PRE-ROMAN FEATURES AND CULTURAL MATERIAL FROM TWO SITES IN OLD FORD, BOW, TOWER HAMLETS

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SUMMARY

During excavations at two sites to the west of the River Lea in Old Ford evidence of land use during several archaeological eras prior to the Roman period was discovered. Lithics, mainly deposited residually, indicated Palaeolithic, possible Late Mesolithic/Early Neolithic, Neolithic/Early Bronze Age, and Middle to Late Bronze Age activity in the vicinity. A Later Bronze Age ditch, which yielded pottery in the Deverel-Rimbury tradition, was recorded. Ceramics of Later Bronze Age/Early Iron Age transition date were recovered, again residually, elements of which offered possible evidence of salt-trade activity. Several features were attributed to activity at the sites during the Late Iron Age, prior to the main Roman phases of occupation - part of the main Roman London to Colchester road ran across the easternmost of the two sites.

INTRODUCTION

During 1995-96 two archaeological excavations were undertaken by Pre-Construct Archaeology in Old Ford, Bow, in the London Borough of Tower Hamlets. The sites were at 91-93 Parnell Road (hereinafter PRB 95) and at F-Block and adjacent land, Lefevre Walk Estate (hereinafter LEK 95) (Fig 1). Both projects were funded by Tower Hamlets Housing Action Trust as part of

a long-term programme of housing regeneration in Old Ford.

The central National Grid Reference for PRB 95 is TQ 3692 8356 and for LEK 95 it is TQ 3700 8355. Both sites front onto Parnell Road, which is situated c.5km to the east of the City of London. Less than 1km to the east flows, historically at least, the principal watercourse in the proximity of Old Ford, the River Lea.

The PRB 95 site was less than 0.2 acres in size, while the plot of land covered by the planning application for redevelopment at the LEK 95 site was 1.96 acres in size. Open area excavations were conducted in six areas of LEK 95 (hereinafter Areas 1 6). In the main, the limits of these areas were clearly defined by the presence of extensive modern intrusions, such as Appian Road (originally laid in the 19th century) or the footprint of F-Block itself. In places the limits of areas were ultimately contiguous, although the areas themselves were not available for investigation simultaneously.

Archaeological investigations had been undertaken at PRB 95 in 1990 and June 1995 (Pitt 1990; 1995a) and within the boundaries of LEK 95 during 1970 71, 1980, and June 1995 (Sheldon 1972; Mills 1984; Pitt 1995b). These investigations had demonstrated that significant archaeological remains of Roman date existed at both sites. Furthermore, these remains were

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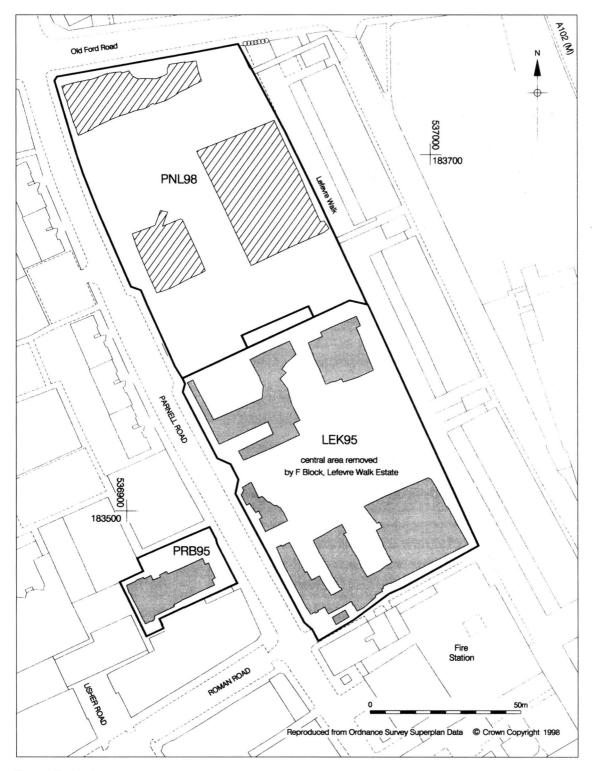


Fig 1. Site locations

highly vulnerable and, since the development proposals would involve complete archaeological destruction, open area excavation was considered to be the most appropriate mitigation strategy.

As anticipated, the vast majority of the archaeological deposits encountered at the sites derived from the Roman period, details of which are described elsewhere (Taylor-Wilson forthcoming). Of particular importance was a stretch of the main Roman London to Colchester road, and evidence of road-side land use, including fragmentary clay and timber buildings, iron smithing activity, field systems, and cemetery activity. However, evidence of prehistoric occupation, the first to be encountered in Bow, was recorded at both sites, and it is these highly significant findings that are described here. The entire site archive, including the dating record of pre-Roman ceramics by Nigel MacPherson-Grant, will be housed at the Museum of London.

GEOLOGICAL BACKGROUND

The solid geology of the Bow area is London Clay and strata of the Lambeth Group, while drift deposits comprise Kempton Park and Taplow gravels, both of which are part of the Thames Terrace Gravel sequence. In places there are known to be extensive brickearth cappings to these deposits (British Geological Survey 1993; Sheet 256 – North London). Brickearth can be described as a firm yellowish brown or orange brown sandy clay.

At PRB 95 natural brickearth was recorded across the entire area of excavation, between c.11.35m and c.11.45m OD. In the northern half of LEK 95 the natural sub-stratum was again predominantly brickearth, although, particularly in Areas 2 and 3, bands of silty coarse sand and gravel were observed throughout. In Areas 3 and 5 the top of untruncated brickearth was recorded between c.11.20m and c.11.30m OD, while towards the north-eastern corner of Area 2 it was recorded at a maximum height of c.10.95m OD.

In the southern half of LEK 95 natural brickearth barely survived, reflecting the extent to which it had been stripped away, down to the underlying sand and gravel, to provide material for the construction of the Roman road. The probably untruncated deposit was recorded in the extreme north-western corner of Arca 4 (W)

at a height of c.11.50m OD, and in the extreme south-eastern corner of Area 1 at c.11.65m OD.

PRE-ROMAN ARCHAEOLOGICAL EVIDENCE

Period I - Later Bronze Age

Period I ditch at PRB 95 (Figs 2 and 3.1)

One feature, a slightly sinuous ditch [123] provided conclusive evidence of Later Bronze Age occupation at PRB 95. The surviving portion of the feature was exposed cutting into natural brickearth. Its width varied between 0.70m and o.gom, its maximum depth was o.4om, and it had generally steep straight sides and a narrow, slightly concave base. To the north the ditch had been truncated by a modern intrusion, although, beyond that, a short length of a similar feature [399] probably represented part of the same ditch. Two oval stakeholes, c.o.14m deep, were recorded cutting into the eastern edge of ditch [123] and these could represent the positions of timber uprights, perhaps part of a simple palisade erected along the side of the ditch.

There was some evidence of re-cutting, in the form of two butt-ended terminals, within the feature, although it is unlikely that this would have created a terminally-defined entrance, since the butt-ends were less than 0.25m apart. The fill of the ditch was firm light greyish brown sandy silt with occasional fine and medium flint pebbles throughout. A total of 30 sherds (430g) of flint-tempered pottery was recovered from the feature, along with a small quantity of burnt flint, a handful of waste flakes, and two flint tools, a scraper and a leaf-shaped arrowhead, both of which were probably residually deposited.

Period I feature at LEK 95 (Fig 2)

A truncated pit or posthole [370] in the northern half of Area 3 was the only feature to which a Later Bronze Age date can be ascribed at LEK 95 on the basis of the ceramic evidence. However, since this evidence consisted of a small, rather heavily worn, fairly thick-walled body sherd of flint-tempered pottery, the evidence for this period of origin is not entirely convincing. The feature was 0.24m deep and its full extent was not seen as it had been truncated to the west by

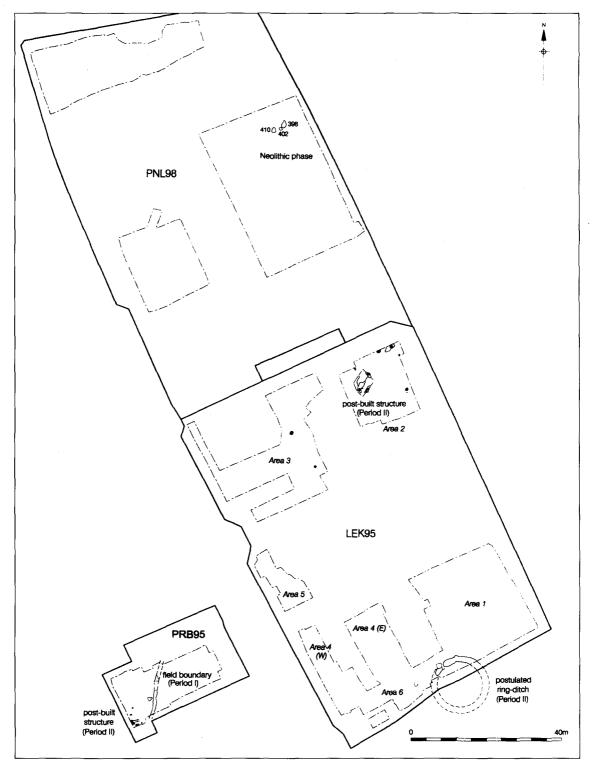


Fig 2. Period II features at LEK 95 and PRB 95, and Neolithic phase features at PNL 98

a Late Roman grave. The fill of the feature soft mid brownish orange silty sand - also contained a couple of chunks of burnt flint.

Discussion of Period I features

Ditch [123] at PRB 95 was almost certainly a land boundary of some description - it may have defined a portion of land, which was possibly further sub-divided into smaller fields. In the face of the excavated evidence more precise interpretation is probably unwise, although the presence of the ditch is clearly indicative of a not insignificant degree of later prehistoric land management. Of the cultural material recovered from the ditch, both the fabric and general wall thickness of the pottery are consistent with Later Bronze Age Deverel-Rimbury types current within the general period ε.1400-1000 BC. Whilst this is the preferred date, the absence of diagnostic forms does not preclude a date as late as ϵ .900 BC.

Apart from the pottery, ditch [123] contained little evidence as to the activities of the Late Bronze Age inhabitants of the site. A few burnt flints probably derived from hearth stones, or else they may have been used in corn parching or in the cooking of meat suspended in skins from simple frames constructed from branches. The two flint tools were probably residual, as Barry Bishop discusses below. No animal bones were recovered by hand during excavation of ditch [123], and only a few tiny, and largely unidentifiable, fragments of mammal bone were recovered from samples of the ditch fill.

The form and extent of the settlement with which ditch [123] was associated are matters for speculation. No other features of this period were located at PRB 95 and, with the possible exception of a single pit or posthole, none was located at LEK 95. These findings, in addition to the fact that no evidence of Bronze Age activity had previously been encountered during several excavations in Old Ford, would seem to suggest that activity in the area during the Bronze Age may have been relatively low-key. On the other hand, since the vast majority of the struck flint assemblage from both sites was probably of Middle to Late Bronze Age origin, as discussed below, it may be that occupation of the sites during this period was actually more extensive than the stratigraphic record suggests. Features of this period may simply not have survived, particularly any which may have been located in the southern half of LEK 95 where the Roman road was eventually constructed.

Period II - Late Iron Age

Period II features at PRB 95 (Figs 2 and 3.4)

Although stratigraphic and dating evidence were limited, the features assigned to this period at PRB 95 have been considered to be broadly contemporary due to their spatial relationships, general form, or the similarity of their fills. The features were concentrated in the south-western corner of the site and were filled with generally firm, or slightly sticky, mid yellowish or greyish brown sandy, occasionally slightly clayey, silt. Coarse components were generally scarce, although occasional or moderate fine, medium, and, in one or two instances, large flint pebbles were noted.

Except for pit [139] and possibly gully [144], which are described below, all the features assigned to Period II from PRB 95 may have been post-pits or postholes. Their details are presented in Table 1.

Feature [85] may well have been the post-pipe associated with possible post-pit [178] and feature [60] may have been similarly associated with possible post-pit [102]; in both cases the smaller features appeared to cut into the fills of the larger features.

Of the two remaining Period II features, the first, feature [139], was the shallow base of an irregularly shaped pit which measured up to 1.20m across. Its fill – firm light grey, with mid brownish red mottling, sandy silt – contained 15 sherds or scraps (31g) of pottery, all decorated with 'Belgic'-style comb decoration. The other was a linear gully [144] which had been truncated at either end. It was 0.54m wide and 0.20m deep. Recovered from the fill of the feature – firm mid yellowish brown sandy silt with occasional patches of light greyish green clay—was a scrap of pottery of Late Iron Age date and several chunks of burnt flint.

Discussion of Period II features at PRB 95

All but two of the features assigned to Period II at PRB 95 evidently represent the locations of timber uprights, perhaps elements of structures

Table 1. Details of possible post-pits and postholes/pipes of Period II at PRB 95

Context No.	Shape	Dimensions (longest axis first) (m)	Depth (m)	Cultural material (see note 2)
60	Circular	0.22	0.10	none recovered
79	Irregular	$1.06 \times 0.62*$	0.50	pot (3 sherds), burnt flint
85	Circular	0.22	0.35	burnt flints
102	Sub-oval	0.64×0.48	0.66	burnt flints
119	Elongated ellipse?	0.58* × 0.54 (with a circular posthole, 0.22m in diameter and 0.18m deep, in the base)	0.68	none recovered
152	Oval	0.30×0.20	0.14	none recovered
154	Elongated ellipse	0.41 × 0.10 (with a circular depression, 70mm in diameter and 90mm deep, in the base)	0.11	none recovered
178	Sub-oval?	$0.66* \times 0.60*$	0.39	pot (3 sherds), burnt flints
206	Sub-oval?	$0.34 \times 0.22*$ (with a circular posthole [208], 0.16m and 0.23m deep, in its base)	0.22	none recovered
214	Elongated ellipse	0.40×0.25 (with a circular depression, $c.0.17$ m in diameter and 70mm deep, in the base)	0.15	none recovered

Notes:

of earth-fast post type construction. The remainder comprised a pit, possibly the result of smallscale quarrying of brickearth, and a short length of a gully, insufficient of which survived to allow definite interpretation. There was some stratigraphic evidence, albeit of a limited nature, to indicate which, if any, of the features of Period II might have been contemporary. Postholes/ post-pits [79, 102, and 119] cut into a thin spread of redeposited brickearth which sealed gully [144], which was cut into natural brickearth, implying that the linear feature was associated with a phase of activity that pre-dated the construction of a probably circular post-built structure represented by the three later features. In addition, posthole [79] truncated the western end of pit [178], suggesting that the latter feature could have been contemporary with gully [144]. Posthole 214 was revealed beneath another spread of redeposited brickearth, suggesting that it too was contemporary with gully [144]. Two smaller postholes [152 and 154] cut into the later brickearth spread, indicating that they were associated with the putative second phase of activity.

Ceramics were recovered from four of the Period II features, namely post-pits/postholes [79 and 178], pit [139] and gully [144], although all this material, with the exception of the assemblage from pit [139], could be easily regarded, given the quantity and degree of abrasion, as having been deposited residually. However, this material, along with a handful of additional sherds deposited residually within features of Roman or later date, is clearly indicative of occupation during the Late Iron Age, c.50 BC to AD 25/50.

Period II features at LEK 95 (Areas 2 and 3) (Figs 2 and 3.2)

Again, there is only limited stratigraphic and dating evidence for the majority of the features assigned to Period II at LEK 95. In Area 2 there was a concentration of features, which, like those at PRB 95, have been interpreted as being broadly contemporary on the basis of their spatial relationships and the similarities of their fills. Typically these features were filled with soft or firm mid greyish, yellowish, or orange brown silty sand or sandy clay deposits that, on the whole, were not easily distinguished from the natural brickearth into which they had been cut. There were generally few coarse components occasional or moderate fine and medium flint pebbles were observed throughout most of the deposits. Only

^{1. *} indicates truncated dimension.

^{2.} Struck flints, presumably residual, and tiny fragments of animal bone and other material, probably introduced intrusively, are not listed.

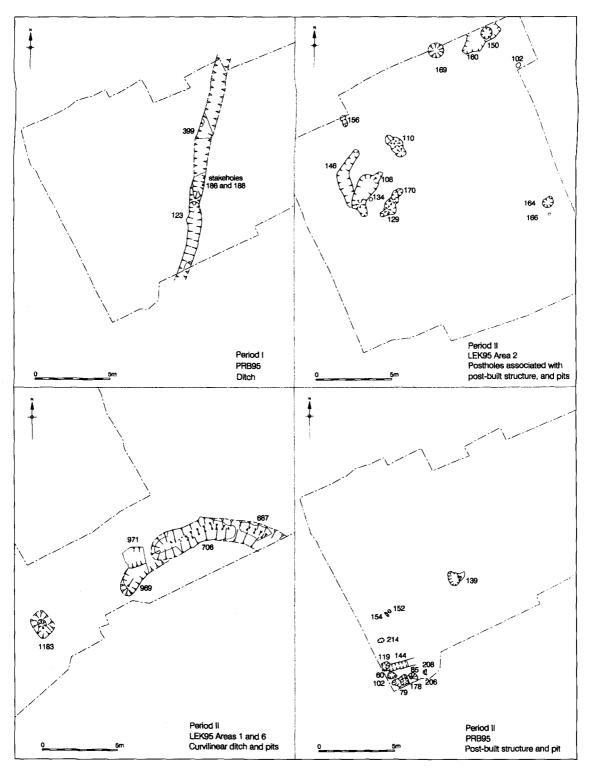


Fig 3. 1. PRB 95 Period I ditch; 2. LEK 95 Period II Area 2; 3. LEK 95 Period II Areas 1 and 6; 4. PRB 95 Period II

one of the features, pit [150], yielded any ceramic material, this being ten shell-tempered sherds (44g) from a 'Belgic'-style storage jar.

Except for an unusual angular gully [146] and possibly the aforementioned pit [150], all the features of this period in Area 2 appeared to be postholes or post-pits. Details of these features are presented in Table 2.

The surviving portion of the aforementioned gully [146] had been truncated to the south by a post-pit [108] and did not continue beyond that feature. The gully was up to 0.30m deep and was filled with mid greyish brown sandy silt with frequent fine and medium flint pebbles throughout. No cultural material was recovered. The shallow base of a sub-circular pit [353], which measured up to o.6om across, was recorded in the southern half of Area 3. Sandwiched between the primary and final fills of the feature, both mid greyish brown sandy silts, was a dump of friable dark brownish red burnt clay, which had evidently been deposited as a deliberate fill, rather than representing a small hearth in situ. A total of 13 sherds (388g) of pottery was recovered from the feature, including 11 sherds from two or three 'Belgic'-style shell-tempered ware vessels. This feature also contained a fragment of brick or hearth/kitchen furniture, a couple of sherds of the

earlier, probably Late Bronze Age/Early Iron Age, pottery, and a couple of fragments (4g) of burnt, but otherwise unidentifiable, mammal bone.

Period II features at LEK 95 (Areas 1 and 6) (Figs 2 and 3.3)

In Areas 1 and 6 at LEK 95 there were several features that, on the basis of stratigraphic evidence, were considered to be of pre-Roman date, but were otherwise essentially undated. They were assigned to Period II, although conceivably they could have been the earliest Roman features at the site or, alternatively, could have originated from any prehistoric era.

In the south-western corner of Area 1, part of a curvilinear ditch [706] was recorded cutting into natural sand and gravel probably exposed by later Roman ground stripping. To the west the feature terminated in a rounded butt-end, while to the east a pit had truncated it. The ditch was up to 1.40m wide, up to 0.95m deep, and had a V-shaped profile. Five fills were recorded, generally consisting of coarse sand or sandy silt and gravel. The feature had been re-cut, as ditch [665], and the intrusive pit had also truncated this version. A further portion

Table 2. Details of possible post-pits and postholes assigned to Period II at LEK 95

Context No.	Shape	Dimensions (longest axis first) (m)	Depth (m)	Cultural material (see note 2 in Table 1)
102	Oval	0.38×0.36	0.29	none recovered
108	Irregular	1.06* × 0.62* (with a posthole, of diameter 0.60m and 0.40m deep, in the base)	0.40	none recovered
110	Irregular	1.88 × 0.90 (with 3 postholes, up to 0.70m in width and up to 0.40m deep, in the base)	0.40	burnt flints
129	Irregular	2.0×0.80 (with 3 postholes, measuring up to 0.60×0.47 m and up to 0.43 m deep, in the base)	0.11	none recovered
134	Circular	0.25	0.10	burnt flints
150	Circular	0.80	0.80 (not bot.)	pot (10 sherds)
156	Irregular	$0.50* \times 0.23$	0.22	none recovered
164	Sub-circular	0.80×0.68	0.14	burnt flint
166	Circular	0.18	0.30	none recovered
169	Sub-circular?	$1.0* \times 0.70*$	0.60	burnt flints
170	Sub-oval?	$0.66 \times 0.48*$ (with a posthole, measuring $0.15 \text{m} \times 0.10 \text{m}$ deep, in the base)	0.10	none recovered

Notes:

^{*} indicates truncated dimension.

[687], itself heavily truncated, survived beyond the intrusion and extended to meet the southern limit of excavation. A single sherd of Roman pottery, from the late 2nd century AD, was recovered from the upper fill of ditch [687], although it is assumed this had been introduced intrusively. To the west ditch [665] was observed in section only. It was up to 1.40m wide and up to 0.74m deep with a generally V-shaped profile. Two fills, both consisting of sand or sandy silt and gravel, were recorded.

Approximately 1.0m to the west of the terminal of ditch [706] was a portion of what may have been another curvilinear ditch [969]. This feature was up to 1.40m wide, up to 0.43m deep, and had steep sides which fell to meet a sloping concave base. To the east it had been truncated by machine clearance of modern overburden, which prevented any correlation with ditch [706], although it seems plausible to suggest that they were related. To the west it appeared to terminate in a rounded butt-end, although this was not entirely clear since at this point the vast majority of the edge had also been truncated. Two fills were recorded, both of which consisted of silty coarse sand and gravel.

Part of what may have been a sub-rectangular pit [971] was recorded in the south-western corner of Area 1. To the west, the vast majority of the edge had been truncated, while to the east the feature had been completely truncated, in this case by machine clearance of modern overburden. It is conceivable that the feature, which was up to 0.37m deep, could have been associated with ditch [706/969], perhaps being a re-cut of the western element [969], although this was far from clear. It may simply have been a tree bole, given the amount of disturbance within its base.

Part of what may have been a sub-square pit [1183] was recorded in the east of Area 6. The feature had been truncated to the north and east but from what remained it was clear that it had distinctive stepped sides. A compact mixture of redeposited brickearth, sand, and gravel filled the feature. The function of the feature is difficult to establish given the limited extent to which it survived. It had a maximum depth of 0.80m and may have been a post-pit.

Discussion of Period II features at LEK 95

On the basis of dating evidence, a Late Iron Age date can be ascribed with any certainty to only two features in the northern half of LEK 95, namely pits [150] and [353], in Areas 2 and 3 respectively. A couple of sherds from the same 'Belgic'-style vessel as found in pit [150] were recovered from an amorphous feature [160], which evidently truncated the pit. The purposes of both pits were unclear, although, given its depth, it is possible that pit [150] may have been dug for the storage of foodstuffs, while pit [353] may have been dug in order to dispose of fire debris, as mentioned above.

A scatter of features in Area 2 was also assigned to Period II, although, as intimated above, their period of origin is by no means assured. The majority probably represented the locations of timber uprights, some of which may have been associated with post-built structures, although no ground plans were immediately obvious. Most convincing in this respect was the cluster of three features [108, 110, and 129], each of which may have housed up to three substantial upright timbers. However, the precise form of the resulting structure, if indeed the features were contemporary, was not particularly clear. The shallow angular gully [146] conceivably may have been related to the putative postbuilt structure.

The Period II features recorded in Areas 1 and 6 are similarly enigmatic. However, a pre-Roman origin is strongly indicated by stratigraphic evidence, if not by dating evidence, which was entirely absent, except for an intrusive Roman sherd. Features [706, 665, 687, and possibly 969] could represent the northern part of a ring-shaped enclosure ditch, with a terminally defined north-east facing entrance. The ditches could well have been dug during the early part of the Roman period, although the stratigraphic evidence intimates a pre-Roman date. Abandonment of the postulated enclosure ditch preceded the digging of a series of features to the east. The latter have been interpreted as quarry pits, probably dug in advance of, or contemporary with, the construction of the Roman road, which lay immediately to the north. It is likely that the Londinium to Camulodunum road was constructed within a decade of the Claudian invasion. The form of the postulated ring-ditch in Area 1 is certainly more typical of prehistoric activity. It can be estimated that the diameter of the enclosed area would have been approximately 12.0m. Examples of circular enclosures of similar dimensions from the Late Neolithic through to the Late Iron Age have been found across southern and eastern England. A post-built round-house may have been placed centrally within the enclosure.

THE LITHICS

B. J. Bishop

Introduction

 Λ total of 45 pieces of struck flint was recovered from PRB 95 and a further 74 pieces were recovered from LEK 95. In addition, both sites produced a quantity of burnt flint approximately 500 chunks from PRB 95 and approximately 400 from LEK 95. The vast majority of this material was hand collected during the excavations, although a few pieces were retrieved from bulk soil samples as they were processed in postexcavation. Although the material was examined to ascertain whether any specific contextual information was recoverable, most of the assemblage was recovered from residual contexts. No contexts contained sufficient quantities or distinctive types of flint artefact to be assessed individually, and the material from both sites was considered as one assemblage. All material was catalogued in detail with measurements following Saville (1980).

Raw materials

All of the material examined was composed of flint or cherty flint. Most of the struck and burnt flint that retained cortex exhibited a smooth rolled or 'chattermarked' surface consistent with an origin within alluvially displaced gravel pebbles, as one might expect for the 'drift' geology on the terraces of the Rivers Thames and Lea. The generally small size of the gravel pebbles on both sites suggests that at least some of the raw material was not from the immediate vicinity, although it was still likely to have been found close by. Unlike any of the struck flints, the natural flint at the site generally exhibited a vellowish orange iron-stained cortex that often continued right the way through to the centre of the pebbles.

Some of the struck and burnt material still retained an abraded chalky cortex and this material must have originated either from close to the parent chalk itself or from periglacial mass wastage and slope wash of the chalk hills (Gibbard 1986). Deposits such as these are found all around the London basin, with the tributaries of the Thames providing easy access to them.

Burnt flint

Burnt flint made up the largest component of the assemblage – c.900 chunks weighing c.5500g were recovered from both sites. The degree of burning varied from slight, with only a few thermal cracks visible and little discolouration, to extensive, where the pieces had completely shattered and turned black/red in colour. Some of the burning could have derived from stubble burning, but the more heavily burnt pieces presumably derived from occupation surfaces where hearths had been sited. All the burnt flint was stratified and it came from a variety of contexts datable to pre-Roman and Roman periods. The deliberate burning of large flint nodules during the Bronze Age has been recorded from many areas of Britain. The relatively small quantities recovered from these two sites, when considered with the length and intensity of occupation as outlined above, would suggest that if deliberate burning had occurred then it was on a relatively small scale.

Struck flint

Flint types

Three main types of flint were identified within the struck flint assemblage details are presented in Table 3.

The distinctions between the flint types, especially the black and grey varieties, were often rather

Table 3. Flint types

Flint type	Description
Black	Fine grained black to dark brown flint, although pieces become translucent as they become thinner, with occasional cherty impurities
Grey	Fine to medium grained, opaque to translucent, light to mid grey flint, often containing cherty impurities
Orange	Opaque and orange brown (honey coloured) cherty flint

unclear as there was considerable variation in both colour and quantities of impurities within these groups. There were approximately twice as many grey flints to black flints, with a smaller proportion of orange flint details are presented in Table 4.

No significant differences in the type of cortex or the percentage of remaining cortex could be detected between the black and grey flint types. The orange flint type did, however, contain more frequent primary flakes, which is possibly indicative of the raw material either being of smaller size or having been obtained closer by and, therefore, being less 'dressed' than that of grey or black flint. Grey flint contributed ten of the retouched tools, while there were eight in black flint. Of the eight cores recovered half were of black flint and half were of grey flint.

Table 4. Quantities of flint types

Flint type	Number	% of total
Black	39	32.8
Grey	73	61.4
Orange	6	5.0
Unknown (burnt)	1	0.8
Total	119	100

Condition

The struck flint assemblage was variable in its condition. The majority was either in a good, unrolled, condition with only minor post-deposition edge damage or exhibited only slight abrasion, mostly to the thinner edges and consistent with only minor taphonomic movement. Approximately 20% of the assemblage was abraded, which would suggest that these pieces had spent some considerable time being moved around, thereby suffering from repeated trampling, bioturbation and the like. Two struck flakes had been subsequently burned.

Cortication and recortication

Primary flakes were defined as those whose dorsal surfaces were completely covered with original cortex and, therefore, were those removed first from that part of the nodule or pebble. Secondary flakes were defined as those whose dorsal surfaces retained some original cortex, while tertiary flakes were those from within the nodule or pebble and, therefore, retained no cortex whatsoever. Quantities of the flake types present within the assemblage are presented in Table 5.

Table 5. Quantities of flake types

Flake type	Number	% of total
Primary	2	1.7
Secondary	68	57.1
Tertiary	49	41.2
Total	119	100

Over half (57.1%) of the flakes were of secondary type, partially retaining cortex. This suggested that the pebbles or nodules from which they were derived were relatively small, as is typical of the gravel beds in the area, and would indicate that core reduction activities were occurring on the sites. However, the small quantity of primary flakes (1.7%) would indicate that little primary knapping was occurring, suggesting that the raw material was 'dressed' elsewhere.

Some of the material showed a slight degree of recortication, although this was variable. Differences in recortication should not be used to argue for different phases of occupation as Schmalz (1960) has demonstrated how variable recortication can be, even within a single field.

Technology

It is clear that a range of technological options was employed in producing the assemblage. Many of the struck pieces exhibited diffuse bulbs of percussion and feather distal terminations, and some trimmed or faceted striking platforms were present, all indicative of soft hammer or indirect percussion technology. However, most of the flakes had plain, wider butts, more pronounced bulbs of percussion and frequent hinged distal terminations, which along with the presence of cores reused as hammers, would indicate that hard direct percussion was also being employed, and with only minimal concern for platform preparation. The leaf-shaped arrowhead from the Period I ditch at PRB 95 had been finishedoff by fine competent pressure flaking. A few pieces occasionally displayed very pronounced bulbs of percussion which are consistent with plough damage, or possibly having occurred during machine reduction of the site.

Metrical analysis

Metrical analysis of the lithics demonstrated that the majority of the assemblage consisted of variably shaped flakes with a few blades being present. The majority of the flakes and blades were categorised as medium in size (as defined by Saville 1980), most were under 50mm in length and breadth, but over 30mm long and 20mm wide. Narrow flakes contributed only approximately 10% of the total. A technological shift from blade to flake production in southern England during the Neolithic has been demonstrated (Pitts 1978; Pitts & Jacobi 1979; Ford 1987; Saville 1990), indicating that at least some of this assemblage was likely to derive from the later prehistoric periods. There was a general lack of conformity of the blades and flakes, with a wide range of sizes and shapes being present. The lack of standardisation in flake size and shape suggested a very unsystematic core reduction technique was employed and/or the material originated from a variety of periods.

Cores

A total of eight cores was recovered, all from LEK 95. Their average weight was 38.5g, with a minimum of 21g and a maximum of 67g. Seven were very irregular in size, shape, and reduction sequence, mostly being Clark's type C (Clark et al 1960), with multiple platforms and irregular sized and shaped flake removal scars, at least one utilising a thermally fractured chunk. Two cores had been reused as hammerstones and one possibly as a scraper.

One of the unstratified cores was notable in that it displayed a more systematic reduction sequence with a prepared and rejuvenated platform which produced thin blades. It was categorised as a Clark's type A2 and would be at home in a Late Mesolithic/Early Neolithic assemblage. None of the other examples was particularly diagnostic, although the lack of systematic reduction techniques and the variety of flake types removed would suggest a later prehistoric origin, probably within the Bronze Age.

Retouched blades and flakes

Despite the low density of flint work from the two sites, there was a very high percentage (15.1%) of

retouched tools to waste flakes. This was clearly indicative of tool use and discard, rather than production. As with the cores and debitage, a wide range of tool sizes and shapes was present, although few diagnostic pieces were identified.

Of particular interest was a finely produced small ovate bi-face in fresh condition recovered from LEK 95 (Fig 4.1). The implement measured 99mm x 63mm x 22mm, and weighed 116g. It had been bifacially reduced but had not been completely worked on one face, resulting in the presence of some original abraded chalky cortex and a plano-convex profile, suggesting it had been manufactured from a large flake. Soft hammer thinning flakes had removed all traces of the presumed striking platform and ventral surface. The finely retouched cutting edge continued virtually all round the tool which was slightly asymmetrical, with one lateral edge straighter in plan than the other, which also was slightly sinuous in profile. It had not been finished with a tranchet blow. Industrially it was Acheulian or Mousterian of Acheulian Tradition, and was most likely to date to towards the middle of the Palaeolithic. The implement was retrieved from the fill (context [650]) of a feature interpreted as an early Roman quarry pit. Although deliberate collection of Palaeolithic material during the Roman period is known (Adkins & Adkins 1985), the context of deposition in this case would suggest that the implement was unconsciously backfilled into the feature. The bi-face was probably deposited originally in the Taplow or Kempton Park gravels, as seen on the site, although there is a possibility that the overlying brickearth may be part of the Langley Silt Complex (Gibbard 1985) and that it may have derived from that deposit.

Except for the bi-face all of the lithics are most probably Holocene in date. The leaf-shaped arrowhead (Fig 4.2) from the Period I ditch (context [212]) at PRB 95 is a type 4A (Green 1980), which is a type more commonly found in Cornwall, Wales, and North-Western England than in South-Eastern England (*ibid*, 78). Although leaf-shaped arrowheads are characteristic of the Early Neolithic, Green (1980, 94–7) has demonstrated the survival of this type of implement into the Early Bronze Age.

Other than the above there were no clearly diagnostic or closely datable types identified. An invasively retouched cutting tool from an unstratified context at PRB 95 displayed a worn, almost polished, cutting edge with traces of

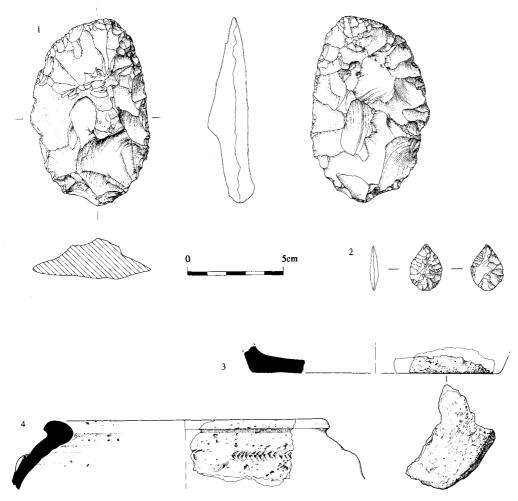


Fig 4. 1. Palaeolithic ovate bi-face tool (Scale 1:2); 2. Leaf-shaped arrowhead (Scale 1:2); 3. Rectangular based vessel Late Bronze Age/Early Iron Age tradition (Scale 1:4); 4. 'Belgic'-style shell-tempered storage jar, with impressed herring-bone style impressions separated by applied knobs (Scale 1:4)

'silica' gloss. Implements of this kind have been associated with composite sickles of Bronze Age date (Curwen 1936). A denticulate knife, recovered from an arbitrary cleaning layer (context [137]) in Area 2 at LEK 95, would be at home in a Neolithic assemblage but again similar forms were being manufactured during the Bronze Age.

Some of the tools, especially two notched blades from LEK 95 (context [133] – an arbitrary cleaning layer in Area 2 and context [311] – the fill of a late Roman grave in Area 3), two reworked core rejuvenation flakes from the same site (context 746 – a make-up layer for the Roman road in Area 1 and context [880] – the fill of a Roman ditch in Area 5), a scraper from Period I ditch [123] at PRB 95 (context [183]), and possibly a point from

Period II pit [79] at the same site (context [80]) appeared to be more like Later Mesolithic/Early Neolithic examples than later ones.

The remainder of the tools exhibit the lack of formality and systematic reduction traditions that characterised much of prehistory and would, therefore, suggest a date within the Bronze Age (Edmonds 1995). Since most of the types are scrapers or cutting tools, this would indicate, despite the sample being very small, generalised domestic rather than more specialist activities.

Discussion

The lithic assemblage recovered from the two sites is of relatively low density, despite prehistoric features being recorded, which may in part be due to later ploughing removing ancient occupation surfaces. In broad terms, it is fair to say that the range of tools present is more indicative of domestic occupation than a more specialised activity site.

Most of the raw material was obtained from derived pebble flint. The amounts of cortex still present would indicate that the pebbles were reasonably small and were likely to have been obtained from close by. The lack of many primary flakes and the high proportion of retouched to debitage flakes would suggest that initial core reduction was not occurring on the sites, while the presence of cores is indicative that secondary reduction and tool manufacture were.

Although diagnostic pieces were scarce, those present broadly suggest low density occupation over a long period of time. The bi-face is Palaeolithic in date and constitutes an important find for this part of London. Some of the tools, cores, and flakes suggest Later Mesolithic/Early Neolithic activity and the leaf-shaped arrowhead is clearly a Neolithic/Early Bronze Age type. Overall, however, the low density of these finds suggests only occasional exploitation of the area.

The majority of the struck flint assemblage shows an impoverishment of techniques and tradition and lacks the formally retouched artefacts and systematic reduction techniques found throughout much of prehistory until the Bronze Age (Edmonds 1995). This would strongly suggest a Middle to Late Bronze Age date for the majority of the material, which would perhaps correlate with the evidence of Late Bronze Age land management at PRB 95. During the Middle to Late Bronze Age virtually nothing but locally available raw material was exploited and there was little formality in its disposal. The absence of structured flaking and formal tool and core types does not necessarily mean that flint was not important to those involved in production, merely that flint may have lost some of the prestige associated with it in earlier prehistoric eras (Edmonds 1995).

Despite the likely importance of the London region during the Middle and Late Bronze Age, as outlined above, there are few published comparable lithic assemblages. To the west of London, a similar assemblage was recovered from excavations at the former Jewsons Yard site in Uxbridge, Middlesex (Barclay *et al* 1995). There, in a similar topographical situation near

the confluence of the Thames and one of its tributaries, Late Bronze Age features were recorded and a flint assemblage containing some material from the Mesolithic, but again predominantly Late Bronze Age in character, was recovered.

In summary, although the lithic assemblage from the two Old Ford sites was small, it contributes to the study of Bronze Age occupation in East London, particularly on the gravel terraces at the confluence of the Rivers Thames and Lea. Such broad-based analysis could fulfil an important and complementary role in understanding the aforementioned complex and apparently dense contemporary activity that has been recorded further to the east (Meddens 1996).

THE POTTERY

N. Macpherson-Grant

LEK 95

The material from LEK 95 represents two principal periods namely the Late Bronze Age to Early Iron Age transition and the Late Iron Age to Early Roman transition. Much of it is worn, although there are a few fairly fresh sherds. The assemblage comprised 52 sherds with a total weight of 595g.

A small quantity of material from an Area 2 cleaning layer [137] is possibly of Late Bronze Age Deverel-Rimbury date, although a Late Bronze Age to Early Iron Age transition date equivalent to residual sherds from Roman context [74] is entirely feasible. The presence of a profuse-gritted base sherd supports the date for the latter [74], as do the general range of associated sherd thicknesses. The material from contexts [137] and [374] including residual sherds in [352] is likely to be contemporary, although a little on the coarse side. A dating relatively close to the start of the first millennium BC, ie between c.900/850 and 700 BC is suggested.

The tentative identification of a residual oxidised sherd from context [30] as a fragment of briquetage, coupled with the residual rectangular based vessel (Fig 4.3) from context [352], may indicate a link with salt trade activity. The sparsely tempered fabric of the latter sherd is broadly reminiscent of fabric types present in confirmed East Kent briquetage assemblages of broadly Late Bronze Age to Early Iron Age transition date.

These two pieces may indicate an up-river supply of salt from Lower Thames Valley coastal locations.

The second period represented is characterised by 'Belgic'-style grogged and, principally, shellfilled wares from Period II features [150] (context [151]), [160] (context [161]), [353] (context [352]) and residual material from Roman contexts [500, 616 and 973] (Fig 4.4). With the exception of context [973], North Kent type shell-filled wares dominate. These have a date range commencing from the Conquest period (Pollard 1988, 40, 50), ie from c.AD 30 (Isobel Thompson pers comm). A mid to later 1stcentury date AD is considered applicable here, but it is worth noting that storage jar types in particular have a long life with productional currency up to the late 2nd to early 3rd century AD, a point that may have relevance in view of some of the Roman brick fragments recovered.

PRB 95

The two phase division noted for LEK 95 is retained in this material, although it should be noted that the group suffers from dating difficulties typically encountered with non-diagnostic sherds made in fabric types which could be placed in several date brackets. The assemblage comprised 61 sherds with a total weight of 586g.

Technically there is not quite enough form information to be totally confident about the Late Bronze Age element present. The fabrics and wall thicknesses observed are in keeping with Deverel-Rimbury types, although the rim diameter of the simple rimmed jar (pinched to thin lip) from context [124], a fill of ditch [123], is a little on the large side and could therefore be either late in the tradition or an early post-Deverel-Rimbury type. There is a flint-tempered base sherd from context [406] which is definitely not Deverel-Rimbury, but could be either Late Bronze Age to Early Iron Age transition or Late Iron Age to Late Iron Age/B transition, and indeed this choice could apply to the other flinttempered sherds in the group. Bearing in mind the coarseness of some of the flint-tempered material from ditch [123] (contexts [110], [124], and [182]), activity of later to late second millennium BC date is possible, but, if this material is broadly contemporary with the coarseware base from context [406], then a date of c.1000-800/700 BC could be applied in order to account for all the apparent characteristics of the group. On balance a $\epsilon.1500/1300-1000$ BC date is preferred but emphasis could be somewhat later, between $\epsilon.1100-900$ BC.

There is a clear 'Belgic'-period presence represented in Period II features [139] (context [138]), [144] (context [145]) and possibly [178] (context [179]). In addition, Period II feature [79] (context [80]) and Roman contexts [89, 99 and 525] produced material of Late Iron Age or possibly Late Iron Age/B transition date, although mixed temper fabrics do occur in minority types in earlier 1st millennium BC assemblages, so these particular pieces could be earlier. The Late Iron Age assemblage suggests a pre-Conquest AD date with an emphasis of c.75/50 BC to AD 25 or 50.

SUMMARY DISCUSSION OF THE PRE-ROMAN EVIDENCE

Irrespective of the problematical nature of the interpretation and dating of many of the features described in this paper, it has been possible to identify, with some confidence, features from two discrete periods of pre-Roman occupation in Old Ford, namely the Later Bronze Age and the Late Iron Age. In addition, amongst the cultural material recovered from the sites, there is evidence of occupation during other prehistoric eras, although no features could be ascribed to them with any certainty.

Early prehistoric activity

One of the most important finds from the two sites was a Palacolithic bi-face recovered from a large feature, interpreted as an early Roman quarry pit, in the south of Area I at LEK 95. The latter implement was one of only two items amongst the lithic assemblage from the sites to be datable or clearly diagnostic. A number of other Palacolithic implements have been discovered in the Lea Valley area in Greater London, the closest being an axe found in Victoria Park, less than Ikm to the north-west (GL SMR 080 060).

The other diagnostic tool, a leaf-shaped arrowhead from Period I ditch [123] at PRB 95, was typically Neolithic or possibly Early Bronze Age and, therefore, had presumably been deposited residually. A number of the other flint implements from the sites appeared to be Late

Mesolithic/Early Neolithic examples, hinting at activity in the vicinity during those eras.

Most of the humanly fractured lithics from both sites were retrieved from features or deposits securely dated to the Roman period and, like the leaf-shaped arrowhead, can, therefore, be considered to have been deposited residually. In summary, it seems that, although there may well have been occupation at Old Ford prior to the Late Bronze Age, little can be concluded about its precise nature from the evidence recovered during the excavations herein described. Excavations undertaken in late 1998, in advance of redevelopment at D- and E-Block, Lefevre Walk Estate (hereinafter PNL 98), did, however, produce good evidence of Neolithic activity in Old Ford (Fig 1). Three closely-grouped pit features were identified here and the largest of these, measuring 1.85m north-south, by 1.33m east west, by 0.29m in depth, yielded more than 22 pottery sherds from a single Peterborough Ware (Mortlake sub-style) bowl and single sherds of residual possible Neolithic pottery were recovered from each of two narrow ditch terminals of Bronze Age date immediately to the west of the pit. The Peterborough Ware bowl is likely to represent a placed deposit (A. Douglas pers comm). No other evidence of early Prehistoric activity is known from the vicinity of the site (Frederick et al 2000).

Middle to Late Bronze Age activity (Period I)

Definite evidence of Later Bronze Age activity was recovered at PRB 95, in the form of the Deverel-Rimbury pottery assemblage from ditch [123]. At PNL 98 a series of ditch cuts were identified thought to represent field boundaries; from the top fill of a curvilinear ditch a whole but broken, tub-shaped vessel with an ill-sorted fire-cracked flint-tempered fabric of Middle to Late Bronze Age date was recovered. The completeness of the vessel and its deposition in a field boundary, as with the earlier Peterborough Ware bowl, suggest a deliberately placed deposit (A. Douglas pers comm). A possibly comparable find comes from the Stepney High Street site c.2.5km south of the Old Ford sites. Here a truncated pit has been found with the remains of two Late Bronze Age/Early Iron Age jars of the post-Deverel-Rimbury 'plain ware' tradition, dated to c.800-700 BC (Blackmore 1982). It has

been suggested that these vessels were originally buried upside-down and that they may have been part of a funerary deposit (Mills 1982), although the possibility of them having been part of a placed deposit should not be dismissed out of hand. These are significant discoveries, in that there are few parallels for occupation during this period in North-East London, particularly to the west of the Lea (Frederick et al 2000). A barrel beaker, found in 1864 c.1km to the north-west, represents the closest find of Bronze Age date (GL SMR 080 014). To the east of the Lea, a series of investigations, mostly undertaken by Newham Museum Service, has revealed extensive evidence of exploitation of the marshland along the north-eastern bank of the Thames and its tributaries, although much of this dates to the Middle Bronze Age (Meddens 1996).

The Thames Valley in general has been a particularly rich source of metalwork finds of Bronze Age date, much of which was probably deposited for votive and ritual reasons (Needham & Burgess 1980). Numerous items of Bronze Age metalwork were discovered in the vicinity of the William Girling Reservoir, approximately 10km further up the Lea valley (eg a palstave and a shield – GL SMR 061 601 and 080 586 respectively).

The paucity of evidence for Late Bronze Age occupation in North-East London stands in direct contrast to that from South and West London, where extensive evidence of settlement during this period has been recorded, such as at Carshalton (Adkins & Needham 1985), Heathrow Airport (eg O'Connell 1990; Grimes & Close-Brooks 1993), and, most notably, at Runnymede/Egham, where a waterside settlement, probably of specialised status, developed on a small island where a tributary met the Thames (eg Longley & Needham 1980; O'Connell & Needham 1986).

It would be unwise, in the face of the excavated evidence, to attempt to draw major conclusions about the nature of Later Bronze Age occupation at Old Ford. However, in broad terms, the activity of Period I at PRB 95 may be viewed within the context of increased social organization of the landscape, which began in the period c.1400–1300 BC in many parts of Britain (Cunliffe 1995, 27). Fertile river valleys became foci for settlement as the expanding population found the environment particularly attractive for habitation. The damp grasslands provided an ample supply of food for grazing cattle and, at the same time, cereals could be cultivated on drier ground

associated with the slightly more elevated gravel terraces. Many small farming hamlets developed, usually consisting of a cluster of post-built houses.

A broad parallel may be drawn from the Middle Thames Valley, where a cluster of Late Bronze Age settlements, probably chiefly pastoral in nature, has been recorded close to the confluence of the Thames and the Kennet near Reading (Moore & Jennings 1992). At the aforementioned Egham site, it seems that pastoralism also constituted a major subsistence occupation during the Later Bronze Age (Needham & Longley 1980, 403). With these examples in mind, a suitable interpretation of the ditch recorded at PRB 95 could be that it belonged to a boundary or enclosure within a system utilised primarily for stock control. Little else can be deduced about the activities of the Later Bronze Age inhabitants of the putative settlement(s) at Old Ford, although the lithic assemblage from the sites is broadly suggestive of generalised domestic activities rather than more specialised occupations.

Late Bronze Age/Early Iron Age transition activity

Although a Deverel-Rimbury date seems likely for ditch [123] at PRB 95, there is little convincing evidence of occupation for this period at LEK 95. Overall it seems more likely that the earliest ceramically-represented phase at the latter site is of Late Bronze Age/Early Iron Age transition date (c.900/850-600 BC). Vessels produced during this time are characterised by finer flint-tempering and thinner body walls than those produced during the Later Bronze Age. A dozen contexts from LEK 95 yielded a total of 21 sherds (c.100g) of such pottery, although all of this material was evidently residual, mostly recovered from Roman features.

In addition to the material described above, a small quantity (7 sherds/79g) of pottery characteristic of Late Bronze Age/Early Iron Age transition date was recovered at PRB 95, again having been deposited residually within Roman features or deposits. While there is certainly evidence of activity at Old Ford during the Late Bronze Age/Early Iron Age transition, little can be deduced about its nature. Of particular interest, however, was one sherd that had been deposited residually within Period II pit [353], in Area 3 at LEK 95. This item was from the base

of a sub-rectangular vessel, possibly associated with salt production or trade. A fragment of fired clay, possibly briquetage of Late Bronze Age/Early Iron Age transition date, was found residually within a modern pit in Area 1 at the same site. This item reinforces the suggestion of salt trade activity at Old Ford during this period.

Since the vast majority of the pottery of Late Bronze Age/Early Iron Age transition date to be recovered at LEK 95 came from features or deposits associated with the earliest phase of the Roman road, it is plausible to suggest that at least some prehistoric features, particularly of this period, were destroyed during construction of the road. It is clear that the extent of horizontal truncation in the southern half of LEK 95 must be taken into account in any discussion of pre-Roman activity. There is strong evidence to suggest that natural brickearth was stripped en masse from the 'road zone', principally in order to provide material for the construction of a solid foundation for the road agger, and, in this event, only relatively deeply cut pre-Roman features could have survived.

Late Iron Age activity (Period II)

Only a handful of features can be attributed, with any degree of certainty, to this period. Consequently, any attempts to answer questions about the nature of settlement at Old Ford immediately prior to the Roman Conquest are confounded by the exiguous nature of the evidence. Whatever its nature, occupation at Old Ford during this period was clearly not intensive and may have been related to episodic, perhaps seasonal, activities.

Little in the way of Late Iron Age material has been encountered in the vicinity, although prior to the fieldwork described in this paper there had been two discoveries of Iron Age coinage within 1km of Parnell Road - two tin coins were reputedly found immediately to the south of LEK 95 and a gold coin inscribed 'Tascio' was discovered to the north-west in Victoria Park (GL SMR 080 825 and 080 723 respectively). The discovery of a quarter stater of Cunobelin within the fill of the earliest southern boundary ditch of the Roman road, in Area 1 at LEK 95, was, therefore, a significant if not entirely surprising find. A plot of all the coins of Cunobelin, who died c.AD 40, shows the greatest concentration along the Lea Valley, which was

the main route to the heartland of the Catuvellauni; the latter had been united with another powerful tribe, the Trinovantes, by his father Tasciovanus to create one large kingdom (Webster 1993, 62-3). At PNL 98 the remains of what may have been two enclosures defined by ditches, as well as a number of pits and postholes, have been identified. The first enclosure measured a minimum of 38m east—west by 32m north south and of the second, of which only one corner was exposed, the observed dimensions to the edge of excavation were 10m east—west by 2m north-south (A. Douglas pers comm).

One of the most recent syntheses of the vast body of evidence for Roman occupation in London has concluded that, 'We can be reasonably certain that there were no major settlements in or around London at the time of the conquest' (Perring 1991, 1), a view which continues to hold true in more recent research (Frederick et al 2000, 112-13). While the evidence from the sites described in this paper neither proves nor disproves this assertion conclusively, the ceramic evidence is certainly indicative of a 'Belgic'-period presence in Old Ford. Over 50 sherds (c.570g) of 'Belgic'-style grogged and, principally, shell-tempered wares, broadly datable to the period c.50 BC to AD 25/50, were recovered from the two sites. This is a significant finding in itself, as Gallo-Belgic pottery styles are thought to largely bypass the London area (Frederick et al 2000, 112), and one that should not be overshadowed by the problematical nature of the dating and interpretation of many of the features ascribed to Period II.

Evidence for Late Pre-Roman Iron Age settlement in London, gathered from several sites in Southwark, is suggestive of occupation on the scale of a simple farmstead at the most (Perring 1991, 3). Since this was probably the commonest class of 'Belgic'-period site in South-East Britain (Rodwell 1976, 325-37), it is conceivable that this was also the nature of occupation at Old Ford. Also in the Lea Valley, but some 22km to the north of Old Ford, a 'Belgic'-period farmstead was excavated at Nazeingbury in Essex (Huggins 1978) and it is possible that a similar settlement existed at Old Ford. Certainly it seems implausible to suggest that there was settlement on the scale of an oppidum, although a settlement of that status at Wheathampstead in Hertfordshire evidently guarded a ford across the upper Lea (Wheeler & Wheeler 1936).

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