

Stours Farm, Lower Stokes Road, Ashen Sudbury Essex CO10 8JQ  
Description and analysis of the farmyard buildings at Stours Farm.  
Surveyed 14 02 2011.



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Stours Farm recorded by Google Earth in the year 2000 (top) and 2006 (annotated).

## Location

Stours Farm (TL 7520 4346) is situated on the south side of Lower Stokes Road, Ashen some 400m west of Hollow Road. The River Stour is 500m directly to the west. The full address is Stours Farm, Lower Stokes Road, Ashen, Sudbury, Essex CO10 8JQ. The site is split into two discrete complexes by a lane off the road. To the west is the farmhouse named Stours along with two timber-framed buildings used as stores and the gardens. To the east is the self-contained farmyard containing the studied buildings.

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These are: **1. East Aisled Barn, 2. South Barn, 3. Store, 4. West Stables, 5. North Stables and 6. Open Shelter.** Of these only the two barns are Listed:



© Mr John Edward Salt. The East Aisled Barn looking NE.

IoE Number: 114408

Location: BARN APPROXIMATELY 30 METRES EAST NORTH EAST OF STOURS FARMHOUSE, LOWER STOKES ROAD (south side) ASHEN, BRAINTREE, ESSEX

Photographer: Mr John Edward Salt. Date Photographed: 29 September 2004

Date listed: 29 August 1984. Date of last amendment: 29 August 1984. Grade II.

TL 74 SE ASHEN LOWER STOKES ROAD South Side 2/3 Barn approx. 30 metres ENE of Stours Farmhouse GV II Aisled barn, c.1600. Timber framed, weatherboarded, roofed with corrugated iron. 5 bays aligned approx. N-S with midstrey to W. Lean-to shed at N end. Jowled posts, braces to tiebeams and arcade plates mainly straight, some of irregular and reversed curvature. Face-halved and bladed scarfs in arcade plates and wallplates. Clapsed purlin roof. Part of the brick base wall is original, in English bond, but most of it has been renewed at various periods.



© Mr John Edward Salt (South Barn is to the left, West Stables to right). Looking S.

IoE Number: 410211

Location: BARN APPROXIMATELY 30 METRES SOUTH EAST OF STOURS FARMHOUSE, LOWER STOKE ROAD (south side) ASHEN, BRAINTREE, ESSEX. Photographer: Mr John Edward Salt

Date Photographed: 29 September 2004. Date listed: 29 August 1984

Date of last amendment: 29 August 1984. Grade II.

TL 74 SE ASHEN LOWER STOKE ROAD South Side 2/4 Barn approx. 30 metres SE of Stours Farmhouse GV II Barn, c.1600. Timber framed, weatherboarded, roofed with corrugated iron. 5 bays aligned approx. E-W with midstrey to S. Jowled posts with later bolted knees, curved bracing trenched inside heavy studding. Face-halved and bladed scarfs in wallplates. Clapsed purlin roof with curved wind bracing. The original base wall in English bond is almost wholly present.

### **The General Setting**

The farmyard is discrete from the house which is set back and higher up on a hillock which the road winds round to the SW. Stours, which is not in the scope of this study, was examined with the owner and has many features original to the C16th and C17th as well as Georgian additions and alterations.

The farmyard is designed as a quadrangle formed by the buildings and is closed to the west by a brick and flint panelled wall. To the east between the East Aisled Barn and the Store is a low C20th wall with a gate and it is evident from the large concrete footing beyond that there was once a sizeable outshot on the south of the East Aisled Barn.

To the SE is an opening to the land around the back of the East Aisled Barn which is fenced off from the general paddocks that surround the farm. Both stables are still in use and are furnished with modern doors and interiors. The South Barn is used to store loose straw and the Store is outfitted with wire compounds for dog kennels. The East Aisled Barn is used as a general store, workshop and bale store. The Open Shelter is used to store lumber and old tires prior to disposal. All the buildings have C20th corrugated roofs.

The following photographs show the disposition of the current buildings:





The East Aisled Barn and the Store (right) from Lower Stoke Road looking west.



The Store, Open Shelter and North Stables with the barns behind. Looking SE.



The North Stables, East Aisled Barn and West Stables looking NE.



The East Aisled Barn, the West Stables and the South Barn looking east.



The South Barn and the West Stables looking SW.



The North Stables, West Stables and the South Barn looking NE. Set on a hill.

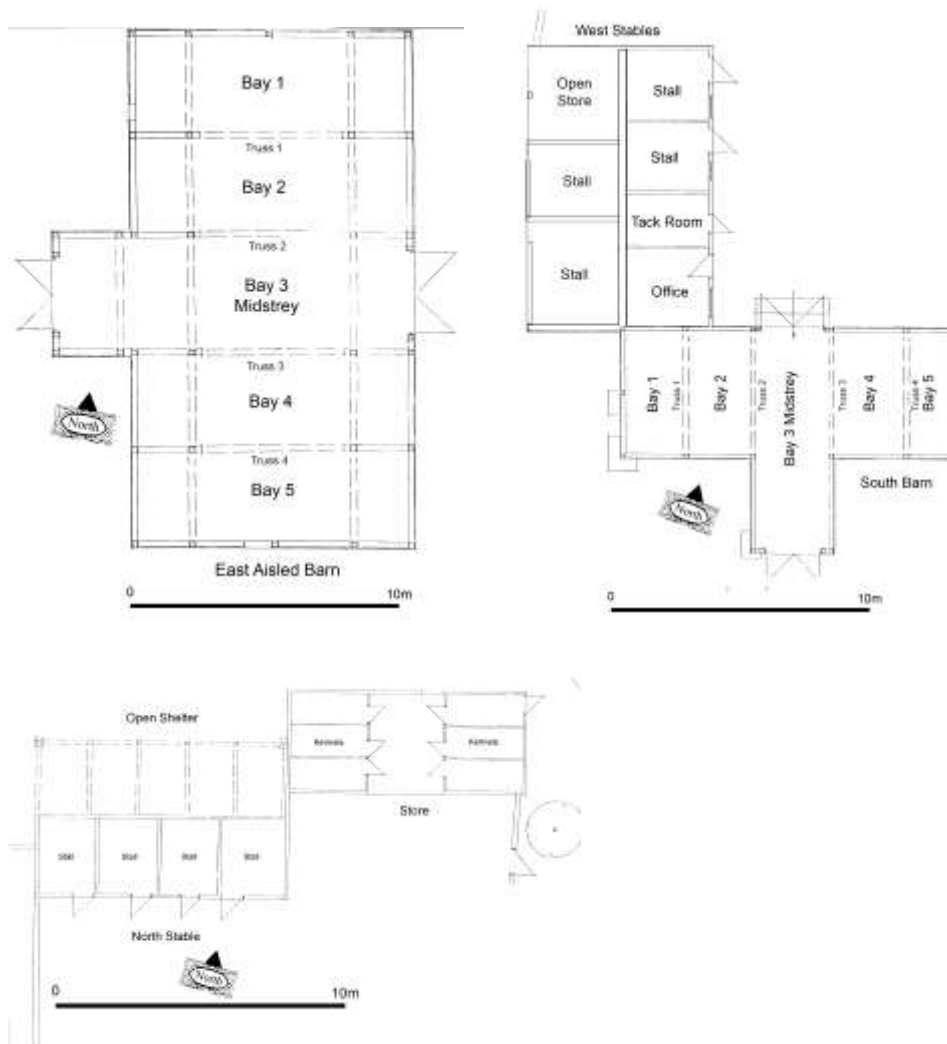




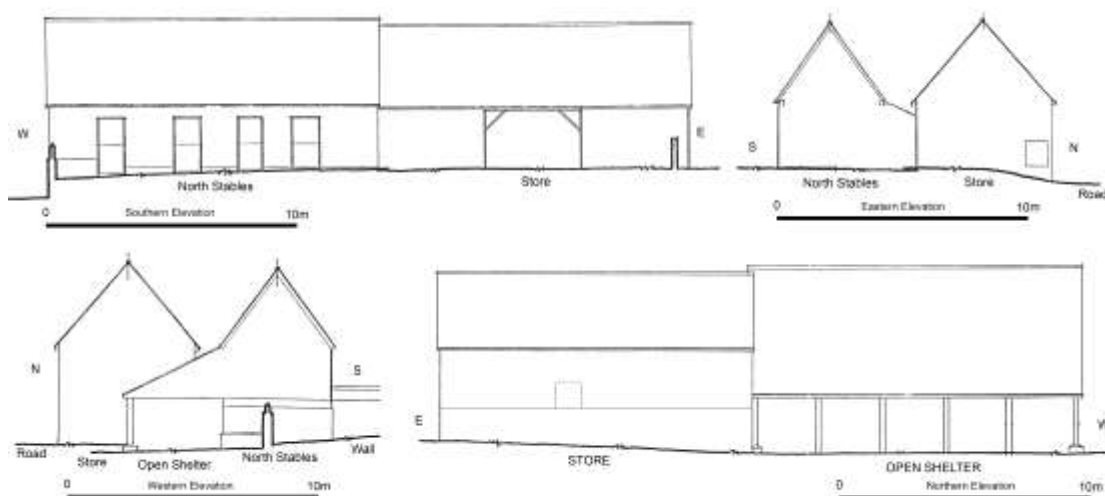
Overgrown store, Stours and a formerly thatched outbuilding. Looking NNW.



Stours looking west from the farmyard.

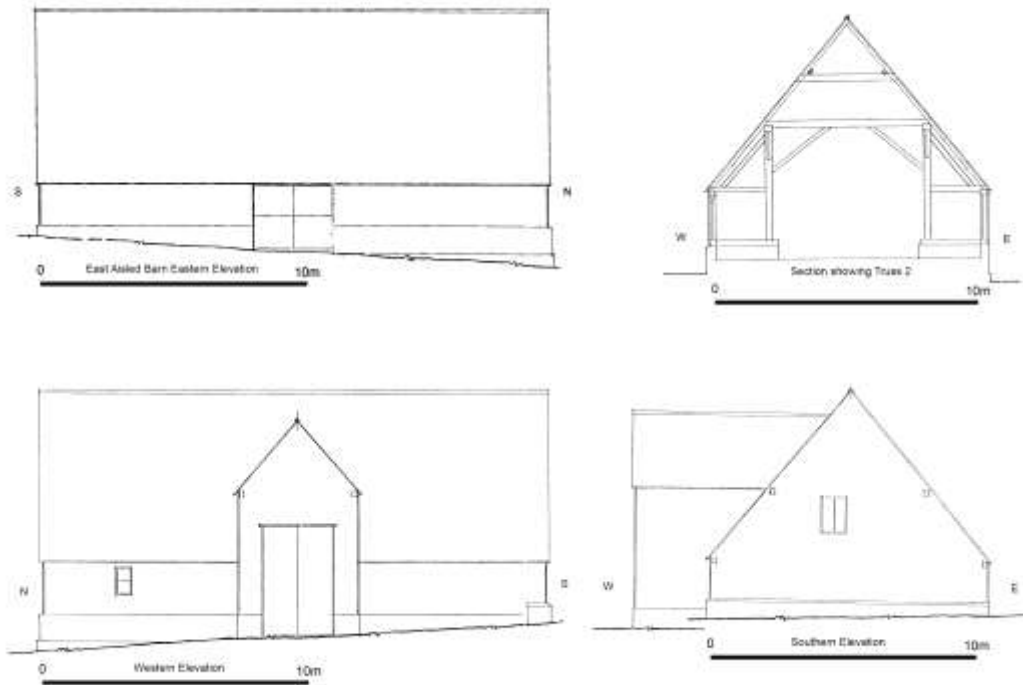


Ground plans of the studied buildings drawn by Strutt and Parker in 2005.

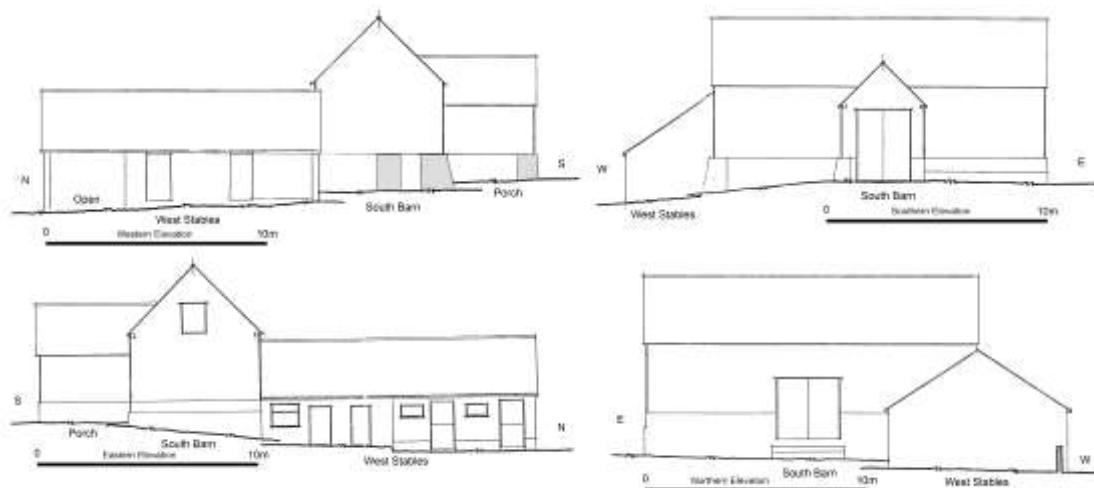


Elevations of the North Stables, Store and Open Shelter drawn by Strutt and Parker in 2005.





Eastern Aisled Barn Elevations drawn by Strutt and Parker in 2005.



West Stables and the South Barn drawn by Strutt and Parker in 2005.

## Descriptions of the Buildings.

### 1. East Aisled Barn - External Elevations



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Western elevation looking east across the farmyard.

#### Western Elevation

The East Aisled Barn is a five bay timber-framed aisled barn with a full height central midstrete porch on its western flank. The walls are clad in feather-edged 7in weatherboards of which most are either circular or bandsawn and fastened with French nails. There are a few 10in plain boards fastened with wrought iron nails to the southernmost bay frame. These have been hot tarred while the thinner ones were treated with cold brushing tar many years ago.

The frame is stood on a plinth of red bricks, 70x110x235mm set in a beige sandy bed in Flemish bond. They are handmade with creased faces, sharp arrises and light frogs. The brickwork extends inside to support the frame of the midstrete porch.

The roof has been clad in corrugated galvanised iron sheets, primed with red oxide and later painted green. The amount of wear suggests this was done over 40 years ago. The rainwater goods are all painted metal and in poor condition. The mean hopper head on the northern end does not look up to the job.

There is a narrow two pane C20th casement into the northernmost bay of the barn. The lower pane is a translucent type of wire reinforced plastic and the upper is modern thin window glass.

There are two softwood full height gate and ledger softwood doors with plain vertical boards held on mild steel reversible hinges. Original pintles remain in the jambs. The boards are stamped 'HEM-FIR in several places with accompanying BS 4978 numbers most of which are unreadable. Hem-Fir is a species combination of Western Hemlock and the true firs (Noble, California Red, Grand, Pacific Silver and White fir). The British Standard refers to the visual strength grading of timber and appears to have been first issued in 1973. (British Standards Institute).



Full height doors and above a dovecote made from an upturned boat hull.

The lower part of the southern leaf has the first three planks sawn through as though to create a half door but this was abandoned when the circular saw broke (owner - pers comm) and a hasty timber plate has been nailed on the inside to patch it all up. The doors are held closed with two home-made latches hung on a timber crossbar. There are pintles or sockets for previous upper and lower doors remaining in the jambs



Clinker built dovecote with hinged panels for access to the rear.



Above the doors is a very interesting dovecote. It appears to have been made out of a clinker built boat inverted and sawn through. Inside it can be seen that the back has a series of hinged panels with turn-buckles to allow access to the nests. The back is pencil marked and must be C20th. The supporting structure is machined softwood held with French nails.

According to the owner the dovecote was made by Italian prisoners of war between 1940 and 1945.

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The southern elevation partially obscured by an enormous heap of stable waste.

### **Southern Elevation**

Most of the barn stands on a plinth of red bricks but the northern elevation stands on shuttered concrete. The 7in weather-boards are all C20th fastened with French nails, most showing the vertical marks of a bandsaw. There are also some galvanised sheet metal patches.

Off -centre to the west there is two-pane modern plain glass casement with home-made frame. Below, a weather-board has fallen to reveal the aisle-tie and the vertical oak posts and studs of the western aisle. The ends of the arcade plates are visible under the eaves and there are applied bargeboards. The roof is heavy battened for the corrugated iron roof.

The flank of the midstrey is plain without openings. The midstrey is stood on a red brick plinth as described.



The eastern elevation looks out over the paddock which slopes to the road.

#### **Eastern Elevation.**

The eastern elevation is dominated by the blank corrugated iron roof. On this side the terrain slopes noticeably to the road and the brick plinth is sunk into the ground at the southern end and has been part replaced by shuttered concrete.

The weatherboarding has 7in and 10in boards fixed with French nails. The boards are cut short and arranged so they the span between the principal posts forming the bays. This means there is a vertical joint on every post which is very bad for water ingress and normally avoided. There is a boarded section next to the central doors that suggest a former window.



The low central doorway with two types of door. Note boarded section to the right.

There is a low, inserted doorway, beneath the wall plate in the central midstrey which is pegged through for studs. The upper half has two vertically boarded, edge-moulded, tongue and groove softwood doors. The long wrought iron pintle straps are bifurcated at the terminals and nailed in place.



Sunray lower leaf doors in the Barley Barn at Cressing Temple.

The lower leaf is a single 'Sunray' style door where the boards are trapezoidal to form a geometric pattern like a sunray. The wrought iron pintle strap is extremely long and takes a lot of weight into the doorframe. Doors like this are normally made in pairs for much larger openings and there is a fine example on the Barley Barn at Cressing Temple which open inwards instead of outwards.



Northern elevation is blank and faces the road.

### **Northern Elevation.**

The northern elevation has no openings. The C20th 7in weather-boards are all French nailed. There is a footing for an outshot but no trace of it on the barn indicating it was reboarded after the outshot came down. The plinth is made of thinner 50x110x230mm dark red bricks set in a beige/white mortar bed with a peg tile damp course.



## East Aisled Barn Description - Internal



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Inside the East Aisled Barn. Trusses 1 and 2 from N. Note unequal braces and lack of principal rafters. Also slender jowls on Truss 1. Looking N.

The East Aisled Barn has five bays with a central midstrey porch to the west. There are four main trusses with jowled arcade posts braced to the tie-beams and arcade plates with a variety of curved and straight braces. Most are replacements because they are the same thickness as the mortices in which they sit giving them far less lateral stability than originally designed for.

The braces curve both upwards and downwards and some appear to be pairs sawn from the same trees. The end walls have been remodelled using interrupted studwork and here the empty mortices for the original braces can be seen. There are no principal rafters. Some of the jowls are so slender they might be termed upstands.

The arcade posts in the north wall are down-braced onto the mid-rail and then braced from behind onto the aisled-ties. In the other trusses these braces might be called shores but some are morticed and others are lapped and nailed. The aisled-ties are all morticed for studwall partitions between the aisle bays. (See following photograph).

The shores were added later to the original design to counteract the enormous forces put on the arcade posts that have caused many of them to contort along their length.

Most of the rafters are set on edge but since the roof has been clad with corrugated iron the re-used flat rafters have sagged under their own weight dropping away from the line of the battens.



Photo showing the sag of the rafters and the rebuilt south wall.



Comparing Bays 4 and 5 on the eastern side. Note awkward disposition of studs in Bay 5.

The walls are constructed from 5-6in wide studs cut to 3in deep. These are all fully pegged but it is evident that the frame has been completely dismantled and reassembled in a new configuration. Some of the studs are upside down and a number in the south wall are set at right angles. This is given away by the darts and ledger mortices cut in the faces of the timbers.

Each bay should have 6 studs but Bay 5 (southernmost) has only five on the west side and on the east side the sixth is awkwardly close to the principal post. The principal posts (that is those in line with the arcade posts) are unconvincing in that they have a very narrow section tapering down to 6x6in and do not correspond with the aisled ties. Most appear to be elm and some still have the bark on.

The least convincing posts are those either side of the midstrey whose form owes nothing to carpentry of c.1600 the date which is claimed for the barn in the Listing.





The southern side of the midstrey porch. Note scarf joint at top, interrupted studwork and unusual wall post. The midstrey post to the right is not oak. Initials WN are carved by the lashing ring.



In the north wall some of the studs are numbered on the inside but not in a continuous series and the numerals are cut with a variety of tools. In the midstrete a few of the studs are numbered with a large N and following digits but not in a series. (See later section on carpentry marks).



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Scarf joints in the arcade plates weakened by the insertion of mortices for braces.

There are face halved and bridled scarf joints with face pegs in the arcade plates, wall plates and the midstrete tie-beams which connect to the midstrete porch top plates. Here the tie-beam has a reduced terminal to allow the joint to be made to a smaller section timber (previous photograph). The scarves in the arcade plates are weakened by the mortices for the braces being either inserted or adjacent to them and may imply a later modification.



The roof has no principal rafters and is a clasped side purlin construction with long collars.

### **The Roof Structure**

The roof is a simple clasped side purlin roof with a collar on every third or fourth rafter pair. The rafters are mostly set on edge and there are no principal rafters. There are a few riven battens left on the midstrete porch near the dovecote.

## 2. The South Barn - External Description.



The South Barn from the south.

### Southern Elevation

The weather-boarded frame is stood on a tall plinth of deep red 55-60x110x230mm hand-made bricks with creased faces, horizontal pressure marks and sharp arrises set in a beige sandy mortar in English bond. The plinth is at least 16 courses up to a step in and then a further 6 courses to the sill plates. The SW corner is reinforced with poured concrete buttresses and the midstretey porch plinth is also rebuilt with concrete either side of the door.

The 7in weather-boards are circular and bandsawn and secured with french nails. The boards were coated with cold brushing tar many years ago. The upper six runs of board are fastened with wrought iron nails and may have been hot-tarred. There are patch repairs and some boards missing. This applies for all the elevations.

The roof is corrugated iron painted green and the rainwater goods are painted metal in poor condition.

The porch doors are vertical, edge moulded softwood boards, tongue and grooved with a gate and ledger construction. The wrought iron pintle straps have spooned terminals but each is different as though reused from elsewhere. The bottoms of the doors are raggedly sawn off and it is likely they were originally full height. There are redundant pintles in the jambs on either side.

The lower leaves have horizontal plain boards and are hung on mild steel T-strap hinges screwed to battens fixed to the inside of the jambs. It seems they were made from earlier doors that were set with the boards vertical. It is easier to see from inside.



South doors in the midstrey porch. The upper doors may be original, the lower home-made.



Western elevation showing concrete buttresses.

### Western Elevation

The western elevation is a plain gable with modern weatherboards. The West Stable abuts the NW corner. The plinth is buttressed with poured concrete.





The eastern elevation is a plain gable with central hayloft door.

### **Eastern Elevation**

The eastern elevation is a plain gable with a central door set above the tie-beam. The vertically plain boarded door has unequal wrought iron short pintle straps. The gate and ledger construction is nailed and clenched but the timbers are all machined and are LC19th or C20th.



Test pit against the south wall reveals it has been rebuilt with a Fletton foundation.

### Southern Elevation

The entire section of plinth east of the midstre doors has been rebuilt using Flettons to form a substantial foundation to 3 courses above the present surface level. The bricks above are reused and set in a cementitious mortar. This part of the plinth is properly finished with small closer bricks to the door jamb whereas the older section on the other side lacks this refinement.



The doors on the northern side.

The doors are in a sorry state almost hanging off their wrought iron pintle strap hinges. The upper leaves are vertically boarded softwood, tongue and grooved, gate and ledger with edge moulded boards. They are poor quality. The lower leaves are softwood plain boards rebated into the frame and hung on shorter wrought iron pintle straps.

The door jambs were originally wider at the base for a slot for leap boards but this has been cut back for the lower doors to be fitted.



## South Barn Description -Internal

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Looking south into the midstrey porch. Note interrupted studwork and reused timber.



South wall, Bays 4 and 5. Studwork from an earlier house and Georgian nailed bracing.



Unlike the East Aisled Barn which is fully pegged in construction the 5 bay South Barn is held together with ironwork at every major joint, be it nails, bolts or iron ties. The timber-frame is raised on the red brick plinth and is for the most part reused oak. The curved braces in the walls are elm and there are elm quarter poles as well as other unidentified timbers, some with the bark still on.

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The interrupted studwork is cut on a module of 3in deep and varies in width from 3-6ins. The walls each have two diagonal braces, straight or slightly curved upwards with the exception of the south wall which is composed almost entirely of a fully framed wall from an earlier house. The principal posts are joined by a mid-rail (missing for the midstrete doorway) and vertically studded with heavy 6x3in timbers which are numbered through with bolster marks.



Top-plate (left) in Bay 1 and midrail in Bay 4 have diamond mortices for heavy mullions.

The top-plates and the mid-rail have mortices for diamond mullions and there are remnants of shutter grooves. The easternmost tie-beam has diamond mortices and mortices for a fully framed end wall. (See roof description later).



Wrought iron tie on the midstrete post. Square headed bolts on the hanging knees.

The principal posts have been hacked or sawn back to a constant square section leaving the large empty matrices of the original braces. The braces have been superseded by hanging knees fastened with square headed threaded bolts. There are wrought iron L-ties and pin-ties on the principal posts connecting them to the midstrete porch. The door jambs are bolted through to the frame.

The scarf joints in the top-plates are simple central tenons clouted through with big nails and those in the sill plates are half lapped and secured with flat iron straps on the outside.



The roof structure looking east. Note curved windbraces and diamond mortices in tie-beam.

### The Roof Structure

The roof has been much depleted when reconfiguring it to receive the corrugated iron cladding and about half the original rafters are missing. The roof is a simple but elegant clasped side purlin construction with curved or cranked flat windbraces from the main rafters to the purlins except in Bay 5. The collars are narrow and slightly cranked upwards.

The main rafters forming pairs with the collars were originally the principal rafters sitting on top of the principal posts but the roof has been dismantled and remodelled as seen today. The other remaining rafters are on the flat and many are sooted black and have lap joints for collars from a collar purlin roof.

The tie-beams are all reused and have mortices for dividing stud walls top and bottom and double pegs in the centre for a crown post. The easternmost also has two diamond mullions in the centre for little gable window.

### Ironwork Fixings



A wrought iron flat strap and a pin-tie both held with nails and square staples.



L-ties on the tie-beams with bolts through the hanging knees. Mild steel L-tie on midstrey.

Wrought iron ties have been used throughout to connect the main timbers. There are three easily recognised types. The L-ties are used to connect timbers such as tie-beams and posts at right angles to each other. Flat straps are used to connect across in-line joints like scarfs. Pin-ties are used to pass through a timber and anchor to the flank of another to pull them together. These are relatively rare and are recognised by their forged round heads and stapled shanks.

Most of the iron ties are contemporary and of the same form - well finished, tapered to a nib and pierced for nails. They are attached with large nails and anchored with a square section staple. Where visible the nails have the square heads of horseshoe nails which is not uncommon on a farm. There is one exception and that is on the western midstrey porch post where the top-plate has an inserted timber section and a well rusted tie which must be mild steel and therefore Victorian. The scar for the original tie is higher up. The hanging knees are all held with two wrought iron square headed bolts with flat square nuts which can be seen on the outside. It is likely the knees were hammered into place with large clouts and then the whole assembly drilled through for the bolt.

#### **The Store - External Description.**



The northern elevation gives close onto the road to allow loading through the hatch door.



## Northern Elevation

The northern elevation consists of a 21 course stepped brick plinth of red and orange 55&65x110x230mm handmade bricks set in a beige sandy mortar in 9 courses of Flemish bond over English bond. There are a couple of courses of Fletton repairs in the west corner.

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The 7in cold tarred weatherboards are in good condition and fastened with French nails. There are several recent replacement boards fastened with French nails which have not been tarred. The roof is clad in corrugated iron sheets and is very steep and suitable for thatching. The rainwater goods are painted metal and in reasonable condition.



The hatch door from the road and inside.

There is a small gate and ledger hatch door with wrought iron pintles that opens out high to the roadside but is at floor level inside. A larger hatch has been blocked above which may have been a window. A solitary pintle remains to show there was a door or shutter.



The eastern elevation presents the gable to the road. There is a small hatch door under the sign.

### Eastern Elevation

The building presents a plain gable end to the road clad with C20th weatherboards. There is a small vertically boarded gate and ledger door in the NE corner which like the other is high to the road but at floor level inside making it ideal to load off a cart into. It has long wrought iron pintle hinges and appears C19th. Below is an iron cramp being used to stabilise the brickwork of the plinth which has had several repairs. The ground here has been made up and is overgrown.

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The western elevation is a plain reflection of the eastern.

### Western Elevation

The western elevation has a plain gabled C20th weatherboarded wall over a much repaired brick plinth. The upper few courses are inexpertly replaced with Flettons some set on edge.



The southern elevation has original boards and netting for dog kennels.

### Southern Elevation

The southern elevation is clad with hot-tarred 7in weatherboards fixed with wrought iron nails. The central bay of the three is open with a skeleton frame of modern softwood supporting galvanised netting to act as a cage. There is an opening for a door but no door.



## The Store - Internal Description.



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Modern softwood frames cobbled together with wire fencing to make dog kennels.



The eastern bay looking at the NE corner. Note very heavy timbers in the left hand wall.

The open bay gives onto three dog pounds on either side. These are quite recent and put together from oddments of modern machined timbers and heavy duty wire fencing as well



as the odd sheet of corrugated iron. The eastern bay also has a lowered ceiling insulated with straw. Each bay has a dog box. The kennels are still in use.

The Store has been constructed from the timbers of a much earlier building which has been completely dismantled and the studs and tie-beams re-used. While the gable ends have been constructed out of 2x4in machined softwood the two long walls are fabricated from very heavy waney studs 5in deep and up to 8in deep. These are pegged into massive 10x8in top-plates that have been hard worked with an adze.

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In the corners there are long straight braces nailed to interrupted studwork. The studs are all reused with many fixture holes, trenches for bracing and redundant mortices. The principal posts on the northern side are the same size as the top-plates but turned to provide an inch wide upstand which is then clamped by a hanging knee secured with wrought iron square headed threaded bolts with flat, square nuts.



Square post in the north wall has tiny upstand. Hanging knees made from tree roots.

The hanging knees appear cut on a bandsaw and have a display face into the centre of the building while the obverse reveals a very gnarly root structure. The principal posts on the southern side have proper jowls but are profiled to follow the curve of the re-used and eroded top-plate. The tie-beams are secured with wrought iron L-ties.

### **Roof Structure**

The gable ends of the roof are composed of reused rafters at the western end and quarter sawn elm poles at the eastern end. The roof is a simple clasped side purlin roof constructed in the main from reused timbers from a collar purlin roof. The sooting on them implies a former open hall. There are also elm quarter poles and waney tree poles probably cut from nearby. The rafters are paired without a ridgepiece.

The thin straight collars are tenoned or lapped, pegged and nailed to the rafters. There are no principal rafters that sit on the tie-beams. There is also a heavy bark covered pole inserted lower down to act as an intermediate tie-beam which is a later addition.



The upper sections of the gable ends have old rafters used as studs. Looking W.



Clapsed side purlin roof with reused rafters and tree poles. Looking E.





Main tie-beams are re-used oak. Central tie-beam is bark covered elm.

The main tie-beams are of interest as they are both re-used. They are clearly from a crown post roof, pegged for braces and the central post. There is an additional central one (without hanging knees) made of roughly finished elm. The two crown post tie-beams have very clear apotropaic marks facing into the central bay. (See later section on Apotropaic marks).



Apotropaic mark on the tie-beams.



#### 4. West Stables - External Description.



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Eastern elevation of the West Stables.

##### Eastern Elevation

The eastern elevation faces into the farmyard and has doors for the Office, Tack Room and two stalls. The walls are timber-framed clad with C20th weatherboards standing on a Fletton brick plinth bedded with grey cement. The roof is of corrugated asbestos sheets and the rainwater goods are painted metal in fair condition.

There is a large single pane casement with top hung light into the Office with internal horizontal bars. There are two C20th vertically boarded, softwood, gate and ledger doors with mild steel strap hinges screwed to the frames. The door into the Office is wider and has a Bakelite doorknob.

The horse stalls have very modern boarded half doors with galvanised reversible hinges secured with recent Pozidrive screws. The boards are sheeted in galvanised sheets to stop the horses chewing them. Each stall has a two field casement glazed with an obscured rigid plastic sheet.



The southern elevation has a brick and flint wall.

### **Southern Elevation**

The southern elevation has a brick and flint panel wall bonded with hard beige sandy mortar. The red bricks are large at 70x110x235mm, have smooth faces, sharp arrises, horizontal pressure marks and deep frogs visible in one brick inverted in the top course. This wall is continued down the centre of the building for its entire length.

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The timber frame above is made of machined 2x4in softwood and clad with French nailed C20th weatherboards.



Western elevation has two horse stalls and an open shelter.

### **Western Elevation.**

The western elevation has two LC20th horse stalls in the southernmost bays each outfitted with modern boarded stable doors with galvanised fittings. These are not the same as on the other side and from the greying of the timber are obviously much older. There are makers plates on the lower doors but unfortunately the horses have worn the lettering off.

The walls are clad in C20th bandsawn weatherboards above a C20th brickwork plinth set in beige cement. The internal floors are visible as poured and shuttered concrete.

The building is divided by its posts and tie-beams into 5 bays. The two to the north are open-sided with a rough earth floor. The two horse stalls are inserted and the partition between them does not respect the position of the posts.



The open bays at the northern end. The axial brick wall can be seen to divide the building.



The inside of the northernmost bay is the only place where the timber-frame is visible.

The north wall inside the open shelter is the only place the interrupted studwork timber-frame can be seen. The studs are mostly quarter sawn elm and the braces are straight sawn. The wall is framed around a central post with each half having two diagonal braces. The top plates are all sawn square. The rest of the building has been boarded out with ply or OSB (oriented strand board) in the LC20th. See following photographs.





The northern elevation has a blank gable over a brick plinth.

### **Northern Elevation**

The northern gable is weatherboarded with a mixture of older and replacement boards all French nailed. Some have traces of hot-tar but most are cold brushed and of inferior quality having split and buckled.

The frame is stood on a brick plinth of 70x110x235mm red/ orange frogged bricks the same as used to build the brick and flint panelled wall. The sill plate sits on a soldier course and there are 3 courses down to a flint foundation which is faced to be seen.

The corrugated asbestos roof is finished with narrow machined barge boards and a nailed on timber plate to cover the end of the ridgepiece.

## The West Stables - Internal Description



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Stalls on the west side have marine ply walls and no fittings.



Stalls on the east side have C20th plastic corner bowl and hay nets. Walls are clad with OSB.



The roof has very long collars clasping the side purlins. Elm tie-beams and rafters.

### **Roof Structure.**

The roof has a low pitch designed for grey slates and like all the other roofs is a clasped side purlin roof. The collars are very long and nailed to the rafters. The purlins are further supported with raking struts from the long, waney elm tree trunks that serve as tie-beams.

There are also raking struts from the top of the brick and flint wall to the apex where there is a ridge piece. Further racking has been prevented by nailing windbraces across the rafters which are also gusseted on the pairs where the collars are.

The rafters are all quarter sawn elm poles similar to the studwork but all the rest of the timbers are straight sawn in a saw mill. The tie-beams are secured with wrought iron L-ties visible above the posts on the outside.

A C20th timber-framed and plyboard sheet ceiling has been inserted over all but the open bays.



## The North Stables - External Description



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The southern elevation faces into the farmyard and has four horse stalls.

### Northern Elevation.

The North Stables has four openings with split stable doors to the same pattern as those in the West Stables (east side) but in a more weathered condition. The doors to Stall 3 (from the west) are an earlier version with mild steel strap hinges instead of the stout galvanised reversible hinges. It has been refurbished with a new bolt and kick lock.

The timber-frame is repaired with C20th weatherboards and stands on a brick plinth painted over with tar. There are some original 76in boards at the eastern end. The roof is corrugated iron painted black. The rainwater goods are painted metal in fair condition.

### The Eastern Elevation



The eastern gable is plain. The Open Shelter has been attached to the north (right).

The eastern gable has no openings and retains most of its original hot-tarred boards.



The western gable end is sat on a very deep plinth.

### **Western Elevation**

The western and northern elevations have the timber frame sat on a very deep brick plinth similar to that for the Store. The 70x110x230mm red bricks are handmade with smooth faces, sharp arrises and some have diagonal pressure lines. There are at least 20 courses up to a step and then 4 more to the sill plate which is stood on a soldier course. The base of the plinth has been shuttered with concrete.

The timber frame is clad with C20th 7in weather boards and there is a straight joint with the boards for the end of the Open Shelter to the north. The Open Shelter conceals the wall of the North Stables and the boards here are original fixed with wrought iron nails

Brick and flint panel walls are butted against the plinth to form an entrance gateway to the farm and a boundary to the farmyard.

### **North Stables - Internal Description.**

Like the West Stables the walls have been boarded out with OSB and the timber-framing is not visible. However the main posts and tie-beams are exposed and it can be seen that they have the same type of hanging knees as the Store secured with square headed bolts and wrought iron L-ties. The tie-beams are a mix of elm and reused oak from a crown post roof.

It is likely the building has been constructed to the same pattern as the Store and at the same time.



The stalls are all outfitted the same with a water trough and haynet. Hanging knees.



Tie-beam re-used from a crownpost roof (left) and an elm tie-beam with hanging knee.

### **Roof Structure.**

The roof has been largely dismantled and battened for a corrugated iron roof. There are the remains of a simple clasped side purlin roof with some reused oak and elm rafters which are mostly quarter poles. The collars are nailed to the sides of the rafters. There are some long machined timber windbraces nailed on the undersides and a few interesting makeshift additions.

### **6. The Open Shelter - External Description**



The Open Shelter has been hung off the North Stables.



## Northern Elevation

The Open Shelter is a very simple 5 bayed lean-to open to the road and supported on 6 square posts. The pitch of the roof is quite slack and originally it would have had a grey slate roof. Now, in common with the other buildings it has a corrugated iron roof. The rainwater

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Interior of the Open Shelter looking east.

## Roof Structure

The roof is a simple lean-to with a central purlin supported on raking struts from the waney elm tie-beams which are held with large iron L-ties rusty enough to be mild steel. Some of the rafters are machined to 2x7in but most are elm quarter poles. There are some additional struts nailed on later.

## End of Building Descriptions.

## Carpentry and Timber Marks



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Sequence of carpenter's marks on the north wall of the South Barn. V, VIII, 9, XIII and XVI shown.

Both the barns have carpenter's marks in various places but there is only one true sequence. The north wall of the South Barn is numbered through on the old frame that forms most of the wall. The sequence is complete from I through to XVI and reads from east to west. The marks were made with a bolster except for number XVI which is very much fainter than the others. Number 9, which is often represented by an N, is marked like an MOD arrow. These marks indicate a mediaeval frame.



Carpenter's marks in the East Aisled Barn. III, VII, IV-II, N-II

The midstrey of the East Aisled Barn has several non-consecutive carpenter's marks. There are a number marked with an N and then a numeral on either side of the doors. Some numerals are used to replace others by over printing. Some are original and others are added. They can be distinguished by the patina which is cut through by the added marks but runs into the originals. There are similar marks on the northern wall but these are difficult to photograph. XVXX, XVII, III were found.



Carpenter's mark XII on the arcade post of Truss 2 and NII-III on the midstrey frame.

## Apotropaic Marks and Graffiti



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Apotropaic marks in the Store and initials in the East Aisled Barn.

Apotropaic marks are those symbols scratched or carved into the timbers or brickwork to ward off witches. They were common in times of witch persecution in the C16th and C17th and especially during the Civil War (1642 - 1646) when Essex was in the grip of the Witchfinder General. Their use was revived in the mid C19th by the 'Cunning Men' of which James Morrell and George Pickingill were well known in Essex.



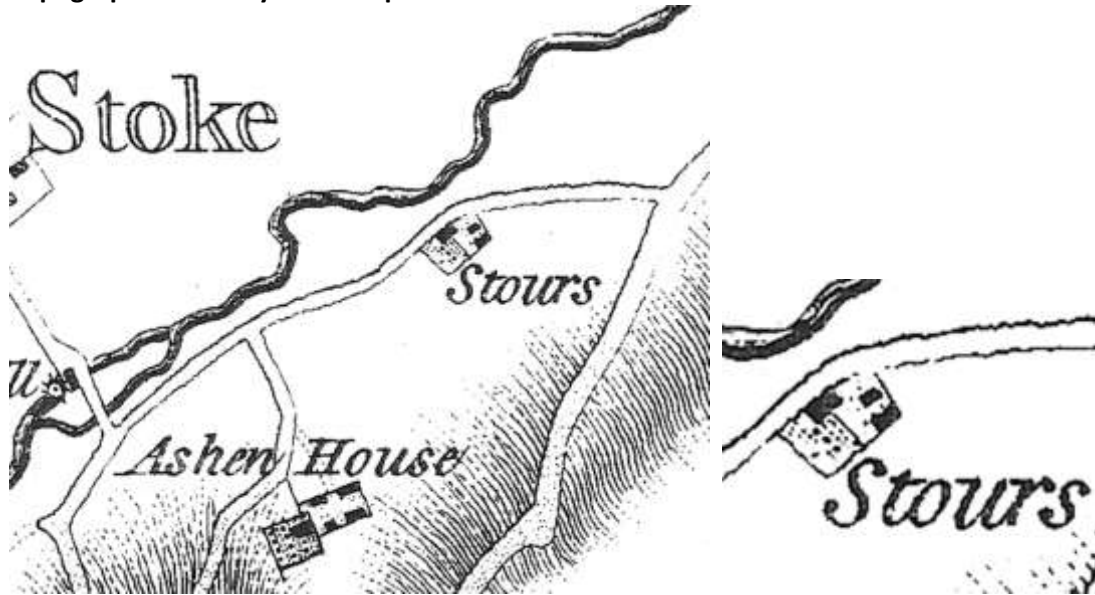
St Andrews cross, known as the Saltire Cross. Variations of the chi-rho

The two marks on the tie-beams in the Store date from the C16th and are a combination of the Saltire Cross and the symbols for chi-rho, the greek letters X and P. The marks were made with a thin knife blade and would have originally been directly beneath the crown post of the earlier building. There are similar marks in the house at the top of the stairs.

The site is remarkably free of graffiti but the initials WN have been carefully scribed on the wall post adjacent to the south side of the midstrey. See photo on page 15.



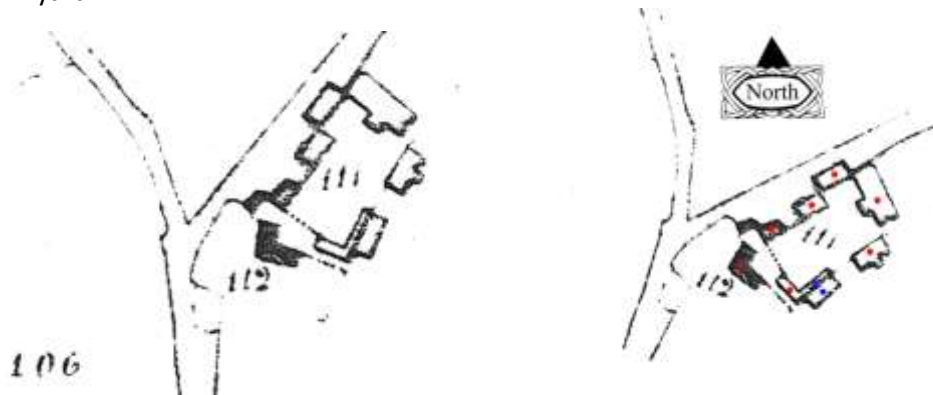
## Topographical Survey from Maps



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**1777 Chapman & Andre**

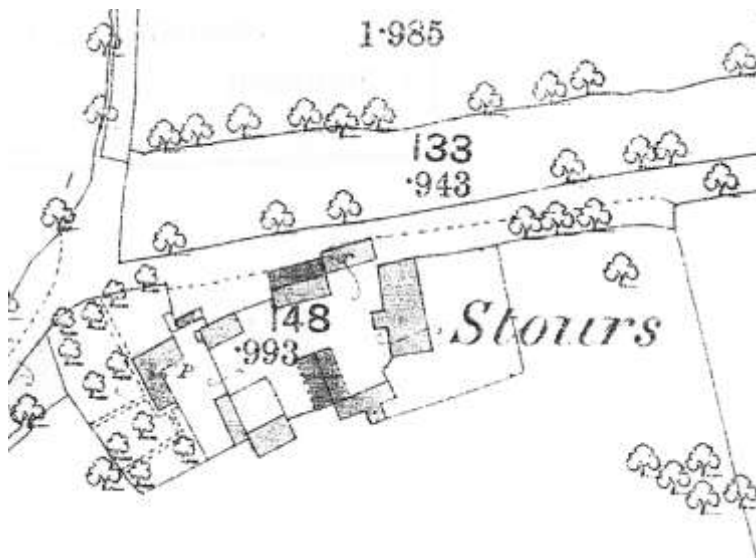
In 1777 there were only three substantial buildings on the site. If it is assumed that Stours is the larger one by the roadside then the other two buildings do not correspond to any remaining on the site. The property is shown divided into a garden or orchard and the farmyard.



**1839 Tithe Map - ERO D/CT10(2).** Map reoriented to North and marked with extant buildings.

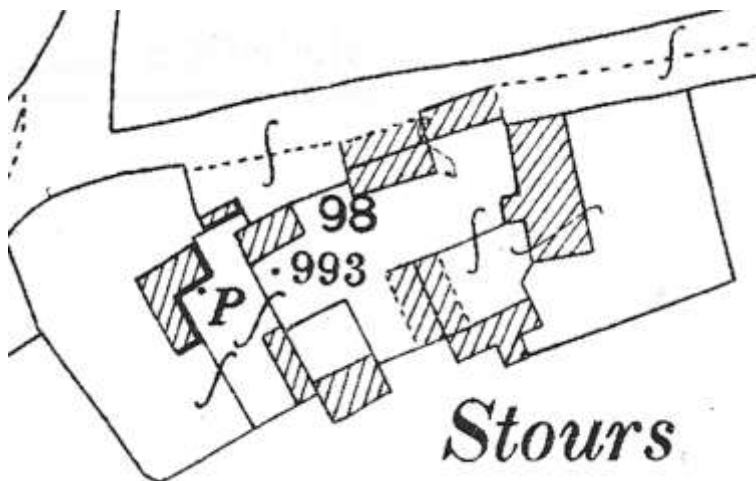
By the time of the Tithe Map the site had burgeoned into a fully developed farmstead and the East Aisled Barn, South Barn, North Stables and Store can all be identified in their current positions. Other standing buildings shown by the red dots have corresponding footprints and there are two others shown with blue squares that are marked by in-situ footings. The road has been routed away from the house.

Plot 111 is the homestead and 112 is the garden. The owner was John Barnes Elwes and the occupier was Elizabeth Clark, which in 1839 was an incredibly common name. Stours does not appear in White's Directory of 1848 and 1863 or the Post Office Directory of 1874 for Ashen.



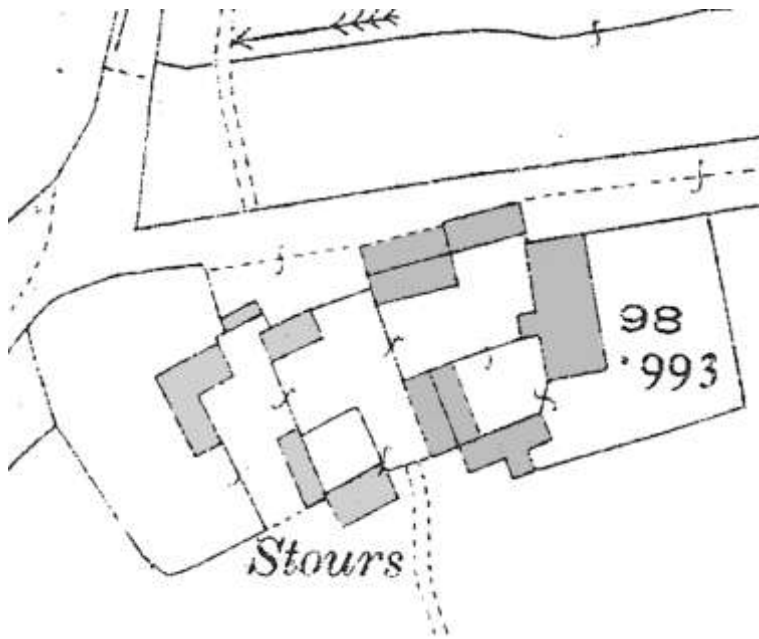
### 1876 1<sup>st</sup> Edition Ordnance Survey.

By 1876 the Open Shelter and West Stables have appeared and are shown as open sided buildings. The colour coding used in this edition indicates that both buildings have brick walls while all the others are timber. There is a pump shown outside the house and the garden paths are shown. A large fenced enclosure has appeared to the east and a smaller one has been put in the SW corner of the farmyard. The entrance to the farmyard seems to be the NE corner between the East Aisled Barn and the Store which are shown closer together than today.



### 1898 2<sup>nd</sup> Edition Ordnance Survey.

The 1898 OS plan shows no change in the layout of the farmyard. A fence has been added to subdivide the farmyard. The loss of detail in the 2<sup>nd</sup> edition is lamentable as the previous edition showed the trees and hence gave an idea of the ground cover - very useful to the military for who the maps were made.



**1922 New Edition Ordnance Survey. Enhanced by BJHC.**

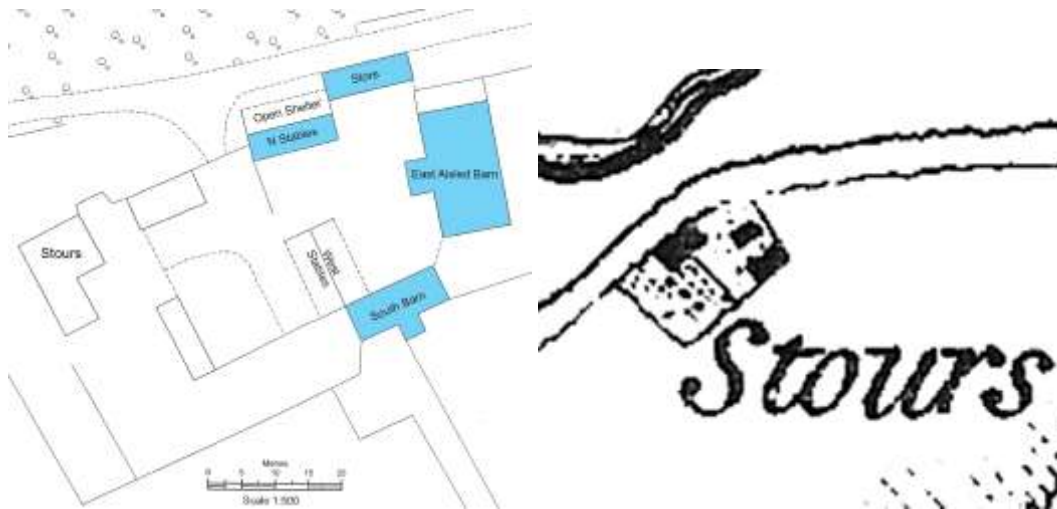
There is no discernable change in the layout of the site. The pump is no longer shown although it was still there in the 1950's recorded in photographs in the owner's possession. A trackway is shown into the site from the south and another progresses north.

Each of the maps shows the East Aisled Barn as an asymmetric building with the northern half longer than the south bringing it close to the Store. The building is fully framed on its plinth and there is a footing for another building on its northern end which must be the extra area depicted in the mapping. The owner, who was brought up on the farm knows it was a lean-to latterly used as a garage.

The lane shown in most of the maps going to the north has now been consumed in a C20th tree plantation. See the 2006 Google Earth photograph.



## Phasing and Discussion



Phase 1. Circa 1800 - 1838. Chapman and Andre's map of 1777.

### Phase 1 Late Georgian. Circa. AD1800 - 1838

Without even considering the fabric of the buildings it can be seen from the Chapman & Andre map of 1777 that none of the buildings in the farmyard were in existence then. The two barns have been fabricated out of the parts of two earlier buildings that have led to them being Listed as C16th.

#### 1. The East Aisled Barn.

The East Aisled Barn has the principal components of a fine C16th aisled barn but it is obvious that it was taken down and transplanted on the site after undergoing some heavy modifications in the style of the timber fabrication at the turn of the C19th.

Both end walls have been rebuilt using nailed interrupted studwork with primary braces incorporating sawn studs and reused rafters as well as those of the original barn. Many of the studs are numbered up but not in a rational sequence and it is evident that they have been repositioned. Some have been renumbered over the earlier carpenter's marks.

All of the principal wall posts have been replaced, along with the aisle ties which are all morticed for partition studs. The arcade posts, which have contorted under the weight of the roof have been reinforced with added shores from the aisle ties to the backs of the jowls. The principal rafters have been displaced from the trusses.

The midstrete porch is an addition where much of the timber is not oak. The central tie-beams pass into the porch indicating that there was an earlier version but they have been reduced at their terminals to scarf onto the much thinner top-plates of the current porch.

The porch originally had a pair of upper and lower doors set on heavy pintles so that a thresh-hold could be created by closing the lower doors. The same arrangement is still in place on the eastern side and the lower sun-ray door is probably original. The top-plate over

the door is morticed all along its length and is further evidence for a rebuild using older timbers.

Unusually the carpentry in the East Aisled Barn is entirely pegged and there were no visible ironwork reinforcements. The whole frame was stood on a tall plinth of red bricks. Those at the north end are reused 2in Tudor style bricks but all the others are the large, well made 70x110x235mm late Georgian bricks.

There was also a lean-to on the north end of the barn that may have been the seed processing house that is usually associated with a barn of this period.

## **2. The South Barn**

The South Barn retains a large part of the frame of an earlier house which had diamond mullioned windows with shutters running in grooves in the inside. The first four bays of the north wall are almost entirely a transplant from the earlier house and has heavy section studs, numbered in sequence and pegged into a mid-rail. The easternmost bay has been added using scantling and interrupted studwork and this creates a symmetrical building about the midstretey.

All the tie-beams and top-plates come from an earlier building and are pocked with empty mortices for partition studwork above and below. The roof structure retains the curved and cranked windbraces for the side purlin roof. The windbraces were introduced in the C16th and were very popular by AD1550 when houses were being built with chimney stacks to serve two floors. There remain a number of smoke blackened rafters from a collar purlin roof.

However the rest of the structure is c.AD1800. The walls and midstretey porch have straight and curved interrupted bracing nailed to a variety of reused oak, elm and other timbers. In the South Barn every joint is secured with ironwork of a pattern common c.AD1800. The screw threaded bolts in particular were very common by then.

The barn is raised on a deep plinth of Georgian red bricks. The doors with their edge-moulded vertical boards and long wrought iron pintle straps with spoon terminals are commonplace in buildings of this period.

## **3. The Store and 5. the North Stables.**

These buildings can be considered together as they are so similar in design and fabric. They have both been built out of the re-used timbers from an early hall house whose soot blackened flat rafters have been used in the roofs. The tie-beams are from crown post roofs and the rafters have lap joints for the collars of a central purlin roof.

The massive studs visible in the Store have deep trenches in them for curving braces, numerous fixture holes and darts for wattle and daub. The tie-beams both have apotropaic marks invoking the chi-rho symbol popular in the C16th and C17th.

The frames are secured with hanging knees and ironwork L-ties and screw threaded bolts and the framing itself is of interrupted studwork with straight diagonal braces. The frames

are stood on very deep Georgian red brick plinths. The buildings are offset because they respect the topography of the hill. If they were in line the plinth would have to be even deeper and even more expensive.

After the French Revolution of 1789 there was a long period of instability culminating in the Napoleonic Wars of 1799 to 1815. Britain and France declared outright war in 1803. England also went to war with the USA who in 1807 declared the Embargo Act preventing European vessels from trading with America. War was declared in 1812 and ceased in 1815.

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The Barns, Store and North Stables are typical buildings of the Napoleonic War Era which ignited the rush for farms to convert to grain production to capitalise on the grain embargo imposed during the hostilities from AD1799 to AD1815.

‘Napoleonic Barns’ sprung up all over Essex. They are built to a pattern composed of simple frames using primary bracing with nailed in interrupted studs. The building costs could be significantly reduced by dismantling old, out-moded buildings, possibly already on the site and reusing their frames. The owner of Stours recalls that there is a barn shaped piece of barren land up in the fields which may have been the original location of the East Aisled Barn.

At the same time wrought iron fixings, in the form screw threaded bolts and the traditional ‘blacksmith’s joints’ were being incorporated in the build as part of the original design and removed the need for heavy jowled posts. Spandrels were replaced with hanging knees bolted into place which were economic on space as well as materials. They also allowed free movement in the haylofts which had become a feature of the barns indicated by the high level doors.

Eventually the wars came to an end and trade resumed its old pattern which was disastrous for the newly improved farmsteads. There was an exceptional harvest in 1813 which drove the prices down due to over-supply. The farmers had borrowed heavily to build their new buildings and the resulting decline in prices led to a recession.

The economic climate would have been reflected in the farm buildings whose function may have been changed when the farmers used increasing mechanisation in the production of grain to reduce their labour costs.





Phase 2. The 1876 OS map shows the appearance of the Open Shelter and West Stables.

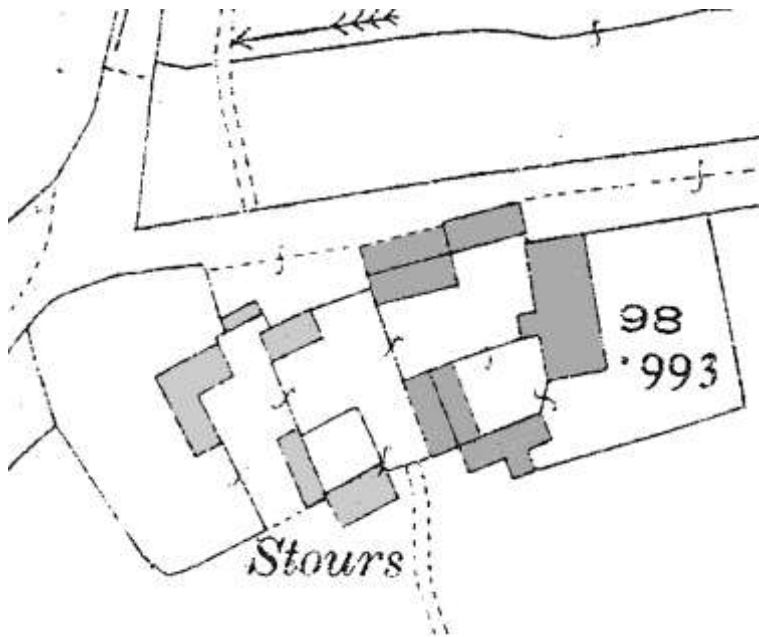
### Phase 2. Victorian Improvements - 1839 - 1876

Coming into the period of Victorian High Farming it can be seen that Stours farmyard was already perfectly configured to conform to the new ideals set by the farming elite. By the 1840's the concept of Victorian High Farming emerged.

According to G.E Mingay in *Victorian Countryside* (2000) High Farming 'was the achievement of high production by the widespread application of new knowledge and equipment. Land was drained to grow more grain and other food for more and fatter stock, yielding in turn more manure and heavier crops.'

At Stours in 1876 we see a fully developed farmyard system fully corralled for animal husbandry. As Mingay says 'To house valuable stock, preserve its manure and promote greater efficiency in the working of the greater complexities of the system, new buildings in new configurations were required. Implements of unprecedented complexity and dedication to single tasks became increasingly common and steam power invaded, first the barn and eventually the field.'

The Store and North Stables were closed buildings but the West Stables and the Open Shelter were built as open sided animal shelters for cattle and horses. The fences shown on the maps would serve equally well as paddocks or pasture.



The site in 1922.

Phase 3. The C20th.

The 1922 OS map shows that Stours retained its layout into the C20th. Here and there are repairs in Fletton bricks which became very popular in the 1920's (most of the houses in Sible Hedingham were built out of Flettons in 1924 for example).

The West Stables has been reroofed in corrugated asbestos sheets whose moss encrustations imply long use. This type of roofing was popular from the 1930's to the 1960's. The current format of the West Stables dates to the later C20th and the owner Mrs Nicholls, who was brought up on the site remembers the stalls being in place before she lived there in the 1980's.

All of the other buildings have been reroofed with corrugated iron sheets in the later C20th. The West Stables and North Stables have been recently reboarded with fresh OSB (oriented Strand Board) which is a C21st product and new good quality stable doors fixed with Pozidrive screws. The Eastern Aisled Barn has new LC20th full height doors.

The makeshift kennels in the Store are recent. The brick and flint walls that border the farmyard are LC20th and have suffered many rebuilds due to vehicular traffic impacts.

### Significance

Stours Farm is significant as a classic example of the development of a previously modest homestead into a fully outfitted commercial farm at the turn of the C19th. The grain embargoes imposed during the Napoleonic War meant that there were huge profits to be made in grain and many farms were reconfigured to incorporate large threshing barns.

Often the barns were made from earlier, outmoded buildings. In the case of Stours Farm a good quality C16th aisled barn and a dwelling house with diamond-mullioned windows and crown-post roofs. The outbuildings that are now the Store and North Stables are so similar

they must have been built at the same time and although their frames are rather shabby the deep plinths of Georgian red bricks testify to the wealth of the site at the time.

The addition of the Open Shelter and the West Stables is significant to the study of Victorian High Farming and illustrates how the site went from grain production to animal husbandry in a progression familiar all over Essex.

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Finally the two apotropaic marks in the Store are significant to the study of this arcane practice.

### **Synopsis.**

The two barns are wrong to be Listed as C16th. They are constructs of c.AD1800 using the frames of earlier buildings. The East Aisled Barn is a sympathetic Georgian rebuild of a C16th aisled barn but much of the original fabric has been replaced. The South Barn uses the roof and wall components from a much earlier house with diamond mullioned windows and a crown-post roof and may be as early as the C15th. However they are not shown on the site in Cahpamn and Andre's map of 1777.

The Store and North Stables were built at the same time early in the C19th using the principal components of an open hall with sooted rafters and tie-beams marked with chi-rho symbols in defiance of witches. The Open Shelter and West Stables were added by the Victorians between 1839 and 1876 in order to transform the site from a grain factory to an animal husbandry farm.

### **FIN.**

### **Acknowledgements.**

I am indebted to Derek Mason for engaging me to record the buildings and to the owner Mrs Nicholls for her interest and recollections of the modern details of the site. The architect's drawings were made by Strutt and Parker back in 2005 and were supplied by Nigel Valentine Architecture of Halstead. I also acknowledge Teresa O'Connor of the Essex County Council HEM team for her help.

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**ESSEX HISTORIC ENVIRONMENT RECORD/  
ESSEX ARCHAEOLOGY AND HISTORY**

**SUMMARY SHEET**

Site name/Address: Stours Farm, Lower Stokes Road, Ashen Sudbury Essex CO10 8JQ	
Parish: Ashen	District: Braintree
NGR: TL 7520 4346	Site Code: ANSF11
Type of Work: Historic Building Recording	Site Director/Team: Barry Hillman-Crouch
Date of Work: 14 02 2011	Size of Area Investigated: 100x100m
Location of Finds/Curating Museum: N/A	Funding source: Owner
Further Seasons Anticipated?: No	Related EHER Nos:
Stours Farm, Lower Stokes Road, Ashen Sudbury Essex CO10 8JQ. Description and analysis of the farmyard buildings at Stours Farm. Surveyed 14 02 2011. Barry J Hillman-Crouch MStPA DipFA BSc HND.	
Periods Represented: c1800 - C20th	
<p><b>SUMMARY OF FIELDWORK RESULTS:</b></p> <p>Farmstead shown on Chapman and Andre 1777. None of the present buildings are represented.</p> <p><b>C.1800</b>          1. East Aisled Barn. Timber-framed 5 bay threshing barn reconstructed from an earlier C16th aisled Barn with much inserted timber and midstrey.          2. South Barn. Timber-framed 5 bay threshing barn rebuilt from parts of a C15th/C16th house.          3. Store and North Stables built to the same pattern as outbuildings reusing the roof, studs and tie-beams from an open hall. Crown-post tie-beams have chi-rho symbols.          1839-1876          West Stables and Open Shelter built as open cattle sheds in the Victorian High Farming period.  <b>C20th</b>          Plan remains little changed. West and North Stables outfitted with LC20 doors and partitions. Farmyard used as a livery and dog kennels.</p>	
Previous Summaries/Reports:	
Author of Summary: Barry J Hillman-Crouch MStPA DipFA BSc HND.	Date of Summary: 26 02 2011

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