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1.0 SUMMARY

This report presents the results of an extensive survey of the remaining structures associated with the textile industry in Essex. The survey has not only identified the sites and remaining structures of the various silk mills of the County, but also fulling mills[1], weavers' cottages, workers' housing and a large range of public buildings and private houses associated with the predominant silk manufacturing family of the County - the Courtauld family. The survey's purpose is to establish the priorities within the industry, thereby enabling an appropriate response should significant remains become threatened, to assess existing statutory designations and to formulate a coherent long-term management strategy. (*Link to the English Heritage work. – S.G.*)

2.0 INTRODUCTION

2.1 Background

In summary, the production of woollen cloth was the traditional textile industry of the County, being well established by the medieval period and further stimulated by Dutch immigrants in the mid 1500s. However, its vulnerability became evident throughout the 18th century and despite some mechanisation and diversification around the turn of the century, its decline was complete by the early years of the 19th century resulting in a pool of unemployed, cheap but experienced textile workers. Towards the end of the 18th century the established Spitalfields silk industry, suffering competition, needed to find cheaper labour and migrated from its east London base to north Essex to employ the redundant wool spinners and weavers. Although the silk industry did continue the Spitalfields', and the Essex wool tradition, of domestic hand powered production, it quickly developed onto an industrial scale from the late-1820s in factories and mills in what had been the major woollen cloth production towns. Little identifiable remains of the woollen industry and also of the early domestic silk industry, and even early silk mill sites such as that in Back Lane (now Queen Street) Coggeshall (1820s) and that in Military Road, Colchester (1850) have still to be identified. However, the silk industry did have a major impact on the landscape of the County and a number of sites and structures remain to testify to this fact.

This survey concentrates upon sites of manufacturing, from weavers' cottages to the large industrial scale mills of the major towns and also upon the housing of the workforce, hence these sites are detailed in the inventory. Such, however, was the impact of the Courtauld family upon the landscape of the County over a period of in excess of 100 years, that it has been necessary to deal with different groups of sites and structures in another way. Public structures, ranging from hospitals, schools and churches, through workmen's clubs to drinking fountains are listed in one appendix, whilst the family's estates and houses along with associated estate workers' houses are listed in another appendix. Fulling mill sites identified from the literature have been included in a further appendix for completeness and future reference.
A list of the sites to be included in the inventory was thus drawn up as follows:

[1] Fulling mills are often inseparable from water powered corn mills and these will be considered in a future Thematic Survey of water mills.

Category	Number of Sites
Silk Mills & Factories	16
Weavers' Cottages	6
Workers' Housing	4 – 8
County Total	**26 – 30**

The sites were assessed and a low-level record made of any surviving remains, noting completeness, importance, rarity, group value and condition. At least one photograph was taken of each site and their limits were marked on a current Ordnance Survey map extract. Due to the nature of the survey few buildings were inspected internally, therefore an assessment will be undertaken as and when the site becomes subject to a planning application.

2.2 Layout of the Report

The report is divided into several sections. Within the section on the history of the industry in the County, the decline of the woollen industry will be examined, followed by a brief overview of the rise of the silk industry. Particular attention will be paid to the influence of the Courtauld family business. This is important because of its predominance in the area and, therefore, the extent of the remains of that branch of the industry, and also because of the welfare activities of the family in respect of both the workforce and the general populace of the area. The process of woollen cloth and silk manufacture will be briefly described, including an overview of the technology involved and the power sources used. The priorities for each of the categories of building are then established, the criteria for statutory protection are critically appraised and additional buildings of outstanding merit have been recommended for statutory protection. Schemes of re-use and the detailed recording are also considered.

An inventory is provided at the back of this report containing information on all the sites visited, ordered by Essex Sites and Monuments Record (SMR) Number. Each assessment sheet includes a description of the building(s), their archaeological potential, significance, current legislative status, recommended action and future management strategy; they are also graded according to local, regional and national importance. The textual information is supplemented by at least one photograph, a current map extract and a copy from the appropriate Ordnance Survey first, second or third map edition. As well as the inventory there are also appendices on other sites with Courtauld family connections (and town maps of the most appropriate date which show the sites in relation to each other and the urban landscape generally – *are we going to do this mapping?*)

3.0 HISTORY OF THE ESSEX TEXTILE INDUSTRY

The following historical background is a brief summary of the main events and trends in the rise and fall of the various parts of the industry. It concentrates particularly on the principal sites of the industry in Essex and the power sources and processes associated with them. For a fuller, detailed history of the industry reference should be made to the texts in the bibliography.

3.1 The Decline of Wool

Production of woollen cloth in Essex has a long history, being traced back to Saxon and even Roman times, and therefore it was well established by the medieval period. In the mid sixteenth century the Dutch introduced what was to become the main type of cloth produced in Essex – 'bays' and 'says'. A report of 1629 described a crisis in the trade due to war with Spain, one of the main markets for the Essex product. However, at the beginning of the eighteenth century the woollen cloth trade was still the dominant industry in Essex and particularly the north of the County. By the very nature of the structure of the industry it contributed to the income of a majority of the County's population. The crisis described in the 1629 report was reckoned to be affecting 12 to 14 towns and a total of 50,000 individuals.

As stated, Essex came to specialise in bays (from which baize is derived) and says (a type of serge) which were introduced by Dutch Protestant immigrants into the County during Elizabeth I's reign. These were light, loosely woven cloths similar to worsteds, but which needed fulling, though not heavily. The predominant market for this cloth was Spain, Portugal and Latin America where it was used for gentlemen's cloaks, habits for monks, nuns and clergy and soldiers' uniforms. A little was used in England for waistcoats, workhouse dress and Quaker aprons.

In 1700 Colchester, with its Dutch Quarter dating back to1570 and including a Dutch Bay Hall, produced about 50% of the total County output of woollen cloth, followed by Braintree and Bocking, Coggeshall and Halstead. Other minor centres included Dedham, Saffron Walden and Chelmsford.

Turning to the structure of the industry, the bay makers and say makers, the clothiers, were the entrepreneurs who controlled it and they were based in the large market towns. They obtained their raw wool from an area stretching from Lincolnshire in the North to Kent in the South and Leicestershire and Northamptonshire in the West. The clothiers employed their own woolcombers and spinners in the villages which surrounded the market town in which they were based and the wool was put to them for spinning. Spinning was also undertaken in the County's workhouses. The yarn was then brought back to the clothier's warehouse before being put out to weavers in the town or the surrounding villages. Once woven it was again brought back to the clothier before being carted to the fulling mill for cleaning and the creation of a dense felted finish, then stretched and dried on tenterhooks, finished and sent to London by cart or sea for export. The weavers were not necessarily full time, perhaps involved in the textile industry alongside agricultural work. Weavers during the eighteenth century became more concentrated in the towns. At the height of the industry there were estimated to be over 3,000 looms in the County which would have required tens of thousands of spinners to keep them supplied with yarn. The clothiers ran their businesses from their own homes and apart from warehousing may have had some minor finishing processes on their premises. Thus, all processes were undertaken as a domestic industry in the homes of the employed spinners and weavers.

There were booms and slumps in the trade throughout the 1700s dependent upon England's relationship with France and Spain, with overall a general decline in the

industry throughout that century. Inevitably the smaller centres were the first casualties of the decline in the trade, but even the larger more mechanised businesses eventually ceased production by the early nineteenth century. Some diversification was tried. John Savill of Bocking produced blankets, kerseys, horse-cloths, horse-rugs and collar-cloth in the early 1800s. Halstead and Braintree also produced blankets and Coggeshall worsteds and horse-cloths. In northwest Essex around Saffron Walden and Thaxted worsteds and fustians were produced well into the nineteenth century.

The reasons for the decline in the woollen trade were many and varied, and were related to the particular characteristics of the Essex trade. Thus it was too dependent upon a single product – bays and says – which had a very limited and vulnerable market – Spain and Portugal, with whom England was at war on and off throughout the eighteenth century. There was an unwillingness on behalf of the clothiers to diversify until it was too late at the beginning of the nineteenth century. The structure of the trade – the 'putting-out system' using scattered, waged labour and the clothier as the co-ordinator of the whole process – had inherent weaknesses when compared with the system of having the majority of processes under one management and in one location. The fact that the Essex industry in 1800 had no steam power and very little mechanisation was probably not that significant a factor in its decline. Although nationally mechanisation of the silk industry was well established by the middle of the eighteenth century and cotton spinning was mechanised during the second half of that century, the wool industry, and particularly weaving, was not mechanised until well into the nineteenth century.

However there was some mechanisation of the woollen trade in Essex before its decline. The horse powered roughing or rowing mill (for raising the nap on the cloth) was introduced in 1750, the wool-mill for cleaning and loosening the wool before carding and combing was in use in 1770, Kay's Flying Shuttle was in use in the 1750s, and a Spinning Jenny in 1794. The Savill family, who were bay makers, attempted mechanisation of their business having a horse powered roughing mill and wool-mill and then using water power on two sites, including at Bocking Mill, in the early 1800s to drive spinning machines.

There are few physical remains of the Essex woollen trade to assist the historian and archaeologist and hence little significant for preservation. As the industry was almost entirely domestic based and not mechanised, the cottages and houses, which once were home to the spinners and weavers, have been at least considerably altered and at worst demolished over the intervening 200 years. Weavers' cottages do exist but any special features they may have had will have been lost. Fulling mills reverted to their original use as corn mills. (Water mills are to be the subject of a full survey by Essex County Council in themselves.) The Dutch Quarter in Colchester has been re-developed in part but some of the original houses still exist in a partially preserved area (NGR TL 995 253) *(S.G., is this a Conservation Area?)*. The only significant physical remains of this industry in the County is the former bay and say mill at Dedham (NGR TM 058 328, SMR H).

The decline in the woollen trade could have had potentially disastrous effects on the Essex economy, but just as soon as that industry had declined, the silk industry arrived in the County.

3.2 The Rise of Silk

The silk textile industry was well established in England by the 15th century, although imported silk cloth had been in use long before that. By the end of the 17th century it was estimated that 40,000 families were employed in silk throwing in England. During the 16th and 17th centuries Dutch refugees had settled from time to time in the Spitalfields area of east London, just outside the City. It was to this area also that Huguenot refugees from France settled following the revocation of the Edict of Nantes (which had given the French Protestants freedom and rights) in 1685. While Spitalfields became a major centre of silk cloth production based upon a cottage industry in the attic workshops of the hand loom weavers water powered silk throwing mills were being established in Derbyshire and east Cheshire silk (weaving was still a domestic industry). In 1702 Thomas Cotchett opened a three storey silk throwing mill on the River Derwent in Derby using Dutch throwing machinery. Although this business failed within a few years, Thomas Lombe and his half-brother John (who had worked at Cotchett's mill), sons of a Norfolk worsted weaver, established another silk factory near to Cotchett's in 1721. This throwing mill was five storeys high, powered by a single water wheel and used Lombe's 1718 patent powered throwing machinery based upon Italian design.

East Cheshire was an area of mechanised silk production from the mid 18th century when it was the major textile industry of the area. Macclesfield had its first silk mill in 1744 and Congleton ten years later, although the roots of the industry can be traced back to the 16th and 17th century lace, ribbon, button and trimmings manufacturing. While generally in the textile industry the 18th century saw developments in the mechanisation of spinning of yarn, it was not until the late 18th / early 19th century that the powered mechanisation of weaving cloth became successful and wide spread. The Jacquard loom was patented in France in 1801 and was introduced to England around 1821. This loom facilitated the weaving of patterns using a continuous strip of punched cards mounted above the loom which lifted via a needle and hook the individual warp threads to create the pattern.

The industry in Spitalfields felt the competition from the mechanised factory/mill based industry elsewhere in the country. To protect their incomes the Spitalfields workers petitioned for fixed labour rates which resulted in the Spitalfields Act 1773 which fixed wages within a three mile radius. This silk industry, subject to competition both from abroad as well as elsewhere in England, needed to find cheaper labour in order to survive. Not far from east London was an increasing pool of unemployed, skilled textile workers – the former wool spinners and weavers of Essex. Thus began a migration of the industry from east London to Essex.

In fact even in the early years of the 18th century there is reference to silk throwing at the mill at Little Hallingbury (NGR TL 4958 1692, SMR 3651) which used water power to drive a copy of Lombe's machinery used in Derby. The mill was not used for long for this purpose and reverted to corn milling.

Weaving of wool cloth had taken place in Saffron Walden from 16th century or even earlier and died out at the end of the 18th century, although worsted yarn was still spun there until 1823. Around 1815 Grout, Baylis & Co. established a crape factory

at Bridge House, basically a distribution warehouse (NGR TL 5355 3865, SMR J). Silk yarn was put out to weavers who worked on looms in their own homes, there having been upto 900 looms in the town and surrounding villages. Weavers' cottages in the town itself included those that are extant in Gold Street (NGR TL 538 383, SMR S) and the terrace in East Street (NGR TL 543 384, SMR T). This hand powered, domestic business only lasted until 1836.

Pigot's Directory of 1839 recorded that in Coggeshall "the woollen and clothing trade, and particularly the production of a superior kind of baize, designated 'Coggeshall Whites', formerly gave celebrity to this town: these branches are not now attended to; they have been superseded by the manufacture of silk, which for many years has been carried on to a considerable extent, and at present employs numerous hands." The same edition also records three silk manufacturers and throwsters – William Beckwith of Back Lane, John Hall of Crouch Factory and Abbey Mills, and Westmacott, Goodson & Co of Gravel Mill. The wool cloth trade dated back to the 14th century, was third in size only to that at Colchester and Braintree & Bocking, and had all but ceased by 1815 when there was just a small production of horse cloth. Johnson and Rudkin, former woollen clothiers, began weaving silk in the town in 1816. Eventually Johnson continued production by himself and by 1827 was using a building called "Monkwell", adjacent to the River Blackwater (NGR TL 8496 2235, SMR E) for the production of silk cloth and also as a centre for teaching the manufacture of tambour lace. A number of other names are associated with silk in Coggeshall using former woollen cloth production premises, although there is now little evidence to help identify the sites - for example it is known that one such site was in Church Street and another in Back Lane (now Queen Street).

In 1818 the Coventry firm of Saywer and Hall set up business in Coggeshall, John Hall eventually running the business himself from 1827. He initially used Abbey Mill (NGR TL 8554 2214, SMR 8660) for throwing organzine and weaving ribbons (for which Coventry was a major centre of production). Hall moved production from Abbey Mill, which continued as a throwing mill until the end of the 1830s, when he built the Gravel Factory in 1827 (NGR TL 8487 2253, SMR F) for the production of ribbon and velvet. This mill was of three storeys, 130' x 24' and powered by an undershot water wheel for its 30 power-looms. Hall also used hand-loom weavers in Stoneham Street and for whom he built 14 cottages in Crouch Place. In 1838 Hall built the Orchard silk mill (NGR TL 8485 2259, SMR G) allowing him to sell the cottages in the adjacent Crouch Place (which were eventually demolished). This was a two-storey steam powered mill which had weaving on the top floor under sky-lights on 50 power-looms, with throwing and winding on the other floors. It was closed in 1877 having been run for the previous ten years or so by Stephen Brown and was sold to a seedsman, John King. Much of the site was destroyed by fire in 1920s, only the mill house, warehouse and engine house remain.

Colchester, formerly the major woollen cloth producing town and latterly a centre for clothiers, some of whom remained in business into the twentieth century, also embraced the new silk industry. In 1826 Stephen Brown built a steam powered throwing mill on a site adjacent to the River Colne in what is now St. Peter's Street (NGR TL 997 256). The main mill building was of red brick on four floors and covered an area of 81' by 39', while there were also other four-storey buildings and a single-storey winding shed plus engine house and chimney. Weaving also took place

at this mill and there were up to 160 power-looms in the mill. The mill was lit by gas from 1827. Silk production ceased in 1879 and the site was adapted to use by a brewery for malting and storage until the First World War. The site has now been redeveloped and there are no extant remains of the mill. The other silk mill in Colchester was in Military Road in the former Barracks mortuary – this site has not been identified as it may be within the boundary of the MoD site.

Chelmsford's silk industry was initially an extension of Hall's Coggeshall business. As his business flourished he opened factories and depots in Tiptree, Inworth and Maldon, and he built not only the warehouse in Hall Street, Chelmsford in 1861 (NGR TL 7100 0630, SMR No. 15572) but also the housing in the street (which was named after him). When Hall's business collapsed in 1863, the Chelmsford site was closed and then sold to Courtaulds in 1865 who used it as a silk mill until 1893. In 1899 it was rented to Marconi and became his first radio factory.

Braintree and Bocking, along with Halstead became the centres of the Courtauld family silk business, but whereas they dominated Halstead and Bocking other manufacturers were also active in Braintree. Detail of the Courtaulds business is given in the next section.

As with most of the Essex silk industry, that of Braintree had its roots in Spitalfields. Amongst the master weavers there was the firm of Walters, one of whom, Daniel, took over Pound End Mill in South Street (NGR TL 7578 2286, SMR 28098/28101) in 1821 from Courtaulds who had built it in 1818. There was a four-horse mill powering the winding machines, with handlooms being used for weaving. Weaving was also 'put out' to be undertaken in local cottages. In 1861 Walters built a new factory in Black Notley, but he had already bought the land on the south side of South Street opposite Pound End Mill where he began erecting New Mills (NGR TL 7575 2280, SMR 15098). It was built in two or three phases, being extended each time, during the 1860s. The Black Notley factory was dismantled and re-erected alongside New Mills in 1869 and itself was extended, while Pound End Mill became just a store. Weaving was undertaken on this site and outwork was able to cease, hence the distinctive fenestration. Jacquard looms were used here from the 1830s and around 1870 power looms were introduced; power-looms and Jacquard looms being built on site in the machine shop using castings made at the Rayne Foundry (NGR TL 727 227, SMR 15301). Walters' business went into liquidation in 1894. Meanwhile another Spitalfields textile family, the Warners, who can be traced back to the late 17th century, were building a prosperous business in east London. In May 1895 Warner and Sons took over New Mills from Walters. Power-loom weaving ceased only to be re-introduced in 1918 along with powered Jacquard looms. 1936 saw the building of another power-loom weaving shed which was further extended in 1949. In 1920s a dye-house was opened which again was enlarged in 1949. The site is now home of the Working Silk Museum of Humphries Weaving Co.

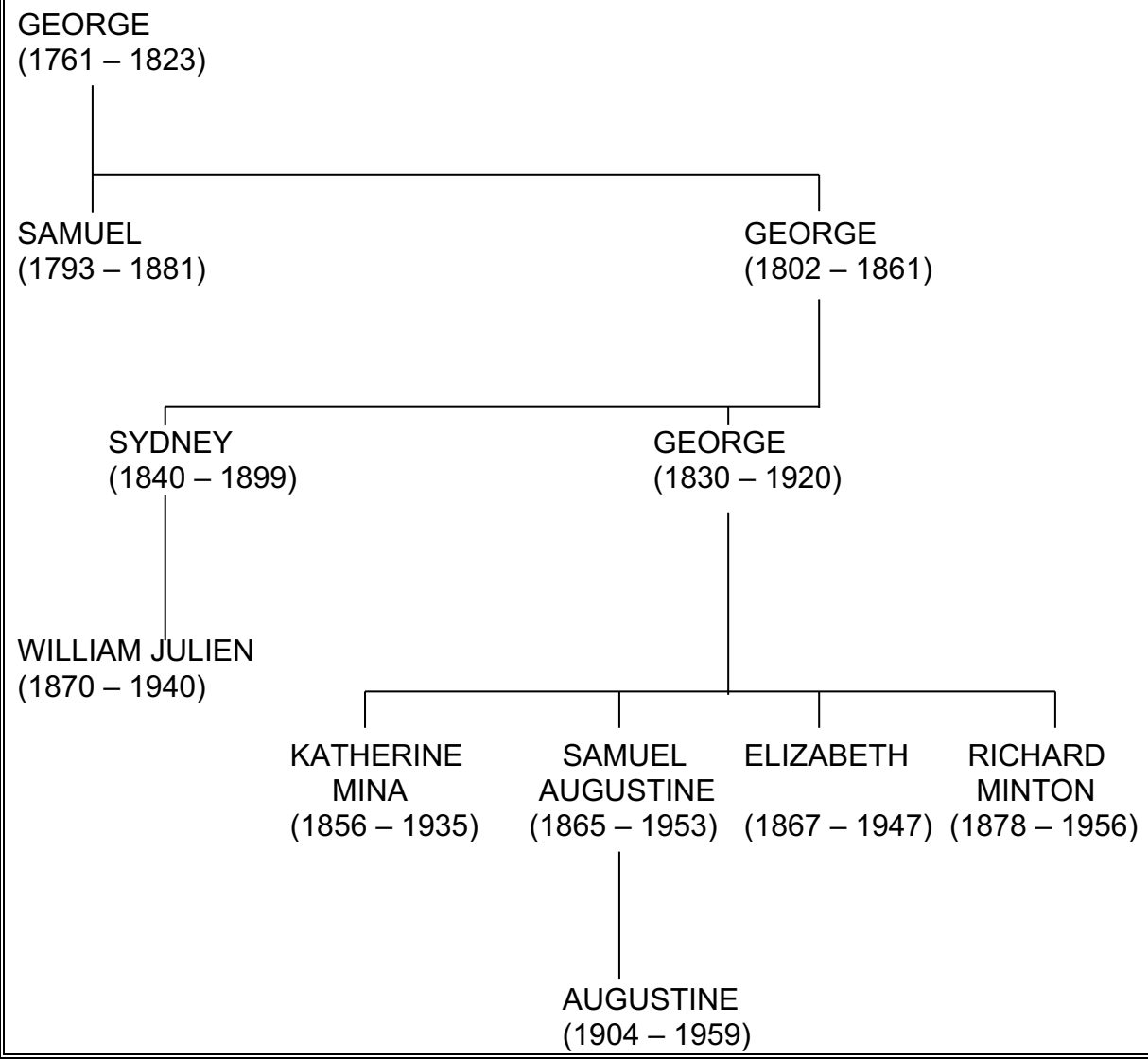
There were many other minor silk businesses in a number of the smaller towns as well as Braintree and Coggeshall which had far shorter histories than those described. As a consequence they did not develop major factories or mills and hence there are no identifiable remains of these businesses - their sites and structures. Certain key firms did prosper, as has been described, and produced silk on a large industrial scale, the remains of which are included in the inventory. Principal

amongst these large firms was the Courtauld family business, which was to have a major impact upon the Essex landscape.

3.3 Courtaulds

The Courtauld family was a French Huguenot merchant family who fled to England in the late 1680s with so many others and settled in Spitalfields. Augustine (1655 - 1706) was the then head of the family and his son Augustine (d 1751) and grandson Samuel (1720 - 1765) were goldsmiths. Samuel married a woman from another Huguenot family who had settled in Spitalfields and who were master silk throwsters and weavers. One of their sons, George (1761 – 1823) was apprenticed by his mother to a silk throwster of Spitalfields for three years before he went to America. On his return to England he re-entered the silk/crape business in Kent and in 1799 began his involvement in the Essex silk industry at Pebmarsh.

SUMMARY COURTAULD FAMILY TREE SHOWING RELATIONSHIP OF THE FAMILY MEMBERS MENTIONED IN THIS REPORT



Witts & Co., a London silk manufacturing firm engaged George to convert the existing flour mill in the village of Pebmarsh into a water powered throwing mill and to manage it (NGR TL 8535 3310, SMR 9476). He in fact demolished the old mill, built a three storey mill with an overshot wheel and the adjacent mill house, where he and his family lived, plus other houses and cottages in the village for the mill workers and weavers. Rodicks continued in business there until 1883. A 5 hp horizontal steam engine was installed in 1820s.

In 1809 George entered into partnership with Joseph Wilson, who bought the former Megs Mill flourmill in Chapel Hill, Braintree, and George converted that for silk throwing and winding (and eventually crape weaving) (NGR TL 7660 2255, SMR B). This involved the demolition of the old premises, erection of the new silk mill and mill house, deepening the water and installing a larger water wheel. George was helped by his son Samuel (1793 - 1881) and became both manager and a partner in the firm of Wilson & Courtauld. This partnership ended in 1818, Wilson retaining the premises and running his own business – Remington, Wilson & Co. George returned to America and died there in 1823.

Meanwhile Samuel, who had worked at Pebmarsh and helped his father in Braintree set himself up as a silk throwster in Panfield Lane, Bocking (NGR TL 7555 2340, SMR C) where a horse powered throwing mill was built, human power also being used. In 1817 samuel, the turue founder of the family business, went into partnership with his cousin Peter Alfred Taylor (1790 - 1850) and in 1818 the partnership of Courtauld and Taylor was formed (later known as Samule Courtauld, Taylors & Courtauld). This business was a success and Samuel & Peter set about seeking a site for a water powered mill. Not having any success they decided to build a horse powered mill and bought land at Pound End in Braintree (NGR TL 7578 2286, SMR 28098/28101) and opened what was then originally called New Mills. This was described by Samuel as a "'snug little mill'... 60ft long, 23½ ft wide and three stories [sic]; weather-boarding beaded edge, painted stone colour with black sashes and slate roof". The search for a water powered mill continued and in 1819 the lease on Savill's woollen mill at Bocking was secured (NGR TL 7550 2570, SMR D). New Mills, Pound End, was sold to Daniel Walters in 1819, Panfield Lane was closed and all activity was concentrated in Bocking. Panfield Lane was re-opened as a winding and doubling plant in 1823 and in the mid-1820s expanded to accommodate weaving.

In 1825 Samuel converted the water powered corn mill at Halstead – Townsford Mill (NGR TL 8130 3040, SMR 26109) – for silk manufacturing for another Spitalfields Huguenot, Stephen Beuzeville. The latter became bankrupt within a few short years and Samuel took the mill into his own business. In 1843 Samuel bought the Braintree Mill he and his father had originally built, from Remington, Wilson & Co for handloom weaving. Thus by the middle of the 19th century Samuel Courtauld & Co (as it was known from 1849) had what were to become its three main working bases – Bocking Mill, Halstead Townsford Mill and Braintree Mill and on all three sites expansion was taking place.

Alongside Savill's old wool mill on the River Blackwater in Bocking there developed three component parts of the whole manufacturing complex, known as Steam Factory, Finishing Factory and Bocking Mills. The Steam Factory of 1826 became

the Machine Shop which George (1802 - 1861), Samuel's brother, made his domain and where much of the firm's throwing, weaving and finishing machinery was maintained, repaired and also devised and built. The Finishing Factory began in 1827/8 as a small dye house, but as the manufacture of mourning crape became the mainstay of Samuel Courtauld & Co.'s business it became the important and almost secretive centre where the biasing, crimping, dyeing and dressing of Courtauld's crape took place. Samuel's lease on Bocking Mill expired in 1833 and he purchased it. The Mill became both the main centre of winding, drawing and throwing and also the administrative headquarters of the business.

Halstead Mill with its adjacent mill house where the manager lived had been extensively equipped for Beuzeville with 9,300 throwing spindles and 1,430 winding and drawing and doubling spindles. Advantage was gradually taken of available adjoining land when space was needed for the firm's successfully developing power-loom weaving. The first part of the Power Loom Factory opened in 1832, with further expansion in 1836 and 1842. In 1835 all 106 Essex power looms were at Halstead. Thus weaving was concentrated at Halstead although some was still put out to domestic hand-loom weavers and hand loom weaving took place at Panfield Lane until 1833 when it closed. The Braintree Mill was the least developed of the three at this time and was used for winding and throwing.

The silk trade in England saw many booms and slumps due to the generally inferior quality of English silk, competition from abroad and a dependence upon imported raw silk. It was especially affected by the 1860 trade treaty with France. This resulted in many of the Essex firms being forced out of business, including Halls of Coggeshall and Rodicks of Pebmarsh. However for Courtaulds the second half of the nineteenth century was a period of growth and this was due almost entirely to its concentration on the production of mourning crape. It became not only fashionable, but also required etiquette, for people to go into long periods of mourning (up to two years for a husband) and for them to wear black crape throughout this period, which was then discarded, new mourning clothes being bought for any subsequent period of mourning. English thrown silk yarn was ideal for this hard, stiff fabric which was dyed black, figured, crimped and biased. Courtaulds also made other soft and hard silks, but mourning crape became the firm's mainstay in the second half of the nineteenth century.

Further extensions to the mills were therefore required throughout the second half of the nineteenth century. At Halstead this was to house new throwing mills, at Bocking for new steam engines, finishing and dyeing capacity. The greatest building work though was undertaken at Braintree which had been least developed so far. A three-storey mill was erected there in 1859, which was later extended, to house power-loom weaving, winding and throwing.

In 1865 Courtaulds took over Hall's mill at Chelmsford for winding and in 1883-5 a small winding and drawing factory was erected at Earls Colne (NGR TL 8565 2880, SMR I).

Although Bocking and Halstead mills originally used waterpower, steam power was also introduced. At Bocking in 1826 there was 8 hp of water and 4 hp of steam

power. By 1850 this became 40 hp of steam provided in part by two beam condensing engines built by James Horn of Whitechapel in 1845 and 1847. At Halstead in 1828 there was 8 hp of water and 6 hp of steam power which grew to 45 hp in the power-loom factory alone. Braintree remained at 10 hp of waterpower.

By 1892 19 steam engines were in use across Bocking, Braintree, Halstead, Chelmsford and Earls Colne, including four beam engines from the middle of the century. However in that year the first gas engine was installed at Halstead. In 1894 it was decided to equip Halstead with Crossley gas engines, a gas plant was also installed to provide the gas. In 1896 twelve gas engines were at work, six at Halstead, four at Bocking and two at Braintree, all three sites having gas making plants. This, therefore, led to the scrapping of the steam engines – ten steam engines were sold or broken up in 1896/7. This rush to gas was to prove unsuccessful and when further extensions at Halstead were erected in 1903 gas was replaced by a new steam engine. Bocking also reverted to steam, as did Braintree in 1906.

Gas lighting was installed at Halstead power-loom factory in 1838 and in 1846 a gas storage plant was built at Bocking to light the factory and provide heat for the crimping rollers. By 1886 electric lighting was installed to replace this gas lighting at Halstead, Braintree and Bocking.

This period also saw the loss of many of the original Courtauld and Taylor partners in the business. In 1850 Peter Alfred Taylor died, 1861 George Courtauld died and in 1881 Samuel Courtauld. Towards the end of the century the fashion and requirement for mourning crape declined. 1891 the business became a limited liability company and new non-family members joined the Board. Hall Street mill in Chelmsford closed in 1893 and was eventually sold to Marconi for his first radio factory. Although Braintree Mill closed temporally in 1893, it was extended in 1896 and 1903 and Halstead was also extended to house more power-looms including Jacquard looms.

Courtaulds survived the changes in the silk industry at the turn of the century by re-structuring, rationalising and diversifying and were able to become in the twentieth century not just a national but also an international business having a subsidiary in America. In 1904 the firm bought the patents to viscose process of producing artificial silk fibre chemically and they immediately bought land in Coventry (another traditional silk manufacturing area) to produce viscose rayon. They expanded into north Wales, northern England and the Midlands, but also retained their textile mills in Bocking, Braintree, Halstead and Earls Colne, rayon still being produced in Essex up to the 1980s.

At Earls Colne weaving of fabric using the new artificial yarn continued until it was closed in 1925, when the building was taken over by Hunts the iron founders. At Bocking in 1913 a new five-storey mill was constructed and an improved dyehouse provided. It was further expanded after the First World War and a considerable investment was made in knitting machinery there although a small amount of mourning crape was still produced. However the old mill at Bocking was demolished in 1922. Braintree Mill was destroyed by fire on 9th December 1909, but was rebuilt within the year. It too was expanded after the First World War and Halstead's factory was re-equipped.

Although, as with the woollen industry, it is difficult to identify much of the domestic and smaller scale silk production sites apart from a few weavers' cottages, the sites of all the main industrial scale factories have been identified and most have some physical remains.

3.4 The impact on the Essex landscape of the Courtauld business and family.

The impact of the Courtauld family upon the built landscape of Essex and the development and culture of the towns and villages, extends far beyond the remains of the manufacturing sites with which they were associated. In common with many successful Victorian business families, and particularly those from a non-conformist background (the Courtauld family at this time was principally Unitarian) they were benefactors towards not only their own workforce, but also the public at large. Being a large and wealthy family they also owned a number of rural estates and associated buildings.

It became a pattern for the heads of some of the textile businesses in other parts of England and in Scotland to create whole new settlements for the workers in their mills. New Lanark in Scotland was founded in 1785 and taken over by Robert Owen in 1799, who developed it into a company village. Likewise at Saltaire founded in 1851 as an industrial model village Sir Titus Salt developed an industrial community with hygienic living standards, a church, dining rooms, school room and lecture hall and laundry. This development of model villages was not confined to the northern textile industry. In 1888 Port Sunlight was developed by Lever Brothers, in 1895 Cadburys began to build Bournville and in 1901 Rowntrees New Earswick was begun. In Essex itself, during the inter-war period Francis Crittall built Silver End for the workers of his metal window factories and Thomas Bata likewise developed East Tilbury for his shoe factory workers. These model villages not only consisted of housing for the workers but also many of the other facilities they would require – places of worship, schools and institutes, shops, open space and village halls.

However, Courtaulds did not follow this pattern, preferring as did Reuben Hunt for his foundry workers in Earls Colne (TL 856 287), to develop housing and associated facilities as necessary within the settlement in which the works were already situated. Included in the inventory to this report are a number of sites of workers' and staff housing as well as weavers' cottages used by the out workers employed by Courtaulds at times when they quickly needed to increase capacity. Halstead has the most workers' housing consisting of:

- Factory Terrace built in 1872, 16 three-storey houses (SMR L)
- The Causeway built in 1883, 12 two-storey cottages, with what was originally an adjacent dining room (SMR M)
- 45 houses built on various sites between 1920 –1935, two-storey houses in 'Courtauld Tudor' / Arts & Crafts style (SMRs N, O, P, Q & R)

In Church Street, Bocking there are five pairs of semi-detached cottages built in 1872 (SMR K).

Although Courtaulds did not develop a company village of housing and associated social facilities but built the housing in the existing settlements, they also donated a wide range of sites and facilities to the whole community in those settlements and these are detailed in Appendices 1 and 2. Thus, for example, in Halstead they were responsible for:

• Cottage Hospital	1884	SMR 15637
• Drinking Fountain	1887	SMR A2F
• Public Gardens (part donation only)	1901	SMR A2I
• Public Baths (part donation only)	1914	SMR A2J
• Homes of Rest	1923	SMR A2K
• Union Offices	1923	SMR A2L
• Church Hall, Church & Presbytery	1928	SMR A2O

and in Braintree for:

• School	1862	SMR A2A
• Mechanics Institute	1845/63	SMR A2B
• Drinking Fountain	1882	SMR A2C
• Public Gardens	1888	SMR A2H
• Cottage Hospital	1920-21	SMR 15642
• Town Hall	1928	SMR A2N
• Fountain	1937	SMR A2S
• Nurses' Homes	1939	SMR A2T
• Church & Presbytery	1939	SMR A2U

Some of these individual buildings were constructed close to each other and hence have value as a group as well as on their own. For example in Halstead the Homes of Rest, Cottage Hospital and a large number of company houses form a group along the Hedingham Road. In Braintree the School, Town Hall, Drinking Fountain and 'Corner House' are all close to each other around the Market Place.

The principal benefactors in the family appear to have been Samuel (1793 -1881), George (1830 - 1920), Katherine Mina (1856 -1935), Samuel Augustine (1865 - 1953), William Julian (1870 -1940) and Dr Richard Minton (1878 -1956).

To be able to be benefactors on this scale the individual family members had to be very wealthy, and this wealth was reflected also in the property they owned personally – estates with large houses plus housing and other facilities for the estate workers. It is assumed, it must be said, that most if not all the properties built in the rural villages and hamlets around the main manufacturing centres but close to Courtauld family mansions were for rural, estate workers rather than those involved directly in the silk industry. These sites are listed in Appendices 1 and 3 and the following table gives some of the principal examples of this rural development:

Family House	Occupant	Associated housing & facilities
Folly House, High Garrett	Samuel Courtauld (1793 – 1881)	Cottages, Houses & Chapel
Gosfield Hall	Samuel Courtauld (1793 – 1881)	Cottages, Lodges, Coffee/Reading Room, School & Bakehouse
Knights Farm, Colne Engaine	George Courtauld (1830 – 1920) and later Katherine Mina Courtauld (1856 – 1935)	Houses, Cottages & Village Hall
Cut Hedge, Gosfield	George Courtauld (1830 – 1920)	Cottages and House
The Howe Estate	Samuel Augustine Courtauld (1865 – 1953)	House and Cottages
Penny Pot	William Julian (1870 – 1940) & Constance Cicely Courtauld	Cottages

4.0 PROCESS and TECHNOLOGY

There were basically four stages to the production of finished cloth, although for different raw materials there were variations in their treatment within each of these stages. The stages were: preparation, spinning, weaving and finishing.

For wool, preparation involved firstly the washing and cleaning of the fleeces and then it was combed (worsteds) or carded (woollens) to separate the tangled fibres into straightened strands that could then be easily drawn for spinning. Carding was mechanised in 1775 by Richard Arkwright while combing was the last wool producing process to be mechanised in the 1840s.

Spinning was the process by which the fibres were twisted together to form a yarn suitable for weaving. Undertaken for centuries on the spinning wheel, this process was mechanised initially in the cotton industry with the spinning jenny (1764, by James Hargreaves), the water frame (1769, by Richard Arkwright) and the spinning mule (1779, by Samuel Crompton). These machines were then adapted for use in the woollen industry, so that by the 1770s woollens yarn was spun on a hand-powered spinning jenny, by 1784 worsted yarn could be spun on the water frame and not until the 1820s could woollens yarn be spun on a mule.

Weaving was essentially the same for all types of cloth and was performed on a loom which had the warp (longitudinal) threads wound round the warp beam and treaded through ‘eyes’ on wire ‘healds’. These ‘healds’ rose and fell in order to create the space between the warp threads for the shuttle, which held the weft (transverse) thread, to pass the width of the cloth. Originally performed on a handloom, power was eventually applied to worsted in the 1820s and woollens and silk in the 1830s. The Jacquard mechanism was applied first to handlooms in the 1820s in this country and then to power looms.

The finishing processes were many and varied, and were related to the type of cloth being produced. Woollen cloth would require fulling, a process of removing grease and other dirt in fulling stocks using fullers earth and then washing again on the fulling stocks in a soapy solution. This fulling also gave the cloth a dense felted finish. This process was mechanised in the middle ages and water powered fulling mills continued to be used until the second half of the nineteenth century. The cloth was then stretched and dried by 'tentering', tensioning and pulling on racks, in the open air. The nap of the cloth was then raised through the process known as either roughing or rowing. Traditionally undertaken using teazels, this process was mechanised in the mid eighteenth century. These raised fibres were then sheared to the required even finish. The piece of cloth could then finally be dyed. Worsteds went through a shorter finishing process of washing, tentering and shearing.

For silk the process began with putting the silkworms' cocoons into warm water to soften the natural gum and detach the end of the thread which was then wound onto skeins (this would all have taken place where the cocoons where produced, mainly in China and Italy. Once in this country the thread would be prepared by washing and then winding the thread from the skein onto a bobbin ready for throwing. While other fibres required spinning, silk would be thrown or twisted as it as already one very long piece of yarn and hence did not require the spinning of many fibres into one length of yarn. Then the thrown threads would be further twisted together in a process called doubling to produce a yarn of the required thickness. Throwing was originally performed on hand powered throwing mills until water powered throwing was introduced to this country by Cotchett and Lombe at the beginning of the eighteenth century. The cloth would then be woven on a loom as with woollen cloth. Dyeing, if not undertaken before weaving when individual yarns would be dyed, would again take place as part of the finishing process. Plain cloth would at this stage be patterned by handblock, roller of silk screen printing.

Mourning Crape was finished in a particular way which was kept a closely guarded secret within the Courtauld family business and generally within the business as a whole. Lengths of undyed crape gauze from the looms were 'biased' or 'angled' – softened and drawn to free the gauze from wrinkles and then pulled to lay the weft askew to the warp. The gauze was then passed through a crimping machine during which a 'figure' was embossed onto it. The gauze was then allowed to return to its natural curl or crimp. Thus the figure was set on the gauze and the crape allowed to assume the peculiar craped and crimped quality that was fashionable and therefore desirable. Mourning crape was then dyed black and the required dull stiffness put into the material. These various processes were performed on machines imaginatively named after the process they were performing; thus baising machine, crimping machine etc..

5.0 ARCHITECTURE

Architecturally the earliest mills reflected the vernacular style of water mill construction especially as many were either within existing water powered corn mills or replaced them on the same site. Those at Little Hallingbury (SMR 3651), Abbey Mill, Coggeshall (SMR 8660) and Halstead Mill (SMR 26109) are all of timber framed, weather-boarded construction in the typical Essex style. Even the new mills built on new sites – the water-powered mill at Pebmarsh (SMR 9476) and even the

animal/human powered mills at Panfield Lane (SMR C), Pound End (SMR 28098/28101) and New Mills (SMR 15098) - were all also of the same timber framed and weather boarded construction. Roofing materials varied with most of the early water powered mills such as Little Hallingbury and Abbey Mill having hand made tiled roofs, while the newer non water powered ones such as Pound End and New Mills had slate roofs. (Halstead Mill has a slate roof.) Gradually, however, brick construction became the main style, beginning at Braintree Mill (SMR B) and continuing through the many extensions at Bocking (SMR D) and Halstead (SMR 26109) to the new mills at The Gravel and Orchard Mills in Coggeshall (SMRs F & G respectively), Chelmsford (SMR 15572) and Earls Colne (SMR I).

The main distinguishing feature of most of these mills was the fenestration. Long windows often the full length of a facade with glazing bars and small panes indicated the weaving areas, such windows allowing as much light as possible into these work areas. Such windows are also a feature of some of the weavers' cottages, particularly Brook Place (SMR V) and Finsbury Place (SMR X) in Halstead. In both these examples the top, third storey, has long windows on each of its facades. The weavers' cottages in South Street, Braintree (SMR U) have a unique and interesting feature, that being the loom room. This takes the form of a single storey extension on the side of the main cottage building which was built to house the weaver's hand-loom. The original windows to this room were probably both larger than the others in the cottage and also of small panes separated by glazing bars.

As has been indicated within the report, the Courtauld family also had a far wider impact upon the landscape than just the manufacturing sites with which it was associated. Many of the other buildings – housing, public buildings etc. – associated with the Courtaulds had particular architectural styles, and were constructed of traditional materials. Workers' housing in Bocking (SMR K) and Factory Terrace, Halstead (SMR L) plus the housing in Gosfield (SMR A3A) all had windows with cast iron decorative glazing bars in octagonal patterns. The housing on The Causeway, Halstead was bulit in the Queen Anne style. The Company Housing in Halstead and many of the rural houses built in the inter-war period were built in what has become known as 'Courtauld Tudor' style. This was a style making use of traditional materials – wood, rendering, brick and plain clay tiles – characterised by steep roofs, tall, shaped chimney stacks, brick door and window surrounds and brick mullions.

6.0 PRIORITIES

The priorities for the industry are divided into three sections so that each category of site can be dealt with separately. These are the mill sites where manufacturing processes took place; the housing built for the workers of the mills and other company staff; and the weavers' cottages where out-work was undertaken.

6.1 Mills

This category consists of a number of sites ranging from early, small animal/human powered mills to the sites that developed throughout the nineteenth and even in the twentieth century into industrial scale water and steam powered complexes where a number of processes took place. There are some remains of structures associated

with the whole range of sites identified and the extent of the remains is very high. Also the extent of the statutory protection of structures is again very high – 81% of the sample have some protection ranging from building Listed Grade 1 to Conservation Area status.

Current Use and Status of Mill Sites

SITE NAME	PRESENT USE	CURRENT STATUS
Pebmarsh Mill SMR No. 9476	Private house and gardens	Conservation Area
Braintree Mill SMR No. B	Site cleared for housing	None
Panfield Lane Mill SMR No. C	Site cleared for housing	None
Bocking Mill SMR No. D	Light industrial, Derelict and cleared	None
Pound End Mill SMR No. 28098/28101	Light industrial	Listed Grade II and Conservation Area
New Mills, Braintree SMR No. 15098	Commercial and Working Silk Museum	Listed Grade II and Conservation Area
Abbey Mill, Coggeshall SMR No. 8660	Privately owned	Listed Grade II and Conservation Area
'Monkwell', Coggeshall SMR No. E	Private house	Listed Grade II and Conservation Area
Gravel Mill, Coggeshall SMR No. F	Site cleared for public open space	Conservation Area
Orchard Mill, Coggeshall SMR No. G	Private housing	Conservation Area
Townsford Mill, Halstead SMR No. 26109	Retail	Mill Listed Grade II*, mill house Listed Grade II and Conservation Area
Hall Street, Chelmsford SMR No. 15572	Commercial	Listed Grade II and Conservation Area
Foundry Lane, Earls Colne SMR No I	Light industrial	Conservation Area
Little Hallingbury SMR No. 3651	Restaurant	Listed Grade II*
Flemish Houses, Dedham SMR No. H	Private housing	Listed Grade I and Conservation Area
Bridge House, Saffron Walden. SMR No. J	Private house	Listed Grade II*

There is one recommendation for re-grading and any other changes in statutory protection may follow intensive internal inspection of the structures in order to assess their significance. The main recommendations of the survey are that internal inspection, assessment and recording should take place whenever an opportunity arises.

As over half of the structures are timber-framed and weather-boarded and three are former water-powered corn mills pre-dating the silk industry, priorities for these

structures have to be considered in the context of their architecture, being water-powered sites as well as in the context of the textile industry. Three sites are of national importance. Dedham (SMR No. H) is the only identified structure associated with bay and say, woollen manufacturing of the pre-nineteenth century. It is also a timber-farmed building of some considerable significance dating from the fifteenth century and is already therefore Listed Grade I. Townsford Mill (SMR No. 26109) was a water-powered corn mill before being converted to use in the silk industry. It is timber-framed and weather-boarded and is already Listed Grade II*. Abbey Mill (SMR No. 8660) is again former water-powered corn mill also used in the woollen cloth trade and silk industry. It is timber-framed and weather-boarded and currently Listed Grade II and it is recommended that it should be re-graded to Grade II*.

One site is deemed to be of regional/national importance and that is New Mills in Braintree (SMR No. 15098). This purpose built, mid nineteenth century timber-framed and weather-boarded mill remains very much intact and is used in part as a working silk museum. As such it is already Listed Grade II.

Two sites are of regional importance. Pound End Mill, Braintree (SMR No. 28098/28101) is again timber-framed and weather-boarded and retains its external integrity. An early nineteenth century site associated with the Courtauld family business, it is already Listed Grade II. Hall Street, Chelmsford (SMR No. 15572) is a mid nineteenth century brick built mill which also has significance in the context of the electronics and public water supply industries and is Listed Grade II.

Two sites are of local/regional significance. The Little Hallingbury mill (SMR No. 3651) is a water-powered corn mill of timber-framed and weather-boarded construction. It has only a brief association with the early Essex silk industry and is more significant as a water mill of typical Essex construction and as such is already Listed Grade II*. The Foundry Lane Crape Factory in Earls Colne (SMR No. I) is a mid-nineteenth century purpose built brick structure constructed for the Courtauld family business. It requires intensive internal inspection to assess and record any significant features. Following this assessment it may be deemed appropriate to re-grade the building which is currently in the Conservation Area.

Five sites are of local importance. The site of Pebmarsh mill (SMR No. 9476) is the first site in the county associated with Courtaulds. Although the mill itself has been demolished, the contemporaneous mill house remains as does some of the original watercourse. The mill house is Listed Grade II. Orchard Mill in Halstead (SMR No. G) was a major steam powered industrial scale silk manufacturing complex, but only the mill house and part of a warehouse and the engine house remain, all of which lie in the Conservation Area. Bridge House, Saffron Walden (SMR No. J) had a short association with the silk trade as a warehouse/distribution centre. The building dates from the late fifteenth century and is of architectural significance in itself and hence is already Listed Grade II*. 'Monkwell' in Coggeshall (SMR No. E) was likewise mainly a distribution centre with also some small scale, hand powered manufacturing. Again dating from the fifteenth century, the building is if architectural significance in itself and is Listed Grade II. The Bocking mill site was originally a corn mill, then associated with the woollen cloth trade before being taken over by Courtaulds. It grew into a major steam powered, multi-functional manufacturing complex and administrative centre for Courtaulds. Much has been demolished leaving the site

derelict except for two remaining buildings. It lies within the Conservation Area. But following further investigation and assessment one of the extant buildings may be deemed worthy of Listing.

The other three sites, Braintree Mill (SMR No. B), Panfield Lane, Bocking (SMR No. C) and The Gravel Mill, Coggeshall (SMR No. F) have all been totally demolished and redeveloped and hence are no longer significant sites.

Mills

SITE NAME	SIGNIFICANCE	CURRENT STATUS	ACTION	MANAGEMENT
Pebmarsh Mill SMR No. 9476	Was the site of the first purpose built silk throwing mill in Essex & associated with Courtaulds	Extant mill house in Conservation Area	Maintain current status	Mill house occupied and well maintained. Parts of original watercourse remain which may be worth recording.
Courtaulds Braintree Mill, SMR No. B	Was one of the three main Courtauld manufacturing complexes, now all demolished	None	None	Site cleared and new housing development now on site
Panfield Lane, Bocking SMR No. C	Was the site of an early Courtauld throwing mill, now all demolished	None	None	Site cleared and new housing development now on site
Bocking Mill SMR No. D	Significant site of former corn mill, woollen mill and then one of the three main Courtauld silk manufacturing complexes and HQ	None	Dependent upon outcome of further assessment of extant structures	Much of the site has been cleared, but remaining structures should be assessed and excavation take place to assess any below ground remains.
Pound End Mill, Braintree SMR No. 28098/28101	Intact example of early 19th century timber construction animal powered mill	Listed Grade II and Conservation Area	Maintain current status	In use and well maintained. Internal inspection needed and recording where appropriate.
New Mills, Braintree SMR No. 15098	Intact example of mid 19th century timber mill complex	Listed Grade II and Conservation Area	Maintain current status	In use and well maintained. Internal inspection needed and recording where appropriate.

Abbey Mill, Coggeshall SMR No. 8660	One of the most important water-powered mill sites in Essex associated with corn, wool and silk	Listed Grade II and Conservation Area	List Grade II*	In private ownership and there is evidence of maintenance work underway (May 2000). Internal inspection needed and recording where appropriate.
'Monkwell', Coggeshall SMR No. E	Slight in the context of the silk industry, but an important building itself	Listed Grade II and Conservation Area	Maintain current status	In use and well maintained. Internal inspection needed and recording where appropriate.
Gravel Mill, Coggeshall SMR No. F	Site of an early 19th century water-powered mill, now demolished and site cleared	Conservation Area	Maintain current status	Site cleared and used as public open space.
Orchard Mill, Coggeshall SMR No. G	Was the site of a mid 19th century steam powered complex, now almost entirely mainly redeveloped	Conservation Area	Maintain current status	Remaining structures in use as private houses and well maintained
Townsford Mill, Halstead SMR No. 26109	One of the three main Courtauld manufacturing complexes built around the core of a former water-powered corn mill	Mill Listed Grade II* and Mill House Listed Grade II and Conservation Area	Maintain current status	In use and well maintained. Internal inspection needed and recording where appropriate.
Hall Street, Chelmsford SMR No. 15572	In context of the silk industry only slight but also associated with electronics and public water supply	Listed Grade II	Maintain current status	In use and well maintained. Internal inspection needed and recording where appropriate.

Foundry Lane, Earls Colne SMR No. I	Late 19th century brick crape mill, purpose built for Courtaulds and then used by Hunts engineering works	Conservation Area	Maintain current status unless outcome of further assessment indicates Listing	In use and well maintained. Internal inspection needed and recording where appropriate.
Old Mill Lane, Little Hallingbury SMR No. 3651	Only brief association with the silk industry, main significance as a timber built water-powered corn mill	Listed Grade II*	Maintain current status	In use as a restaurant and well maintained Internal inspection needed and recording where appropriate.
The Flemish Houses, Dedham, SMR No. H	Former bay & say mill and as such one of few identified sites of wool trade. Building itself also important	Listed Grade I and Conservation Area	Maintain current status	In use as private houses and well maintained Internal inspection needed and recording where appropriate.
Bridge House, Saffron Walden, SMR No. J	Brief association with the silk industry and not for manufacturing. Building itself of interest	Listed Grade II*	Maintain current status	In use as private houses and well maintained Internal inspection needed and recording where appropriate.

6.2 Housing

Four groups of workers' and company housing have been identified and all remain intact with little alteration. Three are late nineteenth century developments by Samuel Courtauld & Co. – those in Church Street, Bocking (SMR No. K), Factory Terrace, Halstead (SMR No. L) and The Causeway, Halstead (SMR No. M). They are all already Listed Grade II and hence are adequately protected, although internal inspection for assessment and recording is recommended.

Current Use and Status of Housing

SITE NAME	PRESENT USE	CURRENT STATUS
Church Street, Bocking SMR No. K	Private housing	Listed Grade II and Conservation Area
Factory Terrace, Halstead SMR No. L	Private housing	Listed Grade II and Conservation Area
The Causeway, Halstead SMR No. M	Private housing	Listed Grade II and Conservation Area
Various numbers in Box Mill Lane, Hedingham Road, Mill Chase, Colchester Road & Mallows Field SMR Nos. N to R	Private housing	Some lie within the Conservation Area and some are outside of it

Considering their association with Courtaulds, group value and their architectural merit those at Bocking and The Causeway, Halstead are considered to be of regional importance. Factory Terrace, Halstead is considered to be of regional/national importance because as well as the factors mentioned above unusually for this region this is a three storey, tenement type development.

The twentieth century company housing in Halstead, which is associated with Samuel Augustine Courtauld, requires further research into both its original purpose and also any original internal features so that these can be assessed and recorded as appropriate. They are all built in the distinctive 'Courtauld Tudor 'style with elements of both Arts and Crafts and Garden Suburb styles. As only some of them lie within the Conservation Area it is recommended that this be extended to include all the company housing and other buildings associated with Courtaulds. This company housing is of local/regional importance.

Housing

SITE NAME	SIGNIFICANCE	CURRENT STATUS	ACTION	MANAGEMENT
Church Street, Bocking SMR No. K	Housing constructed by Samuel Courtauld & Co. for workers of the nearby silk and crape factory	Listed Grade II and Conservation Area	Maintain existing status	In use and well maintained. Internal inspection needed with recording where appropriate
Factory Terrace, Halstead SMR No. L	An unusual development of workers' housing by Samuel Courtauld & Co. associated with adjacent silk factory	Listed Grade II and Conservation Area	Maintain existing status	In use and well maintained. Internal inspection needed with recording where appropriate
The Causeway, Halstead SMR No. M	Housing constructed by Samuel Courtauld & Co. for workers of the adjacent silk factory	Listed Grade II and Conservation Area	Maintain existing status	In use and well maintained. Internal inspection needed with recording where appropriate
Various numbers in Box Mill Lane, Hedingham Road, Mill Chase, Colchester Road & Mallows Field SMR Nos. N to R	Inter-war company housing built to a house style by Courtaulds	Some lie within the Conservation Area	Extend Conservation Area to include all the company housing	In use and well maintained. Internal inspection needed with recording where appropriate

6.2 Weavers' Cottages

Obviously, considering the extent of domestic weaving across the County over a long period of time, there are no doubt many extant houses in which weaving at some time or other took place. However, it is difficult to identify many of these due to the passage of time and the fact that there were not and are not necessarily any distinguishing features. Of those identified there is again a very high level of statutory protection – three are Listed Grade II, one lies within the Conservation Area *(?Brook Place?)* and one is not currently protected.

Current Use and Status of Weavers' Cottages

SITE NAME	PRESENT USE	CURRENT STATUS
34 Gold Street, Saffron Walden SMR No. S	Private house	Listed Grade II
17 – 37 East Street, Saffron Walden, SMR No. T	Private houses	Listed Grade II and Conservation Area
118/120 & 141 – 145 South Street, Braintree, SMR No. U	Private houses	None
11 & 12 Brook Place, Halstead SMR No. V	Private houses	?
7 – 18 Weavers Row, Halstead SMR No. W	Private houses	Listed Grade II and Conservation Area
Finsbury Place, Halstead SMR No. X	Private houses	Conservation Area

All these sites are of local importance with the exception of those on South Street, Braintree (SMR No. U). These, rather than having the more common attic weaving room (as at Brook Place and Finsbury Place for example), are the surviving examples of cottages built with a single storey loom room on the side of the cottage. As such they are deemed to be of local/regional importance and Nos. 141 – 145 are recommended for Listing Grade II.

Weavers' Cottages

SITE NAME	SIGNIFICANCE	CURRENT STATUS	ACTION	MANAGEMENT
34 Gold Street, Saffron Walden SMR No. S	Slight in the context of the textile industry	Listed Grade II	Maintain current status	In use as private house and well maintained
17 – 37 East Street, Saffron Walden, SMR No. T	Slight in the context of the textile industry	Listed Grade II and Conservation Area	Maintain current status	In use and well maintained. Internal inspection needed with recording where appropriate
118/120 & 141 – 145 South Street, Braintree, SMR No. U	Among the last remaining weavers' cottages associated with Daniel Walters and with a single storey loom room	None	Nos. 141 – 145 be Listed Grade II	In use and well maintained. Internal inspection needed with recording where appropriate
11 & 12 Brook Place, Halstead SMR No. V	19th century three storey silk weavers' cottages with large windows to top floor	?	?	In use and well maintained. Internal inspection needed with recording where appropriate
7 – 18 Weavers Row, Halstead SMR No. W	Remaining of two terraces of silk weavers' cottages	Listed Grade II and Conservation Area	Maintain current status	In use and well maintained. Internal inspection needed with recording where appropriate
Finsbury Place, Halstead SMR No. X	19th century three storey silk weavers' cottages with large windows to top floor	Conservation Area	Maintain current status	In use and well maintained. Internal inspection needed with recording where appropriate

7.0 ADAPTIVE RE-USE and RECORDING

Of the 16 mill sites assessed during the survey one is Listed Grade 1, three Listed Grade 2*, five Listed Grade 2 and four lie within Conservation Areas: 81% of the sample being protected. Of the weavers' cottages three are Listed Grade 2, one lies within a Conservation Area *(one unknown, Brook Place, Halstead)*: 66% of the sample. Finally of the workers' housing three groups of houses are Listed Grade 2, while of the company housing in Halstead some lie within the Conservation Area and some just outside. Considering the high rate of statutory protection already afforded to the mills of the County (the only three sites not protected have few above ground remains) it is not recommended that any further protection is necessary. However, as most sites have not been internally assessed or recorded as part of this survey, it is recommended that, when the opportunity arises, most structures are inspected internally, assessed for the technological, architectural and historical significance of any internal features and appropriate recording undertaken. Also following any internal assessment the statutory protection of a particular structure may need to be reviewed, such as in the case of the Crape Factory in Earls Colne (SMR I).

With respect to the workers' housing and weavers' cottages, again a high level of statutory protection is already in place. It is recommended that all the Company Housing in Halstead (SMRs N – R) be brought within the Conservation Area. Of the weavers' cottages the only sites not already protected are those in Braintree (SMR U) and it is therefore recommended that numbers 141 – 145 be Listed Grade II as the sole surviving in-tact examples of such cottages with the single storey loom rooms as extensions to the cottages. Again internal inspection of all this housing was not possible as part of this survey and hence when the opportunity arises it is recommended that internal assessment is undertaken, followed by recording and a review of statutory protection as appropriate.

With regard to adaptive re-use, all the housing, including mill houses, remains as private residences and are likely to continue to do so. Of the mill sites what remains on the site of six of them is now in use as private residences, five have commercial use, one light industrial use and one is a restaurant. Of the other three nothing remains of the original structures and the land has been redeveloped. Such new uses seem highly appropriate and are to be encouraged as a way of ensuring the continued existence of some very significant structures.

8.0 CONCLUSIONS

The woollen cloth trade in Essex was extensive but had all but totally ceased by the end of the eighteenth century. It was a domestic industry in scale and location and hence there is little identifiable and of significance remaining, with the exception of the former bay and say mill at Dedham (SMR H). The woollen cloth trade was succeeded at the start of the nineteenth century by the silk industry which was a major industry within certain market towns throughout the nineteenth century and was itself succeeded by the artificial silk industry – the production of rayon – at the beginning of the twentieth century.

The century of the silk industry, its use of former water powered corn mill sites and its industrial factory scale has meant that there are significant remains of this activity in respect of large manufacturing sites, weavers' cottages, workers' housing and other public buildings associated with the main manufacturing family – the Courtaulds.

The survival rate is variable with some sites including the whole of the Braintree Mill (SMR B) and most of the Bocking (SMR D) and Halstead (SMR No 26109) Mill sites having been demolished. In contrast however most sites do survive to a considerable extent and are protected by Listed Building or Conservation Area status. Likewise, most of the weavers' cottages and workers' housing are also protected. Hence this report does not recommend many sites for consideration for statutory protection. However, few of the structures have been internally inspected and hence the main conclusion of this survey is that when the opportunity arises all the identified sites should be internally assessed and subsequently recorded and further protected in accordance with the conclusions of the assessment.

Particular note needs to be made of the many structures listed in the appendices as these have so far only been identified as regards their existence and association with the Courtauld family. Should any of these become threatened by development of any sort, a full assessment needs to be made of the structure and appropriate action taken in the light of that assessment.

9.0 RECOMMENDED FUTURE POLICY

Having quantified the remains, Essex County Council together with its District Council colleagues will seek sympathetic schemes of reuse for those buildings and structures associated with the Textile Industry that are recognised as being of local, regional and/or national significance. Proposals that fail to appreciate the special character of a building or that result in the loss of a site's historic integrity will not normally be accepted. In order to understand the original purpose and evolution of the surviving resource, records will be secured in advance of development and deposited for future research in the Essex Records Office. Demolition will only be considered in circumstances where the site is deemed to be of insufficient importance to merit retention.

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S. Gould
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