A PREHISTORIC TIMBER STRUCTURE AT RICHMOND TERRACE, WHITEHALL

DAVID ANDREWS and NICK MERRIMAN

The buildings at the corner of Richmond Terrace and Whitehall, just to the S of the Ministry of Defence (Fig. 1), had been earmarked for redevelopment by the Home Office since 1967. In the late 1960s, Mr B. K. Davison researched the archaeological implications of the scheme and dug trial trenches to check the historical investigation[1]. The development was deferred until 1979 when its revival prompted further archaeological work by the Inner London Archaeological Unit in 1980. Construction did not start until 1983, when the Central Excavation Unit carried out a watching brief[2].

Circumstances were not favourable. Whereas the Regency frontage by Thomas Chawnor on Richmond Terrace was being retained, a modern building with deep basements was to be erected along Whitehall. Already the top 2m of deposits, containing the foundations of post-medieval buildings, had been removed, and a forest of piles had been sunk. Between these the ground was being excavated by up to 3m to the various floor levels of the basements, the piles then being cut off. Archaeological excavation was out of the question, and the operation was limited to examining and recording the sections where the new reduced level was stepped for the basements.

The results of the previous investigations had been largely negative. Historical sources suggest the area was marshy land which in the later Middle Ages was used as gardens and then from the 16th century was occupied by a series of palaces and houses of the nobility. Similarly the ILAU excavations indicated that 'the area was marginal land at the edge of Thorney Island, frequently flooded and used as a rubbish dump'[3]. Despite late medieval attempts at reclamation, it remained vulnerable to flooding until a riverside wall was constructed in the later 16th century. Apart from some 12th-century sherds, the earliest finds were datable to the 15th–16th centuries. In general, relatively little is known of the early history of Westminster. There is evidence for Roman occupation of some kind on Thorney Island where Edward the Confessor founded Westminster Abbey, and there can be no doubt that the abbey was preceded by an earlier monastery (cf. Bond 1909, 3–7; Ralegh Radford 1965; Black 1976, 141–2). The various excavations that have been carried out at Westminster have revealed remains of the Roman and Anglo-Saxon periods, but so far virtually none of these have been published.

Over most of the site, the removal of the post-medieval buildings revealed deep deposits of bluish clay which tended to turn brown on exposure to the air. These clays were considered natural by the ILAU. But although deposited naturally in marshy conditions at the edge of the river, they are in fact of sufficiently recent formation to be of archaeological interest. This was only apparent at the deepest part of the excavations, at the NE corner of the site. Here a rectangular area was dug out to 2.8m below OD and enclosed by sheet piling. On its E side, the remains of a timber structure were exposed in a well preserved section (Section 1, Fig. 2). At the bottom of the section were fine gravels (11, Fig. 2) deposited in riverine conditions and apparently

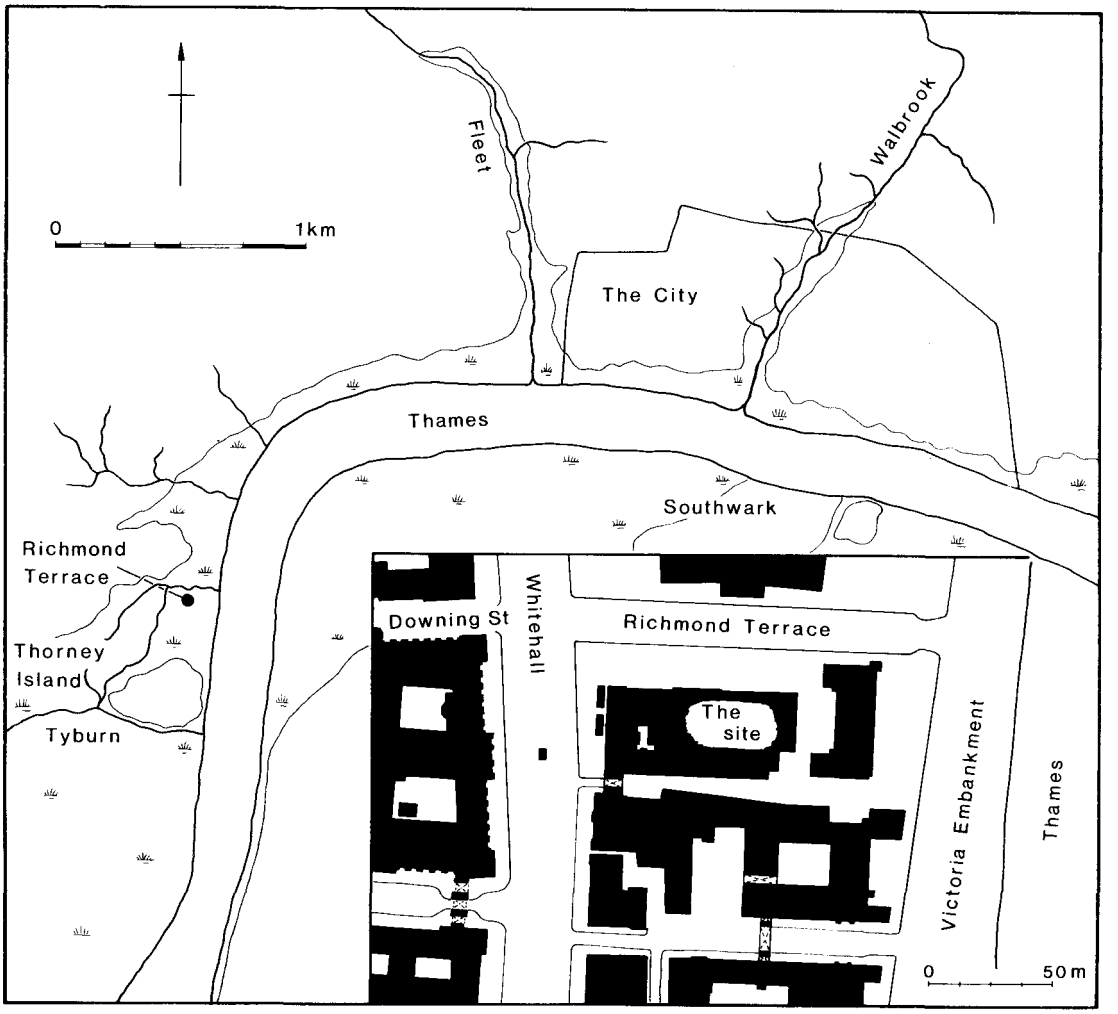

Fig. 1 Richmond Terrace: Location map (geological base map after D. Bentley and the Geological Survey)

typical of the Thames foreshore[4]. Above these was a thick layer of dark gleyed silt relatively rich in organic matter. This was overlain by a band of laminated sands and bluish clays (8, Fig. 2), probably representing a seasonal cycle of alternating rapid and slow silting, perhaps deposited in a channel. This was succeeded by another layer of gleyed silt containing less organic material, above which there was a dark peaty silt containing relatively large pieces of wood (5, Fig. 2). It was at this level (1.4m below OD) that the timber structure had been built. A base-plate (4, Fig. 2) aligned N-S had been cut through longitudinally in the course of the excavation. It was about 150mm wide, tapering off to the S. Set into it was a post about 120mm wide (3, Fig. 2) made from an unsquared piece of wood, the bottom of which was wedge-shaped. About 800mm from this the base plate was briefly interrupted, as if for the seating of another post which had been removed. Part of the base-plate was removed for scientific examination. It proved to be a piece of alder, and radiocarbon dating gave a result of 2540 ± 70 BP, 590 ± 70 BC uncalibrated)[5]. The structure was buried beneath a deep deposit of gleyed silty clay, the top of which lay behind the sheet piling.

Elsewhere, the depth of the excavations corresponded roughly with the level of the peat

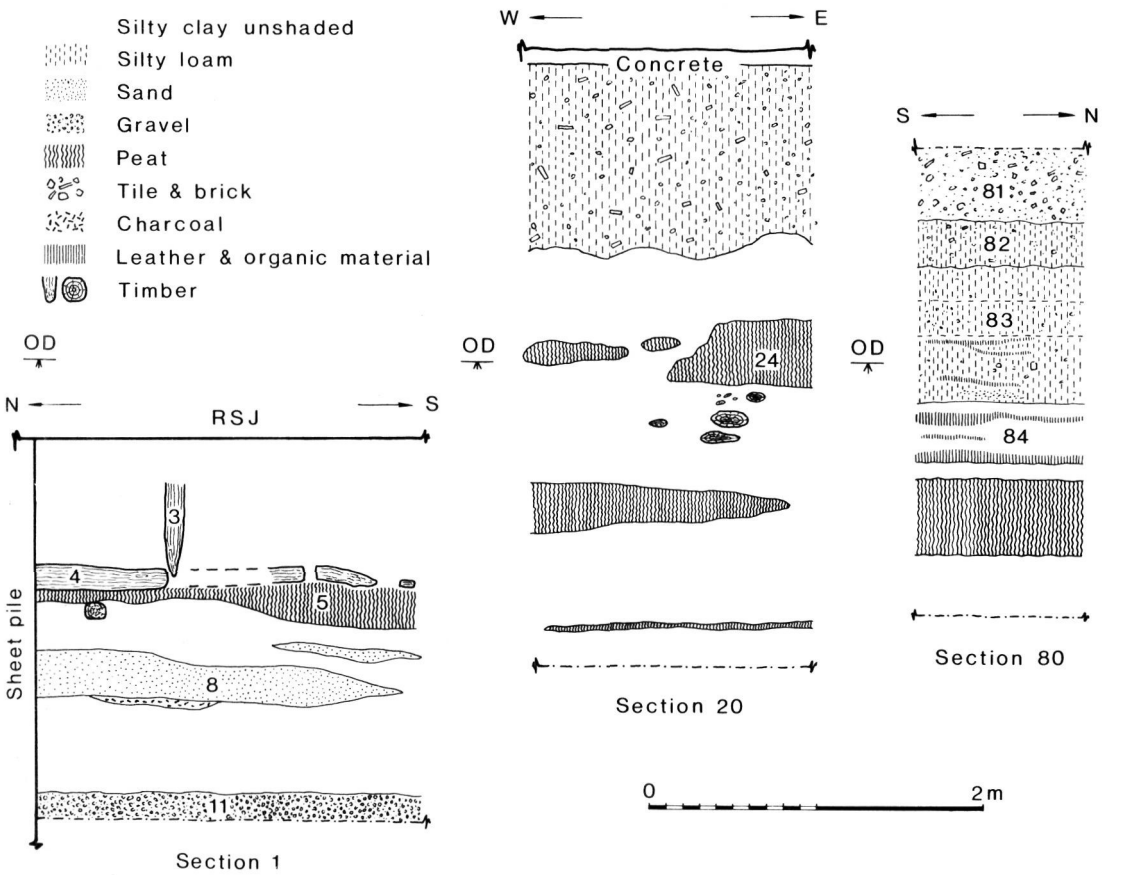

Fig. 2 Richmond Terrace: Sections 1, 20 and 80

immediately below the base-plate. The sections consisted predominantly of silty clays in which only a very few poorly differentiated layers could be discerned, apart from deposits of peat of varying thickness. A band of peat near the base of one of these sections, at approximately 2m below OD, gave a radiocarbon date of 8580 ± 110 BP (6630 ± 110 BC uncalibrated)[6], whilst another layer of peat at a higher level (approximately 0.5m below OD) was dated to 4110 ± 80 BP (2160 ± 80 BC uncalibrated)[7]. Particularly conspicuous was layer of peat about 300mm thick which was present along much of the E and S sides of the development area (24 in section 20, Fig. 2). This was at about OD, and possibly equivalent to a similar layer at the same level found at New Palace Yard[8]. Radiocarbon dates ranging from the 3rd century BC to the early 5th century AD were obtained for this peat (noted in Evans n.d.). The most westerly (i.e. the nearest to Whitehall) of the sections presented a rather different picture, with made ground occurring from a depth of almost 1m below OD, a sequence of the type recorded by the ILAU. The clays and peats were overlain by a mixed layer of clay and organic material (84, Fig. 2), the latter being conspicuous for the presence of large quantities of leather scraps, but also containing household refuse such as bone and mussel and other shells. This can be equated with the 'leather layers' noted by the ILAU and dated by them to the 15th or 16th century. Above, there were layers which had clearly been dumped (83, 82, Fig. 2), consisting mainly of dark loam with silty and clay lenses, and containing brick, mortar and stones. Horizontal layering evident in these deposits suggests that they may have accumulated over a period of time, and that there may have been surfaces within them. At the top of the section

there was crushed brick and mortar with rubble (81, Fig. 2). Layers of this kind had extended over much of the site, and were presumably make-up for the houses and palaces of the 17th and 18th centuries.

These observations hardly add much to our knowledge of the origins and development of Westminster, but do provide a tantalizing glimpse of the sort of activity taking place on the N bank of the Thames in prehistoric times. It is only possible to speculate on the nature of the timber structure. Ground level when it was constructed may have corresponded with the peat at about OD so conspicuous in the sections at the E and S sides of the site, whilst the laminated sand and clay deposits beneath it could indicate that it was situated at the edge of a creek or inlet. If so, it no doubt formed part of a waterside revetment or quay.

DISCUSSION OF THE RICHMOND TERRACE TIMBER STRUCTURE

By NICK MERRIMAN

The discovery of a timber structure of apparent Late Bronze Age/Early Iron Age date under at least 80cm of silt potentially holds important implications for prehistoric archaeology in London. However, the dating of the structure must be viewed with caution. A single radiocarbon date may be subject to error through contamination of the sample or through laboratory errors which cannot be checked on one date alone. Furthermore, in this case, particular problems are encountered in calibration. The core date of 590 BC (2540 BP) has a date range from 830–414 Cal BC with a sample precision of ±120 years[9]. The broadness of this range is due to certain kinks in the calibration curve around this point which mean that two samples with different calendar ages can produce identical radiocarbon dates.

If for the time being it is assumed that the sampling and dating are reliable, then the calibrated date for the structure would put in the Late Bronze Age or Early Iron Age. This dating immediately invites comparison with the Runnymede Bridge site further upstream on the Thames (Longley 1980, Needham and Longley 1980). However, at Runnymede most of the timbers are sharpened stakes of oak *c.* 20cm in diameter driven vertically into the underlying deposits. The Richmond Terrace find is quite different, consisting not of driven piles but of a post set into a base-plate. It is however not totally dissimilar from some of the structures uncovered at Flag Fen near Peterborough, for which a similar date of 660 ± 60 BC (uncalibrated) is published (Pryor *et al* 1986, 5), although these structures are of oak, while the Richmond Terrace base-plate is of alder[10].

The structure would therefore not be out of place in a Late Bronze/Early Iron Age context. Its function, however, is difficult to determine. The site appears to be outside the extent of the gravels which form Thorney Island, so it may not be indicative of a settlement, but perhaps of a revetment to a stream channel[11]. The range of dates from the structure place it either during Nunn's Thames IV incursion or in the subsequent period which he characterises as the formation of the Borough and Bermondsey eyots (Nunn 1983, 209). However, our knowledge of environmental conditions in this area during the early first millennium BC is not sufficient to determine whether the area was dry or wet during this time.

The Richmond Terrace find supplements various discoveries of prehistoric flint, pottery and cut features already made in the Westminster area. These have included a number of poorly-provenanced finds of Late Bronze Age metalwork from the Thames at West-

minster, and, more recently, sherds of Iron Age data from sites at Westminster Abbey and Cromwell Green, the latter also producing evidence of contemporary postholes and gullies[12].

The main implication of the Richmond Terrace find is that, even in Central London, there is a strong possibility that *in situ* prehistoric structures still survive beneath deep deposits of silt that have accumulated in areas such as Southwark, Chelsea and Westminster which have been subject to flooding since the last glaciation. Demolition and redevelopment work in these areas would therefore merit close investigation even where previous work has not indicated prehistoric activity.

NOTES

1. Mr Davison's records are held by him at Fortress House, 23 Savile Row, London W1.
2. The watching brief archive has been deposited at the Museum of London. A microfiche copy is held at the NMR and by the Central Excavation Unit.
3. See Mills 1980, and LAMAS Trans 32, 1981, p. IV.
4. Information from Venessa Straker.
5. HAR—6393.
6. HAR—5741.
7. HAR—5742.
8. A suggestion made on site by Harvey Sheldon.
9. The calibration is based on tables supplied in Stuiver & Becker (1986).
10. The use of alder is however attested at Flag Fen, and a split alder log is illustrated in Pryor (1986, 20).
11. The location of the timber structure appears to coincide with one of the arms of the River Tyburn illustrated in Barton (1962). However, there is no evidence that the stream took this course in later prehistory.
12. These finds are generally discussed in Merriman (1987).

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