

## **Bibliography.**

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**List** Description of Building. Images of England – ASR – Full Description. Copied 17/07/2007.

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**The** History and Antiquities of the County of Essex. Philip Morant, published 1768. (Re-published 1978 by EP Publishing Ltd.)

**Ordnance** Survey 1<sup>st</sup> Edition 25" to mile. c1878.

**Ordnance** Survey 2<sup>nd</sup> Edition 25" to mile. c1896.

**Ordnance** Survey New Series 25" to mile. c1920.

**Ordnance** Survey New Series 25" to mile. c1937.

**Record** card for secular monuments. Shenfield M4. 11/05/1920.

## **Notes.**

Thanks to the owners, Mr & Mrs N Humphries and the architects Ann Nicholson Associates for general assistance and the provision of the survey drawings by MLM, Chelmsford branch produced in Feb. 2007 and used as a base for the drawings of this report.

Elphin & Brenda Watkin. July 2007.

sloping site from south to north. This section is dated to 1757 by the inscription on the jowl of post 6D. The list description implies that the letters and date were added only when the knees were added to the barn. The knees more likely date to the addition of the further bay to the north when an end frame was converted into an open frame. The forming of the mouldings to the jowl of the post is a primary piece of carpentry and almost impossible to cut insitu when the oak has fully seasoned. The arcade plates and roof were aligned with the earlier build and an additional midstrey was constructed in its central bay (5-6) with an opposing door in the, now high, aisle walling. A further bay was added in the nineteenth century with further constructions running east – west that can now only be seen from mapping records. By the divisions within the barn it can be seen that conversion to at least part animal use started quite early with added windows and rendered sections of lower walling suggesting, with the cast iron windows, the middle nineteenth century. One has also to consider that the rebuilding of the older portion could have been as late as the middle of the seventeenth century. Most roofs up to c1600 would be expected to be crown post with a Queen post form slightly later but in west Essex side purlin roofs are being used from the fifteenth century. The raking struts in the earlier portion therefore suggest a fifteenth century date as do the reduced principals. The primary arch bracing to the aisle walling would not normally be seen until the sixteenth century so what we now see could relate to a fifteenth century barn or barns being restructured in the seventeenth century with an additional three bays being added in the eighteenth century. The nineteenth century bay and the now lost buildings suggest another change in the farm as the long stable range to the eastern boundary is also shown on the earlier maps. The buildings appear to reach maximum development by the end of the nineteenth century with gradual reductions in buildings up to 1920 and then very little change to 1937 and one assumes until after the second world war. The next development being the steel framed silo and grain handling building of a type making an appearance on farms from the late 1950's as mechanisation quickly appeared. Nothing in the existing barn suggested that it was a hay barn as detailed by the HER, it has all the characteristics of a crop barn with threshing floors. Although these have long since disappeared the barn has no original pitching doors as one would expect in a hay barn or even a barn converted to a hay barn.

is now very different and the primary braces actually cross between bays ignoring the bay structure of the nave. A door is inserted into the wall of stable type with vent above.

Bay 5-6 has the top end of the wall brace and terminates in a post. As there is another post in a similar position at the other end of the bay that goes down into the next bay it can be assumed that the opening left is an original wide opening to this construction. It has holes for pintle hinges in both posts. This would be for the opposing doors to the main porch doors. The arcade brace to post 5 has the number III and has an added horizontal timber across the brace from post 6. Again bladed scarf joints can be found across post 6 at arcade plate and wallplate.

Bay 6-7 shows in the walling what would have been the normal wall framing for this phase. Two central posts fully pegged have primary braces down to the ground sill. The wallplate has quite a long bladed scarf joint adjacent to and through post 6 with a longer one above in the arcade plate. The arcade braces are numbered II and I and post 7 formed the end wall of this phase.

Bay 7-8 is the later structure with typical nineteenth century framing having minimal pegged joints. An extension scarf is part hidden by post 7 and the arcade brace to this post is nailed. A diagonal tie is set across the rafters from the collar on truss 7 down to the top of the arcade plate at post 8. A window has been cut into the wall adjacent to post 6 to miss the primary brace of the wall. The plinth brick is again nineteenth century to date with the frame with the bricks having the typical horizontal pressure marks.

### **Conclusion.**

The surviving barn is an impressive structure consisting of a series of builds, rebuilds and additions which possibly reflect the changing times in farming and eventually the complete change to equestrian use in the twentieth century. The southern end of the barn shows three bays remaining from a five bay barn possibly rebuilt in the sixteenth or seventeenth centuries from a fifteenth century barn or barns of similar dates. Posts are not in original positions and the visible carpenter's assembly marks now make little sense to the present structure. The brick plinth at this end has varying size bricks to those of the next build. This build of three bays is attached to the earlier build at a lower floor level respecting the

the stud adjacent to truss 6. This is the same as the remnant bracing seen to the south of the midstrey. This walling and the plinth had been cut into at a later time for access to the tanked outshot. The inner face of arcade post 6 is where the construction date and initials appear. The initials being picked out with nail heads to make them more prominent.

Bay 7-8 is the latest construction and shows typical wall framing to the aisle wall with primary bracing from a central stud down to the sill on each side. Again typically only the central stud and braces are pegged. The arcade braces are nailed back to the phase II structure and the roof has a ridge board. The brick plinth is cut into the earlier plinth at truss 7.

### **East wall bays 1-7.**

Bay 1-2 at the south is the bay before the two bay loss. The long scarf in the arcade plate could be an original as it would have continued into the further bays. The other adjacent to the arcade brace from truss 2 is short and more likely a cut-in scarf when the barn was refitted. A wind brace survives from this truss up to the purlin although all the top rafters are later. The aisle wall seems to be a relatively modern rebuild with a window inserted and some modern softwood boarding infilling another section. The arcade brace from truss 2 has carpenters assembly marks top and bottom, a I to top and II to the bottom.

Bay 2-3 has part of the aisle walling in place with braces as seen on the west side. In the wallplate is a bladed scarf with a short body set over a stud. Above in the arcade plate is a longer bladed scarf. A mortise exists in the principal rafter of post 2 for a wind brace to the north. The aisle walling has a late door opening to the north, a nearly central good cast iron window with opening light and rendered wall to the lower half.

Bay 3-4 has another cast iron window, much of the aisle wall structure surviving again with both braces in place. The wallplate has another short bladed scarf joint at the southern end. The arcade braces are numbered III to truss 3 and IIII to truss 4.

Bay 4-5 has a weather surface to the northern face of the arcade post 4 suggesting that this was the end of the original barn. The arcade brace to this post is nailed to the post at the lower end. The arcade plate has a bladed scarf across post 5 and also one in a similar position on the wallplate. The aisle walling

wallplate and the wall appears to have been fully studded although peg holes are not visible for some positions. A later window has been inserted into the aisle wall just north of centre. The lower half of the aisle wall is a rendered brick infill.

Bay 3-4 has a large later door opening in the aisle wall but peg holes exist for a similar wall brace to bay 2-3. Beyond the doorway at the northern end of the bay the wall brace survives and above the brick plinth the wall is again rendered to half height. The arcade brace from post 3 has an extra peg hole below the two used in the construction and a blocked mortise for the nave brace. A bladed scarf is in the wallplate near truss 3. The aisle roof has added rafters.

Bay 4-5. This bay has a near centrally positioned softwood door with vent above. The infill to the north is later possible from the door insertion. The arcade brace from post 4 has fine chiselled carpenter marks VI and it is nailed to the earlier post from phase I. The arcade plate at truss 4 laps over the earlier build and the wallplate plate has a simple lapped scarf at this position. The arcade plate has a bladed scarf near post 5. The post at truss 5 has a carpenter's mark V to the arcade brace. These carpenter's marks refer to the eighteenth century build.

Bay 5-6 contains the northern midstrey. The arcade braces have carpenter marks IIII & III continuing the eighteenth century sequence. These braces have a long timber set horizontally across them which has bare-faced dovetailed ends suggesting an earlier use as a long lapped brace. The midstrey roof is side purlin with one birds mouth jointed collar. The porch opening is considerably lower than that to the southern porch although the door posts have long swelled lower ends no board slot evidence remains as the present doors have been cut back into the frame. It can also be ascertained that the doors were to the full porch height before these modern doors were fitted. At the roof hip the lower area is plastered internally. This is due to the large overhang precluding the fitting of weatherboarding in this area. Immediately below the tiebeam and a lower tie is the area of the dove boxes and along the lower tie are large peg holes for timbers to support the boxes. Three of the board support pegs survive and the end support plates to the side framing are in place. This area is now covered with modern boarding.

Bay 6-7 has the mark II on the arcade post to truss 6 but one could not be found on the 'end' truss 7. The aisle wall shows one brace in position dropping from a stud below the aisle wallplate to the sill at the northern end and a partial one from

spanned by the hip support braces. Now only holes, some support pegs and end supports survive. A very good oak door survives from the midstrey to a northern outshot.

#### **Truss 7. Bay 6 A-E & outshot F.**

This truss was the end bay of the eighteenth century build. The tiebeam has mortises under for infill studding and the two arcade posts have mortises for a midrail. The aisle show positions for studs and some boarding survives. Again the ground sill shows signs of being cut through to remove it in the nave area. The knees to the posts/tiebeam are not original to this construction but most likely date to the addition of a further bay to the north. The wall appears to have been fully boarded externally with no signs of any infill. The outshot to the west alongside the midstrey is a late nineteenth century build with a slate roof. It possibly started as a granary but is now tanked with a small hatch access cut through the brick plinth from the barn.

#### **Truss 8. Bay 7. A-E.**

This truss is the present end of the barn and all appears to be nineteenth century construction. It is infilled with an end frame having long pegged primary bracing with machined stud walling. Posts and rails are square machined sections and a vertical set tiebeam date it to late nineteenth century. The bricks of the plinth change and are visible as an addition to the eighteenth century plinth of the rest of the barn. A blocked but secondary opening appears in the top gable and a closed panel infill covers what was a later sliding door opening filling the area to the east of the centre post to the east arcade plate. Again the opening suggests a later modification to this end.

#### **West wall Bays 1-7.**

Bay 1-2 has the southern midstrey with side purlin roof and one central collar. The opening has a slightly cranked tiebeam with door posts inset from the jowled storey posts and set across tiebeam 1&2 as the original arcade plate is cut at truss 2. Bay 2-3. has a short bladed scarf joint to the arcade plate near truss 3. The arcade braces are numbered I & II. The roof has mortises for a wind brace from truss 2 . Truss 3 aisle post has a heavy primary brace up to the aisle

#### **Truss 4. Bay 3. A-E.**

This truss would have been the end wall of the suggested original five bay barn. It is still mainly infilled above midrail level with pegged mortise and tenoned studs and the aisles are infilled with boarded studding with the lower areas as plastered studwork. It appears to have concrete plinths under the return aisles and it is suggested that the main sill beam was cut out to extend the barn in the eighteenth century. The mortises under the midrail in this area still show very strong shadow marks which may suggest that the wall was not actually removed until much later. The 'end' truss of the roof has a collar with the principal rafters reduced for the purlin and again higher up for the ridge joint. A later opening west of the centre post is now filled with late braces nailed from centre post to tiebeam.

#### **Truss 5. Bay 4. A-F.**

This truss is the southern side of the second or northern midstrey. The arch bracing, from post to tiebeam has been removed and replaced with knees. They are fastened with one large bolt and iron spikes to the lower edge. Both aisle plates are made from reused timber but contemporary to this part of the structure. The roof is now a simple collar rafter roof with side purlins and the principals are not reduced but simply trenched for the purlins. Again carpenters marks do not seem to relate to the structure. The rear aisle (east) has heavy butt fitted elm boarding above plinth level. This comprises 5 boards at 12" wide and one at 6". They are hand sawn from axe converted timber as the top board on the midstrey side shows an axe finished surface. The west aisle into the midstrey also has similar boarding all 12"-13" wide and again with one face of a board visible as hand hewn. The porch wall of the midstrey has a modern infill. The porch roof was built with an hip having a large overhang which was braced back to the posts. The nave floor from this truss rises to truss 4 in a concreted slope, the rear aisle has a concrete sill but the brick plinth survives to the porch area.

#### **Truss 6. Bay A-F.**

This truss to the north of the midstrey is relatively complete and the west arcade post has a decorated moulded jowl upstand on which was carved the date 1757 and the initials J + C that have been picked out with iron nails. This almost certainly dates this part of the structure. The porch had pigeon boxes in the area

an original gabled end. The brick plinth under this truss is eighteenth century to the porch and also to the rear aisle with late twentieth century brick infilling the area between.

**Truss 2. A-E with midstrey wall.**

This former open truss is fully closed by later framing and cladding. The lower part is rendered over with the nave area above covered with late nineteenth century to early twentieth century boarding. To the rear aisle five early hand sawn elm boards survive as do five to the midstrey wall with two modern. These are butt edged boards suggesting mid eighteenth century. Above the midstrey boards is an area of feather edged elm boarding. A central doorway exists in the nave area. The arcade posts are similar in age to truss 1 but have no rear shores to the aisle. The east arcade brace to the tiebeam appears to be a replacement and again the east aisle is rebuilt. The roof truss is constructed with reduced principal rafters having wind brace mortises with raking Queen struts to support the main upper purlin. The porch, possibly a seventeenth century addition, has a dragon tie to the northern corner with the door post having a mortise in line with the base of the slot in the south post.

**Truss 3. Bay 2. A-E.**

This open truss is more complete and comprises of an intermediate truss with a heavy jowled arcade post to the west with mortises for original shore and aisle tie. The arcade post to the east is not jowled has no old mortises and single pegging to the arch brace to the tiebeam. The west arch brace is also a later addition. On this truss the principal rafters are locally reduced for the purlin and have no windbrace mortises. The two braces from the aisle ties to outer wall posts have carpenters assembly marks. That to the east is I and to the west I with a tag. These make no sense in relation to the overall structure of the barn as a mark to the arcade post on the west has a I with no tag. The eastern aisle tie has three timbers set across it running north but no suggestion for use. They could date from later stabling use for the hanging of harness items. The brick plinth under the aisle return sills is rendered.



already been reduced back again by 1920 and finally to the present levels in the second half of the twentieth century. The Royal Commission photograph from 1920 shows a barn already part converted to accommodate stabling use. From the photo. it can be suggested that from the division still in place on truss 2 that the six bays to north were already converted with possibly the southern three bays only for crops. Two fields are picked out on the estate map as growing hops. Hop growing had been lost to Essex by the 1950's due to the industry being more interested in quantity rather than the high quality but low quantity produced by the Essex hop industry. The eighteenth century estate map shows what may be considered as a typical Essex arable farm also having some dairy for local needs. It had wood springs for timber requirements, controlled by the landlord, as did many Essex farms. The older stable ranges were more likely for working horses originally and appear from the maps to be very extensive as first suggested by the farm outline on the 1837 Tithe map. No buildings other than the barn were examined during this survey as access was restricted, so survival of dairy or the rearing of other animals cannot be considered.

### **Details in the barn.**

#### **South gable wall and midstrey wall. Bay 1. A-F.**

The main structural timbers are from the fifteenth century and represent a typical open truss but the infill is late twentieth century following the removal of the two further bays that were to the south. Some elm boarding in the midstrey possibly relates to its date of construction with some remains also in the east aisle. The east arcade post has mortises on its eastern face suggesting a main shore from post to aisle return sill and two varying heights of mortises for aisle ties. The lowest mortise would be from the earliest construction relating to the original low aisle walls with change made to increase the height of the aisle outer walls maybe in the seventeenth century. The western aisle post is a recent insertion. The arcade plate had been cut before reaching this end bay and a tie plate has been added across the tiebeams inside from the original plate position. An interesting item noted on the southern midstrey door post is a long tapering drop in slot for a security bar rather than the usual stepped mortise usually found for retention. The present hipped end to the porch roof appears to be a change from

on the Chapman & Andrée map of 1777 followed by an estate map in 1797. Both of these maps show vague detail. By the tithe map of 1837 the farmyard is highly developed with a large courtyard complex with numerous associated buildings. It shows the hall in the wrong position in relation to the barn. By the first edition Ordnance Survey of 1878 the barn complex shows outshots to the east and an attached building running east from the north elevation. These have all been lost. The implication from the first maps are for a smaller barn with the increase in size coming with the eighteenth century rebuild but if the inscribed date of 1757 is correct the assumption has to be made that as with many early maps the buildings are just representations and not a scale representation.

Based on this assumption we have a large barn rebuilt in the seventeenth century to a size, less the two bay lost, that remains today. No really early timbers survive in the barn, the earliest being at the northern end which suggest a fifteenth century date. With the two lost bays and the remaining fragmentary frame it is suggested that it represented a possible five bay barn, or parts, of the fifteenth century repaired and rebuilt in the middle seventeenth century.

### **Farming overview.**

The area is within the arable lands of Essex and the size of the remaining barn confirms that the estate was based on crop growing through to the twentieth century. It appears to have remained mainly arable, as shown by the steel framed silo building, well into the second half of the twentieth century with an increasing equestrian use taking over towards the end of the century. The modifications and extensions to the barn suggest an early recovery from a poor time for arable farming in the early part of the eighteenth century. However, dairy cows also formed part of the economy of the estate as shown on the estate map by field names and the building towards the north of the site that could have a related use to that field name. As with many other Essex farms they had a hopyard by the eighteenth century (grown in Essex from the sixteenth century) and the building on the 1797 estate map to the west may have been an oast house or combination oast/maltings buildings as found on many farms at that time. The buildings seem to increase in size through additions in the nineteenth century with what appear to be large stable ranges and an extension to the north of the main barn. The complex reached its peak by the end of the century and has

## **Report and Historic Assessment of the barn at Shenfield Hall.**

**Essex Historic Environment site code ; BWSH07.**

**Map ref: TQ 6053 9625**

### **Introduction.**

This is an ancient manorial site, one of two within the parish of Shenfield. An estate map by the Lucas family in 1797 showed an estate of 276 acres, then occupied by a John Marsham, which is to be considered large for the period. It is interesting to note that as, with many gentry houses, the estate sustained a long period of tenancy.

This report has been carried out following a planning application to convert the barn to domestic use. The specification was prepared by the HEM team at Essex County Council and published in January 2007.

### **Overview.**

The barn is set approximately north south in the remains of a large farmyard area converted over many years to accommodate animals with the last use of the barn being for equestrian functions. It has a line of stables bordering the site to the east with store buildings at their northern end. To the north west of the barn is an interesting corrugated iron covered steel framed grain store. This still appears to have all of its silos and operational equipment still in place and a covered vehicle loading area on the east end and most likely dates from the coming of combine harvesters to the estate. Due east of the barn is a range of modern stables. Immediately to the south of the barn is Shenfield Hall. A public footpath runs east west across the site immediately to the north of the barn.

### **The Barn.**

The building is a large high timber-framed aisled barn which has been reduced in size by two bays in the late twentieth century. It is clad with weatherboarding and has a plain clay tile roof covering. The roof was tiled when examined by the Royal Commission in 1920. The earliest diagrammatic representation of the building is