

Rescue Excavations on the Old Custom House Site

Part 1:— Medieval and later

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LAST YEAR large scale rescue excavations took place on the "Old Custom House" site in Lower Thames Street. These excavations had been planned for a long time because it has always been known that the site of the original London custom house and all subsequent ones until 1814 were here; the custom house only moved to its present site next

door after this, when it was rebuilt on a vast scale. Because only limited time was available, excavation started on the site as soon as was possible; the standing warehouses were only half demolished when the first trench was opened on July 30th.

The excavation was carried out in two parts which ran concurrently. The first phase lasted for eleven

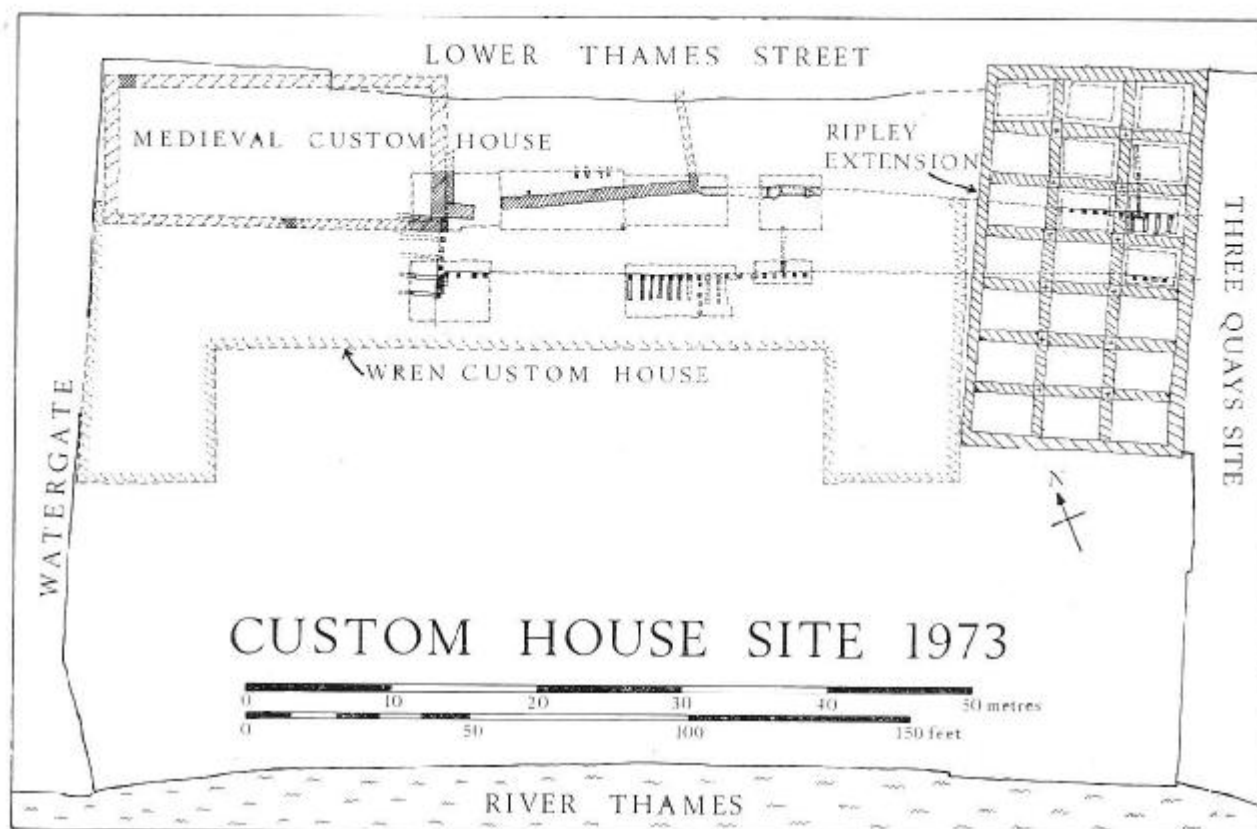
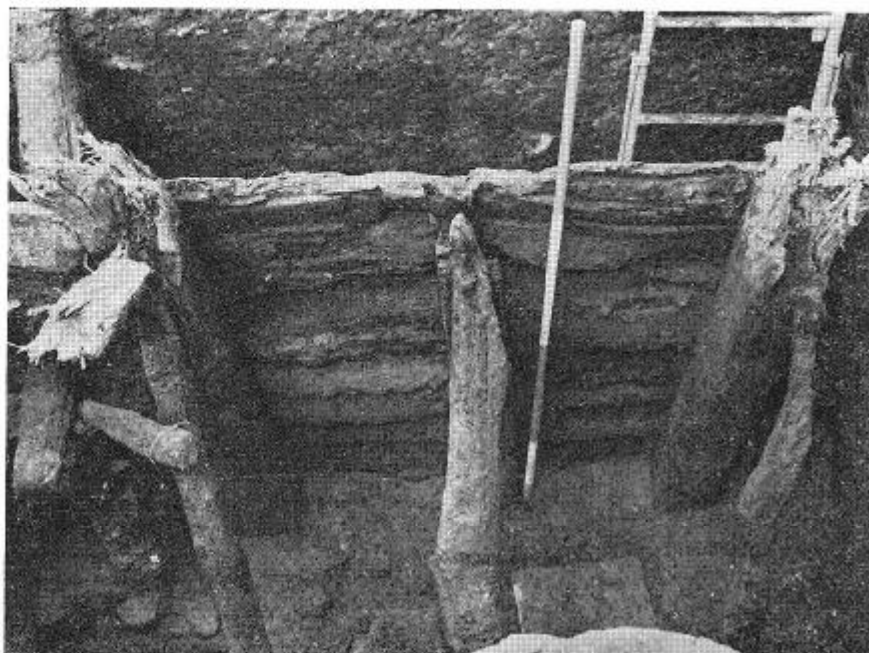


Fig. 1

Fig. 2. View of front of 13th century timber quay showing rough braces and reused planking (N.B. rivets in planks)

(Photo: G. T. Denford)



weeks and was carried out by a volunteer force of up to twenty-five people working seven days a week. The second phase started after the end of the summer vacation and lasted for five weeks. This phase was done by a small group of paid diggers and ended on 17th November when excavation had to cease to allow piling to begin.

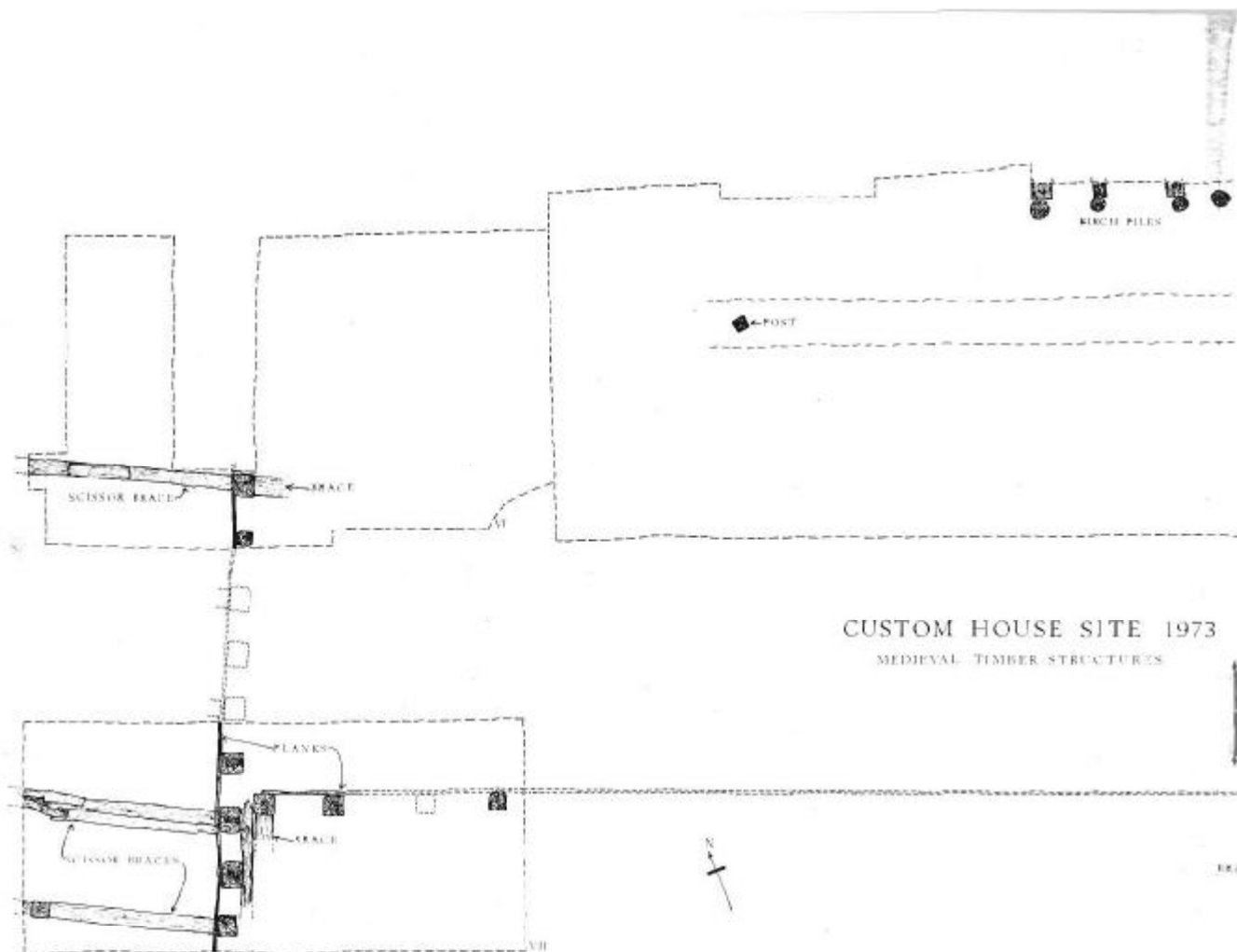
The Site (Fig. 1)

The site itself extends from Lower Thames Street on the north for 50 metres to the Thames, and westwards for 75 metres from the Water-gate (a small lane) to the "three quays" site on the east. Only another 100 metres further east is the entrance to the Tower of London. This gave a very large area (c. 0.375 hectares or just less than an acre) to be excavated in under four months. However, from trial bore holes previously made on the site, it was known that all the upper levels had gone and that all that remained was masses of brick rubble and disturbed strata. From documentary records it was also known that the whole southern half of the site was only reclaimed from the Thames in post-medieval times and that it consisted of a series of massive wood, brick and concrete waterfronts. In fact the only area where medieval (and possibly Roman) structures were likely was in the northern third of the site, where three deep basements existed. Of these basements only the eastern one was relatively old and probably dated from 1722. The central and west basements were constructed early in this century and used massive quantities of concrete in the founda-

tions. Work started in the central basement and it was soon discovered that the foundations were three parallel concrete beams. These beams were both an advantage and a disadvantage. On the one hand they acted as a shoring for deep trenches, while on the other they had destroyed virtually everything down to natural London clay. However, two strips of undisturbed strata occurred between them and a series of trenches was excavated here, starting immediately below the basement floor which was at about + 2 metres O.D.

Trial boreholes showed that the depth of natural clay was between -2 metres O.D. on the north and -4 metres O.D. on the southern side of the basement. It falls to about -7 metres O.D. on the southern side of the site (i.e. under the modern waterfront). This gave the great problem of excavating trenches between 4 and 6 metres deep in waterlogged strata if one was to get to the earliest levels. As it turned out, a dry summer and very hard work on the part of the "diggers" who at times had to shovel up more than 4 metres, enabled excavation down to natural clay in several quite large areas. In one trench -2.1 metres O.D. was reached.

For a period of about 1,000 years (between the early 3rd and early 13th cent.) no structures or stratigraphical layers were found on the site though some earlier medieval pottery, including some Saxon sherds, occur as survivals in the 13th century river gravels. This unconformity of layers (to use the useful geological term which describes it) was prob-



CUSTOM HOUSE SITE 1973
 MEDIEVAL TIMBER STRUCTURES

Fig.

ably due to two factors: a continually rising sea level and an eroding shoreline. The top of the Roman level is clearly much eroded and lying on this erosion surface was a very thin layer of well-sorted fine gravel. Immediately above this came the coarser, more pebbly gravels of a medieval date.

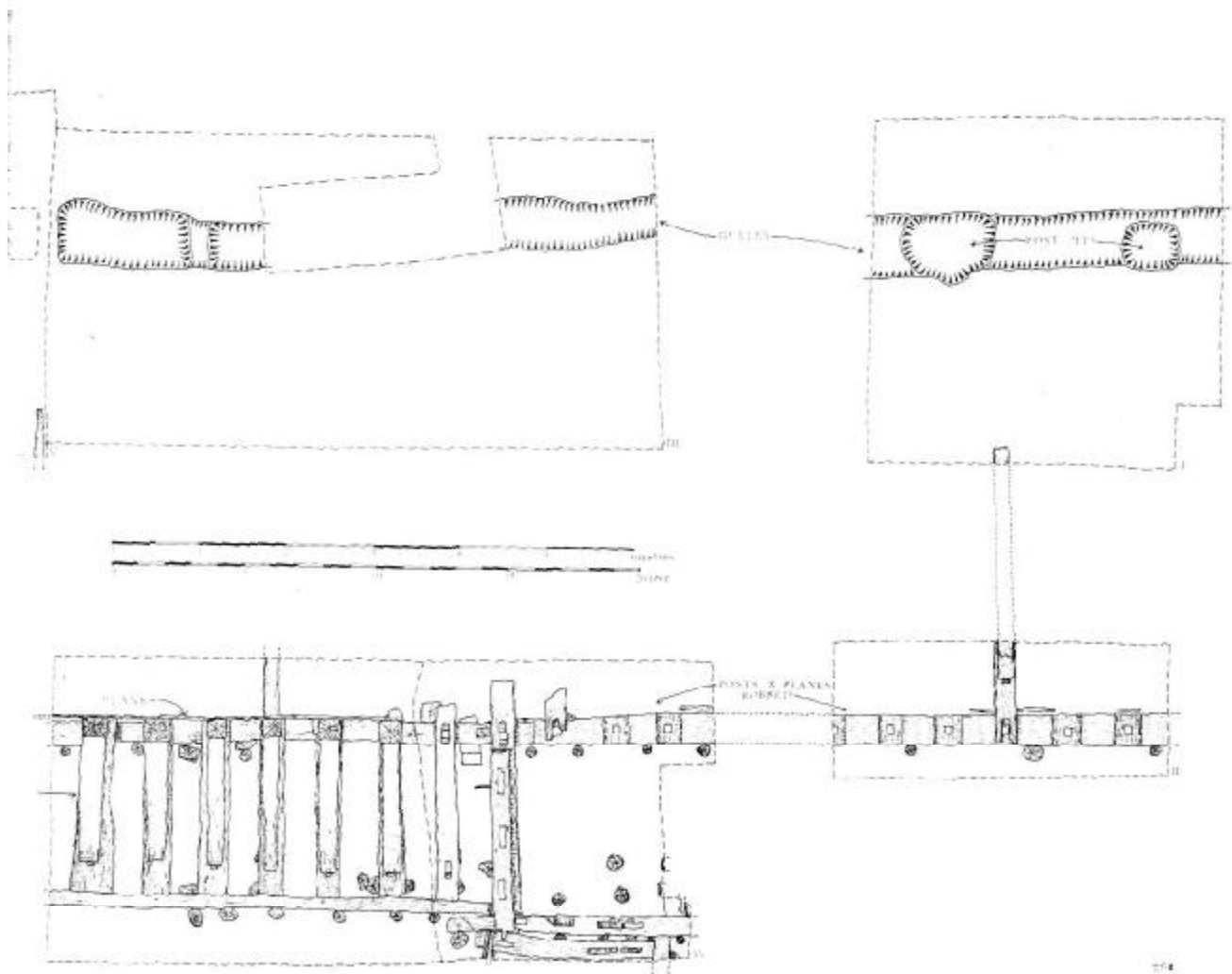
Indirect evidence therefore points to the later Roman, Saxon and all pre-14th century medieval waterfronts being north of the site under Lower Thames Street. It was only with the building of the great 13th century timber structures that gravel and peat began again to be deposited by the river on the foreshore. Between the 14th and 19th centuries a total of more than 50 metres in width of land was reclaimed on the site. Thus in the Pool of London at least, the Thames must still have been a wide shallow river in early medieval times. Only in the last cen-

tury or so has the river become narrow and, due to dredging for large ships, very deep.

The Timber Structures

Probably at some time in the 13th century,¹ a rough timber structure was erected on the foreshore. This was done first by cutting a rough channel parallel to the existing waterfront and at least 8 metres south of it. In this channel were dug at fairly regular intervals sub-rectangular post holes into which were put large roughly-squared-off timber posts. Some of these posts were of reused timber (including part of a rib of a ship) and all varied greatly in size and length. The bottom of one post

1. All dates are provisional and await dendrochronology results and detailed pottery study before one can be more precise.



was nearly a metre below the contemporary surface while another barely went in more than 29cm. All the posts had sawn-off bases and were packed into the post holes with large stones.

Along the south side of the line of posts so erected was placed a long horizontal beam which was held in place by a series of pointed silver birch piles which were driven in south of the beam. The tops of the posts were supported by a series of very rough braces which ran at an angle of about 45° to the ground southwards from the post and rested on the ground plates. The brace was inserted into the vertical post at the top and into the ground plate with a very rough tenon and mortice joint. The mortice hole was a long narrow slit which was too big for the tenon, and on the ground plate a long wedge was driven in in front of the brace

which acted both as a "chock" for the brace and as a means of holding the plate in place.

Behind (i.e. north of) the vertical posts ran a continuous wall of planks, which had no visible means of attachment to the posts. These planks were all reused and came originally from the hull of a boat or a ship which must have been broken up on the spot for reuse. (This would be very logical on the foreshore). The hull fragments were at least 4.5 metres long and had up to five strakes articulated. (The iron rivets of the clinker-built hull were still in perfect condition due to the anaerobic condition of the waterlogged peat, and they only started to rust when water was regularly poured on the wood during excavation to stop it from drying out). This braced timber structure was at least 2.2 metres high,

and was probably built as a rough quay wall, though it seems unlikely that ships tied up against it.

At some subsequent period, this structure collapsed and a new braced waterfront was erected about five metres further south (see fig 4 and front cover). When this new quay was built, the old quay front in its ruinous state was partly demolished, leaving only the channel and post holes; it survived only at the far eastern end of the site. The new structure was exactly similar in function to the old one (i.e. to support a waterfront standing c. 2.5 metres above the foreshore), the only difference being that the new structure was far better built using new materials and incorporating some fine carpentry.

In this new structure ground plates on piles were used continuously with the plates for the braces half-lapping over the main east-west plate. Also at this point a new square tenon-and-mortice joint for the vertical post was cut. The half-laps were fixed with vertical square pegs while the tenon-and-mortice joints used dowels (round pegs) to secure the joint. Small wedges were also used in front of the braces but these were only for making an absolutely tight fit. The southern ends of all the ground plates of the braces were jointed on to a long east-west beam. Here again a fine bare-faced soffit tenon was used with very long dowels driven in vertically. In front of this beam a line of silver birch or elm piles had been driven in to hold it in place. Similar piles had also been used to hold the southern side of the main plate.

The large ships which loaded wool at "Le Wollewharf" (as it is called in contemporary records) must have anchored in the river while the wool was brought to them in barges or small boats. The packing behind the quay wall was mainly a very thick layer of peat, which was deposited subsequent to the building of the quay. How this was done is at the moment uncertain, but a close examination of the organic make-up may give a clue. The peat layer was full of pottery, leather, wood, etc., as well as some very interesting small finds, including a Jew's harp, several decorated leather dagger sheaths, a wooden chess piece and several wooden combs.

Further west remains, probably of a timber jetty, were found. This was again a braced structure but the posts here ran north-south down the foreshore. Only half the structure was able to be excavated, but the presence of internal "scissor" braces suggested a double line of posts. These scissor braces were jointed with pegged half-laps and mortice-and-tenon joints suggesting a possible date in the second half of the 13th century.² Structures of this sort are

2. I am indebted to Mr. C. A. Hewett for pointing this out.

usually only found now in old houses, barns, or church roofs.

Later History

Until 1275 there was no national custom on wool and it is not till the later 14th century that a "Custom" house on "Le Wollewharf" is mentioned in the records. However, it seems very likely that throughout the 13th century this was one of the main quays in the City of London for loading wool for export to the continent.

During the 14th century a house on the woolwharf had come to be used as a place for weighing wool to assess the amount of tax due. Eventually by 1382, John Churchman, the official "tronoger" (weigher), pulled down the then existing buildings and built a new custom house, which he and many others after him added to until its final destruction in the great fire of 1666. However, early 17th century prints show that a new custom house may have been erected between 1638 and 1647, possibly by the Parliamentarians in the Civil War.

Unfortunately archaeology can add very little to this because of the large-scale destruction of the upper levels by later basements. What survives is only the foundation of the medieval buildings. However, it is now possible for the first time to fix the exact position of the medieval building which had chalk and ragstone foundations. The primary structure was a long rectangular building with a cellar at least on the east. Outside its east wall a fine wooden box drain was built, and from it came one of the finest objects to be found on the site, a medieval buckler. The buckler, which was made of wood and iron, was complete when found. Unfortunately the very corrosive fill of the drain has attacked the iron and left it in very fragile condition. The buckler, which is about 0.28m in diameter, is slightly convex and has a hexagonal spike on its boss. As far as is known, this is the first complete medieval buckler to be discovered in this country.³

Subsequently the building was added to on the east side, but only the arched foundations of this extension were found. No floors or actual walls survived. The dimensions of the medieval custom house were therefore c. 24 metres east-west by c. 10 metres while the eastern extension which abutts it, is c. 17 metres east-west by c. 9 metres. However, other medieval buildings of the custom house must also have existed (e.g. See Agas' map of c. 1561).

After the great fire of 1666 many legal wrangles took place until eventually Sir Christopher Wren was commissioned to erect a new building, which he did

3. Dr. G. C. Dunning has kindly communicated a note on it.

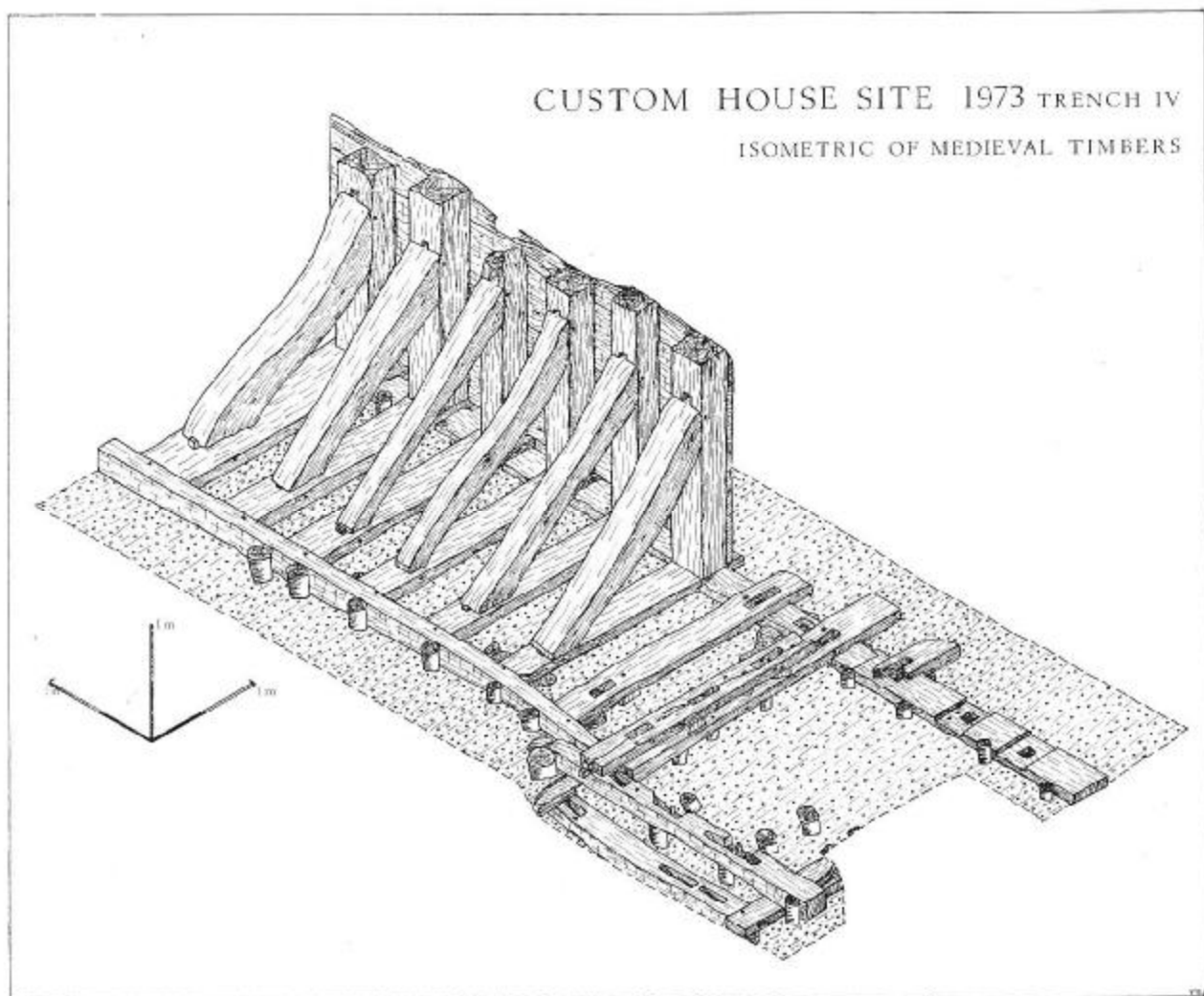


Fig. 4

between 1669 and 1671. This was a fine looking building, but unfortunately did not even last Wren's lifetime. By 1721 a fire had destroyed the west end and the foundations of the east end were rotten according to Wren's own report. As a result of this and because of the need for more space, Thomas Ripley completely rebuilt the whole custom house in 1720, and in 1722 a new east block was added, the vaults of which survived to July 1973. Parts of the foundations of the Wren-Ripley custom house were also observed and recorded during mechanical excavations and piling (see fig. 1).

The Ripley custom house lasted till 1814 when it was destroyed by a fire which burnt for two days and finally ignited gunpowder in the basement. The resulting explosion blew customs papers as far as

Hackney marshes! Since 1814 the site has been warehouses.

Acknowledgements

I must end with a brief note of thanks to all the members of the Guildhall Museum, who have helped in every way throughout the excavation. Without this help, my job would have been impossible. Throughout the excavation there was close co-operation with the contractors and much help was received, particularly in clearing dumps and breaking up concrete floors, from Messrs. Henry and Co., the demolition firm. I am also greatly indebted to Mr. Donald Stewart, the site architect from Fitzroy Robinson and Partners, without whom the excavation could hardly have taken place.