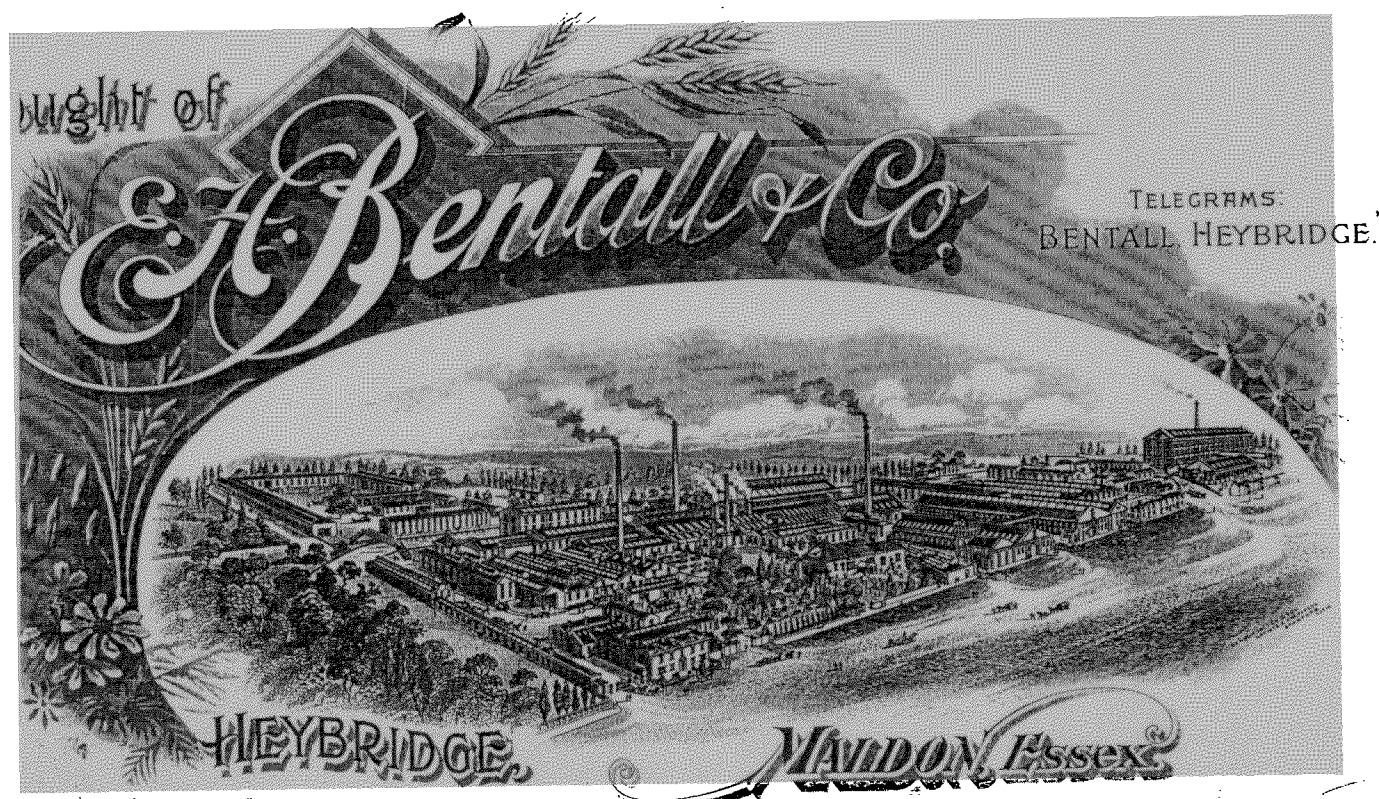


# IRON FOUNDRIES IN ESSEX

## COMPARATIVE SURVEY OF MODERN INDUSTRIAL SITES AND MONUMENTS

No.6



Essex County Council  
Planning

Field Archaeology Group

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Recording by A.Garwood, S. Gould and S.Gibson of both the Field Archaeology Group and Archaeological Advisory Group of the Essex County Council Planning Department.  
Report prepared by A. Garwood.

Front Cover: Illustration of E.H. Bentall's Iron Foundry, Heybridge, Essex.

## **Iron Foundries in Essex: A Comparative Survey**

### **1.0 Summary**

This report provides an assessment of the field remains of 26 Essex iron foundries operating from the late eighteenth to the twentieth century. The survey aimed to establish the priorities of the industry, thereby enabling an appropriate response should significant archaeological and technological remains become threatened. Historical data on the location, spatial layout and products of the foundries was derived from J. Booker's *Essex and the Industrial Revolution* (1974, 1-23) and the Industrial Archaeology Record Cards held by the Essex Record Office (accession numbers T/Z 193/2, 193/8, 193/8/1, 193/8/2, 193/8/3, 193/8/4, 193/8/5). Additional information was obtained from relevant cartographic evidence, namely, the Tithe maps and awards, and the first to third edition 25-inch Ordnance Survey maps. Having identified the location of each site they were then visited to assess the survival of both standing and buried remains.

### **2.0 Introduction**

The survey was undertaken by Essex County Council Field Archaeology Group (FAG) for the Archaeological Advisory Group (AAG), of Essex County Council Planning Department. An initial search identified 30 sites, of which 26 were located; the remaining four (listed as Appendix 1) could not be traced. During March and April 1997, members of both the FAG and AAG visited each site in order to assess the nature, quality and condition of any remains. Because of access restrictions it was not always possible to undertake an internal inspection of specific buildings, but this will be rectified should the site become subject to a planning application. A pro-forma record sheet was compiled for each foundry with the limits clearly defined on modern Ordnance Survey scale 1:2500 maps; these have been re-produced as an 'inventory' at the back of the report. Site details have also been added to the Essex Sites and Monuments Record.

Having outlined the technology and historical development of the Essex industry the report then addresses rates of survival and priorities. The 26 sites are listed in the inventory together with relevant historical and contemporary map coverage; where appropriate a photograph is also produced. Appendix 1 lists those foundries which could not be located and Appendix 2 provides names and details of known iron smithies; these will be the subject of a separate report.

### **3.0 The Iron Foundry Process**

Within the iron foundry pig iron is re-smelted in an air or cupola furnace and then poured into moulds to produce castings; these vary enormously in shape and size ranging from large beams for steam-driven Cornish pumping engines to more intricate machine parts. In Essex the industry was essentially geared to the needs of agriculture, supplying threshing machines, portable steam engines, ploughs, winnowers and chaff cutters.

Initially the process was housed in a single building containing a furnace, erecting shop and possibly a forge, but as the scale of the industry increased during the nineteenth century the number of specialist buildings expanded with the addition of pattern and core shops, a separate forge, brass works, carpenters shop, fettling room, power house, offices and stores. Many sites were laid out around a courtyard plan lying beside canals, docks or railways. The principal component parts include:

### **3.1 Pattern Shops**

Pattern makers are experienced carpenters who fabricate an exact wooden replica or pattern of the finished product and repair any patterns that may become damaged. Each pattern is manufactured to exact dimensions and within a narrow margin of tolerance; they are usually built oversize to a pre-determined dimension, to allow for shrinkage of the final casting. The pattern shop may be located on one side of the foundry or within an entirely separate building. Tools were mostly hand-held, but lathes could be driven by belts connected to overhead line shafting.

### **3.2 Core Shop**

Castings can have very intricate designs, requiring specific chambers and galleries, or when the object to be cast requires a hollow centre, such as a column, a core must be placed centrally into the mould before the iron is introduced. The core is held in position by supporting arms, known as chaplets and when the casting has hardened, the core, as with the mould is discarded. Cores, which are made of sand, are formed in moulds specifically designed for each batch of castings. Once the cores are formed any imperfections are removed, as these will be passed onto the casting. The core shop may be located within the foundry or alternatively in a small building to one side.

### **3.3 Furnace and Foundry**

The air or cupola furnace worked in the same way as a blast furnace; the charge comprising pig iron, scrap cast iron, coke (fuel) and limestone (flux). Heat within the furnace was regulated by hand, water or steam-driven bellows, but electric blowers are now mostly employed. Once melted the metal would either be run down channels to moulds within the sand beds or was ladled directly into a flask containing the mould. A flask is a cast iron or steel box, comprising two halves, each with no top or base. The pattern is placed into half the flask and packed with sand, known as facing sand, on one side. This half is then turned over and the other half placed on top and the pattern is then packed with sand on its other side. The pattern is then removed and the mould is complete. The sand that the moulder uses must be firm enough to take the impression of the pattern and resist the molten metal. Green sand (wet) was widely used for moulding. It is mixed with coal dust before being introduced into the mould; when the molten metal is poured into the mould it ignites the particles of coal dust within the sand which cause gases, arising from the combustion, to form a barrier between the surface of the sand and



the casting. When the casting has finally hardened, the flask is removed and the sand is broken away from the body of the casting.

The foundry was usually a rectangular gabled brick-built range with a raised louvered ridge in the roof to permit the escape of smoke and gases. A large uninterrupted space was essential to lay out moulds and heavy castings were moved around the building using travelling cranes supported on pilasters. Internal columns were initially of cast iron, but these were superseded during the twentieth century by rolled steel joists; roof trusses were of iron or steel, and the floor was made up of sand. The cupola stood against one of the long walls.

### **3.4 Fettling Shop**

Having made the casting any roughness or unwanted projections were removed using belt driven machine tools. The fettling shop normally stood beside the foundry, but within the larger complexes it often formed part of the erecting and machine shop (see 3.5 below).

### **3.5 Erecting and Machine Shop**

These large halls were used for manoeuvring heavy pieces of machinery in the course of assembly. Typically brick-built, single-storey with wide open spaces, arched dispatch doorways and a roof supported on cast iron columns or latter, rolled steel joists. Travelling cranes carried on internal pilasters would traverse the whole length of the building and belt driven machine tools powered by overhead line shafting were positioned along the walls. Hearths for producing wrought iron forgings to complete machines may also have been present together with multi-storeyed storage areas.

### **3.6 Power House**

An intricate network of overhead line shafting and belts was used to drive the many lathes and machine tools within the works; power being supplied by a horizontal steam engine housed in a power house. Typically brick-built the building can normally be identified by the presence of a boiler chimney at one corner.

### **3.7 Offices and Stores**

The office fronted the foundry and acted as an advertisement for the firm; the facade often containing more elaborate architectural treatment, plaques or date-stones. To the rear of the site stood a random collection of brick or wooden sheds for the storage of raw materials, sand and wood.

#### **4.0 Historical Background**

The first Essex foundries were mostly connected with the manufacture and supply of agricultural implements. This dependence on limited local markets led to the establishment of a number of firms including those at Greenstead Green (ESMR No. 15306), Gestingthorpe (ESMR No. 15307) and Goldhanger (ESMR No. 15303) in purely rural locations. The sites were generally small and their isolation coupled with the lack of communications led to their eventual downfall. By the mid-nineteenth century larger integrated concerns in Heybridge (ESMR No. 15304), Maldon (ESMR No. 15069) and Colchester (ESMR No. 15293) began to dominate the industry; the works were more substantial and better equipped, lying beside inland navigations or railways. At Walton-on-the-Naze, the ironworks (ESMR No. 15312) had its own dock with a private tramway linking the buildings to the water-front.

As demand shifted away from purely agricultural products many urban foundries obtained contracts from local authorities supplying such items as lamp standards, drainage pipes, wall plaques and municipal railings. Increasing competition both at home and abroad especially after W.W.II led to a marked contraction in the industry with the closure of many of the more important foundries including Bentalls at Heybridge (ESMR No. 15304) and the Atlas Works, Earls Colne (ESMR No. 15005). Essex now retains only one working iron foundry at Rayne (ESMR No. 15301) and although much altered, the plant provides an important historic link to the industrial past.

#### **5.0 SURVIVAL**

The rate of attrition for Essex iron foundries has been particularly dramatic with only a handful retaining up-standing remains. Many of those described as working by J.Booker between 1969 and 1974 have been closed, demolished and developed. Records are scarce and the complete absence of detailed recording means that the typological, spatial, regional and architectural development of this important industry can no longer be fully understood. Evidence of site layout, phasing, equipment, methods of construction and variations between rural/urban, age and location have been lost. It is therefore essential that for those that survive due consideration is given to their long-term management and conservation.

Of the 26 sites that were assessed:

9 have been demolished and re-developed. Many of these have been lost in recent years and have been graded 0 in the inventory.

6 retain buildings of only local importance. They include two warehouses (Maldon Ironworks [ESMR No. 15069] & Heybridge [ESMR No. 15304]), the converted buildings of the former Johnson's Foundry, Saffron Walden (ESMR No. 15313), a possible twentieth-century brass foundry (ESMR No. 15298) and

fragments at two other sites (ESMR Nos. 15309 & 15311). These have been graded \* in the inventory.

2 sites have below ground archaeological remains of moderate to low importance (ESMR Nos. 15112 & 15292). They both continued to operate into the twentieth century and this may have destroyed much of the earlier evidence; a building also occupies part of one of the sites. They have been graded \*.

3 sites have below ground remains of moderate to high importance (ESMR Nos. 15306, 15307, 15310). The nineteenth century foundries were all relatively short-lived and the lack of subsequent development suggests the presence of potentially significant archaeological deposits. These have been graded \*\*.

4 other sites have been graded \*\*; they include the working iron foundry at Rayne (ESMR No. 15301), and the only extant example of a small early nineteenth-century foundry which survives at Coggeshall (ESMR No. 15302). The remnants of the only coastal works at Walton-on-the-Naze (ESMR No. 15312) and an unroofed foundry at Halstead with its in situ travelling cranes (ESMR No. 15305).

Two sites have been graded \*\*/\*\*\*. The Atlas Ironworks at Earls Colne (ESMR No. 15005) retains much of its architectural integrity and is the best preserved upstanding iron foundry in Essex. At Goldhanger (ESMR No. 15303) the relatively short-lived works had ceased operating by 1815 and if it can be accurately located any surviving below ground remains are likely to be of major national importance.

## **6.0 Priorities for the Industry**

Of the 26 sites assessed during the survey nine have been demolished and developed, and a further three retain features of low importance (ESMR Nos. 15309, 15311, 15313); 46% of the total sample. For the surviving 14 foundries the following priorities have been established:

### **6.1 For those sites graded \* in the Inventory**

The warehouses at Maldon and Heybridge (ESMR Nos. 15304 and 15069) stand on the site of two of the largest iron foundries in Essex; the former has a particularly grand frontage and this is reflected by its grade II listing. Both buildings have been successfully converted to alternative uses and should be retained as local landscape features.

The Albion Ironworks, Braintree (ESMR No. 15298) was established as an integrated foundry during the early twentieth century. Most of the buildings have been demolished, although a possible brass foundry stands at the west end. The

building is not of a listable quality, but as the only extant example in Essex it merits photographic recording prior to demolition.

Below ground deposits may survive at the W. Cottis Iron Foundry Ltd., Epping (ESMR No. 15112) and Paxman's, Colchester (ESMR Nos.15292). Both works were still operating into the 1970's-1980's and this may have led to the loss of any mid-nineteenth century sub-surface remains. Due to the paucity of remains elsewhere an intensive (paid) watching brief should be maintained during any groundwork's.

## **6.2 For those sites graded \*\* in the Inventory**

Coggeshall (ESMR No. 15302) retains the only standing small-scale nineteenth-century foundry in Essex. The building retains much of its external integrity and forms part of a good group along Bridge Street comprising Foundry House, foundry, brewery and malting. Lying within the Coggeshall conservation area any proposed conversion needs to respect its special character and the building merits full recording. An archaeological watching brief should also be maintained during any groundworks both within and beside the foundry.

W.J. Harmer Ltd, Walton-on-the-Naze (ESMR No. 15312) was established as a major coastal ironworks in the later nineteenth century with a dock and integrated tramway. Many of the original process buildings have been lost, but those that survive merit recording. The area of the dock should be archaeologically evaluated prior to any development and if warranted, conserved as an historic landscape feature.

Colne Valley Ironworks, Halstead (ESMR No. 15305) retains a rare example of an unroofed mid-late nineteenth-century foundry with in situ travelling cranes. Listing cannot be justified, but a detailed measured survey is needed in advance of any demolition.

As the last operational foundry in Essex, a video recording of the Rayne works (ESMR No.15301) should be undertaken at the earliest possible date. If threatened by any future re-development the site merits full recording.

Three nineteenth-century foundries have been identified with possible below ground remains (ESMR Nos. 15306, 15307, 15310). They were all relatively short lived, and the lack of subsequent development suggests the presence of walls, floors, hearth and possible machine bases. Given the paucity of remains elsewhere the sites should be evaluated in advance of any proposed works with further mitigation and/or recording if appropriate.

### **6.3 For those sites graded \*\*/\*\* in the Inventory**

The Goldhanger Foundry (ESMR No.15303) has yet to be accurately located; working for only seven years between 1808-1815 any sub-surface remains are likely to contain important evidence of early nineteenth-century practice. Should the site be identified from aerial reconnaissance during 1997 a recommendation will be made to English Heritage for possible scheduling.

The Atlas Works, Earls Colne (ESMR 15005) is the best preserved iron foundry in Essex. The earlier buildings including the machine shop, those structures fronting Foundry Lane, the water tower and a cast iron lamp stand are listed grade II; the entire complex also forms part of the Earls Colne conservation area. As part of any future scheme of reuse all the listed buildings must be retained and the preservation of the foundry, offices, power house and Tillwicks Farm Cottages actively pursued. The site has already been fully recorded by Essex County Council Archaeological Advisory Group (Gould and Gibson 1994).

## **7.0 Conclusions**

Throughout the nineteenth and early twentieth century Essex had a thriving industry based on the supply of iron goods. Initially located in rural areas supplying products to nearby farms, the business became increasingly urbanised during the later nineteenth century with the emergence of a number of fully integrated firms. Competition and the loss of Britain's engineering base during the 1950s-1970s led to the inevitable collapse of the industry with only the Rayne Foundry now in operation.

Redundant iron foundries are especially difficult to convert to new uses and in towns where vacant land is at a premium many have been demolished; the survival of the Atlas Works can be explained by the unusual decision to list the buildings whilst the site was still functioning. Rates of survival within rural areas has been much stronger, but most foundries now exist as below ground archaeological sites.

The high rate of attrition is compounded by the absence of detailed recording in advance of demolition and unlike the Essex malt industry (Comparative Survey of Industrial/Modern Sites and Monuments Vol.1) the evolution of foundry technology, plan form and architecture cannot be fully understood from the extant remains. Having established the priorities for the industry these will be implemented through the application of the advice given in Central Governments Planning Policy Guidance Notes 15 and 16 (1990 and 1994). Copies of this report have also be sent to the appropriate District Council Planning Authorities, English Heritage, the Royal Commission on the Historical Monuments of England and the Essex Record Office.

## **Acknowledgements**

I would like to thank S. Gould and S. Gibson for their contributions toward the completion of the report and R. Spencer of The Rayne Foundry for demonstrating the processes which a working foundry employs.

## **References**

Booker, J 1974. *Essex and the Industrial Revolution* (Essex County Council).

Gould, S. and Gibson, S 1994. *The Atlas Ironworks, Earls Colne, Essex. Industrial Buildings Report No. 2* (Typescript report, Essex County Council Planning Department).

Department of the Environment 1990. *Planning Policy Guidance Note 16: Archaeology and Planning* (HMSO).

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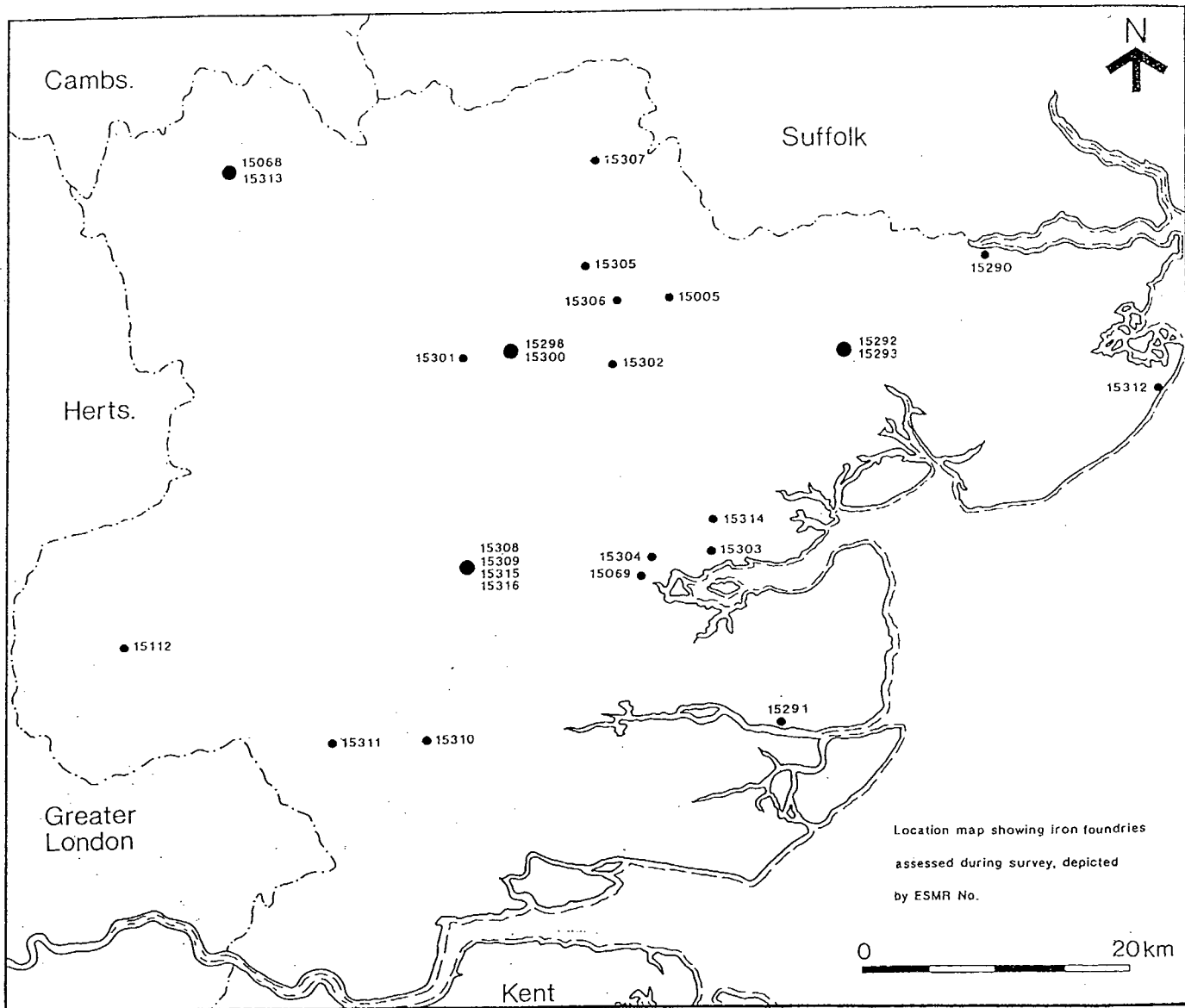
Essex County Council 1996. *Industrial and Modern Archaeology in Essex; A Statement of Current Practice* (Internal procedural document).

## INVENTORY

The inventory contains an individual record sheet for each site that was assessed during the survey. The record sheet is based on present knowledge and gives a brief description, assesses its archaeological potential, significance, status and identifies the need for any future action or management. The sites are graded on a \* system whereby;

0	Building or site of low importance or demolished
*	Building or site of local importance only
**	Building or site of regional importance
***	Building or site of national importance
****	Building or site of major national or international importance

A current and where possible, a contemporary map extract with the working building is provided for each site. At least one black and white photograph was taken for each foundry or site of foundry and where earlier photographs exist, these have also been included. The records have been entered onto the Essex Sites and Monuments Record and the inventory is ordered by ESMR number.





ESMR	SITE NAME	GRADE
15005	Atlas Works, Earls Colne	**/**
15068	Railway Foundry, Saffron Walden	0
15069	Maldon Ironworks	*
15112	W.Cottis Iron Foundry Ltd, Epping	*
15290	Lawford Ironworks, Manningtree	0
15291	Mildmay Ironworks, Burnham-on-Crouch	0
15292	Paxman's Britannia Works, Colchester	*
15293	Wallis and Coleman Iron Foundry, Colchester	0
15298	Albion Ironworks, Braintree	*
15300	Manor Ironworks, Braintree	0
15301	Rayne Foundry	**
15302	Coggeshall Iron Foundry	**
15303	Goldhanger Iron Foundry	**/**
15304	E.H. Bentall and Co. Ltd, Heybridge	*
15305	Colne Valley Ironworks, Halstead	**
15306	Greenstead Green Iron Foundry	**
15307	Downs Iron Foundry, Gestingthorpe	**
15308	Coleman and Morton, Chelmsford	0
15309	Anchor Street Ironworks, Chelmsford	*
15310	Billericay Iron Foundry	**
15311	Victoria Ironworks	*

15312	W.J. Harmer Ltd, Ironworks, Walton-on-Naze	**
15313	Johnson's Yard, Saffron Walden	*
15314	Beckingham Foundry, Tolleshunt Major	0
15315	Bewley Foundry, Chelmsford	0
15316	Broomfield Road Ironworks, Chelmsford	0

<b>SITE NAME</b>	Atlas Works, Earls Colne		
<b>NGR</b>	TL 8550 2860		
<b>ESMR No</b>	15005	<b>IRIS No</b>	EX/AAG/SG8
<b>PARISH</b>	Earls Colne	<b>DISTRICT</b>	Braintree

**SITE DESCRIPTION** One of the largest and most important iron foundries in Essex the Atlas Works was established on its present site by Reuban Hunt in the 1860s. It specialised in the production of agricultural machinery and produced such items as winnowers, chaff cutters, clod crushers, horse gears and threshing machines. Hunt's was also the first British company to produce a flexible coupling on a commercial scale. The site closed in 1988 and is currently owned by Wimpey Holdings Ltd.

The earliest buildings stand on the eastern side of the site and include a part single and two-storey watch house, canteen, hay loft and stores; fronting Foundry Lane the upper storey of the hay loft carries a cast iron plate with the inscription 'Built by Reuban Hunt 1886'. The offices face the main gateway and the eastern facade contains a carved sandstone figure of Atlas with the inscription 'Atlas Works'. Beyond the central courtyard stands a substantial six gabled machine shop with cast iron plaques dated 1869, 1869, 1871, 1871 and 1872. The machine shop was constantly being extended westwards and this is reflected in the buildings fabric. Approximately half-way along the south wall, the traditional brick-work is replaced by a modern 1930s addition with large rectangular windows. At the west end of the building the roof-line takes on a more modern sawtooth profile. The seven gabled foundry stands to the south and carries four cast iron date stones with the inscriptions 1889, 1901, 1902 and 1911. Like the machine shop, the foundry was constantly being extended with ad-hoc additions and internal modifications. An ornate 1885 water tower is abutted by the machine shop and on the west side of the site stands a 1920s power house. Lesser buildings include the brass moulding shop (mostly demolished), pattern store, timber storage sheds, carpenter's shop and covered warehouse.

In order to attract a skilled and permanent workforce, Hunt also erected a large number of houses around the site. The first, Hibernia and Belle Vue Cottages, were built between 1872 and 1876 on the eastern side of Foundry Lane fronting the main entrance to the works. Similar terraces, with between three and four cottages in each, were erected in 1888, 1897 and 1900 on the west side of Foundry Lane and to the north of Hayhouse Road. Between 1890 and 1900 over 200 people were employed at the Atlas Ironworks and the company eventually provided 160 properties all rented to the workforce at subsidised rates.

The increasing reputation and paternalistic attitude of Hunt's led to provision of a large number of public buildings and the supply of water, gas and sewerage. A number of important buildings were erected at the Company's expense including the extension to the railway station, the grammar school, the extension to the Baptists Chapel, York Place House and the village hall.

**ARCHAEOLOGICAL POTENTIAL** Although the Atlas Works retains much of its external architectural integrity no contemporary technological fittings survive. The internal cast iron columns within the machine shop have been replaced by rolled steel joists and only a handful remain within the foundry. The offices, watch house and canteen have been extensively modernised thereby removing any nineteenth-century decorative features.

**SITE SIGNIFICANCE**

The best preserved mid-nineteenth century iron foundry in Essex retaining good group value. Hunt's had a major influence on the later morphology and architecture within the town.

**CURRENT STATUS**

The earlier buildings including the machine shop, those structures fronting Foundry Lane, the water tower and a cast iron lamp standard are listed grade II; the entire complex also forms part of the Earls Colne conservation area.

**RECOMMENDED ACTION** None**MANAGEMENT**

Planning permission for a residential development including the demolition of the unlisted buildings was submitted in 1989 and 1990, but this was refused by Braintree District Council. The site is currently unoccupied although emergency repair works have been undertaken on the roof of the machine shop. Present knowledge suggests this is the best surviving ironworks in Essex and given its perilous condition a full photographic and written record has been undertaken by the Archaeological Advisory Group of Essex County Council (Gould and Gibson 1994).

A sympathetic scheme of reuse now needs to be implemented, but this should respect the spatial form and layout of the works. All the listed buildings must be retained and the preservation of the foundry, offices, power house and Tillwicks Farm Cottages should be actively pursued; the remaining buildings are of lesser importance.

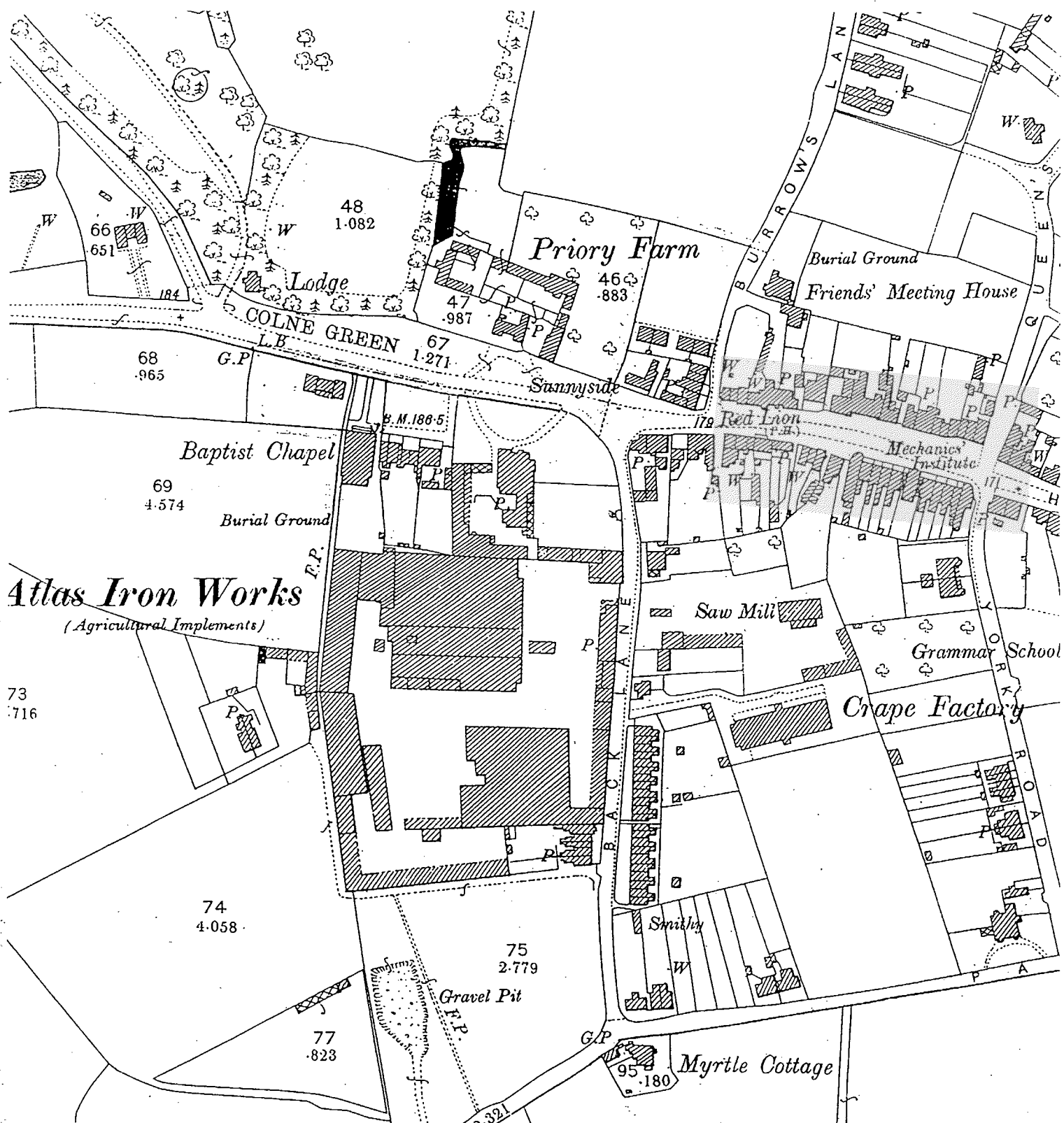
**GRADING**

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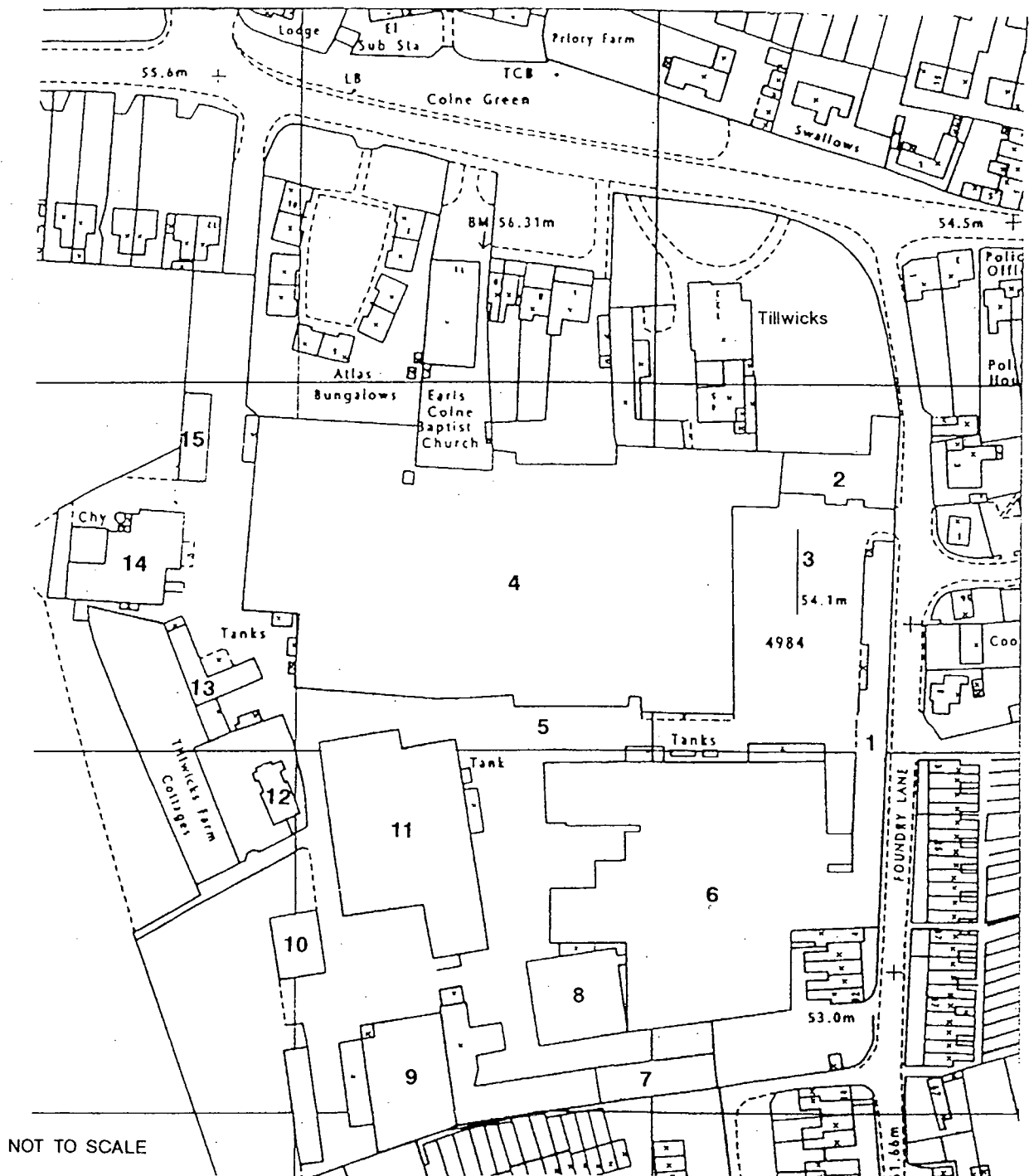
Booker, J., 1974 *Essex and the Industrial Revolution* (Essex County Council) 1-23

Booker, J., 1971 Industrial Archaeology Record Card. Essex Record Office (Ref. T/Z 193/2, 193/8, 193/8/1, 193/8/2, 193/8/3, 193/8/4, 193/8/5).

Gould, S., and Gibson, S., 1994 *The Atlas Ironworks, Earls Colne, Essex Industrial Buildings Report No. 1* (Essex County Council typescript report).



# THE ATLAS IRONWORKS EARLS COLNE



1. Watch house, canteen, hay loft and stores
2. Offices
3. Gas lantern
4. Machine shop
5. Water tower

6. Foundry
7. Brass moulding shop
8. Pattern store
9. Timber sheds
10. Loading shed and dust extractor plant

11. Carpenters shop
12. Tillwicks farm cottages
13. Outbuildings to Tillwicks farm cottages
14. Power house
15. Covered warehouse

Based on the Ordnance Survey  
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Plan of the works.



Atlas Works, Earls Colne. Machine shop viewed from the east, with Grade II listed cast iron gas lantern in the foreground (1986).

<b>SITE NAME</b>	Railway Foundry, Saffron Walden		
<b>NGR</b>	TL 5404 3796		
<b>ESMR No</b>	15068	<b>IRIS No.</b>	EX/AAG/SG123
<b>PARISH</b>	Saffron Walden	<b>DISTRICT</b>	Saffron Walden

**SITE DESCRIPTION** One of three iron foundries in Saffron Walden, the Railway Foundry was established by John Green in 1865. A collection of buildings stood beside a raised embankment above the sidings taking full advantage of the railway to transport large bulky items. These have been demolished and a housing estate now occupies the site.

The foundries of Robert Rickard in Mill Lane and William Rider in Black Swan Street, who was joined by T. Johnson in Church Street in 1848, were first recorded in 1823. No evidence for the location of Rickard's foundry was encountered during the survey. However the remains of Johnson's/Rider's foundry in Church Street still survive (ESMR No. 15313).

<b>ARCHAEOLOGICAL POTENTIAL</b>	None. Demolished and re-developed.
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<b>SITE SIGNIFICANCE</b>	None. Demolished and re-developed.
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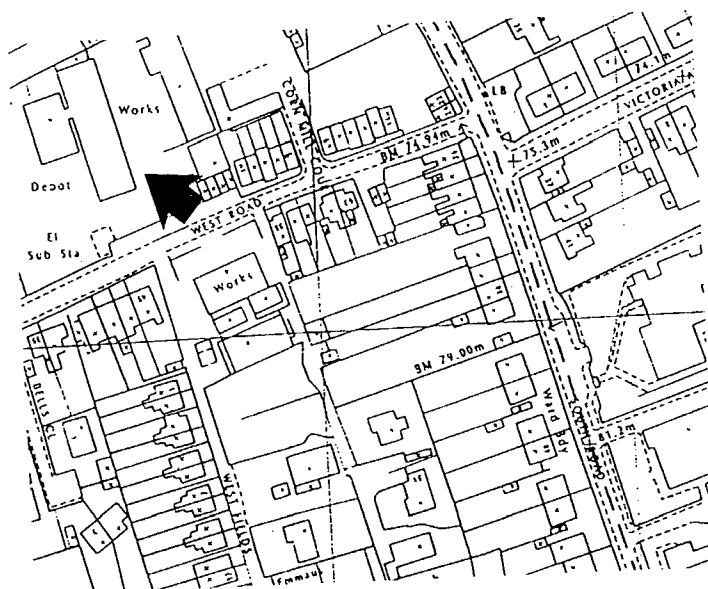
<b>CURRENT STATUS</b>	None
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<b>RECOMMENDED ACTION</b>	None
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<b>MANAGEMENT</b>	None
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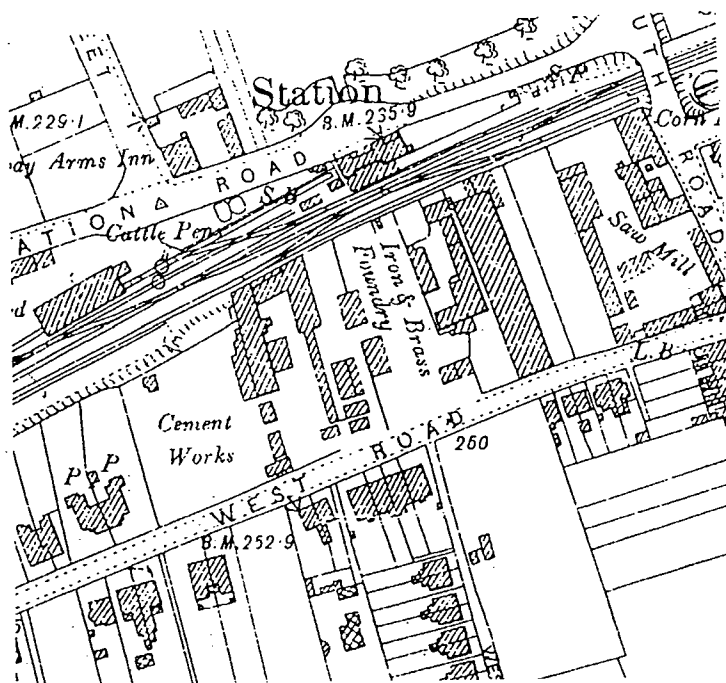
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OS Scale 1:2500 Sheet TL 5437 1996

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OS Scale 25 inch Sheet 9.5 1897

<b>SITE NAME</b>	Maldon Ironworks, Maldon		
<b>NGR</b>	TL 8520 0076		
<b>ESMR No</b>	15069	<b>IRIS No.</b>	EX/AAG/SG122
<b>PARISH</b>	Maldon	<b>DISTRICT</b>	Maldon

**SITE DESCRIPTION**      The brick-built slate-roofed twin-gabled three-storey range is all that remains of the former works, whose name (MALDON IRONWORKS COMPANY LIMITED) can be seen in relief on the eastern elevation fronting Fullbridge. Established by J Warren in 1853 the site comprised foundry, blacksmiths, fitting and wheelwrights shops, stores and workers' housing. Iron production ceased in 1954 when the property was bought by J. Sadd and Sons, woodworkers and importers, who also owned substantial timber yards and wharfs on the eastern side of Fullbridge. The surviving building was probably erected in 1876 as a warehouse, fitting shop, pattern store and offices; the foundry 'proper' extending to the rear.

**ARCHAEOLOGICAL POTENTIAL**      Slight. The standing building has been converted and only the internal cast iron columns survive. The rest of the site has been demolished and developed.

**SITE SIGNIFICANCE**      An important landscape feature providing a direct link with Maldon's industrial past.

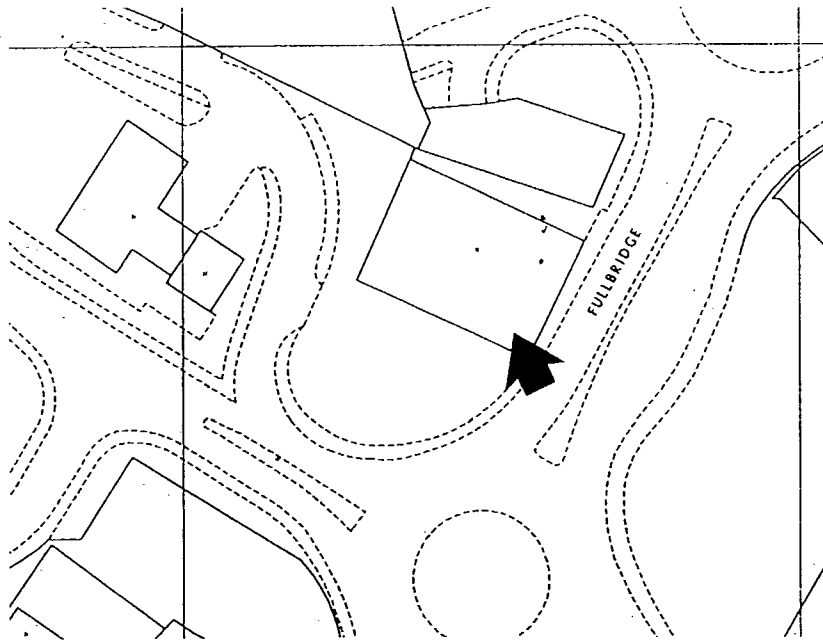
**CURRENT STATUS**      Listed Grade II

**RECOMMENDED ACTION**      Maintain existing status

**MANAGEMENT**      Currently well-maintained and should be retained. If threatened record RCHME Level 2 with detailed photography (both internal and external) and textual description.

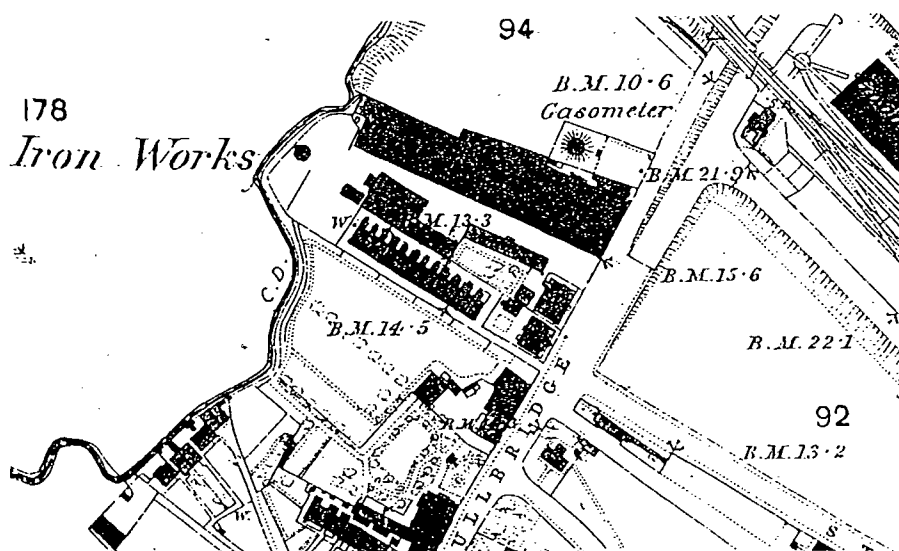
**GRADING**      \*

Booker, J., 1974 *Essex and the Industrial Revolution* (Essex County Council) 1-23  
 Booker, J., 1971 Industrial Archaeology Record Card. Essex Record Office  
 (Ref. T/Z 193/2, 193/8, 193/8/1, 193/8/2, 193/8/3, 193/8/4, 193/8/5).



OS Scale 1:1250 Sheet TL 8507 1994

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OS Scale 25 inch Sheet 54.2 1874



The Maldon Ironworks, Maldon, viewed from the north-east

<b>SITE NAME</b>	W. Cottis Iron foundry Ltd., Epping		
<b>NGR</b>	TL 45930213		
<b>ESMR No.</b>	15112	<b>IRIS No.</b>	EX/FAG/AG14
<b>PARISH</b>	Epping	<b>DISTRICT</b>	Epping Forest

**SITE DESCRIPTION**      The foundry, which was formerly called the Archimedean Iron Works, was established in 1858 by William Cottis. The subsequent development of the business saw it divided between Wm. Cottis & Sons, ironfounders and W. Cottis & Sons, builders, furnishing and general ironmongers. The site comprised three blocks around a central courtyard, with the foundry to the north and, workshops, fettling rooms and pattern shops to the west and south. The foundry was still in use up until the early 1970's, but has now been totally demolished and a modern office complex (Falcon House) occupies the site. All that survives of the original buildings are parts of the west and south walls which have been retained as perimeter walling.

**ARCHAEOLOGICAL POTENTIAL**      Although the works have been demolished sub-surface deposits, specifically in the area of the car park, may survive.

**SITE SIGNIFICANCE**      A good example of a courtyard urban foundry, but the longevity of operation has probably resulted in the loss of any important mid-nineteenth century sub-surface remains.

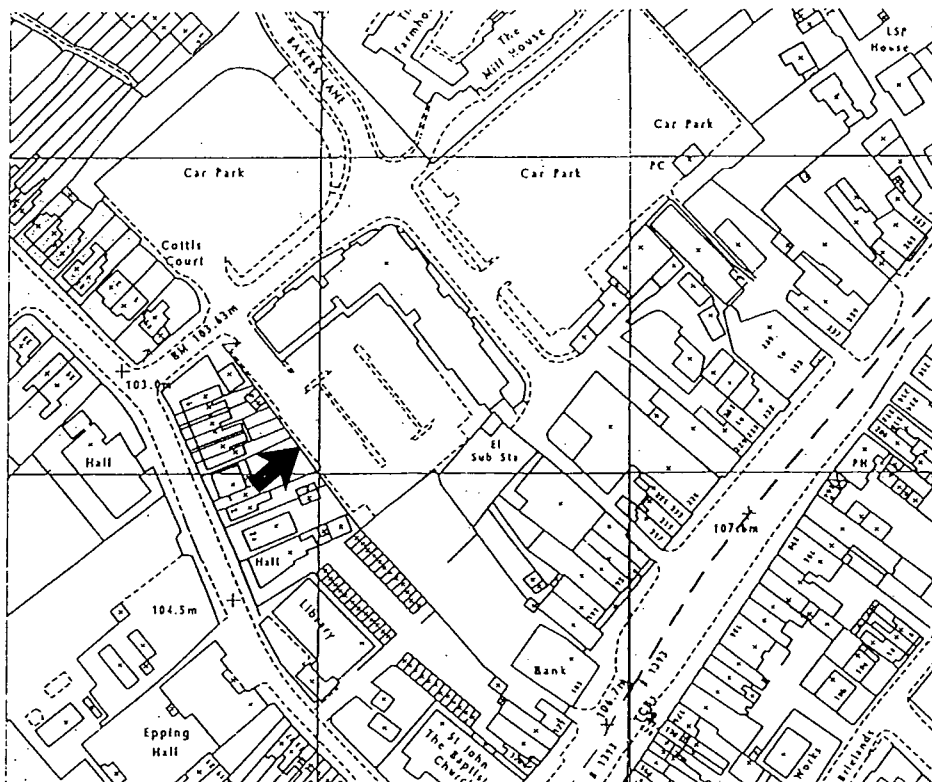
**CURRENT STATUS**      None

**RECOMMENDED ACTION**      None

**MANAGEMENT**      Should the car park become threatened by development an intensive watching brief should be maintained during groundworks.

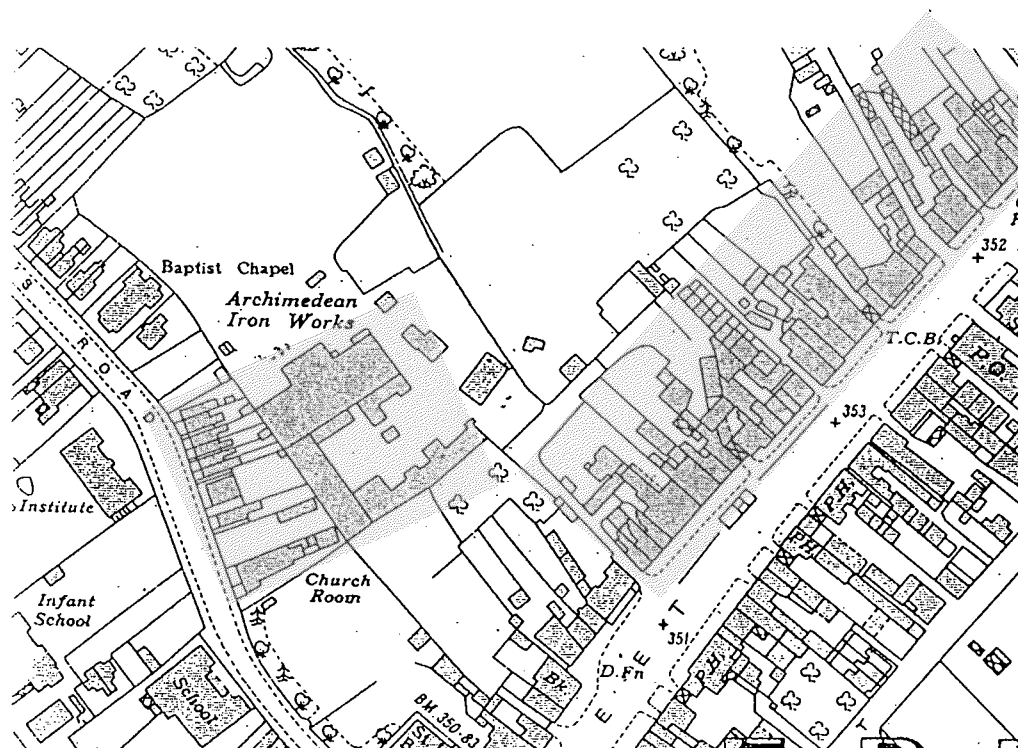
**GRADING**      \*

Booker, J. 1974 *Essex and the Industrial Revolution* (Essex County Council) 1-23  
 Booker, J. 1971 Industrial Archaeology Record Card. Essex Record Office  
 (Ref. T/Z 193/2, 193/8, 193/8/1, 193/8/2, 193/8/3, 193/8/4, 193/8/5)



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OS Scale 1:2500 TL 4502 1995



OS Scale 25 inch Sheet 60.8 1936



Site of The Archimedean Ironworks, Epping (now redeveloped), viewed from the west  
3rd April 1997

<b>SITE NAME</b>	Lawford Ironworks, Manningtree.		
<b>NGR</b>	TM 1043 3178		
<b>ESMR No</b>	15290	<b>IRIS No.</b>	EX/AAG/SG120
<b>PARISH</b>	Manningtree	<b>DISTRICT</b>	Tendring

**SITE DESCRIPTION** One of the earlier Essex foundries, the Lawford Ironworks was established by 1835. The site contained several Victorian brick-built buildings, and an engine house stood between the foundry and smiths shop; a tannery also occupied the southern part of the complex. A substantial manager's house overlooked the works and the iron gates by the drive-way were probably manufactured within the foundry. The house survives, but the site of the ironworks has been destroyed and is now occupied by flats for the elderly. Two leather works were also founded by the company beside Station Road and Mill Hill.

<b>ARCHAEOLOGICAL POTENTIAL</b>	None. Demolished and re-developed.
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<b>SITE SIGNIFICANCE</b>	None. Demolished and re-developed.
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<b>CURRENT STATUS</b>	None
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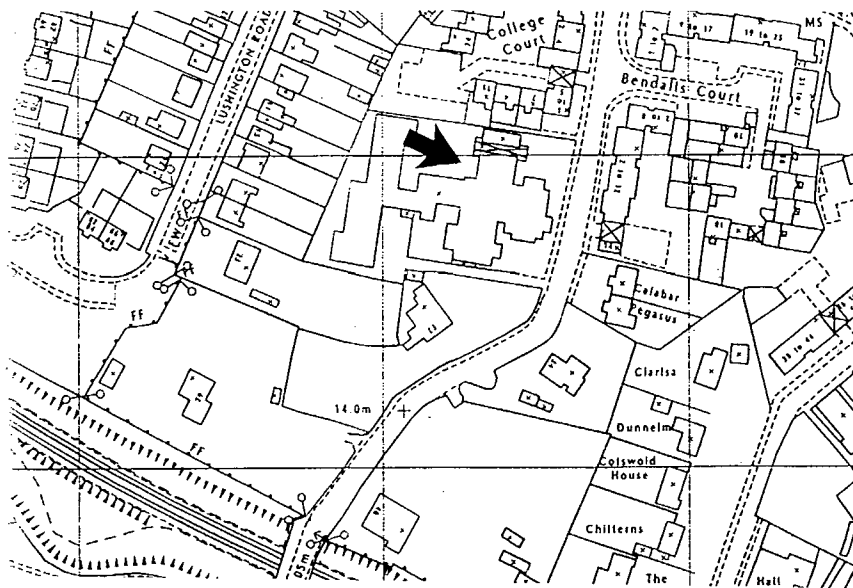
<b>RECOMMENDED ACTION</b>	None
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<b>MANAGEMENT</b>	None
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<b>GRADING</b>	0
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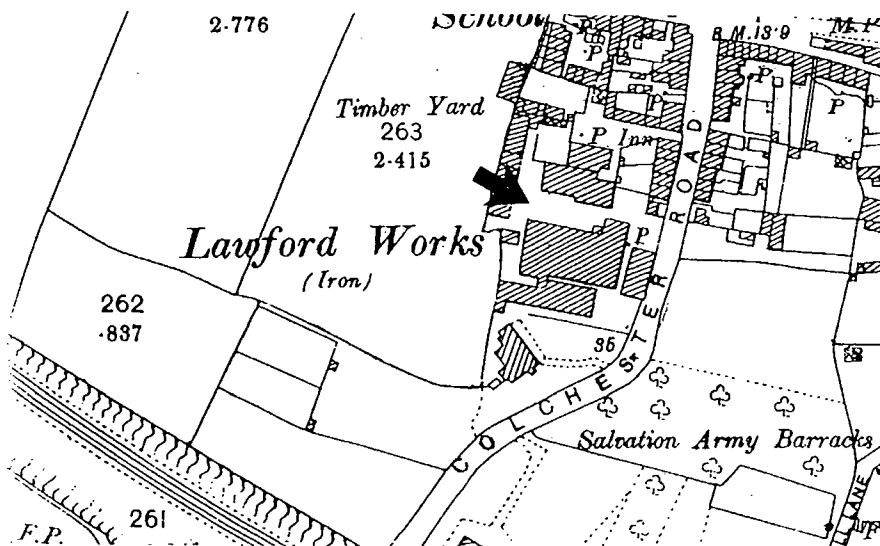
Booker, J., 1974 *Essex and the Industrial Revolution* (Essex County Council) 1-23  
 Booker, J., 1971 Industrial Archaeology Record Card. Essex Record Office  
 (Ref. T/Z 193/2, 193/8, 193/8/1, 193/8/2, 193/8/3, 193/8/4, 193/8/5).





OS Scale 1:2500 Sheet TL 1030 1990

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OS Scale 25 inch Sheet 20.9 1897

<b>SITE NAME</b>	Mildmay Ironworks, Burnham on Crouch.		
<b>NGR</b>	TQ 9480 9645		
<b>ESMR No</b>	15291	<b>IRIS No.</b>	EX/AAG/SG121
<b>PARISH</b>	Burnham on Crouch	<b>DISTRICT</b>	Maldon

**SITE DESCRIPTION**          Founded in 1899 as Palmer and Booth the works stood on the edge of the town beside the railway. Brick-built complex comprising foundry, machine shop, pattern shop, offices and engine house; the latter being located on the south side of the foundry/machine shop containing a 50 hp gas engine and 100 hp oil engine. The foundry has been demolished and a modern industrial estate now occupies the site.

**ARCHAEOLOGICAL POTENTIAL**          None. Demolished and re-developed.

**SITE SIGNIFICANCE**          None. Demolished and re-developed.

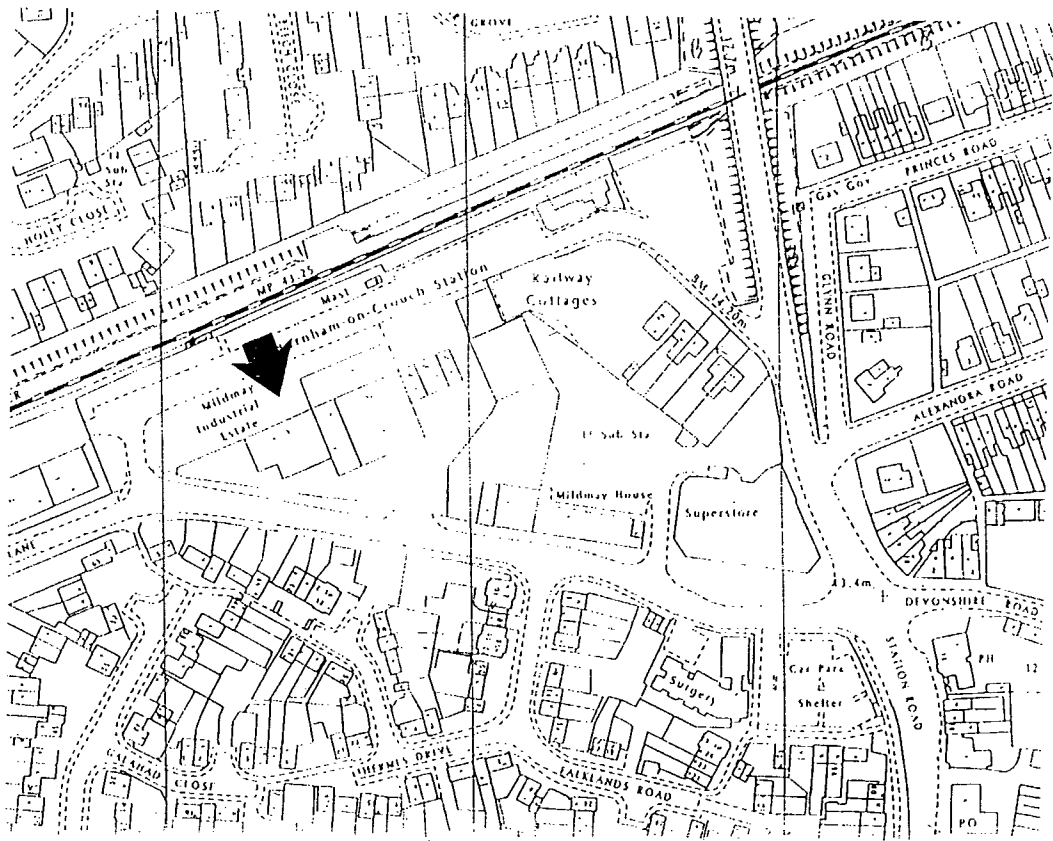
**CURRENT STATUS**          None

**RECOMMENDED ACTION**          None

**MANAGEMENT**          None

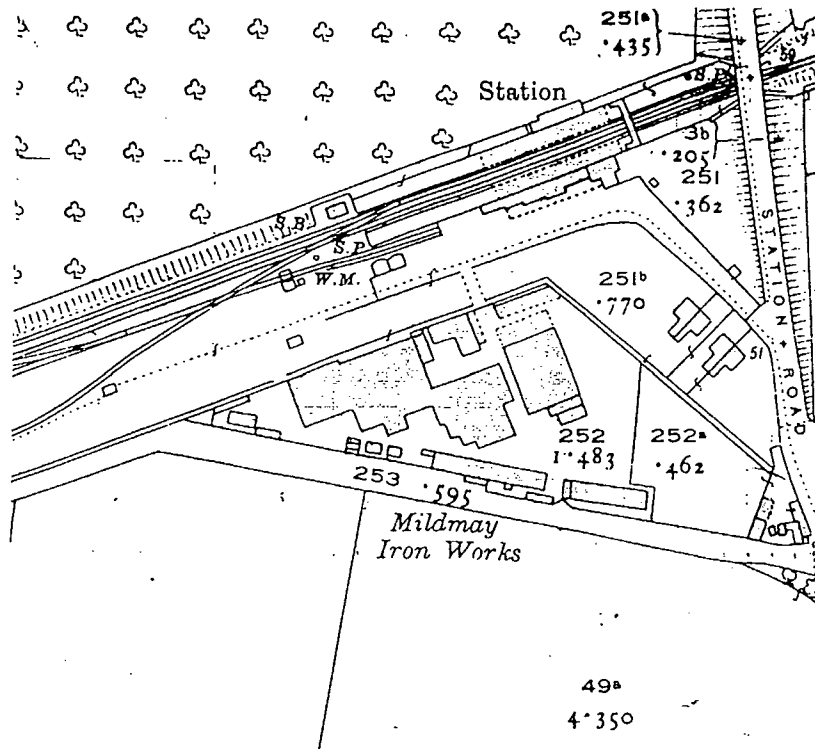
**GRADING**          0

Booker, J., 1974 *Essex and the Industrial Revolution* (Essex County Council) 1-23  
 Booker, J., 1971 Industrial Archaeology Record Card. Essex Record Office  
 (Ref. T/Z 193/2, 193/8, 193/8/1, 193/8/2, 193/8/3, 193/8/4, 193/8/5).



OS Scale 1:2500 Sheet TQ 9496 1995

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OS Scale 25 inch Sheet 74.2 1922

<b>SITE NAME</b>	Paxman's Britannia Works, Colchester		
<b>NGR</b>	TM 0050 2490		
<b>ESMR No</b>	15292	<b>IRIS No.</b>	EX/AAG/SFG6
<b>PARISH</b>	Colchester St Botolph's	<b>DISTRICT</b>	Colchester

**SITE DESCRIPTION** Paxman's Britannia Works, later part of Ruston Paxman Diesels, was located on the site of an earlier iron foundry built by William Dearn in 1839. Paxman left Wallis and Coleman in 1865 (ESMR No. 15293) and established his first foundry in Culver Street, later enlarging and adapting Dearn's original foundry buildings. Operations ceased in the 1980's and the superstructure was demolished in anticipation of re-development. The site is currently used as an NCP car park, the surface of the car park being largely the ground floor of the works. The remains of tramlines, floor furnishings, and steel girder supports are apparent suggesting that below ground evidence of the later and perhaps earlier foundry may still survive.

**ARCHAEOLOGICAL POTENTIAL** High, although the superstructure has been demolished below ground remains almost certainly survive.

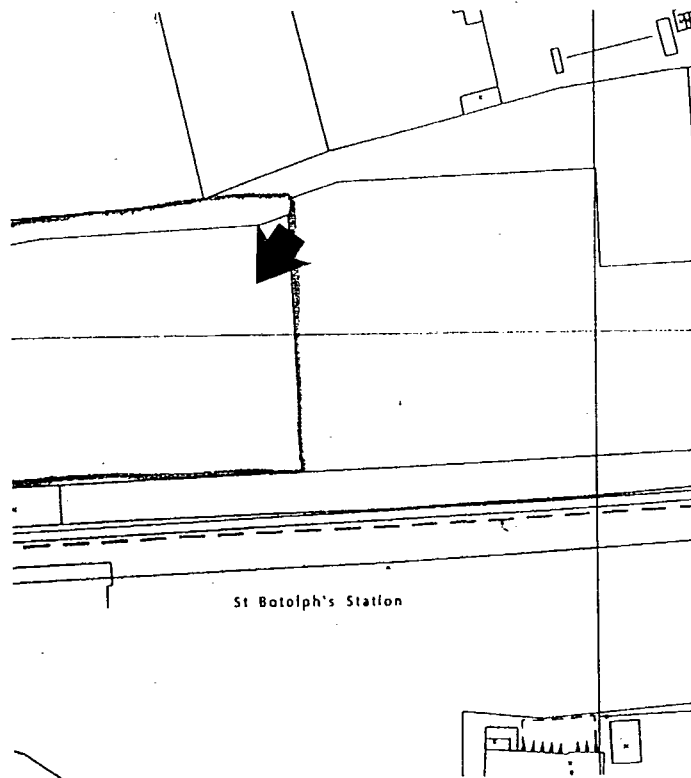
**SITE SIGNIFICANCE** Paxmans was one of the many foundries in Colchester that helped establish the town as the first and major provider of Iron goods in Essex and the south-east. None of the Colchester foundries retain upstanding remains.

**CURRENT STATUS** The site is awaiting re-development, but it is not known whether there is a current planning application.

**RECOMMENDED ACTION** None

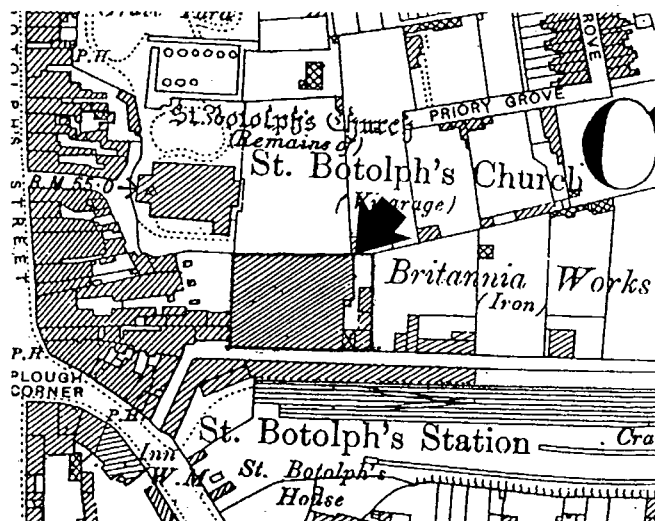
**MANAGEMENT** The below ground evidence of a foundry which only ceased operating in the 1980's is likely to be of low technological and archaeological importance. Should a planning application be submitted, any recording could be undertaken as part of an intensive watching brief.

**GRADING** \*



OS Scale 1:1250 Sheet TM 0024 1996

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OS Scale 25 inch 1897

<b>SITE NAME</b>	Wallis and Coleman Iron Foundry, Colchester		
<b>NGR</b>	TL 9950 2525		
<b>ESMR No</b>	15293	<b>IRIS No.</b>	EX/AAG/SFG7
<b>PARISH</b>	Colchester St Peter's	<b>DISTRICT</b>	Colchester

**SITE DESCRIPTION**      The foundry has been demolished and the site re-developed by Williams and Griffin. This was the site of the earliest iron foundry in Essex, built by Joseph Wallis in c. 1792, on land owned by the Winnock Charity. An 1803 plan and elevation of the foundry survives, illustrating a single storey gable-roofed building with central cupola, in a complex which included a counting house, shed and warehouse, built at Wallis' own expense. For many years, Wallis and from 1828, Wallis and Coleman, were the major ironmongers in Colchester and the business prospered and expanded, despite Coleman's departure in 1848 (to the Coleman and Morton foundry in Chelmsford) and the death of Wallis shortly after. Principally producing agricultural implements and machinery, but later steam engines and boilers, the firm passed into the hands of Catchpool and Thompson, Catchpool and Stanford's and ultimately as Stanfords the engineering firm until the 1920's, when trading ceased. It is uncertain when the foundry was demolished, but the redevelopment is c. 1930's-40's in date.

**ARCHAEOLOGICAL POTENTIAL**      None.

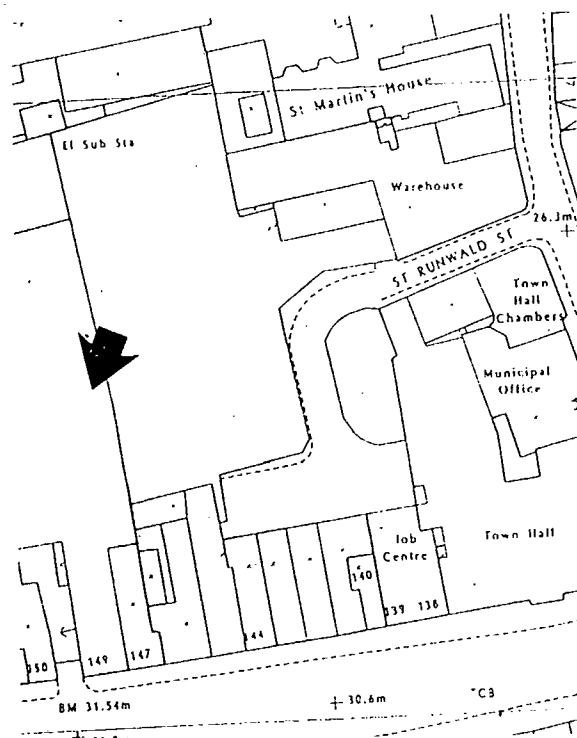
**SITE SIGNIFICANCE**      None, but historically significant as the site of the earliest Essex foundry.

**CURRENT STATUS**      Demolished and re-developed

**RECOMMENDED ACTION:**      None

**MANAGEMENT**      None

**GRADING**      0



OS Scale 1:1250 Sheet TL 9925 1994

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Monson's Map of Colchester 1848 (6 chains to one inch)

<b>SITE NAME</b>	Albion Iron Works, Braintree		
<b>NGR</b>	TL 78652273		
<b>ESMR</b>	15298	<b>IRIS No</b>	EX/FAG/AG1
<b>PARISH</b>	Braintree	<b>DISTRICT</b>	Braintree

**SITE DESCRIPTION**      The Albion Works was founded in Rayne Road, Braintree by W.B. Lake and E.H. Elliot in 1876, but by 1905 the foundry moved to its present site at Chapel Hill. The company traded under several names including the Braintree Castings Co. and Chapel Hill Foundries. Standing beside a disused railway line (Braintree to Witham) the site had private sidings thereby facilitating the transportation of large bulky commodities. By 1906 the works was enlarged and manufacture ceased in 1968. The main foundry and machine shop have been demolished and most of surviving buildings are ancillary retaining no technological information. The only building of interest stands toward the west end of the site which has been tentatively interpreted as a brass foundry.

<b>ARCHAEOLOGICAL POTENTIAL</b>	Slight. The principal buildings have been demolished and those that survive retain little or no technological details.
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<b>SITE SIGNIFICANCE</b>	Low
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<b>CURRENT STATUS</b>	None
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<b>RECOMMENDED ACTION</b>	None
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<b>MANAGEMENT</b>	If the presumed brass foundry becomes threatened, inspect internally with photographic recording where appropriate.
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<b>GRADING</b>	*
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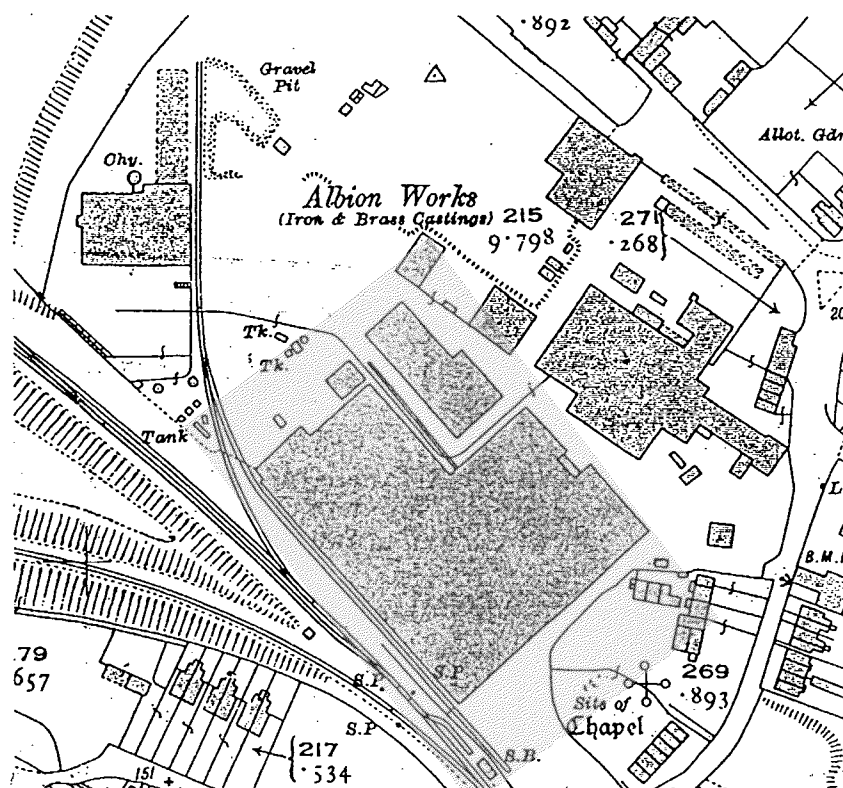
Booker, J. 1974 *Essex and the Industrial Revolution* (Essex County Council) 1-23  
 Booker, J. 1971 Industrial Archaeology Record Card. Essex Record Office  
 (Ref. T/Z 193/2, 193/8, 193/8/1, 193/8/2, 193/8/3, 193/8/4, 193/8/5)





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OS Scale 1:1250 Sheet TL 7622 NE 1996



OS Scale 25inch Sheet 35.5 1922



The Albion Works, Braintree. Brass foundry viewed from the south-west  
21st March 1997

<b>SITE NAME</b>	Manor Iron Works, Braintree		
<b>NGR</b>	TL 763231		
<b>ESMR No</b>	15300	<b>IRIS No</b>	EX/FAG/AG2
<b>PARISH</b>	Braintree	<b>DISTRICT</b>	Braintree

**SITE DESCRIPTION**      The Manor Works Iron Foundry is first shown on the third edition 25 inch Ordnance Survey map extract of 1922 (sheet 35.5). Containing three large brick-built structures the foundry was located to the north of Manor Road and had its own railway sidings. Demolished and currently being developed as a housing estate only fragments of the west perimeter wall survive.

**ARCHAEOLOGICAL POTENTIAL**      None

**SITE SIGNIFICANCE**      None; Demolished and re-developed.

**CURRENT STATUS**      None

**RECOMMENDED ACTION**      None

**MANAGEMENT**      None

**GRADING**      0



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OS Scale 25inch Sheet 35.5 1922



OS Scale 1:2500 Sheet TL 7623 1996

<b>SITE NAME</b>	Rayne Foundry		
<b>NGR</b>	TL 727227		
<b>ESMR No.</b>	15301	<b>IRIS No.</b>	EX/FAG/AG3
<b>PARISH</b>	Rayne	<b>DISTRICT</b>	Braintree

**SITE DESCRIPTION** The earliest historical reference to the site appears on the Tithe map of 1838 (ERO/D/CT 286), which records, house, foundry and garden of Edward Goss, of Street Farm. In 1874 the first edition Ordnance Survey map extract (sheet 25.13) depicts a cluster of buildings lying centrally within the village. The central block probably represents the foundry with those to the west being used as offices; a managers house lies to the west and a rural smithy stands to the east. The current building mostly dates to the 1930s/1950s and the roof is supported on external brick walls with internal rolled steel joists. A single-storey linear office range with the words 'Rayne Foundry' fronts the 'Street'. To the east is the single-storey foundry which contains a modern coke fuelled Cupola; the building has a raised ridge and molten metal is transferred to the patterns by over-head cranes. The fettling and finishing shop is located to the rear. Little of the original fabric survives and the manager's house to the west is now a private dwelling.

**ARCHAEOLOGICAL POTENTIAL** The foundry uses modern twentieth-century equipment and no original fixtures and fittings survive.

**SITE SIGNIFICANCE** As the last operational iron foundry in the county Rayne represents the final evolution of an important Essex industry.

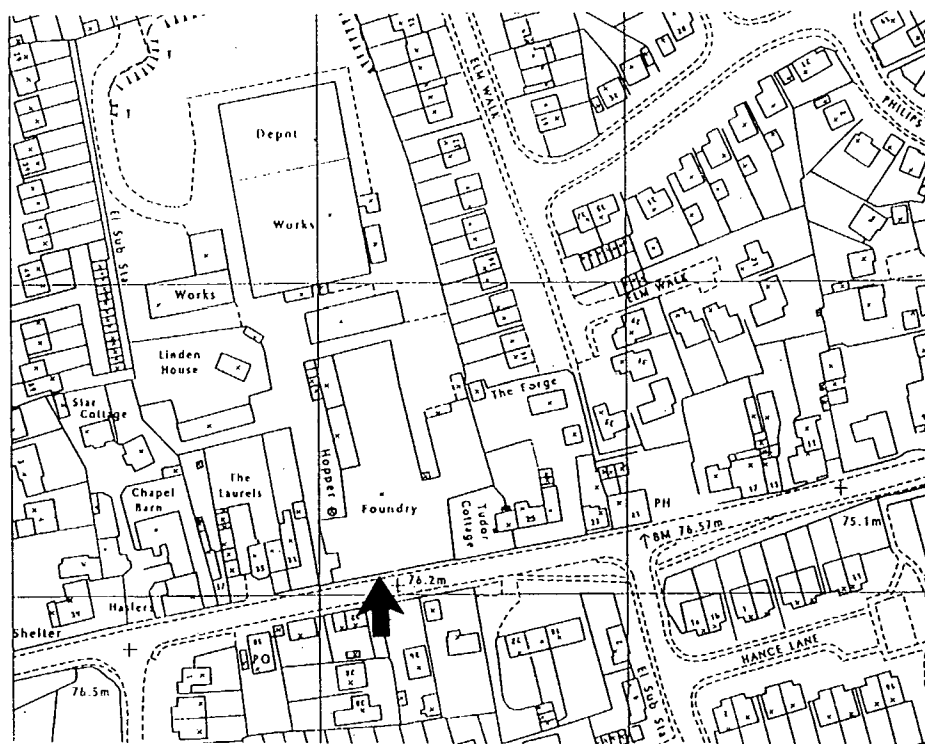
**CURRENT STATUS** None

**RECOMMENDED ACTION** None; the extant buildings are not of a 'listable' quality.

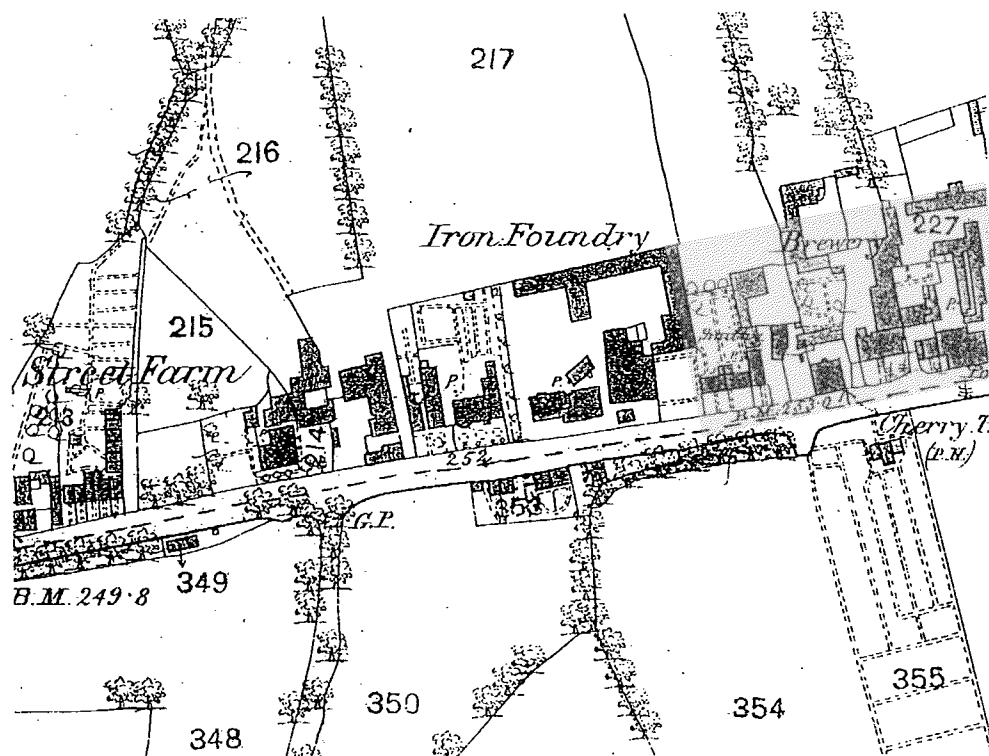
**MANAGEMENT** If threatened the site should be fully recorded; this needs to include a block plan, photography and textual report. Ideally working practices should also be noted using video footage.

**GRADING** \*\*

Booker, J. 1974 *Essex and the Industrial Revolution* (Essex County Council) 1-23  
 Booker, J. 1971 Industrial Archaeology Record Card. Essex Record Office  
 (Ref. T/Z 193/2, 193/8, 193/8/1, 193/8/2, 193/8/3, 193/8/4, 193/8/5)



OS Scale 1:2500 TL 7222 1995



OS Scale 25 inch Sheet 25.13 1875





The Rayne Foundry, Rayne, viewed from the south-east



The former Manager's House, viewed from the south-west  
21st March 1997

<b>SITE NAME</b>	Coggeshall Iron Foundry		
<b>NGR</b>	TL 84982250		
<b>ESMR No.</b>	15302	<b>IRIS No.</b>	EX/FAG/AG4
<b>PARISH</b>	Coggeshall	<b>DISTRICT</b>	Braintree

**SITE DESCRIPTION** The Coggeshall foundry was founded by William Kirkham and Chas. Newman in the summer of 1816. Upon the death of W. Kirkham in 1837 the business was carried on by his son R.M. Kirkham until c.1887. The foundry, which appears on the first edition 25-inch Ordnance Survey map of 1875 (sheet 26.14), lies at the junction of 'The Gravel' and 'Bridge Street', some 140m north of the Blackwater and adjacent to 'Foundry House'. The building is partly brick built, timber framed and weather-boarded, with gable ends. In recent years it has been used for storage and garaging, and is presently unroofed and under-going repairs. Little internal technological information survives, but a projecting brick pier on the south elevation may denote the position of the cupola. The weather-boarding on the long walls is loosely fitted to enable the escape of smoke, and large open doors and a blocked segmented brick arch are present along the south elevation. A single-storey cart shed lies to the east of the main building and a small weather-boarded office with a corrugated roof stands at the west end.

**ARCHAEOLOGICAL POTENTIAL** Having been used for alternative purposes little internal technological information survives.

**SITE SIGNIFICANCE** Coggeshall retains the only standing small rural nineteenth-century foundry in Essex. The building retains much of its external integrity and it forms part of a small industrial development along Bridge Street comprising brewery, malting and iron foundry.

**CURRENT STATUS** Lies within the Coggeshall conservation area.

**RECOMMENDED ACTION** None

**MANAGEMENT** The building should be retained in situ and any work's need to be in keeping with its special character. If threatened with conversion record RCHME Level 2; this should include floor plans, detailed photography and textual report. Any groundworks both within and beside the foundry should be monitored.

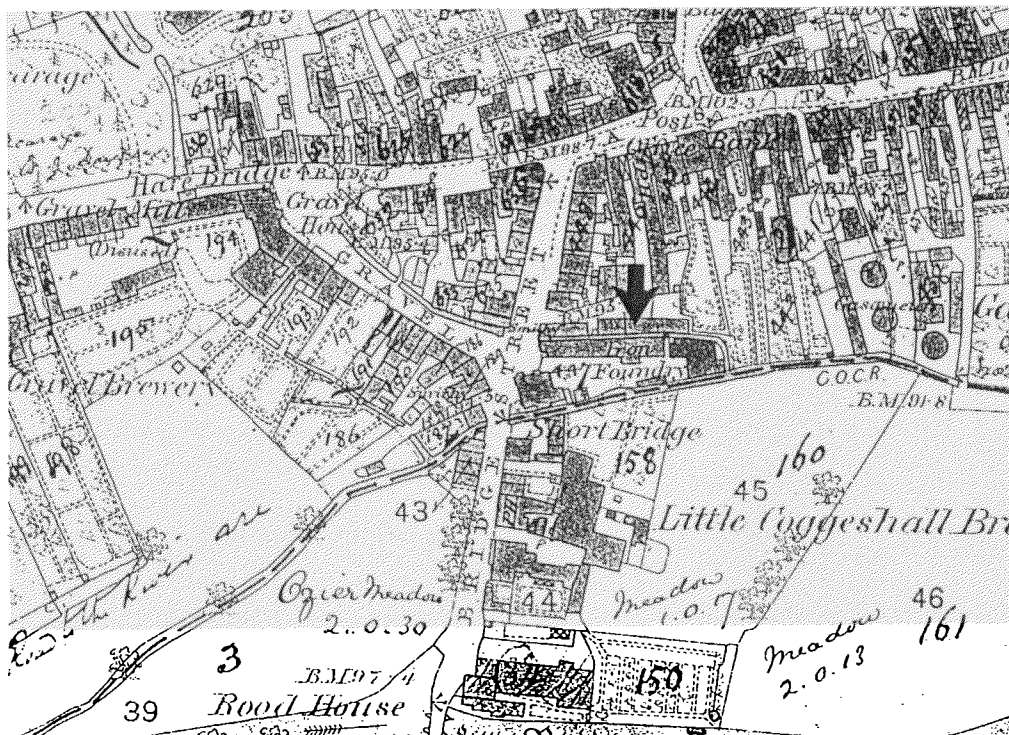
**GRADING** \*\* (As a rare example of a small 19th century rural foundry)



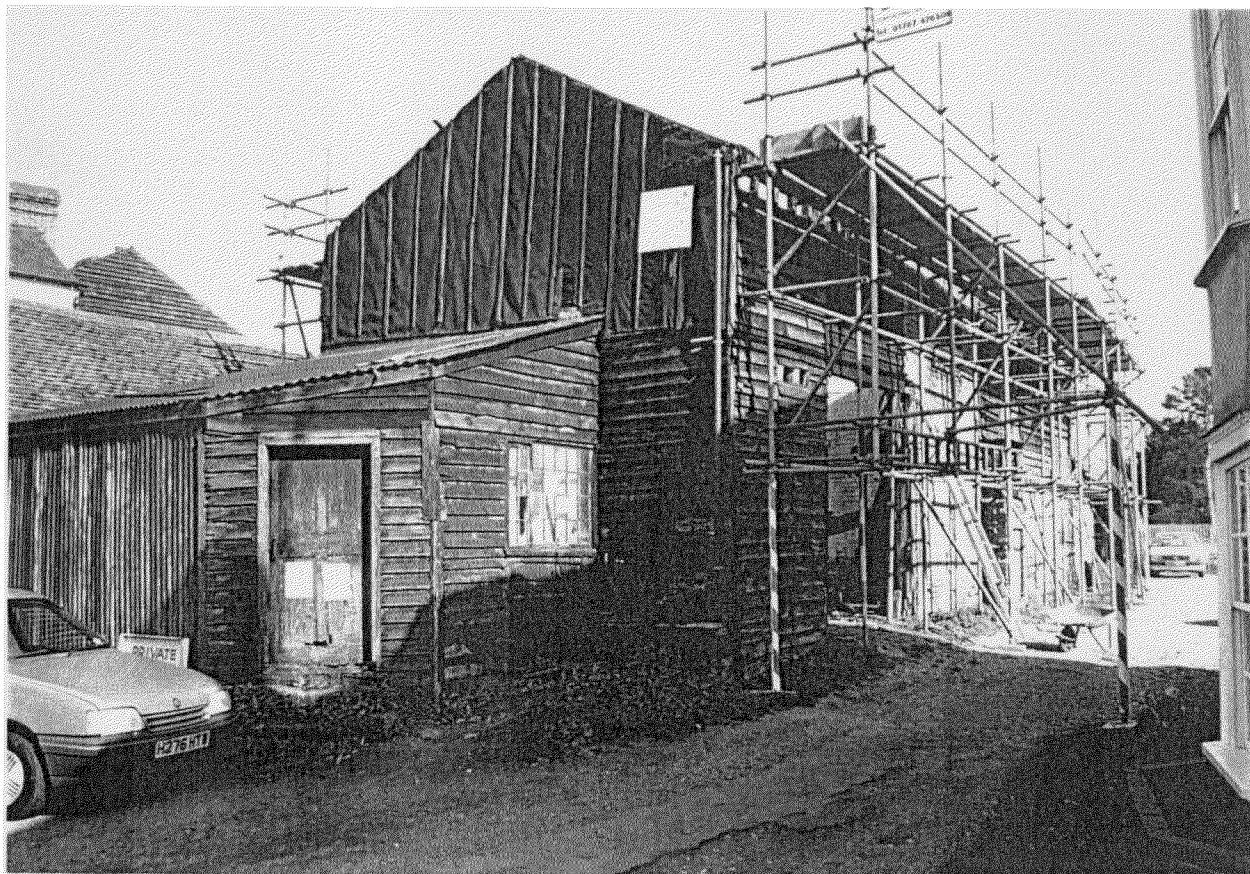


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OS Scale 1:2500 TL 8422 1995



OS Scale 25 inch Sheet 26.14 1875



The Iron Foundry, Coggeshall, viewed from the south-west  
21st March 1997

<b>SITE NAME</b>	Goldhanger Iron Foundry		
<b>NGR</b>	TL 897085		
<b>ESMR No.</b>	15303	<b>IRIS No</b>	EX/FAG/AG5
<b>PARISH</b>	Goldhanger	<b>DISTRICT</b>	Maldon

**SITE DESCRIPTION** The Goldhanger foundry was established by W. Bentall in 1808, but had closed by 1815 when Bentall moved the foundry from Golhanger to Heybridge (eventually becoming E.H Bentall [ESMR No. 15304]). Foundry field, which lies immediately east of Cobbs Farm and to the south of Maldon Road, is recorded on the 1841 tithe map (ERO/D/CT 150) as field 132. The field which is now laid to crop is presumably the location of Bentall's original foundry. Although no structural evidence survives the foundry was probably sited toward the north of the field beside the road.

**ARCHAEOLOGICAL POTENTIAL** Potentially important deposits of a short lived early nineteenth-century foundry comprising footings, foundations, working floors and furnace beds.

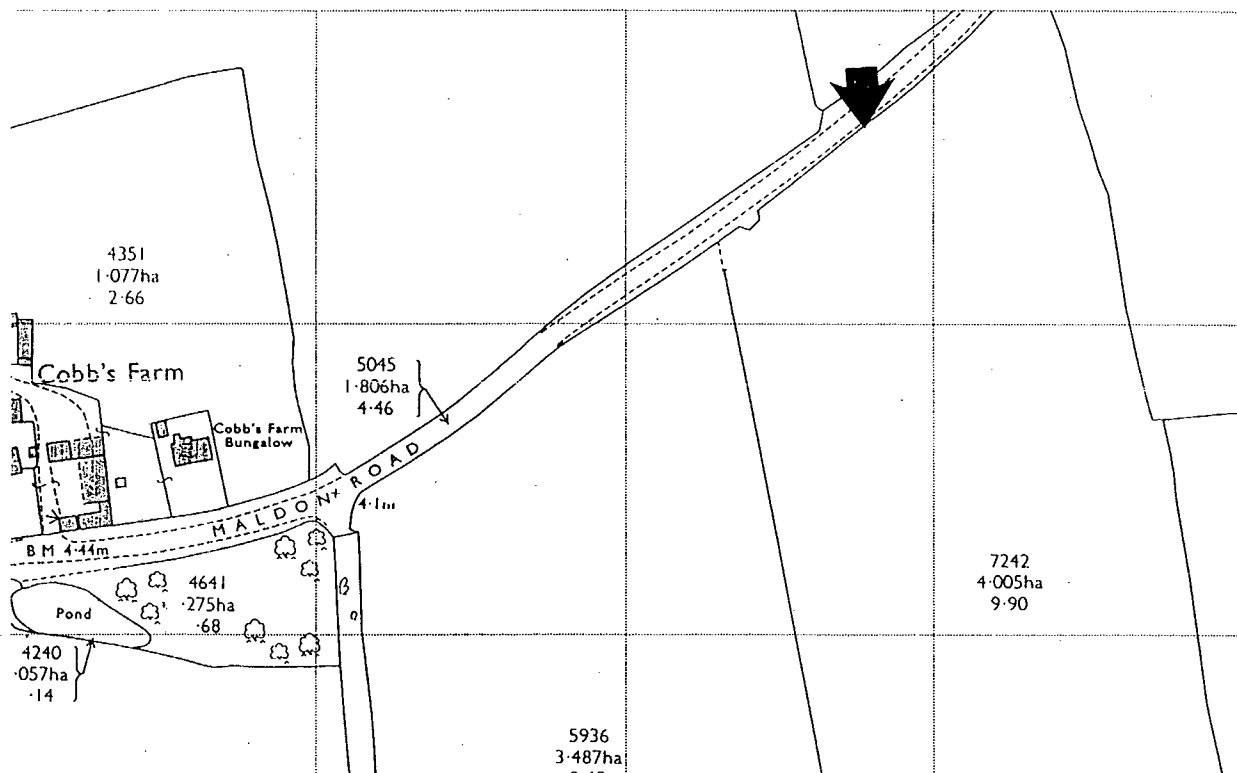
**SITE SIGNIFICANCE** This is of one of the earliest iron foundries to be established in Essex. The short period of operation and lack of subsequent development suggests the presence of significant and potentially schedulable archaeological remains.

**CURRENT STATUS** None

**RECOMMENDED ACTION** None

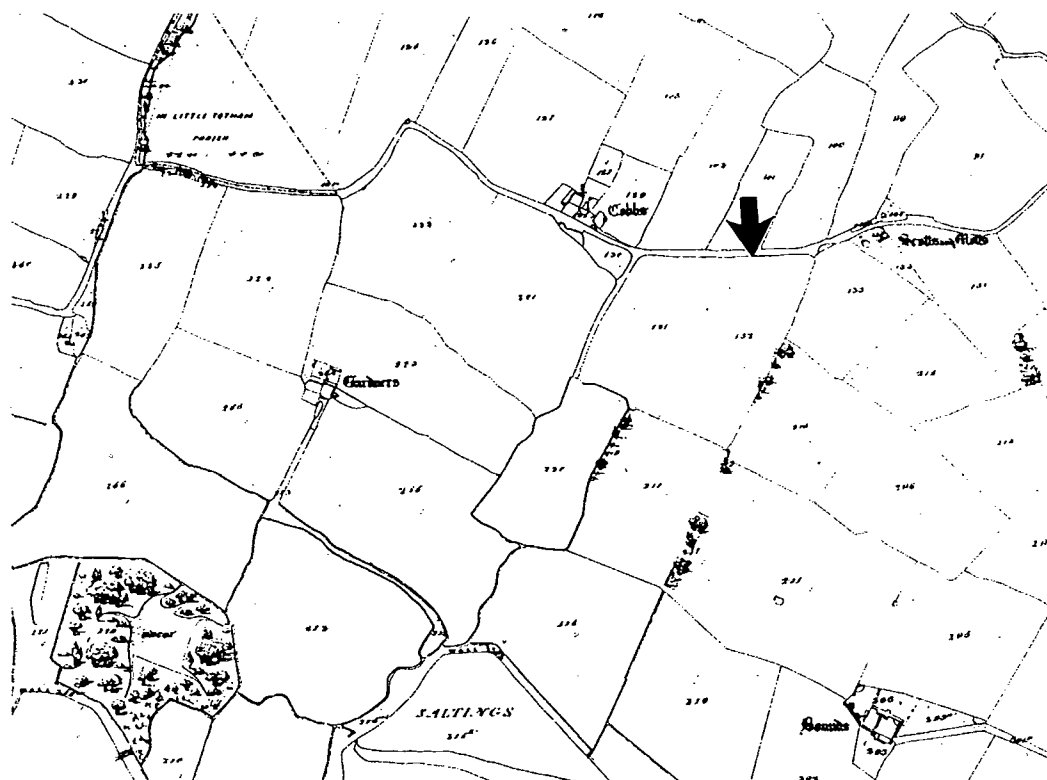
**MANAGEMENT** Further information is needed on the exact location of the foundry. The site will be photographed from the air during 1997 and if the results prove positive this may be enhanced by geophysical survey. Should the site become threatened an archaeological evaluation by trial trenching needs to be undertaken with in situ preservation if the deposits are of a high quality.

**GRADING** \*\*/\*\*

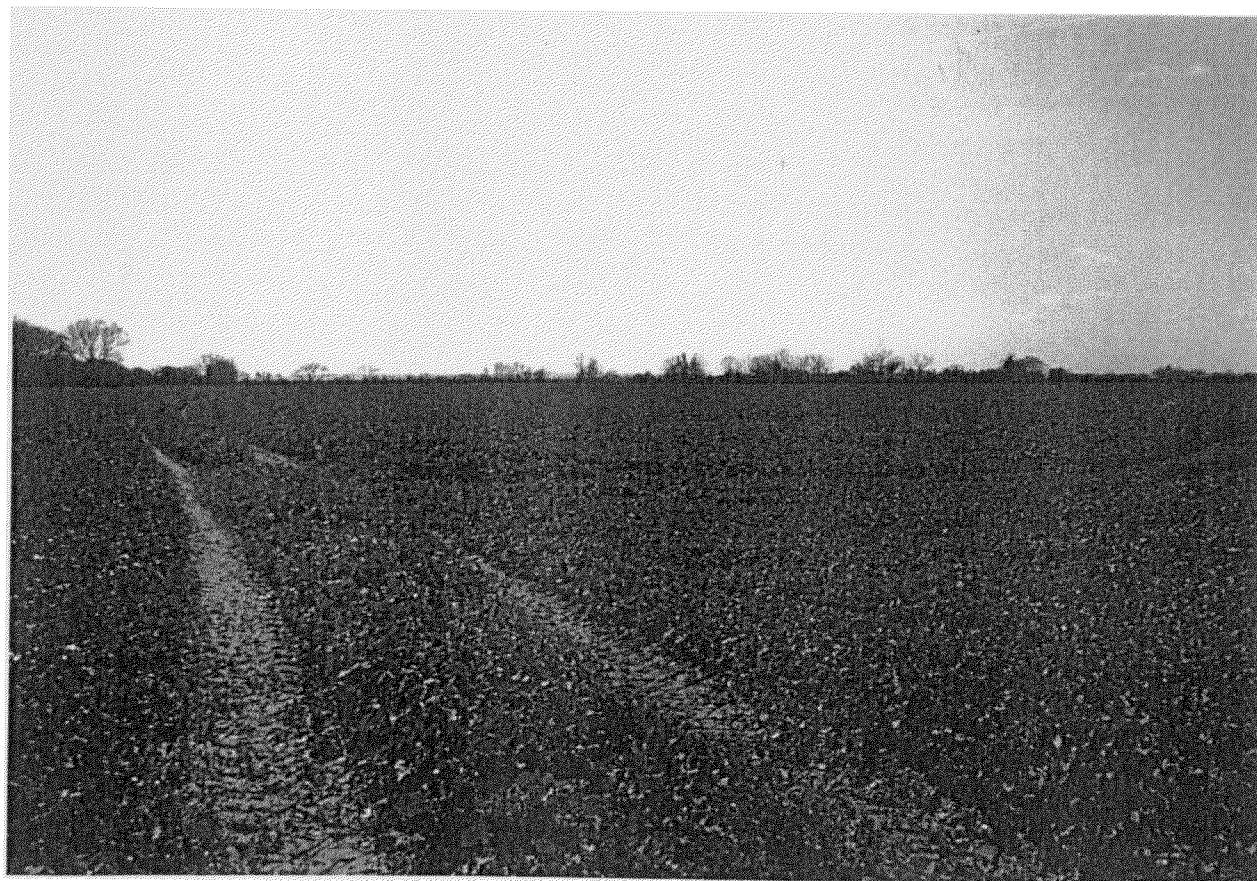


OS Scale 1:2500 TL 8908 1975

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Tithe Map Sheet D/CT/150 1841



Foundry Field, Goldhanger, viewed from the north  
21st March 1997

<b>SITE NAME</b>	E.H.Bentall & Co. Ltd, Heybridge		
<b>NGR</b>	TL 856081		
<b>ESMR No</b>	15304	<b>IRIS No.</b>	EX/FAG/AG6
<b>PARISH</b>	Heybridge	<b>DISTRICT</b>	Maldon

**SITE DESCRIPTION** The site was founded by W. Bentall in 1815 on the west side of the Blackwater navigation and is depicted on the first edition Ordnance Survey map of 1874 (sheet 54.2). The improved communication links with access to the Blackwater Navigation and the coming of the railway profited the company, which went on to become one of the major iron founders and suppliers of agricultural implements in Essex. By c.1949, the foundry had expanded its operations with buildings on the east side of the Blackwater Navigation. The original site has been extensively re-developed and now houses a modern industrial estate, whose buildings, seem to respect the layout of the demolished foundry buildings. All that survives of the works is a single internal wall with brick pilasters that supported a travelling crane, a converted warehouse erected by Bentall in 1863 and part of the former saw mill.

**ARCHAEOLOGICAL POTENTIAL** Slight; demolished and re-developed

**SITE SIGNIFICANCE** The only significant building is the four storey warehouse.

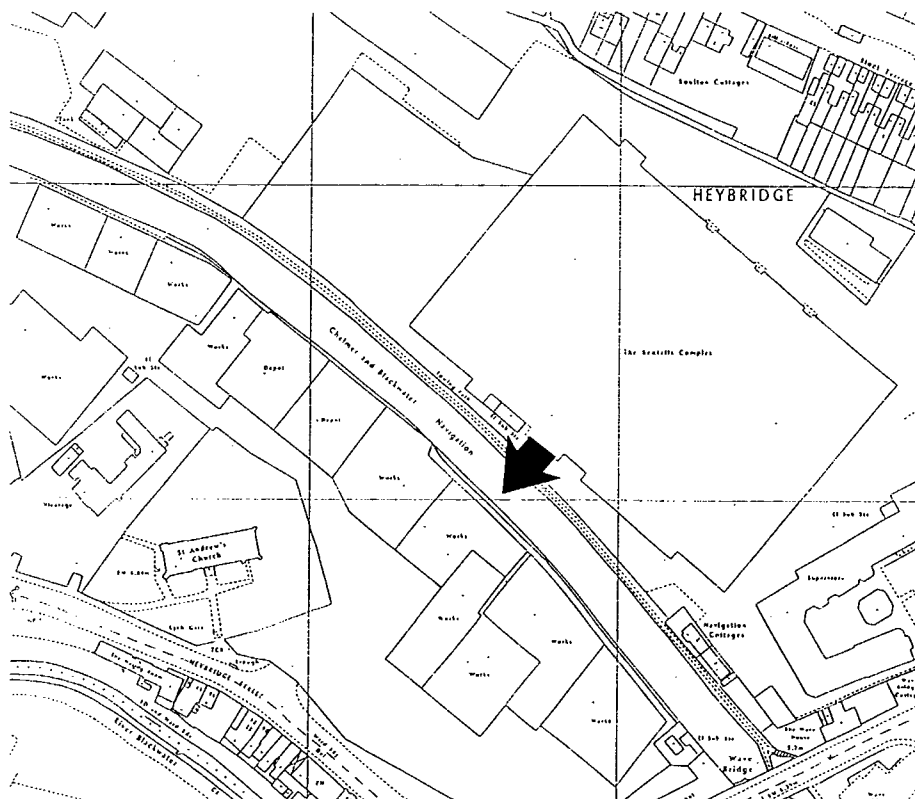
**CURRENT STATUS** None

**RECOMMENDED ACTION** None

**MANAGEMENT** The warehouse building should be preserved and if threatened by major works recorded RCHME Level 2; this should include photography (internal and external) and written description.

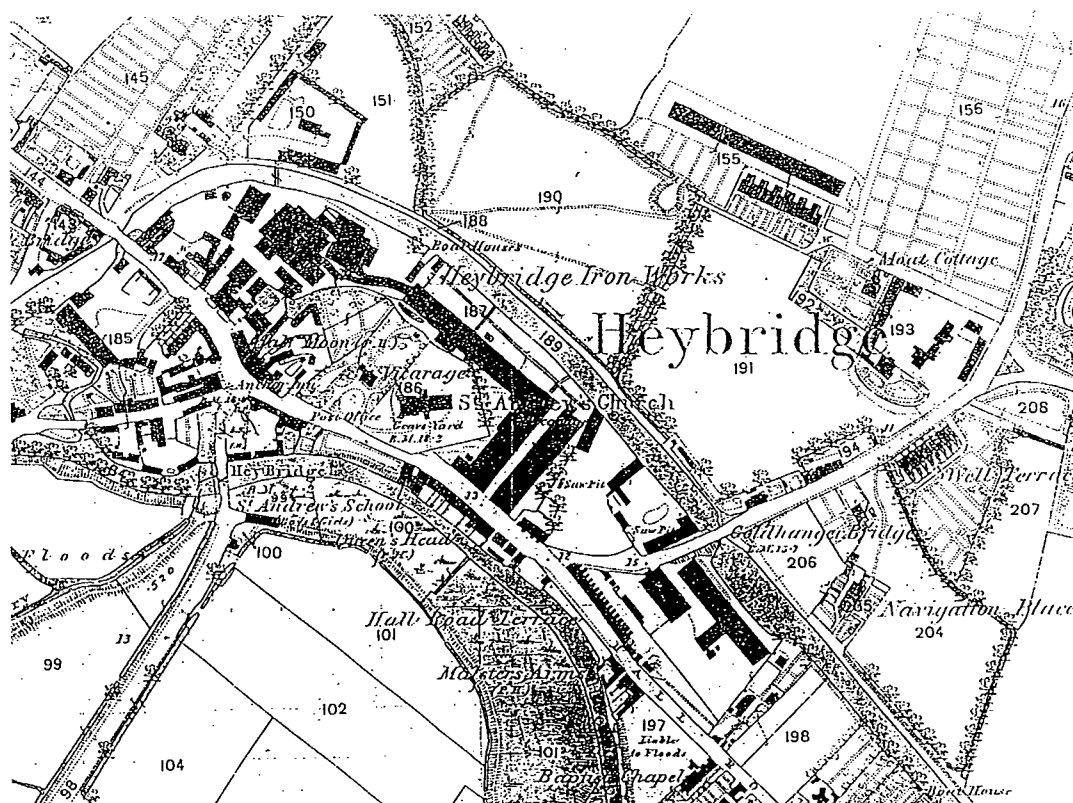
**GRADING** \*

Booker, J. 1974 *Essex and the Industrial Revolution* (Essex County Council) 1-23  
 Booker, J. 1971 Industrial Archaeology Record Card. Essex Record Office  
 (Ref. T/Z 193/2, 193/8, 193/8/1, 193/8/2, 193/8/3, 193/8/4, 193/8/5)



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OS Scale 1:2500 TL 8508 1994



OS Scale 25 inch Sheet 54.2 1874





Site of Bentall's foundry (now redeveloped) viewed from the south-east



Bentall's Warehouse, Heybridge, viewed from the south-east  
21st March 1997



<b>SITE NAME</b>	Colne Valley Iron Works (Tortoise foundry Co Ltd and C.Portway & Sons), Halstead		
<b>NGR</b>	TL 811306		
<b>ESMR No</b>	15305	<b>IRIS No</b>	EX/FAG/AG7
<b>PARISH</b>	Halstead (Urban)	<b>DISTRICT</b>	Braintree

**SITE DESCRIPTION** The Colne Valley Iron Works was founded by Symington and Atterton, between 1866 and 1870. It was subsequently acquired by Charles Portway and split between two founders, C.Portway and Sons Ltd and the Tortoise Foundry Co. Ltd. Much of the site was rebuilt in 1954. The former works was located to the north of Trinity Street between Rosemary Lane and the railway (disused) which is now Butler Road. The first edition Ordnance Survey map of 1876 (sheet 16.12) shows three main buildings, two running parallel to the railway line (east and west) and a third at right angles, to the south. The site has been extensively re-developed and now includes a modern industrial complex; part of the northern area lies derelict.

The eastern block, which may have been a gas works and the southern office(?) range have been demolished being replaced by industrial buildings and a car park. The construction of Broton Drive has effectively cut the western building (foundry and pattern shops) in half culminating in the demolition of its northern portion. All that currently survives is the southern end of the foundry building, which comprises three structurally related elements described below as south, west and east. The southern area is partially demolished and unroofed. Overhead tracking for 2 *in situ* travelling cranes survives and these are supported on wrought iron beams with internal cast iron columns. Two joined, but distinctly different buildings extend to the north. The western is single storey with gable ends and has a modern asbestos corrugated roof; the first floor being supported by cast iron columns. The eastern building is two storey, half brick, half weather-boarded with gable ends. Two taking-in doors are located at first floor level suggesting storage.

**ARCHAEOLOGICAL POTENTIAL** The site retains important mid-late nineteenth-century technological information including travelling cranes and elements of the iron-framed foundry. Buried evidence within this structure may also be of importance.

**SITE SIGNIFICANCE** Although much of the site has been destroyed, this is one of the few Essex examples of an upstanding nineteenth-century foundry. The survival of the travelling cranes is notable.

**CURRENT STATUS** None

## RECOMMENDED ACTION

The buildings are not of a listable quality.

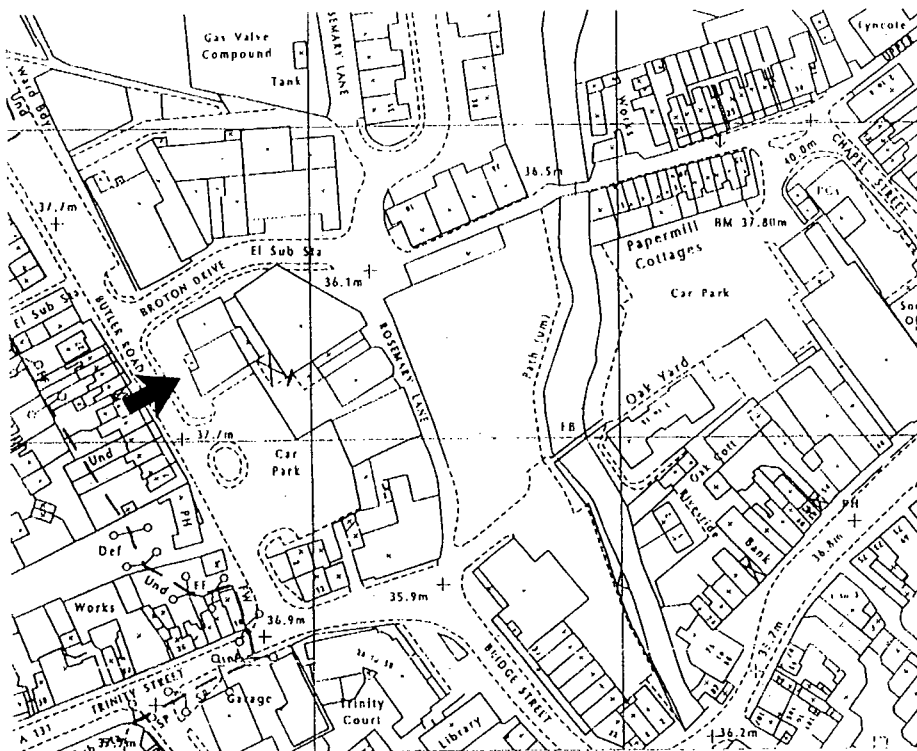
## MANAGEMENT

If threatened by major works record RCHME level 2; this should include ground floor plan, detailed photography and written synthesis. An intensive watching brief should be maintained during any groundwork's within the foundry building.

## GRADING

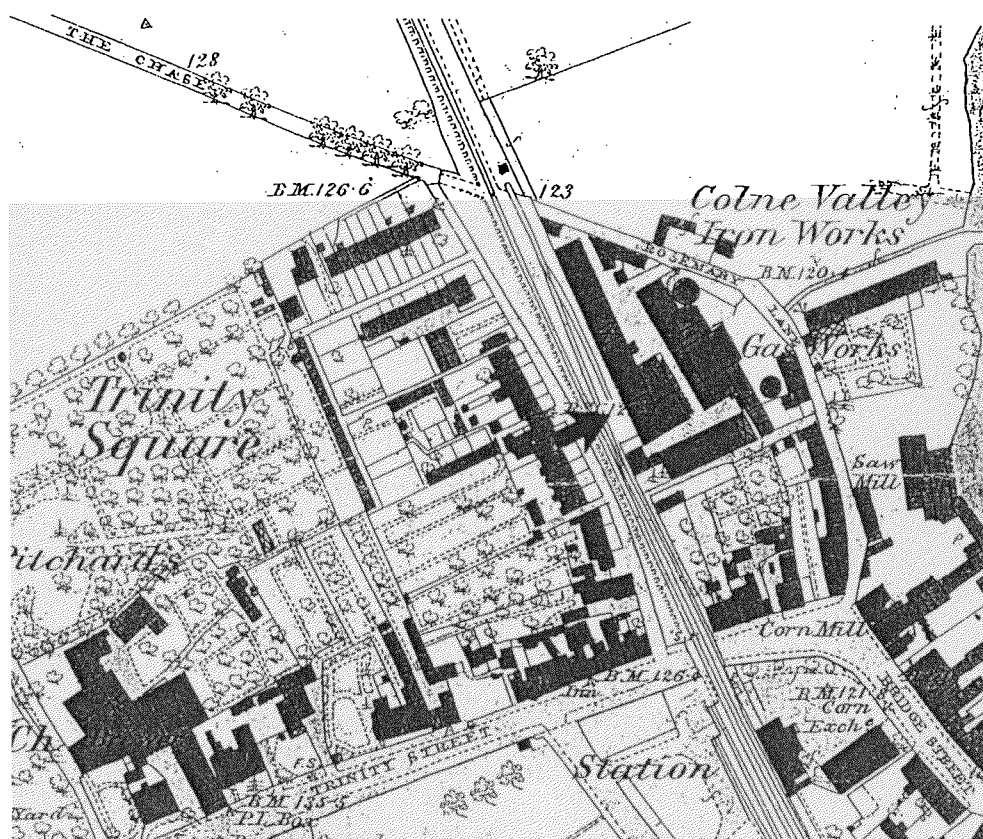
\*\*

Booker, J. 1974 *Essex and the Industrial Revolution* (Essex County Council) 1-23  
Booker, J. 1971 Industrial Archaeology Record Card. Essex Record Office  
(Ref. T/Z 193/2, 193/8, 193/8/1, 193/8/2, 193/8/3, 193/8/4, 193/8/5)



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OS Scale 1:2500 TL 8130 1990



OS Scale 25 inch Sheet 16.12 1876



The Colne Valley Ironworks, foundry building (south) viewed from the south-west



Buildings east and west, viewed from the north-east  
4th April 1997

<b>SITE NAME</b>	Greenstead Green Iron Foundry		
<b>NGR</b>	TL 82172784		
<b>ESMR No.</b>	15306	<b>IRIS No.</b>	EX/FAG/AG8
<b>PARISH</b>	Greenstead	<b>DISTRICT</b>	Braintree

**SITE DESCRIPTION** A foundry or smithy was established by W. Mead in 1806 at Greenstead Green. In 1851 the business was sold, but whether it carried on trading as a foundry is unclear. The first edition six-inch Ordnance Survey map (1876, sheet 26) records a smithy on the site, however this appears to have ceased operations by 1897 (Ordnance Survey second edition 25 inch map extract, sheet 26.1). Lying to the south of Greensteadhall Farm and beside the boundary of a residential property named 'The Firmins' the foundry has been demolished and forms part of a rear garden.

**ARCHAEOLOGICAL POTENTIAL** High. Below ground deposits of the foundry, hearth and casting pits may survive.

**SITE SIGNIFICANCE** One of the earliest foundries in Essex with potentially intact sub-surface deposits. Its importance is enhanced by its short operating life and lack of subsequent development.

**CURRENT STATUS** None

**RECOMMENDED ACTION** None

**MANAGEMENT** If threatened evaluate by trial trenching with further mitigation works and/or recording if appropriate

**GRADING** \*\*

Booker, J. 1974 *Essex and the Industrial Revolution* (Essex County Council) 1-23







Site of The Greenstead Green Foundry, viewed from the east  
4th April 1997

<b>SITE NAME</b>	Downs Iron Foundry Gestingthorpe		
<b>NGR</b>	TL 81153879		
<b>ESMR No.</b>	15307	<b>IRIS No.</b>	EX/FAG/AG9
<b>PARISH</b>	Gestingthorpe	<b>DISTRICT</b>	Braintree

**SITE DESCRIPTION** The Downs Foundry at Gestingthorpe was established by 1838. It appears on the first edition Ordnance Survey map of 1876 (sheet 12.5), but had closed by c.1908. Located immediately west of the present 'Foundry House' to the south of North End Road, only the lower courses of its north wall now survive acting as a property boundary. The wall is built of red brick and has two ventilation windows with brick lintels at the base; the remaining part of the foundry lies within a grassed rear garden. A smithy may have stood to the east of Foundry House, but only a few courses of bonded brick survive.

**ARCHAEOLOGICAL POTENTIAL** High. Below ground deposits of the foundry, hearth and casting pits may survive.

**SITE SIGNIFICANCE** Long-lived rural iron foundry operating for more than 70 years with potentially intact below ground remains. Nineteenth-century examples in Essex on un-developed sites are now rare.

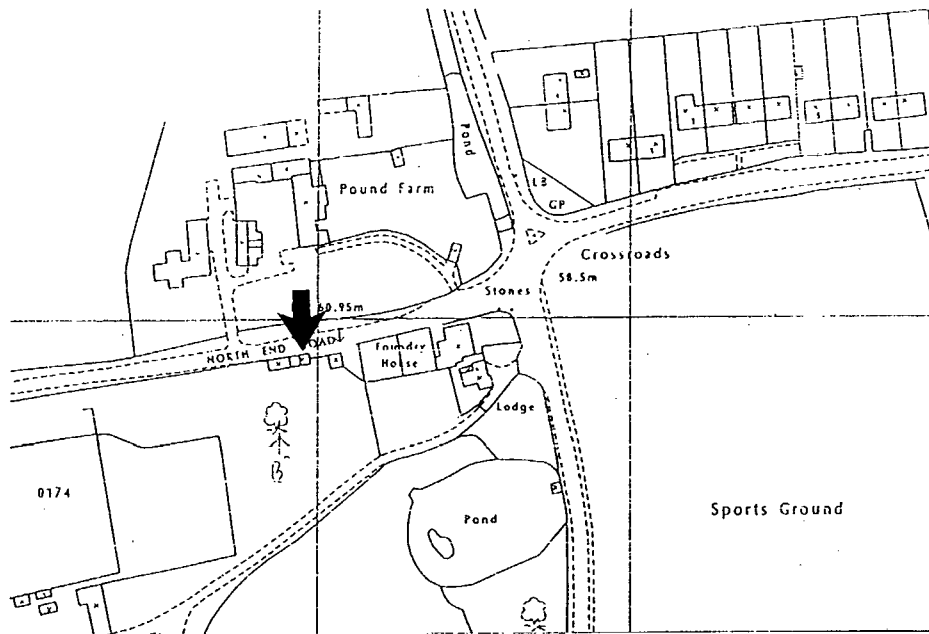
**CURRENT STATUS** None

**RECOMMENDED ACTION** None

**MANAGEMENT** If threatened evaluate by trial trenching with further mitigation works and/or recording if appropriate.

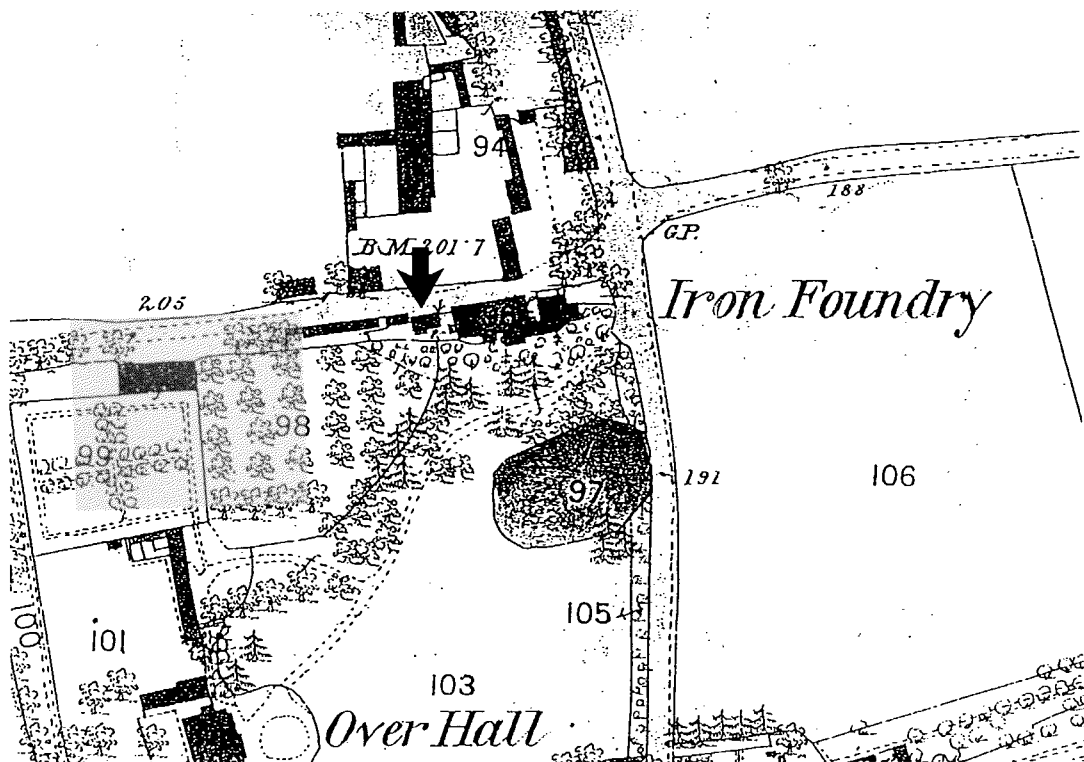
**GRADING** \*\*





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OS Scale 1:2500 TL 8138 1995



OS Scale 25 inch Sheet 12.5 1876



The Downs Foundry, Gestingthorpe, viewed from the east  
4th April 1997



The Downs Foundry circa 1900

<b>SITE NAME</b>	Coleman and Morton, Chelmsford		
<b>NGR</b>	TL 70710635		
<b>ESMR No.</b>	15308	<b>IRIS No.</b>	EX/FAG/AG10
<b>PARISH</b>	Chelmsford	<b>DISTRICT</b>	Chelmsford

**SITE DESCRIPTION** R. Coleman took over the site in 1848. The foundry proved to be very successful and by 1862 it had developed into Coleman and Morton. Located north and east of the junction between New London Road and New Writtle Street the foundry is depicted on the first edition Ordnance Survey map of 1874 (sheet 52.8). Since closure, the site has been extensively re-developed and is currently occupied by a modern garage (Kwik Fit). This has retained the facade of an older structure with a single brick pier on the south-west corner and two gable ends projecting above the modern facade. All the original foundry buildings have been demolished.

**ARCHAEOLOGICAL POTENTIAL** None. Demolished and re-developed.

**SITE SIGNIFICANCE** None. One of four foundries to be established in the Chelmsford area of which none survive (ESMR Nos. 15309, 15315, 15316).

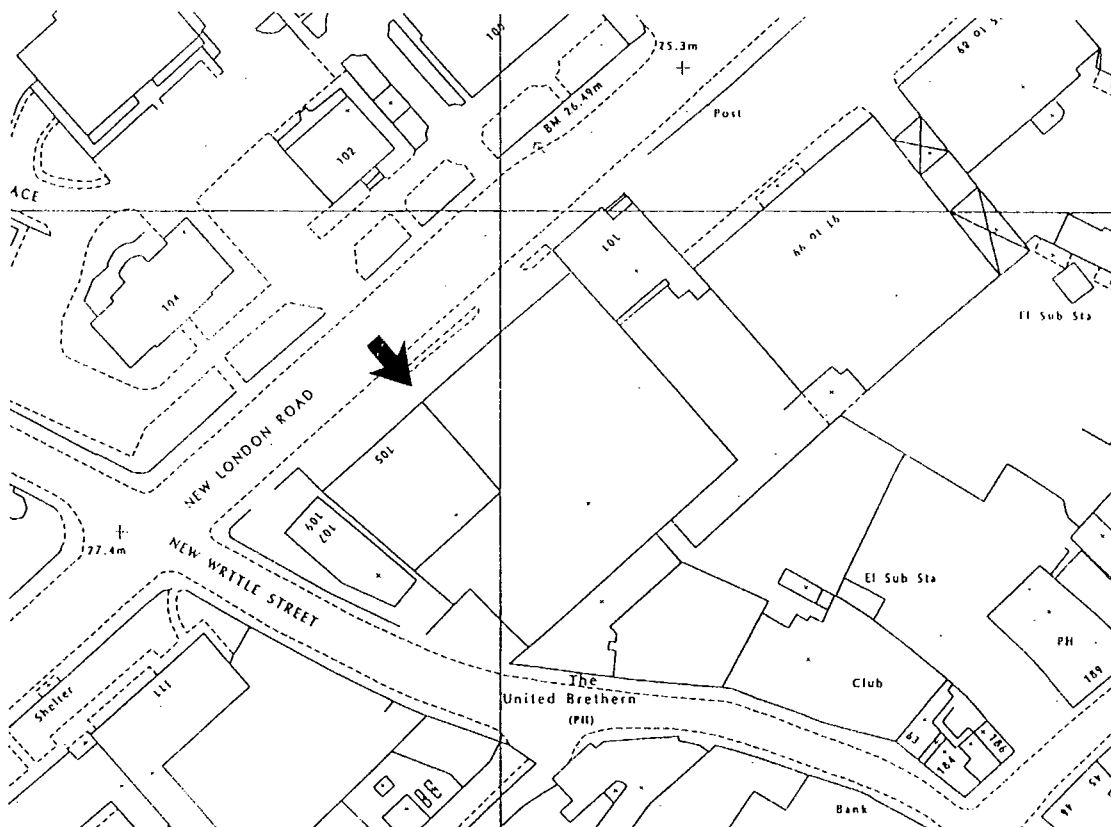
**CURRENT STATUS** None

**RECOMMENDED ACTION** None

**MANAGEMENT** None

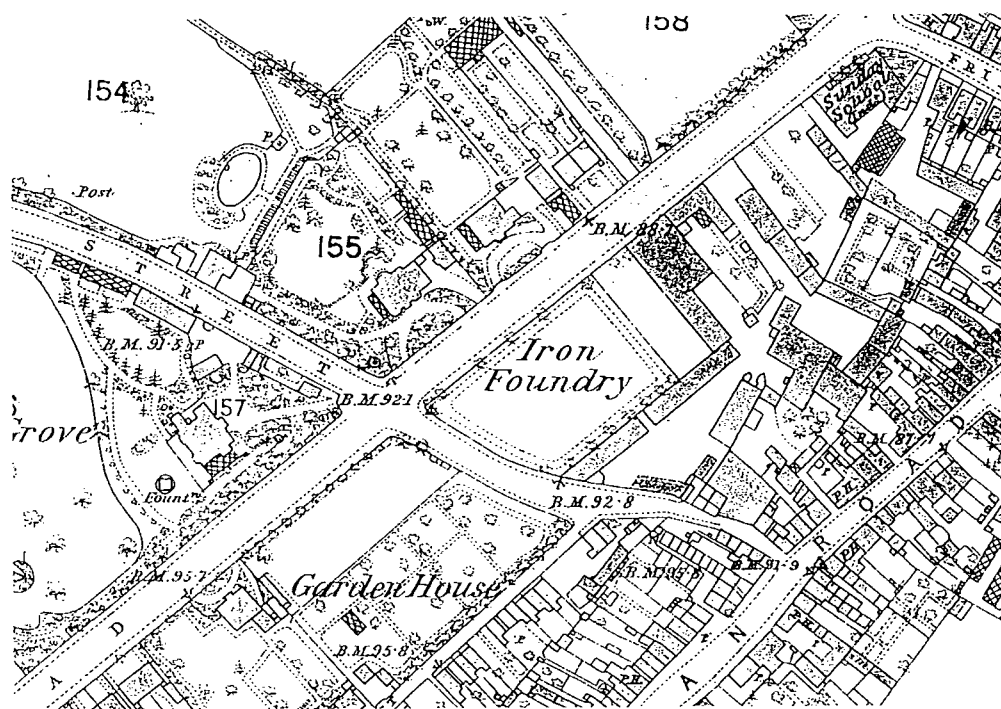
**GRADING** 0

Booker, J. 1974 *Essex and the Industrial Revolution* (Essex County Council) 1-23



OS Scale 1:2500 TL 7006 1993

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OS Scale 25 inch Sheet 52.8 1874



Site of The Coleman and Morton Foundry, viewed from the south-west  
3rd April 1997

<b>SITE NAME</b>	Anchor Street Ironworks, Chelmsford		
<b>NGR</b>	TL 70560615		
<b>ESMR No.</b>	15309	<b>IRIS No</b>	EX/FAG/AG11
<b>PARISH</b>	Chelmsford	<b>DISTRICT</b>	Chelmsford

**SITE DESCRIPTION** The exact date when the foundry was established is unclear, but it does appear on the 1848 tithe map (ERO/D/CT/72) and on the first edition Ordnance Survey map of 1874 (sheet 52.8). T. Bewley whose father J. Bewley founded the Bewley foundry in New Street, set up the business in Anchor Street. The site was enlarged in 1878, when the foundry was taken over by Colonel Crompton who established the Arc Works, trading in electric lighting and power supply. The evolution of the site has seen the demolition of the original foundry buildings, which now form part of a carpark/yard. A wall along the north of the site fronting onto Anchor Street with a small central window and ventilation slats is all that survives. To the east is what remains of the Arc Works, now called Devon House. This large two-storey building comprises 2 ranges with gable ends and an ornate facade. A memorial plate on the front of the building is dedicated to *Colonel Crompton, pioneer of electric lighting, power and electricity supply, established here in 1878, his Arc Works.*

**ARCHAEOLOGICAL POTENTIAL** Slight in a foundry context.

**SITE SIGNIFICANCE** The re-use of the buildings prior to their demolition has probably culminated in the loss of any internal technological information. One of four foundries established in the Chelmsford area (ESMR Nos. 15038, 15315, 15316)

**CURRENT STATUS** None

**RECOMMENDED ACTION** None

**MANAGEMENT** If threatened by major development a watching brief should be maintained during groundworks.

**GRADING** \*







Site of The Anchor Street Iron Works, Chelmsford, viewed from the north-east



Colonel Crompton's  
Arc Works  
Viewed from the  
north-west  
3rd April 1997



<b>SITE NAME</b>	Billericay Iron Foundry		
<b>NGR</b>	TQ 67339395		
<b>ESMR No.</b>	15310	<b>IRIS No.</b>	EX/FAG/AG12
<b>PARISH</b>	Great Burstead	<b>DISTRICT</b>	Basildon

**SITE DESCRIPTION**      The six-inch Ordnance Survey map of 1866 (sheet 68) records an iron foundry to the south of Billericay and west of Laindon Road. By 1896 (second edition Ordnance Survey map, sheet 68.2) the foundry was no longer working and a gas works had been established on the site. This may have re-used some of the original buildings, but the present facility has been modernised; earthworks can be seen in the area of the foundry.

**ARCHAEOLOGICAL POTENTIAL**    High. Earthworks suggest intact below ground remains.

**SITE SIGNIFICANCE**              A small mid-late nineteenth-century short-lived iron foundry with potentially important below ground deposits. Examples of this date are now comparatively rare in Essex.

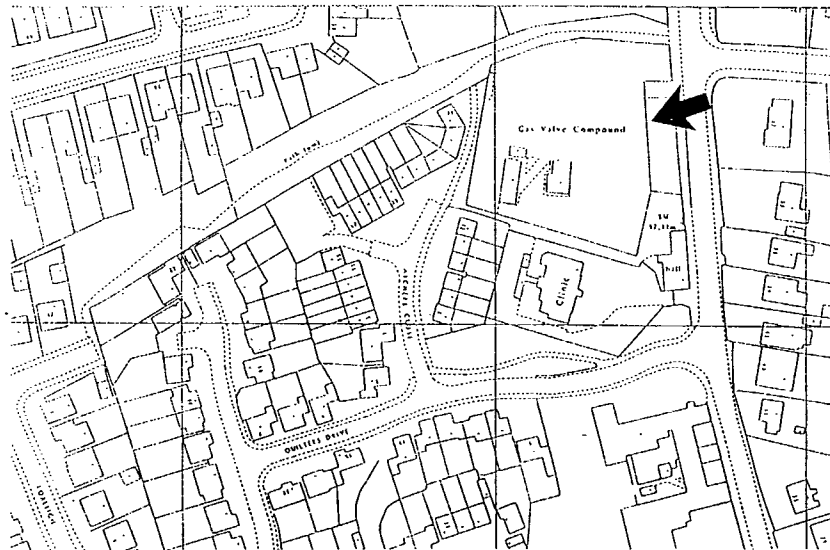
**CURRENT STATUS**                      None

**RECOMMENDED ACTION**              None

**MANAGEMENT**                          If threatened evaluate by trial trenching with further mitigation works and/or recording if appropriate.

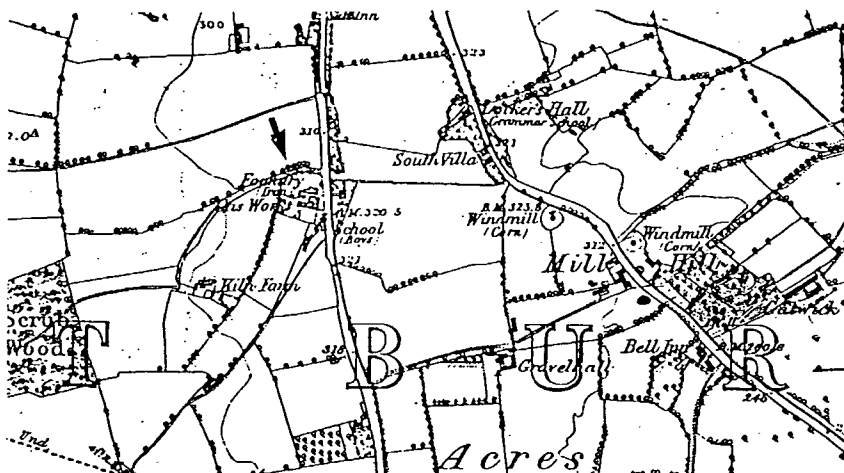
**GRADING**                                  \*\*

Booker, J. 1974 *Essex and the Industrial Revolution* (Essex County Council) 1-23

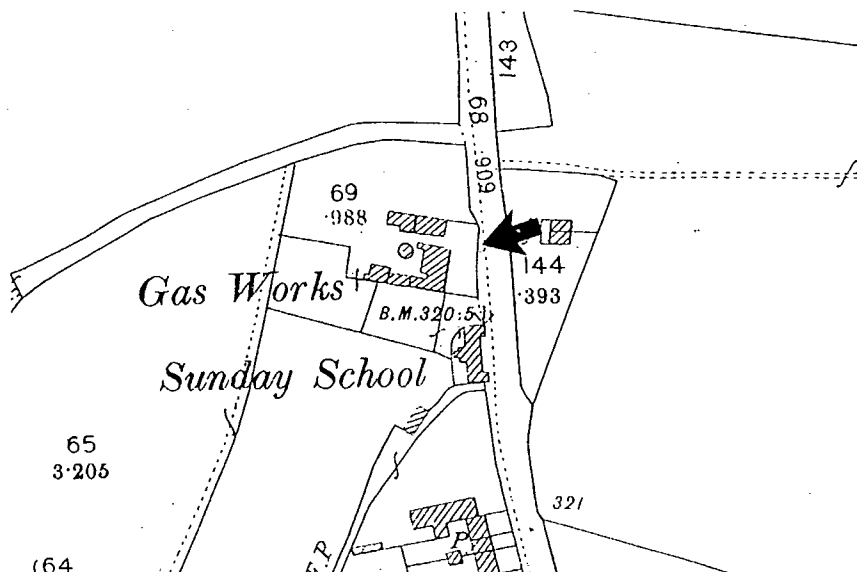


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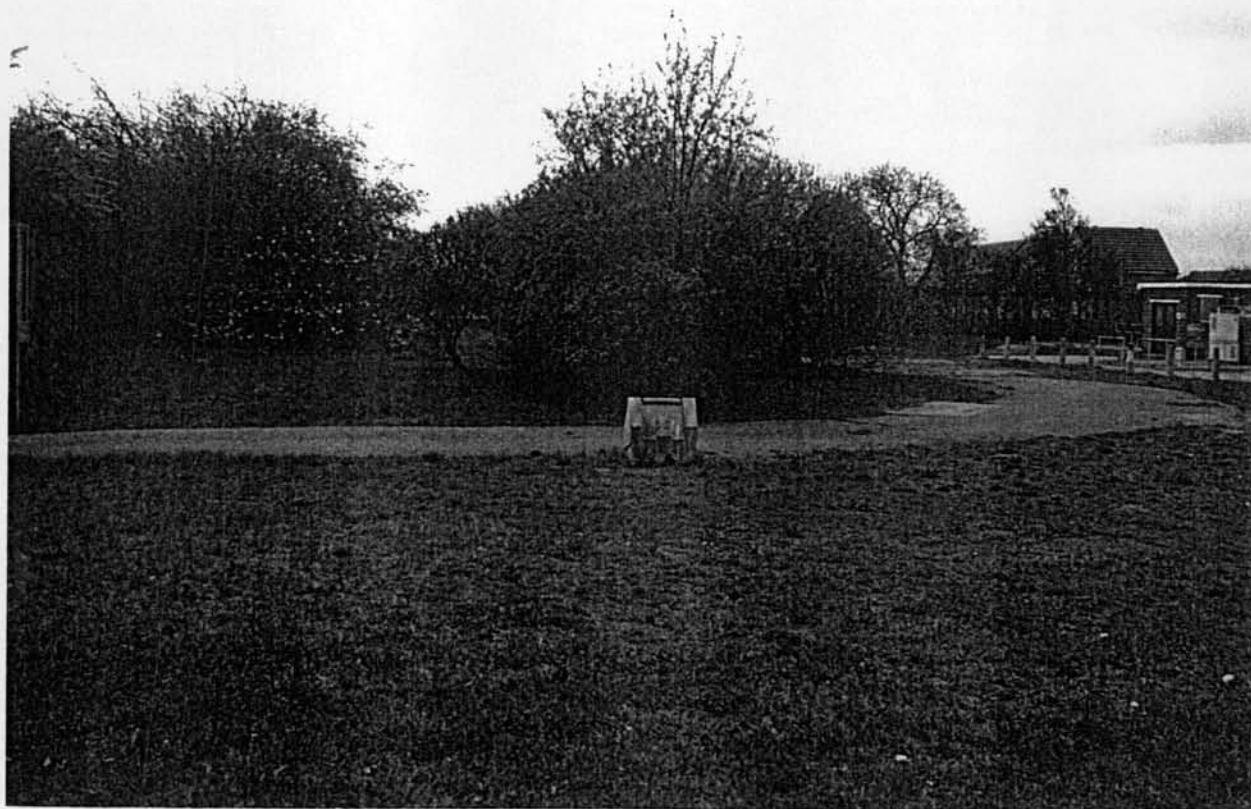
OS Scale 1:2500 TQ 6793 1994



OS Scale 6 inch Sheet 68 1866



OS Scale 25 inch Sheet 68.2 1896



Site of The Billericay Iron Foundry, Billericay, viewed from the north  
3rd April 1997

<b>SITE NAME</b>	Victoria Iron Works, Brentwood		
<b>NGR</b>	TQ 59589413		
<b>ESMR No.</b>	15311	<b>IRIS No.</b>	EX/FAG/AG13
<b>PARISH</b>	Brentwood	<b>DISTRICT</b>	Brentwood

**SITE DESCRIPTION**      The Victoria Works appears on the first edition Ordnance Survey map of 1872 (sheet 67.3). The site was of a considerable size comprising four main blocks; two fronting the Ongar Road with buildings along the south of the site and a long linear range to the east. Little remains of the original works which has been re-developed as a modern industrial complex. The northernmost building fronting Ongar Road has been completely demolished, as has the eastern range and most of the foundry with only the odd perimeter wall remaining. From the junction with North Road, to the south, original structures survive albeit having been converted into shops with dwellings above. These were probably ancillary to the foundry acting as an administrative and/or an office block.

**ARCHAEOLOGICAL POTENTIAL**      Slight: The principal foundry buildings have been demolished.

**SITE SIGNIFICANCE**      The surviving buildings are of low importance.

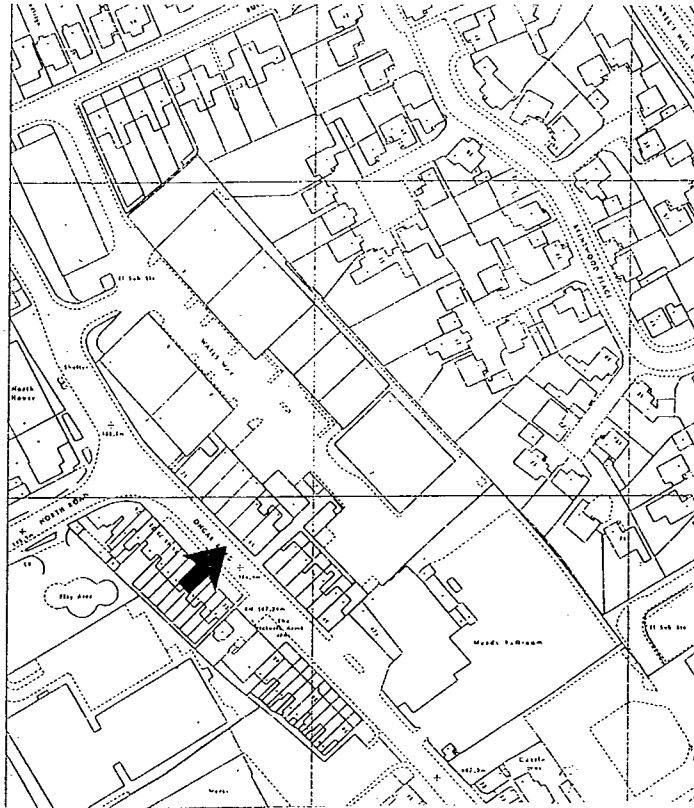
**CURRENT STATUS**      None

**RECOMMENDED ACTION**      None

**MANAGEMENT**      Recorded at RCHME level I. No further recording necessary.

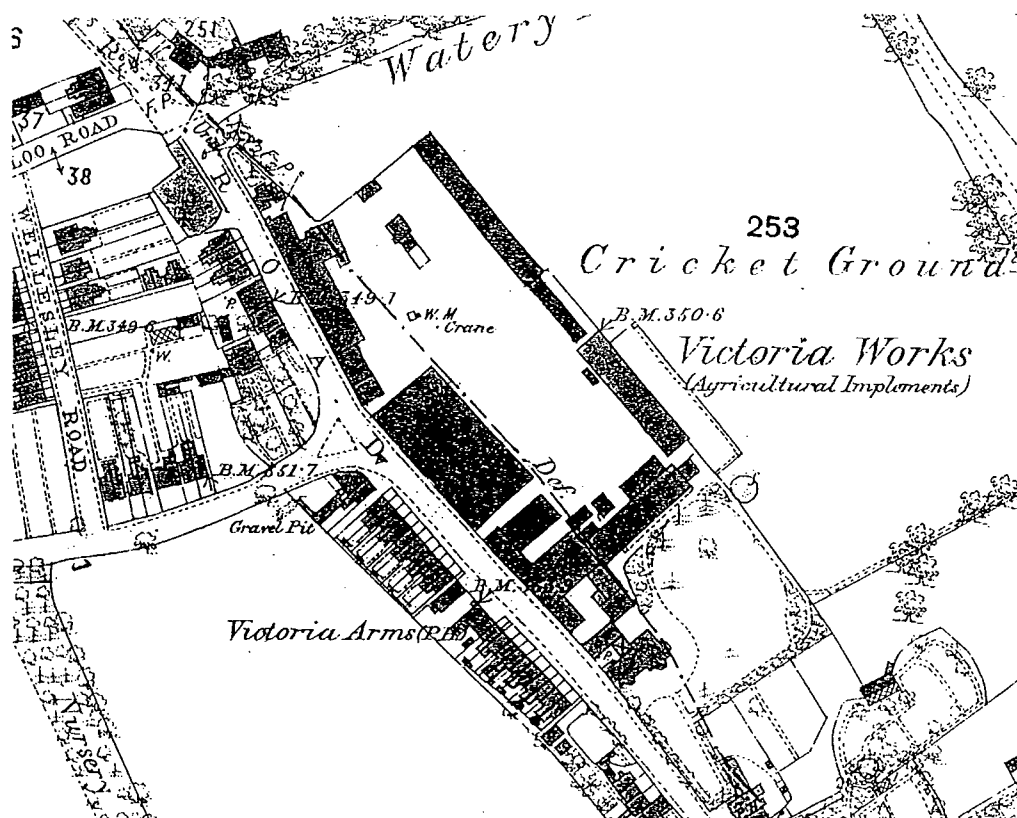
**GRADING**      \*

Booker, J. 1974 *Essex and the Industrial Revolution* (Essex County Council) 1-23



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OS Scale 1:2500 TQ 5994 1995



OS Scale 25 inch Sheet 67.3 1872



The Victoria Works, Brentwood, viewed from the north-west



The Victoria Works, Brentwood, viewed from the south east  
3rd April 1997

<b>SITE NAME</b>	W.J Harmer Ltd, Iron Works, Walton-on-the-Naze		
<b>NGR</b>	TM 25752285		
<b>ESMR No.</b>	15312	<b>IRIS No.</b>	EX/FAG/AG15
<b>PARISH</b>	Walton-Le-Soken	<b>DISTRICT</b>	Tendring

**SITE DESCRIPTION** The site is located west of the junction of Hall Road and Naze Park Road, on the northern side of Walton-on-the-Naze. The foundry was established by Robert Warner, son of John Warner, an iron founder from London. It appears on the first edition Ordnance Survey map of 1874 (sheet 39.3), as three rectangular blocks arranged in series; the westernmost being the foundry. Standing beside the coast the works had its own private dock (Port Said) for the transportation of raw materials and finished products; the cut was infilled in the 1950's. A tramway was used to move heavy goods to and from the wharf, and within the foundry. Little remains of the original works due to post-war development; extant features include the manager's house, a time keeper's office surmounted by a wooden cupola and a pattern shop with rough cast concrete walls. Of the northern range only a linear single-storey building with gable ends survives, but fronting Hall Road is a large twin gable structure which post dates 1874 (the date of the first edition Ordnance Survey map extract). Ancillary buildings probably erected at the same time include the drill shop used in piano manufacture and a shot blasting shop. A new foundry, built c.1950, also survives with the cupola being located externally along the north wall; this has been demolished and the building lies derelict.

**ARCHAEOLOGICAL POTENTIAL** Only fragments of the original works remain and many of the later buildings have been converted to light industrial uses. The navigation survives as a buried feature.

**SITE SIGNIFICANCE** The only Essex foundry to be established on the coast and of major historic/technological importance being built as a large integrated complex with docking facilities and internal tramway. Much of the site has been demolished and developed; those buildings which survive are of low significance.

**CURRENT STATUS** None

**RECOMMENDED ACTION** None



## MANAGEMENT

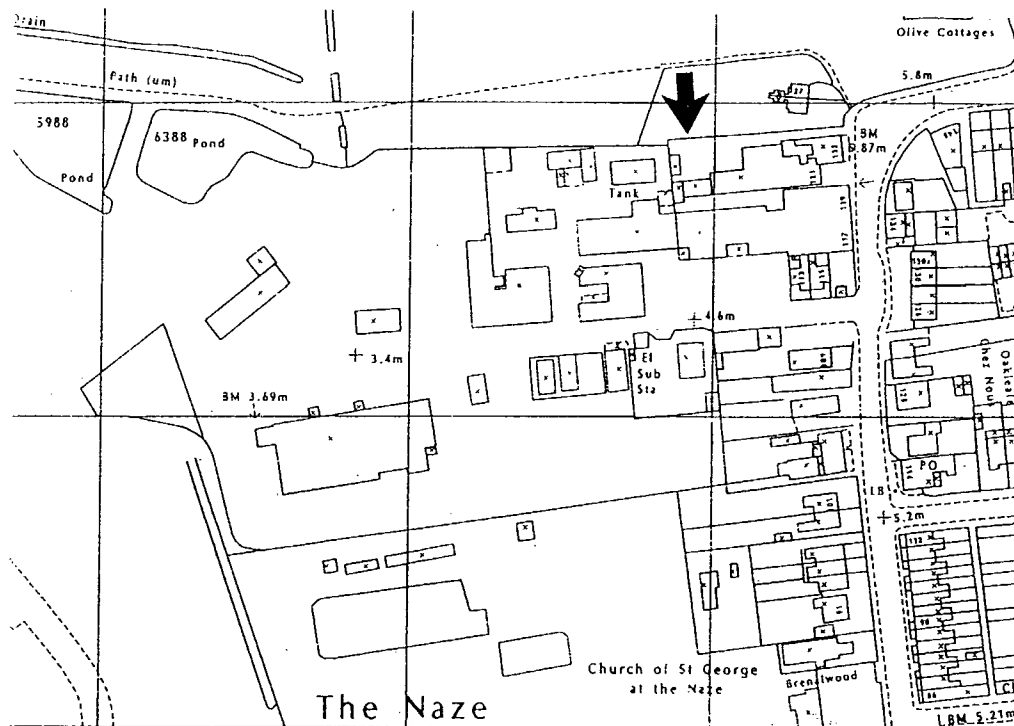
If threatened by major works, record RCHME level 2; this should include a block plan, detailed photography and textual synthesis. Prior to any proposed development the docking area should be evaluated and if the remains are of a sufficient quality to be preserved in situ.

## GRADING

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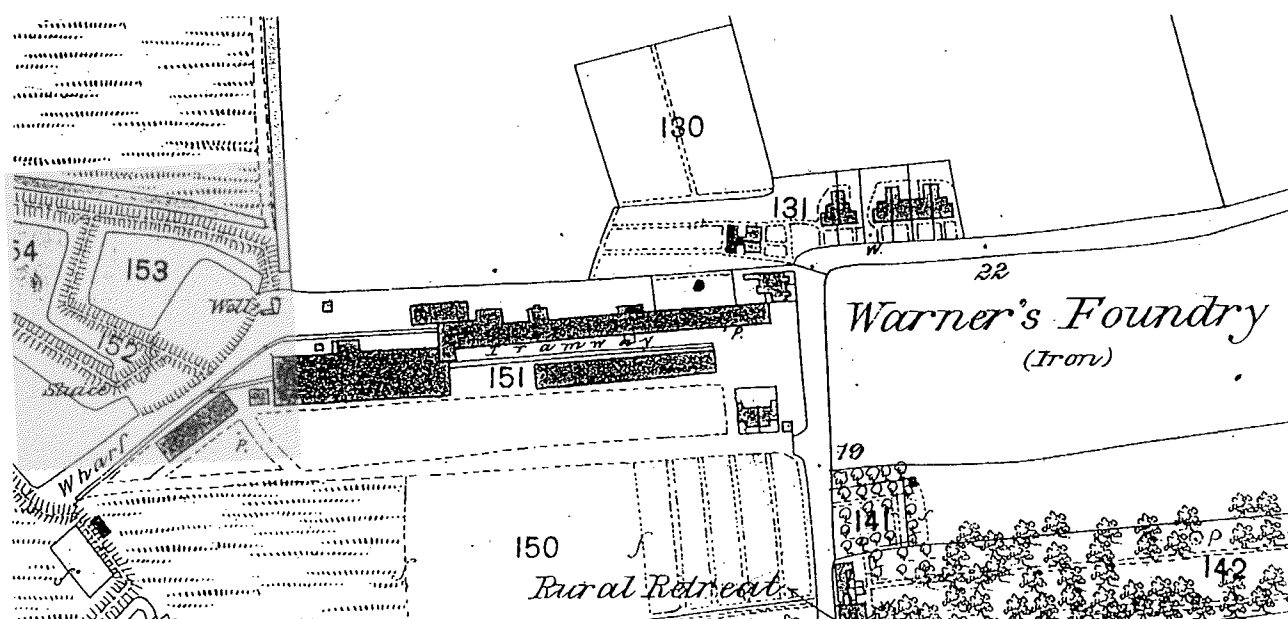
Booker, J. 1974 *Essex and the Industrial Revolution* (Essex County Council) 1-23  
Booker, J. 1971 Industrial Archaeology Record Card. Essex Record Office  
(Ref. T/Z 193/2, 193/8, 193/8/1, 193/8/2, 193/8/3, 193/8/4, 193/8/5)





OS Scale 1:2500 TM 2522 1994

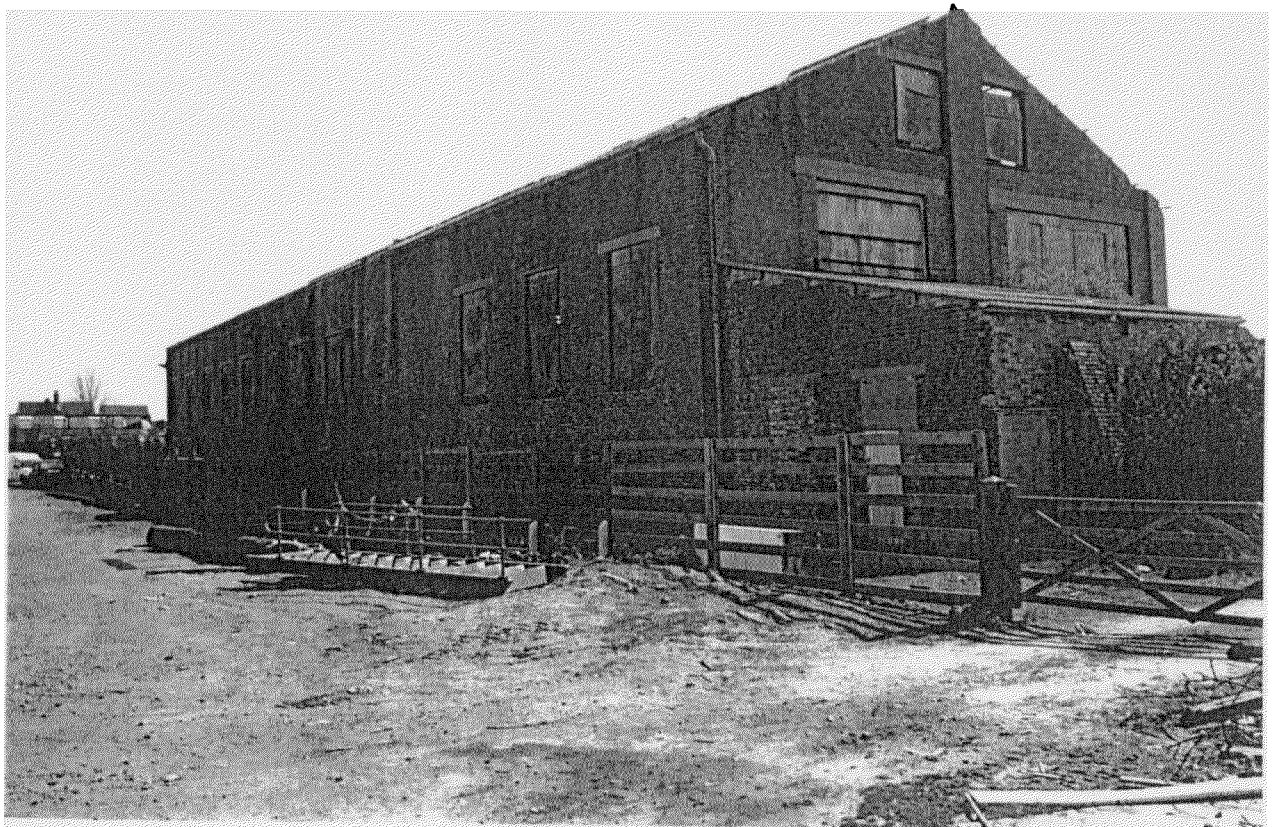
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OS Scale 25 inch Sheet 39.3 1874



Part of Harmer's Foundry fronting onto Hall Road, Walton-on-Naze, viewed from the south-east



The 'New foundry', viewed from the north-west

<b>SITE NAME.</b>	Johnson's Iron Foundry, Church Street, Saffron Walden		
<b>NGR</b>	TL 53853863		
<b>ESMR No.</b>	15313	<b>IRIS No</b>	EX/FAG/AG16
<b>PARISH</b>	Saffron Walden	<b>DISTRICT</b>	Uttlesford

**SITE DESCRIPTION** W. Rider established an iron foundry in Church Street and was joined in 1848 by Thomas Johnson, who soon became sole proprietor. The works was one of three iron foundries that were operating in the town during the nineteenth century. Its demise was brought about by the arrival of the railway and the creation of the Railway Foundry in Station Road (ESMR No. 15068). The surviving buildings have all been converted to residential uses and include a three-storey warehouse(?), a two-storey flint-rendered structure with a square headed courtyard arch and a building of unknown function. Three grade II listed nineteenth-century timber-framed dwellings (Nos. 1-3 Johnsons Yard) may have formed part of the complex serving as managers' and/or workers' dwellings.

**ARCHAEOLOGICAL POTENTIAL** Slight. The buildings have been converted and retain no technological information.

**SITE SIGNIFICANCE** Of the three iron foundries in Saffron Walden this is the only example with standing remains.

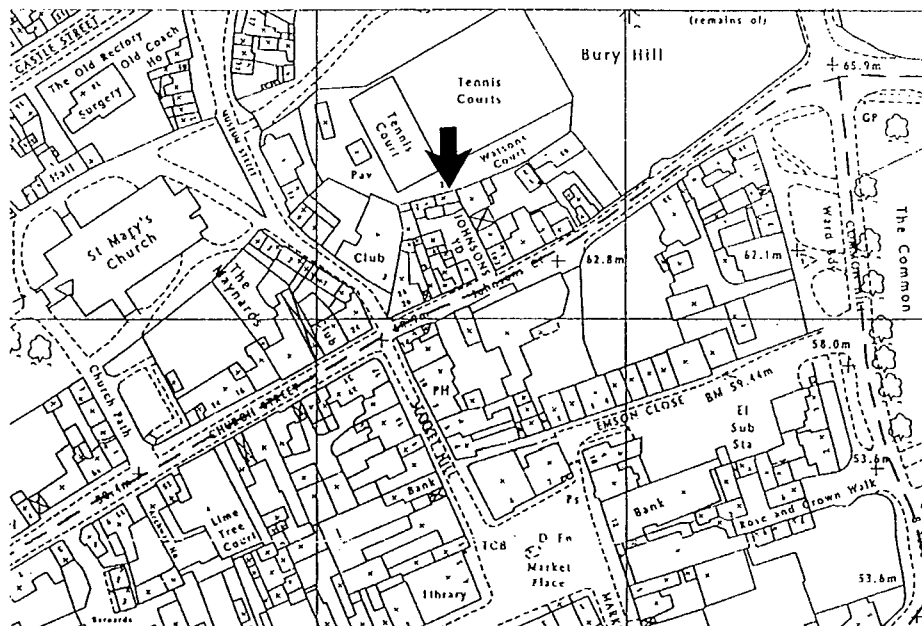
**CURRENT STATUS** Forms part of the Saffron Walden Conservation Area.

**RECOMMENDED ACTION** None

**MANAGEMENT** None. The buildings are currently well maintained.

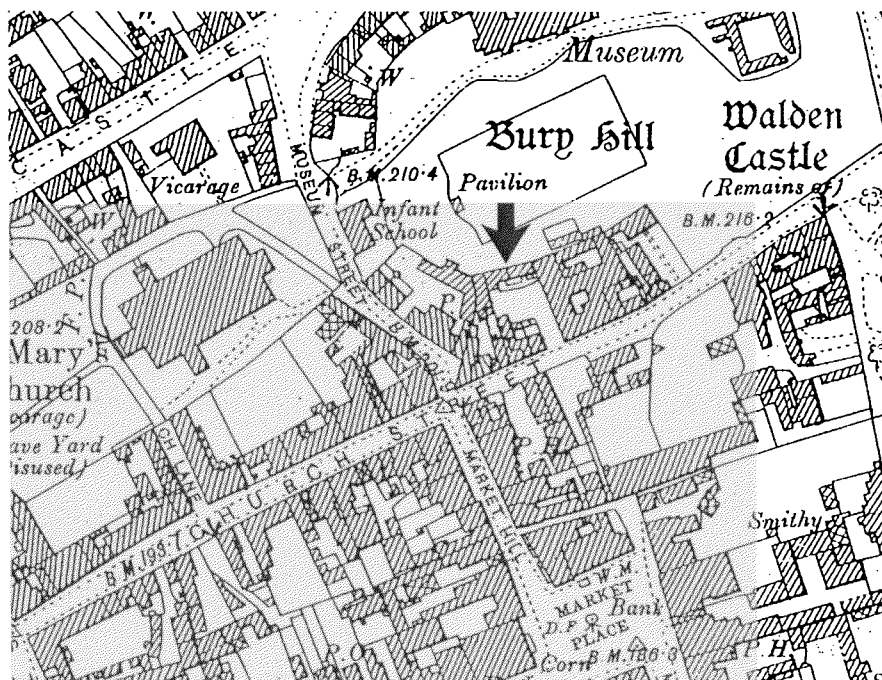
**GRADING** \*

Booker, J. 1974 *Essex and the Industrial Revolution* (Essex County Council) 1-23



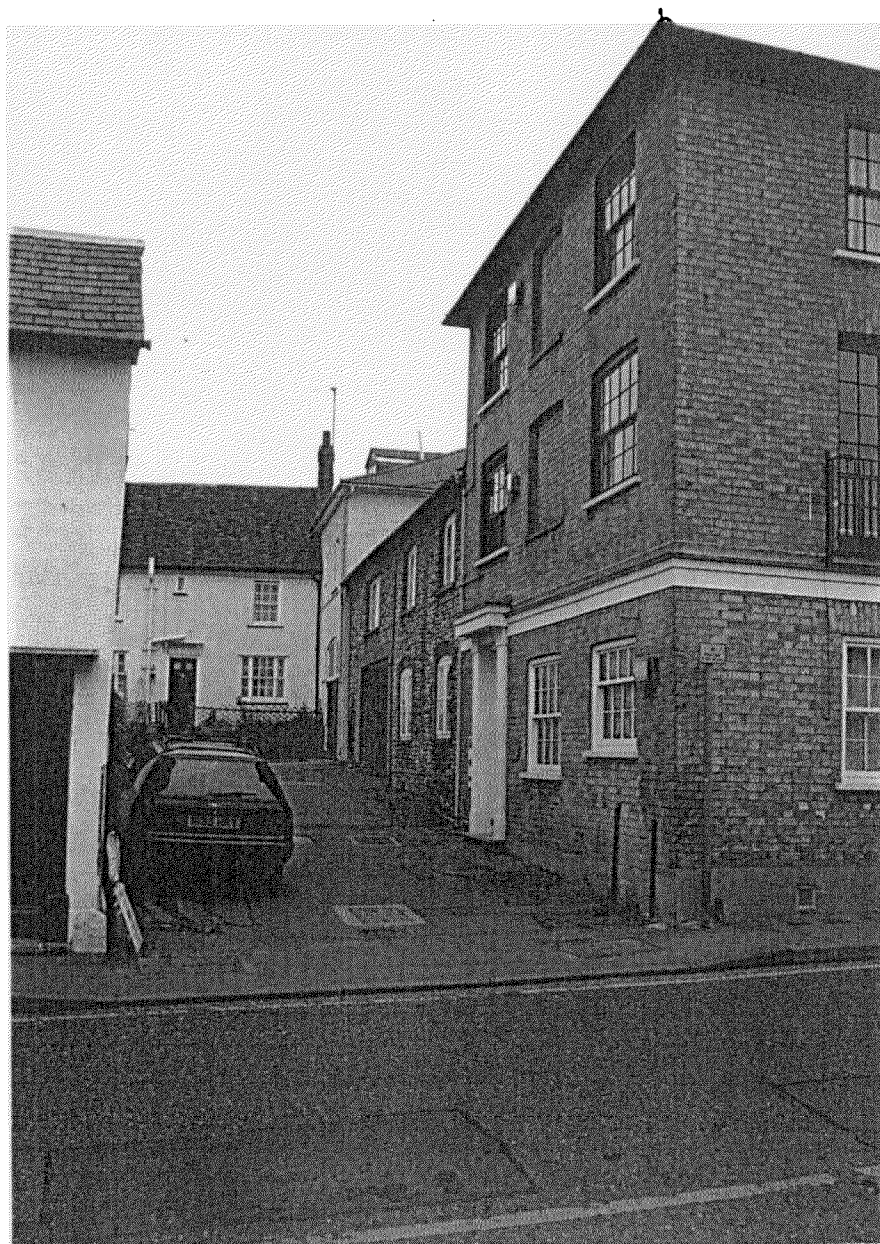
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OS Scale 1:2500 TL 5338 1995



OS Scale 25 inch Sheet 9.1 1897





Johnsons Yard, Saffron Walden, viewed from the south  
18th April 1997

<b>SITE NAME.</b>	Beckingham Foundry, Tolleshunt Major		
<b>NGR</b>	TL 89131246		
<b>ESMR No.</b>	15314	<b>IRIS No.</b>	EX/FAG/AG17
<b>PARISH</b>	Tolleshunt Major	<b>DISTRICT</b>	Maldon

**SITE DESCRIPTION**      The Beckingham Iron and Brass Foundry, was established by the Belsham family in c.1870. Having appeared on the first edition Ordnance Survey map of 1872 (sheet 45), the works had closed by 1914. The present building, which is currently used for storage, was rebuilt on the original ground plan of the foundry, in the mid-1970s, using recovered bricks from the works. Two cottages (Foundry Cottages) located immediately to the west have also been demolished.

**ARCHAEOLOGICAL POTENTIAL**   None; demolished and re-developed.

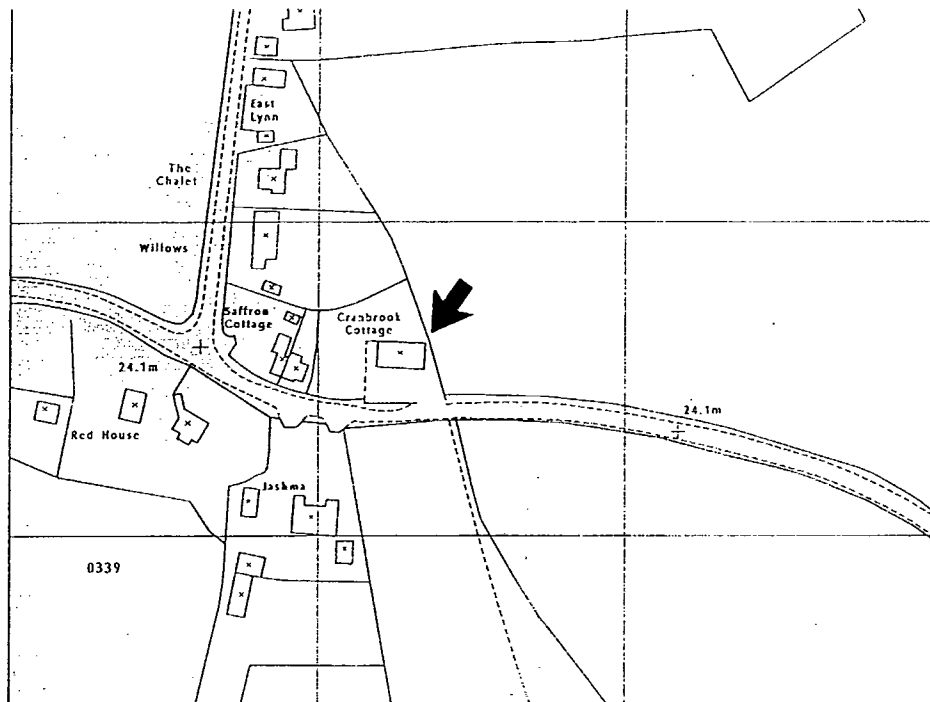
**SITE SIGNIFICANCE**                      None

**CURRENT STATUS**                              None

**RECOMMENDED ACTION**                      None

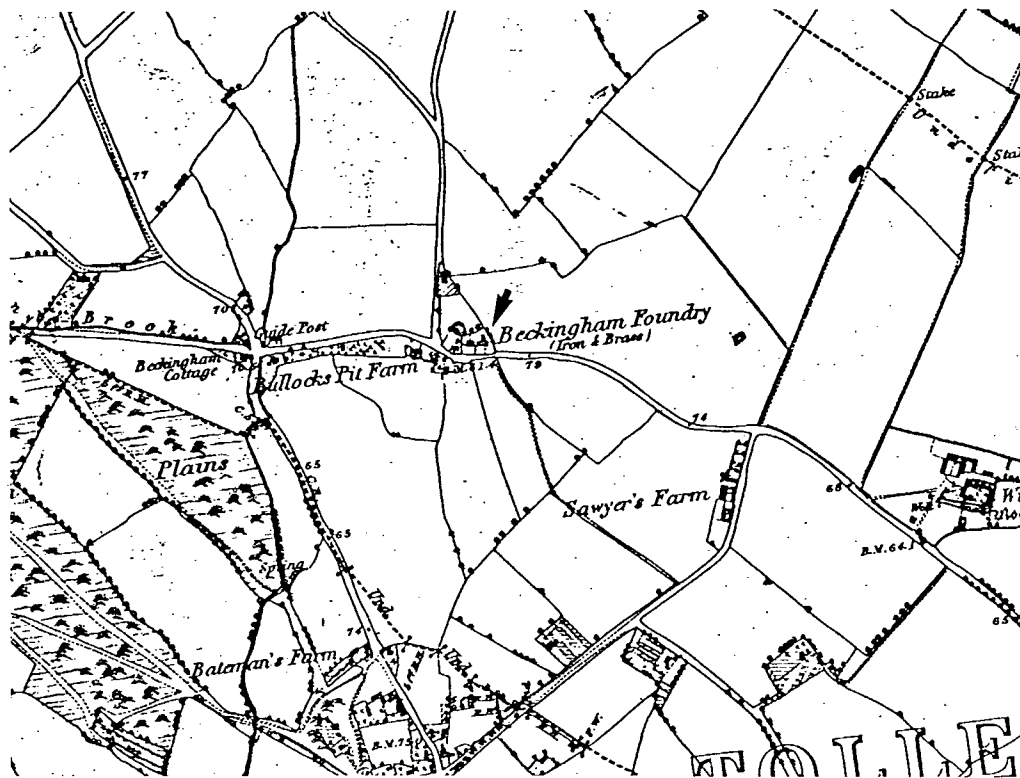
**MANAGEMENT**                                      None

**GRADING**    0



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OS Scale 1:2500 TL8912 1990



OS Scale 6 inch Sheet 45 1880



The Beckingham Foundry (rebuilt), viewed from the south-east  
1st May 1997



<b>SITE NAME.</b>	Bewley Foundry, Chelmsford		
<b>NGR</b>	TL 709071		
<b>ESMR No.</b>	15315	<b>IRIS No</b>	EX/FAG/AG18
<b>PARISH</b>	Chelmsford	<b>DISTRICT</b>	Chelmsford

**SITE DESCRIPTION**      The Bewley Iron Foundry was established by John Bewley, in New Street by 1809. Upon his death in c.1833 the business was passed to his son, Thomas Bewley and by 1856 the foundry was taken over by G.Wood and Son. The site was still in operation up until the latter part of the nineteenth century, appearing on the first edition 25-inch Ordnance Survey map of 1874 (sheet 52.4). The original site has been demolished and is currently occupied by the modern buildings of the Essex Police Force.

**ARCHAEOLOGICAL POTENTIAL**   None. Demolished and developed.

**SITE SIGNIFICANCE**                      One of the four foundries in the Chelmsford area, of which none survive (ESMR Nos. 15038, 15309, 15316).

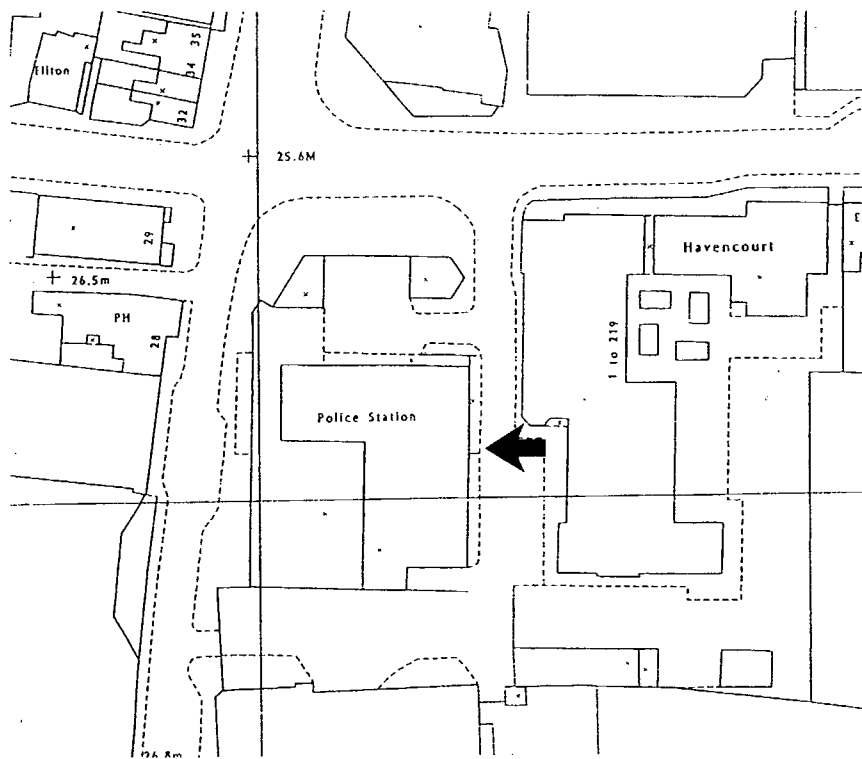
**CURRENT STATUS**                              None

**RECOMMENDED ACTION**                      None

**MANAGEMENT**                                      None

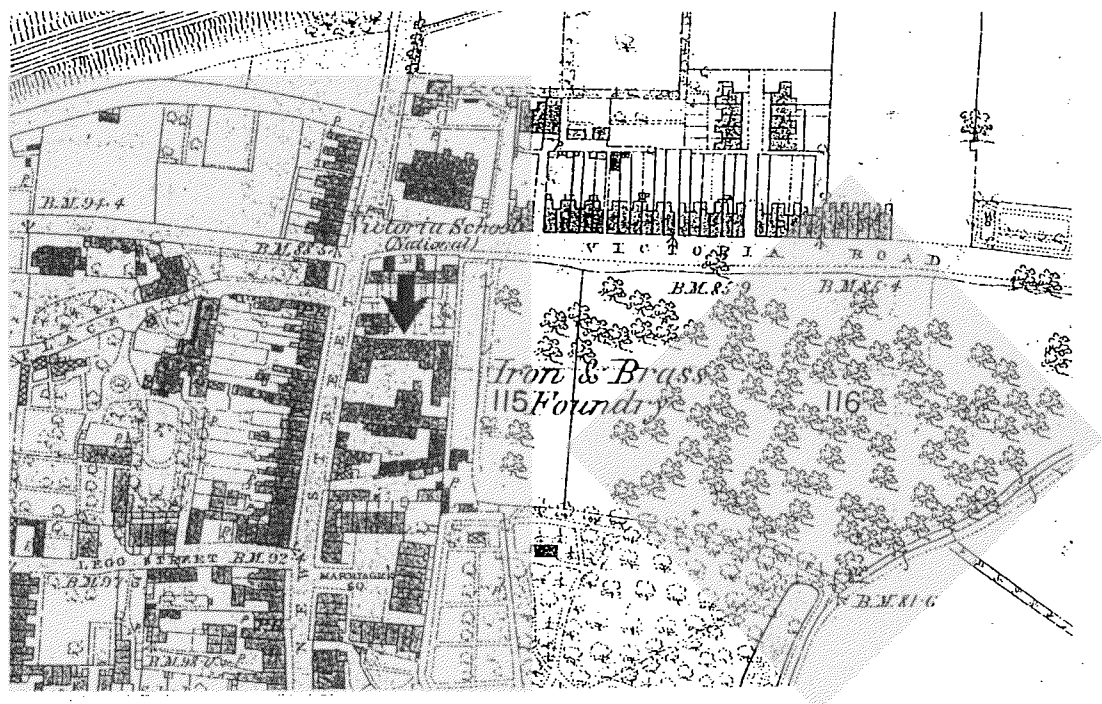
**GRADING**    0

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OS Scale 1:1250 TL 7007 1994



OS Scale 25 inch Sheet 52.4 1874

**SITE NAME.** Broomfield Road Iron Works, Chelmsford

**NGR** TL 703080

**ESMR No.** 15316 **IRIS No** EX/FAG/AG19

**PARISH** Chelmsford **DISTRICT** Chelmsford

**SITE DESCRIPTION** The Broomfield Road Iron Works was founded by Christy and Norris by 1886. Lying to the west of Broomfield Road the foundry appears on the second edition Ordnance Survey map of 1897 (sheet 52.4). The original foundry has been completely demolished and the site re-developed as a housing estate.

**ARCHAEOLOGICAL POTENTIAL** None. Demolished and re-developed.

**SITE SIGNIFICANCE** None. One of four foundries to be established in the Chelmsford are of which none survive (ESMR Nos. 15038, 15309, 15315).

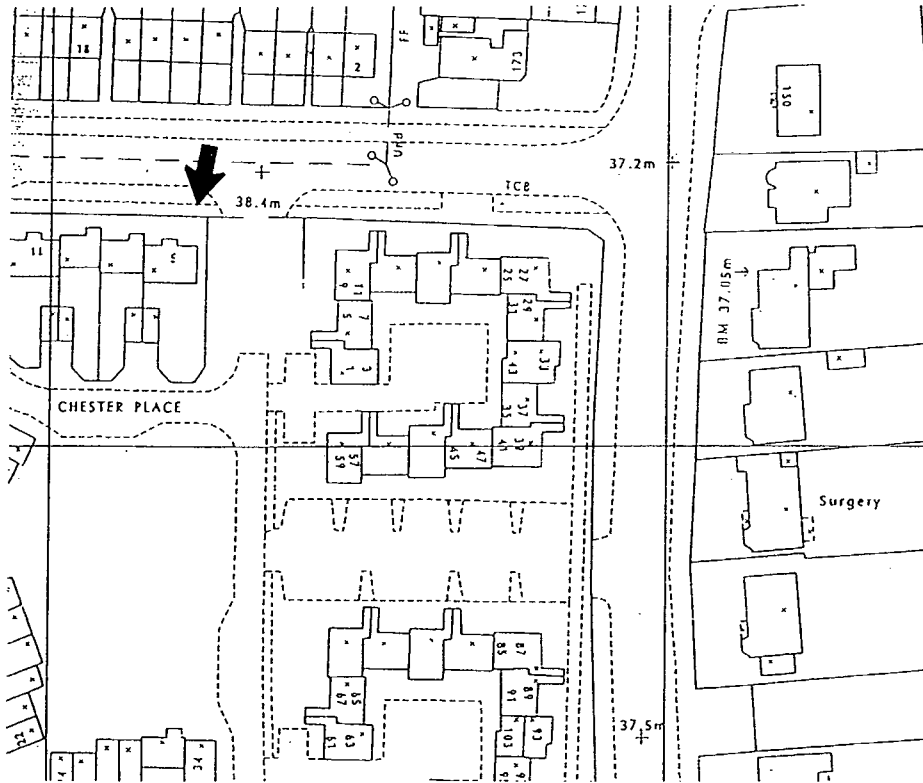
**CURRENT STATUS** None

**RECOMMENDED ACTION** None

**MANAGEMENT** None

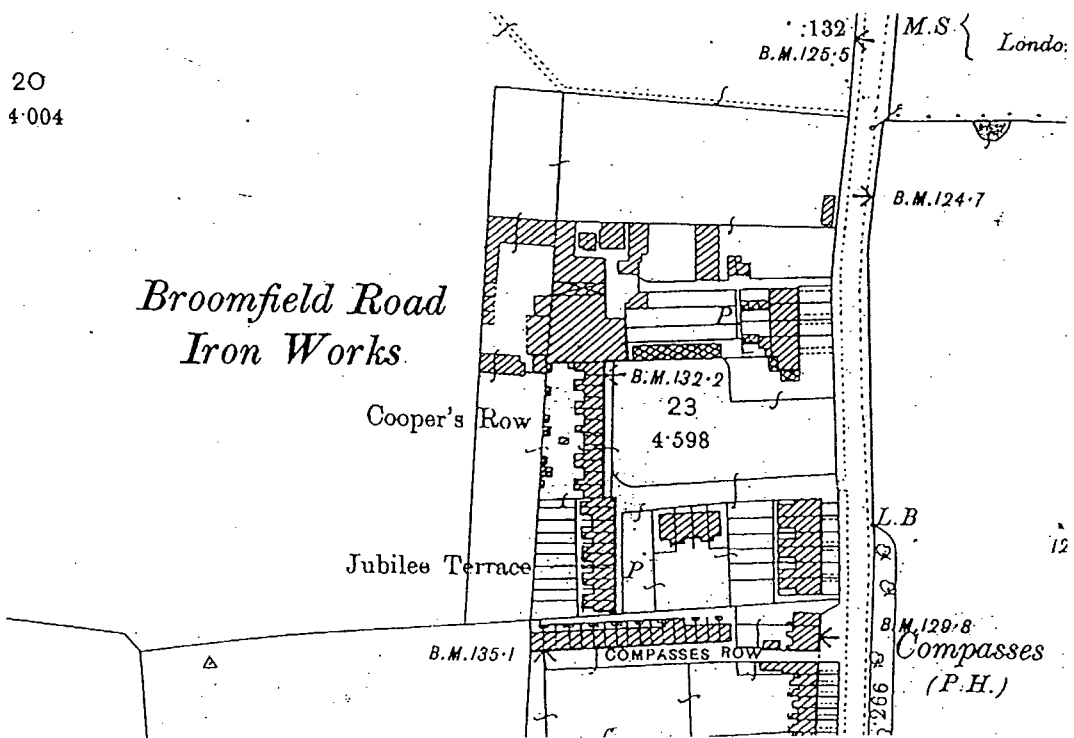
**GRADING** 0

Booker, J. 1974 *Essex and the Industrial Revolution* (Essex County Council) 1-23



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OS Scale 1:1250 TL 7008 SW 1994



OS Scale 25 inch Sheet 52.4 1897

## Appendix I: Sites not Located

Appendix I comprises a list of 4 foundries that could not be identified from the available cartographic evidence. They generally comprise short-lived early 19th century foundries, who were out of business by the compilation date of the Tithe map. They include:

- **J.W Coleman** (father of R.Coleman of Coleman and Morton, Chelmsford)  
Established in Head Street, Colchester in 1820
- The Chelmer Foundry, Springfield Basin. Founded by **John Richmond** by 1828 but redundant by 1839
- Iron foundry in Mill Lane, Saffron Walden. Established by **R. Rickard** in 1821.
- Iron foundry established in 1833 in Broad Street Green, Heybridge by **J.Warren**. Warren later moves to the causeway to set up the Maldon Ironworks in 1853

## Appendix 2: Smithies and Forges

A 10% sample of smithies and forges in Essex, identified from both cartographic sources and the Historic Buildings Register of the Essex County Council Planning Department.

Site Name and Location	NGR	Date	Grade
1 Forge Cottage, Lucking Street, Great Maplestead	TL 83 SW	c.18th	2
2 Weatherboarded outbuilding to Forge Cottage, Mersea Road, Abberton.	TM00631920	c. 19th (early)	2
3 Smithy south of and adjoining Forge Cottage, Whalebone Lane (Whalebone Corner) Langham	TM0333 25/14	c. 19th (early)	2
4 Old Forge Garage, High Road, Layer De La Haye	TL92 SE 12/33	c.18th	2
5 Forge, Church Road, Peldon	TL98631637	c.19th	2
6 The Forge, Harlow Road, Roydon	TL 40 NW 3/27	c.17th	2
7 Ballards Gore, Creeksea Road, Stambridge	TQ 99 SW 7/288	c.1820	2
8 No. 56 Forge Cottage (formerly known as Old Forge Cafe) High Street (south side), Manningtree.	TM 1031	c. 18th	2
9 Forge in front of No. 30, Church End (S. side), Great Dunmow.	TL 6322 7/29	c.18/19 th	2
10 Forge Cottage, Duck End, Stebbing	TL 62 NE 2/343	c. 17th	2
11 Workshop, formerly smithy, High Street (east side), Bradwell-on-sea.	TM 0006	c.18th	2
12 Ashen (smithy)	TL747423		
13 Wickford (smithy)	TQ745928		
14 Castle Hedingham (smithy)	TL785355		
15 Radwinter (smithy)	TL61183774		
16 Howletts End (smithy)	TL58373480		
17 Bradfield (smithy)	TM14363050		

Site Location	NGR
18 Ramsey (forge)	TM21433032
19 Bocking, Church Street (forge)	TL75902580
20 Panfield	TL73662498
21 Bocking (forge, still there)	TL76152422
22 Blackwater (forge)	TL80632313
23 Fordham Hall (forge)	TL92822843
24 Fordstreet (forge)	TL92002704
25 West Bergholt Heath (forge)	TL95892733
26 Lexden (forge)	TL96402504
27 Copford Place (forge)	TL93182401
28 Copford Place (forge)	TL93312404
29 Stanway (forge)	TL93502421
30 Marks Tey (forge)	TL91342348
31 Bottle End (forge)	TL97082318
32 Gore Pit (forge)	TL87221967
33 Black Heath (forge)	TM00332200
34 Cock Green (smithy)	TL43490856
35 Tilegate Green (smithy)	TL51280870
36 Maldon (forge)	TL85440635
37 ? forge (Mosklyns)	TL82870318
38 Mundon Hill (forge)	TL86920278

Site Location	NGR
39 Ingatestone (forge)	TQ64929948
40 Brentwood (smithy)	TQ59349315
41 Great Warley Street (smithy)	TQ58369068
42 Billericay (smithy)	TQ68329329
43 Dunton Wayletts (smithy)	TQ65649096
44 Laindon (smithy)	TQ68379047
45 Eastend (forge)	TQ94589213
46 Foulness (forge)	TQ00369162



<b>SITE NAME</b>	Victoria Iron Works, Brentwood		
<b>NGR</b>	TQ 59589413		
<b>ESMR No.</b>	15311	<b>IRIS No.</b>	EX/FAG/AG13
<b>PARISH</b>	Brentwood	<b>DISTRICT</b>	Brentwood

**SITE DESCRIPTION**      The Victoria Works appears on the first edition Ordnance Survey map of 1872 (sheet 67.3). The site was of a considerable size comprising four main blocks; two fronting the Ongar Road with buildings along the south of the site and a long linear range to the east. Little remains of the original works which has been re-developed as a modern industrial complex. The northernmost building fronting Ongar Road has been completely demolished, as has the eastern range and most of the foundry with only the odd perimeter wall remaining. From the junction with North Road, to the south, original structures survive albeit having been converted into shops with dwellings above. These were probably ancillary to the foundry acting as an administrative and/or an office block.

**ARCHAEOLOGICAL POTENTIAL**      Slight: The principal foundry buildings have been demolished.

**SITE SIGNIFICANCE**      The surviving buildings are of low importance.

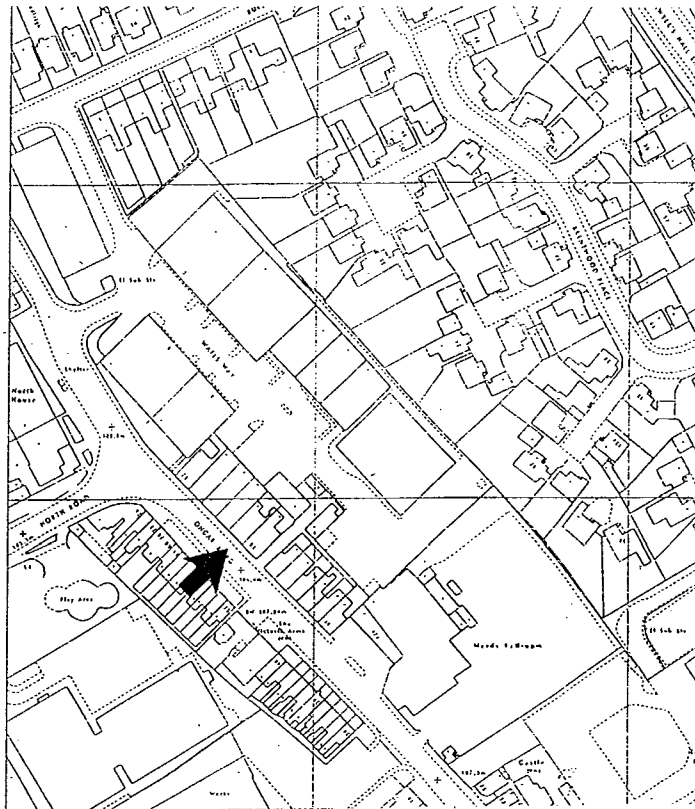
**CURRENT STATUS**      None

**RECOMMENDED ACTION**      None

**MANAGEMENT**      Recorded at RCHME level I. No further recording necessary.

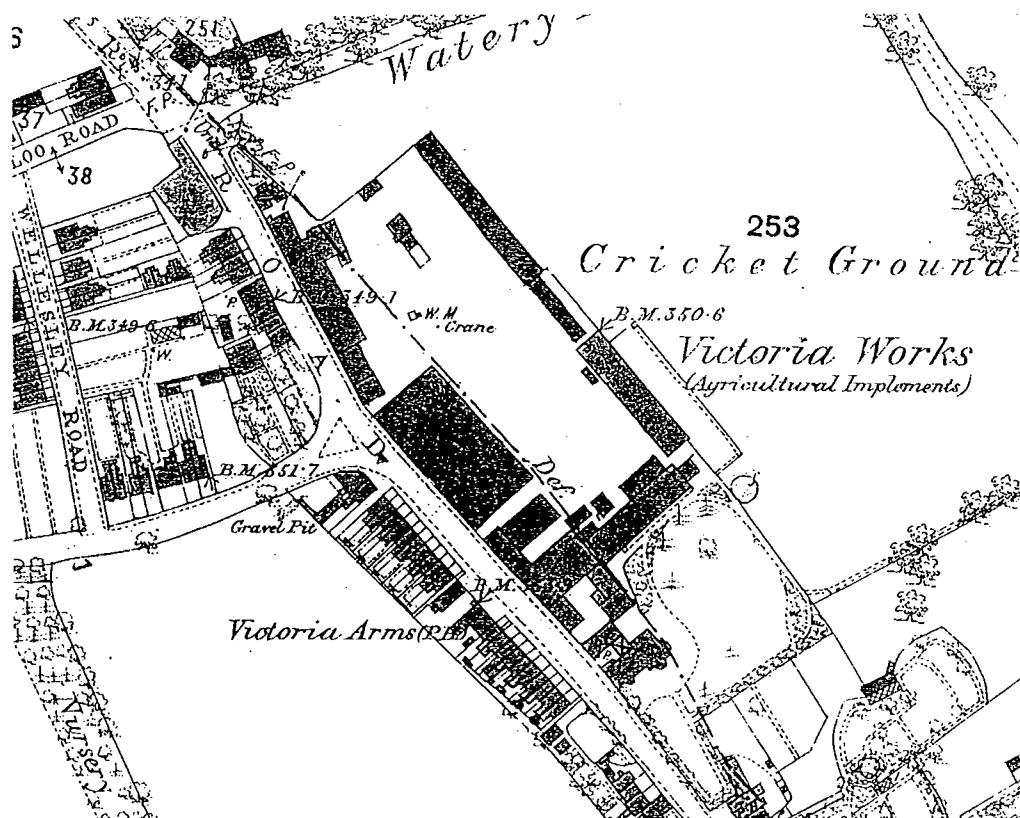
**GRADING**      \*

Booker, J. 1974 *Essex and the Industrial Revolution* (Essex County Council) 1-23



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OS Scale 25 inch Sheet 67.3 1872



The Victoria Works, Brentwood, viewed from the north-west



The Victoria Works, Brentwood, viewed from the south east  
3rd April 1997

<b>SITE NAME</b>	W.J Harmer Ltd, Iron Works, Walton-on-the-Naze		
<b>NGR</b>	TM 25752285		
<b>ESMR No.</b>	15312	<b>IRIS No.</b>	EX/FAG/AG15
<b>PARISH</b>	Walton-Le-Soken	<b>DISTRICT</b>	Tendring

**SITE DESCRIPTION** The site is located west of the junction of Hall Road and Naze Park Road, on the northern side of Walton-on-the-Naze. The foundry was established by Robert Warner, son of John Warner, an iron founder from London. It appears on the first edition Ordnance Survey map of 1874 (sheet 39.3), as three rectangular blocks arranged in series; the westernmost being the foundry. Standing beside the coast the works had its own private dock (Port Said) for the transportation of raw materials and finished products; the cut was infilled in the 1950's. A tramway was used to move heavy goods to and from the wharf, and within the foundry. Little remains of the original works due to post-war development; extant features include the manager's house, a time keeper's office surmounted by a wooden cupola and a pattern shop with rough cast concrete walls. Of the northern range only a linear single-storey building with gable ends survives, but fronting Hall Road is a large twin gable structure which post dates 1874 (the date of the first edition Ordnance Survey map extract). Ancillary buildings probably erected at the same time include the drill shop used in piano manufacture and a shot blasting shop. A new foundry, built c.1950, also survives with the cupola being located externally along the north wall; this has been demolished and the building lies derelict.

**ARCHAEOLOGICAL POTENTIAL** Only fragments of the original works remain and many of the later buildings have been converted to light industrial uses. The navigation survives as a buried feature.

**SITE SIGNIFICANCE** The only Essex foundry to be established on the coast and of major historic/technological importance being built as a large integrated complex with docking facilities and internal tramway. Much of the site has been demolished and developed; those buildings which survive are of low significance.

**CURRENT STATUS** None

**RECOMMENDED ACTION** None

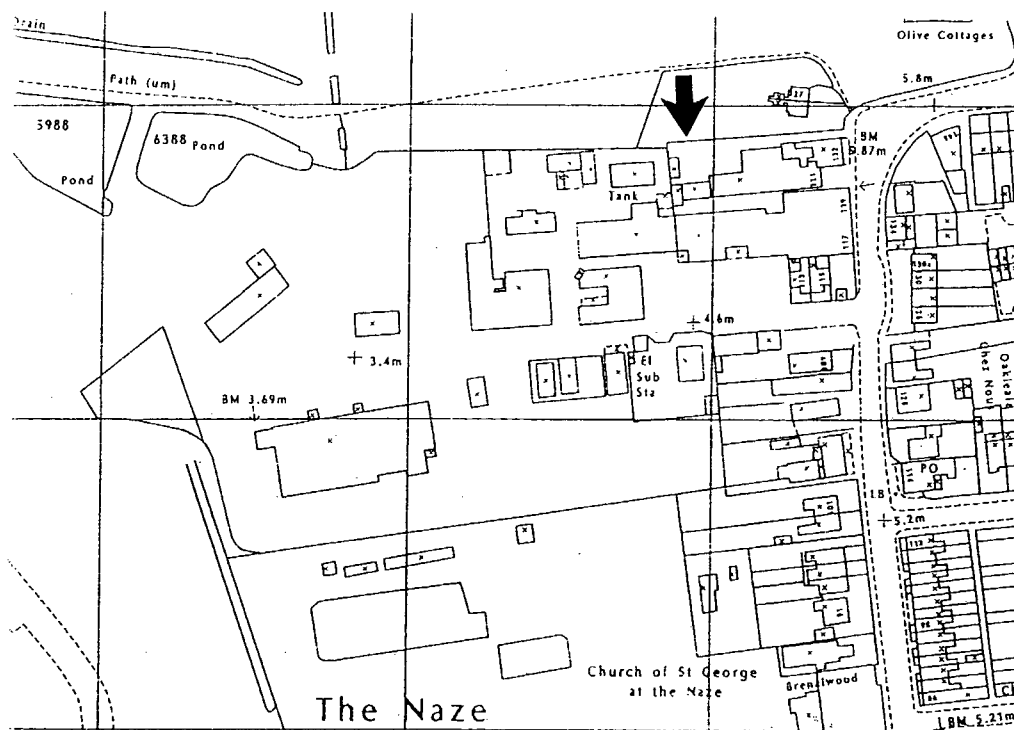
## MANAGEMENT

If threatened by major works, record RCHME level 2; this should include a block plan, detailed photography and textual synthesis. Prior to any proposed development the docking area should be evaluated and if the remains are of a sufficient quality to be preserved in situ.

## GRADING

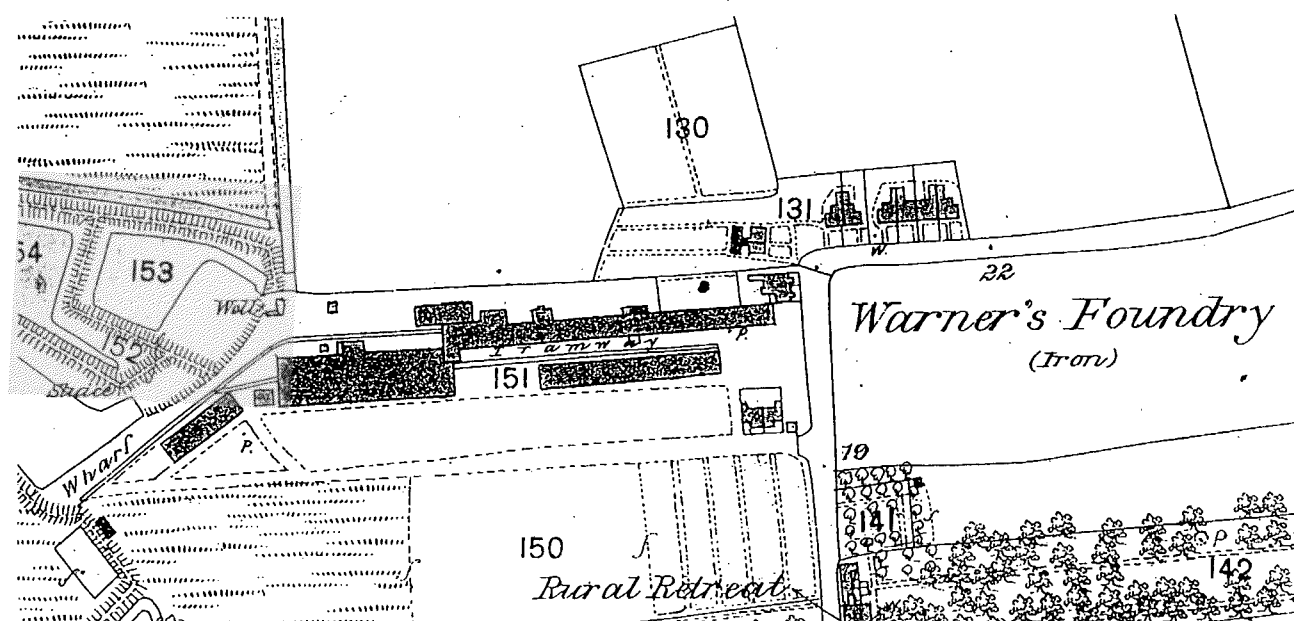
\*\*

- Booker, J. 1974 *Essex and the Industrial Revolution* (Essex County Council) 1-23  
Booker, J. 1971 Industrial Archaeology Record Card. Essex Record Office  
(Ref. T/Z 193/2, 193/8, 193/8/1, 193/8/2, 193/8/3, 193/8/4, 193/8/5)



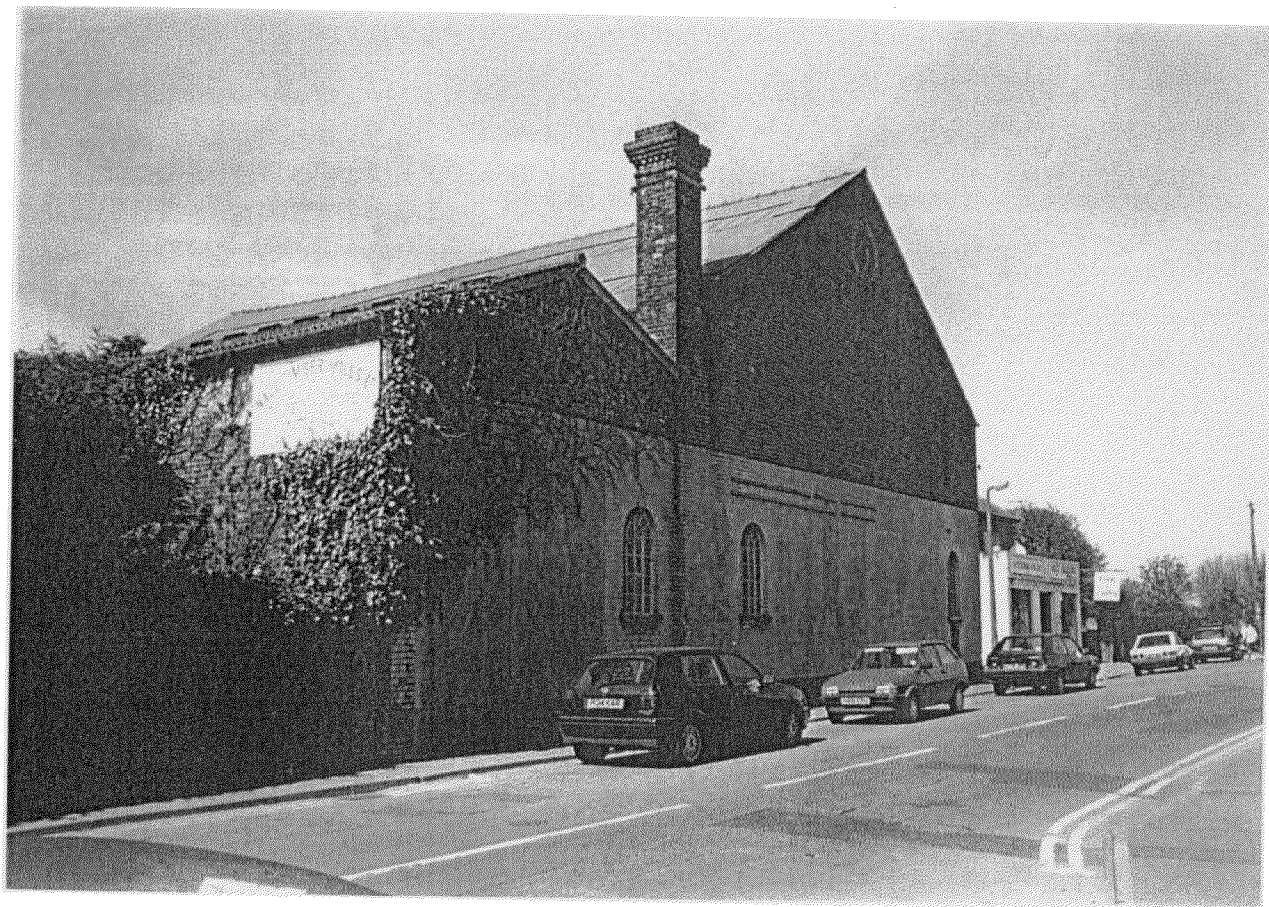
OS Scale 1:2500 TM 2522 1994

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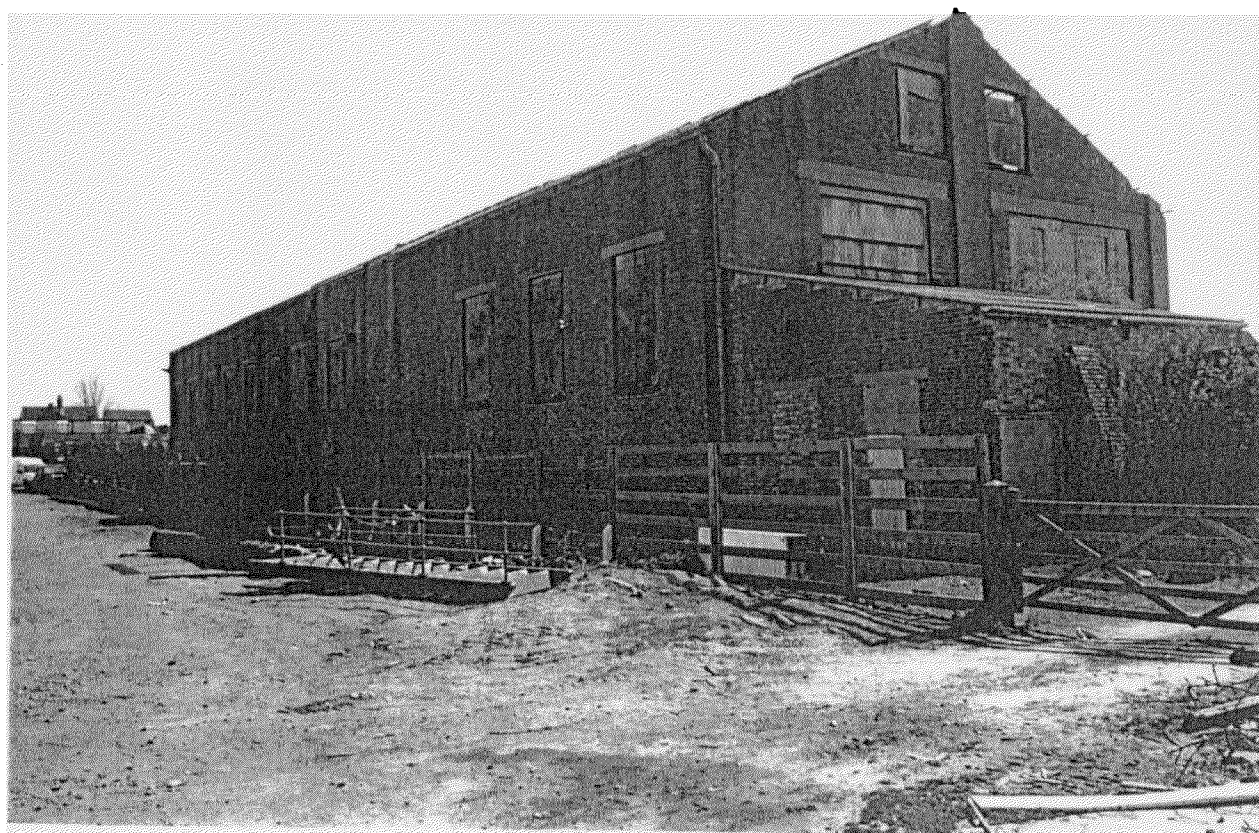


OS Scale 25 inch Sheet 39.3 1874





Part of Harmer's Foundry fronting onto Hall Road, Walton-on-Naze, viewed from the south-east



The 'New foundry', viewed from the north-west

<b>SITE NAME.</b>	Johnson's Iron Foundry, Church Street, Saffron Walden		
<b>NGR</b>	TL 53853863		
<b>ESMR No.</b>	15313	<b>IRIS No</b>	EX/FAG/AG16
<b>PARISH</b>	Saffron Walden	<b>DISTRICT</b>	Uttlesford

**SITE DESCRIPTION** W. Rider established an iron foundry in Church Street and was joined in 1848 by Thomas Johnson, who soon became sole proprietor. The works was one of three iron foundries that were operating in the town during the nineteenth century. Its demise was brought about by the arrival of the railway and the creation of the Railway Foundry in Station Road (ESMR No. 15068). The surviving buildings have all been converted to residential uses and include a three-storey warehouse(?), a two-storey flint-rendered structure with a square headed courtyard arch and a building of unknown function. Three grade II listed nineteenth-century timber-framed dwellings (Nos. 1-3 Johnsons Yard) may have formed part of the complex serving as managers' and/or workers' dwellings.

**ARCHAEOLOGICAL POTENTIAL** Slight. The buildings have been converted and retain no technological information.

**SITE SIGNIFICANCE** Of the three iron foundries in Saffron Walden this is the only example with standing remains.

**CURRENT STATUS** Forms part of the Saffron Walden Conservation Area.

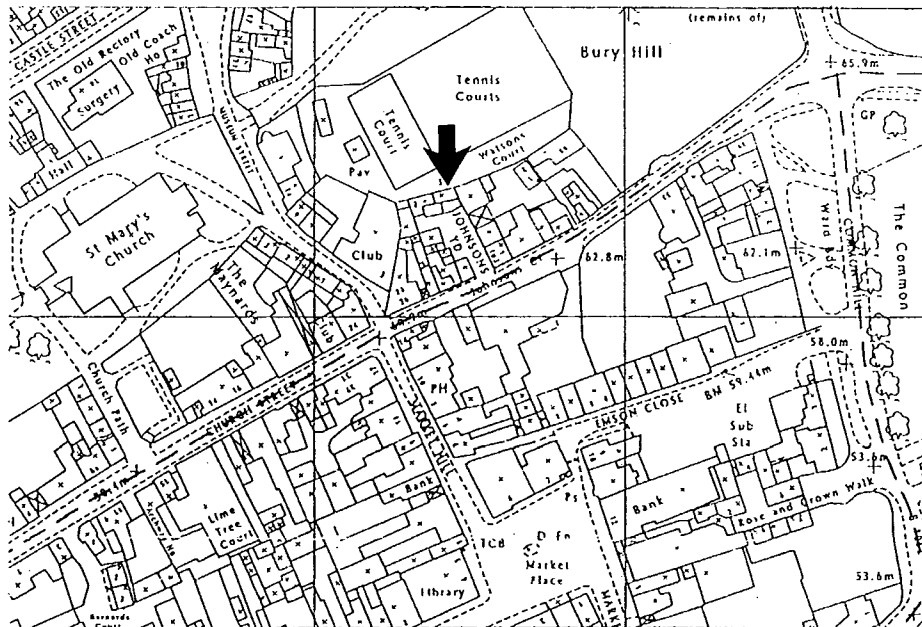
**RECOMMENDED ACTION** None

**MANAGEMENT** None. The buildings are currently well maintained.

**GRADING** \*

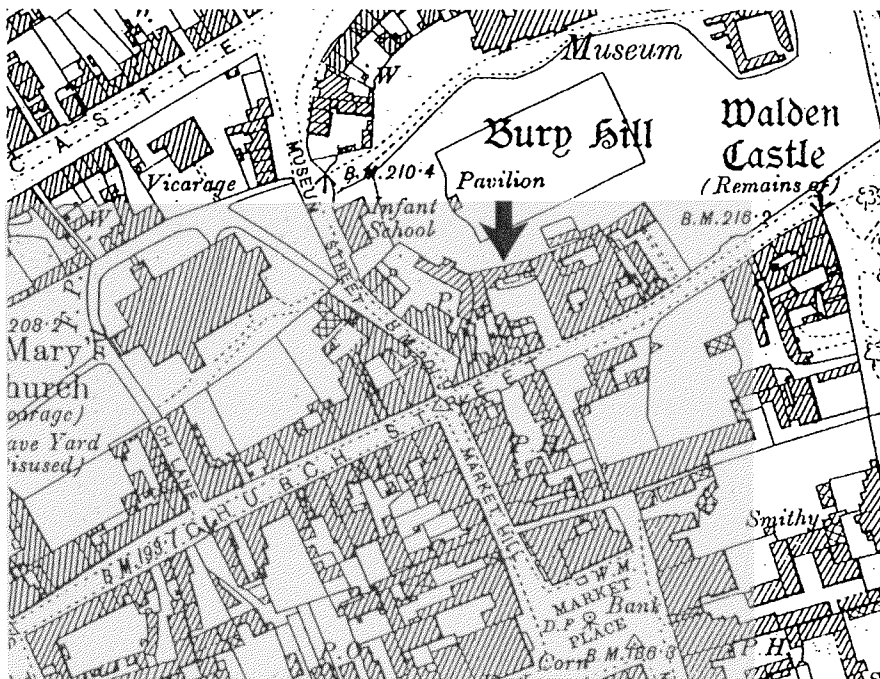
Booker, J. 1974 *Essex and the Industrial Revolution* (Essex County Council) 1-23



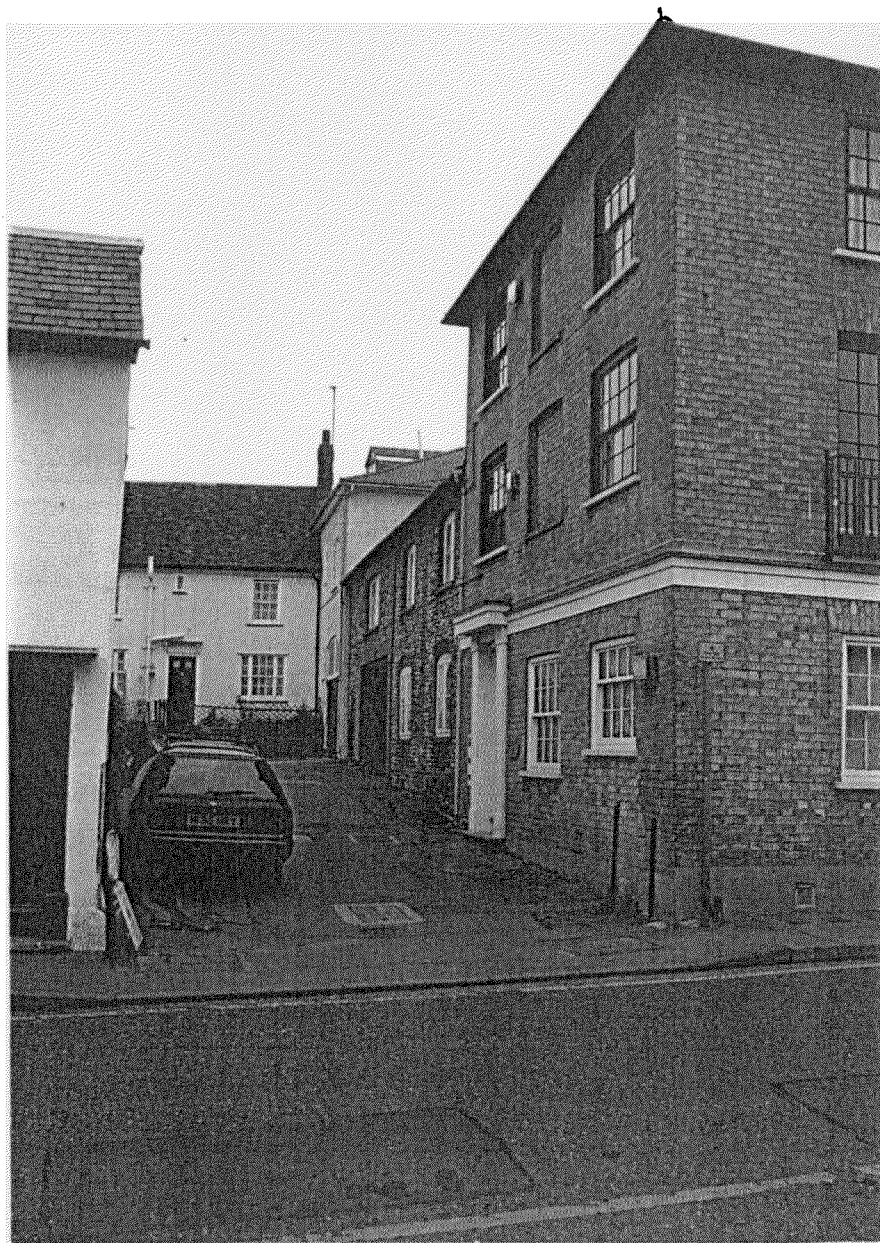


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OS Scale 1:2500 TL 5338 1995



OS Scale 25 inch Sheet 9.1 1897



Johnsons Yard, Saffron Walden, viewed from the south  
18th April 1997

<b>SITE NAME.</b>	Beckingham Foundry, Tolleshunt Major		
<b>NGR</b>	TL 89131246		
<b>ESMR No.</b>	15314	<b>IRIS No.</b>	EX/FAG/AG17
<b>PARISH</b>	Tolleshunt Major	<b>DISTRICT</b>	Maldon

**SITE DESCRIPTION**      The Beckingham Iron and Brass Foundry, was established by the Belsham family in c.1870. Having appeared on the first edition Ordnance Survey map of 1872 (sheet 45), the works had closed by 1914. The present building, which is currently used for storage, was rebuilt on the original ground plan of the foundry, in the mid-1970s, using recovered bricks from the works. Two cottages (Foundry Cottages) located immediately to the west have also been demolished.

**ARCHAEOLOGICAL POTENTIAL**    None; demolished and re-developed.

**SITE SIGNIFICANCE**                      None

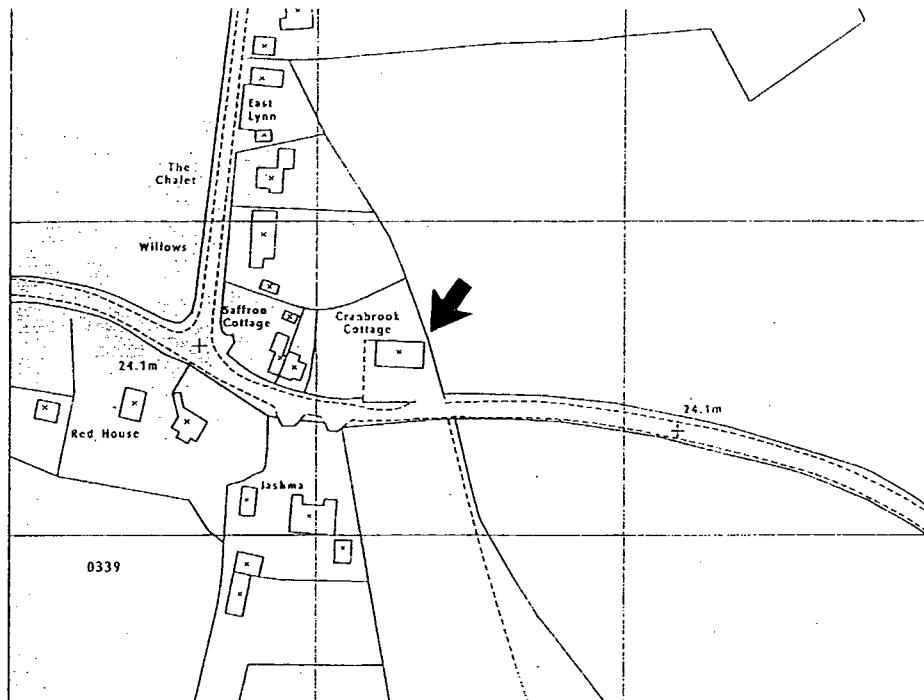
**CURRENT STATUS**                              None

**RECOMMENDED ACTION**                      None

**MANAGEMENT**                                      None

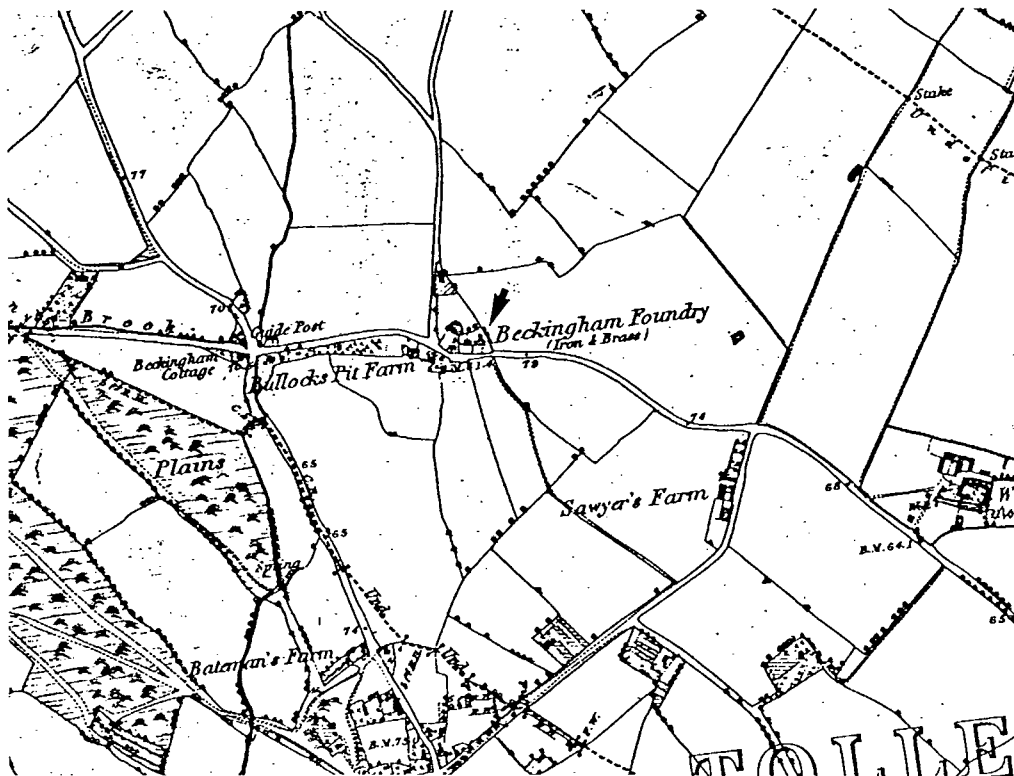
**GRADING**    0

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OS Scale 1:2500 TL8912 1990



OS Scale 6 inch Sheet 45 1880



The Beckingham Foundry (rebuilt), viewed from the south-east  
1st May 1997

<b>SITE NAME.</b>	Bewley Foundry, Chelmsford		
<b>NGR</b>	TL 709071		
<b>ESMR No.</b>	15315	<b>IRIS No</b>	EX/FAG/AG18
<b>PARISH</b>	Chelmsford	<b>DISTRICT</b>	Chelmsford

**SITE DESCRIPTION**      The Bewley Iron Foundry was established by John Bewley, in New Street by 1809. Upon his death in c.1833 the business was passed to his son, Thomas Bewley and by 1856 the foundry was taken over by G.Wood and Son. The site was still in operation up until the latter part of the nineteenth century, appearing on the first edition 25-inch Ordnance Survey map of 1874 (sheet 52.4). The original site has been demolished and is currently occupied by the modern buildings of the Essex Police Force.

**ARCHAEOLOGICAL POTENTIAL**   None. Demolished and developed.

**SITE SIGNIFICANCE**                      One of the four foundries in the Chelmsford area, of which none survive (ESMR Nos. 15038, 15309, 15316).

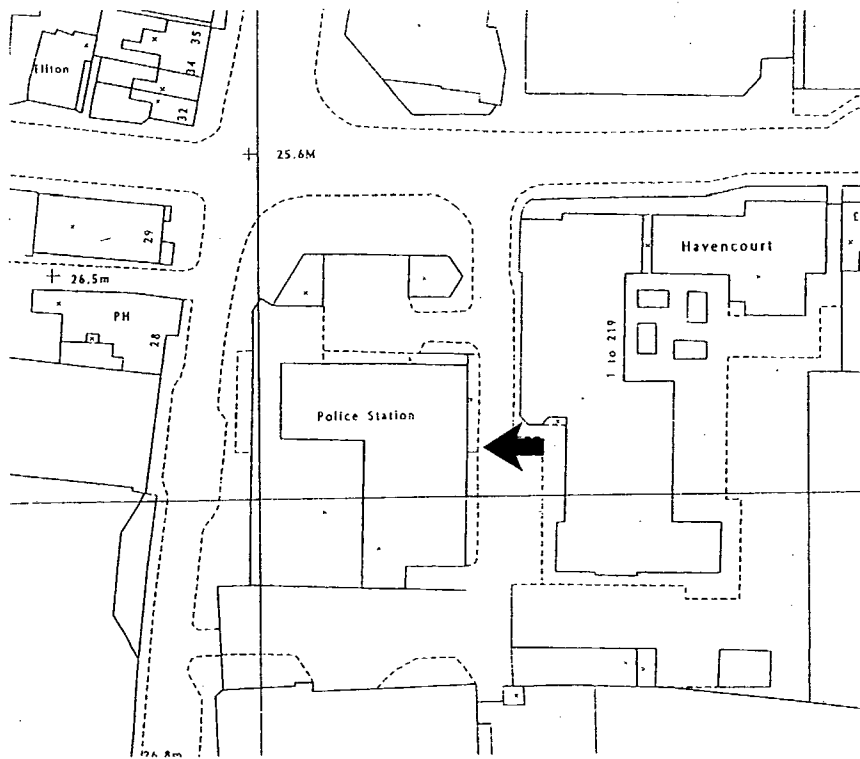
**CURRENT STATUS**                              None

**RECOMMENDED ACTION**                      None

**MANAGEMENT**                                      None

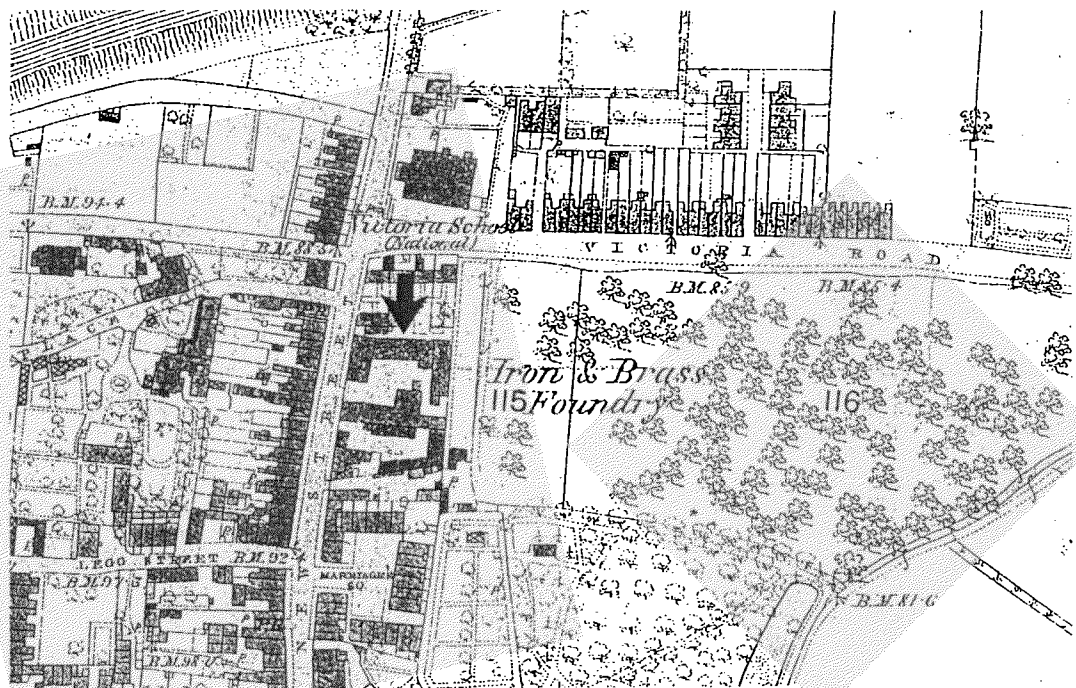
**GRADING**    0

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OS Scale 1:1250 TL 7007 1994



OS Scale 25 inch Sheet 52.4 1874

**SITE NAME.** Broomfield Road Iron Works, Chelmsford

**NGR** TL 703080

**ESMR No.** 15316 **IRIS No** EX/FAG/AG19

**PARISH** Chelmsford **DISTRICT** Chelmsford

**SITE DESCRIPTION** The Broomfield Road Iron Works was founded by Christy and Norris by 1886. Lying to the west of Broomfield Road the foundry appears on the second edition Ordnance Survey map of 1897 (sheet 52.4). The original foundry has been completely demolished and the site re-developed as a housing estate.

**ARCHAEOLOGICAL POTENTIAL** None. Demolished and re-developed.

**SITE SIGNIFICANCE** None. One of four foundries to be established in the Chelmsford are of which none survive (ESMR Nos. 15038, 15309, 15315).

**CURRENT STATUS** None

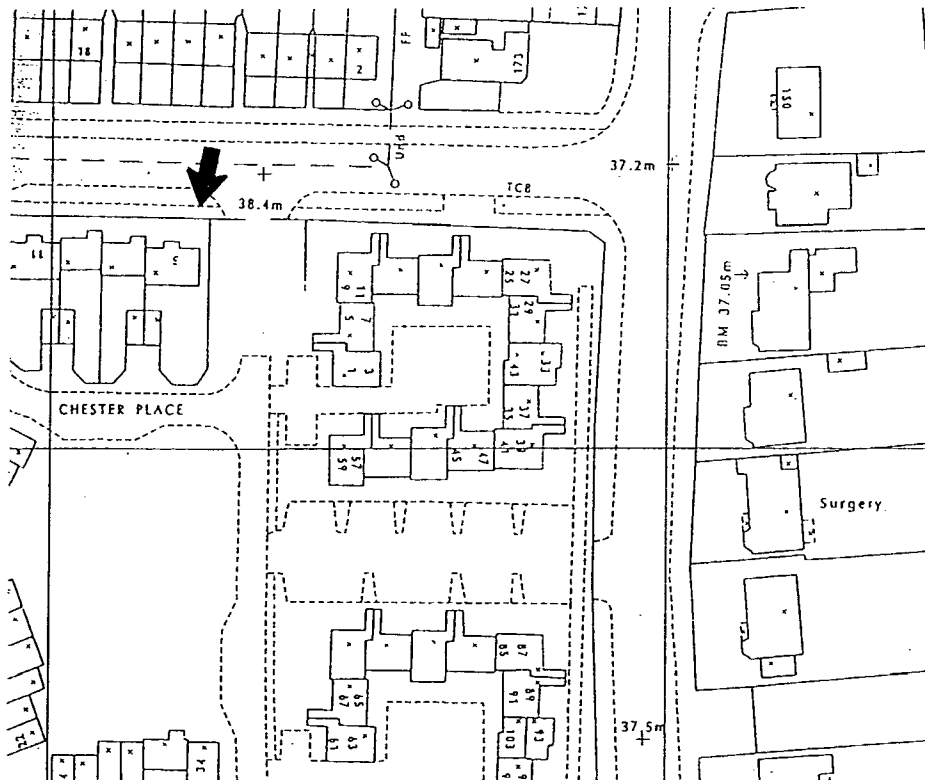
**RECOMMENDED ACTION** None

**MANAGEMENT** None

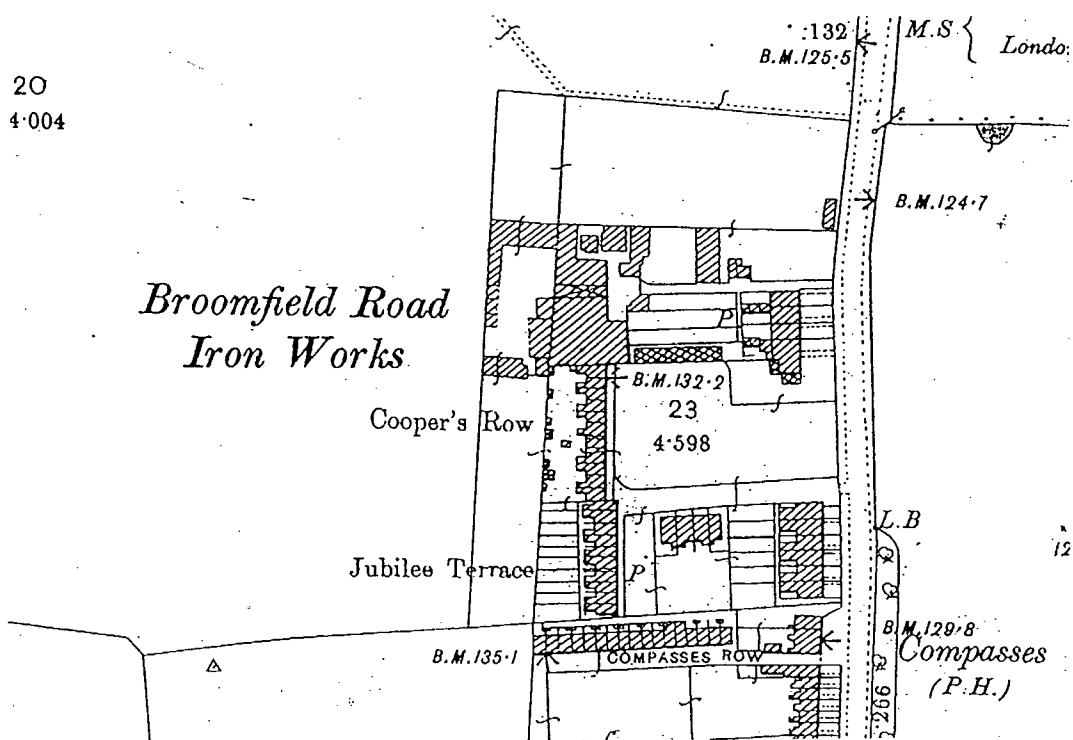
**GRADING** 0

Booker, J. 1974 *Essex and the Industrial Revolution* (Essex County Council) 1-23





OS Scale 1:1250 TL 7008 SW 1994



OS Scale 25 inch Sheet 52.4 1897

## **Appendix I: Sites not Located**

Appendix I comprises a list of 4 foundries that could not be identified from the available cartographic evidence. They generally comprise short-lived early 19th century foundries, who were out of business by the compilation date of the Tithe map. They include:

- **J.W Coleman** (father of R.Coleman of Coleman and Morton, Chelmsford)  
Established in Head Street, Colchester in 1820
- The Chelmer Foundry, Springfield Basin. Founded by **John Richmond** by 1828 but redundant by 1839
- Iron foundry in Mill Lane, Saffron Walden. Established by **R. Rickard** in 1821.
- Iron foundry established in 1833 in Broad Street Green, Heybridge by **J.Warren**. Warren later moves to the causeway to set up the Maldon Ironworks in 1853

## Appendix 2: Smithies and Forges

A 10% sample of smithies and forges in Essex, identified from both cartographic sources and the Historic Buildings Register of the Essex County Council Planning Department.

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3 Smithy south of and adjoining Forge Cottage, Whalebone Lane (Whalebone Corner) Langham	TM0333 25/14	c. 19th (early)	2
4 Old Forge Garage, High Road, Layer De La Haye	TL92 SE 12/33	c.18th	2
5 Forge, Church Road, Peldon	TL98631637	c.19th	2
6 The Forge, Harlow Road, Roydon	TL 40 NW 3/27	c.17th	2
7 Ballards Gore, Creeksea Road, Stambridge	TQ 99 SW 7/288	c.1820	2
8 No. 56 Forge Cottage (formerly known as Old Forge Cafe) High Street (south side), Manningtree.	TM 1031	c. 18th	2
9 Forge in front of No. 30, Church End (S. side), Great Dunmow.	TL 6322 7/29	c.18/19 th	2
10 Forge Cottage, Duck End, Stebbing	TL 62 NE 2/343	c. 17th	2
11 Workshop, formerly smithy, High Street (east side), Bradwell-on-sea.	TM 0006	c.18th	2
12 Ashen (smithy)	TL747423		
13 Wickford (smithy)	TQ745928		
14 Castle Hedingham (smithy)	TL785355		
15 Radwinter (smithy)	TL61183774		
16 Howletts End (smithy)	TL58373480		
17 Bradfield (smithy)	TM14363050		

Site Location	NGR
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19 Bocking, Church Street (forge)	TL75902580
20 Panfield	TL73662498
21 Bocking (forge, still there)	TL76152422
22 Blackwater (forge)	TL80632313
23 Fordham Hall (forge)	TL92822843
24 Fordstreet (forge)	TL92002704
25 West Bergholt Heath (forge)	TL95892733
26 Lexden (forge)	TL96402504
27 Copford Place (forge)	TL93182401
28 Copford Place (forge)	TL93312404
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31 Bottle End (forge)	TL97082318
32 Gore Pit (forge)	TL87221967
33 Black Heath (forge)	TM00332200
34 Cock Green (smithy)	TL43490856
35 Tilegate Green (smithy)	TL51280870
36 Maldon (forge)	TL85440635
37 ? forge (Mosklyns)	TL82870318
38 Mundon Hill (forge)	TL86920278

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43 Dunton Wayletts (smithy)	TQ65649096
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45 Eastend (forge)	TQ94589213
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