TROSSALDY

592 143 1*6*4924

Not adequate - have asked to report to be tening brief k Phase 3 ad me Mort as agreed.

Archaeological watching brief at Plot LII, Eurolink Phase 3 Castle Road Sittingbourne Kent

ī.

Paul Hutchings

Canterbury Archaeological Trust 92A Broad Street Canterbury Kent, CT1 2LU

June 2002

Contents

Introduction Topography and geology The archaeological and historical background The evaluation and excavation The watching brief Methodology Summary of results Early occupation Late Iron Age and Early Roman features Discussion

Appendix 1: The worked flints Appendix 2: The pottery: a summary Appendix 3: The small finds Appendix 4: The daub Appendix 5: The animal bone Appendix 6: Context register

Bibliography

List of figures

- Fig. 1 Site location plan
- Fig. 2 Features recorded during the excavation and watching brief
- Fig. 3 Ditches revealed by the watching brief
- Fig. 4 Plan and section, Trench A
- Fig. 5 Sections A–B, C–D, E–F, G–H and I–J

An archaeological watching brief at Plot LII Eurolink Phase 3, Castle Road, Sittingbourne, Kent

CAT site code: ESL II-O1 W/B

Introduction

An archaeological evaluation of Plot L2 in the Eurolink industrial park, Castle Road, Sittingbourne was undertaken by the Canterbury Archaeological Trust late in 1999. The evaluation revealed features and occupation debris dating from the Late Iron Age and Early Roman periods (Sparey-Green 1999). In accordance with outline planning permission (SW/99/703, case 17238) an archaeological excavation was commissioned by Peter Brett Associates for the landowners, Blue Circle Industries. Following this an archaeological watching brief during redevelopment was commissioned by the developer, Priority Sites Ltd. The excavation was undertaken between October and December 2000 and the watching brief between March and April 2001.

The present report deals solely with the watching brief and has been compiled at the request of Priority Sites, to satisfy a planning condition placed upon their development. Information included in this report will be published with the results of the earlier episodes of fieldwork.

1. 1. 1920

1

Topography and geology

The site is centred at TQ 9212 6492 and lies within the Sittingbourne urban district situated on low lying ground on the eastern side of Milton Creek. The underlying geology is variable; geotechnical investigations undertaken in advance of the redevelopment revealed Thanet Sands at least 2.5 m. thick overlain in some parts of the site by Head Gravel between 0.6 and 1.2 m. thick. The excavation area measured roughly 50 m. by 42 m., representing the footprint of a substantial building forming part of the development. The watching brief concentrated on a greater area which included not only the footprint of the new building, but areas outside, destined for car parking and landscaping for the development.

The archaeological and historical background

No prehistoric finds are known from the area save for an Iron Age ditched enclosure discovered during a watching brief carried out on Plot K immediately to the north of the subject site in 1997 (Houliston 1998).

A Roman inhumation burial in a lead-lined coffin with rich grave goods was discovered 250 m. to the east of the site (SMR TQ 96 SW 8). Further east and 400 m. from the site, building foundations of Roman date are known (SMR TQ 96 SW 9), while to the south and south-west of that discovery cremation burials have been discovered (SMR TQ 96

SW 50). These discoveries suggest a settlement site of some significance with adjacent burial ground set on a slight rise overlooking Milton Creek.

In the early medieval period the small village of Murston appears to have been centred on a low hill south-east of the site rather than as now a kilometre to the south nearer Watling Street. Reference in the Domesday Book suggests only a small settlement held by the Bishop of Rochester. The existing church of All Saints occupied the hill top and is the only surviving remnant of this small settlement which perhaps extended west to the edge of Milton Creek. Mere Court, 300 m. to the south-cast, may have been a dependent farm.

Murston in 1840 consisted of a scattered parish of twenty-four houses, presumably still dependent on agriculture, but probably with some facilities for shipping alongside Milton Creek and oyster farming at the junction of the creek and the Swale.

Brick-making started here in 1834, growing from earlier brickfields nearer Sittingbourne (Twist 1993). In 1846 George Smeed opened his first brickfield on land near the old All Saints Church, presumably on or near the present site. Eight huts were built near the church for those working in the field at that time. In 1850 operations expanded with the purchase of the manor of Murston. In the following decades stripping of brickearth for brick-making from the neighbouring land revealed the find summarised above.

Present day Murston to the south of the subject site is a relatively new village founded to cater for those involved in the expanded industry of the late nineteenth century. The only remnant of the original village other than the church is the Brickmaker's Arms, a former public house, which is now a domestic residence occupied by a scrap merchant whose yard adjoins the creek.

Ordnance Survey maps of the 1960s show a small gasworks occupied the area close to the creek, while rows of brick clamps existed on the north edge of the site and further north; this and other old industrial buildings or derelict land on the east side of Milton Creek have now been cleared for the present industrial estates.

The evaluation and excavation (Figs 1 and 2)

The previous episodes of fieldwork jointly provided a picture of the nature, date and extent of occupation within the boundaries of the investigation. At the conclusion of the excavation it could be seen that, despite extensive disturbance by quarrying and general truncation and compaction of deposits, 'islands' of intact stratified soil and isolated groups of cut features had survived. Mapping of those features, following clearance of modern overburden and their subsequent sample excavation, indicated that the majority dated from the Late Iron Age or Early Roman periods and suggested the presence of a multi-period settlement occupying ground against the eastern bank of Milton Creek.

Amongst the features investigated were two east–west aligned ditches extending roughly parallel to one another and approximately 6 m. apart. To the south of the ditches were two extensive depressions in the natural subsoil containing stratified ancient soils and cut

features including pits, post- and stake-holes (Fig. 2, pit complex A and B). Elsewhere in the southern part of the investigated area were groups of pits and post-holes clearly suggesting that occupation of the area had been intense, but only deeply-cut features had survived to the present day. A group of pits and post-holes were recorded between the ditches against the western boundary of the excavation area. Modern disturbance was found to have cut away much of the ground north and east of the ditches, but a small number of cut features including possible rubbish pits were identified against the northern boundary of the site (complex C).

An early interpretation of the excavated evidence identified the parallel ditches as possible side drains flanking a road or trackway crossing the settlement to the banks of the creek. The features and deposits either side of the putative roadway were considered to represent the truncated remains of a settlement that had flourished between the mid first century B.C. and perhaps the late second century A.D. Although a reasonable number of post-holes were present, suggesting buildings or fences, the number of rubbish pits and the presence of dumped soils containing quantities of food waste, particularly oyster shells, was taken to suggest that the area may have been on the fringes of the main settlement, in a zone perhaps used for the disposal of rubbish and other peripheral activities.

The watching brief

Methodology

The brief consisted of a number of visits by CAT staff who undertook rapid recording when significant archaeological deposits or features were exposed. Site visits were made only when groundworks were likely to expose new ground. The fieldwork entailed the half sectioning of all exposed features, the investigation of the intersections of cut features to elucidate their relative chronological sequences and the sectioning of linear features to provide a representative profile and dating evidence.

Summary of results

The maintenance of a watching brief during the Priority Sites development of Plot L2 of the new Eurolink industrial park, provided significant new discoveries to complement those made during the excavation. The new information has enabled a re-interpretation of the excavated evidence to take place and has generally enhanced an appreciation of the nature and extent of settlement against the eastern bank of Milton Creek.

Unstratified and residual struck flints recovered during the brief combined with a small corpus from the excavation now clearly suggest a transient phase of occupation, perhaps in the Late Bronze Age. Similarly, a small assemblage of mid to late Iron Age pot sherds also recovered mainly in residual contexts suggests occupation in that period.

A series of ditches identified to the west of the excavated area and in the south-west corner of the area suggest that each of the parallel road ditches identified as possible road drains, in fact form parts of two separate adjacent enclosures, north and south. Earlier and later ditches against the western boundary of the development, testify to topographical changes in the organisation of the settlement in Late Iron Age and early Roman periods.

Cultural materials recovered from the enclosure ditches appear to indicate that they were gradually infilled during the Early Roman period and may have been 'closed' by the late second century. Surface finds recorded both during the watching brief and the excavation indicate that occupation against the creek may have continued into the late third or even the fourth century.

Early occupation (Fig. 3)

Although a small assemblage of struck flints recovered from unstratified and residual contexts during the brief suggested an ephemeral phase of occupation in the Late Bronze Age (see Appendix 1) and a corpus of Late Iron Age sherds (see Appendix 2) indicated possible settlement at that time, the earliest features were uniformly of Late Iron Age or Early Roman date.

A number of ditches identified during the brief as stratigraphically earlier than the Late Iron Age or Early Roman period, but containing no or few datable finds, may be considered to represent occupation predating the main phase of settlement. Amongst this group of features the earliest was a short, curving length of ditch (1016) identified against the north-western boundary of the area (Section A–B, Fig. 5). The ditch, approximately 0.90 m. wide, and 0.22 m. deep, at first appeared to continue the line of southern boundary of the later northern enclosure to the west. Ditch 1016 was however cut by a later north-south aligned ditch (1026), which in turn was cut by the northern enclosure boundary (1038), thus proving that despite similarities in alignment, the ditch was of an earlier phase than the enclosure.

Also stratigraphically earlier than the main phase occupation features was the substantial north-south aligned ditch (1026), found cutting the earliest boundary (1016). The ditch, between 1.25 and 1.70 m. wide, dug on average 0.50 m. deep, was cut by a curving ditch (1038) forming the south-western corner of the later northern enclosure and a second curving ditch (1027) forming the north-western corner of a southern enclosure. Ditch 1026, traced for a length of over 36 m., was entirely cut away at its northern limit by the western side of the northern enclosure. The ditch yielded only a small number of grogged pre-Conquest Late Iron Age pot sherds, these recovered from the uppermost and final fills of the ditch (layer 1012). Given that the latest dated material from the final infilling of the ditch was of pre-Conquest date, then the cutting of the ditch may be assumed to be dated some time before this.

At Section C–D (Fig. 5) a steep-sided V-shaped feature was identified beneath ditch 1026. The feature (1044) which yielded no datable finds was cut to a depth of 1.05 m. and was approximately 1.80 m. wide. The cut which in section appeared to represent a deep linear boundary predating and following the same line of ditch 1026, was not

identified elsewhere beneath feature 1026 or within the watching brief area. The fills which comprised a deposit of primary rapid silt (layer 1025) capped by successive layers of redeposited natural clay containing modest amounts of gravel (layers 1041, 1040, 1042 and 1043) appeared to suggest that the feature had remained in open for a very short period of time. One possible interpretation for this is that 1044 was cut as a sump for ditch 1026 and had been rapidly backfilled.

Also perhaps of early date was a short length of ditch (1020) located in the south-western corner of the investigated area (Section E-F, Fig. 5). The ditch, 0.4 m. wide and 0.3 m. deep, was aligned roughly parallel to and 6.0 m. west of ditch 1026. The ditch fills provided no datable evidence and the allocation of this feature to an early phase is based on similarities of alignment. Given the lack of dating evidence, however, this assumption cannot be proven.

Late Iron Age and Early Roman features

The watching brief provided key observations to assist with the interpretation of features recorded during the excavation. Originally interpreted as possible side drains flanking a trackway a pair of east-west aligned ditches set between 6 and 10 m. apart were identified against the western boundary of the investigated area. The northern ditch (1038) was found to curve sharply from an east-west to a north-south line to form the south-west corner of a possible enclosure. The ditch was cut into the fills of two earlier features (1016 and 1026) and there was evidence to suggest that a short section of the southern ditch close to the corner may have been recut during the life of the enclosure (Section G–H, Fig. 5). The re-cut ditch 1038 was on average 1.40 m. wide and 0.40 m. deep. The fragment of primary ditch (1038A) was 0.60 m. wide and 0.30 m. deep.

Ditch 1038 contained a single fill (layer 1021) which provided just four sherds of pre-Conquest grog-tempered coarse ware. Material recovered from the same ditch within the excavation however, dated into the second century A.D. and the overall construction and occupation of the enclosure may be perhaps be dated from the Late Iron Age into the late second century A.D.

Much of the interior of the northern enclosure was destroyed by brickearthing but a small group of pits was identified and recorded during the excavation (complex C). A second group of features was identified during the watching brief north of the previous discovery. Here a depression in the natural subsoil contained intact ancient soils up to 0.20 m. thick (layer 1009) into which a number of features had been cut. A 1 m. wide and 11 m. long trench (Fig. 4, Trench A) was cut through the deposits to reveal parts of four pits (1004, 1005, 1006 and 1008) and the possible ditch (1002). The intact soils filling the hollow yielded a corpus of sherds dating from the late first century B.C. to the late second century A.D. together with a number of iron nails, animal bones and daub. Of the four pits only 1006 and 1008 yielded finds (layers 1010 and 1007 respectively). The first pit (1006) contained a single pre-Conquest sherd and the second (1008) a single sherd dating up to the early second century A.D. An east–west aligned ditch (1002), 1.30

m. wide and 0.30 m. deep, located at the southern end of the trench, provided material dating into the second century A.D.

The combined evidence from the enclosure boundary ditches, pit complex C and trench A, indicate that occupation of the northern enclosure may be tentatively dated from the late first century B.C. to the late second century A.D.

The watching brief provided evidence for a continuation of the southern ditch found cutting across the excavation. Leaving the excavated area on an east-west line, the ditch (1027) extended south to a north-south line forming the north-west corner of a possible southern enclosure. The ditch, on average 1.45 m. wide and up to 0.82 m. deep (Fig. 5, section I–J) contained a small corpus of sherds dating up to the late first century A.D. The latest material recovered from the same ditch within the excavation can be dated up to the late second century. Material from within the enclosure can be dated up to the late second and possibly into the early third century A.D.

One final ditch requires a mention. Cutting across the south-west corner of the northern enclosure (1038) and into the early fills of ditch 1036 was a short 10 m. long section of north-south aligned ditch (1029). The ditch 0.40 m. wide and 0.30 m. deep yielded no datable finds, but stratigraphically appeared to post-date the infilling of the enclosure boundary and therefore may be the latest feature within the investigated complex.

Discussion

The results of the combined brief not only assisted with the interpretation of evidence recovered during the excavation, but materially contributed to our knowledge of the site in general. The discovery of a small assemblage of struck flints demonstrated ephemeral and perhaps transient occupation of the area east of Milton Creek in the Late Bronze Age. A residual corpus of Early to Middle Iron Age pottery also suggests an episode of occupation in the area at that time. The enclosure located in Plot K may also be broadly dated to this period.

Long term occupation begins and settlement activities appear to intensify from the Late Iron Age onwards and it is from this period that many of the cut features may be associated. By the Early Roman period two separate enclosures appear to have been established set side by side with their western boundaries following a common north-south line. Within each of the enclosures are groups of pits and post-holes testifying to domestic occupation, although iron-working debris was recovered from the southern enclosure suggesting industrial activity. The brief produced a disappointing number of small finds, mainly iron nails and two iron knife blades from the northern enclosure. Daub fragments were recovered from both enclosures together with a small corpus of animal bones. The combined material evidence reinforces the view that the enclosures were of a domestic nature.

Given that the two enclosures are likely to be contemporary it is not inconceivable that the gap between them represented a thoroughfare or roadway. Further still, the presence of ditches to the west of the enclosures is a clear indication that occupation continues in that direction and that overall an extensive and fairly complex settlement pattern is indicated by the evidence.

Occupation within both enclosures appears to continue into the late second and just possibly the early third century A.D. Although there is a small amount of material that could be dated later than this, other than ditch 1038 there are no features that can be definitely attributed to a later Roman phase of activity.

Evidence from the watching brief together with that from the excavation and previous observations would suggest that this part of the eastern bank of Milton Creek may have been occupied from the middle of the first century B.C. until the early third century A.D. with at least three enclosures now identified. As all enclosures were not simultaneously in existence, palimpsest occupation is indicated. Quite how extensive the settlement was at any given time is impossible to establish on the basis of present evidence, but the survival of deeply-cut features at Plots K and L2 would suggest that recent industrial disturbance may not have removed all trace of ancient occupation against the creek.

The presence of a settlement on low-lying ground just above the flood plain against the eastern bank of Milton Creek is significant. The creek provides direct access into the Swale which would have been an important route of communication and trade in the later Iron Age and Roman periods. Further still, the large quantities of oyster shells present in occupation levels (mainly observed during the excavation) may indicate that as in more recent times, oyster beds existed in the Swale and these may have been exploited by the nearby community for both home consumption and trade. By the Early Roman period the settlement would have benefited from the line of Roman Watling Street, located 1.75 km. to the south, close to the head of the creek. The number of chance finds from the general area, particularly burials, and traces of at least one masonry building, would suggest that the two topographical features, Milton Creek and Watling Street, provided a stimulus and focus for settlement near their conjunction from at least the Early Roman period onwards. The settlement discovered beneath the former brickworks may therefore have been one of a small number of creekside or roadside communities that derived a livelihood from the fertile soils, marshes and waters of the area and from the twin arteries of trade and communication represented by Watling Street and the Swale.

Appendix 1

The worked flints

Beccy Scott

Method of analysis

All artefacts were examined and allocated an individual flint number (FN.). Details of these were recorded in an Excel spreadsheet. The following variables were recorded; length, width and thickness (mm., using principle of minimum square), weight, raw material, mode of percussion, degree of cortication and abrasion, and percentage of modern and patinated damage. Following Ashton and McNabb (1996), the following technological indicators were recorded; number of dorsal scars, dorsal scar pattern and type of butt. Core episodes, relict core edges and number of removal were noted, together with any form of platform preparation. Any subsequent retouch was noted, along with any typological classification and other notable features.

The material

In the course of the evaluation and excavation, twenty-nine struck flint artefacts were recovered from the site. All of these exhibited at least some degree of abrasion and unpatinated damage, indicating that they do not represent a pristine lithic assemblage, but rather an earlier surface scatter of material incorporated into later cut features. Some unstratified material collected may represent the remnants of this scatter. None of the material was heavily patinated, as is typical of such acidic clay soils. No single context produced notably more material than any other, nor a collection which was in anyway distinct, and the samples represented are too small to allow any meaningful intrasite contrasts to be drawn. As such, the assemblage is here examined as a diffuse whole, albeit reworked through the cutting of later features and weathering of unstratified material derived from the surrounding land surface.

Technological features of the flint assemblage suggest that most of the material is likely to be Late Bronze Age in date, although not all artefacts fit so well into this range of variation. Indeed, given that none of the material seems to derive from primary prehistoric contexts it is very likely that more than one period is mixed in the sample, although given the low numbers of artefacts this was impossible to disentangle. The assemblage is dominated by struck flakes (41.4%; see Table 1) but also includes a high proportion of retouched pieces (24.3 % of assemblage) for a small collection.

Artefact (n = 29)	Number	% of assemblage	
flakes	12	41.4%	
scrapers	4	13.8%	
miscellaneous retouch	3	10.3%	
cores	1	3.4%	
shatter	8	27.6%	
hammerstones	1	3.4%	

Table 1. Lithic artefact totals for whole assemblage

However, of note is the fact that such a high proportion of shatter - material removed from flawed nodules by poorly controlled hard hammer percussion - is represented. This largely results from the poor quality local raw material used, as is further discussed below. It is likely that the apparent over-representation of retouched pieces is related to this; shattered material may not be recovered in the same proportions as it is not clearly humanly modified and when covered in clay barely distinguishable from naturally fractured pebbles.

Distinctions have been drawn between later prehistoric industries on the basis of technological change in flake and blade production (Pitts and Jacobi 1979; Ford *et al.* 1984). Dorsal scar count, scar pattern and butt type all provide evidence for this, as do flake dimensions and analysis of cores. Summarised briefly, there is a linear trend from the Late Mesolithic through to the Late Bronze Age (and Iron Age) away from narrow, parallel blades reduced from unipolar or bipolar cores of high quality raw material using careful core maintenance, platform preparation and indirect percussion. In contrast, later industries are characterised by broader, thicker flake production from multiplatform cores of lower quality raw material (Edmonds 1995). Material is not habitually imported, but opportunistically derived from the surrounding environment. However, it must always be born in mind that such contrasts are mitigated by local conditions and contexts of tool production.

No blades were recovered from the assemblage, which is dominated by wide flakes, many of which are also thick. The angle of flaking is frequently very steep, again a result of this method of reduction. Only one flake (a scraper, FN 4) exhibits any sort of platform preparation, and a high proportion of butts are either cortical or natural (27% of flake assemblage). This is a result of the small river clasts used as raw material, which necessarily present a large cortical surface for the volume of flint they contain.

The assemblage is markedly dominated by hard hammer percussion (86% of assemblage) and a single hammerstone was recovered from possible occupation context (513). There is also a preponderance of thick butts resulting from poorly controlled hard hammer flaking, often resulting in frequent step terminations from failed blows prior to a flake

actually being removed (eg. FN 14). Incipient cones of percussion, indicating that nodules were subjected to repeated battering rather than controlled reduction are also represented on many flakes; a small multiplatform core (FN 7) exhibits three extant core edges, with incipient cones visible on all faces. As mentioned above, throughout the Bronze Age there is a trend away from uni- and bipolar flake production towards multiplatform cores; the clumsy reduction of this core is typical of the later end of variation.

The retouched artefacts from the assemblage could broadly support a later Bronze Age date); seven modified pieces were recovered; three scrapers (FN 4,5 and 19), one endscraper (FN 9), a notch (FN 23) and two flakes with peripheral retouch (FN 6 and 21; Pierpoint 1981). Scraper typology is notoriously undiagnostic, and tools such as these in which a flake is only peripherally modified to form a working edge, rather than substantially reworked to achieve a specific form, are better seen as tools of the moment. Their form is more controlled by immediate need and raw material constraints than any existing cultural template of what a specific tool should look like. As such, any dating on the basis of typology cannot really be sustained. However, it is perhaps worth noting that the small notch (FN 23) bears many incipient cones of percussion on the dorsal face, and that all but the endscraper (FN 9) are formed on very poor local raw material. These are again indications of a Bronze Age date.

The raw material employed in the assemblage is poorly suited to lithic reduction; it is dominated by rolled material (58.16%; see Table 2.), presumably largely derived from the nearby creek. Some of the material also displays frost fracture planes, perhaps indicating extraction from glacial deposits in the brickearth. Some better quality chalk flint is also represented.

Raw material (n=29)	No. of artefacts	% of assemblage
Bullhead	2	6.9%
chalk flint	7	24.1%
rolled/weatherea	4	13.8%
chalk flint		
rolled gravel	13	44.8%
other	3	10.3%

Table 2. Raw material from which assemblage is reduced

The raw material used to produce this assemblage can overwhelmingly be seen as locally extracted and of limited potential; river pebbles and frost damaged material is prone to unpredictable fracture and renders controlled flaking exceedingly difficult. Such a pattern of exploitation is later Bronze Age in character, with only a small proportion of superior raw material being brought in from elsewhere, in contrast with earlier periods. It is worth noting that such raw material intrinsically limits the products which can be reduced from it; they tend to shatter and hard hammer percussion is necessarily employed to fracture

rounded pebbles. Flakes are therefore shorter and thicker with larger platforms. These are also technological characteristics of later Bronze Age industries, and care must be taken not to confuse limits imposed by raw material with mode of production itself.

Conclusion

Given that the lithic assemblage from the site appears to derive largely from the weathering of a surface scatter into later cut features, it seems reasonable to consider the assemblage as a whole together with unstratified material as a broad sample of prehistoric activity in the area. None of the material seems fresh enough to have been buried quickly, but to have been exposed and perhaps moved some distance in abrasive soil. Technological analysis of the collection seems to demonstrate that it is dominated by later Bronze Age material, indicated by the poor quality of raw material, dominance of broad flakes produced by hard hammer percussion and little control of flake production. Typological examination also seems to broadly support a Bronze Age date. Although the nature of the local raw material would clearly have precluded more refined reduction in many instances, better material was not brought in, as is done in similar situations in earlier prehistory. Whilst earlier prehistoric activity may also be represented, this is subsumed by the dominance of the later material within the sample. On the basis of such a small collection apparently residual in later contexts, little can be said concerning the nature of prehistoric activity on the site other than to note its presence and to advance a tentative date of the later Bronze Age, and to perhaps suggest a less ephemeral prehistoric site outside the limits of the present excavation.

Appendix 2

The pottery: summary Mark Davey

A total of 425 sherds, weighing 7,042 g. were recovered during the watching brief, dating from the Iron Age to the Roman periods.

All of the Iron Age sherds are flint-tempered, small in size and with varying degrees of wear. The few diagnostic sherds, i.e. rims, might indicate a date of *c*. 500–300 B.C. but are essentially undatable (P. Cauldrey pers. com).

The majority of the 'Belgic' wares are in a variety of tempered fabrics, namely grogtempered and shell-tempered. The fine grog-tempered sherds represent flagons, whilst the coarse grogged and the shell-tempered represent storage jars, some of the shelltempered vessels having stabbed/slashed decoration on the shoulders. The fact that the main vessel form represented is the storage jar indicates a late first to early second century A.D. date, after which the tempered fabrics were replaced by a sandy ware tradition. The vessels from this sandy ware tradition are hand-made and mainly appear as bead rim jars and bowls. Many of the sherds recovered have 'Belgic'-style slashed or combed decoration, especially on the shoulders, this being a trait which is more prevalent in West Kent than in the east of the region, and they date from the mid first to mid second century A.D. These sandy wares also introduce an element of ambiguity, as many of the forms retrieved look earlier than the fabric; in context (1030), for example, some of the sandy ware forms recovered suggest late second- to third-century Native Coarseware-types or Late Roman sandy wares. The fabric, however, can certainly be dated to the mid first to mid second century A.D. period.

The mid to late first-century date also coincides with the emergence of the Upchurch pottery industry situated on the North Kent marshes. The Eurolink Watching Brief provided many examples of this tradition in both a reduced and oxidised fabric, the range of reduced forms including beakers, jars, bowls and dishes. The oxidised fabric is mainly represented by flagons, although (Slot 1) produced a bodysherd of fine orange Upchurch with a cream slip and red-painted cross-hatched decoration. Examples of this are rare in Canterbury, there only, to date, being a few sherds recovered from the Marlowe and Longmarket excavations, where they have been dated *c*. late first to early second century A.D.

Other fabrics recovered which fit in with a mid/late first- to early second-century date include Central Gaulish samian, South Spanish Dressel 20 amphora, 'Brockley Hill', Black-Burnished 2 and White Wares. One unexpected trend was the relative paucity of Black-Burnished wares in relation to other fabrics, there only being a few sherds of Black-Burnished 2 dishes and no Black-Burnished-type wares.

Overall, the assemblage would indicate a late first- to early/mid second-century A.D. date, although the small and abraded sherds of the Iron Age and 'Belgic' flint-tempered wares make precise dating difficult. Several of these sherds merit further investigation, especially the hand-made sherds in a fine, silty matrix, cf. some Upchurch wares from Trench A, (1030), and the sherds with abundant fine flint in a fine sandy matrix from (1023). Neither of these fabrics has previously been encountered, and they have been included into the Canterbury Archaeological Trust's Pottery Reference Collection.

Appendix 3

The Small Finds Ellen Swift

A total of thirteen items, mostly of iron, with one fragment of copper alloy and one bone handle were recovered. Predominantly structural ironwork is represented, chiefly iron nails with square or rectangular cross-section. They are undiagnostic chronologically, being found in a wide variety of contexts, e.g. from Roman to post-medieval, though not modern (modern nails have circular cross-section). This range of sizes is suitable for general domestic carpentry (Grew 1984, 94). There is a small number of household and domestic items, most too fragmentary for further comment, though the bone handle, probably from a toothbrush, is post-medieval and most likely eighteenth or nineteenth century.

Structural ironwork

ESL II 01 W/B Context 1030 (as 1009) SF 461 Nail with D-shaped flat head, tapering shank, length 34 mm.

ESL II 01 W/B Context 1030 (as 1009) SF 466 Nail with D-shaped domed head, broken, two pieces, total length 60 mm.

ESL II 01 W/B Context 1030 (as 1009) SF 456 Nail with flat hexagonal head, twisted, length 64 mm.

ESL II 01 W/B Context 1030 (as 1009) SF460 Bolt with hexagonal ends, length 71 mm., cross-section shank c.28 mm.

ESL II 01 Context 1030 (as 1009) SF 464 Fragment of iron strap.

ESL II 00 Context unstratified SF 398 Nail with hexagonal head, length 32 mm.

ESL II 00 Context unstratified SF 61 Nail with flat triangular head, tapering shank, length 42 mm.

Household and domestic

ESL II 01 Context 1030 (as 1009) SF 465 Fragment of iron knife, length 45 mm., width 29 mm. at widest point

ESL II 01 W/B Context 1030 (as 1009) SF 462 Fragment of iron knife, length 39 mm., width 14mm. at widest point

ESL II 01 W/B Unstratified SF 458

Bone handle, probably of toothbrush, bevelled edges, head missing, length 105.mm., width 15.mm.

Miscellaneous/unidentifiable

ESL II 01 W/B Context 1030 (as 1009) SF 463 Iron fragment

ESL II 01 Context 1030 (as 1009) SF 455 Fragment of iron object, heavily corroded.

ESL II 00 Context 3 SF 457 Fragment of flat copper alloy strip.

Appendix 4

The Daub

Louise Harrison

Fourteen fragments of daub weighing approximately 375 g. were retrieved from the site. Approximately 37% of the assemblage had diagnostic features such as flat surfaces and/or wattle impressions. The remaining material consisted of small, worn fragments which were quantified and weighed by context before being discarded. The diagnostic daub has been recorded and catalogued in greater detail and forms the basis of this report.

The fabrics

The daub was examined to determine its clay type or fabric. There were two distinct fabric types.

Fabric 1: An orange coloured fabric with a fine and sandy texture. No other inclusions were visible.

Fabric 2: This is similar in colour and texture to fabric 1 with a moderate quantity of small (under 0.5mm) flecks of mica.

The assemblage

Approximately 68% (by weight) of the daub consisted of fabric 2. Virtually all of the daub (except one piece weighing 20 gm.) had flat smooth surfaces. Four of these had evidence of burning on their surfaces. Additionally two (unburnt) fragments had lime wash on their surfaces. The surface fragments varied in size from 57 mm. to 19mm. in length. Only one piece had a measurable thickness, this being 26 mm.

Only one fragment bore a wattle impression, which measured 23 mm. in diameter.

Conclusion

The presence of the daub suggests that wattle and daub lined structures were once present on the site. The evidence for burning found on some of the fragments surfaces suggests that these pieces may have been situated near a hearth or fireplace area.

Appendix 5

The Animal Bone Louise Harrison

Twenty-five fragments of animal bone weighing just over one kilogram was retrieved from the site. The assemblage was retrieved by hand from a number of different contexts, all dated by pottery to the Roman period (see table).

Context No.	Material	Quantity	Weight (g)	Species
1013	Bone	3	90	COW
1013	Bone	1	105	COW
1023	Воле	3	5	Unidentifiable fragments
1025	Bone	1	90	cow
1030	Bone	17	725	cow, pig and sheep
slot 1	Bone	2	10	sheep
u/s	Bone	2	50	cow

Weight and quantity of animal bone by context

The bone was in a good state of preservation with a large quantity of diagnostic material present in the assemblage. There was no evidence of pathology or butchery.

The assemblage consisted of mainly cattle bone (approximately 91% by weight) while the remainder consisted of sheep (8%) and pig bone (1%). The cow bone consisted of mainly tibia and fibula bones with one maxilla and one vertebra also being present. The sheep bone represented fragments of radius and ulna, while the one pig bone was identified as a radius.

Conclusion

This small assemblage is not atypical of those derived from other Roman contexts. However, the small numbers of bone fragments preclude any further statistical analysis.

Appendix 6

Context register

Context	Туре	Fill of	Cut contains	Plan no.
1000	Deposit			
1001	Fill	1002		
1002	Cut		1001	
1003	Fill	1004		
1004	Pit cut		1003	
1005	Stake-hole cuts		1010	
1006	Cut		1010	
1007	Fill	1008		
1008	Post-hole cut		1007	
1009	Deposit			
1010	Deposit			
1011	Fill	1008		
1012	Fill	1017		
1013	Fill	1027		
1014	Fill	1016		
1015	Fill	1016		
1016	Cut		1014, 1015	
1017	Cut		1012	
1018	Fill	1020	·	
1019	Fill	1020		
1020	Cut		1018, 1019	-
1021	Fill of ditch	1038		
1022	Fill	1027		
1023	Fill of ditch	1024		
1024	Cut of ditch		1023	
same as				
1026				
1025	Fill	1027		
1026			1012, 1033, 1034, 1035, 1036, 1037	
same as				
1024	0		1010	
1027	Cut of ditch	1020	1013	
1028	Fill of ditch	1029	1020	
1029	Cut of ditch		1028	
1030	u/s pit Complex A Unit 3 in excavation			
1031	Fill	1032		
1032	Cut of a pit		1031	
1033	Fill	1026		
1034	Fill	1026		
1035	Fill	1026		
1036	Fill	1026		
1037	Fill	1026		
1038	Cut		1021	

Bibliography

Ashton, N.M. and McNabb, J. 1996, 'Methodology of flint analysis' in B. Conway, J. McNabb and N.M. Ashton (eds), *Excavations at Barnfield Pit, Swanscombe, 1968–72*, British Museum Occasional Paper 94, London.

Edmonds, M. 1995, Stone Tools and Society: Working stone in Neolithic and Bronze Age Britain (London).

Ford, S., Bradley, R., Hawkes, J. and Fisher, P. 1984, 'Flint-working in the metal age', *Oxford Journal of Archaeology* 3, 157–73.

Grew, F. 1984, 'The Small Finds' in Grew, F. Thompson, A. & Schofield, J. 'Excavations in Aldgate 1974', 1', *Post-Medieval Archaeology* 18, 1–148.

Houliston, M. 1998, *Highway infrastructure for Eurolink Phase III, Sittingbourne, Kent:* An archaeological watching brief December 1997-February 1998, unpublished client report (Canterbury Archaeological Trust).

Pierpoint, S. 1981, Prehistoric flintwork in Britain, (London).

Pitts, M.W. and Jacobi, R.M. 1979, 'Some aspects of change in flaked stone industries in the Mesolithic and Neolithic in Southern Britain', *Journal of Archaeological Science* 6, 163–77.

Sparey-Green, C.J. 1999, Archaeological evaluation of proposed factory/industrial use building. Plot L2, Eurolink Phase 3, Castle Road, Sittingbourne, Kent, unpublished client report (Canterbury Archaeological Trust).

Twist, S.J. 1993, Stock Bricks of Swale, Sittingbourne Papers 2, 14, 18.



Fig.1 Site location plan



Fig.2 Features recorded during the excavation and watching brief

•

1.1



Fig.3 Ditches revealed by the watching brief



North



Plan



0 1m

Fig.4 Plan and section, Trench A

South



Fig.5 Sections A-B, C-D, E-F, G-H and I-J

L