

Excavations for foundations of an external lift tower at Loughton Hall, Loughton, Essex. June 2009.



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The location of Loughton Hall as shown on Google Earth 2009.

Loughton Hall is located to the west of Rectory Lane in Loughton, Essex. TQ49NW. The building is reached by a tarmac drive from the lane.

The excavation was centred on grid ref. 297850.77m E, 5725982.73m N on the westernmost wall of the building.

Loughton Hall is a Listed Building registered on Images of England - Number: 118638  
TQ 49 NW LOUGHTON RECTORY LANE, 1/39 Loughton Hall GV II



Aerial photo of Loughton Hall from Google earth 2009.

### **General Description.**

Loughton Hall is a substantial brick built house of 1878. It was designed for Henry Maitland by the renowned architect Eden Nesfield. The Listing describes it comprehensively as follows:

TQ 49 NW LOUGHTON RECTORY LANE, 1/39 Loughton Hall GV II Large house, 1878, by Eden Nesfield, now a college.

Red brickwork, some plaster, roofed with red clay tiles. In Jacobean style with some classical detail on the SE (garden) elevation.

Aligned approx. NE-SW, aspect NW, with 5 chimney stacks irregularly disposed, single-storey service wing to NE and N.

2 small flat-roofed single-storey extensions to SW, C20. 3 storeys.

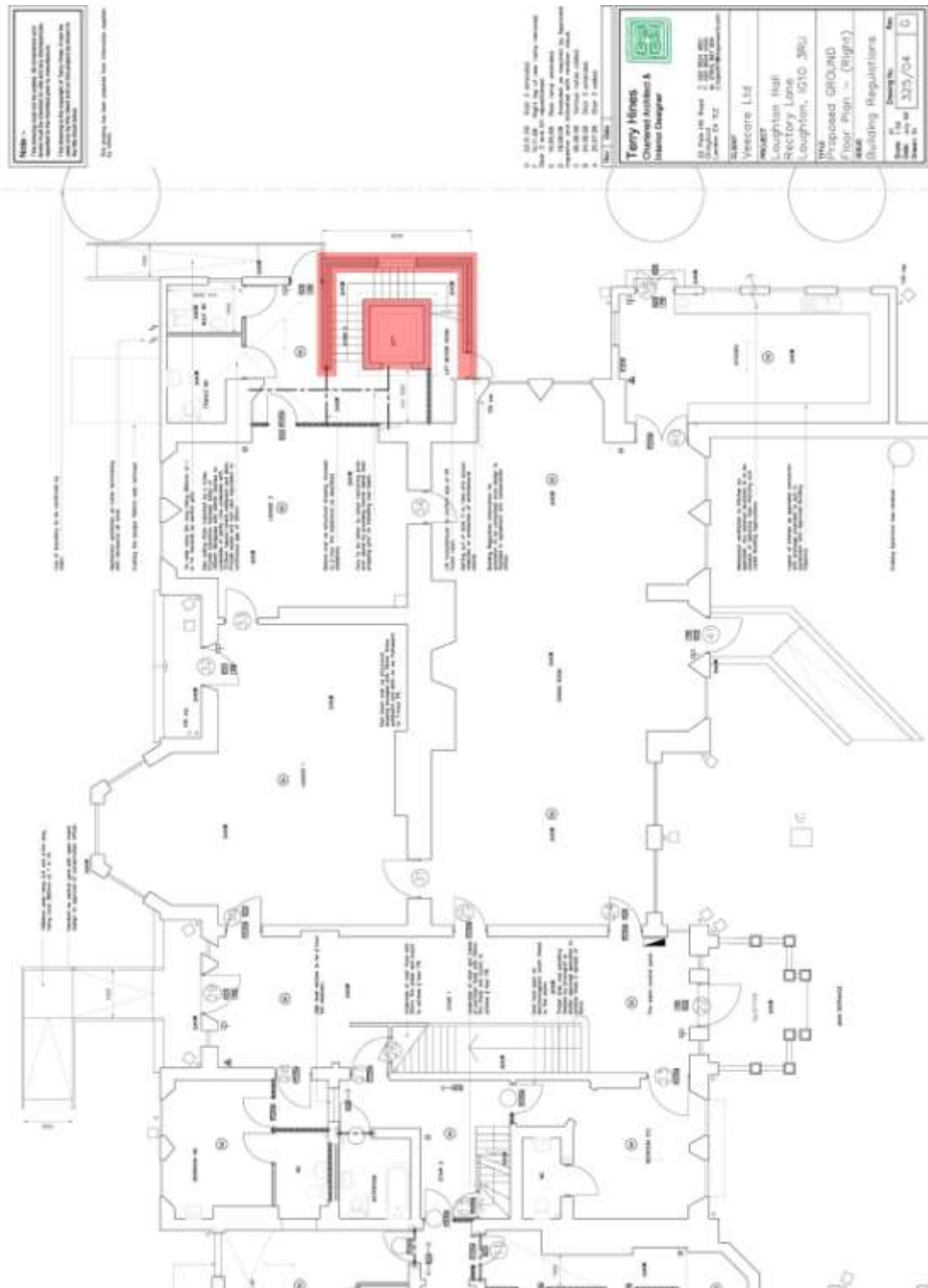
NW elevation, 2 gabled bays, the entrance in the NW bay. Jacobean style door in flat-roofed porch with 8.Ionic columns, fluted above the mid-point, stone balustrade between them, wooden balustrade above. One 3-panel door, 3 double- hung sash windows of 18 lights and 2 casement windows, all below segmental arches with egg-and-dart border.

First floor, 2 large windows of Ipswich derivation, 6 casement windows with flat brick arches.

Attic floor, central dormer of Venetian derivation, 2 flat-roofed dormers with casement windows.



Chimney stacks of oblong form with canted bricks in the short side.  
Octagonal bellcote on ridge, off-centre, with leaded sides and ogival lead roof.  
The date 1878 and the letter 'M' (for Maitland) in moulded brick in some window arches.  
Similar in style to Norman Shaw's Chigwell Hall, Chigwell. (See Pevsner, Essex, p.288).  
Further details are given in Appendix 1.



Plan showing the area of excavation against the SW wall of the original building. (T.HINES).

The current works for which the excavations were recorded were positioned against the SW elevation and required the demolition of part of the southernmost C20th flat-roofed extension to build a two storey tower to house a lift.



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The SW elevation showing the original entrance and windows and the inserted 1970's steelwork.

The lower part of the elevation originally consisted of a centrally placed recessed doorway with a gauged decorative brick roman arch flanked by two pairs of deep Georgian style 9/9 horned sash windows with gauged arched lintels with central moulded brick keystones with the date 1878 and the letter M.

Sometime in the 1970's (in an act of architectural vandalism) the southern pair of windows was removed and a pair of steel lintels placed in the opening to provide entrance into a single storey contemporary flat-roofed extension.



Detail of the cavity wall of the 1970's extension and close up of lbstock bricks.

This was constructed on concrete foundations deep in the ground with a fletton brick sub-structure below ground and a Celcon block and Ibstock brick faced cavity wall. The skins being tied together with butterfly ties of galvanised wire. At the same time a large brick and concrete drain chamber was built in the floor plan to serve the toilets.

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Brick and concrete foul water inspection chamber shown partly demolished.

### **The Excavation.**

### **Methodology.**

The flat-roofed building was partly removed by cutting through the cavity wall and the ceiling panels and demolishing the building to the north. The excavation was undertaken by five strong labourers using pick and shovels under the supervision of the site owner Mr Baldev Sohal and archaeologist Barry Hillman-Crouch. The spoil was inspected visually and also sorted by hand for large pieces of stone and brick before being removed from site.

The concrete inspection chamber was removed using a Kango hammer. The fletton substructure was broken through with sledge hammers where it crossed the line of the new foundation trench.

The sections and surfaces were cleaned by Barry Hillman-Crouch using a trowel and photographed. The site was drawn in plan and a general section made across the site. The



highly disturbed nature of the site meant that other sections were not diagnostic. Levels were taken in respect to the floor of the house.

### Excavation Size and Timescale.

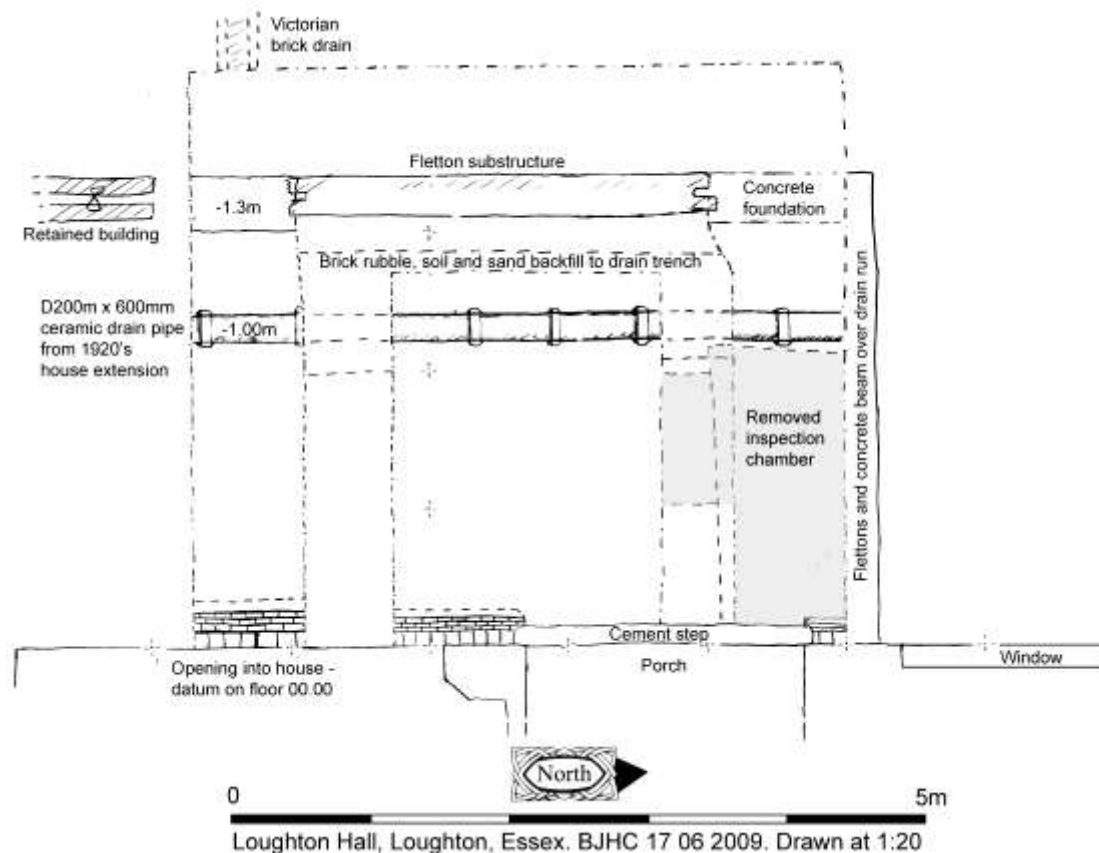
The excavation comprised of a C shaped trench with a central pit to house the base of the lift shaft. The C shaped trench was 4.7m N-S with arms of length 4.2m to reach the house. The trenches were dug to a depth of 1.2m from the present surface level (1.55m from the floor level of the house). This brought it onto the top of the natural grey clay into which the concrete foundations for the previous 1970's extension were cut. On top of these foundations was a fletton built cavity wall substructure to ground level. There was also a considerable inspection chamber for the foul water which was removed.

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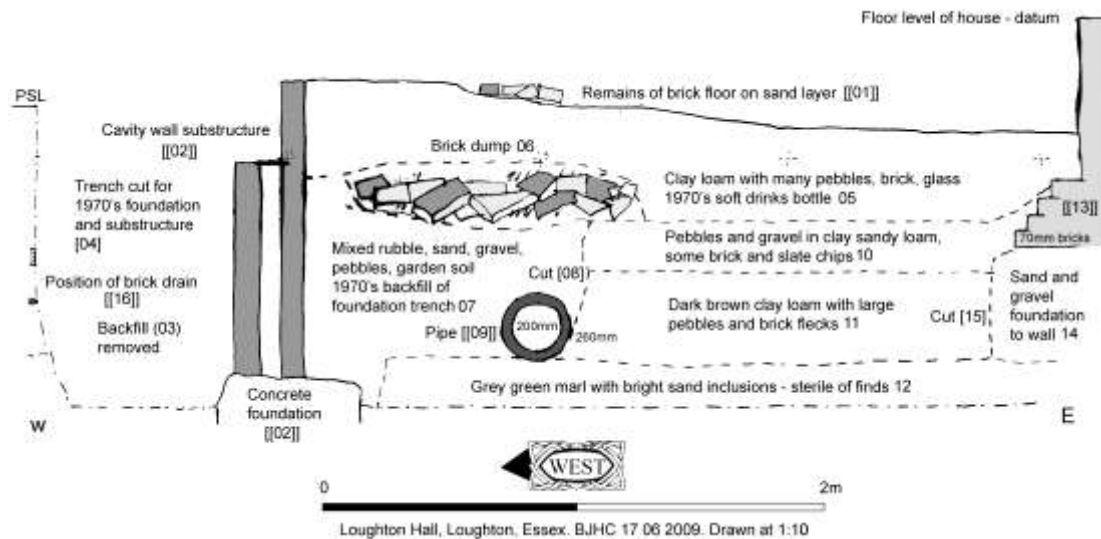
The central pit measured 2.0m N-S by 2.7m and was dug to a depth of 1.2m from the present surface level. (1.55m from the floor level of the house).

The excavation was begun on Tuesday the 9<sup>th</sup> of June when most of the trenching was completed. The work was then suspended due to torrential rain and completed on Wednesday 17<sup>th</sup> of June when the site recording was also completed.

### Excavation Sequence.



Plan of the excavations at Loughton Hall.



Section through the excavations at Loughton Hall.

### Inside the 1970's extension.

The 1970's extension was demolished down to ground level and the concrete floor [[01]] removed. This appeared to consist of flettons laid on a building sand raft and then covered with poured concrete. Within the confines of the extension there was then a thick layer of redeposited mixed soils, gravel, sand and building rubble 05 including bricks obviously removed from the main house when breaking through. Contained in the soil was a corroded can of Corona Cola and a perfectly preserved 1970's glass pop bottle with a screw top bearing the legend 'Deposit charged on bottle'. There was also much window glass presumably from the demolition of the two Victorian windows.



Tinned metal Corona can and glass bottle from the 1970's.

Beneath this layer of levelling was a long band of brick rubble 06 dumped into the top of a trench [08] which had been cut right to the base of the fletton substructure [[02]]. The trench was to allow the bricklayers access to the inside of the fletton wall because where visible it was fair-faced on both sides. The trench was subsequently backfilled with a similar mixture of redeposited soils, rubble, sand and gravel 07 to that used for levelling.



Foundation trenches revealed disturbed drainage trench with ceramic pipe.

However the trench cut the backfill for an earlier service trench containing a 200mm ID ceramic rainwater pipe [[09]] running parallel to the main building and 2.2m from it. To the north, a downpipe from a small extension built in the 1920's showed the source of the rainwater. At the point where the section was drawn all the original backfill of the drain trench had been removed for the 1970's work. The ceramic pipe passed under and was not connected to the concrete inspection chamber which was part of the 1970's floor structure [[01]].

The cut for the drain trench passed through three distinct layers. The upper one 10, sealed by the 1970's overburden was 200mm deep, resembled garden soil and contained pebbles and gravel in a sandy clay loam mix. There were also brick and slate fragments. Below this was a more dense 350mm deep layer 11 of dark brown clay loam subsoil containing large pebbles and some fine brick flecks brought down by plant action. This lay on a layer of clay marl 12 with some bright sand inclusions which was sterile of finds and was the level at which the 1970's foundations had been cut from.





Section beneath the porch step showing the foundation trench cutting the earlier layers. Bricks are 70mm thick for scale.

Beneath the house itself the foundations consisted of a dense layer of sand and gravel (14) 450mm deep set in a trench [15] cut from within the layer of subsoil and resting on top of the clay marl. The brickwork [[13]] was laid to form a stepped pressure base to spread the load. The variously fired bricks were of the same size, 70 x 110 x 220mm as the facing bricks but of a poorer rough finish. There was no foundation beneath the porch so the section there also illustrated the stratigraphic sequence. The stone step [[17]] was laid on a bed of crushed brick bonded with lime mortar 18 up to 400mm deep.



Densely packed modern trench backfill prior to removal in the NW corner of the site. Looking N.

#### **Outside the 1970's extension.**

External to the 1970's extension was a broad foundation trench [04] evidently opened to allow the brickwork for the fletton substructure [[02]] to be put in place. This was filled with a compacted mixture (03) of redeposited soils, brick rubble, sand, gravel and building waste. There were also some more soft drinks bottles and metal ring pull cans. From within the matrix was recovered a 1961 threepenny bit. One of the monogrammed window keystones was also recovered from here.

The trench had been dug down to a layer of grey marl 12 into which the cut for the concrete foundations had been made. This layer was also visible in the base of the interior of the building running under the house foundations.





Victorian brick drain discovered in the western section of the excavation.

The section that was created to the west side was completely uniform being the redeposited mix of soils for the backfilled trench but there remained part of a brick built rainwater drain which must have previously served the Victorian drain system from the side of the house. The bricks were the type used in the foundations and the base was lined with peg tile.

### **Phasing and Discussion.**

There are essential three major phases of construction represented in the excavation, that of the house, the ceramic drain and the 1970's extension. As such only two layers definitely predate the construction of the house, and these are the sub-soil 11 and the sterile clay 12 beneath. No finds were recovered from either layer.

### **C19th House Construction.**

This phase is represented by the sand and gravel foundation (14), [15] that was cut into the subsoil 11 and down onto the solid clay 12. Only 450mm deep it was considered sufficient to support the great bulk of the house above it. The brick base of the wall was stepped out over four courses to provide a pressure base to spread the load. Topsoil was later placed against the brickwork, no doubt to provide flower beds either side of the garden porch.

No foundation was dug beneath the porch and a rubble and mortar mix 18 was poured in to support the stone rear step [[17]].



A brick rainwater drain [[16]] was dug into the top of the subsoil 11 and buried in the garden soil 10. It must have served a down pipe running between the two windows that were subsequently removed as part of the 1970's works.

### **C20th Drainage.**

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A substantial trench was dug at least 600mm deep to house a 200mm inside diameter ceramic sectional pipe to run rainwater from a small extension built on the side of Loughton Hall in the 1920's. The trench was re-excavated in the 1970's removing most of the backfill.

### **1970's Extension.**

The building was extended by removing two of the beautiful 1878 windows and adding a flat-roofed, cavity walled construction sometime in the 1970's. Foundations [08] were cut from the present surface level right down into the grey marl and filled with concrete. A fletton brick substructure [[02]] was then built inside the construction trench and the void backfilled with redeposited soils and building rubble 07. Bricks 06 were dumped on top of this and a layer of over-site 05 deposited to level for the construction of a concrete floor [[01]]. At the same time a concrete inspection chamber was put in position in the floor for the foul water from the toilets on the first floor.

Amongst the modern finds in the trenches were drinks cans and soft drinks bottles as well as a 3d coin. Following decimalisation, the brass threepence ceased to be legal tender after 31 August 1971.

**FIN.**

## Appendix 1.

Loughton Hall has had a fascinating history. [Mary Tudor](#) was its owner two months before she became queen in 1553. In 1578 it passed to the Wroth family, who were prominent in public and court life; they held it until 1738. Lady [Mary Wroth](#) (1586-c1652) of Loughton Hall was a member of a glittering Jacobean literary circle and her book *Urania* was the first full-length novel to be written by an English woman. The 16th Century house, visited by James I, [Anne of Denmark](#), [Ben Jonson](#) and Sir [Robert Sidney](#), the younger brother of [Sir Philip Sidney](#) and the father of Mary. Sir Philip died some months before [Mary Wroth](#) was born. He therefore never visited Loughton Hall.

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The original Loughton Hall burnt down in a spectacular fire in 1836, to be replaced by the present building, which the Reverend J. W. Maitland had built in 1878. The Maitland family held the manor for much of the 19th century, and dominated parish life. As major landowners, they were bound up with the controversy over the future of the Forest.

In 1944 the house and estate were sold to the London County Council. A London County Council estate was built on the land, which surprisingly was called the Debden estate rather than the Loughton Hall estate, and the house was given over to community use.

- Pewsey, S (1995), Chigwell and Loughton: A Pictorial History
- Pewsey, S (1996), Chigwell & Loughton in Old Picture Postcards
- Pond, Chris (2003), The Buildings of Loughton and notable people of the town

Wikipedia.

The present Loughton Hall, which stands in the middle of the Debden housing estate and is used as a community centre (in 1956), is a large red-brick mansion erected by the Revd. J. W. Maitland in 1878. (fn. 42) It was built on the site of an earlier house which was burnt down in 1836. The old house probably incorporated parts of a timber manor house of the 16th century or earlier. In 1602, during the tenancy of the first Sir Robert Wroth, the Commissioners of the Duchy of Lancaster made a report on the condition of the house. (fn. 43)

This indicates a typical medieval or 16th-century establishment with many ancillary buildings including a detached gatehouse. It was then in poor repair, which suggests that it was already of considerable age. A large proportion of the estimated cost of repair was for carpentry and the quoted sum of £100 specifically excluded the value of 70 trees to be had from the manor. This makes it clear that the house was of timber and was to be restored in the same material.

In 1612 a new survey was made. (fn. 44) The accommodation, apart from outbuildings, now included a hall, buttery, kitchen, larder, bakehouse, pastryhouse, milkhouse, and wash-house, together with 'eight other lodgings with faire lodginge and greate roomes over the said roomes new built and redified at the chardgs of Sir Robert Wroth, the now farmer thereof'. The obligation of entertaining royalty and the higher standard of comfort demanded by the times had evidently induced the second Sir Robert to increase the number and size of the reception rooms. There is some evidence that further improvements were

put in hand when the manor had at last been acquired by the Wroths in 1613: in 1630 it was stated that Sir Robert Wroth 'about sixteene yeres past' had built some part of Loughton Hall upon an old foundation. (fn. 45) The date on the front of the building at the time of the fire is said to have been 1616. (fn. 46) It seems possible that work was in progress at Sir Robert's death in 1614 and was completed two years later.

The description of a lodge in the forest, 'a faire house built on a Hill', which occurs in Lady Wroth's *Urania*, is thought to apply to Loughton Hall at the time of her marriage. (fn. 47) It includes a reference to the Lady's Walk, an avenue of trees leading up to the house from a bridge over the river. This was cut down during the Napoleonic Wars when a high price could be obtained for timber. (fn. 48)

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No record has been found of alterations to the house between 1616 and 1825, but it cannot be assumed that none took place. The claim that parts of the interior, including a stone staircase, were designed by Inigo Jones should be taken with the usual reserve. (fn. 49) After 1825, when the house became the property of the Maitlands, over £6,000 is said to have been spent on it. On 11 December 1836 the house was burnt down. Contemporary newspaper reports stated that 50 rooms were destroyed or damaged. (fn. 50) There had been two frontages, both 162 ft. long, and one at least of these had the date 1616 on the rainwater heads. The style is said to have been Elizabethan, modernized later, and the interior was adorned with Ionic and Corinthian orders. (fn. 51)

A picture of the building shows a very curious two story front. (fn. 52) It appears to be of brick and is divided into five bays by a pilaster treatment in stone or plaster. Each pilaster consists of two tiers of coupled Doric columns supporting detached entablature blocks. The only horizontal members which are continuous across the front are a string course at the upper cornice level and the coping of the parapet. This parapet rises in the centre to form a small curvilinear gable. Each story has ten tall sash windows and the roof has gabled dormers. A central doorway with a scrolled pediment is surmounted by a niche. If this front dated from 1616 it is clear that the doors and windows were altered later. In general the features are more consistent with a date near the middle of the 17th century.

From: 'Loughton: Manors', A History of the County of Essex: Volume 4: Ongar Hundred (1956), pp. 118-121. URL: <http://www.british-history.ac.uk/report.aspx?compid=15597>  
Date accessed: 17 June 2009.

42 Architect Eden Nesfield: N. Pevsner, *Buildings of Eng. Essex*, 261.

43 *Essex Naturalist*, vii, 16.

44 *Ibid.* 18.

45 *Ibid.* 21.

46 Newspaper reports on the fire, see below.

47 E.A.T. N.S. viii, 173, quoting *Urania* ii, 297–8.

48 *Ibid.*

49 Lewis's *Topog. Dict.* 1844.

50 *Essex Naturalist*, vii, 20, quotes accts. from the *Essex Standard* and the *Essex Herald*.

51 *Ibid.*

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