





THE LONDON TO CAMBRIDGE RAILWAY LINE IN ESSEX

An Archaeological Assessment of the operational line from London Liverpool Street to Cambridge within the County of Essex







Comparative Survey of Modern/Industrial Sites and Monuments No. 26

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1.0 SUMMARY

The railway line which now runs from London Liverpool Street Station to Cambridge was opened in sections during the mid-19th century by the Northern & Eastern Railway and its successors the Eastern Counties Railway and Great Eastern Railway. Those sections in Essex which are being considered in this report were opened in stages from 1841 to 1845 and these sections of the line represent one of the many railways built during the hey-day of railway construction – the era which became known as 'Railway Mania'. This line through Cambridge was one of the main lines constructed in order to connect London with East Anglia, Lincolnshire, the Midlands and north of England, and eventually Scotland.

The first section of the Northern & Eastern line was opened in 1840 from Stratford (from where it ran over Eastern Counties Railway tracks into Shoreditch, the original terminus) to Broxbourne. In August 1841 the section from Broxbourne to Harlow was opened, followed by that from Harlow to Spellbrook in November of that year and the Spellbrook to Bishop's Stortford section in May 1842. It was not until July 1845 that the Northern & Eastern and the Eastern Counties Railways opened the sections north from Bishop's Stortford into Cambridgeshire. As well as predicting a large passenger potential for the line, freight was also to be a major potential part of the traffic, principally agricultural produce such as malt and flour, but also stone, bricks and timber out of the region, and coal and finished products from the Midlands and north of England into the region.

The line is still operational and has been experiencing a major increase in traffic over recent years as it serves not only the London commuter belt of north-west Essex and east Hertfordshire, but also London's third airport at Stansted. The line underwent modernisation in the 1960s and 1980s when it was electrified, and up-grading in the late 1980s as a result of the expansion of Stansted Airport, which included a new branch line from the main line north of Stansted Mountfitchet to the airport terminal, which opened in 1991. Further up-grading could take place if Stansted Airport were to expand further. In the early 2000s a complex of new sidings for an aggregates business were laid out on the up-side of the line at Harlow Mill.

This survey details all structural elements associated with the line in Essex and assesses their historical and archaeological significance in the context of the extent, integrity and condition of the existing resource. This encompasses a wide range of features (e.g. station buildings, signal boxes, bridges, culverts, crossings etc.) but mainly those of significant historical, archaeological and architectural significance. What is not included is all the paraphernalia of a modern railway: the electric light signals, overhead wires, numerous relay and switch boxes, modern mileposts and modern fixtures and fittings at stations such as departure screens and CCTV cameras. These are very common features, are of recent origin and are likely to be changed as the line develops to meet increasing traffic demands. Survival of features is generally high although there has had to be modifications to structures during up-grading, such as the re-building of over-bridges to accommodate electrification, and many station footbridges have been replaced by concrete and steel ones with higher head-room, again to accommodate overhead electrification, and for passenger safety.

The fact that the line is operational, is likely to remain so well into the future and could be further up-graded and expanded presents both threats and opportunities to the existing significant historical resource. Further up-grading of the line could represent the treat of demolition of or major changes to the surviving historic elements of significance, but there is also the opportunity that the continuing use of the line will ensure that it remains intact and that the heritage elements could be used to enhance the journey experience and the settlements through which it passes.

This report makes a number of recommendations relating to the significant surviving, largely unaltered, original structures in order to preserve the heritage of the line now approaching 175 years old and provide opportunities to enhance the journey experience and the settlements through which it passes.

2.0 INTRODUCTION

This survey was undertaken on behalf of and in partnership with the Historic Environment Branch of Essex County Council, who have been undertaking surveys of industrial/modern monuments for over 18 years of various industries within the County. In response to threats to two of the County's redundant railway lines, a comparable assessment of the industrial archaeology of the Bishop's Stortford to Braintree branch line (The Flitch Way) was carried out in 2002-3 (Havis & Pratt, 2003) and of the Saffron Walden branch line in 2005 (Garwood, 2005). Following these two surveys it was decided to undertake surveys of all the railway lines in Essex, both redundant and operational, and to draw all these surveys together in one over-view report on the railway industry in the County. (The author undertook such an archaeological assessment of the former Elsenham – Thaxted Light Railway in 2010.) The purpose of these surveys of the railways in Essex is to establish priorities within the railway structures identified, to assess existing statutory designations and to formulate a coherent management strategy. Assessing the significance of each site and recommending a statutory framework for future management will ensure that each site is fully considered and an appropriate response given should significant remains become threatened. Listed Building and Conservation Area (Designated Heritage Asset) status ensures a sympathetic approach to alteration and is a means to prevent unnecessary demolition or insensitive works. Such designation, and particularly Conservation Area status is not always sufficient to preserve the internal integrity of a building, therefore, where appropriate recommendations are made that current internal configurations and features should be inspected and assessed whenever the opportunity arises. Copies of this report will be made available to the relevant internal Essex County Council sections, to the Essex Record Office and to the National Monuments Record, Swindon. Further copies may be obtained, at a nominal cost to cover reproduction, from the Historic Buildings Records Officer on 01245 437613.

2.1 Methodology

The route of the Essex sections of the line was surveyed intermittently during 2007-13 by the author. The fact that it is still operational had both positive and negative consequences for access to all the features of the line. The stations are all publically accessible and hence detailed surveys of them and all their component parts were easy to achieve. However, access to features along the route of the line was more often than not very difficult as, obviously, access along the actual route was not possible, and even line-side access was not always possible as the line borders onto private agricultural, business or residential properties. Hopefully all features along the line have been identified by reference to historic and contemporary maps. Where features have been identified but access was not possible, they are mentioned with as much information that can be gathered by other means, but with no photograph. Internal integrity of buildings was not possible to fully survey as they are not fully open to the public. A photographic record was made of all the main features which were accessible, using a Fuji Finepix digital camera at 2 million pixels resolution.

3.0 BACKGROUND

3.1 Site Location and Description

The line from London Liverpool Street Station to Cambridge passes through a number of local authority areas including Essex, but it is only those parts of the line which are in Essex that this survey covers. The first part of the line passes through various London Boroughs, before entering Hertfordshire between Enfield Lock and Waltham Cross, It exits Hertfordshire and enters Essex north of Broxbourne, near to Rye House and the confluence of the Rivers Lea and Stort at TL 394 098. It then follows the floodplain of the River Stort through agricultural land and the settlements of Roydon and Harlow towards Sawbridgeworth. The River Stort forms the boundary between Essex and Hertfordshire for much of its length from Roydon and is to the north and west of the railway line until just north of Sawbridgeworth. The line is, therefore, within Essex from the point mentioned above until it reaches the level crossing at Sawbridgeworth, TL 491 151. Here, although the Stort is still to the west of the railway, the county boundary leaves the river in order to encompass the Great Hyde Hall Estate into Hertfordshire. By the time the boundary rejoins the course of the Stort, the latter has been crossed by the railway and is then to the east of line which, therefore, remains in Hertfordshire. Although the railway again crosses the Stort just south of Bishop's Stortford, as the whole of this market town is in Hertfordshire the railway also continues to be in that County. Essex is re-entered north of Bishop's Stortford where the county boundary, having followed the A120 bypass, rejoins the course of the Stort at TL 499 232. The line continues for a short distance along the Stort valley but then it crosses the watershed into the River Cam or Granta valley between Elsenham and Newport. The line then continues through again largely agricultural land, through Stansted Mountfitchet, Elsenham, Newport, Wendens Ambo and Great Chesterford until it crosses into Cambridgeshire where the county boundary crosses the rail line at the point where the river is also crossed by the railway at Ickleton, TL 497 439. This latter section does, however, cross the chalk uplands of north-west Essex and hence there are more major engineering works including two viaducts, two tunnels and a number of cuttings. In essence, therefore, there are two sections of the Cambridge line in Essex: that from north of Broxbourne to Sawbridgeworth and that from north of Bishop's Stortford to just north of Great Chesterford, both passing through quite different landscapes.

3.2 Historical Background

During the early years of the 19th century there were plans to link the head of the Stort Navigation at Bishop's Stortford with the agricultural areas to the north, in Essex, Cambridgeshire and Norfolk by canal. With the coming of the railways, however, plans for a canal extension were dropped to be replaced by various proposed rail lines from London to East Anglia, Lincolnshire, the Midlands and north of England and onto Scotland. These various proposed schemes culminated in an Act of Parliament of 4th July 1836 authorising a line from London to Cambridge – the Northern & Eastern Railway (N&ER) - based on an earlier survey of a line via Bishop's Stortford by Nicholas Cundy, but slightly modified by James Walker. The original proposal was for a terminus at Islington, North London, but the potential high cost of tunnelling and building a new terminus, led to the N&ER approaching the Eastern Counties Railway (ECR) (which had received Royal Assent for its line from East London to Chelmsford, Colchester and onto Suffolk and Norfolk on the same day as the N&ER), to propose the shared use of the ECR's Shoreditch terminus. As agreement was reached, the N&ER line was diverted from its planned route into Islington to one which ran from Tottenham to Stratford to join the ECR line into Shoreditch. The line from Stratford to Broxbourne in Hertfordshire was opened on 15th September 1840, followed by its reaching Harlow (now Harlow Mill) on 9th August 1841, Spellbrook on 19th November 1841 and Bishop's Stortford on 16th May 1842.

In 1843 the N&ER began construction of the line from Bishop's Stortford to Newport in Essex. However, at the same time negotiations were underway between the N&ER and the ECR resulting in the ECR taking over the whole of the working of the N&ER from 1st January 1844. On 4th June 1844 Parliament passed an Act authorising the ECR to build a line from Newport, although the Bishop's Stortford to Newport line was not finished, through Cambridge to Brandon where it joined the Norfolk Railway to Norwich. Both the N&ER line from Bishop's Stortford to Newport and the ECR line from Newport to Cambridge and beyond opened on 29th July 1845.

This completed those sections of the line which run through the County of Essex and are thus the subject of this survey. The total line as we know it today from London Liverpool Street to Cambridge was not completed until the 1870s. Before that, however, in 1862 the Great Eastern Railway (GER) was created, an amalgamation of a number of East Anglian lines included those operated by the ECR. In mid-1872 the stretch of line from Bethnal Green to Coppermill Junction, the junction with the line from Stratford to Tottenham, was opened. On 2nd February 1874 part of Liverpool Street Station opened, the whole station opening on 1st November 1875.

The GER became a part of the London & North Eastern Railway (LNER) when grouping resulted in the big four railway companies in 1923. Nationalisation of the railways on 1st January 1948 meant that the LNER became part of British Rail which then existed until the privatisation of the railways in the 1994.

Business, both passenger and freight was always good, but despite difficulties on some sections of the line little was done to improve operation except, following the grouping of 1923, for the provision of loops at Harlow and Littlebury amongst other sites and a gradual and unsystematic introduction of colour-light signalling. The

section as far as Bishop's Stortford was included in the 25kV overhead electrification of the north-east London suburban lines, with colour-light signals also installed on that section; work being completed by 21st November 1960. Part of the reasoning for this up-grading was probably the fact that Harlow had been designated for New Town development in 1947 and in July 1960 the current Harlow Town Station was opened on the site of the former Burnt Mill Station - Harlow Station was renamed Harlow Mill. Electrification and up-grading of the line north of Bishop's Stortford to Cambridge was completed by 19th January 1987 and included the lengthening of platforms. These up-gradings of the 1960s and 1980s resulted in the removal or alteration of historic infrastructure, such as the removal original semaphore signals, signal boxes being redundant, and the raising or replacement of bridges to accommodate the over-head electric power supply lines. They also involved additions to the infrastructure such as the need for new signal boxes and also the need for warning bells across farm tracks at crossing points to warn farmers of overheight loads which could snag the over-head power lines. Further up-grading works were undertaken in the later 1980s in order to provide a new rail link to the newly developed third London airport at Stansted, the station opening in 1991. More recently some platforms have been lengthened to accommodate long trains and passenger safety measures have been implemented such as the provision of footbridges.

4.0 RECOMMENDATIONS

As this line is still operational and will continue to be so well into the future, many of the historic features of the line will be retained for many years to come. However there could be, on the other hand, a risk to some of these historic features when redevelopment and up-grade work is undertaken. In the case of some buildings (such as station buildings, goods sheds, etc.) it will be important to preserve the historic fabric, while for other structures (such as culverts, overbridges which have already been altered or rebuilt, etc.) preservation will not be so significant a matter. The following recommendations therefore reflect this principle of different levels of significance for different types of building and structure.

4.1 Buildings

4.1.1 Station buildings

All the original stations continue in use, although both stations in Harlow have had their names changed following the building of a new station at Harlow Town, replacing the original Burnt Mill station; the original Harlow station being renamed Harlow Mill.

Roydon's station retains much of its original and unique character and has been Listed Grade II and it is recommended that this designation should be maintained. However, there are other original structures on the site (see below for Goods Shed and Signal Box), and the station site is adjacent to both the road bridge across the Stort Navigation and to the

Navigation itself with Roydon Lock nearby. It is therefore recommended that the whole station site, adjacent road bridge, the Stort Navigation at this point and Roydon Lock be included in the Roydon Conservation Area. Failing this the station as a whole should be included on the Local Heritage List.

Harlow Town Station is already Listed Grade II and it is recommended that this designation should be maintained.

Harlow Mill Station has been the subject of much alteration including the demolition of one of the cross-wings, so, although one of the original stations, it has lost much of its historic and architectural significance. It is recommended that it should be included on the Local Heritage List and that any redevelopment of the station building should be undertaken in sympathy with the original design, with restoration of original features.

Stansted Mountfitchet's station house, the platform canopies and their cast-iron support columns and brackets are already included in the Stansted Mountfitchet Conservation Area and it is recommended that this designation should be maintained.

At Elsenham Station the timber waiting room of 1902 on the up-platform, with its canopy, decorative valancing and cast-iron supporting columns and brackets, is Listed Grade II. However, although the station house is original and little altered it is not protected at present. Therefore it is recommended that all buildings on Elsenham Station should be included in a future Conservation Area or failing that they should be included in the Local Heritage List.

Newport's station house and other buildings are included in the Newport Conservation Area and it is recommended that this designation should be maintained.

Audley End station building is already Listed Grade II. However the down-platform waiting room block with its canopy and decorative valancing supported on cast-iron columns and brackets is not included in the Listing. It is recommended that the designation of the station house be maintained and that it be extended to include the waiting room block on the down-platform / west side of the track.

Great Chesterford station building is already Listed Grade II and it is recommended that this designation should be maintained.

4.1.2 Goods shed

The only operational freight facility on the line now is the modern aggregate works at Harlow Mill station. All the original goods yards at Roydon, Burnt Mill/Harlow Town, Harlow (Mill), Stansted Mountfitchet, Elsenham, Newport, Audley End, and Great Chesterford have been dismantled along with any goods sheds or other storage facilities. Most are now the location of the station car park. The only structure to survive is the goods shed at Roydon which is deteriorating rapidly having recently been on fire and the roof is collapsing. Otherwise maltings at Sawbridgeworth, Stansted Mountfitchet and Newport which were connected to the railway survive in other uses, as does the granary in the former goods yard at Stansted Mountfitchet.

Roydon goods shed is one of only eight remaining such buildings in Essex and is the earliest survivor. It forms part of a group of historic railway buildings along with the Grade II listed station building, and the former signal box. Considering these factors it is recommended that the Roydon goods shed be designated for protection either by including it in the Listing of the station, extending the Roydon Conservation Area (as recommended above) or including it on the Local Heritage List.

4.1.3 Signal boxes

There are only two surviving but redundant signal boxes on the line, that built in 1876 at Roydon and that dating from the 1960s electrification of the line at Harlow Mill station.

Roydon signal box built in 1876 was much altered and extended during the 20th century, but survives and forms part of a group of historic railway buildings along with the Grade II listed station building and the goods shed. It is recommended that the Roydon signal box be designated for protection either by including it in the Listing of the station, extending the Roydon Conservation Area (as recommended above) or including it on the Local Heritage List.

Harlow Mill signal box was built for the 1960s electrification and modernisation of the line to Bishop's Stortford. It is of a design which, along with Harlow Town station, was meant to convey modernity to customers. However it is now not staffed but still retains equipment, and survives as an example of the post-war modernisation of the railways in Essex and as such is a rare survivor of that era. It is recommended that it is included in the Local Heritage List.

4.1.4 Crossing keeper's cottage

The only level crossing keeper's cottage on the line is that at the lckleton Road level crossing just north of Great Chesterford station. It is recommended that it is included in the Local Heritage List.

4.1.5 Huts

One of the traditional features of railway lines was the existence of huts for permanent way staff at intervals and strategic places along the line. Although no longer in use the remains of some of these huts survive and there are examples along the Cambridge line. Due to the siting of these huts along the line they are rarely accessible to identify, survey and photograph, although they can be spotted from a train as it speeds along! These huts were built of timber (often old sleepers), concrete panels or corrugated iron sheets. Huts surviving along the Cambridge line include those between Roydon and Harlow Town, between Harlow Mill and Sawbridgeworth and at Great Chesterford (corrugated iron). Most now seem to be in a derelict condition as they are unused, are likely to collapse with neglect, are usually inaccessible and have no particular architectural merit. It is recommended that no action be taken should they become threatened, although one of the County's heritage railways may be interested is rescuing examples which are in a reasonable condition and could be easily and cheaply restored.

4.2 Underbridges

Nineteen underbridges were identified during the survey, six taking the line across rivers and streams, seven taking it over farm tracks and six over roads. They are built of various materials and combinations of materials – brick, concrete and steel – for example steel girders supported on brick or concrete piers, concrete beams on concrete or brick piers, or entirely of brick. They are all likely to continue to exist and be maintained by Network Rail especially those crossing water courses and roads, the farm track ones probably being the most vulnerable. The two most significant underbridges are that at the north end of the Newport viaduct which takes the line across Cambridge Road (see below) and that at Audley End taking the line across Chestnut Avenue. It is recommended that: a) all underbridges should be maintained; b) that at Newport should be dealt with in association with Newport viaduct; and c) that at Audley End should be included in the Local Heritage List.

4.3 Culverts

Considering the landscape this line crosses, following as it does various river valleys and their flood plains (particularly that of the river

Stort between Roydon and Harlow), there are a large number of culverts taking streams under the Cambridge line. Most of these have been identified, of which again most have been surveyed and photographed and hence included in the gazetteer. However, it has not been possible to identify all culverts, as not all possible sites are accessible and, considering the seasonal nature of some of the streams and brooks, not all culverts are easily identifiable. All those accessed were assessed as being brick built and reasonably well maintained. Like the underbridges these are likely to continue to exist and be maintained by Network Rail and/or the Environment Agency. It is recommended that all culverts should be maintained.

4.4 Viaducts

Considering the landscape crossed by the line is mainly river valleys and a fairly even landscape, major engineering features are few. However, the northern part of the line does cross the chalk hills of northwest Essex and hence this part of the line does contain a number of major engineering features including two viaducts.

- 4.4.1 Newport viaduct takes the line from north of Newport station across a tributary of the River Cam and a couple of minor roads. It is a low viaduct of 13 brick arches. At the north end of the viaduct is an underbridge taking the line across Cambridge Road. The viaduct is included in the Newport Conservation Area and it is recommended that this designation should be maintained.
- 4.4.2 Wendens Ambo viaduct takes the line across the deep valley of a tributary of the River Cam and is more spectacular than the only other viaduct on the line, being 60 feet high at the centre. It is somewhat hidden from view although a footpath does run under it. It is recommended that this viaduct (if not already) should be included in the Wendens Ambo Conservation Area or failing that included in the Local Heritage List.

4.5 Tunnels

Two other major engineering features on the chalk hills of northwest Essex are the only two historic railway tunnels in the County: Audley End and Littlebury tunnels. The south portals of both tunnels are Listed Grade II and it is recommended that these designations should be maintained.

4.6 Overbridges

Fifteen overbridges carrying roads over the line have been identified during the survey, the majority of which are on the sites of original bridges, the two in Harlow having been built as part of the development of the New Town. However, all the historic bridges have either been

replaced with more modern ones or have been altered, all as part of the electrification of the line and the need to raise the bridges to accommodate the overhead power lines. They were constructed of brick with more recent alterations using concrete as well as brick. That at Pardon Mill Lane is the only one with steel girders. All the bridges have therefore been altered to some extent, or originate, in the 20th century and all will be required for a number of years to come. Further alterations may be necessary considering the needs of what were originally mid-19th century structures which are carrying 21st century loads and any future up-grading of the line. It is recommended that all overbridges be maintained.

Footbridges – as well as the road overbridges and the footbridges at the stations, four footbridges were identified during the survey. That in Harlow Town Park dates from the mid- to late 20th century, while the two crossing the deep cutting north of Audley End are also 20th century replacements. The only original footbridge is that at Stansted Mountfitchet which has been altered as part of the electrification of the line. **It is recommended that all overbridges be maintained.**

4.7 Crossings

As well as being crossed by various bridges as described above, the line is also crossed at a number of places on the level by roads, farm tracks and footpaths. These are all historic crossing points, but all will continue to come under scrutiny for health and safety reasons, especially pedestrian footpath crossings considering the number of recent serious accidents which have taken place along the line.

4.7.1 Level crossings

Five **road level crossings** were identified during the survey, at Roydon, Elsenham, Wendens Ambo and Great Chesterford, plus a private one near Widdington. Of the four publically used ones only Elsenham has the original manually operated gates, the others all have automatic barriers. It is very likely that the Elsenham one will be up-graded fairly soon especially considering the fatal accident to pedestrians which occurred here. Before the up-grading takes place, **it is recommended that a full written**, **photographic and video recording be made of the operation of the level crossing at Elsenham**.

Six farm track level crossings were identified during the survey, of which three are disused and three still operational. Of the latter the one at Bordeaux Farms near Great Chesterford is protected by automatic barriers while the other two have manually operated gates. The unusual feature of all these six crossings is that they have warning bells strung across the farm track on either side of the line to warn users of any over height loads which may snag the overhead power lines. These are

obviously a declining feature as these potentially dangerous crossings fall out of use and hence are becoming rarer. They are also an unusual feature and it is recommended that at least one pair of warning bells be retained even if all crossings fall out of use as evidence of this former activity.

Seven **pedestrian footpath crossings** were identified during the survey. These allow pedestrians to cross the line while using the public footpath which runs from either side of the line. They are guarded by fences and stiles or by timber gates, but access to the tracks is very easy and hence they could be seen as being potentially very dangerous features. Even ones with visual and audio warning alarms have seen fatal accidents recently on the Hertfordshire stretch of the line. They are therefore likely to come under increased scrutiny over the coming years and be seen as needing up-grading.

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6.0 GAZETTEER

The gazetteer details the sites identified during the survey of those sections of the London Liverpool Street to Cambridge line which are situated in Essex. The sites are ordered from where the line enters Essex in the area of Rye House to where it leaves Essex for Hertfordshire at Sawbridgeworth and then from where it re-enters Essex north of Bishop's Stortford to where it leaves again for Cambridgeshire at Ickleton. These sites are located onto a series of maps each with an identifying letter. Each site entry comprises the Essex Historic Environment Record number (EHER), the name/location, the National Grid Reference (NGR), a photograph (if available), a short description and any statutory designations. For the general descriptions and recommendations see section 4.0.

EHER xxxxx (maybe have two EHER numbers, one for each of the two sections)
Rye House to Sawbridgeworth and Bishop's Stortford to Ickleton – the Essex sections of the London Liverpool Street to Cambridge line.

The Essex sections of the London Liverpool Street to Cambridge line were opened in stages in the early 1840s (to Bishop's Stortford) and then in 1845 north from that town to Cambridge by the Northern & Eastern Railway (N&ER) and the Eastern Counties Railway (ECR). The line was built during the 'railway mania' era in order to link London to the agricultural areas of East Anglia and then the industrial areas of the Midlands, north of England and then Scotland. As well as passenger business, the line also had freight traffic consisting of agricultural produce, principally malt and flour, from East Anglia, and raw materials and finished goods in from the industrial areas of the north. The line was always a success and as freight traffic on the railways declined, passenger business increased as it serves the expanding London commuter area of north-west Essex, including Harlow New Town, and east Hertfordshire. A more recent boost to the traffic on the line has been the development of Stansted Airport. The line remains operational and is likely to be further developed if Stansted Airport is further expanded.

MAP A

EHER 41071 Underbridge



NGR TL 394 098

county boundary of The Hertfordshire and Essex follows the course of the River Stort (rather than the navigation which is to the south east of the river and railway at this point in Essex) in the area of Rye House and as the railway line crosses the it SO crosses the river boundary into Essex. At this point the line is taken over the river on a concrete beam bridge supported on brick and concrete piers and with brick parapets and metal railings. It probably dates from 1841 but with more recent modifications. The railway then continues along the flood plain of the river and passed Roydon Mill.

MAP B

EHER 41072 Underbridge and culvert





Just after passing Roydon Mill the line crosses an overflow weir from the Stort Navigation into the River Stort itself. The water flows through a circular culvert and under a bridge which are next to each other, the presence of both perhaps indicating that the original culvert was not enough to cope with the overflow when water in the navigation was at its height. The entire structure appears to be of blue engineering brick.

After a short distance the line reaches Roydon Station which consists of a number of component parts, mostly original and hence of historic and architectural importance – goods shed, station building, signal box, level crossing, platforms. As well as being a group of structures in itself, the station forms part of a wider group of important transport structures with the Stort Navigation and the road bridge over the navigation adjacent to the level crossing. The station is set to the north of the village of Roydon which is a Conservation Area, the northern boundary of which is to the south of the station. The whole station is staggered either side of the level crossing. The down platform is on the north of the line to the west of the level crossing while the up platform is on the south side of the line to the east of the level crossing.

EHER 41073 Goods shed



NGR TL 406 105

The goods shed on the north / down side of the line was built 1840 when the station was new. Built of brick it has five bays with blind arches on the both the north and south elevations with large entrances at the west end for the railway wagons and one at the east end for road vehicles. The goods yard is now the station car park. Currently in a very derelict condition, it is one of only eight remaining station goods sheds in Essex out of about 40, and is the earliest survivor.

EHER 41074/45227 Roydon Station

NGR TL 406 105

Station buildings – down platform



Most of the platform furniture – lamps, name boards, seats, and CCTV cameras and screens – are modern. There is also a modern steel and glass shelter on the platform in front of the goods shed. However this platform also has the original station building, small station master's house, open-fronted hut (for a ticket collector?) and greatly modified signal box.

Built in 1841, the single storey station building (listed Grade II) is timber-framed and plastered, part brick and stone with a grey slate roof. The road side has a curved portico with round headed windows and marginal lights. Valencing to the verandah was added in the 1920s. The platform frontage has three central bays divided by chamfered piers with round headed double doors to each bay and a fretted platform canopy. This is flanked on either side by single bays and the station building is now



a restaurant. The 1876 now redundant **signal box (EHER xxx05)** has been much altered and extended at both ends and to the front in the 20th century. It is built of

timber on a brick plinth with a slate roof. The tiny former station master's house on the east end of the station building now has a lean-to roof.





Across the modern, automatic level crossing (see below) on the south side of the line is the **up platform**, all the structures upon which are of the late 20th century, including the brick/steel/glass waiting room.

EHER 41075 Level crossing

NGR TL 406 105

The High Street north from Roydon village crosses the line at the station site on the level. The level crossing is a modern one with automatic gates which control both vehicles and pedestrians crossing the line.

EHER 41076 Underbridge

NGR TL 408 104

Soon after leaving Roydon Station, the line crosses the Stort Navigation, as it passes from the south to the north of the line, on a double girder bridge, with one span for each track.



The line then follows the flood plain of the Stort to Harlow. The area either side of the line is grazing land, is subject to flooding and hence has a number of drainage channels which cross the line. Thus, the line between Roydon and Harlow crosses footpaths, farm access tracks, brooks and drains.

EHER 41077 Footpath crossing

NGR TL 410 104

The footpath and track from the village of Roydon to Roydon Lock and Lock Cottage crosses the line here. The crossing is protected by a pedestrian and a road gate on both sides of the line.



(From map evidence there is possibly a culvert at NGR TL 415 105, but it is not accessible as it is on private farm land and the drain is probably seasonal.)

EHER 41078 Footpath crossing

NGR TL 418 106



The footpath running north from the Harlow Road (opposite East End Farm) crosses the line at a stile and also a vehicle gate, which is now redundant.

EHER 41079 Culvert

NGR TL 418 106



Adjacent to the crossing above is a culvert taking a drain under the line. It has brick piers, concrete beams, a brick parapet and metal railings.

MAP C
EHER 41080
Underbridge on farm track

NGR TL 424 109



The farm track running north from Roydon Lea crosses the line through an underbridge. It has brick piers, concrete beams, brick parapets and metal railings. It has restricted height and width and also floods, hence the adjacent farm level crossing below.

EHER 41081 Farm crossing





The farm track running north from Roydon Lea also crosses the line at a farm level crossing. It is protected by manually operated gates and has height warning bells on either side in case of over-height loads which could snag on the over-head power lines.

EHER 41082 Culvert

NGR TL 428 111



Canons Brook flows under the line in this horse-shoe shaped brick culvert. On either side of the line the Brook's banks are strengthened with metal pilings.

EHER 41083 Footpath crossing

NGR TL 428 111



Adjacent to the Canons Brook culvert above, is the footpath crossing for the path from Roydon Lea running north eastwards. It is protected by timber fences and stiles either side of the line.

EHER 41084 Underbridge on farm track

NGR TL 431 111



A track linking farm land either side of the railway runs under the line at this small underbridge. It has brick piers, concrete beams, brick parapets and metal railings.

EHER 41085 Disused farm crossing

NGR TL 433 111



Adjacent to the underbridge above is a redundant farm level crossing with surviving gates and poles for the height warning bells.

Passing Parndon Water and Steam Mill of c1897 on the north side of the line, it now enters the built-up area of Harlow New Town developed from 1947 as an overspill town to ease overcrowding in London.

EHER 41086 Overbridge

NGR TL 438 111

The line passes under Parndon Mill Lane, at a steel girder bridge on brick piers. The bridge was obviously raised on both extra courses of brick work and a concrete slab in order to accommodate the overhead wires installed at electrification in 1960.



The line soon passes under another overbridge which carries the A414 Fifth Avenue / Allende Avenue over the railway. This was built in the mid 20th century as part of the development of the New Town.

EHER 31761 Harlow Town Station

NGR TL 446 113



Harlow Town Station was built in 1959-60 in association with the development of the New Town and the electrification of this line from London to Bishop's Stortford. It replaced the original Burnt Mill Station and is Listed Grade II. Built of a combination of materials – steel and timber framed, pre-stressed concrete cantilevers, brick cladding, plywood fascias and plate glass. It has a double height concourse, which has blue glass and black mosaic decoration, linked to the two

island platforms by an overbridge containing passenger facilities and above the bridge are three tall lift rooms.

The line continues eastward from the station, again along the Stort valley, the navigation being still to the north of the line, but running between various industrial and retail estates which restrict access to the line.



MAP D

EHER 41087 Culvert

NGR TL 450 114

On leaving Harlow Town Station the line runs through part of the Town Park where there is a brick culvert for a drain leading to the River Stort (see below). At the same point there is a modern concrete and steel footbridge which is both very tall to accommodate the overhead power lines and with long gentle ramps for ease of access by people with mobility problems and families with pushchairs, etc.



The line continues eastward along the Stort valley, the navigation being still to the north of the line, but running between various industrial and retail estates which restrict access to the line, especially as it is in a shallow cutting at this point. The bridge taking River Way across the line is of concrete construction supported on paired concrete piers, with a brick parapet capped in concrete. It dates from the development of Harlow New Town in the mid-20th century.

EHER 41088 Harlow Mill Station

NGR TL 472 123

The original Harlow Station of 1841 served the village of Harlow now, since the creation of the New Town, known as Old Harlow, and was renamed in 1960 after the nearby Mill on the River Stort adjacent to Harlow Lock on the navigation. The original station building had a central block of three bays and two crosswings on either side. The east wing has been demolished and what remains of the station is much



altered and plainer than when it was built. The platforms are staggered as at Roydon and Elsenham, the down platform is to the west while the up platform is to the east of the A1184 overbridge.

EHER 41089 Harlow Mill Signal Box

NGR TL 472 123

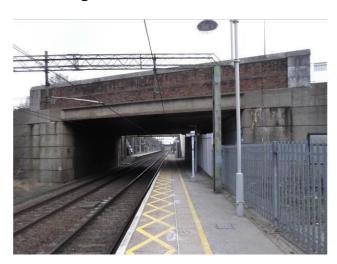
Built on the down side of the line opposite the up platform of Harlow Mill Station for the 1960s electrification of the line and signalling, this signal box is brick built and mainly single storey with a flat roof. Centrally the operating room forms a second storey with glass windows along three sides for visibility of the line and again a flat roof. It is now not staffed but contains equipment following the centralisation of signalling operations. This signal box represents a major period of development in the operation of the line.



MAP E

EHER 41090 Overbridge

NGR TL 473 123



The bridge which divides the two platforms of Harlow Mill station, takes the A1184 Cambridge Road over the line. It is of concrete construction with brick parapets capped with concrete and probably dates from the time of the development of Harlow New Town in the 1950s.

EHER 41091 Overbridge

NGR TL 475 125



This overbridge takes the road from what is now Old Harlow to the Cambridge Road and is now a residential road, Old Road, over the line. Built on brick piers with brick parapets capped with concrete, it has concrete beams supporting the roadway. It appears to be original, although the concrete beams may have been inserted during the electrification of the line.

EHER 41092 Culvert

NGR TL 476 126



Leaving the residential area of NE Harlow / Old Harlow the line again enters pasture and agricultural land between Harlow and Sawbridgeworth, part of the flood plain of the river which has been left undeveloped as green space between the two towns. The line curves round to run northerly to Sawbridgeworth. This brick culvert takes a tributary stream under the line towards the River Stort.

EHER 41093 Underbridge

NGR TL 480 127

This bridge takes the line which at this point is on an embankment over a farm track. It is built of red brick with what appear to be later additions in blue engineering brick.



EHER 41094 Culvert

NGR TL 481 128



This red brick built culvert takes a tributary steam under the line to the River Stort.

EHER 41095 Farm crossing

NGR TL 484 132



This crossing has become disused recently judging by the still extant notices, and the warning bells that are still in place either side of the line.

EHER 41096 Farm Crossing

NGR TL 488 137

A farm track westwards from Sheering Lower Road crosses the line here on the level. There are stiles for pedestrians, the track itself is protected by metal gates and there are height warning bells all on both sides of the line.



MAP F

EHER 41097 Overbridge

NGR TL 489 144



The bridge carrying Sheering Mill Lane across the line has brick piers and parapets. It has been heightened by the insertion of concrete beams to accommodate the overhead power lines.

The line is now entering the built-up area of Lower Sheering. As it approaches Sawbridgeworth Station the line passes through an industrial area dominated by former malthouses. On the west, down-side, of the line is a group of mid-nineteenth century malthouses (EHER 3628) which were linked to the railway by sidings and some of the track can still be seen in the road surface that surrounds the site. On the east, up-side, of the line are two late nineteenth century multi-storey malthouses (EHER 15044) which again had a siding connection to the main line. All these malthouses have been adapted to new uses, those on the west side for commercial purposes and those on the east for residential purposes and both have been surveyed by Essex County Council (see Gould 1995). Having passed the malthouses the line crosses Station Road at a level crossing (at NGR TL 491 151) to enter Sawbridgeworth Station and as it does so it leaves Essex for Hertfordshire where it remains on its way to Bishop's Stortford.

MAP G

The line next re-enters Essex north of Bishop's Stortford after it passes under the modern A120 viaduct across the Stort valley at NGR TL 499 232. The railway is again on the flood plain of the River Stort for a short distance, the line then going northeast towards Stansted Mountfitchet following tributary streams of the Stort rather than the main river valley itself.

EHER 41098 Overbridge

NGR TL 506 240



Pesterford (formerly Pesthouseford) Bridge takes the B1383 Stansted Road across the line. It was probably raised when the line was electrified in the 1980s to accommodate the overhead power lines, but it was largely rebuilt in the early 21st century. Parts of the original brick piers were retained but new brick work was added to the piers and the bridge and parapets are of modern concrete construction.

EHER 41099 Culvert

NGR TL 507 241



Having passed under the bridge the line then immediately crosses a culvert taking a tributary stream, the Stansted Brook, to the River Stort. The culvert is not accessible, but appears to be a substantial brick structure.

EHER 41100 Overbridge

NGR TL 510 244

Stoney Common Road overbridge is entirely of brick construction apart from concrete beams which were inserted to raise the height of the bridge to accommodate the overhead power lines during the electrification of the 1980s. To the north of the bridge the line passes a pair of industrial buildings which are on the up-side (east) of the line. These are the malthouse and its associated storage building of c1870 and originally a siding from the up-line ran between the two buildings (EHER



15275 – see Gould et al 1997). The line is now entering the village of Stansted Mountfitchet.

EHER 41101 Culvert

NGR TL 511 246

The line crosses the Stansted Brook again, but the culvert is inaccessible as it is surrounded by private properties. Again it is likely to be a substantial brick structure.

EHER 41102 Footbridge

NGR TL 512 247



for safety reasons.

The footpath bridge between West Road and Water Lane is supported by blue engineering brick piers on either side of the tracks. These piers appear to have been raised by about six courses of similar brick, if so, probably at the time of the electrification of the line in the 1980s. The bridge itself is of welded steel, the parapet sides having been raised with metal sheets, again probably dating from the period of electrification,

MAP H

As the line enters Stansted Mountfitchet Station it passes, on the down side, a former granary. The area between the granary and the railway was originally part of the station goods yard, but is now a car park.

EHER 41103 Stansted Mountfitchet Station

NGR TL 514 248

Built in 1845, the two-storey station house, on the down side platform, is of red brick with white brick dressings under a slate roof with clay ridge tiles. The original single storey lean-to on the south-west side has been partly extended to two storeys and a two-storey extension to the north-east end was added, probably in the 1850s. The platform canopies are different in pitch and support reflecting their different building dates. The original canopy is supported on large brackets from the station house wall, while the later canopy on the platform side of the 1850s extension (although built in 1889/90) is supported on cast-iron columns and brackets. The up-side platform has a timber waiting room of 1889/90 and a long canopy supported on cast-iron columns of the same design as those of the same age on the down side platform.



Stansted Mountfitchet station building of 1845, the original building being the gable end on the right.

Down side platform showing 1845 station building and the two canopies of different designs, reflecting the different dates of construction.





Up side platform with timber clad waiting room and canopy of 1889/90 supported on cast—iron columns.



Up side platform showing detail of the 1889/90 columns and brackets supporting the canopy. The columns are round in section on an octagonal base with four short lengths of fluting on the main portion of the column.

General view of Stansted Mountfitchet station highlighting the footbridge. This was built in 1986 and replaced the former footbridge which was at the north end of the station adjacent to the road bridge. The earlier footbridge was probably dismantled as it needed raising to accommodate the new overhead power lines. It has concrete stairs and a steel span.



EHER 41104 Overbridge





Bridge taking Church Road over the line at the north end of Stansted Mountfitchet station. Of brick piers and parapets topped with concrete caps and with concrete beams to carry the road surface, this bridge demonstrates well how the bridges on this line had to be remodelled or even totally rebuilt to accommodate the over-head power lines following electrification of the line in the 1980s.

The railway now leaves Stansted Mountfitchet and goes through open countryside following the valley of the Stansted Brook.

EHER 41105 Underbridge

NGR TL 516 248



Once again the line crosses the Stansted Brook adjacent to the village car park. This time the line is on a concrete beam bridge, supported on brick piers, and has metal railings.

Just beyond the car park on the down side of the line are two surviving sidings.

At NGRs TL 520 250 and TL 528 253 are the two spurs forming the triangular junction of the branch line to Stansted Airport opened in 1991, with a tunnel under the airport runways and a single station underground at the airport terminal. Immediately after the up-side, facing, eastern spur at NGR TL 530 247 the railway passes under the M11 motorway bridge built in the 1970s, and at the same point is another culvert for the Stansted Brook which is inaccessible.

EHER 41106 Underbridge

NGR TL 528 254



Between the up-line facing spur to the airport and the M11 bridge, the line is taken over a footpath on this bridge. It appears to have been narrowed and reinforced since original construction as there are two newer red brick piers with a short concrete beam to support the track across the piers. Beyond the newer piers is on both sides is older brick work and the metal railings extend well beyond the current opening.

MAP I

EHER 41107 Underbridge

NGR TL 534 258



Brick underbridge with metal railings takes the line over a private track. Stansted Brook again flows under the line at this point.

EHER 41108 Footpath Crossing

NGR TL 534 259



Fullers End
Footpath
Crossing joins
Robin Hood
Road and Tye
Green Road,
as the line
enters
Elsenham. It
has manually
operated gates
with warning

lights and klaxons. The line then curves north entering a shallow cutting as it runs through Elsenham, crossing the watershed between the valley of the Stansted Brook flowing west and south and the valley of the River Cam or Granta flowing north.

EHER 41109 Overbridge

NGR TL 536 263



Bridge taking Elsenham High Street over the railway which at this point is in a cutting. Having concrete piers, brick parapets topped with concrete caps and concrete beams to carry the road surface, this bridge demonstrates well how the bridges on this line had to be remodelled or even totally rebuilt to accommodate the over-head power lines following electrification of the line in the 1980s.

EHER 40892/35931 Elsenham Station

NGR TL 533 270

Elsenham Station was opened in 1845 and is a staggered station like Roydon and Harlow Mill. The up-side platform is to the south of the **level crossing (EHER 41110)** and on the east side of the line, while the down-side platform is to the north of the crossing, on the west side of the line. The station house of 1845 is to the northwest of the level crossing at the south end of the down platform. It is of red brick with brighter red brick dressings and is slate roofed. It has a single-storey extension on the track (east) side and there is a two-storey extension on the west side.



There are other single-storey flat-roofed brick buildings on the down platform adjacent to the station house. One is a glass-fronted waiting room, another the gents toilet and the rest storage. These were built in c1938 after fire destroyed the original ones.

The up platform buildings are the 1902 timber waiting rooms with a canopy which the platform across has decorative valencing (this was cut back accommodate in 1980s to overhead power lines) supported on cast-iron columns and brackets; a red brick booking office probably built in 1913 when the Thaxted Branch was opened: and attached to the north end of the latter, a timber crossing keeper's hut. The Thaxted Branch ran into a bay



on the east side of the up platform – for more details of this branch see Crosby 2010. As well as the level crossing to gain access to either platform, there is also now a large footbridge built in 2010.



View of Elsenham Station from south on the up platform. The Thaxted Branch platform was on the right of the photo, the curve in the platform traces the curve of the branch line as it met the station. Up-side buildings can be seen in the centre with the timber waiting room, Listed Grade II, and canopy dominant. The modern footbridge crosses the line just before the level crossing, and the lights of the down platform can be seen in the distance.



Detail of the up-side timber waiting room, Listed Grade II, with canopy valencing and supporting columns and brackets. The Station House is just on the left with the down platform beyond the level crossing.



Up-side brick booking office and timber level crossing keeper's hut on the up platform.



Detail of the canopy valencing and the cast-iron support columns and brackets on the up platform. The columns and brackets are of the same design as those at Stansted Mountfitchet.

EHER 41110 Footpath crossing

NGR TL 532 273



A footpath runs due west from Old Mead Road north of the former Elsenham goods yard and crosses the line at this crossing. It is accessed and protected only by a white timber gate at each side of the line.

The line has crossed the watershed from the Stort valley and now enters the valley of the River Cam or Granta (from herein referred to as just the River Cam).

MAP J

EHER 41111 Underbridge

This bridge takes the line across North Hall Road, just southwest of Little Henham. Built on brick piers topped with concrete beams, the bridge is of steel girders. The young River Cam here flows under both the road and railway.

NGR TL 528 293



EHER 41112 Crossing



NGR TL 528 293

This former farm crossing, adjacent to the underbridge above, is protected by timber gates. The warning bells to alert users to the presence of the overhead power lines should there be an overheight load are still in place.

MAP K

EHER 41113 Underbridge



NGR TL 526 301

This bridge takes the line across the road going east into Little Henham. Built on brick piers topped with concrete beams, the bridge is of steel girders.

EHER 41114
Footpath crossing



NGR TL 526 304

The footpath from North Hall Road eastwards to London Jock Wood runs through a farm yard and then through a timber gate and up steps to cross the line.

EHER 41115 Underbridge

NGR TL 526 313



This bridge takes the line over Hollow Road going east into Widdington. Built on brick piers topped with concrete beams, the bridge is of steel girders.

MAP L

EHER 41116 Culvert

NGR TL 526 314



The River Cam is crossed by the line at this substantial brick culvert. It is built of blue engineering bricks and has metal railings at track level.

EHER 41117 Private level crossing

NGR TL 527 320

A private drive runs down eastwards from the B1383 to Oxcroft and crosses the line at a level crossing which is on private land and hence inaccessible.

EHER 41118

Culvert NGR TL 526 323

Again the River Cam runs under the line in a culvert which is in private farm land and inaccessible.

EHER 41119 Overbridge

NGR TL 525 324

This bridge takes the road from the main London Road (B1383) eastwards to Widdington. Built of brick piers and parapets with concrete beams and capping to the parapets, it appears to be a modern bridge probably a rebuild of the original at the time of electrification in the 1980s.



MAP M

EHER 41120 Newport Station

NGR TL 523 336

Newport Station was opened in 1845, the station house having been built at that date. The other station buildings date from the mid 1880s, although the canopies were cut back at the time of electrification and that on the up platform dates from the 1980s. The Porters' Room on the down platform south of the footbridge is more recent, while the plate steel span footbridge is of the mid 1980s, no doubt a replacement to accommodate the overhead power lines. The former goods yard is now the station car park.



General view of Newport Station looking north.

Newport Station building.



Detail view of down platform looking north. The columns supporting the canopy of the mid 1880s have an octagonal base, are round in section with rings above the base the uppermost of which is knobbed, two rings midway up with a Tudor rose between them and square capitals.





Up-side platform waiting room and canopy of the mid 1880s. The supporting columns are of the same design as those on the opposite platform.



This view shows the station house on the right and a store building, part of the malthouse complex of 1853 (EHER 15054 – see Gould 1995) on the left. A trailing siding came from the down line just north of the station and ran alongside the stores building, to the right of it in this view.

EHER 41121 Overbridge



NGR TL 523 338

This bridge takes Debden Road eastwards from Newport towards Debden across the line. Built of brick piers and parapets with concrete beams and capping to the parapets, it appears to be a modern bridge probably a rebuild of the original at the time of electrification in the 1980s.

EHER 41122 Crossing



NGR TL 523 340

This pedestrian crossing takes a footpath from the village centre northeast. There are stiles on both sides of the track for pedestrian use, but also height warning bells indicating that this may have been a vehicle crossing at one time.

EHER 41123 Culvert

NGR TL 523 341



The River Cam is crossed by the line, but the actual culvert is inaccessible, all that could be viewed was the culvert at track level indicated by the top of the brick parapets and the metal railings.

EHER 41124 Underbridge

NGR TL 523 343

Consisting of brick piers with concrete beams carrying the track and metal railings, this bridge takes a track and footpath under the line from White Horse Lane.



The line is rising out of the River Cam valley as it swings northwest towards the higher chalk landscape of this part of northwest Essex. Crossing this chalk landscape results in the few major engineering works on this line.

EHER 41125 Viaduct

NGR TL 522 346





Newport viaduct is on the north edge of the village is a low viaduct with 13 segmental arches (left above) and takes the line across Wicken Water by one of the arches, just before the latter joins the River Cam, then the next arch is over Water Lane, followed by an arch over Bridge End, and then one over a track. The final span is a girder bridge supported on brick piers with concrete capping beams, across the main Cambridge Road (right above). The main viaduct is of red brick and some of the arches have been under strengthened with four courses of engineering bricks.

MAP N

EHER 41126 Footpath crossing

NGR TL 519 348



A footpath running westwards from the B1383 Cambridge Road towards the road to Tudhope Farm crosses the railway at a pedestrian crossing. It is accessed by wooden stiles over a wire fence on both sides of the line.

EHER 41127 Footpath crossing





A footpath running westwards from the B1383 London Road towards Mill Hill crosses the railway at a pedestrian crossing. It is accessed by wooden stiles over a wooden fence on both sides of the line.

EHER 41128 Level Crossing

NGR TL 517 359



This level crossing takes Rookery Lane across the railway as it runs westwards from London Road towards Norton End. It has modern warning lights and signals for the road and automatic barriers. There is a small wooden hut on the upside of the line.

EHER 41129 Viaduct

NGR TL 516 361



The viaduct at Wendens Ambo is one of only two viaducts on the Cambridge line and is more spectacular than that at Newport. Built of blue engineering bricks it has seven arches of 20 feet span and is 60 feet high at the centre. It crosses the deep valley of a tributary brook running east to the River Cam and also crosses a footpath. Each pier has a pair of arched openings.



EHER 36774 Audley End Station



NGR TL516 363

Audley End Station is also described in Garwood 2005 as it was the western terminus of the Saffron Walden Branch Line. The branch line halt and platform are extant in the car park and again are described in the Saffron Walden Branch report.

The main line station has a Grade II listed station building of 1845 by Francis Thompson. It is a rectangular two storey yellow gault brick building with a parapet behind which is a low-pitched roof. Windows are sashes

with semi-circular-arched, radially-glazed windows. The east front has a porte-

cochere with stucco arches and coursed pillars. There is a late 20th century single-storey extension on the north end in a similar style to the original. Also on the up-platform is a 1980s waiting room, again built in similar materials to the main station building and in sympathy with the original design and style. The original footbridge was replaced in the 1980s during electrification of the line by the present one which has concrete stairs and a steel span.



The down platform waiting room block dates from 1894. It has a canopy supported by two cast-iron columns and with quarter-circle longitudinal brackets. The columns have four short lengths of fluting at the top, bottom and two intervening places.



Detail of up-platform canopy and supporting columns and brackets.



EHER 41130 Overbridge

NGR TL 516 364

This bridge takes Station Road westwards from London Road across the line. Built of brick piers and parapets with concrete beams and capping to the parapets, it appears to be a modern bridge probably a rebuild of the original at the time of electrification in the 1980s.



The line now cuts through the chalk hills of north west Essex, having had to divert to the west away from the River Cam valley in order to avoid grounds and view from Lord Braybrooke's Audley End House and Park. This results in further major engineering features, a deep cutting and two tunnels.

MAP O

EHER 41131 Cutting and footbridges

Cutting and footbridges Northwards from NGR TL 516 364 to 514 375



Cutting through the chalk hills looking north from a steel footbridge supported on steel columns (see next photo) at TL 515 372. A second footbridge crosses the line at TL 515 373 of similar design and construction, also supported on steel columns. Both footbridges are modern and probably date from the 1980s electrification of the line to Cambridge. In the distance can just be seen the south portal of Audley End tunnel.



Footbridge at TL 515 372 from which the above photo was taken, showing detail of construction. There are the remains of brick piers in the cutting sides, evidence of an earlier (original) bridge replaced during electrification.

EHER 41132 Underbridge

The line emerges from the cutting to cross the valley of a small stream and Chestnut Avenue before going into Audley End tunnel. The substantial bridge over Chestnut Avenue is built entirely in blue engineering brick. The arch has been reinforced with steel arched beams supported on concrete beams.

NGR TL 514 378



MAP P

EHER 41133/35582(South Portal) Tunnel

South Portal NGR TL 513 382 North Portal NGR TL 513 386

(Neither portal to this tunnel is accessible for photography.)

Built in 1845 and attributed to Robert Stephenson, Audley End tunnel takes the line under the chalk hills west of the Audley End estate. The south portal is listed Grade II, being built of red brick and stone. The outer stone ring is embellished with alternating Tudor portcullis and rose bosses. There is then a ring of five courses of brickwork followed by a rusticated stone arch with a keystone bearing the Braybrooke coat of arms. Within this are five concentric receding rings of brickwork. All this springs from a rusticated stone plinth at each side. The north portal is plain.

EHER 41134/35625(South Portal) Tunnel

South Portal NGR TL 513 389 North Portal NGR TL 514 393

(South portal to this tunnel is not accessible for photography.)



Built in 1845 and attributed to Robert Stephenson, Littlebury tunnel takes the line under the chalk hills west of the Audley End estate. The south portal is listed Grade II, being built of yellow brick and stone in Egyptian style. The south portal has an upward tapering brick façade, surmounted by a stone cornice and entablature. The mouth is formed by a semi-circular arch within five concentric receding rings of brickwork all springing from rusticated stone plinth on each side.

The north portal shown here is again plain. Little Green Road runs across the line at the north portal.

EHER 41135 Crossing



NGR TL 514 396

A footpath crosses the line in Littlebury village. It is accessed by white picket gates at either side.

MAP Q

EHER 41136 Overbridge



supporting the other opening.

NGR TL 515 398

This bridge takes the Strethall Road running west from Littlebury village across the line. It has piers of blue engineering bricks and parapets of red brick with concrete cappings. To the east of the line is another square opening which has parapets of blue engineering bricks. Concrete beams support the road level and it appears that the beams supporting the road across the line have been raised to accommodate the overhead power lines as they are higher than the beams

EHER 41137 Overbridge



NGR TL 515 404

This bridge takes Merton Place as it runs west from Cambridge Road over the line. Built of blue engineering bricks, as well as the main opening for the two railway lines it has an arched opening on the west side and a square opening on the east side. The road is supported beams. concrete themselves supported on concrete beams set into the brickwork. These concrete beams are probably additions to raise the road surface when the overhead electric lines were installed in the 1980s.

The line now swings back eastwards towards the flatter land in the valley of the River Cam and the agricultural land which characterises this area of the valley.

MAP R

EHER 41138 Level Crossing

This crossing takes a farm track from Bordeaux Farms towards the agricultural land no doubt belonging to the farm. The track is protected by automatic barriers on each side of the track, while the pedestrian crossing has white picket gates.

NGR TL 512 417



NGR TL 508 421

EHER 41139 Underbridge

This bridge takes a farm track from Bordeaux Farms towards agricultural land no doubt belonging to the farm. It is a concrete bridge with iron railings all supported on piers of blue engineering bricks.



EHER 40893 Great Chesterford Station



lost.

NGR TL 504 425

Great Chesterford Station was built in 1845 to designs by Francis Thompson and is very similar to Audley End Station also by Thompson. It has, however, five bays as opposed to Audley End's three, the windows are all square headed and it has no porte-cochere. There was an all-round canopy but this has been removed from the front, car park side, of the building, but remains to the sides and the platform side. It is supported by diagonal wooden struts which originally had pendants, many of which are now



This is the only building on the station. The footbridge dates from 1986 and has a steel span and concrete steps in common with that at Audley End and again built at the time of electrification of the line.

EHER 41140 Level Crossing

NGR TL 502 427

EHER 41141 Underbridge

NGR TL 502 427



The Ickelton Road running north from Great Chesterford is crossed by the line by both a level crossing and then immediately an underbridge. The level crossing is guarded by automatic barriers. The bridge is of steel girders supported on concrete piers. The crossing keepers cottage (see below) dates from 1845 so it can be assumed that the level crossing was in place when the line opened and that the bridge with its more recent construction was installed at a later date to ease

traffic flow on the road, albeit only for cars and other vehicles under 8' 6".

EHER 41142 Crossing Keeper's Cottage

NGR TL 502 427

The Ickleton Road level crossing at Great Chesterford has a single storey keeper's cottage, built in 1845 for the opening of the line. It has semi-circular arched windows reminiscent of those at Audley End Station. However, the glazing has probably been altered in them and one has had the semi-circular arch bricked in so that the window now has a square head. Alterations / additions have also been made to the road side of the



building. It is one of only four surviving crossing keepers' cottages in the County.

The line now continues to follow the valley of the River Cam and soon enters Cambridgeshire just south of the village of Ickleton. Before doing so it crosses the River Cam twice by bridges and is, in between these two, itself crossed by the M11 motorway on a bridge built in the early 1980s.

MAP S

EHER 41143 Underbridge

NGR TL 501 429



The line crosses the River Cam on a steel girder bridge supported on brick piers and with metal railings.

EHER 41144 Underbridge

NGR TL 497 439



The line crosses the River Cam on a steel girder bridge supported on concrete piers and with metal railings. This is also the County boundary and the line then passes into Cambridgeshire.

EHER 40897

The Newmarket and Chesterford Railway was opened in 1848 and ran from the Cambridge line northeastwards from a junction at NGR TL 500 431, just south of the M11 overbridge. The line between Six Mile Bottom and Great Chesterford closed only three years later, while the rest of the line to Newmarket survived as part of the Cambridge to Bury St Edmunds line. It was finally dismantled in 1858. The section in

Essex has now been mainly lost having been ploughed into the fields and the M11 motorway has also helped to obliterate any sign of the line. However, where the line crossed Mill Lane which runs eastwards from Ickleton there is a hump in Mill Lane probably indicating the site of a bridge taking Mill Lane over the railway. This is at approximately **NGR TL 500 440**.



Mill Lane looking eastwards. It is assumed that this hump in the lane coincides with the site of a former bridge over the Newmarket and Chesterford Railway.