s (Arnold and Howard 2016). Surviving decorated plaster fragments (not in situ) suggest a contemporary ceiling with single moulded ribs.

Building survey and analysis were carried out by Historic England Historic Places Investigation and Geospatial Imaging teams to understand the form, development and function of the building. Techniques used included laser scanning, Total Station Theodolite (TST) survey, observation and analysis. The main range of the house was surveyed but the first floor and cellar of the 19th-century south range were not accessible. Only Little Toller Farmhouse was looked at as there are no immediate plans for the other buildings on the site, although the stable block is also on the Heritage at Risk register.

BACKGROUND

Little Toller Farmhouse is in the hamlet of Toller Fratrum about one mile west of Maiden Newton and ten miles north-west of Dorchester in west Dorset (Figs 1-2) at SY 5782 9741. The hamlet comprises a scatter of houses along a dry valley leading down to the River Hooke. It is about a mile east from the larger village of Toller Porcorum and they are usually known as Little and Great Toller respectively. The geology of the area comprises Zig-Zag Chalk Formation over Upper Greensand Formation that makes up the steep drop to the river (British Geological Survey).

The house is one of a group of buildings, including a large threshing barn to the west (NHLE 1279339) and a 16th-century block, once a stable, to the east (NHLE 1228910). These form three sides of a loose courtyard arrangement. The two storey house is orientated east-west with a two and a half storey wing extending north from the east end and a two storey wing extending south from the west end. The parish church, St Basil's, is just to the east of the farmhouse. Although the church was rebuilt in the 19th century, it contains features indicating there was a church at Toller Fratrum from the medieval period. Within the church there is a 12th-century font carved with a series of figures. A fragment of a plaque in the east wall is probably 11th century in date. This shows part of the figure of Saint Mary Magdalene wiping the feet of Christ with her hair (RCHME 1952, 251, Plate 15).

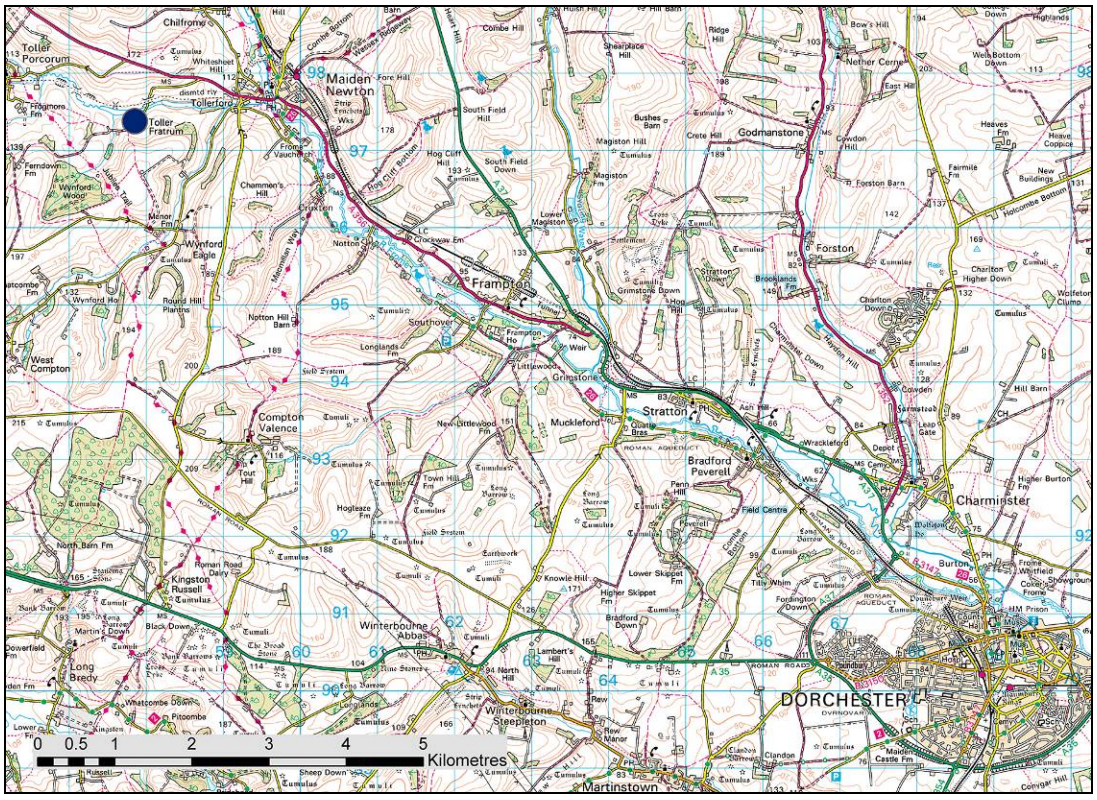


Fig 1Location of Toller Fratrum (blue dot, top left). Base map © Crown Copyright and database right 2018. All rights reserved. Ordnance Survey Licence number 100019088.

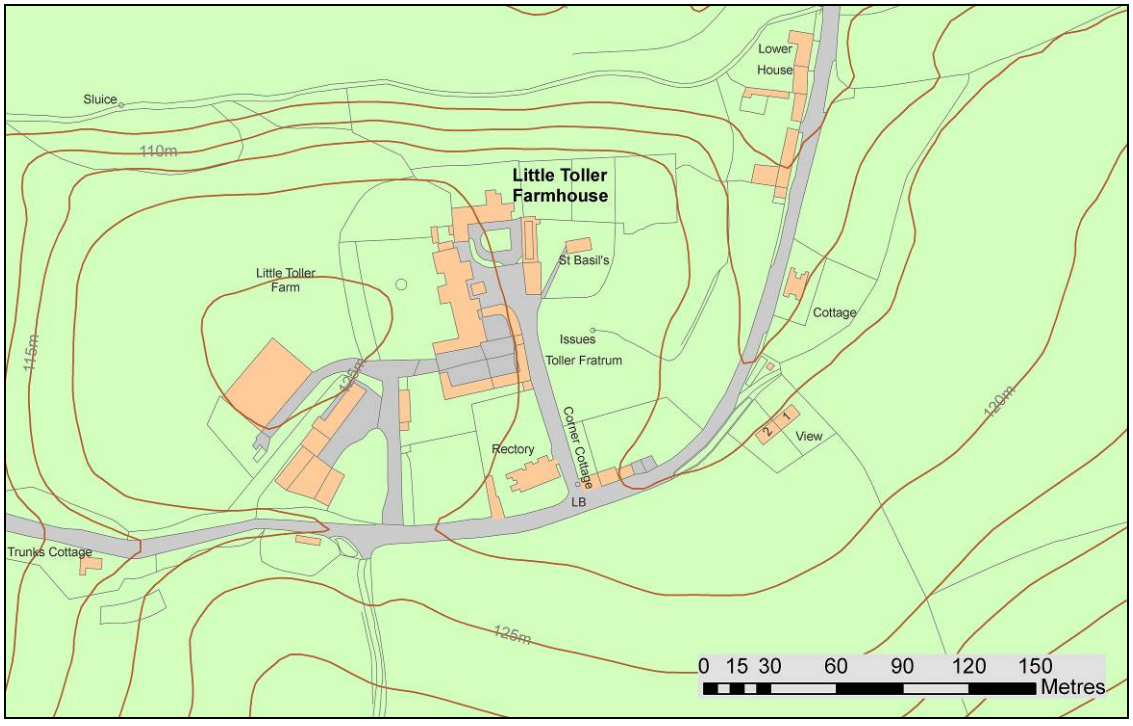


Fig 2 Little Toller village. Base map © Crown Copyright and database right 2018. All rights reserved. Ordnance Survey Licence number 100019088.

HISTORICAL BACKGROUND

The manor of 'Tolre' is recorded in Domesday Book and it relates that 'Oger holds Toller from Walerun. Alward held it before 1066' (Thorn and Thorn 1983, 40). This could relate to both Toller Fratrum and Toller Porcorum or the whole Hundred of Tollerford. The place name 'Fratrum', means 'of the brothers' and is the plural genitive of the Latin 'frater' meaning brother, member of a religious order (Mills 2010, 111). There is documentary evidence that the manor was owned by the Knights Hospitallers and 'the order possessed a smaller estate returned in 1338 as the 'camera' of Chilcombe, which comprised the manors of Chilcombe and Toller Fratrum with the rectory of the latter; it was valued at £4 5s. 4d., paid 30 marks into the treasury at Clerkenwell, and was farmed out to Ivo de Chilcombe.' (VCH Dorset II 1908, 92). A publication on the cartulary of Buckland Priory includes references to Toller and there is a transcription of a document, quoted as dated 'in the said convent of Rodes ...1387'. This mentions default of payments on 'parcels of Chiltecomb and Tolre whereof they have an estate by grant of the chapter' (Weaver 1909, 16-17). The grant of land to John Samways in the 1540s also mentions that the 'rectory of Toller' belonged to the priory of Buckland (see below).

The association with Buckland Priory seems to have led to the idea that there was a preceptory, or other monastic buildings at Toller Fratrum. For example, the first and second edition Ordnance Survey maps (1888, 1902) are annotated 'Little Toller Farm on site of Monastery' (Fig 4). However, the reference to the rectory of Toller in the various documents listed above suggests there was a church with associated land rather than a monastic site. A document of 1307 refers to a grant of a messuage and appurtenances at 'the vill of Tolree' (Weaver 1909, 104) suggesting that it was a manor. Therefore, there is no evidence that Buckland Priory had any presence at Toller Fratrum but there may be some medieval fabric relating to a rectory or an early manor house. The presence of a medieval church is indicated by the font and wall plaque in St Basil's church.

The house is traditionally associated with John Samways, from Martinstown sometimes called Winterbourne St Martin (Oswald 1959, 78-9). The 18th-century county historian John Hutchins (1698-1773), in his *History of the County of Dorset* relates how John Samways acquired the manor of Toller Fratrum, with other lands (Hutchins 1803, 260). These were all formerly owned by religious establishments and were presumably confiscated by the Crown as part of the Dissolution of the monasteries from 1536 to 1540.

Hutchins suggests that John Samways gained the manor in 1539/40 and still owned it in 1585/6. He relates that '31 Henry VIII...this manor (Toller Fratrum), and the rectory of Toller and Wynford Eagle, and the advowson of the vicarage, belonging to the priory of Buckland, Somerset, and lands etc called Silke in Winterbourne St Martin, late belonging to the priory of Merton, Surrey, were granted to John Samways, for £409 15s, paying yearly for the former 44s for the latter 15d. They were held by him, 28 Elizabeth, of the queen in chief, by the 20th of a fee, value £21 11s 6d.' (ibid, 260). A transcription of a document of 1552, linked to the appraisal of all church property, listed Henry Abrahams as the rector and John Samwyse as the principal parishioner in Toller Fratrum (Barnes 1904, 205).

The presence of the Samways family in the parish is confirmed by the parish register where the earliest surviving entry, on a page headed 'Toller Fratrum' relates to a burial in 1558. This also has an entry for the death of 'the wife of John Samways Esq' in 1562 (Parish Records of Toller Fratrum and Wynford Eagle 1558-1810, Dorset History Centre (DHC)). The death of John Samways is recorded in the parish register as 'The 22 day of February departed this world John Samways Esquire and patron of Toller Fratrum, and his corps was buried the 28 of the same month 1585. 28. Elizabeth Reginae aged about 62 years old.' As this John Samways was probably only 16 in 1539/40 it is unclear if it was he or his father, John Samways who acquired Toller Fratrum manor. However, it is likely that it was John Samways (c1523-1585) who had the house built in the 1550s. The initials 'I S' and what is thought to be the family coat of arms are carved on the adjacent stable block to the south east of the house.

The Samways family were associated with Toller Fratrum through the 16th and early 17th centuries. Documents record them as 'of Toller Fratrum', for example the will of John Samways in 1623, and the parish register confirms the family were probably living in the house as it records some of their births and deaths. Bernard Samways (died 2 Jul 1645 aged 96) was the last male heir at Toller Fratrum. His daughter Elizabeth Samways married Francis Fulford of Great Fulford, Devon. They were living in Toller Fratrum parish, almost certainly in the house, as the parish register records 'John son of Sir Francis Fulford, Knight and Dame Elizabeth his wife baptised 28 October 1610'.

The hearth tax assessment for Dorset for Michaelmas 1664 (based on a 1662 assessment) records the numbers of hearths per household in Little Toller Tithing. George Fulford Esq. is listed with ten hearths (Meekings 1951, 6). This suggests the house was divided into at least 10 rooms at this point. The large number of heated rooms indicates the house was of relatively high status for the time. The death of Francis Fulford is recorded in the parish register in May 1664. His son, George Fulford, inherited the estate.

A legal dispute in 1698/99 is described in The National Archives Catalogue (TNA) as 'Francis Fulford vs John Sydenham and his wife Susanna Capital messuage, barton, or farm lying in Toller Fratrum, called Toller farm (Dorset), lately belonging to George Fulford, former husband of defendant, &c., &c. Tithes' (TNA E 134/10Wm3/Mich2) . The Sydenham family lived in nearby Wynford Eagle and were major landowners in the area.

A lease dated 18th September 1729, for property in Toller Porcorum includes mention of 'Francis Fulford, son and heir of Francis Fulford of Toller Fratrum, esq, deceased' (DHC D1/8312). The parish register recorded the death of Francis Fulford Esq. in April 1729 and a will for Francis Fulford was written on 26th March 1728 and proved on 10th September 1731 (TNA PROB 11/647/315). This states that he is 'of Little Toller alias Toller Fratrum' and stipulates that he be buried in the parish church. Amongst other bequests, his will mentions household goods and the parlour chamber in the house. The household goods, including books, a harpsichord and silver items suggests a relatively wealthy family. The will also mentions coaches and horse, livestock and the dung heap demonstrating their links to farming in the

parish. It is not entirely clear whether the Fulfords lived in the farmhouse in the period from the 1730s onwards although it is likely that Catharine Fulford, as a main beneficiary of her husband, stayed in the house until her death. This is recorded in the parish register in 1745 perhaps indicating that she still lived at Toller Fratrum.

The will of another Francis Fulford was proved in 1749 and he was almost certainly the son and heir mentioned above (TNA PROB 11/768/446). The will records that he inherited the substantial ancestral estate of Great Fulford in Devon. It also states that he held 'the several manors of Toller Porcorum and Toller Fratrum Winford Eagle and Chilfrome... and likewise one dwelling house situated in the town of Dorchester'. However, the will also states that they are to be sold to pay for debts. It includes mention that his wife 'if she pleases shall or may live and remain in my capital house at Fulford' suggesting that they did not live at Toller Fratrum. The will of John Fulford, proved 1780, makes no mention of Toller Fratrum or estates in Dorset (TNA PROB 11/1066/241). This suggests they had been sold in accordance with his father's will. The last Fulford recorded in the Toller Fratrum parish records is 'Dorothy the sixth daughter of Francis Fulford esq and Catharine his wife' who died on 3rd July 1760. However, her will states she is 'Spinster of Maiden Newton' and makes no mention of property in Toller Fratrum. Therefore, it seems that the Fulfords disposed of Toller Fratrum manor after the death of Francis Fulford in 1749.

A reference in his will, proved in 1777, suggests that George Browne Esquire of Frampton purchased the manors and dwelling house in Dorchester mentioned above from the Fulfords (TNA PROB 11/1030/122). This was possibly in the 1760s, and perhaps in response to a newspaper advertisement in 1762. This provided detail of the sale of 'The fee-simple and Inheritance of the Lordships and manors of Toller Porcorum and Toller Fratrum....Also....all that capital messuage, mansion house, farm and demesne lands, called Little Toller; consisting of a good dwelling-house, and out houses, and near 800 acres of land, lying adjoining to the above manors; now let to Mr Henry Davis, at 305l a year, with reserve of part of the dwelling house' (*The Salisbury Journal* 27th September 1762 Number 1273, Volume XXVII, 2).

A deed to found a school at Great Toller, dated 28th November 1772, describes the indenture between George Browne Esquire of Frampton and John Whittle Gentleman of Frampton (DCH PE/TRP:SC 1/1). This includes provision of land for the schoolroom with a house and garden for a schoolmaster at Toller Porcorum. It also relates that George Browne will erect the buildings at his own expense but that costs for the maintenance of the schoolmaster and repair of the schoolhouse and buildings will come from a perpetual rent charge on 'the capital messuage farm and demesnes of Little Toller otherwise Toller Fratrum'. Little Toller Farm is described as in the possession of Edmund Henning, under tenant. Hutchins quotes a deed of 1774 where an annual sum of money (£15) is to be taken 'out of the capital messuage, demesnes and farm of Toller Fratrum, otherwise Little Toller...to be paid yearly...and equally divided amongst 60 of the most industrious poor persons...of the parishes of Toller Porcorum, otherwise Great Toller and Toller Fratrum, otherwise Little Toller' (Hutchins 1803, 268). It is not clear why Little Toller Farm

was chosen to fund these bequests but it demonstrates that the farm was thought to be profitable enough to support them.

George Browne died in 1777 (from the date of the proving of his will) and his son Francis John Browne inherited Toller Fratrum. Francis John Browne Esq is named as owner, and John Whittle as occupier, on land tax returns from 1794-1832 (DHC).

The tithe apportionment of 1841 lists Thomas James Willis Fleming as the owner of the house and virtually all of the land in the parish (DHC T/TRF). John Whittle is recorded as occupier of all Fleming's land. This comes to almost 500 acres and includes all but two of the land parcels and buildings in Toller Fratrum parish. The church, churchyard and the house to the west of the lane leading to the farm were occupied by the incumbent Reverend Edward Butt (Lots 1 and 30 on Fig 3).

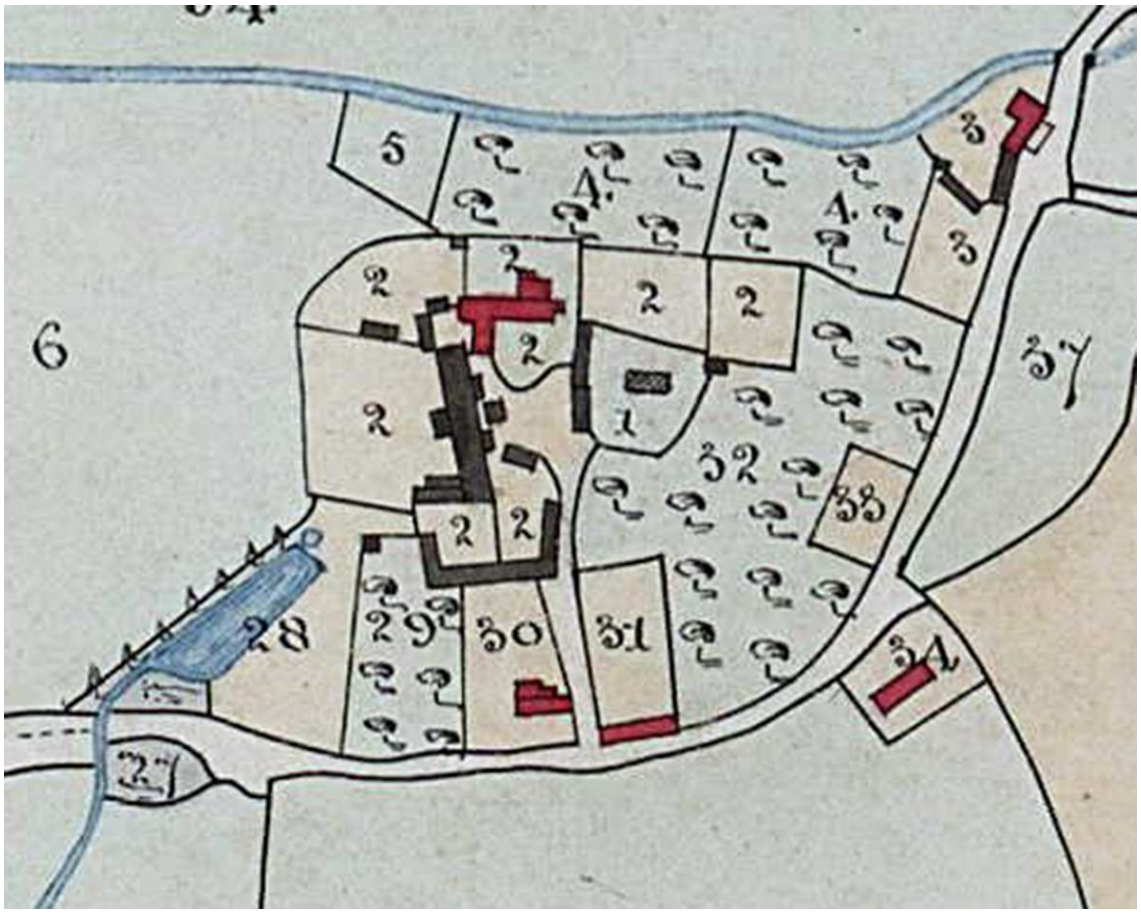


Fig 3 Extract of the 1841 tithe map for Toller Fratrum. Reproduced with the permission of the Dorset History Centre.

The census records, taken every 10 years, show two further generations of the Whittle family living at Little Toller Farmhouse from 1841 to 1871. The head of household is successively named as John Whittle (son of John Whittle mentioned above), Mary Whittle his widow and then their son Edward. The Whittle family appear to have been people of some status and farmers of large areas of land within the parish and elsewhere. In his will (1806) John Whittle describes himself as 'of

Toller Fratrum' and 'gentleman' (TNA PROB 11/1437/77). He left large sums of money (gifts of hundreds or thousands of pounds) to his relatives as well as property in Maiden Newton and Frampton. In 1829 and 1830, his son John Whittle is described as 'yeoman' and is recognised as the only person eligible for jury duty in Toller Fratrum parish (Jury Lists, England, 1825-1921). The tithe apportionment also shows that John Whittle owned land and some property in Chilfrome and was occupier of various land parcels in Frome Vauchurch and Wynford Eagle parishes. The census records the presence of servants in Little Toller farmhouse from 1841-71. The 1851, 1861 and 1871 census records mention the areas farmed and numbers of workers – in 1851 it is 700 acres and 40 labourers, in 1861 it was 1050 acres, 30 men and 10 boys but in 1871 it was down to 424 acres and 26 labourers. The 1841 tithe apportionment shows that the Whittle family were tenants and owned land outside Toller Fratrum parish but it is not clear how the areas mentioned in the census records relate to this. However, the size of land being farmed, as described in the tithe apportionment and census records partly explains the large size of the farm complex.

Therefore, it is possible that the Whittle family had the resources and the time to invest in Little Toller Farm through the late 18th and 19th centuries and may have made some alterations to the house. However, it is likely that the owner, Francis John Browne, funded any major alterations to the house in the early 19th century. It is likely that it was Francis or George Browne who built, or substantially rebuilt, the church of St Basil's in the 19th century.

William Samuel Best, Lord Wynford, acquired the house in 1867 but lived at nearby Wynford House in Wynford Eagle (Oswald 1959, 79; Hutchins 1863, 701). The census lists different occupants of the farmhouse at Toller Fratrum in 1881 (Malcolm Bicknell, Farmer) and 1891 (Mary Winzar, caretaker-domestic) and the Studley family are listed in 1901 and 1911. No servants are listed after 1881. The house appears to have been in dual occupation when the RCHME investigators visited in 1938, as they could not view the interior of the western portion. However, the census records two heads of household on one occasion only, in 1881. Numbers were assigned to properties by the census enumerator, rather than being street numbers, but the entries seem to refer to two parts of the same property. Number 9 is annotated as 'The Farmhouse' with Malcolm Bicknell listed and Matthew Marsh, a labourer, is listed as the head, and sole occupant, of 9a. The house at Toller Fratrum continued in use as a farmhouse throughout the 20th century. JJ Studley is mentioned as the outgoing tenant and HP Yeates as the incoming tenant in a farm evaluation in 1935 (Dorset History Centre D-ENS/F/1/1061).

The Ordnance Survey 1888 first edition 2 inch to the mile (1:2500 scale) shows a similar layout to the earlier tithe map. The house is shown with the same layout as the current plan except that the main east west range projects west beyond the south wing. This was a single storey lean-to that was removed in the late 1960s (see below for more detail).

The tithe and OS first edition map show that Little Toller Farm comprised a substantial complex of buildings and all survive in varying states of preservation. This includes the stable and attached cart shed to the south-east of the house and

the large barn to the south-west of the house (Fig 4). There is a granary just to the east of the barn. To the south of the barn, there is another group of buildings forming three sides of a courtyard, probably the milking parlours. The projection on the rear of the barn is a wheelhouse for a water wheel presumably to drive farm machinery. The 1888 map shows the water supply system including header pond, aqueduct and pump. These elements and the buildings represent a complex but coherent group.

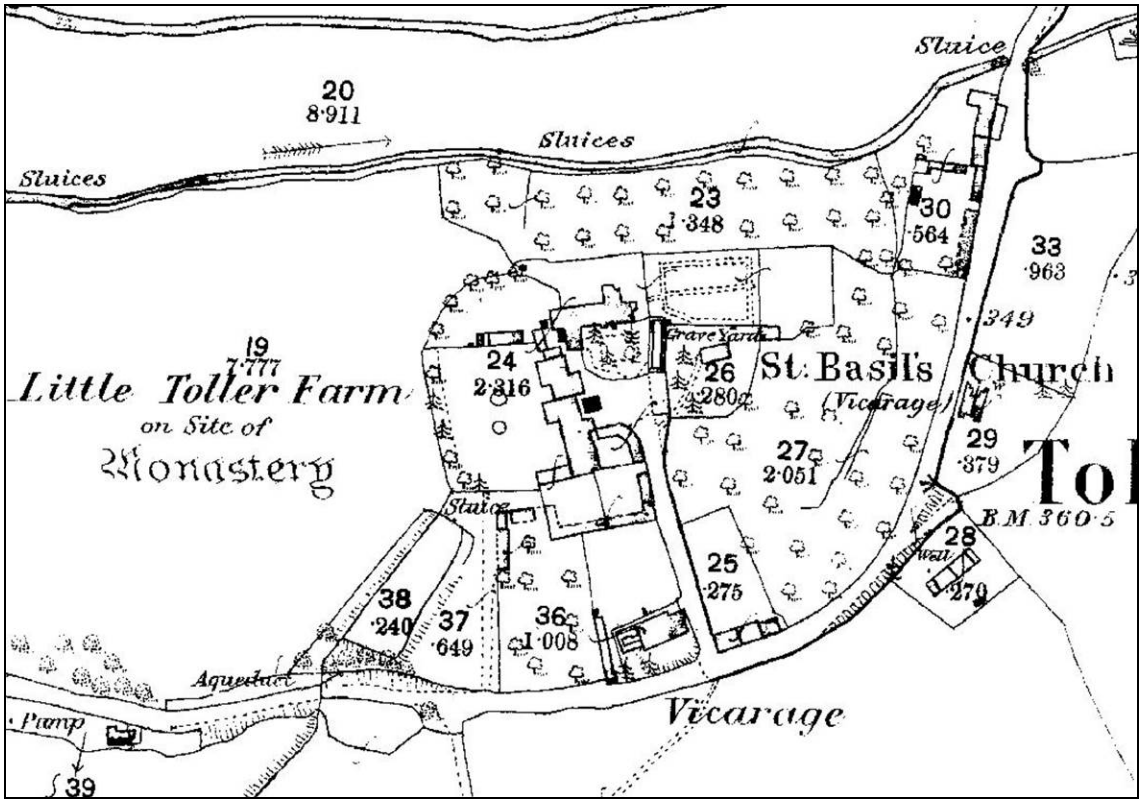


Fig 4 Ordnance Survey first edition map of 1888 showing the layout of the farmhouse and associated structures including viaduct to feed a water wheel by the barn. © and database right Crown Copyright and Landmark Information Group Ltd (All rights reserved 2018) Licence numbers 000394 and TP0024.

PREVIOUS WORK

Little Toller farmhouse is noted for its 16th-century origins in various publications but there has been no major study of the fabric. The documentary research by the historian John Hutchins (1698-1773), in his *History and Antiquities of the County of Dorset*, is a major source for much of the history linked to buildings in Dorset (Hutchins, 1803, 219-272). This research is acknowledged in the Royal Commission on the Historical Monuments of England (RCHME) volumes on Dorset. Hutchins' documentary research on Toller Fratrum is repeated in a number of publications but is not always acknowledged. Hutchins quotes original documents linked to ownership of the house from the 16th to 18th centuries and provides pedigrees of the Samways and Fulford families linked to Toller Fratrum. The third edition provides a brief description of the house and adjacent buildings including the heraldic carvings on the exterior. It referred to a 'circular cylindrical ceiling' and plaster ornament on the interior of the east gable. The house is described as 'one of the most picturesque of the old manor houses of this period remaining in Dorset' (Hutchins 1863, 701).

Arthur Oswald identified Little Toller farmhouse as one of a significant group of Tudor buildings in north-west Dorset with characteristic carvings. This included the use of octagonal shafts at the corners, often carrying heraldic devices (Oswald 1959, 20). Oswald seems to have visited the house and as well as describing the exterior, he mentioned 'a great barrel ceiling, running the whole length of the first floor and once, no doubt, ornamented with plaster decoration' (Oswald 1935, 28). A later edition mentions 'an arched brace collar beam roof, below which there used to be a barrel ceiling' (Oswald 1959, 79).

The RCHME examined the exterior in 1938 and the notes reference Arthur Oswald's publication including mention of the 16th-century date and the link to John Samways (Historic England Archive (HEA) Inventory Notes for Toller Fratrum Parish). The RCHME investigator, Edward R Rahbula, described the exterior of the farmhouse and stables and noted the overall arrangement of the main buildings forming three sides of a courtyard. He described the main exterior elements of the farmhouse including the stringcourses, original first-floor windows, octagonal shaft and the heraldic carvings. He included sketches of the profile of the stringcourse, moulded window jambs and similar details of the stables.

In 1947 the RCHME visited part of the interior. RWH McDowall (and 'RJB') added notes and sketch plans of the house, barn and stables as well as sketches of the south and east elevations of the house and the west elevation of the stables (Fig 5). The 1947 RCHME notes relate that 'the whole length of the main range of the house has an arch braced collar beam roof, below which a later flat ceiling has been inserted' and the investigators observed decorated plaster on the interior east gable wall. The RCHME sketch plans and elevation also show the, now demolished, single-storey lean-to at the west end of the house.

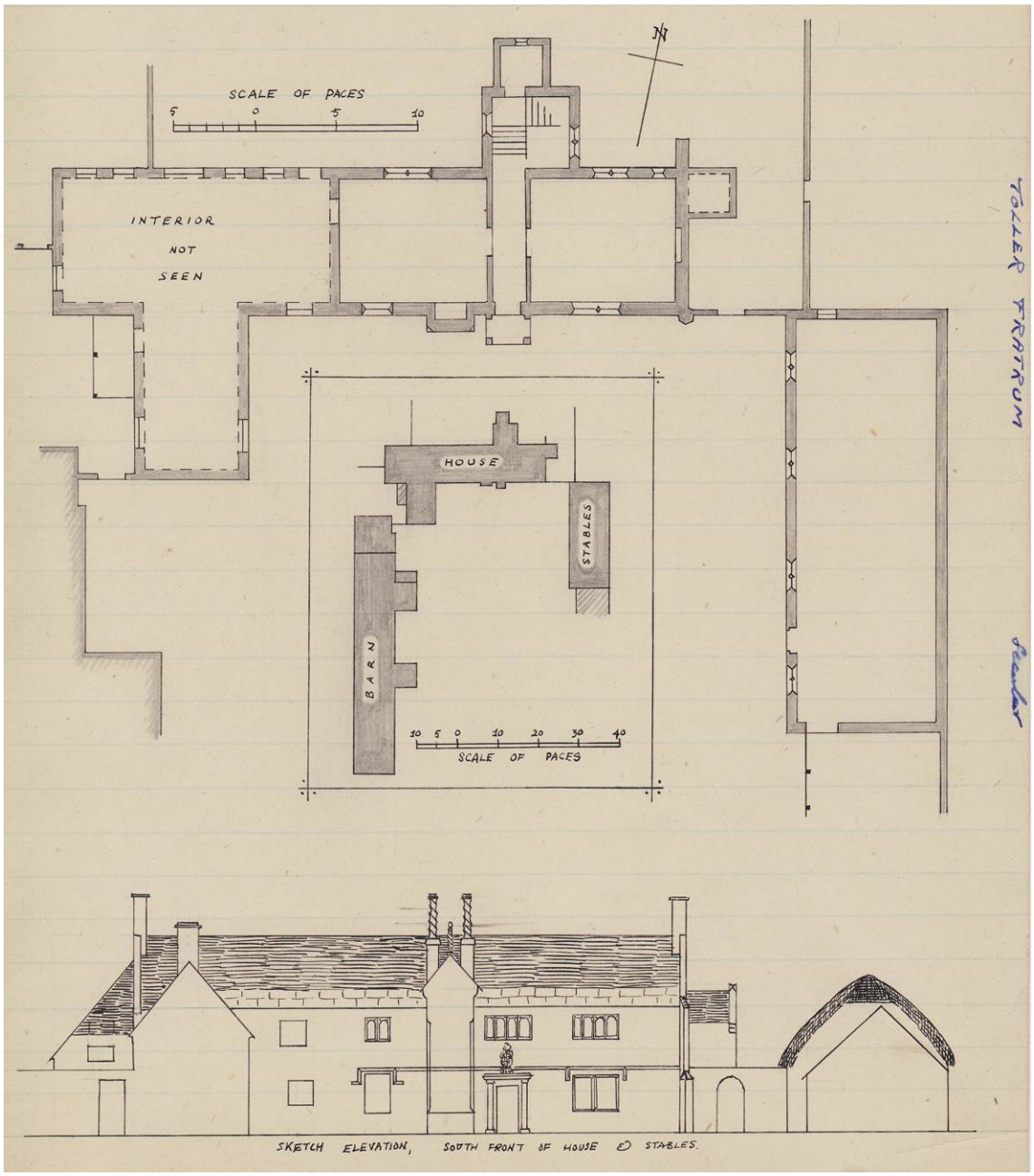


Fig 5 1947 RCHME sketch plans and elevation of the house and associated buildings. HEA IN00484.

The RCHME Inventory notes record different interpretations of the phasing of the wing projecting south from the west end of the house. A pencil annotation refers to medieval origins and the suggestion that the wing was an early 19th-century addition is crossed out. However, the 1952 RCHME publication reverts to the original interpretation that the west wing is a later addition to the farmhouse (RCHME 1952, 251).

Ann Atkinson produced a site evaluation for a Post Graduate Certificate in Architectural History at Oxford University (Atkinson 2007). This included

photographs, plans and an interpretation of the history of the house and associated buildings. A small surviving fragment of the decorated ceiling was still in place in 2007 (Atkinson 2007, 87, Photo 148).

After the fire in July 2015, there was damage to the central parts of the roof and the first floor. Examination by a structural engineer found that parts of building were structurally unstable, including the area of the main stair at the east end (J Chesher pers comm). The whole structure was encased in scaffolding and a corrugated iron cover was placed above the roof. Slates were removed from the whole of the eastern and central parts of the roof exposing the trusses. A historic buildings statement was written in support of the Listed Building Consent for repairs (Cursham 2016). This came to different conclusions on the phasing of the building to those in this report.

Dendrochronological analysis, funded by Historic England, used samples from the eastern and central part of the roof. This concluded there was a single phase of construction for this part of the roof as the timbers were probably felled in a single episode in the mid-1550s (Arnold and Howard 2016). See below for further discussion.

BUILDING ANALYSIS

Introduction

Little Toller Farmhouse comprises a main range, 27m long, orientated east-west with a south facing doorway adjacent to a large projecting lateral chimneystack (Figs 6-7). There is a small one-and-a-half storey projection from the east gable. A two-and-a-half storey wing extends north from the east end of the main range and this has a small single storey extension (Fig 8). A two-storey wing extends south from the west end of the main range. These are described in the report as the north wing and the south wing.

The house is constructed of coursed rubble and has ashlar facing on the south elevation of the main range except at the west end where it meets the south wing. The ashlar on the south elevation is a mix of orange-brown limestone and pale-grey sandstone. The coursed rubble is mainly of pale-grey sandstone. The orange-brown limestone was used for dressings on what appear to be original openings on the south and north elevations. The Strategic Stone Study reports that the house has 'Upper Greensand ashlar walls with Ham Stone dressings' although it is not clear whether this is based on any detailed analysis of the building (BGS 2012). The orange-brown limestone, probably 'Inferior Oolite', may have come from closer sources than Ham Hill, as there were quarries across west Dorset including those around Mapperton not far from Toller Fratrum (English Heritage 2012, 4-5).

Fig 6 The central and western parts of the south elevation of the house. The photograph was probably taken in 1947 by RCHME investigators. HEA IN00484 DM 1524.

Fig 7 The eastern part of the south elevation of the house. The photograph was probably taken in 1947 by RCHME investigators. HEA IN00484 DM 1525.

Fig 8 The north (rear) elevation shortly after the fire.

Phase 1: East and central parts of the main range - mid 16th century

The earliest phase comprises the eastern and central parts of the house to a point about 17.6m west from the east gable (point A on Figs 9-10). There are two storeys with a common rafter roof almost certainly intended to take a barrel vaulted plaster ceiling. This phase is identified principally by the high-quality ashlar stonework on the exterior, the style of the first-floor windows and a difference in wall width between this part of the house and other areas. There is a straight joint on the south elevation 17.6m west of the east gable (point A on Figs 9-10, Fig 23) where the stonework changes from ashlar to coursed rubble. This roughly corresponds to the position of a change in wall width between 16m and 17m west of the east gable (point B on Figs 9-10). The roof trusses change in form at a point 15.4m west from the east gable (point C on Figs 9-10). Dendrochronological analysis of the roof up to the point where the form of roof trusses change showed it was constructed from timbers probably cut in a single episode in the mid-1550s (Arnold and Howard 2016). See below for a more detailed discussion of the roof.

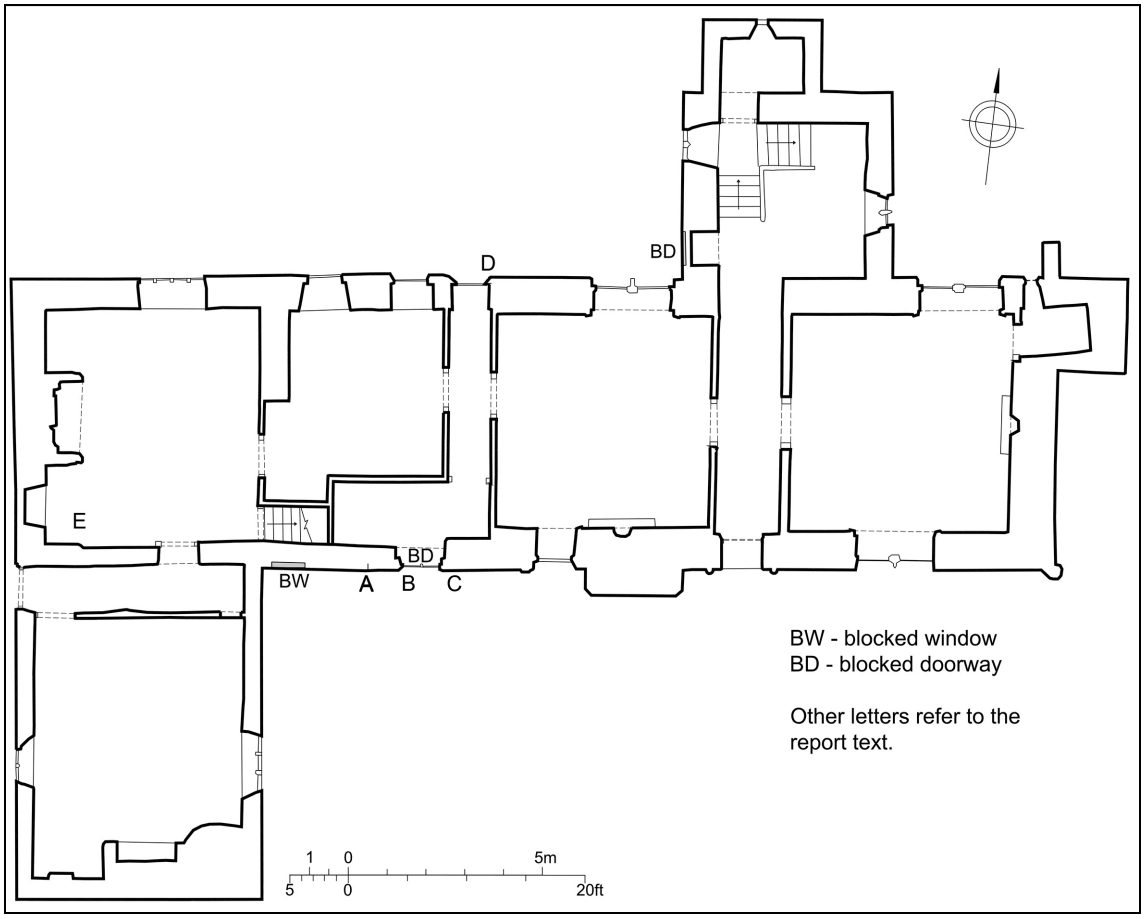


Fig 9 Ground-floor plan.

The exact plan form of the first phase of the main range is unclear and, given the relatively high status of the features surviving from this phase, it is possible that it was intended to form part of a larger building. There is no evidence of a stone wall, or a timber partition, at the western end of phase 1 of the main range (A-C on Figs 9-10) and it might have been unfinished until the addition of the rest of the building. From the visible evidence, it is not possible to determine the original layout of rooms but there are indications that there were at least two rooms on both the ground and first floors. The doorway to the house is immediately to the east of the chimneystack on the south elevation. Although altered, the opening in the north wall on the ground floor opposite the front door could indicate the position of an original rear doorway. This would have created a cross-passage arrangement at ground-floor level. The large (2.5m wide) lateral stack on the south elevation and the end stack on the east elevation appear to belong to the first phase. This indicates that there were probably two heated rooms on each floor. There was almost certainly a high-status room on the ground floor, perhaps intended to act as a hall. On the first floor, the two rooms were probably the full depth of the house, and each appears to have had a decorated barrel-vaulted plaster ceiling.

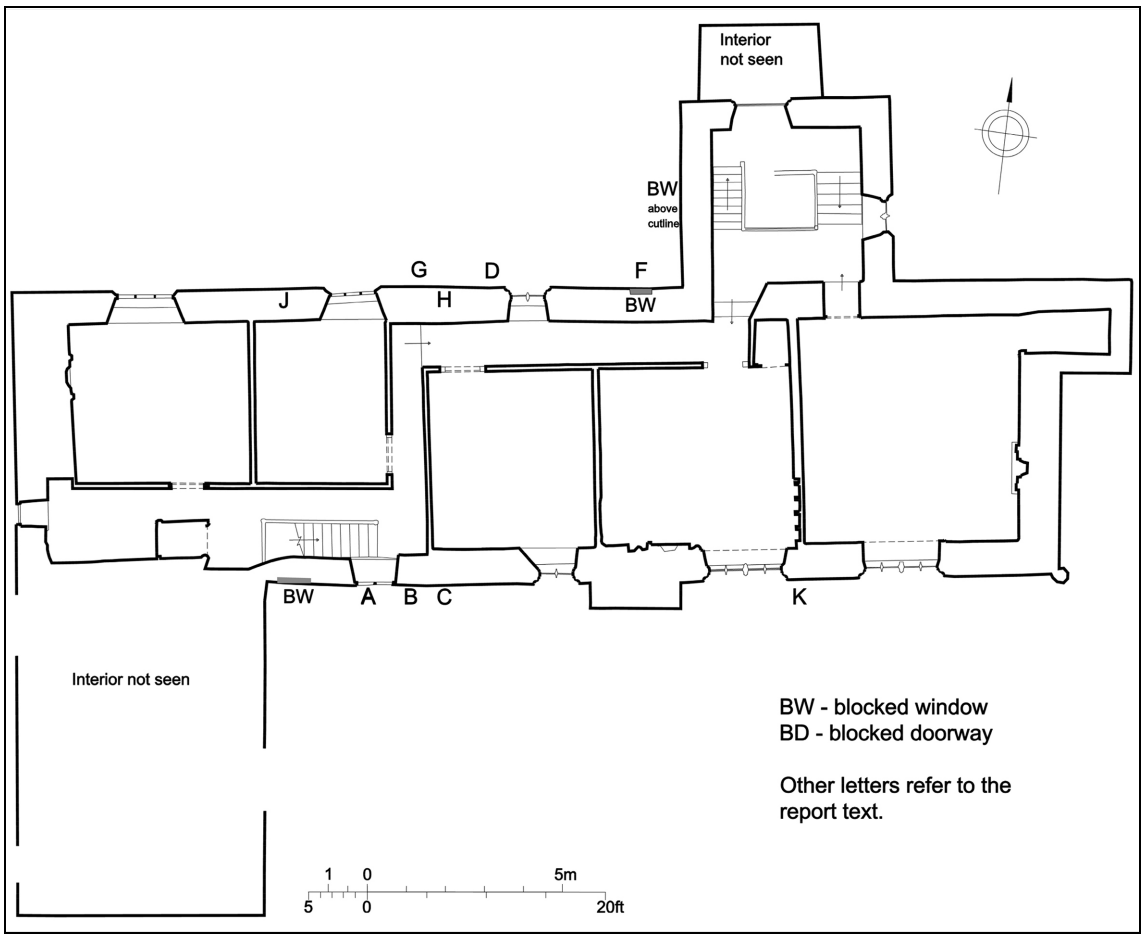


Fig 10 First-floor plan.

A one and a half storey tower with a pitched roof, projecting from the east gable, probably held a stair and possibly also a garderobe. There is no joint or disturbance in the external masonry between the stair tower and the main range so it is likely they were constructed at the same time. There is a small arch-head window on the ground floor of the north elevation of the stair tower, but it is not clear if this once lit the stair or is a later insertion. There is a buttress supporting the north elevation of the main range where the main east gable meets the stair tower projecting from the east elevation. This appears to be an original feature, as although it is constructed from larger blocks of stone than the coursed rubble, the string course that extends across phase 1 parts of the north elevation (see below for more detail) continues around the buttress.

The ground-floor windows to either side of the lateral stack and doorway on the south elevation have been altered. However, the hood moulds above the windows probably indicate the position and width of original window openings and are in line with the windows on the first floor. A drop in level of the string course to the west of the window, on the west side of the chimney stack, probably indicates the original base level of the windows.

On the north elevation, the ground-floor windows, to either side of the later north wing, have been altered (Fig 11). However, the presence of large relieving arches above shows they are original openings and that the first phase windows were probably the same width as now. The ground-floor window at the west end of the building has a hood mould similar to those on the front elevation. There is a blocked window on the first floor of the north elevation, adjacent to the west side of the north wing (Point F on Fig 10). It has orange-brown stone dressings and probably relates to the first phase of the building. To the west, there is a two-light arch-headed window, which also appears to be part of this phase. A plinth, with a simple hollow chamfer on top, extends along the lower part of the ground floor on the south elevation. This appears to be an integral feature to the wall and is made of the same materials. There is no plinth on the north elevation in keeping with the generally plainer appearance at the rear.

About 0.75m above the plinth, there is a string course with an ogee moulding that probably once extended continuously across the south and north elevations of phase 1 of the house. The string course is now interrupted by the ground-floor windows but it is likely that originally it ran underneath the window openings forming the sill of the windows. On the south elevation, the level of the string course drops slightly, adjacent to the west side of the ground-floor window to the west of the chimneystack. On the south elevation the string course extends further to the west beyond the phase 1 section of the building (see phase 2 discussion below). On the north elevation, the string course terminates adjacent to the external north doorway on the main range, approximately 14m from the east elevation (point D on Figs 9-10). This appears to demarcate the extent of the first phase fabric to the north of the building, although alteration further west makes the exact extent hard to determine. The string course does not extend across the east elevation or around the stair tower but does extend around the adjacent buttress.

Fig 11 The east end of the north elevation. The roof of the stair tower is just visible top left of frame. The ground-floor window in the main range has been altered but the relieving arch above shows it is an original opening. HEA DP196818.

Fig 12 The south elevation showing the string course extending across the top of the ground floor window to the east of the front door. Photo: Helen Winton.

Above the ground-floor windows on the south elevation there is a continuous moulded string course with hollow chamfers and a central roll moulding (Fig 12). It extends for about 14m, from the window to the west of the chimneystack to the east edge of the front elevation. This string course has labels projecting downwards from it, framing the top of the windows. There is no corresponding string course above the windows on the north elevation in keeping with the generally less decorative appearance there. However, there is a hood mould with labels above the easternmost window on the north elevation (Fig 11).

Fig 13 Upper part of the first-floor window at the east end of the south (front) elevation. HEA DP196796.

On the first floor of the south elevation there are two four-light arch-headed windows to the east of the chimneystack (Fig 13). There is a two-light arch-headed window to the west of the stack. The window dressings on this elevation are carved orange-brown stone with ornate ogee moulded surrounds on the exterior splays. On the interior and exterior, the arched tops of these windows are framed by deeply carved sunk spandrels and the mullions have hollow chamfers. Both of the four-light windows have a central king mullion with a small roll moulded shaft rising along their external and internal faces.

The ornamental carvings on the exterior include an octagonal shaft with concave sides on the south-east corner of the building with a spiral pedestal and a carving of a dragon on top (Fig 14). There is photographic evidence that shows the figure was removed for part of the 20th century, but it is likely that it is in its original position. The lateral chimneystack on the south elevation has a moulded string course at roof level and where the shaft rises above the roof line it sits on carved kneelers. It is topped by a spiral shaft upon which there was originally a carving of a chained

monkey. The monkey was not observed during the 2017 survey but it was described as 'a seated figure of a chained monkey holding a mirror' by the 1938 RCHME investigator and is recorded on several published photographs (Russell and Grindrod 2007, 124). The monkey was in place in 2007 (Atkinson 2007, 60, Photo 83). The two tall spiral chimneystacks that flank the shaft for the monkey appear to be early 20th-century but may be replicas of the originals.

Fig 14 The dragon on the south-east corner of the south elevation and the lion above the porch. HEA DP196801 and DP19682.

The doorway in the south elevation is flanked by two four-sided carved stone pilasters each sitting on a small circular pedestal. A carving of a lion clasping an oval scutcheon sits on top of the porch over the south door of the house (Fig 14). The scutcheon is heavily weathered but appears to have three lions top right and bottom left, and is probably showing the Tudor royal coat of arms (Oswald 1959, 79; RCHME 1938). Although the lion is not *in situ*, stylistically its form indicates that it was part of the first phase.

The double-flue chimney on the east elevation indicates that there were heated rooms on the ground and first floor at this end of the house. However, the original fireplaces have both been removed or, alternatively, they may be concealed behind the current fittings. The lateral stack on the south (front) elevation of the house probably indicates there were heated rooms in the central part of the main range. A 16th-century fireplace survives on the first floor and used the lateral stack in the south elevation (Figs 15-16). This was partly revealed after the fire damaged the plaster and surround for a later fireplace. The original opening for the 16th-century fireplace measures about 1m across. The fireplace has chamfered jambs and a

depressed arch defined by hollow chamfered moulding. The left hand jamb of the fireplace has a vase stop at its base. Removal of the plaster by the 2015 fire also revealed the original plain stone internal splays of the four-light window next to the fireplace. It is likely that the other original four-light window on the first floor has similar splays, although these are currently concealed.

Fig 15 The 16th-century fireplace behind plaster and a 19th-century fire surround on the first floor. HEA DP196753.

Fig 16 Detail of the lower part of the left hand side of the fireplace showing the vase stop. HEA DP196752.

On the ground floor, there may be an original fireplace, behind the current fittings, that used the large lateral chimneystack on the south elevation. Alternatively, the large fireplace at the west end of the house (see discussion below and Fig 32) is of a size and style that suggest it was intended for a high-status room, possibly a hall. The carved stops on the lintel are similar to the original first-floor window dressings and the chamfered jambs are like those on the first-floor fireplace. The width of the lintel of the fireplace (2.4m) is similar to the width of the lateral stack (2.5m). Therefore, although there is no direct evidence, there is a possibility that the fireplace at the west end of the house was moved, from the lateral stack on the south elevation.

The roof over the whole of the main range

The roof comprises two parts of similar construction, with the central and eastern parts probably belonging to Phase 1 and the western part to Phase 2. The whole roof comprises 62 coupled-rafters with collars and arch braces (Figs 17, 19). Only 12 of the 62 rafters were heavily charred or burnt away and even then, some details were observable on these. Therefore, most of the roof survives and the original form is clearly discernible and retains many notable features.

The details of individual trusses were recorded in a schematic way (see Appendix 2). The following summarises the overall form of the roof structure over the main east-west range. The details of the roof over the central and eastern part of the main range are described below as part of the Phase 1 chapter. The details of the roof over the western part of the main range are described in the chapter on Phase 2.

For the full length of the roof, double wall-plates extend along the south and north elevations, with rafters rising from the outer wall plate, and braces rising from the inner. Each pair of rafters is pegged at the top of the joint, and there is no ridge piece. Each pair of rafters has a high-level collar, single pegged at each end. Each arch brace comprises two timbers that abut; they are not pegged to each other, but are pegged to the rafters.

The four braces form a single curve across the span of the roof with the apex below the centre of the collar (Figs 17, 20). The upper brace is double pegged to the collar at its upper end, with a further mortice and tenon joint. It is also pegged to the rafter at its lower end. The lower brace is pegged to the rafter at its upper end. The lower braces are fixed to the inner wall plate at their base with a mortice and tenon joint. There do not appear to have been any pegs associated with this joint, presumably because the weight of the roof kept the joint together. Where trusses have moved away from the wall plate the form of the tenon could be observed (Fig 18). The tenon is in the form of a simple central tenon but it extends from nearer the outer edge of the rafter and the brace. The tenon was angled slightly to allow it to slot perpendicularly into the mortice in the wall plate.

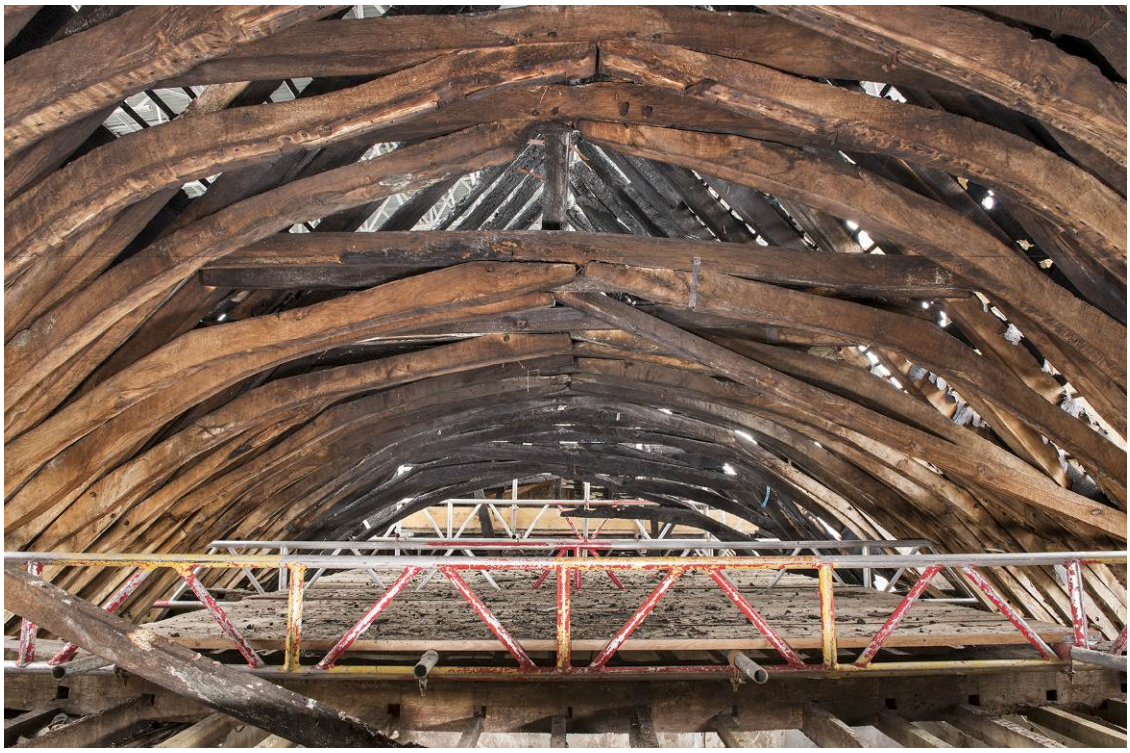


Fig 17 Looking east along the interior of the roof. The post in the upper-centre of the frame is a later addition. HEA DP196761.

Fig 18 Truss 21 on the south side showing the mortices in the wall-plates and the tenons in the rafter and lower brace. Photo: Helen Winton.

The roof trusses form two groups, from 1 to 36 and from 37 to 62 .The external roof pitch is the same the full length of the building but the collars on trusses 1 to 36 are slightly lower than on trusses 37 to 62 (Figs 19-20). This would have resulted in a different pitch to a barrel ceiling below each section (see below for further discussion on the western part). Other differences between the two groups of trusses include the form of the braces where they meet the wall plate, the nature of the carpenters' marks, and the numbers of pegs used in the joints. These differences show two phases of construction. However, the similarity in the basic form of the roof, to create a structure to support a barrel ceiling, suggests the second phase (trusses 37 to 62) followed on soon after the first, perhaps completing a design conceived for the whole east-west range.

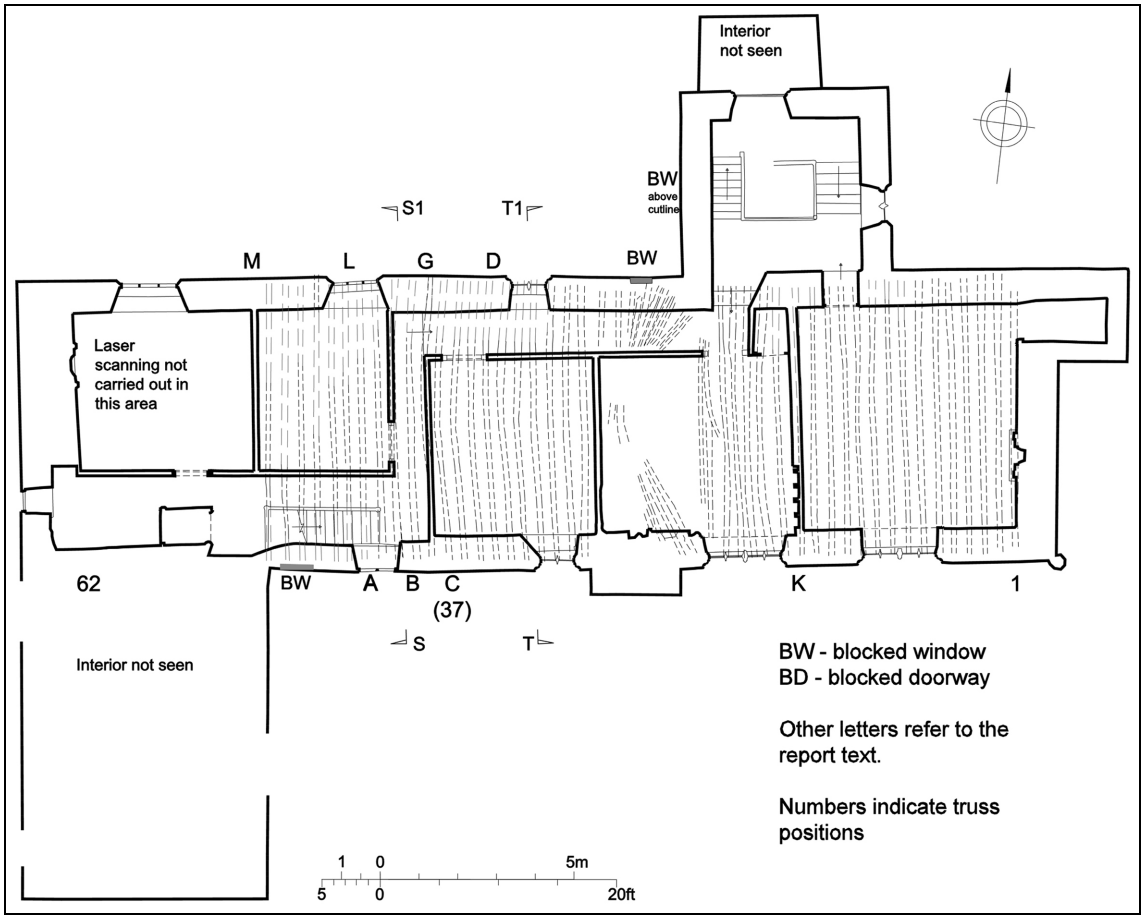


Fig 19 First floor and reflected roof plan. The sections S-S1 and T-T1 are illustrated in Fig 20.

The difference in the form of the roof trusses occurs between trusses 36 and 37. This is 15.4m west of the east elevation (C on Fig 19). The furthest extent of Phase 1 is at point A on Fig 19. Crucially, this means that phase 2 trusses (37 to 41) extend over the eastern end of Phase 1 of the house indicating that they were part of a later phase of construction than the central and eastern portions of the building. The position of the change in rafter form could indicate that the central part of the building was shored up until construction of the west end of the house. Alternatively, it is possible that both sections of the roof were constructed at the same time (see further discussion below).

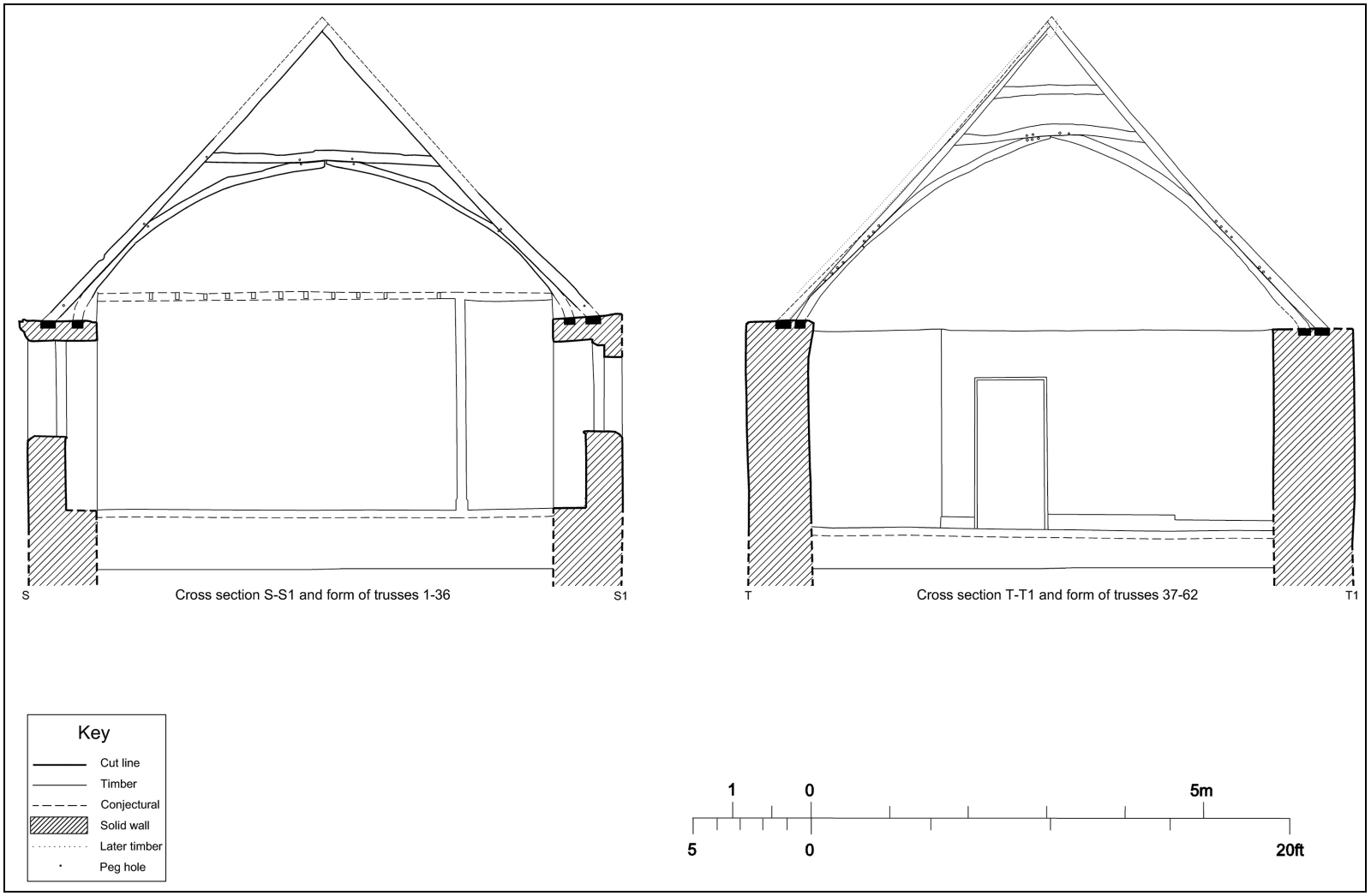


Figure 20 Sections of the two different forms of roof trusses.

The roof over the east and central parts of the main range (phase 1)

Trusses 1 to 36 will be considered here as these cover most of Phase 1 of the building. The rest will be discussed below with other details of Phase 2. Entry to much of the centre of the roof space was restricted but it was possible to observe the position of the joints, and peg holes, in both the upper brace and the lower brace on 26 of the rafters on the south side and 20 of the rafters on the north side out of the total 36 trusses. See Appendix 2 for a detailed description of each truss.

The exact nature of the joint between rafter and brace appears to have varied from truss to truss. Most have a single peg hole in both rafter and brace and 21 such joints were identified on the north side and 15 on the south side. Most have pegs still in place, sometimes flush and sometimes protruding from the timber. There are empty peg holes on five of the lower braces (trusses 2, 8, 12 to 14) and on two on the upper brace (trusses 3 and 36) on the south side of the roof. There is an empty peg hole in the rafter of truss 8 (south side) at the join with the lower brace and empty peg holes in rafter 30 (north side) at the joins with both upper and lower braces. Empty peg holes may have lost the peg, or never had one.

The use of pegs on both the rafter and the brace indicates use of a slip tenon. This form of loose tenon is not joined to either roof member, but is fixed to both with pegs. In places where the timbers were damaged, parts of some of these slip tenons were observed, and they were relatively narrow compared to the broader profile of a typical fixed tenon. Occasionally there is no peg hole in the rafter, for example at the joint with the lower brace on the north side of truss 2, or at the joint with the upper brace on the north side of truss 7. Truss 5 has no peg in the rafter at the joint with the upper brace, on both north and south sides, as well as no peg in the rafter for the joint in the lower brace on the north side. This appears to denote use of a fixed tenon on the brace. There is no discernible pattern in the sequence of joints. Use of different joints, with slip or fixed tenon, may be linked to expediency in terms of the alignment of the grain of the timber as oak splits along the grain. Where the grain of a long curved brace is either parallel or diagonal to the beam there is a risk the ends of the brace will snap off. Use of loose tenons avoids these issues (Dave Taylor, Somerset Vernacular Buildings Research Group, pers comm).

Many of the rafters have a hole, slightly larger than the peg holes, bored completely through the rafter, about 0.2m above where the rafter meets the wall plate. Not all of the rafters had these holes and trusses 1 to 4 and 6 to 20 on the south side of the roof form the longest sequences. Truss 5 is an example where there is apparently no rafter hole. Although common in medieval and later roofs, the function of these rafter holes is not clear but it is likely they were used for setting out during construction (Mennim 1983, Johnson 1987, Alcock et al 1996).

Fig 21 Looking west at the upper braces and rafters on trusses 11 to 14 on the south side of the roof. The underside of the upper braces on trusses 12 and 13 have been cut back, revealing the slip tenon in the joint between the rafter and brace. HEA DP196757.

Most rafters, and corresponding braces, have carpenters' marks on the east facing side indicating the upper face during construction (Fig 21). They were seen on 26 of rafters 1 to 36. Despite the restricted access, it was possible to observe that there were often also marks near the collar joints. The marks comprise scribed Roman numerals sometimes with adjacent gouge stamped circles or semi circles with a central dot. The marks occasionally form short numerical runs but for the most part do not appear to have followed an overall sequence. It seems likely the marks were used to match the correct timbers for the joints and to match the two halves of the truss, rather than for ordering rafters along the full length of the roof. See Appendix 2 for the details of individual marks.

Fig 22 Fragments of plaster with single moulded ribs from the former ceiling with a 30cm scale. HEA DP196738.

The form of the roof at Little Toller strongly suggests the intention was to have a barrel-vaulted ceiling along the full length of the first floor. The coupled rafter roof form was clearly designed to create the type of vaulted space required for such a ceiling. The pattern of nails can still be seen on the underside of many of the braces, and the differential colouring left by the original laths is visible. Fragments of ribbed plaster were found after the fire that probably relate to the original ceiling or wall plaster (Fig 22). These included pieces of smooth plasterwork and several examples of single-moulded ribs including an example where the ribs meet. The snots on the reverse side of the plaster show how it was keyed in to the laths attached to the underside of the barrel roof. These fragments are a key piece of evidence for the mid-16th century decorated plaster ceiling.

The plaster ceiling was removed at an unknown point in the building's history and by 1947 only a fragment remained. RW McDowall relates in the addenda to the

RCHME Inventory Notes (1947) that 'On the east gable wall above the first floor ceiling are the remains of a lozenge shaped plaster panel having a border of foliated enrichment between the two mouldings. Within the border two small rosettes remain but most of the plaster within is missing'. There is plaster surviving on the east gable above the present ceiling level and although it was not possible to examine it closely, it is likely to be part of the original plaster observed in 1947. Unfortunately, the decorative elements of this plaster appear not to survive. A fragment of ribbed plaster was observed in 2007 attached to the lower part of the north side of the roof (Atkinson 2007). A survey of plaster ceilings in Somerset found that thin or single moulded rib ceilings were typically found in houses dated to 1530-1560 (Penoyre and Penoyre 1994, 69). Therefore, the fragments of single moulded ribs found at Toller Fratrum probably came from a ceiling constructed at the same time as the roof in the 1550s.

Phase 2 - West end of main range –mid-16th century

A probable second phase of construction comprises the western end of the main range of the house extending 10m from the west gable up to point A on Fig 9. As previously discussed, the roof structure and the overall plan of the main range may indicate that the west end of the house represented a completion of Phase 1. However, there are sufficient differences in the detailing, and particularly the quality, of the work to suggest they were part of separate phases, but perhaps within a relatively short space of time.

Fig 23 The straight joint between the two phases of the main range is behind the scaffolding plank below the left hand first-floor window. HEA DP196820.

This phase is mainly indicated by the difference in masonry on the south elevation, at the point marked A on the plan. The walls are about 10cm thinner (mostly about 0.8-0.83m wide) than the walls of the central and eastern part of the house (from point B on Figs 9-10 to the west gable). The first-floor floor level is slightly lower at the west end of the building, by about 0.15m, and the change in height is 10.45m east from the west gable (point G on Fig 10).

On the south elevation, there is a straight joint between the ashlar of the first phase of the house and the coursed rubble of the second phase towards the west of the building (point A on Figs 9-10, Fig 23). There is coursed rubble on the south elevation for 2.7m to the east of join with the later south wing (Fig 23). On the same elevation, a moulded string course continues the line of the string course from the central and eastern parts of the building (phase 1). It is likely that this has been carefully patched, as it extends across a former doorway (Fig 9). Below this, the orange-brown stone moulded plinth also continues west from the join with Phase 1 (point A on Figs 9-10) for 3.5m where it changes to the paler stone for just under 0.5m. The addition of the later south wing masked the westernmost portion of the south elevation. The join between Phases 1 and 2 is less clear on the north elevation but the difference is seen where the coursed rubble is less regular for about 12m east of the west gable and there is no plinth or string course (west from point D on Figs 9-10).

Fig 24 The blocked window on the ground floor where the south elevation of the main range meets the south wing. Photo: Rebecca Lane.

On the south elevation, next to the join with the later south wing, there are two blocked openings on the ground and first floor and it is likely that these were window positions (Fig 24). The blocked ground-floor window has orange-brown stone dressings and the one above has dressings of paler grey stone. The adjacent window to the east on the first floor has been modified but the jambs on the east side are of orange-brown stone and it could be an original opening, later widened to the west. Further west, the south elevation was heavily altered by the later construction of the south wing, so little of the original form can be determined. However an off-set and change in width of the interior south wall of the later kitchen (point E on Fig 9) could indicate the position of an original opening, perhaps for a south-facing window.

The openings on the north elevation at the west of the main range have all been altered or inserted. Those at ground-floor level appear to be later insertions (see below), although it is possible that, as elsewhere on the building, they indicate the position of smaller original openings. The westernmost window on the first floor has a plain splayed jamb of orange-brown stone on the west side that perhaps belongs to Phase 2. The other (eastern) window on the first floor has a moulded orange-brown stone lintel and splayed jambs also suggesting these framed an original opening. The original internal arrangement of rooms in the western part of the main east west range is difficult to determine given later alterations.

The roof over the western part of the main range (Phase 2)

As previously discussed, the western part of the building has a common rafter roof similar to that over the east and centre of the range, but with some slight constructional differences. Trusses 37 to 62 will be discussed here in detail as they have the slightly different height and form of braces to trusses 1 to 36. They cover all of the second phase of the building with two trusses (37 and 38) over part of the first phase of the masonry.

The basic form of trusses 37 to 62 (26 in total) is the same as that over the earlier phase of the building – with double wall plates supporting rafter pairs pegged at the ridge, high-level collars, and arch braces comprising four sections creating a continuous arch across the elevation. However, there are subtle differences in the form and constructional detail. The main difference between the two phases is that the collars on trusses 37 to 62 are slightly higher than those on trusses 1 to 36. This would result in a higher barrel-shaped ceiling with a steeper pitch at the west end of the house compared to the central and eastern parts. The form of the braces where they meet the inner wall plate is also slightly different to those on trusses 1 to 36. The lower braces on trusses 1 to 36 have a curved foot whereas those on 37 to 62 run straight, following the rafter profile (Fig 25).

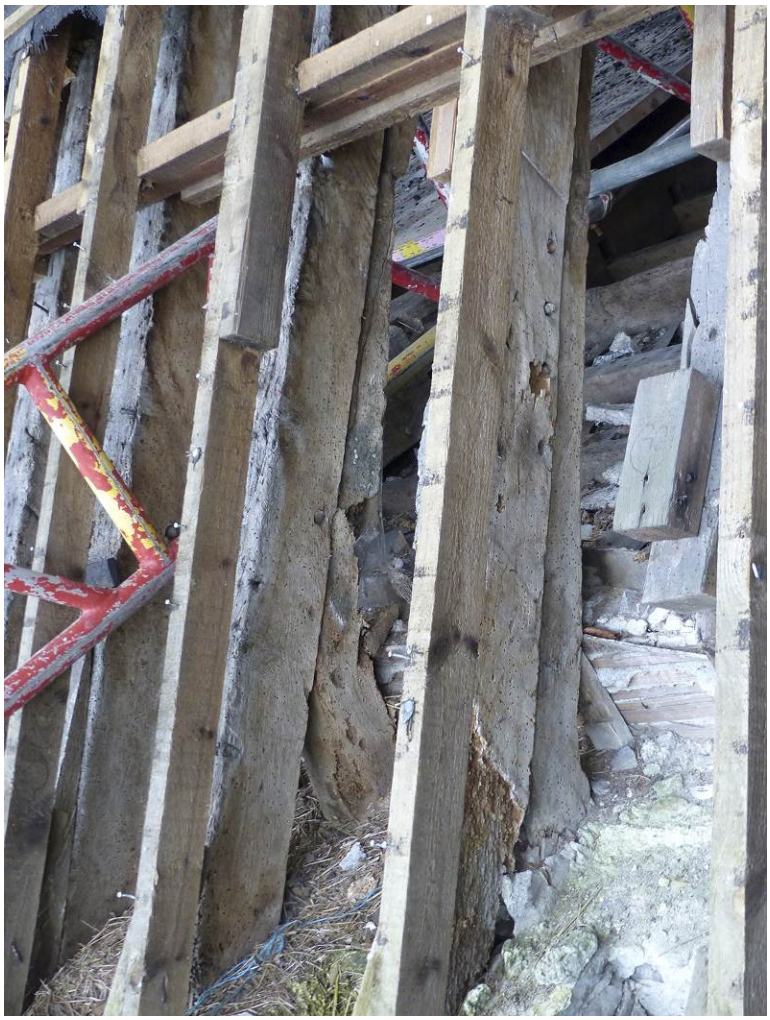


Fig 25 A view looking east at trusses 36 (left) and 37(right) on the north side of the roof. Note the different number of pegs and the curved foot on truss 36 and the straight one on truss 37. Photo: Helen Winton.

The arch braces are jointed to the rafter with groups of 3 or 4 pegs, or more rarely 2 pegs in contrast to the single pegs mainly used on trusses 1 to 36. A few trusses were pegged from the reverse side. There are no peg holes in the rafters on trusses 37 to 62 showing that more conventional, and longer, fixed tenons were used for the joints as opposed to the mix of slip and fixed joints, with short tenons, used on trusses 1 to 36.

The carpenters' marks on trusses 37-45 comprise gouge stamped short curves on the fair (east) side (Fig 26). These form a sequence from 1 to 9, although none were observed on number 5 in this sequence (truss 42). At the north end of truss 37, the lower brace was marked on the west side, ie the other side for all the other trusses, but the marks are on the east side at the south end of the rafter. From trusses 47-53 the marks are Roman numerals. There were no marks on trusses 54-62 except a 'IIII' on the upper brace, south side, of truss 58. Details of the carpenters' marks are in Appendix 2. Surviving parts of laths and nails show the intention to have a barrel ceiling. The nails are not dissimilar to those at the eastern end of the building so it is possible that they are similar in date.

Apart from these differences in the details, the similarity in the basic form of the roof suggests the design may have been conceived for the entire main range but completed in two phases, probably within a relatively short time frame. As noted above in the Phase 1 discussion, it is not clear how the transition from a lower to a higher barrel vault ceiling could have been managed. It is possible, but unlikely that it could have formed part of one continuous space, as the off-set would have been notable and marked. However there is no evidence of a partition between trusses 36 and 37. Another possible explanation for this could be that a flat ceiling was installed at the west end of the house, even though the laths were put in place for a barrel ceiling.

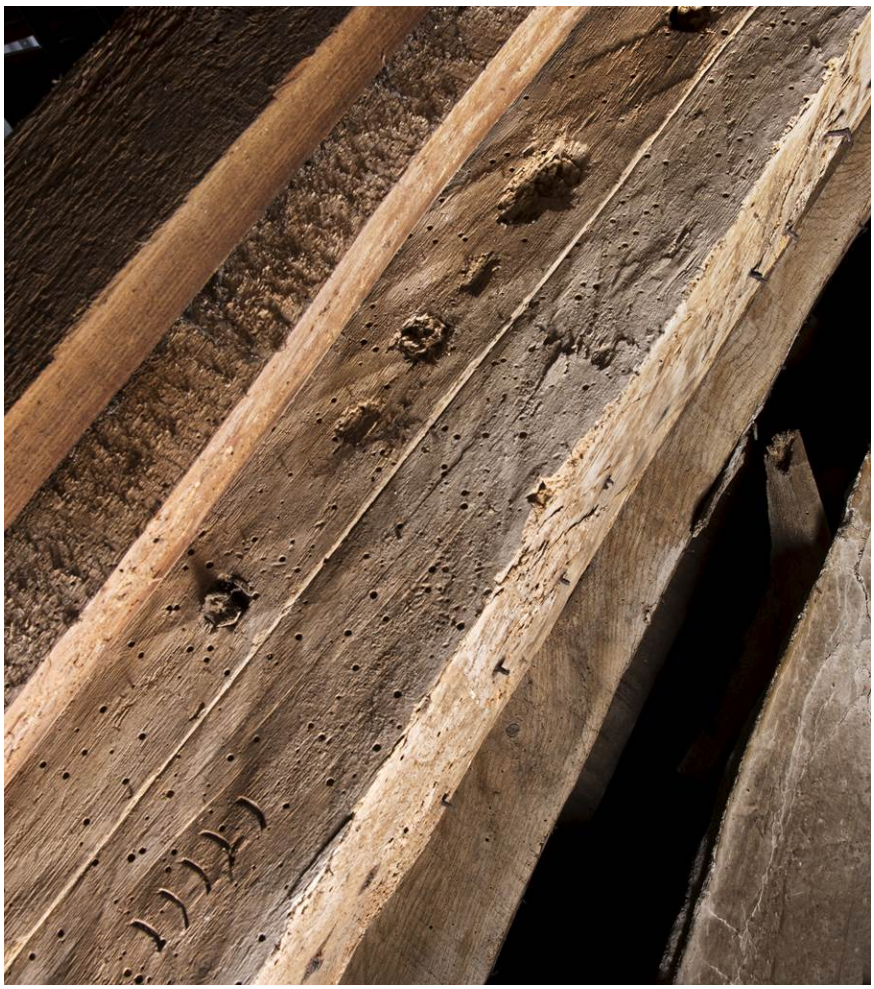


Fig 26 View of the fair (east) side of truss 41on the south side of the roof over the main range. HEA DP 196787.

There are cross beams tenoned into the inner wall plates between trusses 42 and 43 and between trusses 50 and 51 (extending from points L and M on Fig 17). As the beams are tenoned into the wall plate at both ends they are likely to be original. This contrasts with a later cross beam (part of a partition) at the east end of the house where the beam is lapped onto the top of the wall plate (point K on Fig 17). Evidence for any further beams to the west of truss 51 was not visible, but it is possible that there were or are two further cross beams, if they were equally spaced across the west end of the roof. The lower sides of the beams were not visible but if

they were moulded that might be further evidence they are part of this phase. It is possible that the beams sat below a barrel-vaulted ceiling to provide lateral support for the roof - perhaps in response to movement issues with the slightly earlier eastern portion of the roof. There are joist holes cut into the upper face of the beams where they support the ceiling joists but it is not clear if these are an original feature, and the fact that they are cut into the top, rather than properly jointed into the side of the beams might suggest they are more likely to be later. The precise relationship between these features requires further investigation.

Fig 27 The cuts in the wall plates between trusses 42 (right) and 43 (left) on the south side of the roof. West is to the left. Photo: Rebecca Lane.

On the south side of the roof, the inner and outer wall plates were shaped between trusses 42 and 43 at a point 5.65m from the west side of the chimney (opposite point L on Fig 17). Both have a recess, around 0.05m deep, on their inner faces. This created a hole 0.18m long with 0.05m movement between the wall plates. There is a similar gap in the opposite inner wall plate on the north side of the roof (point L on Fig 17). There is a similar arrangement in the wall plates between trusses 50 and 51 on the south side of the roof (opposite side of the roof from Point M on Fig 17). These holes are perpendicular to the wall plate, which suggests they

do not form part of the roof structure. Instead it is possible that they took a vertical post coming up from below, perhaps to support a timber partition dividing part of the first floor or providing support for the cross beams described above.

The balance of evidence so far suggests that the barrel-vaulted ceiling may not have been installed at the west end of the house, even though the laths appear to have been prepared for it. The lack of any evidence of surviving plaster and the presence of cross beams may suggest that a flat ceiling was installed in the western part of the house instead.

Phase 3: The north wing – probably 16th century

The evidence described below suggests that the north wing is likely to have been added not long after the completion of the western part of the main range (Phase 2) and there is the possibility they were built at the same time.

The north wing is of two and a half storeys, extends 4.75m north from the east end of the main range of the house, and is 5.4m wide. Stylistically, it has similar elements to the east and central parts of the house (Phase 1) suggesting it is also 16th-century in date. However, it is likely that it was added in a different phase of construction. The thickness of the rear wall of the main east-west range where it meets the north wing suggests it was not originally designed to connect with a further range (Figs 9-10). At roof level, the walling of the north wing rises above that of the main range, and part of the stonework rests on top of the roof structure of the main range (Fig 28). This awkward and structurally problematic arrangement suggests the two were not constructed together. The difference in height at the first-floor level may be due to the later installation of the current stair but could be original, and would therefore be further evidence that the north wing was not conceived with the main range.

There are several stylistic similarities that suggest that the north wing may have been added fairly soon after the construction of the main range of the house. It is constructed from narrow coursed rubble similar to that seen on the rear of the earlier parts of the main range. An orange-brown stone string course continues the line of that on the phase 1 portion of the main range, stepping up slightly on the rear gable. Some of the quoins on the north gable and the window dressings are of the same orange-brown stone found elsewhere on the house.

The relieving arch over the ground-floor window on the west elevation shows it is an original opening, and is similar to the relieving arches over the windows on the north elevation of the phase 1 section of the main range. The two windows on the east elevation each have two-light arch heads, hood moulds and carved stone dressings similar to those on the main range. The sunk spandrels on the interior of the window on the first-floor, and on the exterior of the ground floor are decorated with a flower pattern. This contrasts to the plain sunk spandrels on the windows on the front elevation of the main range. These could be later replacements but it is likely that the difference is due to the slightly different date of the north wing.

Fig 28 View looking west showing the east wall of the north range resting on the roof of the main range. Photo: Helen Winton.

The windows on the east elevation light the ground and first floors (Fig 29). On the west elevation, the lower window towards the north end of the north wing is positioned between the ground and first floors (Fig 30). The upper window (now blocked) is centrally placed in the elevation and is higher than first-floor level. There is a three light window, in the north gable at eaves height, positioned off-centre to the west (Fig 31). Unlike the other windows, this has an ogee moulded surround and dressings in the same pale grey stone as the rest of the gable. There is nothing to suggest that it has been altered or inserted so it seems to be an original feature even though it is in a different style to the other windows.

The north gable has stone coping and carved kneelers. The stone coping is of orange-brown sandstone on the west side and mostly pale-grey stone on the east side. The kneelers have a simple curved profile on their underside. The common-rafter roof is similar in design to the one for the main range but on a smaller scale, again intended to support a barrel-vaulted ceiling. The chimney built into the gable end (north elevation) appears original. Although the upper parts of the stack are late 19th- or 20th-century brick the lower parts of the original drip mould survive.

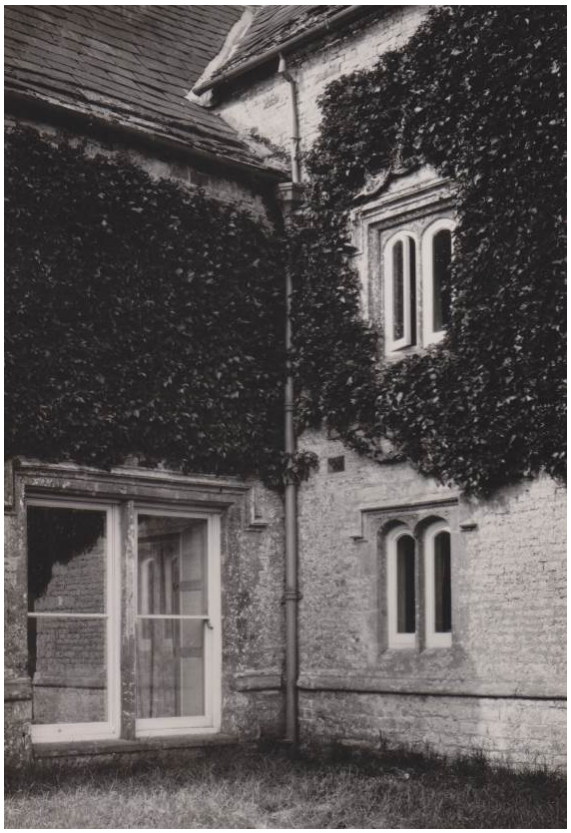


Fig 29 The north wing east elevation (right of frame). HEA IN00484 DM 1521.

Fig 30 The west elevation of the north wing showing the position of the window between ground and first- floor level. The bottom of the blocked window above first floor level is just visible centre-right near the top of the frame. Photo: Helen Winton.

The original internal layout of the north wing is not entirely clear but the position of the windows, at intermediate heights on the east elevation, suggests there was a stair probably extending up the east side (Fig 30). The interior is relatively large to have contained just a stair. A compact stair would allow for more circulation space on each floor but there could have been a well-stair. However, the single flue chimneystack shows there was a heated room on one of the floors that might be difficult to accommodate if there was originally a large well stair.

Above first-floor level there was almost certainly a further room at gable height, lit by the three-light window in the north gable (Fig 31). This room was entered via a stair probably in the position of the current, later stair. This would have provided a low chamber at the head of the stair with a barrel-vaulted ceiling above. The window has angled internal splays similar to original openings elsewhere in the house. The off-centre position of the window in the north gable means that it partly lights the head of the stair and the adjacent space.

Fig 31 A view from the north-east of the three-light window on the top floor of the north wing. HEA DP196810.

The north wing connects to the main part of the house on the ground floor through an opening in the rear wall opposite the front door. This could be a modification to a possible earlier rear doorway from a cross passage arrangement in the main range (see Phase 1 above). There is a possible original external doorway to the north wing.

This is suggested by the position of a joint in the masonry on the west elevation, close to where the north wing meets the main range. This now corresponds to the position of a cupboard that is almost the full depth of the wall. On the first floor, there is an entrance from the easternmost room of the main range to the north wing. Adjacent, to the west, the rear wall of the main range has been cut through to form another door opening and there is a splay in the corridor. It is not clear if these openings were originally created together to provide separate entry to two rooms in the main range with the westernmost leading to the room with the fireplace using the lateral stack. However, the western opening could relate to the much later insertion of the corridor in the main range.

Phase 4: Possible 17th century or later alterations to the house

The later alterations to the house are hard to ascribe to a specific date, although a sequence of events can be suggested for some elements.

As previously mentioned, the large fireplace on the west gable of the main range does not appear to be in its original position (Fig 32). It is likely that the fireplace was moved when its large scale and style became unfashionable. This could have occurred any time from the late 17th century onwards. The size of the fireplace is similar to the chimneybreast of the lateral stack on the south side of the main range. It is therefore possible that the fireplace was moved from within the house, but there is no direct evidence for this. There is an inserted chimneybreast against the west gable of the house (seen in the roof space) and this may have been constructed when the fireplace was installed in its current position.

The partition between the two easternmost first-floor rooms (K on Fig 10) appears to be of an earlier phase to the other interior sub-divisions (Fig 33). It extends across the full width of the house and the beam supporting this partition is lapped onto the top of the inner wall plate. The partition comprises a substantial timber frame and laths with plaster laid over. The partition continued into the roof space and is still partially plastered. It has an off-centre opening, allowing movement through the attic space. It is not clear if this opening is an original feature or if it was created by removing a stud. In the roof space, the partition appears to be plastered on the east side only, although it is possible that the fire removed the plaster from the west side.

The fact that the partition extends into the roof space and is plastered at this level, may mean it was inserted while the barrel-vaulted ceiling was still in place in the eastern and central parts of the main range. It is possible that the first floor was gradually altered with a flat ceiling inserted over certain rooms while retaining the barrel vault in others. For example, the easternmost room possibly retained the barrel ceiling, while the room to the west had a flat ceiling installed. This might explain why the partition in the roof was only plastered on the east side. A flat ceiling would certainly have been inserted along the central part of the range before, or at the same time as, the creation of the corridor to the rear of the first floor.

Fig 32 The fireplace on the ground floor at the west end of the house. HEA DP196746.

There is another lathe and plaster partition in the roof space dividing off the westernmost part of the main range (immediately west of point L on Fig 17) and creating an area around the roof hatch. It is not clear if the barrel-vaulted ceiling was ever completed at the west end of the building so the relationship of the partitions in the roof space to the original ceiling is not clear.

The form of the interior of the window on the ground floor towards the west of the front (south) elevation suggests that this opening was once used as a doorway (Fig 34). Part of a substantial metal hinge just inside the window perhaps once held a door or shutter. This may have been inserted, and then blocked again, during one of the phases of reorganisation of the interior during the 18th or 19th centuries.

Figure 33 The partition between the two easternmost first-floor rooms (K on Fig 10) viewed from the north west. Photo: Helen Winton

A former flue (measuring about 0.3m by 0.4m) for a chimney was inserted into the north wall of the house about 11m from the west gable (Point H on Fig 10). The lower portion of the rafter and brace on the north side of truss 38 appear to have been removed, probably during construction of the flue to accommodate the chimney. Although the chimney no longer survives it could have been fitted between trusses 37 to 38. The position of the flue suggests it was inserted before the creation of the rear door and adjacent window to the west, on the rear elevation (discussed below). The relatively small size of the flue suggests it was for a single fireplace but it is not clear if it was on the first or ground floor. If it served a fireplace on the first floor then this would be before the corridor was inserted.

Fig 34 The metal hinge behind the window on the ground floor at the west end of ther main range. It is possible this was once a doorway. Photo: Rebecca Lane.

The numerous pieces of later bracing, mostly 20th-century but some earlier, within the roof at Little Toller Farm suggest that there were structural issues with the roof. The barrel vaulted ceiling may have provided structural support to the roof. It is possible that extra bracing was required when parts of the barrel ceiling were removed, or perhaps because a barrel ceiling was never installed at the west end of the house. The removal of the lower part of the rafter and brace on truss 38 to accommodate a chimney may have contributed to a slight shift in rafter positions.

Phase 5: 19th-century additions and alterations – the south wing

The use of brick in the arch supporting a passage at the north end of the cellar under the south wing strongly suggests that the structure is 19th-century. The south wing also has a 19th-century king-post style roof – observed from within the roof space over the main range. The wing almost certainly pre-dates 1841 as it is depicted on the tithe map.

The south wing is constructed from a mix of orange-brown and grey coursed rubble with ashlar quoins and curved stone kneelers below the roof on the south gable. The apex of the south gable and the chimneystack are made of brick. On the ground floor there is a three-light casement window in the east elevation and a two-light window opposite in the west elevation both lighting a service room. On the first floor there is a window in the east elevation and two windows in the west elevation. At the east side of the south gable there are windows at ground, first-floor and attic levels. The attic level window is blocked and the two others appear to be later insertions. The window sills all appear to be of concrete except for the window at the south end of the west elevation. This has been reduced in size and modern red brick used as infill. A one-storey lean-to extends across the north half of the ground-floor west elevation sheltering the external doorway and the hatch leading to the cellar.

Fig 35 Interior of the ground floor of the south wing, looking south. Photo: Helen Winton.

Internally the ground floor of the wing has 19th-century fixtures and fittings including a centrally placed brick fireplace against the south wall with a cooking range (Fig 35). To the east side of the fireplace there is a curved brick wall, probably for a bread oven. These are both made of pale bricks, unlike those found elsewhere in the house, and appear to be original features further suggesting a 19th-century date for the south wing. To the west of the fireplace, there are two red brick plinths each with a fireplace underneath, one open, the other enclosed. These probably held coppers for washing. An inserted flue, now plastered over, extends up the wall serving the western copper fire. On the first floor of the main range, the wall was cut back to form a curve leading to the doorway through to the south wing. This must be the result of adapting the earlier south wall of the main range to accommodate the join with the wing.

Phase 6: Other 19th-century and later alterations

The construction of the south wing may have coincided with alterations to the main part of the house. It is likely that the two single-light windows on the ground and first floor of the south elevation of the main range were blocked when the east wall of the south wing was constructed very close to them. It is possible that the door at the west end of the south elevation, mentioned above, was also partly blocked to form a window at the same time. This window and the one above have concrete sills similar to those on the south wing, suggesting they were added at the same time as those on the south wing.

On the ground floor of the north elevation of the main range, the doorway and adjacent windows to the west appear to have been inserted at the same time as they all have wooden lintels. There is a brick chimney on the rear elevation immediately to the west of the windows (J on Fig 10). The chimney rises through the edge of the roof from eaves level for about 1m. It was inserted into the wall and the adjacent braces on the roof trusses were cut back to accommodate it. This may have replaced the chimney observed further east in this north wall (Fig 8, H on Fig 10), which may have been blocked and truncated at the same time.

The easternmost window on the first floor of the rear elevation has a hood mould different to those found elsewhere on the house and it could be mid/late 19th or early 20th century in date. The first-floor windows on the north elevation at the west of the main range may relate to original 16th-century openings. However, they seem to have been widened to the east. This was perhaps to provide more light when the south wing was constructed as this might have blocked windows on the south elevation.

The windows on the ground floor at the east end of the house, to the front and rear were lowered, probably during the 19th century. If the plate-glass horned-sash windows are original, this suggests a post-1850s date.

The porch over the main door to the house in the south elevation appears to be a 19th-century addition. The carved stone lion, mentioned above, was presumably moved from its original, unknown, position to sit on top of the porch.

A single storey extension was added to the north wing, probably at some point in the 19th century. The 1841 tithe map and the Ordnance Survey map of 1888 both depict the position of an extension of similar proportions. It is noted as 'built in comparatively recent times' in the RCHME Inventory notes of 1938. It currently houses a bathroom and its proportions suggest it was probably originally added for this purpose or some other function requiring a relatively small space.

Fig 36 Looking north east towards the back of the barn c1960. The house, with the single storey extension against the west gable, is far left of the frame. HEA AA043154.

The historic maps and the RCHME Inventory notes show the main range extended westwards beyond the south wing. A one-storey lean-to was still there in the 1960s when a photograph was taken to record the rear of the barn (Fig 36). It is not marked on the 1972 1:2500 Ordnance Survey 1:2500 scale map so was probably removed in the late 1960s. It is likely to have been an early 19th century addition to the house, and presumably provided more service rooms associated with the farmhouse.

It is not clear to what extent the 19th and early 20th century remodelling altered the layout of the interior of the house. The doors, door surround and skirting are all relatively plain and appear to be 19th or 20th century in date. Most of the fireplaces also appear to be of this date with the exception of the one on the first floor, and the one on the west gable discussed above.

The stair in the western portion of the house was inserted behind the blocked windows on the south (front) elevation, during or after the construction of the south wing. The open-well stair in the north wing is difficult to date precisely but is likely to be late 19th-century or early 20th-century in date. It is possible that the difference in first-floor level, of about 30cm, between the main range and the north wing was created to accommodate the new stair in relation to the height of the window on the first floor. It is possible that the window on the west elevation of the north wing was blocked at the same time.

These alterations, especially to the exterior, further emphasise the difference between the west and east parts of the house with the western portion continuing to have simpler constructed openings and little decorative detailing. The ground floor of the west end of the building appears to have largely been used as a kitchen with associated service rooms.

DISCUSSION OF SIGNIFICANCE

Context for construction

The construction of the house at Toller Fratrum was the result of a nationwide pattern of transfer of lands and property from religious houses to wealthy secular owners in the period 1536-40. This was part of a much longer trend through the 16th to the early 17th centuries, which saw increased numbers of gentry, greater purchasing and exchange of land and a consequent increase in the building of houses (Cooper 1999, 5-6). Those buying the land included younger sons of the landed aristocracy, holders of small landed estates and new landowners from the merchant classes rising to be landed gentry, such as John Samways.

There may have been a local school of skilled carvers in north-west Dorset, more readily available for secular domestic work in the mid to late 16th century, perhaps following a drop-off in demand due to the cessation of construction of religious, and in particular monastic, buildings after the Reformation (Oswald 1959, 20; RCHME 1970, 161-175). This has been suggested as one of the reasons why there are a number of 16th-century houses in the region with elaborate carvings (Oswald 1959). There was also a demand for use of symbols and heraldry to emphasise ancestral and other associations (Cooper 1999, 24).

The first phase of the 16th-century house at Little Toller Farm has several high quality features including heraldic and ornamental carvings on the exterior. There is an octagonal shaft with concave sides at the south-east corner of the building with a spiral pedestal and a carving of a dragon on top. A spiral shaft between the chimneys on the front (south elevation) was topped by a carving of a chained monkey. Although not in situ, the carving of a lion clasping a royal Tudor shield on top of the porch over the south door of the house is almost certainly original.

Although not part of this survey, it is worth noting the decoration on the outbuilding to the south east of the house, usually called the stable block. This is constructed from coursed rubble and has orange-brown stone ashlar dressings on the three two-light arch-headed windows on the west elevation. The east elevation, facing onto the church yard is plain and devoid of openings. The carved window jambs and sunken spandrels at the top of the windows are similar to those on the house. A continuous moulded string course and a plinth extend above and below the windows, similar to the original arrangement of the string courses on the eastern parts of the south elevation of the house. There are vase-like pendant stops flanking each of the windows in contrast to the plainer labels on the string course above the windows on the house. The outbuilding also has ornamental carvings but instead of the heraldic beasts on the house there are two bosses on the string course. These comprise a boss with a boy playing the bagpipes and a shield with an animal paw holding a hammer flanked by the initials ‘I S’ – presumably for John Samways.

There are comparable external decorative details on other mid to late 16th-century houses in the region, in particular octagonal shafts with heraldic finials at the corners (Oswald 1959, 20). For example, similar shafts can be found at the corners

of the end gable of the north wing at Mapperton about eight miles to the north west of Toller Fratrum (Oswald 1959, plate 76). Further afield there are examples of octagonal shafts on buildings within 15 miles of Little Toller Farmhouse. These are at Clifton Maybank to the north (Oswald 1959 plate 65), at Binghams Melcombe to the north-east (RCHME 1970b, 61-175) or at Athelhampton Hall to the east (RCHME 1970b, Plate 92, Oswald 1959 Plate 2). The use of string courses is also a common feature to divide elevations above and below windows. The main range at Toller Fratrum had many features in common with contemporary houses in the region, but the use of a barrel ceiling across the main range at Toller Fratrum resulted in a different internal and external appearance. Many other manor houses in the region had multiple gables, allowing light in and use of the attic spaces, for example, at Sandford Orcas on the north-west Dorset and Somerset border (RCHME 1952, Plate 157).

The roof structure

This section incorporates parts of the initial report on the roof structure by Rebecca Lane (Lane 2017). A significant part of the building is the arch-braced common-rafter roof that extends, in two slightly different forms, across the full length of the main range. Structurally speaking, the use of a common rafter roof with braces between rafter and collar is associated in some areas with relatively early houses. A Hampshire study noted that this form of roof was only found in a few 14th-century houses but that it continued in the Weald until the early 16th century (Edwards et al 2017, 27). Stone gables may lessen the need for roof purlins, for example, in the solar at Manor Farm Michelmersh, Hampshire (d1321/2) which was the country residence of the Prior of St Swithins, Winchester (ibid, Plate 9, Fig.3.1). The laths and plaster of a barrel-vaulted ceiling may also have provided some longitudinal bracing.

An extensive search of buildings records from Dorset, Somerset and Hampshire established that wagon roofs or arch-braced collar roofs are not unprecedented in a domestic context but they are rare in the region, from any period (Lane 2017). However, there are many examples in parish churches. The earliest dated example in the region is the Church of St James, Whitson Street, Bristol. This was dated using dendrochronology to the second quarter of the 15th century (Arnold and Howard 2011). In Dorset, there are examples at the parish churches at Colehill, Cranborne, Pamphill, Wimborne St Giles (RCHME 1975) and Silton (RCHME 1972). St Martin's Church at Winterbourne St Martin, or Martinstown, has what the RCHME described as 'an open timber roof of arch braced collar beam construction, formerly ceiled with a plaster barrel vault divided by ribs with carved bosses' (HEA Inventory Notes on Winterbourne St Martin for RCHME 1975). The Samways family are thought to come from this parish before they moved to Toller Fratrum. It is clear from the surviving examples that this roof form was used throughout the late 15th and 16th centuries in an ecclesiastical context. These were often, but not always, used to support boarded or plastered ceilings, which could then be elaborately decorated.

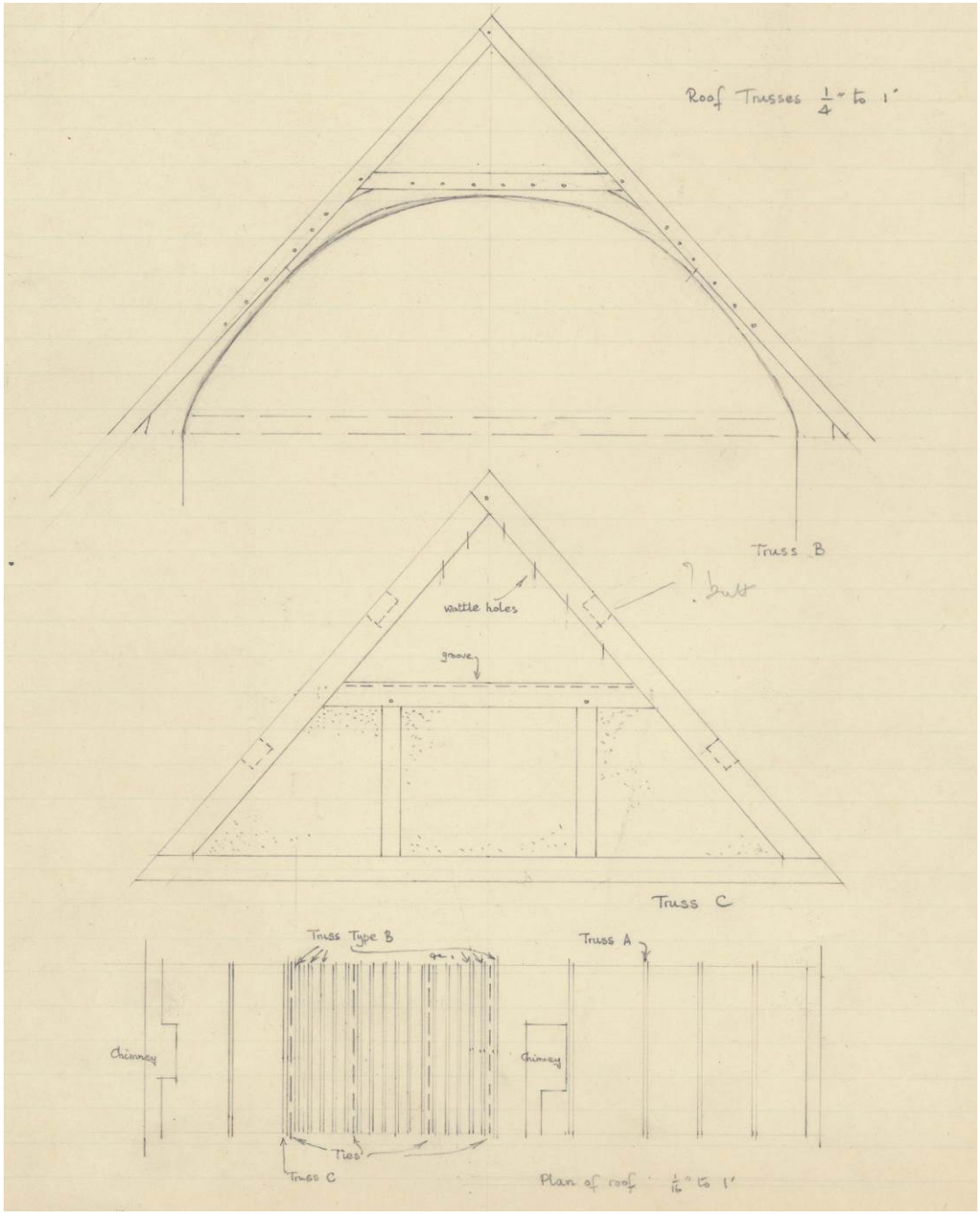


Fig 37 RCHME plan and sections of East Almer Farm. Truss B at the top of the frame is comparable to the roof at Toller Fratrum. Note the plan at the bottom. Drawn by JT Smith and CJ Snell 1956 HEA IN000654.

The carpenters working on religious buildings seem to have applied the same skills in a domestic context. A common rafter roof was identified at East Almer Farm, Sturminster Marshall, Dorset. This was recorded by the RCHME in 1952 and 1956 (HEA Inventory Notes for Vol II Sturminster Marshall Parish). The precise development of the building appears uncertain, with different interpretation from the various investigators. However, the central section of the building had 'a roof of barrel-vault shape formed by a series of 17 arch braces – one to each rafter; the braces are pegged to the collar beam between the upper purlins. There are remains

of lath & plaster on the under surface of the arch braces.' The remainder of the building had a more conventional trussed-rafter roof with queen posts. The subsequent examination in 1956 was undertaken by J T Smith and Christopher Stell. They recorded the roof trusses (Fig 36) and noted that the earlier description appeared to be inaccurate, in that the central section appeared not to have any purlins. They dated the roof structure to the late 16th century.

Two examples of common rafter roofs in late medieval or early modern houses have been identified in Somerset, one at Lodge Farm, Durston (Fig 37). This is noted by Jane Penoyre in her article on medieval Somerset roofs. In discussing common rafter roofs she noted 'Domestic examples do not exist in Somerset with one exception: the Hall roof at Lodge Farm, Durston. Here, many pairs of closely spaced braced rafters form a barrel-shaped ceiling - a form more usually seen in churches.' (Penoyre 1998, 77). This roof was examined by the Somerset Vernacular Buildings Research Group (SVBRG) in 1983 and appears to date from the early 15th century (HEA BF041944).

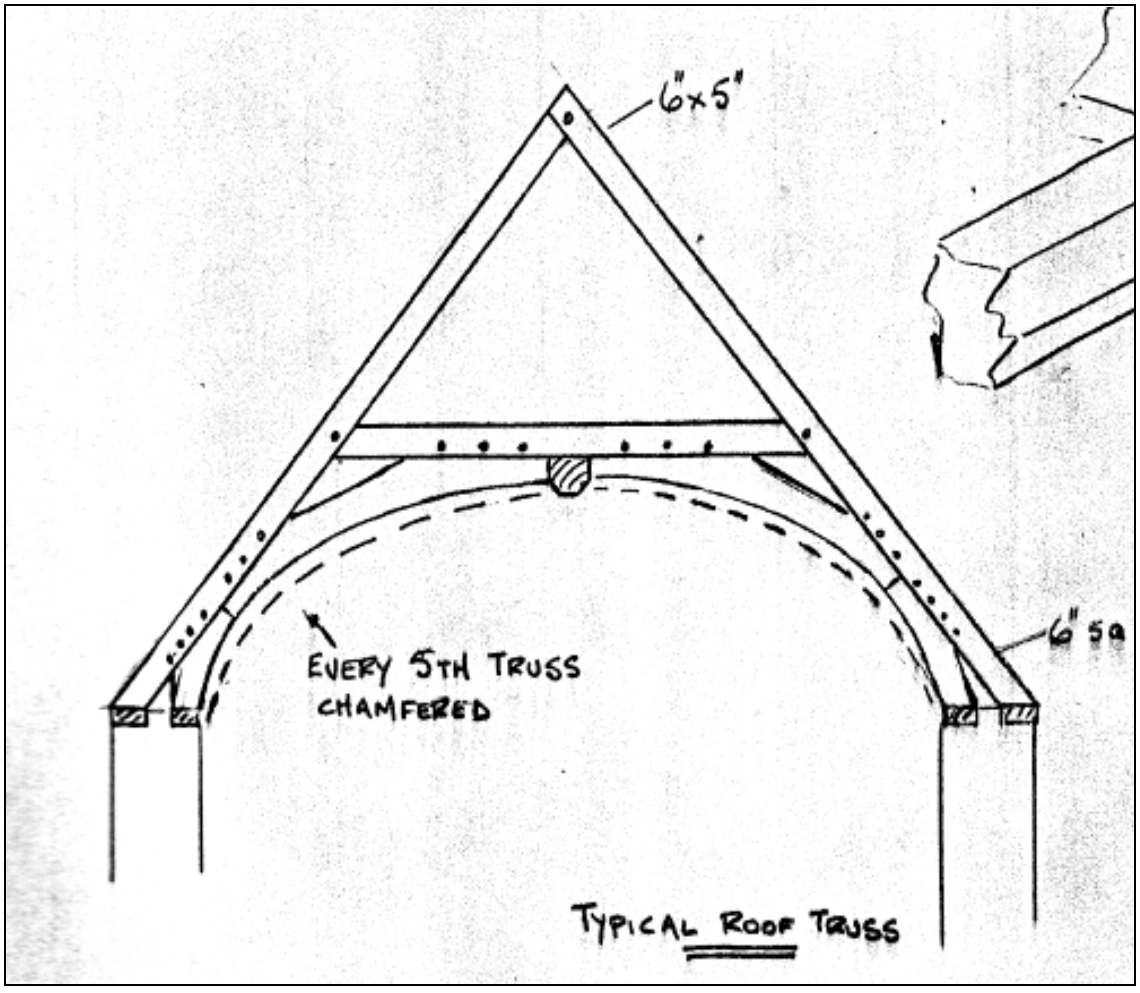


Fig 38 Section through the hall roof at Lodge Farm, Durston from SVBRG report (Copyright SVBRG)

The roof at Lodge Farm was described as ‘a wagon roof, a series of 31 trusses, all common rafter trusses, each with collar and braces. There are no common purlins or ridge timber but there is a chamfered collar purlin, this timber tenoned into the collars in bay lengths (if a bay in this roof can be taken to mean the distance between chamfered trusses). The last truss against each end wall of the hall is flat backed to that wall and chamfered to the Hall, in the rest of the roof is a sequence of four plain then one chamfered truss, the chamfered trusses deeper in section that the plain trusses and therefore projecting below the rest. There has never been a filling of any sort between the trusses, they have always been open. The impression is of a mass of timber, there is less than a foot gap between the trusses. All timbers of the Hall roof are smoke blackened’.

The solar at Lodge Farm has a plastered wagon roof which is supported by trusses the same as those in the hall, without the chamfered trusses. This also has no longitudinal collar purlin, although the report speculates that one may have been removed. It is not clear whether the plasterwork is contemporary with the roof structure above it, but the differences between it and the hall roof suggest that it was perhaps not intended to be seen as the hall roof was, suggesting that some form of ceiling may have been originally fixed underneath.

Subsequent notes make it clear that this is the only smoke-blackened wagon roof identified to date in Somerset. Although undated the smoke blackening strongly suggests a medieval date. The SVBRG report goes on to note that they are more often seen in an ecclesiastical context, including that in a possible chapel at St Algars Farm, Selwood, and at De Salis House, Wells. In this context it noted that the manor of Durston was connected to Buckland Priory, although the manorial ownership appears to have remained in private hands.

The other domestic example of a common rafter roof is at Lytes Carey House in Somerset near the county border with Dorset. A Somerset Vernacular Buildings Group survey in 2005 of the 16th-century Great Chamber noted that 'The South Wing Great Chamber has a remarkable roof structure carrying the decorative plasterwork in the shape of a three-sided vault. The plasterwork is thought to be contemporary with the rebuilding of the south wing in 1533 (date on the bay window). The roof is made of closely spaced common rafters and collars, a most unusual form for domestic use in Somerset where the load is normally carried by the trusses, but here perhaps used to provide an uninterrupted surface for the plasterwork vault in the Great Chamber.' A section through the building shows a slightly cranked collar, but no arch braces. However the use of common rafters is still significant, particularly in the context of a plaster ceiling. The form of the plasterwork at Lytes Cary is also consistent with the type that may have been created at Little Toller, in the use of single moulded ribs.

The national context for these roof structures is difficult to establish. Common rafter roofs were widespread across England in the 13th century, and the tradition continued in some areas, notably East Anglia, up to the end of the 16th century typically in association with crown-post roofs (Walker 2011, 14). This roof type appears to have occurred only briefly in the south-west however, and to have been quickly replaced by the side purlin trussed rafter roof, a form which is attributed to

the cruck tradition in the area (ibid, 13). It seems more likely that the use of these roof types in a domestic context in the 16th century stems from the regional church tradition of wagon roofs than it does from any national context. This is speculative however, as there has been very little work on the roof types used to support plaster ceilings in a national context. The extent to which these roofs parallel, or contrast with, regional carpentry trends remains unexplored. In this context it is perhaps notable that the two Dorset examples identified (Little Toller and East Almer) have both lost their associated plasterwork, allowing a more ready examination of the roof structure above. Elsewhere, where plasterwork is intact, it is rare to find a description of the roof structure, and many may simply be inaccessible. A more detailed investigation would almost certainly reveal more examples.

There are examples of domestic common rafter roofs nationally but these form part of other regional patterns and it is clear that the type of roof structure used to support plaster ceilings showed considerable variation. An example at Treluddick, Cornwall, showed that trussed roofs are used in relation to barrel vaulted ceilings (Jessop 2007). At Apethorpe, Northamptonshire there are a range of plaster ceilings dating from the late 15th century and several roofs were identified that are similar to the common rafter type. This included one over the Great Chamber that comprised alternating principal and common rafters. Both principal and common rafters were of similar scantling, with the principal rafters being distinguished by their use of collars and arch braces (Morrison 2016; English Heritage Apethorpe Hall Research Team 2006, 155). The roof structure was recorded while the roof was under restoration. Here the plasterwork ceiling was attached to reeds, which have then been affixed to the underside of the roof structure. Although not exactly the same, the close spacing of the trusses and the minimal difference between the principal and common rafters creates a similar profile, and was again clearly intended to provide sufficient strength to support the plaster ceiling below.

It is clear from an examination of roof structures in Somerset, Dorset and Devon that, while rare, there is a notable small group of domestic roofs built in this form within the southwest region. This is probably related to the tradition of wagon roofs in church buildings of the area, as one would anticipate carpenters working on both religious and domestic buildings, with parallel carpentry trends in both. Although the sample is small, these often seem related to the provision of barrel-vaulted plaster ceilings. It may be that in seeking a means of supporting the newly-fashionable barrel vaulted plaster ceilings of the mid-16th century some carpenters employed a form of roof they were used to providing in a church context.

The choice to employ this type of roof seems to be largely practical, to provide a solid framework for applying the laths and plaster. Once completed the plaster would in most cases have completely concealed the roof structure, rendering its precise form irrelevant in terms of the overall impact of the building. As not all plaster roofs were attached to this type of structure however, there must also have been some element of choice on the part of the carpenter or perhaps the client. In part it may have been dictated by the size and quality of the timber available.

Plasterwork

The use of decorated plaster for ceilings became widespread through the second half of the 16th century alongside the increased installation of large windows as the light from the windows highlighted the elaborate fretwork on the ceiling (Penoyre and Penoyre 1994, 6). Although most ceilings are undated, John and Jane Penoyre were able to use numerous examples in Somerset to provide a chronological framework based on stylistic elements. The earliest style identified included the use of single moulded ribs and these seem to be the only form used in the period from about 1530 up to about 1620. Craftsmen became more skilled and certain designs became more popular through the 16th century that included curved ribs (ibid, 14).

At Toller Fratrum, the surviving fragments of plaster suggest that the barrel ceiling was decorated with single moulded ribs with curving elements. Therefore, this fits with a mid-16th century date, contemporary with the known construction date of the eastern and central part of the roof in the 1550s. The 1947 RCHME notes mentioned that on the east gable wall there were 'remains of a lozenge shaped plaster panel having a border of foliated enrichment between two mouldings. Within the border two small rosettes remain'. Borders and wall decorations in the lunettes or the half-round walls above the frieze of barrel ceilings were common and usually matched the character of the ceiling (Penoyre and Penoyre 1994, 56). Therefore it is possible that the ceiling at Little Toller included lozenge patterns and flower motifs.

The nearest broadly comparable example of a decorated barrel ceiling is at Lytes Carey. The Great Chamber is the earliest known example of a decorated plaster ceiling in Somerset, dated to 1533 from an inscription on the window (Penoyre and Penoyre 1994, 14). The vaulted ceiling is decorated with ribs extending from bosses to form star and diamond patterns and is an early example of a pattern that developed through the mid-late 16th century (Penoyre and Penoyre 1994, 14). There are other examples from the area, such as the late 16th-century flat ceilings at nearby Mapperton which show another typical style of the time where the ribs curve down to form pendants (Oswald 1959, 82, Plate 77, RCHME 1952, 153-6 Plate 131).

Little Toller Farm is on a modest scale relative to some contemporary manor houses in the region, and the use of a barrel-vaulted ceiling for the entire length of a range is unusual. There are barrel ceilings of comparable size, in a long gallery for example, but these tend to be one component of a larger house. Surviving examples of domestic barrel-vaulted ceilings are usually found over a single room or a chapel within a house, for example, the upper chamber in the oriel at Bingham's Melcombe (RCHME Dorset Central p 161-175). The Great Chamber at Winterborne Herringston, south east Dorset, is of later date (1616-25) but gives an idea of the kind of space created by a barrel-vaulted ceiling over a large room similar in size to those once at Little Toller Farm (about 6m or 20 feet wide).

Although Little Toller Farmhouse is not directly comparable to these nearby houses, it has elements that demonstrate that it was one of a group that used regional materials, carpentry and masonry styles to demonstrate social standing. The first floor of Little Toller Farmhouse would have been a very impressive space with a decorated and ribbed plaster ceiling. Although the removal of this ceiling in previous centuries is a great loss it offers the opportunity to examine the supporting structure. Although the fire caused damage to the central parts of the roof much of the original 16th-century fabric is still in place. Sympathetic restoration will ensure that the remarkable roof continues in use as an example of 16th-century practice.

REFERENCES

Unpublished Sources

Parish Records of Toller Fratrum and Wynford Eagle 1558-1810. Source: Dorset History Centre. Scans of original documents viewed on Ancestry.com [Accessed November 2017]

Will of Robert Samwayes 1625. The National Archive PROB 11/141/46. Scans of original document viewed on www.Ancestry.com [Accessed February 2017]

Francis Fulford v. John Sydenham 10 Wm 3 (13 Feb 1698 – 12 Feb 1699) The National Archive E 134/10Wm3/Mich2 (online catalogue entry only viewed)

Toller Porcorum. Lease for lives.. 18 Sep 1729. Dorset History Centre D1/8312 (online catalogue entry only viewed)

Will of Francis Fulford of Toller Fratrum 1731. The National Archive PROB 11/647/315. Scans of original document viewed on www.Ancestry.com [Accessed February 2017]

Will of Francis Fulford of Great Fulford 1749. The National Archive PROB 11/768/446. Scans of original document viewed on www.Ancestry.com [Accessed February 2017]

The Salisbury Journal 27th September 1762 Number 1273, Volume XXVII, 2 Scans of original document viewed on The British Newspaper Archive https://www.britishnewspaperarchive.co.uk

Attested copy of a deed to found a school at Woods Mead, Great Toller [Toller Porcorum] between George Brown of Frampton, esq. and John Whittle of Frampton, gent 1772. Devon History Centre PE/TRP:SC 1/1

Will of George Browne of Frampton 1777. The National Archive PROB 11/1030/122. Scans of original document viewed on www.Ancestry.com [Accessed February 2017]

Will of John Fulford of Great Fulford 1780. The National Archive PROB 11/1066/241. Scans of original document viewed on www.Ancestry.com [Accessed February 2017]

Will of John Whittle of Toller Fratrum 1806. The National Archive PROB 11/1437/77. Scans of original document viewed on www.Ancestry.com [Accessed February 2017]

The return of the Churchwardens and Overseers of the Poor of the Parish of Toller Fratrum in the Hundred of Tollerford in the said County of men qualified to serve

on juries 25th September 1829. Dorset History Centre. Scan of original documents viewed on Ancestry.com [Accessed November 2017]

1841 Tithe maps for Toller Fratrum and adjacent parishes were viewed on Ancestry.co.uk [accessed 31-JAN-2018].

1841 Tithe apportionment transcription. Dorset History centre

1841,1851,8161,1871,1881,1891, 1901, 1911 Census Record for Toller Fratrum Parish Scans of original document viewed on www.Ancestry.com [Accessed February 2017]

RCHME Notes Toller Fratrum

RCHME Notes Sturminster Marshall, Dorset S.D.T Spittle April 1952 – description of East Almer Farm. Historic England Archive IN00654

RCHME Notes Winterbourne St Martin. Historic England Archive IN00685

SVBRG report on Lytes Carey Manor House Historic England Archive BF110520

British Geological Survey and Historic England Online Gazetteer of the Strategic Stone Study – Little Toller Farmhouse
http://mapapps.bgs.ac.uk/buildingStone/BuildingStone.html
[accessed November 2017])

Published Sources

Arnold, A and Howard R 2011 Church of St James, Whitson Street, Bristol. Tree-ring analysis of the timbers of the nave and chancel roofs English Heritage Research Department Report Series 86/2011

Arnold, A and Howard, R 2016 *Little Toller Farmhouse, Toller Fratrum, West Dorset Tree-ring analysis of oak timbers* Historic England Research Report Series 30/2016

Atkinson, A 2007 *Little Toller Farmstead, Toller Fratrum, Dorset, An historical and architectural survey* Unpublished dissertation for the Post Graduate Certificate in Architectural History, Oxford University for Continuing Education

Barnes W. Miles 1904 'Church Goods, Dorset, 1552' Proceedings of the Dorset Natural History and Antiquarian Field Club XXV,196-274

British Geological Survey 1:50,000 scale, Geology of Britain Viewer [accessed 10-July-2017].

Cooper N, 1999 *Houses of the gentry 1480-1680* Yale University Press, New Haven English Heritage 2012 Strategic Stone Study A Building Stone Atlas of Dorset

Curshams H 2016*Post Fire Report Toller Fratrum, Now known as Little Toller Farm House* Unpublished report for Beauchamps Surveyors

Historic England 2016 *Understanding Historic Buildings a guide to good recording practice* Swindon: Historic England

Hutchins J, 1803 *The history and antiquities of the county of Dorset Volume II* 2nd edition London: Nichols and Robinson

Hutchins J, 1863 *The history and antiquities of the county of Dorset Volume II* 3rd edition Westminster: John Bowyer Nichols and Sons (reprinted 1973 by EP Publishing with Dorset County Library)

Jessop, L 2007 *Treludick, Egloskerry, Cornwall. Survey, Investigation and History of the house and farm buildings* English Heritage Research Department Report Series 91/2007

Lane R 2017 *Little Toller Farmhouse, Toller Fratrum, Dorset, Initial Report* Unpublished Historic England Report

Mills, A D 2010 *The place-names of Dorset, part 4 : the hundreds of Uggescombe, Eggardon, Tollerford, Cerne, Totcombe and Modbury, Yetminster, Beaminster, Beaminster Forum and Redhone, Whitchurch, Canonicorum and Godderthorn* Nottingham: English Place-Name Society

Meekings C.A.F. (ed.) 1951 *Dorset Hearth Tax Assessments 1662-1664: Rawlinson MSS B 292-296*, Bodleian Library Longmans: Dorchester

Morrison, K 2016 *Apethorpe The Story of an English Country House* London: Yale University Press

Oswald, A 1935 *Country Houses of Dorset* London: Country Life

Oswald, A 1959 *Country Houses of Dorset* 2nd edition London: Country Life

Penoyre, J 1998 'Medieval Somerset Roofs' *Proceedings of the Somerset Archaeology and Natural History Society* 141 77-89

Penoyre, John and Penoyre, Jane 1994 *Decorative plasterwork in the houses of Somerset 1500-1700 : a regional survey* Taunton: Somerset County Council

RCHME 1952 *An Inventory of the Historical Monuments in Dorset Volume 1*, West London: HMSO

RCHME 1970a *An Inventory of the Historical Monuments in Dorset Volume 2*, South East London: HMSO

RCHME 1970b *An Inventory of the Historical Monuments in Dorset Volume 3*: *Central Dorset*, London: HMSO

RCHME 1972 *An Inventory of the Historical Monuments in Dorset Volume 4: North Dorset* London: HMSO

RCHME 1975 An Inventory of the Historical Monuments in Dorset Volume 5: East Dorset London: HMSO

Grindrod, Audrey and Russell, Una *The manor houses of Dorset* Wimborne Minster: Dovecote Press

Thorn, Caroline and Thorn, Frank 1983 *Domesday Book, 7: Dorset* Chichester: Phillimore

Victoria County History 1908 *A History of the County of Dorset: Volume 2*, ed. William Page (London)

Walker J 2011 'Introduction and Overview' 11-26, in Walker J (Ed) 2011 *The English Medieval Roof – Crown Post to King Post, Report of the Essex Historic Buildings Group Day School 2008* Essex Historic Buildings Group: Needham Market

Weaver F. W. (ed.) 1909 *A Cartulary of Buckland Priory in the County of Somerset* London: Somerset Record Society, London

Wilson John Marius *1870-72 Imperial Gazetteer of England and Wales* [Vision of Britain website accessed 08-02-18 http://www.visionofbritain.org.uk/place/14044]

APPENDIX 1 METHODS

The site was surveyed over three days in July 2017. Digital recording techniques were mainly used due to the unstable structure in parts of the building and limited time on site. This was supplemented with observation and hand measurements and sketches of key details. A photographic survey was carried out of the exterior and roof and included detailed shots of carpenters' marks on the roof trusses. Photographs were taken of key features in the interior.

Measurements were taken manually of the details of the original window openings on the first floor to create plans of moulding on the jambs and mullions. Sketches were made of the carpenters' marks on the roof trusses and a record was made of the number and position of peg holes and pegs for the joints between the rafters and braces. A detailed description of the carpenters' marks and numbers of pegs is in Appendix 2. The westernmost end of the roof where the roof covering is still on was examined on a second site visit to provide enough information for analysis of the structure.

A rapid and precise measurement was required to provide a reliable framework for the survey of the building. Therefore, an electronic total station theodolite (TST) was used to take closed traverse around the building. An initial geographic position was established using a TrimbleGeo8 survey-grade differential Global Navigation Satellite System (GNSS) equipment to fix onto the Ordnance Survey National Grid using the Trimble VRS network to access the Ordnance Survey system of active stations (OSNet). An infrared measurement wave was used to take measurements of the exterior of the building taking a cut line at first floor level to record the plan of the building, openings and significant details.

A tripod mounted FARO laser scanner was used to survey the central parts of the roof structure. The scanner was set up to take measurements of the exterior from the scaffolding. Scans were taken of the interior of the roof from the centre of the main range where most of the ceiling had been removed following the fire. The laser was mounted on the tripod at different heights including extending the tripod pole to place the scanner within the roof space. It was not possible to scan the whole of the roof space due to partitions and scaffolding boards but a significant area was surveyed including the area where the form of roof truss changes. Control was taken from spheres and hemispheres to unify the various scans. The FARO scans were registered using FARO scene. The FARO data provided details of the form of the roof structure and was used to check the accuracy of the ZEB-REVO data.

A ZEB-REVO handheld scanner was used to survey the exterior and the interior of the building except the westernmost end of the interior of the roof that still had the roof covering. The ZEB-REVO comprises a two-dimensional line scanner mounted on a motorised drive. The rotation of the scanner head provides the third dimension as the user walks around the area of interest. An inertial measurement unit (IMU) records the motion of the scanner and is combined with a simultaneous localisation and mapping (SLAM) algorithm to create a point cloud. The SLAM algorithm requires a lot of overlap between easily identifiable features in the point cloud and to maintain accuracy, it was necessary to start and finish scanning in the same place.

Several loops are preferable in each scanning session and this was achieved where possible. The handheld scanning survey therefore required careful planning of the route around the building to ensure sufficient overlaps within individual scans but also between each scanning session. This involved entering and exiting each room backwards so that it is possible to correlate the information from inside the room with the adjacent area. The ZEB-REVO had a Go-Pro camera to collect video along the route to enable colourising of the point cloud. An LED light panel mounted on the scanner provided some light for the interior but the results were mixed. The 3D point cloud was cleaned to remove extraneous features such as data through windows, the considerable amount of scaffolding around the building, and people. The noise in the ZEB-REVO scan meant that some details were not discernible but it was the most comprehensive of the survey techniques and provided most of the information for the plans.

The FARO and ZEB-REVO scans were converted into POD files for use with the, now legacy, Pointools plug-in for Autodesk AutoCAD as this has more functionality than the native tools for producing and adjusting the required data slices. Plans of the ground and first floor were created in AutoCAD using a combination of all the surveys. The ZEB-REVO, FARO and TST surveys were compared in AutoCAD and there was a good match between each data set allowing the data to be reconciled in the plans. The FARO data, supplemented by ZEB-REVO data, was used to create a plan of the roof trusses in relation to the first-floor plan. The FARO data was used to produce two sections showing the different forms of the roof trusses over western and eastern parts of the building. The ZEB-REVO data was the main source for the ground and first-floor plans although much of the first-floor exterior was taken from the TST survey. The hand-measured sketches were used to create the plan of the carved stone window dressings and mullions of the original windows.

APPENDIX 2 CARPENTERS' MARKS

The carpenters' marks were recorded schematically and are recorded in the table below. 'R' and 'B' stand for rafter and brace. 'RH' stands for rafter hole. Where there is a blank entry it is because no information was available and further study may provide more details. The main area of the roof was too unstable to enter so the marks on the collars were not recorded. When the roof is stabilised, further work could be carried out.

The roof of the main range only was assessed. The west wing was observed (from a gap through the trusses in the main range) to have a 19th century king post style roof. The north extension was viewed but could not be recorded in detail.

The trusses were counted from the east end of main range. The roof comprises coupled rafters with collar and double arch braces. The arch braces comprise two timbers which abut to form a single curve. The arch braces on trusses 1-36 are jointed to the rafter with pairs of pegs in the rafter and brace or a single peg in the rafter or brace. Some were observed to have slip joints. The arch braces on trusses 37-62 (26 in total) are jointed to the rafter with groups of 3 or 4 pegs, or more rarely 2 pegs.

Most rafters, and corresponding braces, have carpenters' marks chiselled on the east facing side (indicating the upper face during construction) – the marks usually match (or relate to one another) on the north and south sides of the roof. The upper parts of trusses in the mid-section of the roof section are charred, and some trusses are completely charred and racked but enough survives to see some structural details in the mid-section (peg holes, braces).

Initial recording by Helen Winton on 27th and 28th June 2017 sketching and photographing carpenters' marks and peg positions in rafters and braces – viewed from scaffolding in areas where there is no roof covering (trusses 1-45). Batons to take the laths for the roof covering are attached to each rafter. The laths are still attached to the upper parts of the roof where most of the roof covering was removed after the fire. The roof is braced with numerous fairly modern looking small pieces of timber nailed at various points usually to the rafters, tying them to the top of the outer wall plate. There are older timbers, including beams, bracing parts of the roof. The west end of the roof (from about truss 46 onwards) still has a roof covering of tiles and felt.

Second visit by Rebecca Lane and Helen Winton on 25th July 2017 reviewed trusses 1-45 and sketched and photographed carpenters' marks and peg positions (where visible) on trusses 46-62 - viewed from the interior of the (unlit) roof space. The numerous later braces, pipes covered in sacking (and other insulation) masked some parts of the roof structure.

There are more detailed notes after the tables.

In the table below, 'M' denotes areas where features were masked by later timbers.

Truss No.	South				North				
	Lower brace		Upper brace		Upper brace		Lower Brace		
	Marks R B	Pegs R B	Marks R B	Pegs R B	Marks B R	Pegs B R	Marks B R	Pegs B R	
RH 1.									
RH 2.									
RH 3.	V V								
RH 4.									
5.									
RH 6.									
RH 7.									
RH 8.									
RH 9.									
RH 10.									
RH 11.									
RH 12.									
RH 13.									
RH 14.									
RH 15.	CHARRED		CHARRED		CHARRED		CHARRED		
RH 16.	"		"		"		"		
RH 17.	"		"		"		"		RH
RH 18.	"		"		"		"		RH
RH 19.	"		"		"		"		
RH 20.	"	BURNT	"		"		"		
21.	"	BURNT	"		"		"		
22.	"		"		"		"		
23.	"		"		"				
24.	"		"		"				RH
25.	"		"		"				RH
26.	"				"				

Truss No.	South				North				
	Lower brace		Upper brace		Upper brace		Lower Brace		
	Marks R B	Pegs R B	Marks R B	Pegs R B	Marks B R	Pegs B R	Marks B R	Pegs B R	
27.									
28.									RH
29.									
30.									
RH 31.									
RH 32.									RH
33.									RH
34.									
35.									
36.									
37.		4		4		4		4	on reverse
38.		4		4		4		4	
39.		4		4					
40.		3		4		4		4	
41.		3		4		4		3	
Pegged on reverse 42.		3		3					
43.		3				3			
Pegged on reverse 44.		4		4?					
45.		4							
46.		4				4			
47.		3		3					
48.		5		3					
49.		4		3				4	
50.				3					
51.		4		4	same on other				
52.		4		2		3		3	

Truss No.	South				North			
	Lower brace		Upper brace		Upper brace		Lower Brace	
	Marks R B	Pegs R B	Marks R B	Pegs R B	Marks B R	Pegs B R	Marks B R	Pegs B R
53.		4	1 1	2	1 + same by collar			
54.		4		4		4		4
55.		4		4		4		4
56.		4		3		4		
57.				3		4		
58.		2	IIII IIII	2		3		4
59.		2		2		4		4
60.						2		2
61.						2		2
62.								

Truss 1

South side

The truss is to the west of the chimney stack on the eastern gable of the building. A large beam extends from the west side of rafter. Scaffolding extends between this and the next rafter. A mortice has been cut into the rafter, just above the upper arch brace, to take a later timber (nailed to the rafter) which extends east across the edge of the east gable wall, presumably to tie the rafter to the gable.

No chiselled marks were observed but there is light scoring on the rafter in the area where the ends of the upper and lower braces are attached to the rafter, extending down the rafter from just below the pegs fixing the joint between the rafter and upper brace. There is a lightly scored X on the rafter in the area above (c 20 cm) where the upper brace curves away from the rafter.

The joint between the upper brace and rafter has a single peg hole in the rafter, no peg hole in the brace. The joint between the lower brace and the rafter has a single peg in both timbers.

There is a larger peg hole in the lower part of the rafter above (c20-25cm) where it meets the outer wall plate.

North Side

There is a timber attached to the north side of the gable but this does not relate to the original roof. The first truss is to the west of the gable. No chiselled marks were seen but there is light scoring on the rafter above the peg for the lower brace joint and above the peg for the upper brace joint. The are two possible single scores below on rafter and lower brace below the pegs for the joint.

Each of the joints between the rafter and upper and lower braces has a peg in both rafter and brace.

Truss 2

South Side

No carpenters' marks were observed.

The joint between the rafter and upper brace has a single peg in both timbers. The joint between the rafter and lower brace has a single peg in both timbers.

There is a larger peg hole in the lower part of the rafter above (c20-25cm) where it meets the outer wall plate.

North Side

No carpenters' marks were found.

The joint between the rafter and upper brace has a single peg in both timbers. The joint between the rafter and lower brace has a peg in the rafter only.

Truss 3

South Side

There are carpenters' marks (V) on the rafter and braces below the peg holes for the upper brace and above the peg holes for the lower brace. In each case, the point of the V on the rafter points in the same direction towards the inner part of the roof.

Each of the joints between the rafter and lower and upper braces has a peg in the rafter and an empty peg hole in the brace. The upper brace has slipped away from the rafter by c 3cm revealing some of the tenon.

There is a larger peg hole in the lower part of the rafter above (c20-25cm) where it meets the outer wall plate.

North Side

There are carpenters' marks (V below a semi-circle) on the rafter and upper brace below the peg holes for the joint. The same mark is on the brace above the peg holes for the joint between the rafter and lower brace. Any corresponding mark on the rafter is obscured by later timber. In each case, the point of the V on the rafter points in the same direction towards the inner part of the roof.

The joint between the rafter and upper brace has a single peg in both timbers. The joint between the rafter and lower brace has a single peg in both timbers.

Truss 4

South Side

There are carpenters' marks on the rafter and braces below the peg holes for the upper brace (semi-circle with a central point, 4 scores below, IIII) and above the peg holes for the lower brace (semi-circle with central point, 4 scores above, IIII).

The joint between the rafter and upper brace has a single peg in both timbers. The joint between the rafter and lower brace has a single peg in both timbers.

The peg protrudes from the upper brace and has a pointed profile, possibly because of erosion. The peg in the lower brace also protrudes but still has a flat profile.

There is a larger peg hole in the lower part of the rafter above (c20-25cm) where it meets the outer wall plate.

North side

There are carpenters' marks on the rafter and braces below the peg holes for the upper brace and above the peg holes for the lower brace. The upper brace has a circle with central point with 4 scores below and the corresponding mark on the rafter has a circle with central point and four scores above. The lower brace and the rafter have a circle with central point with 4 scores above.

The joint between the rafter and upper brace has a single peg in both timbers. The joint between the rafter and lower brace has a single peg in both timbers.

Truss 5

South Side

There are carpenters' marks on the rafter and braces below the peg hole for the upper brace (semi-circle with a central point, 2 scores below) and above the peg holes for the lower brace (semi-circle with central point, 2 scores above).

The joint between the rafter and upper brace has a single peg in the brace only (i.e. none in the rafter) which is almost completely sticking out. The brace has slipped from the rafter and the tenon is visible. The tenon felt loose suggesting it is likely to be part of a slip joint.

The rafter and lower brace each have a peg. There are light scores across the area of the peg hole in the rafter where it is joined to the lower brace. The pegs for the lower brace are higher than on the truss 4.

North side

There are carpenters' marks on the rafter and braces above the peg hole in the rafter (semi-circle with a central point, 2 scores below) and below the peg holes for the lower brace (semi-circle with central point, 2 scores above in the brace, semi-circle with central point, two score below in the rafter).

There is a single peg hole in the upper brace but no corresponding peg hole in the rafter – there is a knot in the wood where a peg hole might have gone. There is a single peg hole in the lower brace but no corresponding peg hole in the rafter. The peg hole in the lower brace is slightly deformed on its upper edge.

Truss 6

South Side

There are carpenters' marks on the rafter and brace above the peg hole in the rafter for the upper brace (semi-circle with a central point, 3 scores below). The semi-circle in the rafter where it is jointed to the upper brace is unclear. About half of the east face of the rafter is masked by a modern timber. There are carpenters' marks on the lower brace and rafter (semi-circle with central point, 3 scores above) but the rafter is half covered by modern timber so any peg position is not clear.

The joint between the rafter and upper brace has a single peg in the brace only (i.e. none in the rafter) which is partly sticking out. The tenon and peg are visible on the west side of the truss. The tenon felt loose suggesting it is likely to be part of a slip joint.

The pegs in the lower brace are not visible. There is a larger peg hole in the lower part of the rafter above (c20-25cm) where it meets the outer wall plate.

The rafter appears wider (c20-25cm) than the others and the upper brace tapers to a narrower end than the other upper braces.

North side

There are carpenters' marks on the rafter for the upper brace (semi-circle with a central point, 3 scores above) but the peg position in the rafter is not clear as it is heavily braced with modern timber. There are carpenters' marks on the rafter above the peg in the rafter for the lower brace (semi-circle with a central point, 3 scores below).

The upper brace has been replaced by a later (relatively modern) timber. The lower brace has been cut back so no marks or pegs were seen. There is a single peg in the

rafter for the lower brace. No peg holes for the upper brace were observed in the rafter as it is masked by later timbers.

Truss 7

South Side

There are carpenters' marks on the rafter and upper brace above the peg holes for the joint (possibly a full circle with a central point, 2 scores below). No marks were found on the lower brace or rafter as they are covered in under modern timber.
There are pegs in the lower brace and rafter (projecting slightly) and the upper brace and rafter. The peg in the upper brace is party sticking out.
There is a larger peg hole in the lower part of the rafter above (c20-25cm) where it meets the outer wall plate.

North Side

There are carpenters' marks on the brace above the peg hole in the brace (two conjoined circles with central points with 2 scores below almost forming a V).
There are carpenters' marks in the brace in the lower brace and rafter (on the brace - two conjoined circles with central points with 2 scores below, on the rafter two scores) above the peg in the brace.
There is a peg hole in the upper brace but none in the rafter. There is a peg in the lower brace but none seen in the rafter. The lower brace has been cut back.

Truss 8

South Side

There are carpenters' marks on the rafter and brace below the peg hole for the upper brace (IIIV) and on the rafter only below the peg holes for the lower brace (IIIV). A beam between trusses 7 and 8 obscures the east face of the lower brace where you would expect the corresponding carpenters' mark.
The joint between the rafter and upper brace has a peg in each timber. The joint between the rafter and lower brace has a peg in the lower brace and a peg hole (i.e no peg) in the rafter.
There is a larger peg hole in the lower part of the rafter above where it meets the outer wall plate – this is lower than the other peg holes in the lower rafters.

North Side

There are carpenters' marks on the rafter and upper brace below the peg holes for the joint (V with three scores above on the brace IIIV). No marks were found on the lower brace or rafter as they are covered in under modern timber.
The joint between the rafter and upper brace has a peg in each timber. The upper brace has partly slipped out from the rafter below the evel of the peg. A potential peg hole was seen in the lower brace but much was masked by later timber.

Truss 9

South Side

There are carpenters' marks on the rafter above the peg holes for the upper brace (on the rafter there are two back to back semi-circles with central points below a disjointed V with the point facing towards the brace – a single score is visible on the brace and possibly the hint of a circle). There are light scores on the rafter and marks on the brace (two back to back semi-circles with central points below a V with the point facing towards the rafter) above the peg holes for the lower brace.

There are pegs in the lower brace and rafter and the upper brace and rafter. The peg in the upper brace is partly sticking out.
There is a larger peg hole in the lower part of the rafter above (c20-25cm) where it meets the outer wall plate.
North side
The truss is under the edge of the east gable of the north extension. The upper parts of the truss are burnt.
There are carpenters' marks on the upper and lower braces (a circle with a central point with a V below, the 'V's point to the lower side of the braces). The marks in the upper brace are above the pegs for the joint, and the marks in the lower brace are probably above the peg(s) for the joint but these are masked by later bracing. There appear to be no marks on the rafter.
The joint between the rafter and upper brace has a peg in each timber. The joint in the lower brace was not seen.

Truss 10

South Side
There are carpenters' marks on the rafter and upper brace above the peg holes (a cross with an extra stroke mirrored on the brace with the strokes opposite each other) and on the rafter and brace below the peg holes (the mark on the rafter is partly obscured by a modern timber but they are the same as the upper marks but orientated slightly differently).
There are pegs in the lower brace and rafter and the upper brace and rafter.
There is a larger peg hole in the lower part of the rafter above (c20-25cm) where it meets the outer wall plate.
There is a possible dendro sample hole in the rafter.
North side
Close examination of the truss was not possible as it under the east gable for the north extension. The upper parts of the truss are burnt.

Truss 11

South Side
There are carpenters' marks on the rafter and brace below the peg holes for the upper brace (a wobbly cross with 3 scores above, the top score extends down to the peg hole) and on the rafter and brace above the peg holes for the lower brace (a cross with 3 scores below).
There are pegs in the lower brace and rafter and the upper brace and rafter. The pegs in the upper and lower braces are partly sticking out.
There is a larger peg hole in the lower part of the rafter above (c20-25cm) where it meets the outer wall plate.
North side
Close examination of the truss was not possible as it adjacent to the north extension – the west side was photographed from the window in the north gable of the extension. Only the lower brace was seen and there appears to be a single peg in the brace only. The upper parts of the truss are burnt.
Trusses 11 and 12 are braced together with a short later timber and there are mortices in the north face for another short later brace.

Truss 12

South Side

There are carpenters' marks on the braces – half the rafter is masked by a modern piece of timber, ditto part of the lower brace. The upper brace has marks above the pegs (a cross with a score attached to the top side of the 'X' with two scorers above). The lower brace has marks below the pegs (a single score with a cross below – the cross has an extra score attached to the upper part).
There are pegs in the upper brace and rafter. The peg in the upper brace is partly sticking out. There is a peg hole (i.e. no peg) in the lower brace and a peg in the rafter.
There is a larger peg hole in the lower part of the rafter above (c20-25cm) where it meets the outer wall plate.
North side
Close examination of the truss was not possible as it adjacent to the north extension – the lower part of the west side was photographed from above.
Carpenters' marks were observed on the upper brace, above the peg, (an X with three scores above) and on the lower brace and rafter (an X and a single score above, and an X only – the upper parts were obscured).
There are single pegs in the lower brace and rafter and the upper brace and rafter.
Trusses 11 and 12 are braced together with a short later timber and there are mortices in the north face of each rafter for another short later brace.

Truss 13

South Side
There are carpenters' marks on the rafter and brace above the pegs for the upper brace (2 back to back half circles with central point with 3 scores below) and on the rafter and brace above the peg holes for the lower brace (the rafter has a semi-circle with central point with 3 scores below, the brace doesn't seem to have a semi-circle above the three scores but has parts of three circles below the scores, the lower two overlapping).
There are pegs in the lower brace and rafter and the upper brace and rafter. The peg in the upper brace is partly sticking out.
There is a larger peg hole in the lower part of the rafter above (c20-25cm) where it meets the outer wall plate.
North side
Close examination of the truss was not possible as it adjacent to the north extension – the lower part of the west side was photographed from above.
There are carpenters' marks on the rafter and upper brace (a circle with central point with 3 scores below), above the pegs, and on the rafter and lower brace (a circle with a central point and 3 scores below) above the peg in the brace.
There are single pegs in the upper brace and rafter, and a single peg in the lower brace.
The east side abuts the brick plinth for a water tank which sits across the north facing wall of the main range. The upper parts of the truss are burnt.

Truss 14

South Side
There are carpenters' marks on the rafter and brace below the peg for the upper brace (two scores above 2 back to back semi circles, a possible third score looks like scuff mark) and on the brace only above the peg holes for the lower brace (two scores above two back to back circles. There are numerous light scores on the upper

part of the lower brace above the joint with the rafter. The south facing side of the rafter is charred up to about where the two arch braces join. However, the east side of the rafter is clear yet there seems to be no marks on the rafter opposite those for the lower brace.
The upper brace has a single peg i.e. there is no peg hole in the rafter. The lower brace has a peg hole and the rafter has a peg.
There is a larger peg hole in the lower part of the rafter above (c20-25cm) where it meets the outer wall plate.
There is a dendro sample hole in the lower part of the lower brace.
North side
Close examination of the truss was not possible as it adjacent to the north extension. The west side abuts the east brick plinth for a water tank which sits across the north facing wall of the main range. The upper parts of the truss are burnt. The braces were not seen and the lower parts were obscured by the water tank – although the very base of the truss was photographed.
There are carpenters' marks on the rafter (a circle with central point with 2 scores below), below the level of the peg in the upper brace.

Truss 15

South Side
The truss is too charred to see carpenters' marks.
There are pegs in the upper brace and rafter. The brace was burnt through enough to show the peg (only partly charred) in the hole.
There is a larger peg hole in the lower part of the rafter above (c20-25cm) where it meets the outer wall plate.
North side
Close examination of the truss was not possible as it adjacent to the north extension. The east side abuts the west brick plinth for a water tank which sits across the north facing wall of the main range. The upper parts of the truss are burnt. Most of the lower parts were obscured by the water tank – although the very base of the truss was photographed.
Timbers (badly charred) were lapped on to the east side of the rafter to form a partition in the attic – some of the plaster is still in place

Truss 16

South Side
The truss is too charred to see carpenters' marks.
There are pegs in the upper brace and rafter.
There is a larger peg hole in the lower part of the rafter above (c20-25cm) where it meets the outer wall plate.
North side
Close examination of the truss was not possible as it adjacent to the north extension. The west side abuts the west brick plinth for a water tank which sits across the north facing wall of the main range. The upper parts of the truss are burnt. The braces were not seen and the lower parts were obscured by the water tank – although the very base of the truss was photographed.

Truss 17

South Side

The truss is too charred to see carpenters' marks.
There are pegs in the lower brace and rafter and the upper brace and rafter. The tenon for the lower brace is exposed where the rafter has been partly burnt away.
There is a larger peg hole in the lower part of the rafter above (c20-25cm) where it meets the outer wall plate.
North side
Close examination of the truss was not possible as it adjacent to the north extension.
There are single pegs in the upper brace and rafter. There is a peg hole in the lower part of the rafter.

Truss 18

South Side
The truss is too charred to see carpenters' marks.
There are pegs in the lower brace and rafter and the upper brace and rafter.
There is a larger peg hole in the lower part of the rafter above (c20-25cm) where it meets the outer wall plate.
North side
Close examination of the truss was not possible as it adjacent to the north extension.
There are single pegs in the upper brace and rafter. There is a peg hole in the lower part of the rafter.

Truss 19

South Side
The truss is too charred to see carpenters' marks.
There are pegs in the lower brace and rafter and the upper brace and rafter.
There is a larger peg hole in the lower part of the rafter above (c20-25cm) where it meets the outer wall plate.
North side
Close examination of the truss was not possible as it adjacent to the north extension.

Truss 20

South Side
The truss is too charred to see carpenters' marks.
There are pegs in the rafter for the joints for the braces – the lower brace is burnt away and the mortice in the wall plate is visible.
There is a larger peg hole in the lower part of the rafter above (c20-25cm) where it meets the outer wall plate.
North side
Close examination of the truss was not possible as it adjacent to the north extension.

Truss 21

South Side
The truss is too charred to see carpenters' marks.
There is a peg in the rafter for the joint for the upper brace but the brace has been burnt away. The rafter and lower brace have sprung free of their joints with the wall plates and the tenons and mortices are visible.
There is a larger peg hole in the lower part of the rafter above (c20-25cm) where it meets the outer wall plate.
North side

The truss was too charred to see any details.
Trusses 22-25 are racked and heavily charred in their upper parts.

Truss 22

South Side
The truss is too burnt away to see pegs or marks etc.
North side
Not seen as it is under the west gable of the north extension.

Truss 23

South Side
This truss is on the east side of the lateral chimney stack on the south facing elevation of the main range.
The truss is too charred to see carpenters' marks.
There are pegs in the lower brace and rafter and the upper brace and rafter.
North side
The upper parts were too charred to see marks. There are carpenters' marks on the lower brace and rafter (A V with 2 scores above, and then a circle above), above the level of the peg and peg hole in the rafter and lower brace.
There is a single peg in the rafter and a peg hole in the lower brace. Heavily charred single pegs in the rafter and upper brace were observed from the west side.
There is a larger peg hole in the lower part of the rafter above (c15-20cm) where it meets the outer wall plate.

Truss 24

South Side
The truss is too charred to see carpenters' marks.
There are pegs in the lower brace and rafter and the upper brace and rafter.
North side
The upper parts were too charred to see marks. There are carpenters' marks on the lower brace and rafter (A V with a single score above, and then a circle above), above the level of the pegs in the rafter and lower brace.
There are single pegs in the rafter and lower brace – the peg is the lower brace protrudes.. Heavily charred single pegs in the rafter and upper brace were observed from the west side.
There is a larger peg hole in the lower part of the rafter above (c15-20cm) where it meets the outer wall plate.

Truss 25

South Side
Virtually all burnt away.
North side
The upper parts were too charred to see marks. There are carpenters' marks on the lower brace and rafter (An X with 4 (poss 5) scores above, and then a circle above on the rafter, the brace seems cut back so has a 'V' (poss half and X) with 5 scores above), above the level of the pegs in the rafter and lower brace.
There is a peg in the rafter and a peg hole in the lower brace. There are heavily charred single pegs in the rafter and upper brace.

There is a larger peg hole in the lower part of the rafter above (c15-20cm) where it meets the outer wall plate.

Truss 26

South Side

The truss is too charred to see most carpenters' marks – except for a cross in the upper brace above the pegs for the joint with the rafter.

There are pegs in the lower brace and rafter and the upper brace and rafter.

North side

The upper parts were too charred to see marks. There are carpenters' marks on the lower brace and rafter (A semi-circle with 2 scores above on the rafter, a semi-circle with 2 scores below on the brace), below the level of the pegs in the rafter and lower brace, very near the base of the truss.

There is a single peg in the rafter and a peg hole in the lower brace. There are heavily charred single pegs in the rafter and upper brace.

Truss 27

South Side

This is the last truss behind the lateral chimney stack on the south elevation of the main range. It is partly covered with roof felt.

The upper brace has a fixed tenon with double peg holes. The rafter has a peg still in one of the peg holes. The rafter has double peg holes with a peg in the upper hole. The lower brace and rafter have a single peg each.

North side

There are carpenters' marks on the rafter and upper brace, above the pegs, and on the rafter and lower brace, above the pegs. They each comprise a V and a single score with a circle below on the upper brace and rafter, and with a circle above on the lower brace and rafter. The open end of the V's on the rafter point towards the brace and the open end of the V's on the braces point towards the rafter. There is another lighter score across part of the V on the rafter opposite the lower brace.

There are single pegs in the lower brace and rafter and the upper brace and rafter.

Truss 28

South Side

This is the first truss to the west of the lateral chimney stack on the south elevation of the main range.

There is a carpenters' mark on the upper brace above the peg – an X and four scores – (XIIII)

There are pegs in the upper brace and rafter. There is a peg in the rafter for the lower brace – the lower brace has fallen away.

North side

There are carpenters' marks on the rafter, above the pegs, and on the rafter and lower brace, above the pegs. The marks comprise an X with 4 scores below and a semi-circle above.

There are pegs in the upper brace and rafter. There is a peg in the rafter for the lower brace.

Truss 29

South Side

There are carpenters' marks on the rafter and upper brace, above the pegs, and on the rafter and lower brace, above the pegs. The marks are a 'V' with the open end facing the join between rafter and brace.
There are pegs in the lower brace and rafter and the upper brace and rafter. The lower brace has partly dropped away from the rafter.
North side
There are carpenters' marks on the rafter and upper brace, above the pegs, and on the rafter and lower brace, above the pegs. The marks are a 'V' with the open end facing the join between rafter and brace, with a semi-circle below.
There is a peg in the rafter but none in the upper brace – the brace has slipped down from the rafter. The lower parts of the truss are masked so any peg(s) were not seen.

Truss 30

South Side
There are carpenters' marks on the lower brace and rafter (4 scores IIII) above the pegs for the joint.
The lower brace has pegs in rafter and brace – the upper brace was not visible.
North side
There are carpenters' marks on the rafter and upper brace, above the pegs, and on the rafter and lower brace, below the pegs. The marks are 4 scores with a semi-circle below.
There is a peg in the upper brace and a peg hole in the rafter. There is a peg in the lower brace and a peg hole in the rafter.

Truss 31

South Side
The upper brace is not visible. There are carpenters' marks on the lower brace and rafter (IIIV on the brace and the same with the V the other way up on the rafter) above the pegs for the joint.
There are pegs in the lower brace and rafter.
There is a larger peg hole in the lower part of the rafter above (c20-25cm) where it meets the outer wall plate.
North side
There are carpenters' marks on the upper brace, above the pegs, and on the rafter next to the lower brace, above the pegs. The marks on the upper brace are 4 scores below a V, below a semi-circle. The open end of the V points towards the rafter. The marks on the rafter opposite the lower brace are a semi-circle below 3 scores below a V. The open end of the V points away from the rafter.
There are single pegs in the upper brace and rafter, and in the lower brace and rafter. The pegs in the braces are sticking out.
There appear to be carpenters' marks on the east face of the lower brace and rafter

Truss 32

South Side
The upper brace is not visible. There are carpenters' marks on the lower brace and rafter (IIV on the brace and the same with the V the other way up on the rafter) above the pegs for the joint.
There are pegs in the lower brace and rafter.

There is a larger peg hole in the lower part of the rafter above (c20-25cm) where it meets the outer wall plate.
North side
There are carpenters' marks on the rafter and upper brace, below the pegs, and on the rafter and lower brace, above the pegs. The marks on the upper brace are 2 scores with a V below and a semi-circle below that. The corresponding mark on the rafter is the other way up with a semi-circle above 2 a V, above 2 scores. The open ends of the V's point towards each other. The marks on the lower brace and rafter match each other and comprise a V above 2 scores, above a semi-circle
There are single pegs in the upper brace and rafter and in the lower brace and rafter. The pegs in the braces are sticking out. There is a larger peg hole in the lower part of the rafter above (c15-20cm) where it meets the outer wall plate.
There is a possible dendro hole in the lower part of the rafter.

Truss 33

South Side
The upper brace is not visible. There are carpenters' marks on the lower brace and rafter (IIIIV on the brace and the same with the V the other way up on the rafter) above the pegs for the joint.
There are pegs in the lower brace and rafter.
North side
There are carpenters' marks on the rafter and upper brace, below the pegs, and on the rafter and lower brace, above the pegs. The marks on the upper brace are 4 scores with a V above and a semi-circle above the V. The corresponding mark on the rafter is partly the other way up with a semi-circle above 4 scores above a V. The open ends of the V's point towards each other. The marks on the lower brace and rafter match each other and comprise a semi-circle above two V's (open ends facing each other) above 4 scores.
There are single pegs in the upper brace and rafter and in the lower brace and rafter. The pegs in the braces are sticking out. There is a larger peg hole in the lower part of the rafter above (c15-20cm) where it meets the outer wall plate.

Truss 34

South Side
There are carpenters' marks (III) on the rafter and upper brace, above the pegs, and on the rafter and lower brace, above the pegs.
There are pegs in the lower brace and rafter and the upper brace and rafter.
North side
There are carpenters' marks on the rafter and upper brace, below the pegs, and on the rafter and lower brace, above the pegs. The four sets of marks each comprise 3 scores above a semi-circle.
There are single pegs in the upper brace and rafter and in the lower brace and rafter. The pegs in the braces are sticking out.

Truss 35

South Side
The upper brace is not visible. There are carpenters' marks on the lower brace and rafter (II) above the pegs for the joint.
There are pegs in the lower brace and rafter.
North side

There are carpenters' marks on the rafter and upper brace, above the peg in the rafter, and on the rafter and lower brace, above the pegs. The marks on the rafter and upper brace each comprise a semi-circle above 2 scores. The marks on the lower brace and rafter each comprise 2 scores.
There is a single peg in the rafter opposite the upper brace. There are single pegs in the lower brace and rafter.

Truss 36

South Side
There are carpenters' marks (possibly a single I) on the rafter and lower brace, above the peg for the joint. No marks could be seen on the rafter or upper brace above the pegs for the joint.
There is a peg in the lower brace but the rafter is masked by later timber opposite the peg in the lower brace. There is a peg in the rafter and a peg hole in the upper brace.
North side
There are carpenters' marks on the rafter and upper brace, above the peg in the rafter, and on the rafter and lower brace, below the pegs. The marks on the upper brace comprise a single score with a semi-circle above. The corresponding mark on the rafter appears to be a single score. The marks on the lower brace and rafter each comprise a semi-circle above a single score.
There are single peg in the rafter and upper brace. There is a peg hole in the lower brace and a peg in the rafter.

Truss 37

South Side
This is the first truss with a different form of joint between the arch braces and rafter. The lower brace is less curved and follows the line of the rafter more closely to the base.
There is a carpenters' mark on the lower brace – a single crescent shape facing upwards.
The rafter has groups of 4 pegs as part of the joints to fix the upper and lower arch braces.
North side
There is a chimney in the wall between truss 37 and 38.
There are carpenters' marks on the west face of the lower brace and rafter – a single crescent facing downwards.
The rafter has two groups of 4 peg holes as part of the joints to fix the upper and lower arch braces. They are pegged from the east side, although the marks are on the west side. There are two pegs in the top group of peg holes (1st and 3rd counting from the top) and the lower group only has a peg in the top hole.
The rafter has been cut back at the base to accommodate a chimney.

Truss 38

South Side
There is a carpenters' mark on the lower brace – 2 crescents facing downwards.
The rafter has two groups of 4 pegs as part of the joints to fix the upper and lower arch braces.
There is a chimney in the wall between truss 37 and 38.

There are carpenters' marks on the east face of the upper brace and rafter, above the pegs – two crescents facing upwards.
The rafter has two groups of 4 peg holes as part of the joints to fix the upper and lower arch braces. There are pegs in the top three peg holes of the upper group and the lower group has a single peg in the top hole. The joints are pegged from the west side i.e the other side from the marks.
The bases of the rafter and lower brace have been removed to accommodate a chimney.

Truss 39

South Side
There is a carpenters' mark on the lower brace – 3 crescents facing downwards.
The rafter has two groups of 4 pegs for the joints to fix the upper and lower arch braces.
North Side
There is a carpenters' mark on the upper brace and rafter – 3 crescents facing upwards, above the pegs. The lower brace is masked by later timber.
The rafter has 4 peg holes for the joint to fix the upper brace. The top three peg holes have pegs. Only two of the pegs in the rafter for the lower brace were seen.
The lower brace has been removed. The joints are pegged from the west side i.e the other side from the marks.

Truss 40

South Side
There are carpenters' marks on the lower and upper braces – two groups of 4 crescents facing downwards.
The rafter has 4 pegs for the joint to fix the upper arch brace and 3 for the joint with the lower arch brace. The joints are pegged from the west side.
North Side
No carpenters' marks observed.
The rafter has two groups of 4 peg holes for the joints to fix the upper and lower arch braces. The top three peg holes have pegs and the lower group has pegs in the three lower holes.

Truss 41

South Side
There are carpenters' marks visible on the lower brace – a group of 5 crescents facing downwards.
The rafter has 4 pegs for the joint to fix the upper arch brace and 3 for the joint with the lower arch brace. The joints are pegged from the west side.
North Side
There are carpenters' marks visible on the lower brace – a group of 5 crescents facing upwards.
The rafter has 4 pegs for the joint to fix the upper arch brace and 3 for the joint with the lower arch brace.

Truss 42

South Side
Later timbers are possibly obscuring the carpenters' marks.

The rafter has 4 pegs for the joint to fix the upper arch brace and 3 for the joint with the lower arch brace. The joints are pegged from the west side.
The rafter has two groups of 3 pegs for the joints to fix the upper and lower arch braces.
There are mortices cut into the wall plates between trusses 42 and 43. They are perpendicular to the wall plate. They are aligned with a beam and there is a partition just to the side of this. It is 5.65m from the west side of the chimney. It is 18cm long with 5cm movement between the wall plates. There is a mortice in the inner wall plate in the same position on north side of the roof.
North Side
No information on the truss. Mortice in inner wall plate.

Truss 43

South Side
This rafter was difficult to see due to later timbers and the roof covering.
The lower brace has carpenters' marks below the level of the pegs in the rafter – a V pointing towards the rafter with 2 crescents below.
The rafter has 3 pegs for the joint to fix it to the lower arch brace. There may be 3 peg holes in the rafter for the upper brace but it was difficult to say as there were other random holes. It is not possible to say for definite but it is likely that the joints are pegged from the west side.
North side
The lower brace has carpenters' above a peg hole – 2 crescents facing upwards above a V. There is a corresponding mark on the rafter is just a V. The wide part of both V's facing towards the inside of the roof.
A single peg hole was seen below the marks on the lower brace. There is a group of 3 peg holes in the rafter for the joint with the upper brace – the top two have pegs.

Truss 44

South Side
This rafter was difficult to see due to later timbers and the roof covering.
The lower brace has carpenters' marks below the level of the pegs in the rafter – a V pointing towards the rafter above 3 crescents facing downwards.
The rafter has 4 pegs for the joint to fix it to the lower arch brace. There are 2 pegs, possibly with 2 more in the rafter for the joint with the upper brace. The joints are pegged from the west side.
North side
The position of the pegs was not clear as the truss was partly covered by tarpaulin.
There are carpenters' marks on the lower part of the lower brace – 3 crescents pointing downwards.
There is a large beam between trusses 44 and 45.

Truss 45

South Side
The upper and lower braces have carpenters' marks below the level of the pegs in the rafter – a V pointing towards the rafter with 4 crescents above.

The rafter has 4 pegs for the joint to fix it to the lower arch brace – 3 pegged from the west side, 1 from the east side. The rafter has 3 pegs for the joint with the upper brace, pegged from the west side.
North Side
Carpenters' marks – 4 crescents pointing upwards above a V.
There is a large beam between trusses 44 and 45.

Truss 46
South Side
The upper brace has carpenters' marks above the level of the pegs in the rafter – an X.
The rafter has two groups of 3 pegs for the joints to fix the upper and lower arch braces.
North side
The rafter has carpenters marks – an X below the peg holes for the joint with the ?upper brace. Three pegs with peg hole below.

Truss 47
South Side
The lower brace has carpenters' marks below the level of the pegs in the rafter – an inverted V with 6 strokes below.
The rafter has two groups of 3 pegs for the joints to fix the upper and lower arch braces.
North side
The rafter has carpenters marks – IX below the peg holes for the joint with the ?upper brace and IX on the collar. Three irregularly spaced peg holes.
Adjacent to chimney stack, no break in wall plate.

Truss 48
South Side
The upper brace has carpenters' marks above the level of the pegs in the rafter – unlike the other marks, these are scored rather than chiselled. There is an X and 2 scores.
The rafter has 4 pegs for the joint to fix it to the lower arch brace and 3 pegs for the joint with the upper brace.
North side
The rafter has carpenters marks – IIX – timbers mask expected peg-hole positions.
The lower brace is cut back, probably for the chimney stack which it now sites behind.

Truss 49
South Side
The rafter and upper brace have carpenters' marks above the level of the pegs in the rafter – a single score.
The rafter has 4 pegs for the joint with the lower brace and a single peg just below where the upper and lower brace abut, and then two pegs for the joint with the upper brace.
A lath and plaster partition abuts this rafter.
North side

There are four pegs in the rafter for the lower brace. It was difficult to see the upper brace. No carpenters' marks observed.
A lath and plaster partition abuts this rafter.

Truss 50

South Side
The rafter and upper brace have carpenters' marks above the level of the pegs in the rafter – two scores.
The rafter possibly has 3 pegs for the joint with the lower brace. There is a single peg just below where the upper and lower brace abut, and then three pegs for the joint with the upper brace.
Between truss 50 and 51 there is a mortice in the inner wall plate with what looks like a corresponding cut in the outer wall plate.
North side
No marks observed.

Truss 51

South Side
The rafter and upper brace have carpenters' marks above the level of the pegs in the rafter – three scores. The rafter and lower brace has carpenters' marks below the level of the pegs in the rafter – three scores.
The rafter has 4 pegs for the joint with the lower brace. There is a single peg just below where the upper and lower brace abut, and then three pegs for the joint with the upper brace.
North side
There are carpenters' marks on the upper brace and collar – III. Peg holes masked by later timber.

Truss 52

South Side
The upper brace has carpenters' marks above the level of the pegs in the rafter – four score. The rafter is masked by later timbers. No marks were observed in the lower brace but it was difficult to see.
The rafter possibly has 3 pegs for the joint with the lower brace. There is a single peg just below where the upper and lower brace abut, and then two pegs were seen for the joint with the upper brace. The rafter above the pegs is masked so there may be more – although the next rafter only has 2 pegs for the upper brace joint.
North side
There are carpenters' marks on the rafter and collar – IIII. Peg holes masked by later timber. The rafter has three pegs for the upper brace and three pegs for the lower brace.

Truss 53

South Side
The rafter and upper brace have carpenters' marks above the level of the pegs in the rafter – a single score. No marks were observed in the lower brace but it was difficult to see.

The rafter possibly has 3 pegs for the joint with the lower brace. There is a single peg just below where the upper and lower brace abut, and there are two pegs for the joint with the upper brace.
North side
There are carpenters' marks on the upper brace and collar – I. Peg holes not seen.

Truss 54

South Side
There is a possible mark in the upper brace – irregular curved lines and a single stroke.
The rafter has two sets of four pegs at the joints with the inner and the upper braces.
North side
Carpenters' marks not seen. There is a missing tenon in the joint or attached to the brace. Pairs if four pegs in the rafter for the upper and lower braces.

Truss 55

South Side
The rafter has four pegs at the joints with the upper brace. Three pegs were seen at the joint with the lower brace but the rafter was only partly visible.
North side
Carpenters' marks not seen as there is a lot of applied timber masking the truss. The braces are missing. There are pairs of four peg holes in the rafter for the upper and lower braces. All have pegs except the upper hole in the lower set of 4.

Truss 56

South Side
The rafter has four pegs at the joints with the upper brace. Three pegs were seen at the joint with the lower brace but the rafter was only partly visible.
North side
Carpenters' marks not seen as there is a lot of applied timber masking the truss. The braces are missing. There are four pegs in the rafter for the upper brace – the area below was masked. Possibly pegged from the other side.

Truss 57

South Side
The rafter is partly covered by later timbers. The area opposite the lower brace was not visible. There are 3 pegs in the rafter at the joint with the upper brace.
North side
Carpenters' marks not seen as there is a lot of applied timber masking the truss. The upper brace is missing but the pegs are still in the 4 peg holes.

Truss 58

South Side
There are carpenters' marks on the rafter and upper brace above the level of the pegs – four scores (IIII).
The lower part of the rafter was not visible. There are pairs of pegs on the rafter either side of where the upper and lower braces abut.
North side

Carpenters' marks not seen as there is a lot of applied timber masking the truss. The upper brace is missing. There are four peg holes in the rafter for the upper brace. All have pegs except the upper hole in the lower set of 4.

Truss 59

South Side
The lower part of the rafter was not visible. There are pairs of pegs on the rafter either side of where the upper and lower braces abut.
North side
Carpenters' marks not seen. There are pairs of four peg holes in the rafter for the upper and lower braces. The peg holes in the lower brace are lower down compared to the other trusses.

Truss 60

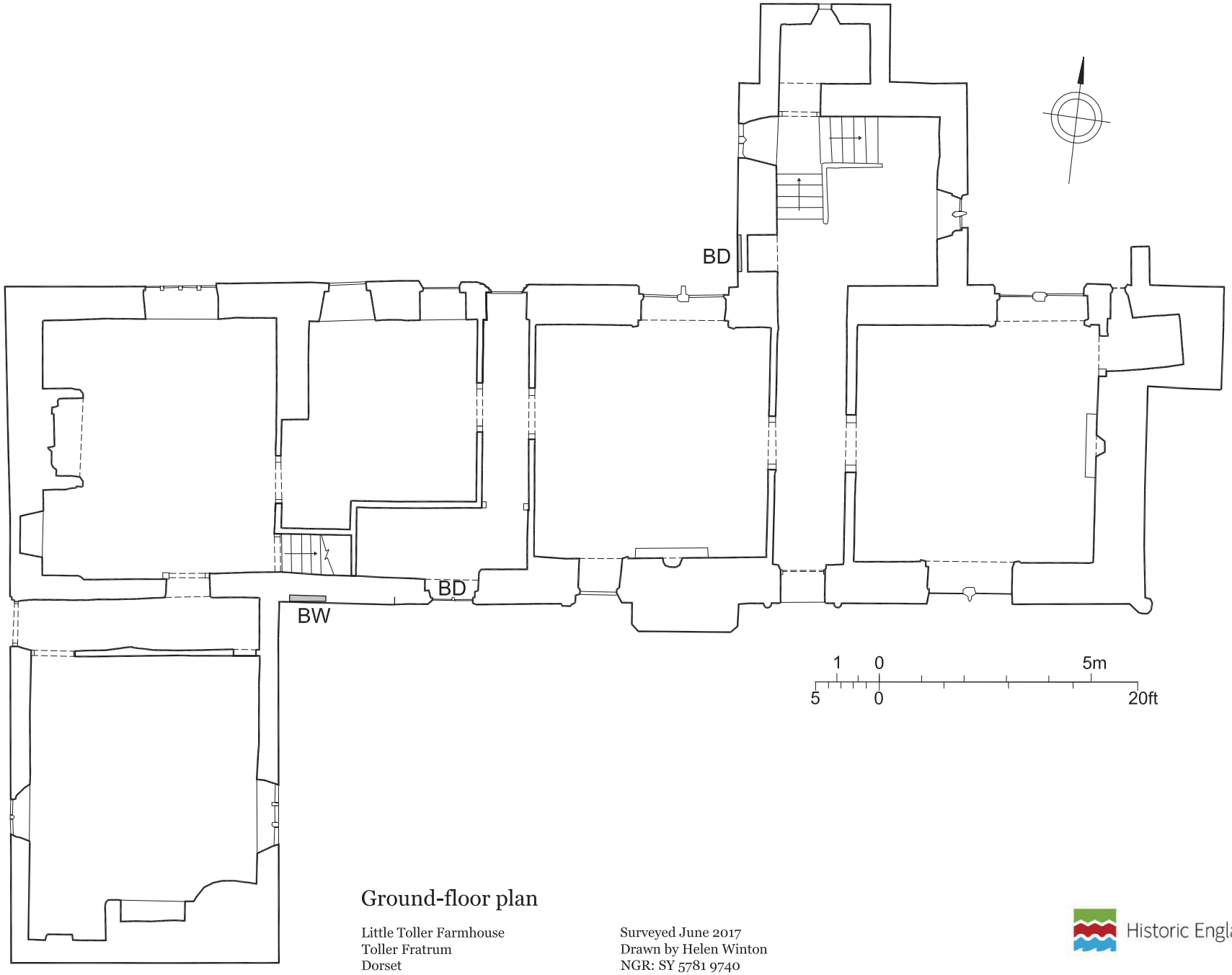
South Side
The truss is cut back on the east side
North side
Carpenters' marks not seen. The upper brace is missing. There are pairs of peg holes in the rafter for the upper and lower braces.

Truss 61

South Side
The truss is cut back and the braces removed to accommodate a lath and plaster structure in the corner.
Carpenters' marks not seen. There are pairs of peg holes in the rafter for the upper and lower braces.

Truss 62

South Side
The truss is cut back and the braces removed to accommodate a lath and plaster structure in the corner.

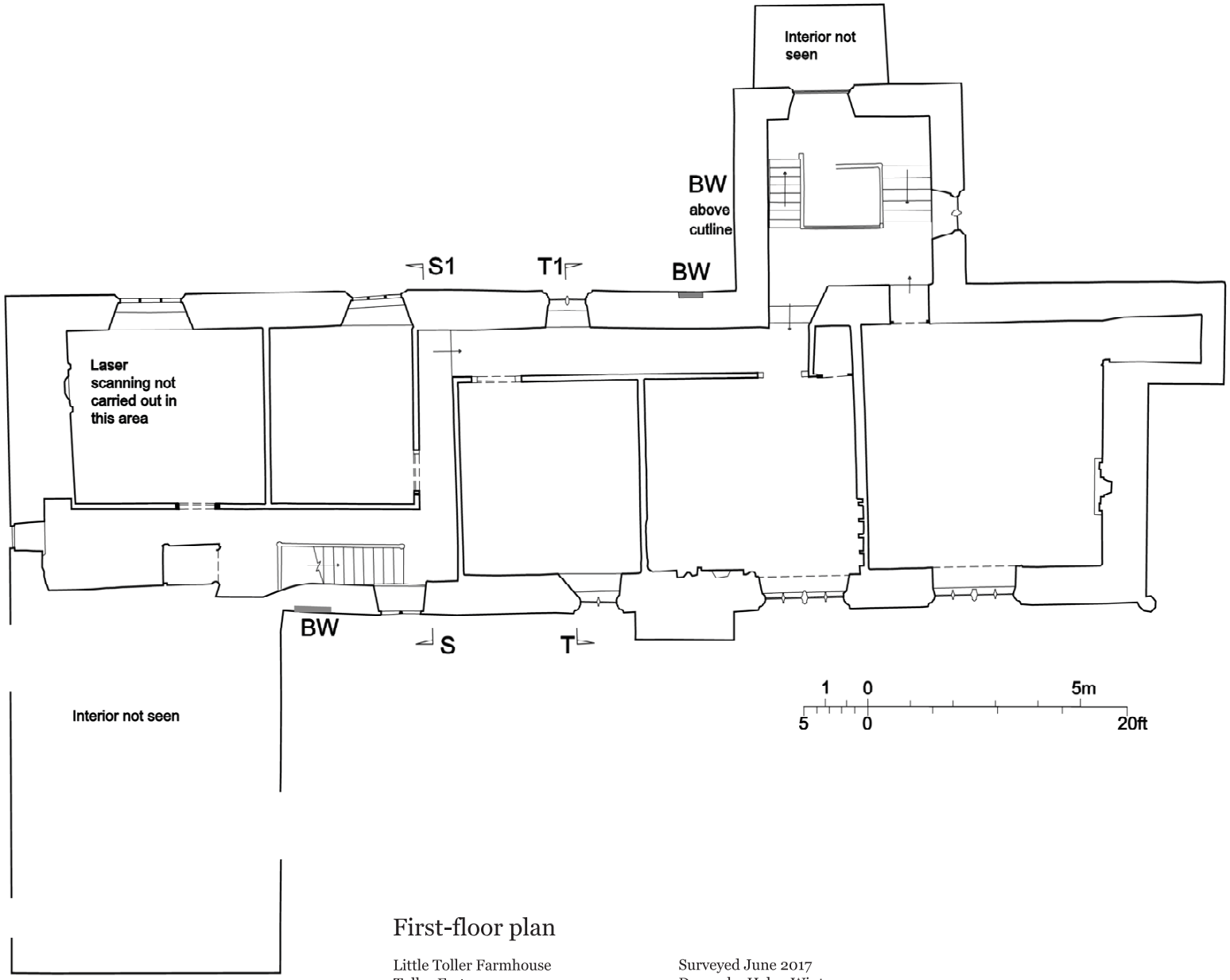


Ground-floor plan

Little Toller Farmhouse
Toller Fratrum
Dorset

Surveyed June 2017
Drawn by Helen Winton
NGR: SY 5781 9740

Historic England

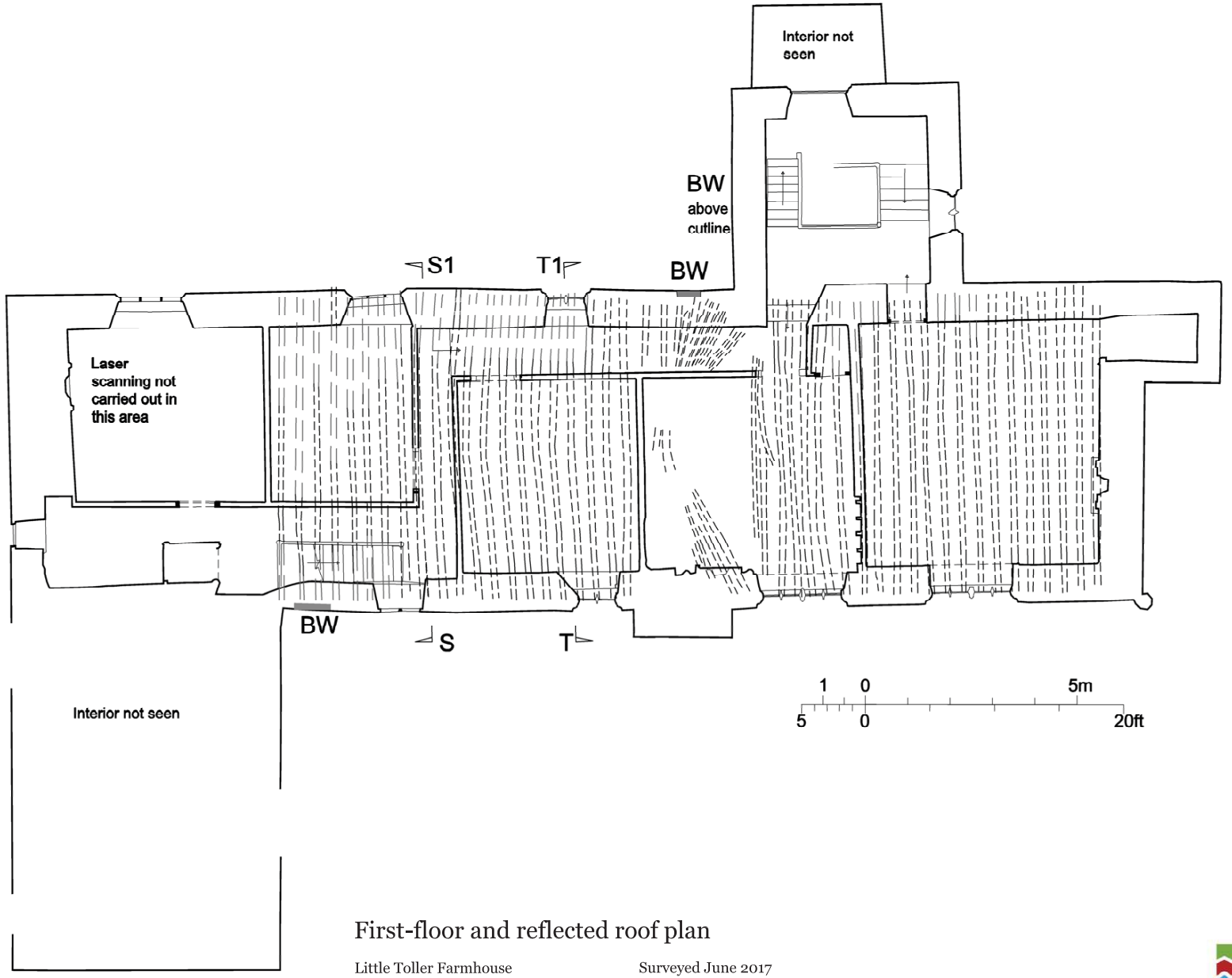


First-floor plan

Little Toller Farmhouse
Toller Fratrum
Dorset

Surveyed June 2017
Drawn by Helen Winton
NGR: SY 5781 9740

Historic England

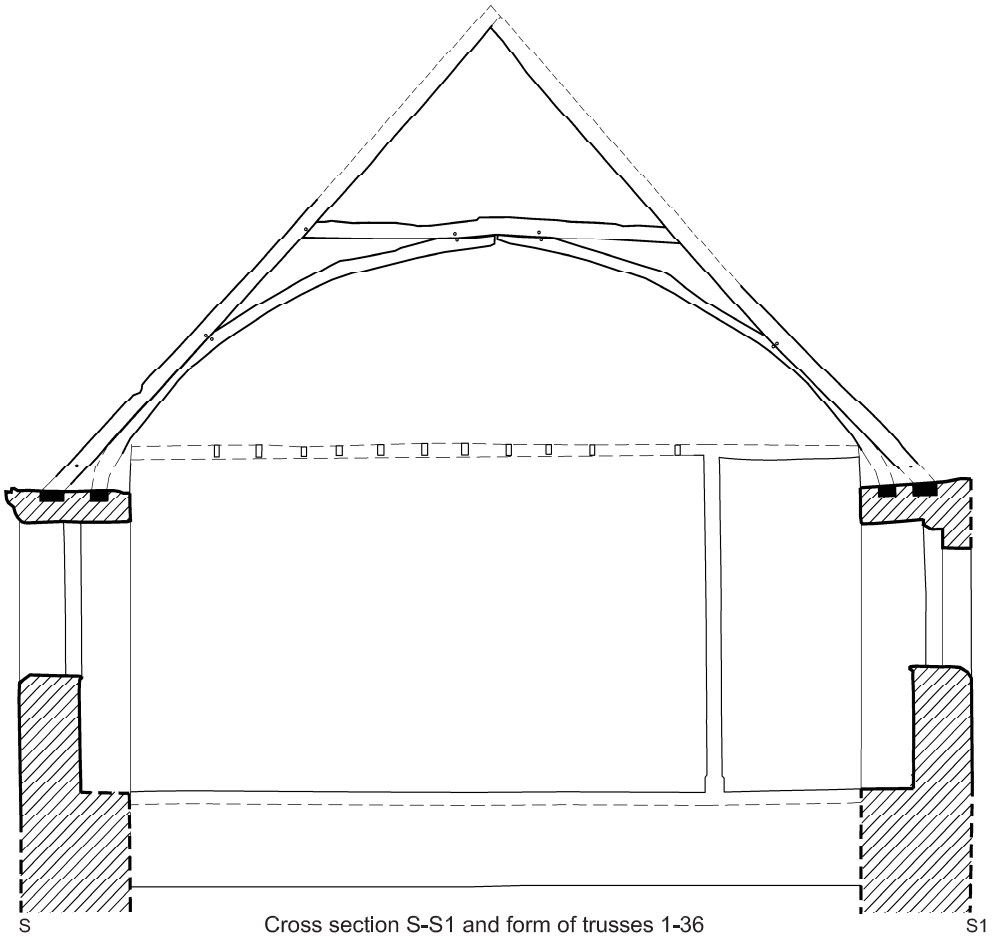


First-floor and reflected roof plan

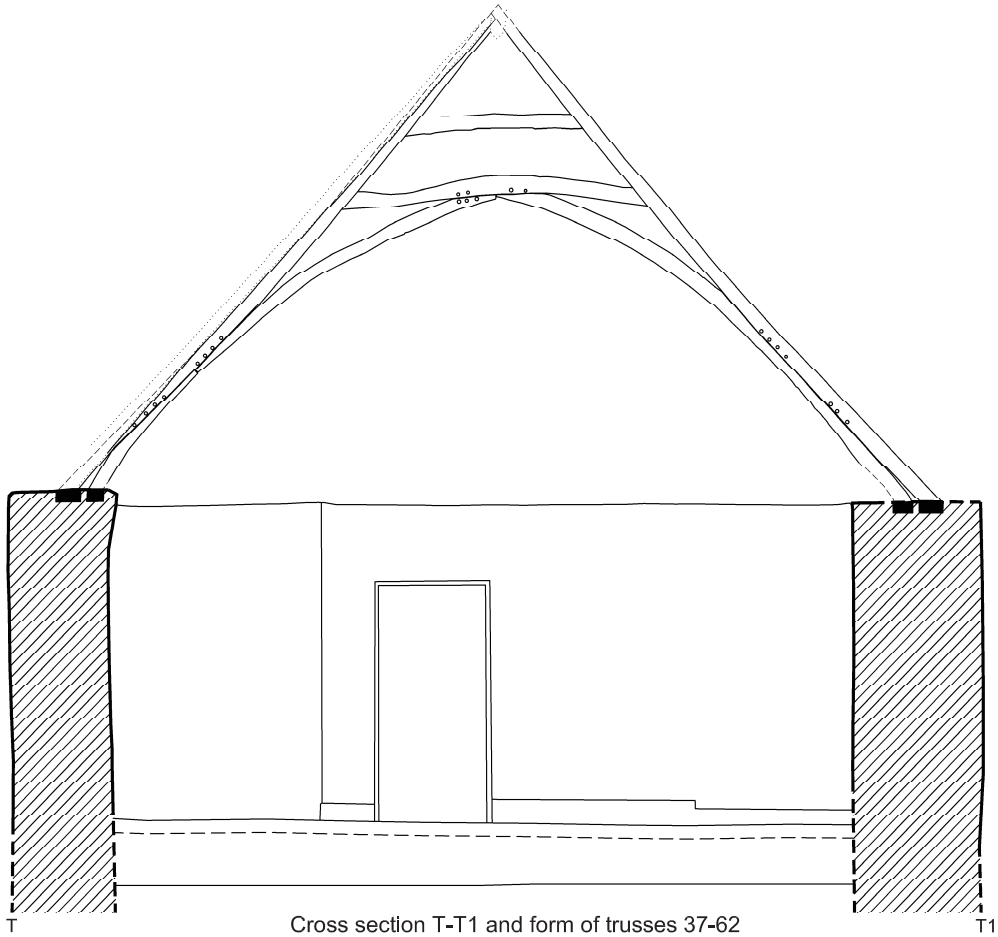
Little Toller Farmhouse
Toller Fratrum
Dorset

Surveyed June 2017
Drawn by Helen Winton
NGR: SY 5781 9740

Historic England



Cross section S-S1 and form of trusses 1-36



Cross section T-T1 and form of trusses 37-62

Key

- Cut line
- Timber
- Conjectural
- Solid wall
- Later timber
- Peg hole

1 0 5m

5 0 20ft

First -floor Sections

Little Toller Farmhouse
Toller Fratrum
Dorset

Surveyed June 2017
Drawn by David Andrews and Helen Winton
NGR: SY 5781 9740

Historic England

Historic England Research and the Historic Environment

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