# Channel Tunnel Rail Link London and Continental Railways Oxford Wessex Archaeology Joint Venture

## The Iron Age settlement and Roman Villa at Thurnham, Kent

by Steve Lawrence edited by Paul Booth

## CTRL Integrated Site Report Series 2006

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#### **ABSTRACT**

As part of an extensive programme of archaeological investigation carried out in advance of the construction of the Channel Tunnel Rail Link (CTRL), Oxford Archaeology (formerly Oxford Archaeological Unit) was commissioned to undertake an excavation at the Scheduled Ancient Monument (SAM KE 299) of Thurnham Roman Villa (OS NGR 579950 157110) and trench excavation of earthworks located in the adjacent Honeyhills Wood near the village of Thurnham in Kent. In addition, a watching brief was undertaken on the surrounding CTRL route section from Sittingbourne Road, Detling, to Crismill Lane, Thurnham. In the course of the watching brief, a concentration of archaeological features was encountered to the east of Hockers Lane, near Detling (OS NGR 579200 157485).

The earliest evidence of human activity was represented by individual flint artefacts distributed across the site. No significant *in situ* scatters were present although a single microlith points to an early presence on the site. The first substantive remains were represented by an isolated large ramped waterhole. This appears to be of Middle Bronze Age date (*c* 1600 BC-*c* 1100 BC) and contained a pin and a dagger of that period, possibly deposited as part of a closing ritual when the feature was back-filled.

Evidence for permanent settlement first appears in the Late Iron Age, first at Hockers Lane, followed by the establishment of a large enclosed settlement at Thurnham. Activity at Hockers Lane consisted of a sequence of curving gully enclosures. Little physical remains of structures survived within the enclosed area, although a fairly large material culture assemblage points to probable domestic occupation from the second half of the 2nd century BC at the earliest, extending up to the conquest period but probably not much beyond.

Occupation at Hockers Lane may have been succeeded by, or slightly overlapped with, the earliest settlement at Thurnham. This consisted of a large rectilinear enclosure of two phases, containing traces of two roundhouses and two four-post structures, occupying an area of raised ground. The rectilinear enclosure was modified and extended c AD 60. At the same time a Romanised proto-villa building, with a tiled roof and painted plaster walls, was constructed as the settlement focus, complimented by a similar-sized possible temple building to the south. The pottery and other finds from this period hint at continuity of site ownership or tenure on either side of AD 43. Outside the enclosure, another possible religious or ritual focus was present, in the form of a massive free-standing post, raised on the approach to the entrance. The structural changes at this time were accompanied by a large increase in the quantities of charred cereal remains deposited in features, indicating an intensification of agricultural production at the site.

A larger stone built villa replaced the proto-villa structure in the early 2nd century, and the enclosure was extended and modified at the same time. The stone villa was built over the top of the Iron Age enclosure ditch, which was deliberately in-filled. The replacement enclosure boundary was defined by substantial fences that enclosed the rear and side of the villa building. Slightly after the completion of the villa, an aisled building of similar dimensions was constructed to the north-east. The enclosure was also extended to the north, beyond the limit of excavation, and an evaluation trench in this area suggests that a further building may exist here.

The possible temple was demolished in the later 2nd century, and a large gated entrance was added, roughly central to the axis of the villa. Possibly as part of these changes, or shortly after, a small bath house was added to the southern end of the villa and a large square extension, with a forward projecting apse, was added to the northern end. Relatively good dating evidence places this work in the last quarter of the second century. Further development included the construction of a 14-post timber agricultural building outside the core enclosure.

No further structural additions were made after the early 3rd century, and later activity at the site is characterised by a distinct change in the character of occupation. None of the boundaries were maintained and the bath house was either demolished or allowed to collapse by the late 3rd century. At this point the central room of the villa was converted into a small smithy that was probably engaged in the recycling of collected scrap iron. The aisled building was no longer standing by the turn of the 3rd century and appears to have been deliberately demolished. However, the estate apparently continued to act as a focus of agricultural production, as a corn drier was built on the site of the 14-post building in the later Roman period. This feature appears to have been the main focus of activity on the site, particularly in the later part of the 4th century and produced large assemblages of associated charred cereals. Combined with the general paucity of clear domestic occupation and associated finds assemblages, these developments suggest that the villa ceased to function as a high status occupation site, possibly being subsumed into a larger estate by this time. A large oven within the main villa building is the only clear evidence for late Roman domestic occupation. The area of the corn drier seems to have provided the focus for continued ritual activity, as wild animals were deliberately buried in the shaft of a well.

There is no evidence for occupation or land-use after the start of the 5th century, until the establishment of Corbier Hall moated manor (SAM KE 309) on the low lying ground to the east of the former villa. Evidence from this area includes peripheral features of the manor, containing artefacts of 12th to 13th century date. The moat ditch was maintained into the post medieval period and incorporated into a system of post-medieval land drainage ditches. Post-medieval land use was characterised by pasture and woodland, until the intensification of arable farming after the Second World War, when all upstanding features of Corbier Hall and the surrounding woodland were removed and levelled.

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Steve Lawrence supervised the fieldwork and prepared the post-excavation assessment report. Fieldworkers and specialist contributors to the assessment report are credited in the main project acknowledgements in the digital archive (ADS 2006).

The following specialists contributed to this publication report: Malcolm Lyne (Roman pottery), Paul Booth (coins), Hilary Cool (metal finds and glass), Peter Northover (metallurgy), Ruth Schaffrey (worked stone), Ian Betts (building material and fired clay), Lorraine Mepham (medieval pottery), Annsofie Witkin (human remains), Jennifer Kitch (animal bones), Ann Davis and Wendy Smith (charred plant remains), John Giorgi (waterlogged plant remains), Elizabeth Stafford (geoarchaeology and molluscs) Robert Scaife (pollen analysis), Richard Macphail with John Crowther (Soil micromorphology) and Simon Skittrell (CAD draughtsman). All illustrations were prepared by Anne Stewardson. The abstract was translated by Mercedes Planas (Spanish), Gerlinde Krug (German) and Valerie Diez (French).

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#### 1 INTRODUCTION

#### 1.1 Project Background

As part of an extensive programme of archaeological investigation undertaken in advance of the construction of the Channel Tunnel Rail Link (CTRL), Oxford Archaeology (OA), formerly Oxford Archaeological Unit (OAU), was commissioned by Union Railways (South) Limited (URS) to undertake an excavation of the Scheduled Ancient Monument and adjoining land to the south-east of Thurnham Roman Villa (SAM KE 299) south-west of Thurnham village, near Maidstone, Kent. This report describes that work and also takes account of all previous CTRL related fieldwork undertaken at Thurnham Villa, survey and excavation within the limits of Honeyhills Wood, the excavation of an enclosure site discovered during the course of a watching brief at Hockers Lane and the complete watching briefs from east of Sittingbourne Road (A429) to west of Crismill Lane (chainage 62+200 to chainage 66+350 in CTRL Project Area 420). A full list of fieldwork events is presented in Table 1.

Table 1: Fieldwork Events

Fieldwork Event	Туре	<b>Event Code</b>	Contractor	Date of fieldwork
Hockers Lane	Watching Brief SDI	ARC 420/99 62+200 - 63+000	OAU	4.6.99-1.1.00
East of Hockers Lane	Evaluation	ARC EHL 99	OAU	29.3.99-1.4.99
Honeyhills Wood	Watching Brief General	ARC 420/99 63+000 - 63+400	OAU	4.6.99-1.1.00
Honeyhills Wood	Detailed Excavation (Trenches)	ARC HHW 98	OAU	a. 30.11.98- 8.12.98
				b. 17-21.5. 99
Honeyhills Wood	Earthwork Survey	ARC HHW 97	OAU	21-23.3.97
Thurnham Roman Villa	Watching Brief SDS	ARC 420/99 63+400 - 63+900	OAU	4.6.99-1.1.00
Thurnham Roman Villa (Principal Site)	Detailed Excavation and Strip, Map and Sample	ARC THM 98	OAU	2.11.98-18.6.99
Thurnham Roman Villa & Land South of Corbier Hall	Evaluation	ARC THM 96	OAU	11-28.11.96
Thurnham Roman Villa	Geophysical Survey	ARC THM 95	Stratascan	a. 23-24.1.95 b. 24-27.2.95
South of Corbier Hall	Geophysical Survey	ARC CHS 95	GSB	23.2.96 (report)

Fieldwork Event	Туре	<b>Event Code</b>	Contractor	Date of fieldwork
East of Corbier Hall	Geophysical Survey	ARC CHE 95	A Bartlett	June 1995 (Drawing)
Thurnham Lane to West of Crismill Lane	Watching Brief General	ARC 420/99 63+900 - 66+350	OAU	4.6.99-1.1.00

The CTRL was built by London & Continental Railways Limited in association with Railtrack Group plc following the authorisation of the project by Parliament with the passage of the CTRL Act, 1996. The high-speed line runs for 109 km (68 miles) between St Pancras station in London and the Channel Tunnel and was built in two sections of which Section 1 lies entirely within Kent and runs from Fawkham Junction (Gravesham) to Folkestone.

The CTRL Act 1996 negated the requirement to obtain Scheduled Monument Consent in order to carry out excavation of the villa; however, the nominated undertaker (Union Railways Limited) was required to obtain agreement under the Deed on Heritage (Ancient Monuments) from the Secretary of State, as advised by English Heritage, for necessary mitigation works in relation to the monument. The agreement set out the detailed mitigation to be undertaken by the nominated undertaker and was granted, subject to conditions, on 9th October 1998.

This report is one of a series of twenty Integrated Site Reports and five Scheme-wide Specialist Reports, presenting the results of a major programme of post-excavation analysis undertaken for Section 1 of the CTRL. In addition the fieldwork reports, digital archives, plans and photographs of over 30 detailed excavations and over 80 evaluations have been deposited with the Archaeology Data Service (ADS 2006).

The Thurnham Roman Villa excavation investigated an area of land 470 m long and 35-80 m wide adjacent to the eastbound carriage of the M20 between Thurnham Lane and Honeyhills Wood (OS NGR 579950 157110). This 3.2 ha area was excavated between November 1998 and June 1999, during which time targeted excavation to investigate extant earthworks was also completed within the adjacent portion of Honeyhills Wood. Trenches were excavated across each of the earthworks, and towards the east end of the woodland, to identify any remains that might have been associated with the villa. The area of woodland subsequently cleared was also observed as part of the watching brief.

The watching brief area was completed between June and December 1999 and during this period a sequence of small enclosures was encountered and excavated at Hockers Lane. This site was located on land immediately south of Detling village enclosed by Honeyhills Wood to the east, the M20 to the south and Hockers Lane to the west (OS NGR 579200 157485) and measured 75 m along its north-west to south-eastern axis and between 45-55 m

wide, covering an area of 0.35 ha. This excavation was completed between August and September 1999.

#### 1.2 Geology and Topography

The area from Sittingbourne Road to Crismill Lane lies c 1 km south of, and parallel to, the North Downs on Gault Clay with localised overlying areas of Chalk Head (Fig. 1) (Geological Survey of Great Britain, sheet 288, 1976). A drift deposit of yellowish-brown silty clay and flints covers the solid geology to varying depths.

A gently undulating landscape typical of downland areas characterises the route along the foot of the North Downs. The historic woodlands of Horish Wood and Honeyhills Wood are located at the north-western end of the investigation area with an area of rough grassed paddocks, within which the Hockers Lane excavation was located, separating the woodlands (see Fig. 2 for the recent historical boundaries to the woodlands). Thurnham Villa was located immediately east of Honeyhills Wood and lay within modern cultivated pasture. Small grassed pasture fields continue eastwards past Thurnham Lane. Larger arable fields lie between Thurnham Lane and the historic woodland at Longham Wood, at the south-eastern end of this route section.

The excavation at Thurnham Villa occupied low-lying ground extending north-westward from Thurnham Lane at 70.0 m OD, dipping into a broadly linear low-lying hollow across the site at 68.0 m OD 100 m to the west of, and parallel to, the lane. From this low point the ground rises gradually westward over the next 220 m to 72.0 m OD. At the western end of the site, the area of the Scheduled Ancient Monument, the ground rises more sharply to an elevated plateau at 76.5 m OD upon which the core of the Thurnham villa complex was situated, backed by Honeyhills Wood (Plate 1).

The excavation at Hockers Lane was situated on gently sloping ground at 74.5 m OD, rising to 76.8 m OD at the northern corner of the excavation.

#### 1.3 Archaeological and Historical Background

Previous excavations at Thurnham Villa and Corbier Hall

The Scheduled Ancient Monument (SAM KE 299) of Thurnham Roman Villa ranks amongst the better-known villas in Kent, with a history of previous investigation by antiquarians and archaeologists. The villa building itself was first recorded in 1833 during preparation of the land for hop cultivation, when it was noted that 'the pavements and foundations of a considerable Roman mansion were uncovered' (Charles 1844). Following the initial discovery, the villa location was consistently wrongly quoted, so that when a Roman building was encountered at this site during 1932 it was at first thought to be a new finding. Limited trench excavations were undertaken in 1933 of what was realised to be the 'Roman mansion',

revealing the line of several walls and remnants of opus signinum floors (Ashbee 1986). During this work a substantial part of the earlier proto-villa structure and floors were also uncovered, although these were not recognised at the time and largely left *in situ*. Little dating evidence was recovered and interpretation of the discoveries was restricted, although the work succeeded in firmly establishing the location of the villa and the quality of preservation and presented the results in a commendable manner from the limited information available, very important factors for comparison with the later excavations. Comparison between deposits encountered in the 1933 and current excavations shows that only minimal truncation of the upper deposits had occurred over the villa in the intervening 65 years.

Further open area excavation of the southern end of the villa building was undertaken in 1958 in advance of construction for the Maidstone bypass (now the M20) (Pirie 1960). This succeeded in identifying two main periods of construction, the earlier comprising the rectangular core of the building. A construction date was not established for the primary building, but on the basis of a clear stratigraphic sequence and associated finds, the later addition of three apses, and the rebuild of the southern end of the villa with opus signinum and sand floors, was dated to the late 2nd or early 3rd centuries. The later additions were disused and sealed by destruction or collapse debris by the end of the 3rd century. The remains of a second, less substantial stone building were also discovered c 50 m to the southeast of the villa, but this building was investigated in less detail. Only a single period of construction and occupation was identified for this 'outbuilding' and associated material recovered from the floor surface suggested this was in use during the 3rd century. The construction of the bypass destroyed an estimated one third of the southern extent of the associated villa complex without further identification or investigation.

Aerial photographs were commissioned in 1990 as part of the Environmental Assessment for CTRL, amplifying the overall plan of the villa building (URL 1994) (Plate 2). The presence of an adjacent aisled building and other potential features was confirmed by a geophysical survey of the villa area in 1995 (URL 1995a). OAU undertook an evaluation in late 1996, exposing the wall footings of both the villa and the aisled building, while trenches excavated to the east also provided evidence of ancillary structures with ditches, pits, cobbled spreads and building debris all present (URL 1997a). Generally the pottery recovered was dateable to the 1st and 2nd centuries AD, with a pre-conquest element almost certainly present.

A separate Scheduled Ancient Monument is located immediately north of the excavation boundary at the eastern end of the site. The medieval moated manor of Corbier Hall (SAM KE 309) is situated 70 m to the west of Thurnham Lane just north of the excavation boundary, although land to its immediate south was examined in the excavation. Foundations of the principal building and a dovecote were uncovered by antiquarians in the

19th century and traces of a moat to the south were visible at the time. Geophysical surveys were conducted in the vicinity of and on the site of Corbier Hall in 1995 and 1996 to establish the extent of the moated site (URL 1995c; 1996). The southern side of the moat was also partly investigated by a trench during the 1996 evaluation (URL 1997a).

#### Honeyhills Wood

An assessment (URL 1994) identified a series of low ditch and bank earthworks in Honeyhills Wood. These were surveyed by OAU in 1997 (URL 1997b) and appeared to be part of a layout of rectilinear enclosures. The western ditch and bank alignment corresponds to the historical and existing parish boundary between Thurnham and Detling. The other earthworks do not appear on any maps, possibly indicating that they were of some antiquity by the time the earliest maps of the area were drawn.

#### Hockers Lane and East of Hockers Lane

Prior to the CTRL investigations few archaeological remains were known within the 800 m section of the CTRL corridor running eastwards from Sittingbourne Road (A429). Most of this area is occupied by the historical woodland of Horish Wood and the western edge of Honeyhills Wood. However, Iron Age and Romano-British pits and ditches were encountered during the laying of a gas pipeline north of Horish Wood (Syddell 1967) which falls within the northern limit of the CTRL boundary.

The c 3.8 ha area of grassed paddocks between Hockers Lane and Honeyhills Wood was evaluated by OAU in 1999, revealing a small cluster of late Iron Age/early Roman ditches, gullies, pits and postholes, all found in a single trench (URS 1999). The trench location subsequently proved to be set within the enclosure revealed during the watching brief

#### *Thurnham Lane to West of Crismill Lane (ARC 420/99 63+900-66+350)*

Apart from ditch and bank earthworks within Longham Wood, no archaeological features were known in the area of chainage 63+900-66+350. The earthworks within Longham Wood were surveyed during the same phase of work as those recorded at Honeyhills Wood and the results are separately reported (URL 1997b).

#### Wider Landscape Background

Thurnham and Hockers Lane are located on the strip of land along the southern base of the North Downs that has had a long and continued role as an important communication route through Kent. This topographical zone provided links to the south-east and north-west and thence, via the Medway valley, north to the Thames estuary and south-west into the Weald.

Relatively little is known of pre Iron Age settlement in the immediate vicinity of Thurnham, but the well-known Medway monuments (Kits Coty etc) and the Neolithic settlement excavated as part of the CTRL works at White Horse Stone lie only 5-6 km northwest. The latter site also produced important evidence for early Iron Age settlement. By the late Iron Age there are indications of a variety of settlement types. Some 6.5 km SSW of Thurnham the enclosed oppidum of Quarry Wood Camp, Loose (Kelly 1971), was presumably at the head of the local settlement hierarchy, although the site is only poorly known and by the time of the Roman conquest may have been replaced as a regional centre by a site near Rochester. Very recent work at Furfield Quarry near the Quarry Wood complex has revealed a major rectilinear enclosure probably of late Iron Age date (Mackinder 2005) and very likely forming part of the oppidum complex. Beyond this site, however, there is insufficient evidence from excavation to support any meaningful distinction between the various rural settlements of farmstead type known in the area. Sites such as Queen Elizabeth Square, Maidstone (Booth and Howard-Davis 2003), may have sequences that originate in the middle Iron Age, but more commonly occupation seems to have commenced in the late Iron Age and then continued at least into the early Roman period. Such a pattern is seen at Thurnham and adjacent Hockers Lane and at numerous other CTRL sites, particularly to the south-east, of which Snarkhurst Wood, c 2 km distant, is the nearest (Diez 2006b), as well as at non CTRL sites such as Runham Farm, Lenham (Philp 1994). Where sufficient is known these sites tend to be characterised by enclosures, sometimes irregular in plan, and other linear boundaries. Domestic structural remains are often elusive, but four-post structures are more common. A general spread of Iron Age coins also suggests quite widespread contemporary activity in the area, but the context of these finds is usually unclear. Their relative concentration in the Maidstone area may be related to the presence of the oppidum at Loose. A hoard of over 200 potin coins was found in 2003 on the Downs just above Thurnham (Richardson 2003) but its relationship to settlement is also uncertain. Another hoard is known from Hollingbourne, some 4.5 km distant to the ESE.

The known Roman settlement pattern of the area is still dominated by villas, a notable cluster of which occurs in the Maidstone area (Houliston 1999). The main Roman road south from Rochester to the Weald (Margary (1973) 13) runs up the Medway valley roughly 4 km west of Thurnham. South of Maidstone a south-east road (Margary 131) ran from road 13 towards the major roadside settlement at Westhawk Farm (Ashford) and thence to Lympne. It has been suggested that there may have been a nucleated settlement or 'small town' on road 13 at Maidstone itself, but the evidence for this remains ambiguous (Webster 1975, fig. 8; Houliston 1999, 158).

Apart from Thurnham itself the most extensively excavated villa site in the area is Eccles, some 9.5 km WNW, of which only interim accounts have been published (Detsicas

1963-1977a). Sites at The Mount, Maidstone, 4 km west of Thurnham (Kelly 1992; Houliston 1999), and Snodland, 11 km distant (Birbeck 1995), are also well-known but excavation has been more limited in extent. Barton Road and other sites in the Maidstone area are known principally from antiquarian references and have seen little significant recent work, although aisled buildings recently examined at Furfield Quarry, Boughton Monchelsea (Mackinder 2005) may have related to a nearby bathhouse known from antiquarian records (Detsicas 1983, 134, 142).

Lower status rural settlement in the area is mostly represented by sites where occupation continued from the late Iron Age. Snarkhurst Wood is typical of such sites. The character of the settlement was not significantly different from its pre-Roman phase, and structural evidence (apart from four-post structures) remained elusive. Occupation concentrated in the early Roman period and seems to have ceased altogether by the mid 3rd century. This pattern is seen on most of the other lower status CTRL Roman settlements, as well as at Queen Elizabeth Square, Maidstone and at Lenham. Early Roman activity was often superimposed on or contiguous with earlier settlement although occasionally, as at Beechbrook Wood, it was adjacent but discretely defined (Brady 2006). Burials, either individual or in small groups, are sometimes associated with these settlements, but more extensive, defined cemeteries are unknown at present. Enclosed cemeteries are encountered in the region (Jessup 1959) but these are usually thought to have been associated with higher status (villa-type) rural settlement, as at Joy Wood, Langley, Boughton Monchelsea, *c* 5.5 km SSW of Thurnham (ibid., 14-5, 26-7).

Evidence for late Roman activity is largely restricted to a handful of villa sites in the area, and very early Anglo-Saxon material is absent. There is a scatter of evidence for Anglo-Saxon burials along the scarp of the Downs and the Vale of Holmsdale, but none of these is dated before the second quarter of the 6th century (Riddler 2004). These finds include two spearheads and beads indicative of graves from Thurnham village itself (Beck 1940) and a 7th century gold pectoral cross comes from north of Pilgrim's Way (TQ 814576, Kelly 1967). Subsequent work at the latter location has revealed further high status objects and a single burial, not certainly that from which the objects derived (Richardson 2004). Cemeteries are known at Maidstone and Hollingbourne (Richardson 2005).

#### 2 AIMS

The aim of this report is to present a synthesised account of the site at an interpretative level that can be readily assimilated into complementary studies. The report is supported by the fieldwork and research archive which is freely available as a web-based digital archive (ADS 2006).

In support of the CTRL Project Monograph (Booth *et al.* 2007), the Thurnham Villa and Hockers Lane report integrates key assemblages and stratigraphic data into a site sequence secured on key dating evidence established from the artefact groups. The report includes a discursive narrative describing the sequence of activity and reasoning evidence (URS 2003, 15-16).

The updated research aims specific to Thurnham Villa focus on its transition from the Late Iron Age enclosed settlement into the early Roman proto-villa settlement. The evidence for continuity and development of the existing indigenous settlement is considered in detail (URS 2003, 31).

Study of the Roman villa complex includes refinement of the absolute chronological sequence, where possible, to demonstrate how the site developed throughout its occupation (URS 2001, 56-59). The report aims to characterise the economic basis of the settlement in each major phase of development, as proto-villa, fully developed villa complex, and in apparent decline in the late Roman period. The development of the character and function of the buildings and how they, and the space around them, were used and perceived by the contemporary inhabitants as the site developed, is considered. Understanding of these aspects helps to characterise the status and cultural affinities of the inhabitants and how the processes of change from the late Iron Age to early Roman periods affected them at all levels of private and public life. This discussion is supported by considerable evidence for Romano-British religious and ritual practice.

#### 3 METHODS

Prior to the start of topsoil stripping at Thurnham Roman Villa a metal detector survey was undertaken and finds locations recorded. The 3.2 ha area of excavation was stripped in several phases. In the initial area, topsoil overburden up to the specified excavation boundary was removed by a team of 360-degree excavators with six-wheeled dumper trucks. Spoil was stored along the north-eastern side of the excavation, preserving *in situ* archaeological remains previously identified during the evaluation of this area. Small areas of the site were extended at various points throughout the excavation to incorporate significant features and structures that were only partially exposed within the initial stripped boundary. Targeted areas and structures within the boundary were also subject to additional stripping at the end of the excavation to reveal stratigraphically earlier underlying features and detail.

A strip, map and sample style of excavation was specified for much of the site area to the south-east of the villa Scheduled Ancient Monument (SAM) boundary. The remaining SAM area was subject to detailed recording; a small portion of the strip, map and sample area immediately adjacent to the SAM was incorporated in the detailed excavation owing to the significance of the villa-complex-related structures and deposits that were encountered. A further 3 m to 4 m strip of land along the south-western edge of the SAM area under the former hedgeline was excavated as part of the watching brief, extending the recorded extent of both the villa residence and the temple structure.

Trench excavations within the eastern extent of Honeyhills Wood were undertaken concurrently with the excavation of the SAM. These were completed in two phases. Five machine-excavated trenches were initially investigated within the standing woodland. Evidence from these was supplemented by a single targeted trench, hand excavated across the best surviving portion of an earthwork bank, once the tree cover had been cleared.

The site at Hockers Lane was discovered during the scheme-wide watching brief. The area had previously been subject to an evaluation which had suggested that only limited archaeological remains were present. However, as topsoil was removed, more significant remains were encountered, showing that the evaluation trench had being fortuitously positioned within the area of archaeological features without encountering the enclosure ditches. Once recognised the site was carefully stripped by a 360-degree excavator and a soil bund was established along the northern edge of the excavation area to preserve *in situ* the remainder of the site not directly affected by the CTRL construction.

Limited archaeological features were also encountered within the western extent of the watching brief area to the east of Sittingbourne Road (A429). Topsoil removal during the watching brief was conducted by 360 excavators and/or bulldozers. Variations in construction stripping methods certainly affected the visibility of archaeological features along the CTRL route, but the recognition of the site at Hockers Lane at a very early stage in the topsoil removal process, suggests that significant concentrations of finds or features would not have been missed in this route section.

All fieldwork in this route section was undertaken by Oxford Archaeology (OA) in accordance with the Written Scheme of Investigation (URL 1998) prepared by the Project Manager, Rail Link Engineering (RLE).

The MAP2 assessment report was produced by OA in accordance with the specification produced by RLE (URS 2001). All method statements followed national guidelines and were agreed in consultation with English Heritage and Kent County Council (KCC) on behalf of the Local Planning Authority.

The post-excavation analysis and report were carried out by Oxford Wessex Archaeology Joint Venture (OWAJV) following the methodology set out by the Updated Project Design for archaeological analysis and publication (URS 2003). All project design documents are available in the digital archive (ADS 2006).

#### 4 RESULTS

#### 4.1 Period Summary

The overall site plans for Thurnham Villa and Hockers Lane are based on well represented stratigraphic sequences and associated dated pottery assemblages (Figs. 3 and 4). Other finds categories refined and added to the pottery assemblage dating evidence. Where secure stratigraphic relationships were absent, features have been assigned to periods based on the finds assemblages, the associations evident between features and the spatial arrangement of the site. This method of phasing has only been applied to a limited extent, although the site arrangement and sequence at Thurnham does lend itself very well to this approach, as a high level of feature continuity is apparent. One significant point affecting the phasing of the site is the continuity and longevity of some of the structures and features within the villa complex. Whilst some of these have excellent associated and dated stratigraphy demonstrating all periods of use, others have few dated levels, with only the start or end date of the structural sequence represented. Actual periods of use were sometimes difficult to date as securely as the best surviving sequences, such as that for the villa building, although all the lines of evidence did provide a secure relative chronology for each structure and the major related features.

The latest period of activity at Thurnham Villa has the added benefit of being securely identified and dated by historical mapping. In addition to the well dated archaeological periods, a mixed assemblage of redeposited and residual flintwork was recovered from deposits across the site. Several isolated features did not produce significant or dateable associated finds although these were thought to be of prehistoric origin and are thus defined only in broad terms as prehistoric. The following periods were represented by the dated archaeological remains recorded on site:

- Middle Bronze Age (c 1600 BC-c 1100 BC): An isolated circular waterhole with a ramped access was identified at the south-eastern end of the site within the area of lowlying ground.
- Middle Iron Age and Late Iron Age (150 BC-AD 43/70): The earliest evidence of activity occurs at the Hockers Lane with a sequence of successive curving enclosure gullies. Occupation of the high-ground plateau at the western end of the site at Thurnham began with the construction of a discontinuous rectilinear ditched enclosure accompanied by limited tree clearance. A continuous rectilinear enclosure with an accompanying external bank replaced the earlier ditches and tree clearance extended across the interior area. Two four-post structures and the drip gullies of two possible roundhouses were centrally

located within the enclosure, with isolated postholes and occasional shallow pits also present. Towards the end of this period a broad linear boundary ditch was positioned to the west of the enclosure and on a converging alignment. A short ditch segment, a cobbled stone surface and a linear gully lay to the west of this. Dating evidence strongly suggests that this period of occupation actually continued into the post conquest period, little changed until after AD 50 and perhaps until as late as AD 70.

- Early Roman (AD 43/70-120): This period saw a major reorganisation of occupation and its physical appearance. Activity at Hockers Lane ceased shortly before or after the conquest and Thurnham expanded with the enlargement of the settlement. Earlier boundaries were replaced by a gully and post row to the north-east and a diversion of the western boundary ditch to a new alignment parallel to the former enclosure ditch. The south-eastern boundary was maintained utilising the existing enclosure ditch and bank, with the addition of an outer ditch creating a double ditch and bank boundary. This boundary had two phases of large gated entrances. Three structures within the enclosure were sited around its edges, leaving the central area open. A 'proto-villa' house formed the focal point of the site, set on the highest point central to the rear of the enclosure and overlying a backfilled portion of the earlier western boundary ditch. The building was constructed on sleeper beams; five rooms with internal floor surfaces were partially preserved. The walls were plastered and painted, many small fragments of the plaster being found within a demolition deposit sealing the floor. A probable screen or fence backed onto the realigned rear boundary behind the proto-villa building. A secondary building, probably a temple, was constructed on an area of levelled ground fronting the south-eastern side of the enclosure. To the north of the temple a circular structure with a cobbled surface and hearth was terraced slightly into the uneven ground close to the enclosure entrance. On the slope to the east of the enclosure a substantial standing wooden 'post' was erected. Ditches from associated field enclosures were located further to the east on the low-lying ground.
- Middle Roman phase 1 (c AD 120-150): The site layout and principal structure were remodelled in a similar manner early in the 2nd century. The enclosure was enlarged by creating a new ditched boundary to the west with a post row fence along the internal edge. The south-eastern boundary was replaced by a more prominent ditch coinciding with the frontage of the temple and with a similarly substantial post row fence replacing the former enclosure ditch alignment. A ditch at the northern end of the post row extended this boundary and the enclosure beyond the limit of excavation. Within the enclosure the proto-villa was replaced by a larger stone-built villa in the same location but set slightly further back (to the west). The temple remained unaltered and in use. To the north-east a

large stone-founded aisled building was constructed with substantial wooden aisle posts. The building was accompanied by a stone-lined well and surfacing to the north-west. A cobbled trackway was probably built over and along one of the earlier field ditches on the low lying ground during this period, although this feature may date from the earlier period.

- Middle Roman phase 2 (AD 150-250): The villa enclosure boundaries remained static during this period. Only the south-eastern side was replaced by a continuous post row fence aligned off the south-eastern end of the aisled building. This fence incorporated a substantial post built entrance located towards its southern end and aligned on the central axis of the villa house. The rear (western) boundary ditch was levelled with debris comprising deposits of different types of material in distinct zones, but the associated post row fence may have remained in use. The villa house itself was extended in the late 2nd century with the addition of a bath suite range at the south-western end and a large square room extension on the north-east side. An apsidal room was attached to the front of the building. The aisled building had a post built structure added to its south-western side incorporating part of the post row fence. The temple building was demolished as part of the boundary alterations and the earlier accompanying boundary ditch was levelled with substantial quantities of roof tile. Outside the enclosure, at the base of the slope to the south-east, a new area was developed with the construction of a 14-post building and accompanying drainage ditch, eaves gully and internal drains. A deep well was constructed to the east of this and the area was enclosed within an outer ditched boundary that joined the flanking drainage/boundary ditch alongside the trackway. Votive offerings were placed within a pit on the 'exterior' side of the outer boundary to the east of the 14post building.
- Late Roman (AD 250-410): The character and representation of activity and occupation changed dramatically in this period. None of the enclosure boundaries was maintained or added to although it is likely that remnant earthworks remained. A characteristic of the 4th century was a lack of cut features; activity in this period was mostly represented by accumulated soil deposits in existing hollows. The bath house range was demolished or collapsed by the late 3rd century and at the same time a core room of the villa was converted into a smithy, probably recycling existing iron items. An oven backfilled in the late 4th to early 5th century represents the only other activity within the villa. Occupation of the aisled building also ceased by the late 3rd to early 4th century and the building had probably collapsed or, more likely, was dismantled at this time. A corn drier was built over the north-western portion of the 14-post structure which was either modified or demolished towards the end of the 3rd century. This corn drier was associated with a

cobbled area terraced into the slope immediately to the north. The corn drier structure had collapsed by, or during, the late 4th century and the cobbled area was sealed by silts that produced an assemblage of pottery of very late 4th century date, quite possibly extending into the early 5th century. The well to the east was probably maintained throughout this period before infilling with woodland debris.

- Early medieval (AD 1000-1350): Features peripheral to the moated site of Corbier Hall, including the south-western arm of the moat, short ditch segments, a sunken trackway and possible structures were located on the low-lying ground at the south-eastern end of the site adjacent to Thurnham Lane.
- Post-medieval and modern (AD 1500-present): Field boundaries and drainage features represent recent land-use. Modern tree holes attest to post-war clearance of Corbier Hall Wood within these boundaries.

Table 2: General quantification of pottery by period\*

Period	Count	Weight (g)	Count %	Weight %
Unphased	1170	8620	7.78	6.36
Middle Bronze Age	3**	21**	0.02	0.02
Late Pre-Roman Iron Age (c 50 BC - AD 50)	1800	14386	11.97	10.62
Early Roman (43 - 100)	3855	32337	25.64	23.86
Middle Roman (c 100 - 150)	1168	13491	7.77	9.95
Middle Roman (c 150 - 250)	3514	36450	23.37	26.90
Late Roman (250 - 410)	2866	24562	19.06	18.12
Early medieval (1000 - 1350)	381	2794	2.53	2.06
Post-medieval and modern (1500 - present)	280	2861	1.86	2.11
Total	15037	135522	100	100

<sup>\*</sup>excluding pottery retrieved by sieving

<sup>\*\*</sup>intrusive medieval sherds into waterhole 10288

### 4.2 Hunter-gatherers - Late Glacial, Mesolithic and Early Neolithic Transition (c 13,000 uncal bc - c 4,000 cal BC)

No archaeological features or *in situ* deposits relating to this period were encountered at the site. However, a single rod or edge blunted microlith of probable later Mesolithic date was recovered from a subsoil context underlying the construction of the villa building. Additional Mesolithic activity in the immediate area between the site and the base of the North Downs is also evidenced by a flint pick in Maidstone Museum (URL 1994 OAU Nos. 1062 and 1063). A significant late Mesolithic (*c* 6500-4000 BC) concentration of burnt and worked flint was recovered from a site in a broadly similar topographical position at Sandway Road, *c* 9.5km to the south-east (Trevarthen 2006).

#### 4.3 Early Agriculturalists and Farming Communities- The Neolithic to the Later Pre-Roman Iron Age (c 4,000 BC - c 300 BC)

Earlier prehistoric activity of Neolithic to Bronze Age date at Thurnham Villa was attested to by a small assemblage of worked flint recovered from the topsoil and redeposited in later features. Similar material had previously been recovered from the fieldwalking survey of the area (URL 1995b). A very small concentration of worked flint with a higher incidence of neatly retouched items was recovered from the surface of a buried soil horizon (20360) sealed by the construction of the villa building. This group had already been subject to considerable disturbance by the time it was sealed and so is unlikely to form an intact *in situ* assemblage.

At the western end of the site several scattered features were of a character and had stratigraphic relationships suggestive of a broad prehistoric date range, although they did not produce any dateable finds to confirm this (Fig. 5). These comprised eight shallow pits (10008, 10073, 10141, 10152, 10155, 10222, 10249, 12713) infilled with burnt flint and charcoal, a meandering ditch (10180) with a V-shaped profile, a shallow linear gully (10082) and an isolated unurned cremation burial (10096). The pits were generally oval in plan, the largest measuring 1.2 m by 0.8 m and the smallest 0.5 m by 0.3 m. Each was between 0.2 m and 0.3 m deep with a relatively dense concentration of charcoal and burnt flint at the base of each pit suggesting that burial of this material was an important factor and probably the primary intended purpose. The charcoal was exclusively of oak and the hawthorn family, the absence of other taxa suggesting a high degree of selectivity.

The possible prehistoric ditches were sealed by a medieval soil across the centre of the site. The linear gully (10082), which never exceeded 0.2 m in depth, was aligned NNE-SSW. It was traced across the full width of the site and roughly marked the boundary between the lowest elevation to the west and slightly higher level ground to the east up to Thurnham Lane. The meandering ditch (10180) was broadly aligned east to west and terminated to the west

before reaching the lowest ground. Both ditches were infilled by homogeneous sterile silty soils suggesting that they were boundaries rather than drainage features.

The small cremation pit (10096) was undated although its isolated location at the eastern end of the site and its unaccompanied characteristic are more suggestive of a prehistoric than a Roman date. Some small unburnt flint chips were recovered from the fill of the feature, but it was unclear if these were deliberate incorporations. Within the pit the cremated bone was mixed with probable pyre debris; oak had been selected as the solitary wood fuel.

The nature of this activity is far from clear, partly because it is not well dated. The ditch and gully suggest a degree of boundary marking, possibly in relation to the low lying contours to the west. The charcoal and burnt flint pits are particularly interesting because the selective nature of their contents suggests that specific factors governed their deposition. Combined with the location of the waterhole discussed below, it seems that this particular part of the site was singled out during the prehistoric period for certain activities that were excluded from or exclusive of the higher ground to the west. There, despite a high level of archaeological intervention, evidence was limited only to occasional worked flints deposited at surface level and/or redeposited in later features.

#### 4.3.1 Middle Bronze Age (c 1600 BC to c 1100 BC)

The only securely dated early prehistoric feature to produce associated finds was a large ramped waterhole (10288) (Figs. 5 and 6). This was located on the low ground at 68.50 m to 69.00 m OD at the eastern end of the site and was truncated by a medieval gully (10355) to the east and by the moat ditch (12600) to the north. With surface dimensions of 11.00 m by 8.00 m the waterhole had a slight teardrop shape in plan, with the ramped access gained from the north before sloping around the western side of the feature. The ramp sloped gently to a maximum depth of 0.75 m towards the deeper, circular base, 1.50 m in diameter, on the eastern side of the feature. The deeper circular area was infilled with a soft grey stone-free fill typical of a standing water deposited silt but was not excavated owing to the late stage of the excavation at which it was examined and the fact that it was below the projected construction impact level. The silt deposit was therefore left *in situ*.

An unusual deposit of very well sorted iron-stained natural flint nodules (10294) filled the entire ramp area and sealed the grey stone-free silt of the waterhole with little or no substantial silt inclusion. This deposit was up to 0.30 m thick and a conservative calculation shows this to represent between 10 m³ and 15 m³ of sorted stone. The deposit was clearly laid in separate batches of different sized nodules. Smaller flint nodules were used for the infill of the main part of the waterhole and large nodules chosen to level the ramp area. Two bronze

objects, a small dirk or dagger and a needle or pin, were recovered from towards the base of the flint nodules over the deeper part of the feature (Fig. 6 small finds 10071 and 10072). Metallurgical and stylistic analysis of these shows that they are of Middle Bronze Age date and belong to the Acton Park or the beginning of the Taunton phase, ie from the 15th century BC (Northover in Booth *et al.* 2006). This deposit also produced a worn end scraper of probable Neolithic or earlier Bronze Age date (Bradley in URS 2001, Harding 2006). Given the unusual hand sorted nature of the flint nodule infill, it is entirely possible that the scraper was also a curated find deposited with the metalwork, although it may just have been an incidental inclusion.

The upper fills of the waterhole were unremarkable. Seven non diagnostic hard hammer flint flakes were recovered from a mixed flint nodule and silting deposit (10292/10297). Three sherds of medieval pottery and a deer bone producing a medieval radiocarbon date also came from this deposit, but these finds clearly derived from a medieval gully (10355) cut along the eastern edge of the waterhole fill. During excavation this feature was initially difficult to distinguish because of poor weather. It does not represent significant post-depositional disturbance of the waterhole deposits as a whole. An upper silting deposit (10293) levelled the waterhole area with thin chalky silt bands (10295 and 10296) separating the main fills.

The date of the infill of the waterhole is problematic. There was no material suitable for scientific dating and the worked flint was not particularly diagnostic. The only dateable items were the metal objects that have a *terminus post quem* of the 15th century BC, or perhaps a little later based on the re-alloying of the needle/pin. This does not preclude the possibility that the items were old when deposited. Indeed Northover (in Booth *et al.* 2006) suggests that they may have been deposited some decades apart, but it is clear from the context of discovery that this was not the case. A date within the middle Bronze Age after the 15th century BC seems the most appropriate.

The association of the metalwork and the character of the feature and its infilling provide convincing evidence for the practice of placed deposits. The sorted flint nodules were clearly deposited at a point when the main water-holding part of the feature had become fully silted. Their deposition effectively closed or marked the end of functional use. There can be no doubt that this deposition, incorporating the metalwork, was a deliberate act requiring substantial time and physical effort on behalf of the people involved. The metal objects can therefore be seen as offerings made within a ritual closing or ending of use of the waterhole. Such instances of placed deposits within the upper fills of features such as ditches and pits is increasingly recognised as being of ritual significance (Barber 2003). Here the association with a water holding feature may have had particular significance. Certainly the association between watery contexts and the deposition of metal items in a ritual context is well known.

At Flag Fen on the outskirts of Peterborough specific areas were selected or reserved for this practice over a long period of time (Pryor 2001). The apparent significance of the waterhole and its infilling might suggest that the area immediately surrounding it was significant in its own right. The distribution of the other features thought to be of prehistoric date cluster in this small portion of the site, and most are conspicuous for their unusual or apparently non-settlement related character. While a waterhole suggests settlement, no contemporary settlement has been identified in the immediate vicinity. This suggests that the waterhole and, more generally, the area around it was selected for certain activities that were not specifically focused on settlement.

## 4.4 Towns and their Rural Landscapes I - The later pre-Roman Iron Age and Romano-British Landscapes II (c 300 BC to c AD 500)

#### 4.4.1 Middle Iron Age and Late Pre-Roman Iron Age (150 BC to c AD 60

The earliest substantial evidence of occupation or associated activity was focused at Hockers Lane to the north-west of Honeyhills Wood. Here a sequence of relatively small curving and linear enclosure gullies and ditches was established by the end of the middle Iron Age and modified on several occasions through to the end of the late Iron Age. This sequence can be split into two distinct phases represented by a gradual enlargement of the primary enclosure in the period c 150 BC-AD 1 and a more condensed phase of activity from c AD 1-40/50 denoted by a single continuous ditch (134). The definition of these enclosures and of their function and relationship to any associated settlement was restricted by the extent of the excavation. Only the apparent south-western portion of the enclosures was exposed, with the remainder preserved *in situ* unaffected by the CTRL corridor. The description below is therefore rather interpretative in character, based on an assumption that if the enclosures were of a fairly regular or symmetrical layout it can be estimated that one third to a half of their total extent was exposed and investigated within the excavated area.

#### The early enclosures at Hockers Lane 150 BC to AD 1

The primary enclosure was a segmented feature comprising several short lengths of gullies, ditches and postholes (Fig. 7). These appear to define a D-shaped enclosure with the stem formed by a possible fence or beam slot 131 and part of ditch 244 aligned NE-SW. The curved portions to the north-west were defined by ditch segments 109 incorporating postholes 55, 57, 114, and by ditch 204. These enclosed an area of 0.12 ha exposed within the site boundary with a broad entrance to the south-west side. This was 6.40 m across with the internal access route flanked by the NW-SE portion of ditch 244 to the north-east and by gully or fence slot 255 to the south-west. Possible entrances of similar size also existed between the

ditch segments on the western side, with a gated entrance defined by postholes 55, 57 and 114. None of the boundary ditches was substantial. The largest (109) was a modest 1.4 m across at its widest, but the ditches were generally between 0.70 m and 1.15 m wide and 0.40 m and 0.60 m deep, with flat-bottomed V-shaped profiles (Fig. 7 sections 16, 18 and 61). Silting deposits infilled each of them. Weathering erosion was clearly visible along the upper edges of the ditches, with the exception of 244 that had a deliberate backfill across its upper portion (Fig. 7 section 71). This may represent a modification of the enclosure shortly after its initial creation, as ditch 244 was replaced by 245. This had a poorly defined relationship with the earlier ditch, but cut across it, creating a much narrower (1 m wide) entrance with the possible fence 131. Both ditches produced very similar, albeit rather small, pottery assemblages, suggesting they were broadly contemporary.

Boundaries 131 and 255 were differentiated from the ditches by their form and fills, which were more characteristic of having held upright fence-like structures, particularly those of 255 that included distinct impressions of posts within the base along its course (Fig. 7 section 70). These would have partially screened off the southern corner of the enclosure with an area of flint hard standing (269) located between the terminals of each, suggesting regular use. An elongated area of disturbed soil (60), possibly caused by animal trample, may reflect the use of this separate area for stock, as only a few incidental and very small sherds of pottery were present. The regular oblong shaped area of trample, 13.5 m by 3 m, was possibly created by the positioning of a feeding stall although there were no associated postholes to suggest that any such structure existed here. This area also appears to be open on its north-western internal side, so the detail of how it actually functioned remains unclear.

The distribution of pottery across the primary enclosure is helpful both for defining the foci of activities and the period when it was established and used. Only small assemblages were present around the curving western side of the enclosure (109). In contrast, the boundaries and fence slots associated with the entrance area (131, 244 and 255) each produced moderate assemblages, with a distinct concentration of finds from the backfill of 255. This was notable for the high percentage of relatively early pottery forms and fabrics present, but late Iron Age forms were also represented in almost equal proportion, suggesting that the feature may have been infilled around the turn of the 2nd and 1st centuries BC (Lyne 2006) (Fig. 8). A Class I potin (small find 2) of Mack (1975) type 12 with a date in the earlier part of the 1st century BC was also recovered from this ditch (Booth in URS 2001). Combined, the apparent richness of finds from this feature makes it stand out from all the others at the site. The likely interpretation of this deposit as being of domestic character was supported by the limited quantities of charred plant remains recovered from it, which contrast with larger concentrations of such material from probable areas of agricultural processing elsewhere in the site.

This enclosure layout was modified, but with a very similar design, on at least two further occasions within this period. The modifications comprised a gradual movement of the linear side to the south-east, enlarging the enclosed area by replacing the former entrance with ditches 175 and 275 of similar dimensions and profile. These maintained the original access point but with a 10 m wide entrance. Further south-east again gullies 339 and 340 were added; these either replaced 175 and 275 or functioned to restrict and control the access with a the short gully segment 91 also directing movement into the entrance. The absence of even small pottery or bone assemblages from these later gullies demonstrates that the focus on the entrance seen immediately beforehand had shifted. It probably reflects a change in the activities characterising this part of the enclosure. Indeed the almost total absence of finds suggests that this area may even have become peripheral to activities in the settlement as a whole. One unusual find that may relate to this was a fragment of human skull (142) from the upper part of the silting fill within the southern arm of the enclosure (275). The silting deposit here only produced a small associated pottery assemblage and no animal bone. Although its incorporation may have been incidental, human bone and particularly fragments of skull in unusual contexts such as this are common on many apparently non funerary Iron Age sites (Hill 1995). Immediately west of the skull fragment in the adjacent excavated section (context 162/174) a small collection of articulated animal leg and foot bones had been placed in the lower part of the ditch silting fill. These were poorly preserved and were not identifiable to species other than as a small to medium sized mammal. A large pit (69) adjacent to the terminal of ditch 275 did contain a small assemblage of animal bone, pottery and mixed charred plant remains and may be related, but these finds were substantially from the upper fill of the pit and possibly post-date the infilling of the ditch.

A small concentration of pits and postholes within the enclosure was focused in the north of the excavation area, with only the soil trample area (60), discussed above, lying within the southern portion of the enclosure. Only a few isolated possible postholes were located outside the ditch boundaries, apparently confirming that the focus of activity lay towards the northern part of the site and beyond the excavated area. Frequent small quantities of charred cereals, of which the identifiable remains were mostly spelt wheat, were also present in the features towards the northern part, indicating that crop processing was amongst the range of activities undertaken at the site.

The only group of postholes that appeared to form a coherent plan was a possible four-post structure (341) positioned within the central area of the enclosure aligned upon its south-east entrance. This was built across the line of the gully or fence line 255 and, given the early date of that feature, is most likely to post-date it. The postholes were between 0.35 m and 0.55 m in diameter and 0.40 m deep, with clay and flint nodule packing suggesting a relatively robust structure consistent with the examples encountered at Thurnham. The structure was

also slightly larger in ground plan, being up to 2.90 m to 3.00 m square. Its position within the enclosure may be important in terms of the interpretation of the structure, but the lack of associated finds makes further comment difficult.

#### The final enclosure at Hockers Lane AD 1-40/50

The final enclosure boundary comprised a single continuous ditch (134) replacing the earlier ditches and again extending the enclosed area to the south-east (Fig. 9). This more rounded boundary enclosed an area of 0.16 ha and lacked the entrance to the south-east, although a terminal ending to the north-west probably represented a continuation of access on this side. This ditch was of similar character to its predecessors with a V-shaped profile and flat base, but was more sharply defined than the earlier ditches and increased in depth to 0.7 m on its southern and south-eastern sides.

The pottery and bone assemblages reverse the trend of the previous period with an increase in quantity and quality of the material deposited. Of the 105 sherds recovered from this ditch, more than 50% was concentrated around the southern side. These included terra rubra imports in fabrics B14 (TR2) (vessel 12) and B16 (TR3) (not illustrated) and a Gallo-Belgic platter copy in a grog tempered fabric B1 (vessel 10) (Fig. 9 pottery). A faunal assemblage dominated by cattle and sheep/goat was evenly distributed around the ditch with occasional fragments of burnt bone. These finds suggest domestic activity, although traces of structures were absent and this part of the enclosure was possibly still rather peripheral to a main focus elsewhere. The fills were also lacking in charred plant remains; a characteristic also typical of the final period of late Iron Age settlement at Thurnham (see below). The occurrence of imported ceramics shows that the range of pottery used was similar to that available at the contemporary settlement at Thurnham. However, the small quantities involved may reflect movement of pottery to Hockers Lane through Thurnham rather than independent acquisition of imported goods. These finds also mark the final occupation at Hockers Lane. The total absence of post-conquest pottery points to an abandonment date shortly before or at the latest just after the conquest.

#### The late Iron Age settlement at Thurnham Villa c 50 BC to c AD 60

The first significant development at Thurnham took place towards the end of the Iron Age and was located upon the raised plateau at the north-western end of the site (Fig. 10). Archaeological features and associated finds assemblages were well represented and preserved, demonstrating that the site was occupied as a settlement engaging in activities including limited iron production and working. Following tree clearance the settlement comprised two phases of rectilinear enclosure with interior circular and four-post structures. To the west of the enclosed area a single ditch on a different alignment appeared to be

contemporary with the later phase enclosure and may have been a more formal land boundary.

#### Tree clearance and the enclosures

Creation of the settlement was initiated by woodland clearance. Numerous shallow tree holes (12740, see Fig. 10 insert) were scattered across the raised plateau at the north-western end of the site. These were distinguished from other features by being shallow and irregularly shaped with a distinctive mixed greyish clay fill containing occasional fragments of pottery, animal bone, iron slag, burnt stone and sparse charred remains. The occurrences of finds in these features was generally limited to the area within the enclosure, reflecting the focus of occupation. Similar tree holes to the west and east had many fewer finds. The presence of occasional fragments of early Roman roof tile in some also suggests that clearance continued throughout the late Iron Age, and some probably remained as shallow hollows into the subsequent period, although significant quantities of early Roman or later pottery were absent.

The earliest enclosure was aligned with its long axis NE-SW along the ridge of the raised plateau. This location proved to be fundamental to the development of the site. It defined the basis for the siting of all the subsequent periods of Roman activity, forming a continuous boundary that was either repeatedly reinstated or extended outward (north-westwards) on the same alignment.

The north-western side and part of the north-eastern side of the earliest enclosure was clearly delineated by a slightly sinuous unbroken ditch (11470) with a curving terminal ending to the north. This may have defined one side of an entrance into the north-eastern side. The scant truncated remains of three further ditch segments (10940, 12575 and 12580) tentatively suggest a south-eastern side. Together these define three sides of a probable rectangular enclosure, although the interpretation of this ground plan relies heavily on the assumption that the subsequent ditch recut (10840 and 12585) represented a more regular layout of an existing form. The recut was much more conventional than its predecessor being both continuous and more formally rectilinear in plan. These ditches enclosed an area of 0.26 ha within the site boundaries.

The NE-SW axis of the enclosure layout was 50 m long, but clearly extended to the south-west beyond the site limit, where boundaries must have been destroyed by the construction of the Maidstone bypass (now the M20) without record. Despite this it is still possible to estimate the full size of the enclosed area from pre-motorway contours and the existing topography. Prior to the motorway construction the slope up to the raised plateau on which the settlement was sited had continued around to the south and west, so it would be reasonable to assume that the enclosure was set specifically upon the high ground forming a slight promontory overlooking ground sloping away to the east and south. These factors

suggest that the entire enclosure would have extended for perhaps a maximum of 25 m to 30 m south-westwards beyond the recorded limit, giving maximum estimated dimensions of 75 m long by 55 m for the enclosure, which thus had an area in excess of 0.4 ha.

The earlier enclosure ditches were smaller than the later ones, but were uniform throughout, being 1.0 m to 1.4 m wide and between 0.5 m and 0.7 m deep (Fig. 11 sections 10271 and 10581). They were infilled by natural processes. Weathering erosion was evident along the upper edges of the ditches. A slight preponderance of slumping/silting deposits with flint nodules along the exterior north-western edge of ditch 11470 suggests that an external bank may have existed here. Finds were rather sparse, although a moderate assemblage of pottery and animal bones was recovered mostly from ditch 11470. The faunal remains were unremarkable and typical of low level domestic activity with bones of sheep/goat, pig and cattle all present and some evidence of meat removal butchery marks.

The pottery was dominated by forms in the glauconitic fabric B9.1 and the grog tempered fabrics B2 and B2.1 pointing to a date range from c AD 1 to about AD 30 (Fig. 11 vessel nos 1-7). Sources may have been the Maidstone locality and possibly further afield to the south-east. Only a very small amount of the assemblage consisted of material deriving from the production sites around the estuary of the River Medway. Combined with the presence of salt container fragments from the Folkestone area and a sherd of a cup or tazza (vessel 7) also likely to be from the same area, the pottery suggests a bias in favour of connections to the south-east and only limited contact with or supply from the north Kent area.

The more formal layout of the recut (10840 and 12585) possibly reflects changes in the requirements for the enclosure towards the end of the Iron Age. The ditch was both broader and deeper, up to 1.9 m wide and 1.2 m deep with a very steep lower profile, a flat base and splayed upper edges at some points along its course (Fig. 12 sections 10271, 10174, 10633 and 10415). The fills of the north-western and north-eastern sides show a distinct concentration of clay and flint nodule fills silting and slumping along the outer edge of the ditch, indicating the presence of an external bank. The enclosure circuit appeared to be continuous, although the south-eastern side was largely obscured by later boundary ditches. These features possibly indicate an emphasis on containment of animals within the enclosure, perhaps because greater numbers of these were being reared, as might be indicated by the increased size of the faunal assemblage; over 2 kg of bone recovered compared to less than 0.5 kg from the earlier features. Given the generally very poor survival of bone across the site, this represents a moderate assemblage, with sheep/goat representing the larger proportion of the identified remains but with cattle and pig present in only slightly smaller quantities.

The dating evidence for the later ditch, based on both finds and stratigraphic relationships, is very good. The ditch was dug as a replacement for the earlier enclosure

probably around AD 30. The composition of the bulk of the pottery assemblage from the ditch is very similar to that from its predecessor, but is greater in volume (Fig. 12 vessels 9-22). In addition there is a notable presence of early post conquest Roman fabrics accompanied by very small quantities of roof tile of the early Eccles fabric (Betts 2006a). The latter were recovered from a sequence of very distinctive redeposited clay backfills that deliberately levelled the ditch after it was only slightly silted. This event can confidently be correlated with the very end of this period and the transition to the subsequent early Roman proto-villa period, when the enclosure area was enlarged (see below). The final backfills occurred around AD 50-70. The late Iron Age period therefore extended past the Roman conquest and the tile fragments suggest that it ended concurrently with the importation of materials to the site for the construction of the proto-villa.

The ditch backfill deposits also produced increased evidence for iron production and smithing. Some 1.7 kg of run slag, tap slag, hearth bottom slag and vitrified hearth lining were present. This material only represents small-scale production, although it is significant for being the largest assemblage of its kind of pre-Roman and immediate post-conquest date on the site. This reflects the general increase in the scale of evidence for most activities at this time, although plant remains were an exception to this, despite the relatively good preservation of charred material in the ditch. The latter was typical of Iron Age deposits across the site with only occasional occurrences of *Triticum spelta* and oak charcoal present. This suggests that aspects of the economy that may have resulted in these deposits, such as storage and processing methods, remained unchanged.

#### *Internal structures and features*

Two roughly circular structures represented by narrow penannular gullies (11600 and 12500) accompanied by two probable four-post structures (12450 and 12710) were centrally located within the enclosure (Figs. 10 and 13). The identification of each of these features was difficult and, in the cases of the four-post structures, tentative, owing to the presence of a large number of tree holes, natural soil and geological differences and seemingly isolated small features in the enclosure interior.

The roughly circular and best preserved penannular gully 12500 had a complete internal diameter of 12.3 m with an entrance 3.5 m wide facing due east. A short gully segment between the entrance terminals reduced the width to 1.6 m although it was not clear if this was a subsequent addition to restrict entry or part of the original arrangement for controlling access to the building. Gully 11600 was immediately north of 12500 with a 1.7 m gap separating the exterior edges of the two features. 11600 was far less well preserved; only a 13 m portion of gully, with an estimated internal diameter of 10 m, survived. This had a well-defined terminal at its eastern end, suggesting a south-east facing entrance.

The gullies were of virtually identical form, both having U-shaped profiles between 0.4 m and 0.6 m wide and up to 0.2 m deep, but feature 12500 was the more uniform of the two (Fig. 13 sections 10441, 10657, 10659 and 10666). It was cut through a surviving area of contemporary soil horizon preserved by deposits relating to the subsequent early Roman period. A silting fill derived from this dark soil horizon infilled the gullies although it only survived in direct association with 12500.

Within the gullies there was a conspicuous absence of any identifiable features that might have supported associated structures. Given the form of the penannular gullies, and particularly the preservation of 12500, there can be little doubt that round house-style structures occupied the interior areas. These were presumably of above ground construction, perhaps utilising interior post pads and an ephemeral exterior wall such as simple wattle panels, or possibly of mass wall (eg cob) construction.

Associated finds assemblages were represented entirely by pottery with negligible amounts of animal bone (mostly cattle) and oak charcoal fragments. Totals of 24 and 17 pottery sherds were excavated respectively from 12500 and 11600, with glauconitic fabrics dominant. While close dating was not generally possible, several sherds dated after AD 30 were recovered from the surface of the northern entrance terminal of gully 12500 and the western part of gully 11600. These could suggest that the structures relate to the later recut enclosure, but there is no clear reason why they could not have been present in both phases as the late pottery was only present in the upper part of the fills. Also, although the structures were very closely spaced there is no structural reason why they could not have been standing at the same time. The gullies probably represent the maximum extent of the roof overhang, acting as drip gullies draining water away from the wall bases.

Two four-post structures, 12450 and 12710, were located to the east and west of gully 11600 respectively. Both were 2.5 m square in plan and aligned on a NE-SW axis. Structure 12450 was the slightly better preserved, with post-pipes present in two of the postholes and flint nodule packing evident in each. See Table 3 below for the posthole and post dimensions.

No other features or finds were associated with the four-post structures, making an independent interpretation of their use difficult. Traditionally these are interpreted as granary or other storage-style structures, or occasionally as funerary structures. Their location within the enclosure adjacent to the domestic structures and the unsuitability of the damp clay geology for storage pits suggest that these were storage buildings. The size of the post-pipes, up to 0.30 m in diameter, shows that they were quite sturdy structures.

Table 3: Four-post structures 12450 and 12710, details of postholes

Structure	Cut Number	Posthole Diameter	Depth	Postpipe Diameter
12450	11883	0.30 m	0.07 m	-
	12187	0.56 m	0.28 m	-
	12193	0.53 m	0.16 m	0.17 m
	12451	0.54 x 0.32 m	0.20 m	0.24 m
12710	12017	0.50 m	0.15 m	-
	12141	0.44 m	0.16 m	-
	12143	0.50 m	0.12 m	-
	12145	0.54 m	0.14 m	0.30 m

#### Boundary 20170 and features west of the enclosure

The alignment of the enclosure was not replicated by the only other significant ditch assigned to this period. Ditch 20170 ran across the width of the site to the west of the enclosure on a north to south alignment. The feature was well defined; it had similar proportions to ditch 10840 and was cut through a contemporary soil horizon (20360) preserved beneath later buildings. If both ditches maintained their alignments then they would have converged 15 m to 20 m to the south of the excavation limit meeting at or near the estimated position of the south-west corner of the enclosure.

The pottery dating evidence for the ditch is very poor with only a very small assemblage (24 sherds, 116 g) of mostly residual material present. The ditch seems to have been kept impeccably clean until the southern portion was backfilled with a series of redeposited natural clays. These fills actually mark the start of the next period as the ditch was levelled for the construction of the proto-villa building. It thus undoubtedly belongs to the immediate pre- and post-conquest period and was contemporary with the enclosure ditch 10840. It was also very clear that ditch 20170 was dug only a short while before the end of this period as the backfilled portion had very straight sides and a flat base displaying only very limited evidence of weathering erosion (refer to Figs. 18 and 19 sections 10377 and 10485).

West of ditch 20170 was a group of three features that may also have been associated with activity of this period, although dating evidence is not conclusive. These comprise a slightly curving 10 m long segment of ditch (10920) with rounded terminals, a narrow linear gully (20500) respecting the southern terminal of 10920 and a roughly oval area of tightly packed flint nodule cobbled surfacing (20430). Interpretation of these features, although they are not insignificant, is problematic. The narrow gully may have been a beam slot and combined with the surfaced area, could be suggestive of a structure. Ditch 10920 could then have been a boundary extending from the southern end of this structure. However, unless they

pre-dated ditch 20170, which cut across gully 20500, it is difficult to see how these features might all have existed towards the end of this period. Alternatively the features were not directly associated with each other, but this makes even less sense of their layout, particularly as they were located beyond the enclosure area.

#### Discussion: the late Iron Age development

The partly contemporary settlements at Hockers Lane and Thurnham present interesting contrasts of form, but it is possible that these appear more pronounced than was really the case as a result of the incomplete nature of their excavation. In essence Hockers Lane, established earlier than Thurnham, incorporated enclosed elements of rather irregular plan, while the Thurnham enclosure was apparently more rectilinear, albeit with some irregularity about a possible entrance in the north side of the enclosure. With the exception of the major north-south linear boundary 20170 there were no other significant late Iron Age features at Thurnham, whereas the Hockers Lane plan gives the impression of a more extensive and relatively amorphous settlement, comparable with CTRL sites such as Snarkhurst Wood and the early phases of Bower Road. Thurnham is unusual in the context of these sites in having evidence for two circular structures, probably positioned close to the centre of the enclosure if the original extent of this to the south-west has been correctly projected. Their occurrence may be something of an accident of survival since the better preserved of the two penannular gullies was partly sealed under deposits associated with the later temple, and since the potential life of the settlement was in excess of 100 years it is possible that other structures were originally present which, for various reasons, did not survive. Nevertheless, the general absence of comparable structures on other CTRL sites is notable. The associated four-post structures are a much more common component of these sites. The structures contained within the penannular gullies are presumed to be of above ground construction, and to have been domestic in function. The chronological relationship between them is unknown. They could represent successive generations of occupation, or contemporary components of a single household. The entire occupation span of the late Iron Age phase at Thurnham might not have been longer than two generations, but a more extended span is perhaps more likely. It has been assumed that there were social and economic links between Thurnham and Hockers Lane. This is plausible, but the sites are 650 m apart and may have been independent in many ways. Both produce imported pottery in this phase, but the relative quantities are not such as to permit speculation about the comparative importance of the sites with regard to socially-embedded patterns of distribution of high status ceramics. Absolute quantities of this material are small.

The chronology of the origins of the sites is dependent largely upon pottery, although a single Class I potin coin from each may suggest activity in the first half of the 1st century BC.

However, the pottery recovered in association with each coin exemplifies the potential differences of chronology between the two sites. The earliest pottery from Hockers Lane could date as early as the second half of the 2nd century BC and is thus in accord with the earlier part of the potential date range of the coin (cf eg Hobbs 1996, 12). Indeed, a large proportion of the earliest vessels present here were recovered in direct association with the potin. Contrary to this the vessel forms at Thurnham, and particularly those recovered from the surface of the buried soil horizon (20360) in association with the potin coin here, suggest occupation not earlier than the mid 1st century BC at the earliest. It is even possible that settlement here commenced as late as the early 1st century AD. The pottery evidence indicates that activity at Hockers Lane had effectively ceased by the end of the Iron Age. The extent to which the excavated sample is representative of the site as a whole is unknown, however, so while it is possible that Thurnham succeeded Hockers Lane as the main domestic focus of the area in the immediate post-Conquest period this cannot be certain.

The evidence from Thurnham suggests that there was an increase in the quantities of finds, or at least in the volume of disposal of finds, at the very end of the Iron Age and into the immediate post-Conquest period. This may imply that the capacity of the settlement to gain access to a greater range of goods was increased, possibly as a consequence of expanding agricultural production, but perhaps in response to social factors, although changes in deposition practices might also have been significant. Unfortunately, understanding of the agricultural economy of the site is restricted owing to the limited quantities of charred plant remains and animal bone found. Cereal assemblages, where present, were dominated principally by spelt wheat, although barley and perhaps some emmer were also recovered. It is possible that the small quantities of charred remains recovered from both Hockers Lane and Thurnham in the late Iron Age phase reflect a genuine characteristic of the economy of these sites, ie an emphasis on pastoralism; but at Thurnham the subsequent early Roman phase was characterised by significantly larger charred plant assemblages. Perhaps, therefore, the contrast in the quantities of charred plant remains present in the late Iron Age and early Roman periods reflects differences in the location of storage and processing activities rather than changes in the agricultural regime at Thurnham. The animal bone data from both sites suggest that sheep/goat were numerically more important than cattle at this time (although the Hockers Lane sample was particularly small), but with their greater mass cattle might still have provided the majority of meat consumed. The samples are too small for detailed patterns of exploitation of the animals to be ascertained. Pigs were quite well-represented in the late Iron Age, but at Thurnham seem to have been of reduced importance after the early Roman period.

The agricultural aspect of the trading connections of the site in this phase is reflected in the occurrence of a quern of Hertfordshire Puddingstone and of a few fragments of salt containers (fabric BER15), probably from the Folkestone area (these materials were absent from the smaller assemblages at Hockers Lane). Its notable that, although clearly deriving from this period, many of the occurrences of these items were in deposits of the subsequent phase. This is also true of the coins and brooches likely to have arrived at the site in this period and discussed in more detail below. These detectable patterns of deposition may also inform the interpretation of the pottery assemblages with regard to questions of residuality. A south-east bias in trading connections may be reflected in some aspects of the pottery assemblage; material assignable to the Medway valley/north Kent area appears to have been scarce, although the calcined-flint and sand tempered fabrics MLIA2.1 and MLIA2.2 made up about 6% of the sherds in this period and shell-tempered wares (B6) from north Kent were also present. Larger quantities of material in glauconite-tempered (such as a carinated cup of Thompson (1982) Class E1; Fig. 11 vessel 7, c 25 BC-AD 50) and particularly grog-tempered fabrics might have derived from the Folkestone area. The majority of the glauconitic fabrics (B9.1-9.3), however, are thought to be of fairly local origin. An increasing amount of distribution evidence suggests sources around the Maidstone area, with one perhaps in the immediate vicinity of Snarkhurst Wood (Lyne 2006). These fabrics comprised just over half of the pottery by sherd count and slightly less by weight. The next most significant group of fabrics were the 'Belgic' grog-tempered ones, B1, B2, B2.1 and B3, forming 28% of the pottery by sherd count and 34% by weight: these came from a variety of sources in east Kent and the Weald.

The chronology of this phase, ending at most c 25-30 years after the Roman conquest, means that the period of use of some of the most clearly defined imported pottery, as well as other finds, is not entirely clear. Objects dated around the middle of the 1st century occurring in contexts of the early Roman period could be residual from the late Iron Age phase, or could have remained in use into the later 1st century. Defining the scale of pre-conquest pottery import, for example, is therefore difficult. Such material probably includes most if not all of the few terra rubra sherds from both sites, and the Arretine ware from Thurnham (Fig. 20 vessel 59). Most of this pottery, however, was recovered from secure early 2nd century contexts and appears to have been associated with the life of the proto-villa building of the post-conquest phase. If such was the case, but the appearance of the early imports can nevertheless be securely associated with the pre-conquest period, this may have important implications for possible continuity of site ownership or tenure each side of AD 43. Other Gallo-Belgic wares (white wares and terra nigra), generally a little later in date, are less easily assigned to a specific period, but these were present only in minute quantities in the late Iron Age phase (their absence at Hockers Lane is probably significant in chronological terms), and were only slightly more common in later assemblages. A sherd of Campanian amphora could have been another pre-conquest arrival, but was not particularly well-stratified. At least eight

of the 17 brooches from the site are likely to have been in use in this period and some of those with an early post-conquest date range, such as the four of Bagendon and Hod Hill types, quite likely also reached the site in this period, but only two of these brooches (small finds 4 and 10772) were securely sealed in 1st century levels deposited before or around AD 70 (Fig. 14). A similar problem concerns the late Iron Age and early Roman coins. Not all of these were stratified, and those that were all occurred in soil horizon contexts that continued to accumulate finds into the 2nd century. The two Iron Age coins at Thurnham may have arrived at the site before AD 43, but this was not necessarily the case with the issue of Cunobelinus. As many as five Roman coins could also have arrived in the post-conquest phase of this period. A quadrans of AD 41-43 is very unusual as a site find (although now in poor condition it was probably quite fresh when dropped) and four probable Claudian asses (at least three of which are certain or probable contemporary copies) are unlikely to have circulated after about AD 70. These could therefore have been in use in the later part of the 'late Iron Age' period or (perhaps less likely) the earliest years of the early Roman 'proto-villa' period. Their findspots do not allow this to be determined, however.

# 4.4.2 Early Roman (c AD 60 to AD 120)

Shortly after the conquest the Iron Age settlement underwent a fundamental remodelling with the construction of a Romanised proto-villa building (20350), although the overall layout of the site was still substantially based upon that of the preceding period (Fig. 15). A major aspect of the remodelling was the deliberate backfilling of the southern part of ditch 20170 and the levelling of all but part of the enclosure ditch circuit (10840). A new rear (north-west) boundary (20400) was connected to the retained (northern) portion of 20170 (included as part of the 20400 ditch group), while the proto-villa building itself was constructed at the rear of the enclosure over the backfilled section of ditch 20170.

The south-eastern side of the former enclosure ditch was maintained (10660) and augmented with an outer ditch (10770 and 12555), creating a double ditch and bank boundary. This had clearly defined gated entrances (12560 and 12570). A new post and fence row (12360 and 15420) replaced the north-eastern boundary and was located further to the north as part of the process of enlargement of the enclosure. On the south-eastern boundary a secondary rectangular building (12720) was constructed, with shallow stone foundations. The ground plan and siting of this building strongly suggest that it was a temple.

The only other major feature within the enclosure during this period was a circular surfaced area (11640) set towards the eastern corner. This also probably represents a contemporary late 1st century structure. Outside the enclosed area to the east a substantial standing post (10700) was erected on the sloping approach to the villa.

#### The enclosure

The primary act of the new period was to enlarge the late Iron Age rectilinear enclosure by levelling all but part of the existing enclosure ditch circuit (10840 and 12585) and the southern half of ditch 20170 with redeposited clay natural. The consistent bias of the backfill deposits to the outer edge of the enclosure ditch suggests that they are most likely to have derived from an exterior bank which was pushed into the substantially open feature (see Fig. 12 sections 10174, 10271 and Figs. 22 and 23, sections 10415 ditch 12063 and 10420, ditch 12121). The presence of Romanised sherds such as those from a collared flagon in fabric R18.1 (AD 43-80) and a South Gaulish Drag 27 cup (AD 43-110) could allow this event to be dated as early as *c* AD 50-60 (Lyne 2006). The presence of a few later sherds dated to AD 70+ might indicate a rather later date, but the very small quantities and size of the later sherds suggest that these were intrusive; material of Flavian to 2nd century date was particularly common on the site. If the enclosure circuit had been infilled as late as the later 1st century it would be reasonable to expect much more substantial amounts of similarly dated pottery to reflect this.

Concurrent with the levelling event, each boundary was replaced by features repeating or respecting the preceding layout. The south-eastern boundary was elaborated upon by retaining a substantial length of the existing steep-sided enclosure ditch and levelling only the south-western part (12585) along this side. Although evidence for the pre-existing external bank, based on erosion and slumping fills in the ditch, was only slight on this downslope side of the enclosure, the presence of the bank would be consistent with the indications from the remainder of the earlier ditch circuit. As this part of the ditch was not backfilled the bank appears to have been retained alongside the open ditch whilst the probable temple building (12720) was constructed over the backfilled and levelled area to the south-west (see below for the building description and figure reference). To the north-east the ditch was extended beyond its original alignment creating the new linear boundary (10660) with a full length of 43.5 m. This had a consistent depth of 0.5 m to 0.6 m and was up to 1.4 m wide (Fig. 16 sections). The primary silting fills produced a moderate quantity of exclusively 1st century pottery consistent with continuity from the late Iron Age period into the early Roman period.

Parallel to the exterior (south-eastern) edge of ditch 10660 an additional ditch and gully sequence (10770 and 12555) was added. These features were placed 0.75 m to 1.50 m from the 'inner' ditch and, with the existing bank, would have created a double ditch and bank boundary with the bank located between the ditches. The moderate quantities of pottery sherds in late Iron Age fabrics and the few sherds of early Roman vessels present in the primary fills also establish the 'outer' ditch and gully as features contemporary with ditch 10660 and forming part of the boundary modification in the mid 1st century.

The addition of the outer range of features created a more complex boundary with the ditches and gullies (10770, 12555 and 12565) punctuated by gated post entrances (12560 and 12570). The character of ditch 10770 also reflected its associated relationship with the inner ditch, clarifying the appearance of the boundary and how it functioned. To the south-west where ditch 10770 extended beyond the limit of ditch 10660, it had a sharp profile of similar dimensions to those of the inner ditch (see Figs. 22 and 23 sections 10190, 10415 and 10420). At the point where the two ditches ran in partnership with the bank between, ditch 10770 dwindled to no more than a stepping obstacle 0.6 m wide and 0.3 m deep up to its north-western limit where it met the gate-posted entrance 12560. The continuation of the outer gully (12555) to the north-east of the entrance was similarly slight in character. This combination of the shallow gullies accompanying the exterior edge of the bank and the mutually exclusive or respective relationship of the deeper ditch sections provided the boundary with a continuous ditched barrier of moderate proportions. This may have been specifically designed to accommodate the new temple building within the boundary and provide an open vista specifically to or from this building.

The primary entrance to the enclosure appears to have been structure 12560. This was of substantial construction represented by large paired post pits 1 m deep and 4 m apart from centre to centre (Fig. 16 plan and section 10254). The structure was positioned in line with the midpoint of ditch 10660 with the corresponding part of the former enclosure ditch levelled to accommodate the access. An entrance of similar width (12570) was positioned 9 m further along the boundary to the north-east, although it was of slighter construction, defined by postholes up to 0.45 m in diameter and 0.25 m deep. This was located at the corner of the enlarged enclosure with a gully (12705 and 15419), screen or fence trench (15420) and a post row fence line (12360) defining the north-eastern side of the enclosure extending to the north-west from the entrance. The larger entrance produced little tangible dating evidence, but its clear association with the primary ditch boundaries shows it to have been conceived as a part of the redevelopment of the enclosure.

The size of the focal entrance implied by the large post pits is also very striking. Its central position in relation to ditch 10660 suggests that this was an impressive feature intended to make a visual impact. Certainly if the size of the post pits translates to the size of the entrance structure, the view upon approach across the low-lying ground to the east would have been imposing, emphasised by the raised location of the structure upon the slight promontory.

Regardless of the apparent importance or focus of the central entrance it may have been quite short-lived. It was closed by an 8 m length of fence or screen (11450) with a characteristic packing and post-pipe type fill (Fig. 16 section 10254). Dating evidence for this event is scanty, but the 7 sherds (68 g) of pottery recovered from the infill include three in

Upchurch fabric R14 dated AD 43-70 and suggest a later 1st century date. This is consistent with the infilling of the diminutive portions of ditch 10770 and 12555 which also appear to have been fully silted by c AD 70-80. However, the deeper section of 10770 to the south-west and the full length of the inner ditch 10660 certainly remained as moderate-sized open ditches into the early 2nd century.

The blocking of the central entrance may have been part of a later 1st century reorganisation of the boundary. The small assemblage of pottery recovered from the excavated postholes of entrance 12570 suggests that this continued in use into the late 1st century replacing 12560 as the principal entrance although, as indicated above, it remains most likely that they were initially contemporary features. As part of this slight reshuffle the enclosure boundary may also have been extended to the north. A 6 m length of fence slot (12565) extended to the north of entrance 12570 beyond the alignment of the north-eastern side of the enclosure. Although unexcavated, this had distinct tile packing along one edge and a dark central fill typical of a packed wooden slot structure. The use of tile for packing is significant here as tile was generally absent from the mid-1st century deposits and only became more prominent in deposits dated AD 60-70+.

The north-eastern boundary created as part of the primary redevelopment in this period may also have been replaced and extended late in the 1st century. Certainly it had ceased to exist by the following period (early 2nd century). Pottery dated to AD 70+ was recovered from some of the post-pipe infills of the post row. However, this boundary was close to the northern edge of the excavation area and no clearly defined replacement boundary existed within the excavation limits.

The more substantial ditches of the south-eastern boundary spanned this period and were finally levelled early in the 2nd century. The portion of ditch 10770 coinciding with the south-eastern side of the temple building was mostly infilled by natural silting. Only the upper remaining hollow was deliberately levelled with a deposit including ragstone pieces, flint nodules and occasional fragments of roofing tile. Several sherds suggesting a late 2nd century date were recovered from the upper fill (11645) of this sequence, but these are almost certainly intrusive from an overlying thin soil accumulation (10649, subgroup 10525) and a posthole (11813) cut into the ditch fills (Fig. 23 section 10415).

The entire length of ditch 10660 was similarly infilled by silting to approximately half its depth before being levelled along its full length by a dark grey-black deposit largely consisting of charred plant remains. These are some of the richest charred remains from any phase of activity on the site with spelt wheat (*Triticum spelta*) dominating the identifiable grain and chaff remains and smaller quantities of weed seeds also present (Smith and Davis 2006). The small size of the chaff fragments and amounts of weeds strongly suggest that this material was a sieving by-product from the later medium and/or fine sieving stages of cereal

processing. This material occurred consistently along the line of ditch 10660 and gully 12705. The sheer volume of this deposit provides a vivid picture of the increased level or possibly changes in the methods of cereal crop processing being undertaken towards the end of the 1st century and the early 2nd century. Its occurrence within the ditch must have been through dumping of waste material, although its origin within the settlement was not identified. However, the fact that it was dumped within the inner ditch of the enclosure boundary suggests that it did derive from activities within the enclosure. It is possible that this material was imported into the enclosure as a secondary deposit of waste used as a fuel source before being dumped, but only moderate quantities of charcoal were present making this unlikely.

Artefacts recovered from the charred deposits included a significant pottery assemblage showing a substantial increase in the quantity and diversity of supply to the site with 914 sherds (7888 g), recovered from an approximate 20% excavated sample of the ditch. Sherds of mortaria and amphorae were present alongside Terra Rubra (TR3), Terra Nigra, South Gaulish samian, Patch Grove ware, Upchurch ware and some rare occurrences of Colchester colour-coated wares. However, late Iron Age fabrics and forms still accounted for 50% of the assemblage from this ditch by count and 61% by weight. These quantities show that this material was not substantially residual; many more 'late Iron Age' sherds were present here than in the complete circuit of enclosure 10840. This not only reflects the unbroken nature of the settlement sequence between successive periods, and the date span of this ditch boundary, but also the continued supply and use of vessels in a late Iron Age potting tradition alongside imported and Romanised fine wares at the site, particularly in the early post conquest period (Fig. 17).

In addition to the charred remains and pottery, a 3.25 kg assemblage of animal bone was recovered from the ditches 10660 and 12705. Cattle dominated, representing 10% by count of all the faunal remains recovered from the ditch, but 52% by count of the identified fragments. This assemblage was largely recovered from the dumped charred deposit that had the effect of preserving the bone in a better state than many of the clayey deposits encountered in other ditches. No wild faunal remains were identified, suggesting a reliance or concentration upon domestic livestock or possibly reflecting a bias of deposition of selected food waste within the ditch.

The rear boundary (20400) on the north-west side of the enclosure was created by the diversion of the existing north to south ditch 20170. The southern portion of this ditch was realigned NE-SW parallel to the former enclosure ditch 10840 which lay 15.5 m to the southeast (Fig. 18). This new addition was the most substantial of all the ditched boundaries of this period, being up to 1.3 m deep where it passed behind the proto villa. Here it also had a very steep-sided and narrow V-shaped lower profile, while the upper edges were widely splayed to shallow inclines of 20 degrees or less giving the ditch a surface width of 2.5 m where it was

cut through the surviving contemporary soil horizon (Fig. 19). There seems to have been only limited natural erosion suggesting that the deep narrow central profile and the broad surface width were deliberate features creating a significant physical boundary. This was emphasised by the positioning of a beam trench (20490) between the edge of the ditch and the core rooms of the proto-villa building. This may have been part of the proto-villa building itself or the base of a fence-like structure screening the building from the exterior of the enclosure.

Silting deposits infilled the basal narrow section of the ditch; this appears to have been a reasonably rapid process represented by a series of homogeneous clay fills. The pottery recovered from the primary silting was dominated by vessels in the late Iron Age fabrics with very few fine wares. These vessels suggest a date of *c* AD 50-70 date for the primary silting of the ditch, but in view of the cumulative evidence from all the infilled ditches of the previous period, and from the contemporary enclosure ditch 10660, a date around the middle and latter part of the range appears more appropriate. There was little evidence of cleaning or recutting of the ditch in this period apart from in the excavated section 10485 which suggests the existence of an earlier ditch (20197) of the same profile and depth (Fig. 19). This was infilled with a single homogeneous sterile clay deposit suggesting that it silted up rapidly, but no comparable evidence was present anywhere else along the line of ditch 20400.

It is likely that after the lower part of the ditch profile became silted a more stable profile was attained. The upper fills represented activity in the later part of this period. As with other ditches of both this and the preceding period, this phase was most dramatically represented by a series of backfill deposits. These took the form of dumps of occupation debris sealing the primary silting deposits that were in turn sealed by a sequence of redeposited clay backfilling and levelling layers (Fig. 19 sections 10485 and 10552). The clay deposits formed an approximately 6-7 m wide corridor completely sealing the ditch and the contemporary surrounding soil horizon. As with the transition from the late Iron Age into the early Roman period, these deposits mark the end of this period and start of the next as ground preparation for the construction of the replacement villa in stone. Dating evidence from these clay layers and the upper fills to the north of the villa building is limited and often affected by intrusive sherds from later events, but the well sealed occupation dumps or other deposits below the clay layers were rich in finds and provide a clear association with the proto-villa building.

Fine wares dominate the pottery assemblage from the finds rich upper fills with vessels in the Upchurch fabric R16 (32%) the largest group by EVEs quantification (Fig. 20 vessels 52-57 and Cxt 20237). South Gaulish samian ware (9%) was also well represented by this measure but only accounted for less than 2% by sherd count or weight. This possibly provides a better indication here for the amount of imported continental fine wares present. Most notable amongst these were two refitting sherds of an Arretine platter (Conspectus form

12.5.2, with thanks to G Dannell for this identification), of Augustan/Tiberian date and Italian manufacture recovered from the upper fills (Fig. 20 vessel 59). This particular vessel is likely to have been old at the time of its incorporation into the backfill and probably arrived at the site in the preceding phase. The latest sherds securely stratified below the clay levelling deposits suggest that the ditch was probably infilled in the first two decades of the 2nd century. Beyond the limits of the villa and clay levelling deposits less secure groups within the ditch included later material and further to the north it appears that the upper part of the ditch was allowed to infill naturally for much of its remaining depth before finally being levelled by a mixed rubble deposit (Fig. 19 section 10442). This process seems to have continued into the mid 2nd century, in the next period of site development. The samian ware assemblage provides possible further clarification of the dating. The securely stratified material comprised entirely South Gaulish samian, perhaps suggesting a *terminus ante quem* nearer to AD 110 than 120. The close association of this ditch with the proto-villa is crucial in providing both the end date for the occupation of the proto-villa and a construction date for the stone villa building in the next period.

Even more notable was the concentration of material from a single excavated section of ditch 20400. Cut 20177 (Fig. 19 section 10485) produced 49% of the total pottery assemblage from the ditch (by count) and was equally distinctive for the quantity of animal bone, small finds and charred plant remains recovered. The small finds include a toilet spoon, hair pin, nail and basin handle all of copper alloy, a fragment from a bone hair pin and an iron knife (Fig. 20 small finds). Numerous iron nails and a drill bit were also present with several fragments of glass vessels including an unguent bottle of mid 1st century form. The basin handle is also of 1st century form and is an unusual find on a rural site; most comparable examples have military or urban associations and can probably be related to elite dining practice (Cool in Booth *et al.* 2006). Much of the animal bone was unremarkable. Many bones had animal gnawing marks, confirming that this was a deposit of waste and food debris probably derived from consumption in the principal building and dumped within the open ditch, but it also included teal and woodcock, suggesting that this consumption included potentially higher status wild resources as well as the standard domesticates.

The rearrangement of the boundaries in this period enlarged the area of the enclosure examined within the excavation to approximately 0.44 ha. This forms some two thirds of the estimated total enclosure area of 0.64 ha (based upon the assumption that the south-western boundary position inferred above remained static).

### *The proto-villa building 20350*

The modification of the rear (western) boundary created a platform area for the construction of the proto-villa building. Only part of the structure remained *in situ* (Plates 3 and 7). This

was represented by a sequence of thin layers laid directly onto the surface of the contemporary soil horizon (20360) and the redeposited natural clay levelling layers infilling ditch 20170. The preservation of these fragile deposits was entirely a result of the protection afforded by part of the subsequent stone villa building (20510), and specifically the corridor, which was built over and sealed the dismantled proto villa. Indeed, the eastern extent of the proto-villa beyond the protective limits of the stone villa had been almost entirely truncated and removed, although the small portion that remained included part of the possible frontage, suggesting that approximately the rear (western) half of the building remained. In spite of this, the preserved portion survived in its entirety with construction layers, structural remains, floor levels and demolition deposits all present, spanning the life of the structure.

The proto-villa building had previously been revealed and investigated by Paul Ashbee (1986) when he unwittingly uncovered a substantial part of it within his limited excavations focused on the stone villa building in 1933. From his detailed records and the publication of the results some 53 years later it is clear that he exposed the south-western extent of the proto-villa building, although this was not recognised at the time as the deposits were thought to relate to the corridor of the later villa building. Nevertheless, the detail and quality of his work has allowed the stratigraphy and finds to be securely related to the 1998 records and used to fully define the proto-villa structure.

The building was aligned NE-SW adjacent to the inner edge of the new rear enclosure ditch boundary (20400) and occupying a focal central location at the rear of the enclosure (Figs. 15 and 18). Following the levelling of the earlier ditch (20170) with clay deposits, a single course foundation of tightly packed flint nodules 0.4 m wide was laid directly onto the existing soil horizon and prepared clay surface, acting as a plinth for sleeper or sill beams. These foundations clearly defined three central rooms (a, b and c) with dividing walls of the same construction forming the core of the structure, 12.6 m long and of rectangular ground plan set 3 m from the edge of the rear boundary ditch (20400). These rooms were of unequal size with internal lengths of 3.8 m, 2.7 m and 4.5 m respectively. Only a 2.1 m width of the rear part of the building had been preserved by the later villa corridor. Additional rooms (d and e) were placed at each end of the flint foundation range. These appear to have been an integral part of the building, but they were constructed by placing the sleeper beams directly onto, or slightly cut into, the ground surface and were principally defined on the basis of the extent of the accompanying internal floor surfaces. These gave the building a total external length of 18.0-18.5 m, although the northern limit is not as clearly defined as other parts of the building and identification of the southern limit is based upon Ashbee's records of a clearly defined tile deposit.

The full width of the building was only evident at the southern end of the structure where the flint nodule foundation extended beyond the exterior of the protective villa corridor

and appeared to return to the south-west as a very disturbed flint plinth defining the 'front' (south-east side) of room d. This suggests that room d was 6.3 m wide, a figure which could reasonably be inferred for the whole building. To the rear a flat-based trench (20490) was aligned along the inner edge of the boundary ditch (20400) coinciding with the core rooms (a, b and c) of the building. Unlike the other sleeper beam foundations, this was cut through the contemporary soil horizon and into the underlying clay to a depth of 0.3 m and was up to 0.6 m wide (Fig. 19 section 10552). It appears that this was part of a wooden structure screening the proto villa from the exterior of the enclosure, but it is also possible that it formed a component part of the building. If it was attached to the main building and roofed it would have provided a rear corridor access to the individual rooms and may still have functioned as a rear screen. This would also be consistent with the pattern of movement around the building suggested by the disposal of debris within cut 20177 of ditch 20400 at the northern end of the potential corridor area. This addition would have given the building a full width of 9.1 m. There was no evidence for a hard or compacted floor surface in this area, but most of it had been truncated and removed by the corridor foundations of the later stone villa.

The rooms were finished with neatly constructed floor surfaces, incorrectly described by Ashbee (1986) as being of opus signinum, although he carefully observed other details and the floor levels remained in situ until the current excavation. The floors of rooms a, b, c and e comprised a heavily compacted reddish silt clay (Ashbee's opus signinum) that had some small inclusions of crushed tile in their surfaces as a result of use and trample rather than design. Within room e the floor survived only partially and was set upon a thin bedding layer of crushed chalk. Bedding layers within the other rooms comprised redeposited natural clay with an additional layer of tightly packed flint nodules (20116) sealing this in room a (Fig. 18) section 10337). Unlike the other rooms, the south-western room (d) was surfaced with a deposit of crushed roof tiles (20304). This was the only floor deposit excavated and removed by Ashbee although a small portion of the deposit remained in situ during the current excavation allowing direct comparison with the remains excavated in 1933. These tiles were invariably tegulae and imbrices, predominantly in the Eccles pale cream fabric described as 'yellow tiles' by Ashbee (1986, 148) and produced from c AD 50-80. The only other tile fabric present was from the group of reddish fabrics with quartz inclusions deriving from the London area and commonly found there from AD 60-100. Occasional fragments of tile incorporated into sealed clay bedding layers were exclusively in the Eccles fabric, suggesting that this was the main and primary source of tile to the site during the construction of the proto-villa, while tiles in the reddish London area fabrics may have arrived slightly later.

More substantial evidence for the roof of the proto-villa is provided by the tile recovered from the fills of the adjacent boundary ditch 20400, c 30% of which was excavated. This assemblage is most likely to have derived directly from the roof and consists of 15 kg of

London area material. The large assemblage recovered from the backfill levels of enclosure boundary ditch 10660 may also relate to the proto-villa roof. Although this ditch lay on the opposite side of the enclosure, it was clearly used for debris disposal including pottery fine wares that are likely to have derived from use in the principal building. The probable temple building (see below) adjacent to ditch 10660 also had a tiled roof, but this remained intact throughout this period and into the next and so is unlikely to have been the main source of the material in ditch 10660. The tile in this assemblage had a similar composition to that from 20400, with over 34 kg of the Eccles fabric and 5.5 kg of the London area tile present in the excavated sample.

A rough calculation of the requirements of the roof of this building, based on the weights of surviving complete examples of tegulae and imbrices in Eccles fabric, and assuming a ground plan area of  $18.5 \text{ m} \times 6.3 \text{ m}$  and a roof pitch of  $c \cdot 30^{\circ}$ , gives an estimated total tile weight of  $c \cdot 12.5$  tonnes. Clearly only a very small proportion of this material survived destruction or (more likely) reuse.

Dating evidence for the construction of the building from the securely sealed deposits is very limited with only six sherds (15 g), of early post-conquest pottery recovered from a clay bedding layer within room b. This small group consisted entirely of mid to late 1st century fine wares; three sherds of South Gaulish samian in forms Drag. 18 and 29, a sherd of an early white ware flagon dated AD 30-60 and two sherds of a flagon in a white-slipped Upchurch fabric. In addition to this group, the building has clear stratigraphic and physical relationship with many of the surrounding features that are very well dated. Ditch 20170 was levelled and diverted as ditch 20400 to create the space for the building and the preceding enclosure ditch 10840 was infilled to facilitate enlargement of the principal enclosure, as discussed above. These two events and the primary silting of ditch 20400 date the construction of the proto villa to the period AD 50-70 and, with the combined evidence of the construction layers, possibly in the later part of this range.

Material found either directly on, or incorporated into, the floor surfaces of the protovilla was more varied, although similarly sparse. It included 44 unremarkable pottery sherds with a low average weight of only 4 grammes, as might be expected of a floor surface. Several iron nails and fragments of tile, again in the Eccles fabric, were also incorporated into the surface with small fragments of animal bone. Interestingly the faunal remains included several bird bones consistent with the occurrence of bird bones in the debris backfills of ditch 20400, suggesting that these deposits of food remains derived from consumption by the occupants of the main house. The pottery did include several sherds of late 2nd or early 3rd century date, but these were clearly intrusive and could have easily been incorporated following the backfilling of the 1933 excavation over the exposed floor levels. This assemblage (excluding the intrusive pieces) represents the whole period of occupation of the building and suggests that the building was kept immaculately clean, with only the smallest of items becoming trampled into the floor surface.

The floor surfaces were not subsequently repaired or replaced. They were sealed by a layer of demolition debris marking the end of the life of the proto-villa when it was replaced by the stone villa at the start of the next period. The demolition layer largely comprised many small fragments of painted plaster generally face down in the deposit. This material was particularly concentrated at the base of the deposit, where several larger fragmented pieces were laid face down directly onto the floor surface. These also infilled the sleeper beam voids showing that the building was dismantled at this point (Plate 4). This deposit was partly excavated in 1933 where it was recorded as sealing the 'opus signinum floors' (Ashbee 1986, 150-1). Ashbee's finds were re-examined alongside the current material. Together they show a typical example of 1st century Roman wall painting style with a dado area of imitation marble in light grey and pink with splash decoration (Betts 2006b). Red panels surrounded by borders in white, green, yellow and grey sat above the dado. Evidence of more elaborate decoration is limited, although areas of curved and jagged white lines and a few fragments of light green foliate design may derive from decorated zones between the red panels, or from the ceiling. Plain white plaster was also used, not only as an *intonaco* for the painted surfaces, but also as plain areas which could represent the ceiling. Ashbee recorded and excavated larger panels of this in his excavation (ibid.), with additional scattered areas of plaster in the same style recorded in the upper debris backfills of ditch 20400. Several sherds of samian ware dating from the late 1st into the early 2nd century were recovered by Ashbee directly under some of the plaster deposits (ibid., 151-2).

As with the construction of the building, its demolition date relies upon very clearly defined and well stratified associated deposits and events. The end of this period is marked by the demolition of the proto-villa and its immediate replacement by the stone villa. The latter overlay the proto-villa resulting in its partial preservation as explained above. At the same time the rear boundary ditch 20400 was backfilled; a series of clay levelling layers securely sealed the backfill deposits and were spread across the remaining hollow as ground preparation in the same way that the proto-villa area had been levelled at the start of this period. The large pottery assemblage from the ditch infill suggests that this occurred between AD 100-120 and probably nearer 110 than 120.

Some 5 m to 6 m in front of the proto-villa and parallel to it was a thin slot (11460) cut into the upper clay backfills along the line of enclosure ditch 10840 and slightly beyond (Fig. 18 section 10652 and Fig. 11 section 10271). This probably held a small fence. Its slightly uneven alignment possibly indicates the location of individual panels within the fence line, while its stratigraphic position and the associated late Iron Age coarse ware pottery

assemblage point to an early association with the proto-villa, probably as part of the primary plan. The fence seems to have been a short lived feature that probably did not survive into the later part of this period as it was sealed by a soil horizon (11510) containing pottery, oyster shell, charcoal, burnt clay and fragments of roof tile exclusively in the early Eccles fabric. The mixed nature of this soil and its inclusions is of similar character to that of debris backfills within the rear boundary ditch, although the pottery consisted largely of late Iron Age fabrics; only a few sherds of an unidentified mortarium and a highly micaceous fabric suggested a later 1st century date for its accumulation.

## The temple building 12720 and pre construction clay levelling 11670

A substantial building accompanied the proto villa in this period. This was constructed along the south-eastern arm of the former enclosure ditch (12585) of the preceding period and was only partly revealed within the excavation boundary (Fig. 21 and Plate 5). Its south-western part extended into the M20 land corridor. This part of the building was partly excavated by Pirie in 1958 (Pirie 1960, 165 fig. 3) although the plan in the Maidstone Museum archives (and not the published drawing) shows that the ground plan was not excavated in detail or well understood, especially in light of results of the current excavation. Pirie provides little comment on the structure other than suggesting "....that it was no more than an outbuilding on the villa's premises." (ibid., 167). By revealing the remainder of the ground plan and placing it within its contemporary setting the building can now be identified as a probable temple that served the inhabitants of the site through this period and well into the next.

Construction of the temple initially followed the same procedure as that of the protovilla. The earlier enclosure ditch (12585) was infilled with clay levelling deposits. The securely sealed fills only produced a small pottery assemblage (30 sherds, 418 g) exclusively in late Iron Age coarse ware fabrics, consistent with most of the contents of the enclosure ditch in only indicating a roughly mid 1st century date AD for the fills. Additional dating of this event is provided by the assemblage recovered from a series of yellowish and green redeposited natural clay deposits (11670). These deposits formed a base for the foundations of the temple building, sealing both the ditch fills and a thin contemporary soil horizon, and levelling a shallow rounded depression, 25 m across, which lay within the enclosed area (Figs. 22 and 23).

Some 329 sherds weighing 2639 g were recovered from the clay deposits and the underlying soil horizon. Unsurprisingly, given the proximity of the late Iron Age structure 12500, the majority comprised late Iron Age glauconitic and grog-tempered fabrics. These include a particularly interesting vessel in the form of a copy Drag. 27 cup in a polished black glauconitic fabric B9.1. This is of a variant relatively closely dated *c* AD 40-60 and raises the possibility that the local production of glauconitic wares may have continued until AD 60; a

feature suggested by the high level presence of similar fabrics in the early Roman deposits elsewhere across the site. In addition several contexts produced sherds indicating a date of c AD 70 at the earliest for the construction of the building although each of these contexts was at the edge of the clay deposits where they were exposed and more susceptible to contamination. The main body of evidence strongly points to a date before AD 70 for the major events of levelling and construction, consistent with the other evidence for enclosure reorganisation and the construction of the proto-villa. However, the few sherds dated AD 70(+) might suggest a construction date for the temple in the early Flavian period rather than significantly before.

The recovery of two brooches, a Nauheim Derivative and a Bagendon style brooch, from the clay deposits confirms this date range (Fig. 14 small finds 4 and 10772). The Nauheim Derivative fashion was generally going out of use by the AD 70s and the particular style represented here appears to be of a pre-conquest form. The Bagendon brooch also has a Claudio-Neronian *floruit*, although it is possible that both had been discarded some time before their incorporation into the levelling deposits.

The foundations of the building (12720) were cut into the clay levelling layers (11670) (Figs. 22 and 23). The form of the ground plan is suggestive of a temple and comprised a central room (or 'cella') with partly surviving internal surfaces, surrounded by a surfaced corridor (ambulatory) and exterior wall. A well defined entrance 1.5 m wide, indicated by the continuation of the corridor surface over the wall foundation through a clear break in the wall courses, in the north-western exterior wall of the corridor directly faced the proto-villa and a possible entrance porch or small room (see further below) protruded north-eastwards from the corridor towards the south-western end of the enclosure boundary ditch (10660). With the addition of the evidence from the 1958 excavation the building is seen to have a rectangular plan, with its long axis aligned NE-SW, dictated by the enclosure boundaries discussed above and the former enclosure ditch (12585) over which the south-eastern side of the corridor was built. However, marrying the current excavation plan to that of the 1958 excavation is not straightforward, largely because of the limited trench-style excavation and recording of the latter, but a 'best fit' plan suggests that the overall external dimensions of the building were *c* 18.0 m NE-SW (excluding the possible entrance porch) by 13.2 m NW-SE.

Unfortunately the most complex part of the building plan coincides with the junction between the two excavated areas, making a comprehensive description impossible. What is indisputable is that there was a continuous corridor with an internal width of 2.0 m around three sides of the *cella* (see Fig. 21). The *cella* had an internal NW-SE dimension of 7.8 m. At the south-west margin of the 1998 excavation was a NW-SE aligned wall (11310), apparently an internal feature within the *cella*. This may have formed a corridor or narrow room on the south-western side since a corresponding wall (293) was revealed a further 2.0 m south-

westwards under the former hedge line during the watching brief phase. The spacing between walls 11310 and 293 matched the corridor width seen elsewhere, but the north-west and south-east walls of the *cella* were clearly continuous beyond their junction with 11310, suggesting that the latter and wall 293, were the long sides of an enclosed room and not part of a continuous encircling corridor. The internal dimensions of the main part of the *cella* were thus 5.8 m by 7.8 m, and its overall exterior dimensions, including the small corridor 'room', were 9.0 m (NE-SW) by 8.5 m (NW-SE).

The south-western part of the building was excavated in 1958 and the corridor shown along the north-eastern side on the 1958 plan probably represents the walls of the subdivided section of the cella from the current excavations; a possibility supported by the identification of the same floor surface in both excavations within this area (Pirie 1960, 165, fig. 3). It should be noted, however, that the continuation of the NW-SE aligned walls across the full width of the building is reconstructed; the relevant wall junctions were not examined. Nevertheless Pirie recorded that the structure was of a single build and that there was a larger room across the full width of the building on its south-western side (ibid.). This room had a NE-SW internal measurement of 5.0 m. As a result of the limited scale of the excavation it was not realised that the walls encountered were part of a larger building and did not form a complete structure. Pirie's published plan is thus interpretative and does not help with establishing the detailed layout of the complete building.

The possible porch-like room on the north-east side of the building was projected along the line of its south-east exterior wall. This room comprised two parallel walls, again conforming to the internal 'corridor' width of 2 m, extending 4.8 m to the north-east. No obvious foundation existed at its north-eastern end, suggesting that the room may have been open-ended. It is also possible that it did not lead directly into the temple corridor and was actually a large niche-like structure, as both the foundation and part of the superstructure of temple outer wall were present at the point of junction and the walls of the 'porch' appear to have butted against the latter. An internal crushed chalk surface continued to the exterior as deposit 12677. Nevertheless, the 'porch' may have been associated with access to the building from the exterior of the proto villa/villa enclosure as there was a gap of c 1.8 m between its open end and the contemporary south-west terminal of boundary ditch sub-group 10660. An open drain of roof tiles was constructed into and through the walls of the 'porch' to remove surface water from a catchment area on the north-western side of the entrance where this formed a corner with the outer wall of the corridor/ambulatory, discharging on the south-east side of the 'porch'. The function of this feature was clearly demonstrated by distinctive thin deposits of crushed tile and chalk found at its mouth, eroded off the surfaces it drained.

Construction of the temple foundations was of a single phase and utilised tightly packed flint nodules with some ragstone pieces, laid in courses three to four deep. The *cella* 

foundation was the most substantial, being generally up to 0.55 m wide and 0.40 m deep, whereas the surrounding corridor foundation was only 0.45 m wide and 0.30 m deep (see Figs. 22 and 23). This was similarly reflected in the surviving wall courses; the stones in the cella walls, where up to two courses of ragstone facing blocks with selected tightly packed flint nodules filling the core survived, were larger than those in the outer wall which was otherwise of similar construction. The *cella* wall was 0.50 m thick and the outer wall between 0.30 m and 0.40 m. No bonding material was present. Although well constructed, the relatively slight appearance of these walls and the apparent absence of bonding material suggest that they were no more than plinths for what is most likely to have been a wooden superstructure.

Several lines of evidence from the building and its immediate surrounds provide some clues as to its appearance and so support its interpretation as a temple. Firstly the foundation dimensions show that the *cella* was clearly intended as a more substantial construction than the adjacent walls. It could thus have supported a taller superstructure, or a heavy tiled roof (as was clearly the case with the proto-villa, which had less substantial foundations), or both. The small corridor room in the south-western part of the *cella* may even represent an area for stair access to an upper level. There is no reason to suppose that the surrounding corridor and the room to the south-west were not roofed in the same manner as the *cella*. If these were only single storey structures the foundations appear more than adequate to carry wooden walls, roof beams and a tiled roof.

The likelihood that the superstructure was largely of timber is further suggested by the large numbers of nails recovered from the surrounding deposits. Some comparison to the proto-villa is useful here, as this was clearly of wooden construction except for a single course of flint nodule foundations. It is unlikely that the temple would have been significantly different from the principal building in this respect. A few nails were incorporated into the clay levelling layers beneath the temple, as was a drill bit. More substantial quantities of nails almost certainly deriving from the building were recovered from the thin soil and debris layer (10525) which accumulated around the temple exterior after it was dismantled or collapsed in the 3rd century. A similar group of discarded nails and a drill bit were also encountered in the demolition levels and backfills of the enclosure boundary ditch (20400) to the rear of the proto-villa.

The remains of the roof were the most striking feature of this building. Evidence for this comes from the 185.7 kg of roof tile deposited in and levelling the later boundary ditch (12545 described below) which coincided with the south-eastern side of the building. This sizeable assemblage was recovered from the 25% sample of the ditch that was excavated. Although the assemblage was moderately broken, some large fragments were present, including a complete tegula and several substantially complete imbrices. Fragments of white

coloured mortar that secured the imbrices in place were also found. The close association between the ditch and the temple, the large fragment size of the tiles and the survival of the fragile mortar clearly show that this material had been directly deposited into the ditch from the adjacent building. Nearly all the tile is in the cream-pink Eccles fabric consistent with the roof of the proto-villa with only a small component of the red London fabric present, perhaps representing later repairs (Betts 2006a). Alternatively it is possible that the red-coloured tiles were added at a later date to create a decorative effect.

The interior surfaces contrasted with those of the proto-villa; durability rather than comfort may have been the most important characteristic. The corridors were surfaced throughout with flint cobbles. These surfaces were less well preserved on the north-eastern and south-eastern sides but survived in excellent condition along the north-western side. Here tightly packed flint cobbles were set into the underlying clay levelling layers and butted against the wall courses. This area was later resurfaced with angular crushed flint (10646). Both made for hard wearing surfaces but probably not very comfortable ones. The floor of the cella, only part of which survived, also had superimposed surfaces. The primary floor level (11451) was constructed of tightly packed flint nodules and small ragstone pieces (Plate 6). At the surviving eastern extent of this were two distinct areas of surfacing defined by larger fragments of ragstone set horizontally and worn on their upper surface (11627/11628). These may have had a specific function within the cella space such as to provide a particularly resilient or firm surface. This seems particularly likely with the presence of a shallow circular pit (11663), approximately 0.6 m diameter, located at the eastern end of surface 11627. This was infilled with neatly laid ragstone blocks around the edges and flat across the base of the pit and was placed perfectly central within the *cella* interior. This may have had a structural role within the building providing support to a roof or upper floor although its appearance and location are much more suggestive of this being a feature related to the use of the temple; possibly as the focal point such as an alter. Overlying the flint nodule surface was one formed of crushed and angular broken fragments of tile (10647). One tile piece had the appearance of a tessera, but this may have been fortuitous as there was no other evidence of any kind for a tessellated floor.

A further surface of packed flint nodules (11720) lay outside and parallel to the north-west corridor wall. This could have been part of the sequence of make-up layers beneath the temple, but seems more likely to have served as a pathway contemporary with the early use of the building. It was overlain by a well-constructed crushed tile surface (sub-group 10780), traces of which were recovered on all three exposed sides of the temple. This was presumably a pathway surrounding and its presence suggests that access to all the observed sides was possible.

#### Structure 11640

A less well defined possible structure (11640) was located within the enclosure approximately 14 m from, and directly in line with, the principal entrance (12560) of this period (Fig. 15). Its compacted flint nodule 'floor' area, neatly laid but irregular in plan, was terraced slightly into the shallow slope of the enclosure interior and was bounded on at least two sides by shallow drainage gullies. Small patches of the surface extending beyond the gullies possibly marked access points. A neatly constructed clay lined hearth with a flint nodule base was cut into the floor, as were a number of small postholes suggesting that there may have been a roofed structure c 5 m in diameter. However, the rather irregular plan of the posthole arrangement, and its small size, make it difficult to interpret as a significant habitable building.

The location and date range of the structure help to define its possible function. Pottery recovered from the surface and sealed directly below it was limited to grog- and glauconitic sand-tempered late Iron Age fabrics, including a vessel with unusual roller stamped decoration (Lyne 2006, vessel 142). A small assemblage including some Upchurch and South Gaulish samian ware sherds was recovered from the associated hearth, postholes and gully fills suggesting a mid to late 1st century date for the use of the area. Sealing these was a silty soil up to 7 m across extending beyond the limits of the surfaced area. This produced a mixed pottery assemblage, principally of early to mid 1st century vessels in late Iron Age fabrics but with a significant later 1st century component and occasional 2nd century sherds. Roof tile, predominantly in the 1st century Eccles fabric, was also present but is not thought to derive from an associated roof as the fragments were small (Betts 2006a). The soil layer thus appears to represent debris disposal or accumulation in the shallow terraced area which was largely infilled by the end of the 1st century.

The position of the structure placed it at a vantage point in terms of view into and out of the enclosure entrance. The date of its disuse (before the end of this period) is also consistent with the blocking of the adjacent primary entrance structure (12560) in the later 1st century. The spatial and chronological relationship between these features seems more than coincidental. Structure 11640 may therefore have had a function linked to the entrance and access into the enclosure, perhaps as some kind of gatekeeper's post or access control point. The presence of a linch pin (small find 10754) recovered from above the cobbled surface is, perhaps, also consistent with an association with transport and access here.

# Standing post group 10700

A large pit (10746) that once held a massive standing post with a diameter of 0.50 m was located on the sloping approach to the enclosure 26 m from its south-eastern boundary. This was accompanied by a further substantial post pit (11856) with clear evidence of it having held a slightly smaller standing post and several 'ancillary' postholes (Fig. 24). These were

grouped together on the 73 m OD contour, overlooked by the interior of the enclosure and particularly by the site of the proto-villa situated on the 76.50 m contour, but 2 m above the low-lying approach to the site from the east.

The pit holding the massive post was 2.50 m square and 1.50 m deep with a ramped access on the upslope (north-western) side of the cut for easing the post into place (Fig. 24 sections 10252 and 10279). At the shallow end of the ramp a further small post represented by a distinct postpipe deposit (10740) with a diameter of 0.12 m was secured in place by large ragstone blocks and angled towards the massive post perhaps as a supporting prop. The remains of the standing post were represented by an equally distinct postpipe surrounded by large ragstone blocks, flint nodules and clay packing deposits. These had partially collapsed into the post void as it decayed making it difficult to determine if the post was circular or squared. The size, and particularly depth, that the post was set at suggests that it was intended as a large and significantly tall free-standing feature. The narrow date range of the 11 sherds (104 g) of pottery incorporated into the packing fills is consistent with its erection within the main period of building activity in this phase between *c* AD 50 and 70. The assemblage recovered from the post-pipe silting was not particularly helpful in establishing how long the post had stood as these sherds all have large date ranges. The latest dates are consistent, however, and could suggest that the feature survived into the 3rd century.

The secondary substantial post pit (11856) was set in a circular pit 1.40 m across and 1.12 m deep (Fig. 24 section 10279). The post itself had a comparatively slight diameter of only 0.22 m and was similarly held in place by large ragstone blocks packed with clay and flint nodules. The pit dimensions again reflect the need to support a very tall post rather than any kind of structure. This was positioned only 2.4 m north-east of the massive post and, although no securely stratified dating evidence was present, a small pottery assemblage of 11 sherds (42 g) was recovered from the surface and upper levels of the associated fills. These suggest that the post was raised after AD 70, perhaps shortly after the massive post, but this date must be treated with extreme caution as it is not clear if the sherds were from the packing or the postpipe fills.

In addition, up to ten smaller postholes were set around the larger post. The role of these is less clear, but although several of the posts were of moderate size, few were set to any depth (see Table 4 for dimensions). These were therefore unlikely to have been free standing posts of any height as they would have easily toppled over. However, if they were part of a surrounding structure such as a screen they would collectively have been self supporting and stable. Screens with a more distinct ground plan have been postulated at Westhawk Farm surrounding a tall post setting, although this was defined as a shrine structure (Booth 2001) and may have functioned on different principles from those represented here. The possibility of an enclosing screen at Thurnham is further supported by the presence of well-trampled

layers surrounding the massive post and sealing the packing fills. Although these layers may have resulted from its construction, the fact that most of the smaller postholes skirt the limits of the layers suggests that they did enclose a well trodden area. The lack of postholes on the south-eastern side may indicate that the massive post was only partly enclosed. The surrounding posts were not intended to bar access to it - as is indicated by the trampled layers which they partly defined.

Part of the problem of interpreting the appearance of the posts and structures represented here is the difficulty in establishing either a relative sequence or an absolute chronology for the construction. The pottery evidence provides little help. Whilst it seems relatively clear that the massive post was the primary and focal feature erected sometime before or near AD 70, it is not so clear if the other posts were added as part of a single plan or represent phased additions, or even replacements, as could be the case with the second large free standing post (11856). It is even possible that the smaller postholes merely marked the area or enclosed it at a date after the main post had fallen. Clearly the bases of the large posts had decayed *in situ* and such features could have remained sound and upright for a substantial time if they were not removed by felling. The pottery dating appears to indicate the survival of the main post in the later 2nd century and possibly into the 3rd century. Without clear evidence to the contrary it therefore seems most likely that all these features existed at some point in a contemporary setting focused on the largest post. The secondary post and screen might have been added shortly after the original foundation.

The function of these features is more difficult to understand. Comparative examples are most clearly seen in association with religious structures, buildings and enclosures as at Westhawk Farm, Kent (Booth 2001), Wood Lane End, Hemel Hempstead, Herts (Neal 1984) and at Ivy Chimneys (Turner 1999) and Heybridge (Atkinson and Preston 1998), both in Essex. Of these Westhawk Farm has been discussed briefly above and provides a clear association between a shrine area and standing post of 1st to 2nd century date. Wood Lane End had an almost identical arrangement of two free-standing posts set within the *temenos* associated with a significant religious complex (Neal 1984, see 206 figs. 8 and 9 for comparison). The combination, size and spacing of these posts is virtually identical to what is seen at Thurnham. Although dating evidence was lacking from Wood Lane End, the site had a Hadrianic peak and was probably active as a religious complex during the Flavian period, suggesting a close comparison in terms of date as well as structural detail (ibid.).

A further point of interest is the setting of these posts in the natural and built landscape. At Thurnham the post arrangement is outside the principal enclosure 37 m from the temple building in a relatively elevated position. At both Ivy Chimneys and Wood Lane End the posts were also set a very similar distance from the associated temples in very visible positions but within *temene*. At Heybridge the post was actually placed in, and possibly

marked, a public area that was previously private, lying across the road from the temple complex (Atkinson and Preston 1998, 99). The distinct similarities that exist between these examples and Thurnham suggest that they conform to similar principles in at least some important respects. The visual aspect and religious associations of these can clearly not be understated. In each case the posts can be demonstrated to be significantly tall and free standing, although intimate contact with them may have been restricted, particularly at Westhawk Farm.

Few finds are ever related to these features, suggesting that they were not the focus of cults or beliefs that required votive offerings. Even the association between the post at Ivy Chimneys and the votive finds from the same area, particularly the Palaeolithic flint axes, seems tenuous; the majority of these come from deposits earlier in date than the post, or were deposited more specifically in specially dug pond areas. In terms of comparable date, Thurnham is the earliest well dated example although Westhawk Farm and Wood Lane End seem to be of the same late 1st to early 2nd century period and the Heybridge example appeared in the phase dated c AD 120-200. Ivy Chimneys is dated to the later 3rd century and so probably post-dates the existence of the post at Thurnham, although this should not necessarily exclude the possibility that similar beliefs or reasoning relating to the raising of such posts were still held or governed their construction.

Table 4: Standing post group 10700: individual post dimensions

Cut Number	Posthole Diameter/ Dimensions	Posthole Depth	Postpipe Diameter	Postpipe Depth	Comments
10701	0.30 m	0.12 m	0.24 m	0.10 m	Clay packing fill
10703	0.30 m	0.11 m	-	-	-
10709	0.20 m	0.08 m	-	-	-
10711	0.38 m	0.16 m	0.10 m	0.12 m	Clay and flint nodule packing fill
10713	0.40 m	0.12 m	-	-	Contained flint nodule packing but no obvious post-pipe
10715	0.18 m	0.04 m	-	-	Possibly not a posthole
10718	0.44 m	0.11 m	0.18 m	0.11 m	Clay, ragstone and flint nodule packing fill
10720	0.32 m	0.22 m	0.20 m	0.22 m	Clay and ragstone packing fill
10722	0.23 m	0.12 m	-	-	
10724	0.38 m	0.10 m	0.20 m	0.08 m	Clay and flint nodule packing fill

Cut Number	Posthole Diameter/ Dimensions	Posthole Depth	Postpipe Diameter	Postpipe Depth	Comments
10737	0.55 m	0.33 m	0.12 m	0.20 m-	Angled post towards the massive posthole 10746
10742	1.20 m x 1.00 m	0.55 m	-	-	Post ramp into (and part of) post pit 10746
10746	2.25 m x 2.25 m	1.50 m	050 m	1.40 m	Massive square post pit with sequences of clay, ragstone blocks and flint nodule packing fills
11856	1.40 m	1.12 m	0.22 m	1.04 m	Substantial sub- circular/squared post pit with a sequence of clay, ragstone blocks and flint nodule packing fills

### Outlying ditch boundaries

Outside the principal enclosure only two ditches (10310 and 10500) were identified as dating to this period. These were located on the low-lying ground to the east of the enclosure approximately 120 m from its south-eastern entrance (see Fig. 15).

Ditch 10310 was aligned NW-SE. It was more uneven and slightly meandering than ditch 10500, which ran north-south. Both ditches had similar V-shaped profiles between 0.60 m and 0.90 m wide although ditch 10310 was the deeper of the two at 0.55 m, making it quite steep sided whilst ditch 10500 was only 0.30 m deep. These variations probably reflect differences between drainage and boundary functions, as ditch 10310 occupied the lowest lying ground along the south-western edge of the excavation area and also sloped down along its length to the south-east. At the time of the excavation this part of the site remained sodden ground throughout the winter despite extensive land drainage, and in the Roman period seems likely to have periodically been under standing water. This was reflected by the fill of ditch 10310, which comprised a stiff gleyed blue/grey clay deposit. The 2 m higher elevation of ditch 10500 was reflected in its more friable and slightly less clayey fill, although it too showed distinct signs of being water deposited and is likely to have had standing water within it at times.

Both ditches produced 1st century pottery assemblages of 75 sherds (505 g) and 48 sherds (347 g) from 10310 and 10500 respectively, with date ranges between AD 50 and 70, and were almost totally void of Romanised fabrics, on which basis it is possible (but unlikely) that they were associated with the late Iron Age period. The outlying nature of these ditches was further demonstrated by the absence of virtually any other finds. A single fragment of a blue/green square glass bottle dated AD 60-250 was recovered from ditch 10310 (small find 10307). Only a small and fragmented faunal assemblage was present.

Two further ditches (10480 and 10490) sealed by a trackway (12685) of the subsequent period are likely to have related to ditch 10500 on the basis that they did not extend beneath the trackway beyond the line of ditch 10500. They had similar profiles, dimensions and clayey fills to those of ditch 10500. Neither produced any dating material. They appear to form a mirror image of the line of ditch 10310, being aligned parallel to it 50 m to the northeast and curving slightly in a similar fashion but in the opposite direction.

These ditches not only enclosed fields but also appear to have been significant in defining the approach to the principal enclosure. The location of the trackway (12685) in the subsequent period shows that this was a defined access route to the site from the south-east and it seems likely that it was to some extent already established during this period. The corridor defined by the parallel arrangement of ditches 10310 and 10480/90 was aligned directly on the central axis of the principal enclosure and would have provided a view of the buildings as the site was approached. It may not be too far-fetched to see it as some kind of ditched avenue leading to the site.

An isolated waterhole (11704) was positioned central to the area between the ditches. This was rapidly excavated by machine after being recognised late in the excavation once standing water had cleared over its position. The waterhole was circular, 2.4 m across and 2 m deep, with organic remains present in the soft grey clayey basal fills. Unfortunately it was not possible to sample these deposits before the section collapsed and the feature infilled with water, although 42 sherds from a single vessel in Patch Grove fabric R68, dated *c* AD 50-70, were recovered from the lower fill. Several large blocks of Kentish ragstone were also tipped into the waterhole, but the origin of these and why they had been deposited into the feature remain unclear. They were clearly not part of a lining, nor was the waterhole located near to any buildings. The presence of the feature in this area suggests the need to water animals and may indicate that this was principally an area of fields or paddocks.

#### *Nature of the occupation: discussion*

This period at Thurnham was marked by a radical transformation of the site which nevertheless involved elements of continuity with the layout of the previous settlement. In particular, the line of the south-eastern boundary of the earlier enclosure, established at the rim of the slight plateau on which the site lay, was retained. While the artefactual assemblage underwent rapid development in the later 1st century this was also from a base that was recognisably rooted in earlier traditions. Precise dating of the inception of the changes is not possible, but it is likely that this fell within the range c AD 50-70, with the pottery evidence perhaps favouring the later part of the range. An important external factor is the dating of Eccles, as this site was the source of the great majority of the roof tile used at Thurnham in this period, apparently from its earliest stages. The earliest villa building at Eccles was dated

provisionally to *c* AD 65 (Detsicas 1983, 120; a date as early as AD 60 is possible, M Lyne pers comm), suggesting a *terminus post quem* for the Thurnham proto-villa. Eccles tiles are, however, generally dated as early as AD 50 in London (eg Betts 2003, 108) and on at least some sites are securely stratified in pre-Boudican fire (AD 60-1) contexts (Pringle 2002, 158), while they have also been identified in a pre-Boudican context at Colchester (Betts 1992, 259), with the implication that some production took place in the area before the construction of the first villa house at Eccles. This is possible in view of the evidence for pre-villa pottery production (Detsicas 1977b), some of which also reached London (Davies *et al.* 1994, 36-7), although its distribution is otherwise sparse (Pollard 1988, 188-9). The dating of Thurnham therefore need not depend upon that of the Eccles building, although it is still possible that it did. On balance the construction of the Thurnham proto-villa may have commenced in the period *c* AD 65-70.

It is not entirely clear that the early Roman settlement was enclosed in the way that the late Iron Age one had been. Whether or not ditch 20400 to the west formed part of an enclosure as such, it certainly defined the 'rear' of the occupation area. The space between this ditch and those on the edge of the plateau was then ordered in a very different way from the preceding period. The principal domestic building, the 'proto-villa', was located at the rear of the settlement space, rather than towards its centre as had been the case previously. Its frontal aspect was approximately south-east, rather than the roughly east-facing alignment of the entrance of the better-preserved of the two late Iron Age roundhouses. The overall southeastern aspect of the site is one that was shared by a large number of villas in northern Gaul, although Haselgrove (1995, 73-74) argues that these alignments were related to pre-Roman patterns, as was also the case at Thurnham. The Thurnham building was of a totally new rectilinear form, but it was not much larger than its predecessor; including the possible rear corridor its ground plan occupied roughly 113 sq m, while a roundhouse of 11.5 m diameter within gully 12500 would have covered roughly 104 sq m. It is of course impossible to be certain if the proto-villa had more than one storey, but if it did not the differences between it and its likely predecessor were more to do with external appearance and the organisation and presentation of internal space than with a significant increase in the scale of the accommodation.

A further aspect of the site worth consideration is the possible provision of a bath-house in this period. There is no direct evidence for such a structure, but it is suggested by the presence of tiles, particularly box flue tiles and voussoirs, in red-brown fabric 3226, thought by Betts (2006a) to date to the period c AD 70-100. A piece of the former was stratified beneath the middle Roman aisled building, while the voussoirs came from late 3rd century deposits in Room F in the main villa. They may have been taken there after the demolition of the baths component at the south-west end of the main house, but that was not built until after

the mid 2nd century at the earliest, by which time it is likely that tiles in fabric 3226 were already old. Possible half box-flue tiles also occurred in Eccles fabric 2454 (this fabric/form combination was a pre-Flavian phenomenon in London, Betts 2006a), and bricks, presumably from a hypocaust, occurred in both Eccles fabric and in fabric 3226. As there is no evidence for a heated room or rooms in the proto-villa the most likely source of all this material may therefore be an early detached bath house. Such buildings are found at a number of sites such as Gadebridge Park, dated c AD 75, and Gorhambury, in the 2nd century (Neal et al. 1990, 48-9). In a Kentish context potential detached or isolated bath houses were discussed by Detsicas (1983, 139-144), but the setting and chronology of a number of these are unclear. Examples at Hayes and Foot's Cray (ibid., 140-1 and 118, fig. 24) may be valid analogies, though both are dated to the 2nd century rather than earlier (ibid.). A more certain example occurs at Minster-in-Thanet, where a small building 9.55 x 7.15 m was built closely adjacent to the villa house in the late 1st or early 2nd century (Parfitt 2004, 33) and may suggest what could have occurred at Thurnham. However small, such a building would have been a significant addition to the site layout and perhaps alters the perception of the importance of the domestic components. It would presumably have been located in the south-western part of the enclosure. If this interpretation is correct, the fact that baths were not added to the middle Roman villa until the later 2nd century might suggest that a detached bath house outlived the associated proto-villa structure.

Assumptions based on negative evidence are dangerous given that the complete settlement plan is not known for any period, but it is arguable that the construction of the probable temple in a topographically key position at the front of the settlement area was a much more radical development than the building of the proto-villa itself. First, the building was large - its ground plan area was at least twice that of the proto-villa - and it was probably also tall. The effect of this, in combination with its location, would have been to emphasise this building to anyone approaching the site from the south-east, at the expense of the main domestic structure. The importance of the visual impact of the site, particularly in a ceremonial/religious/ritual framework, was probably reinforced by the positioning of a large upright post (10700) more or less centrally in front of the settlement area but outside it on the downslope side (see further below).

The new structures required new building techniques and new materials. Stone was used, at least for foundations, and tile for roofs. These resources were available quite locally; flint was near at hand, ragstone came from the Maidstone area and the principal source of tile (probably the only source for the initial construction) was Eccles, only 8.5 km distant. Nevertheless, their employment indicates the existence of expertise in procurement and production of these materials and of an infrastructure for their distribution. Rectilinear timber framed construction probably consumed significantly more wood than the earlier structures,

and at least some of the fixing was done with iron nails. Not only were significant numbers of nails recovered, but there is evidence for iron production on the site in this period and it is quite possible that at least some of this was related to specific construction events. The largest assemblages of smelting slag came from the backfill levels of the late Iron Age enclosure ditch (10840), the fills of ditch 20400, the scattered tree holes (12740) within the enclosure and the soil horizon and clay levelling deposits (11670) sealed by the construction of the temple. Little comparable material occurs in later phases and it seems more than coincidental that this activity coincided with the primary proto-villa construction phase. Indeed Keys (in Booth *et al.* 2006) suggests that the smelting may have been carried out for a specific purpose during this phase. The thin soil and debris layer (10525) which accumulated around the temple exterior after its dismantling or collapse produced a large amount of nails almost certainly derived from the building. Fills of ditch 20400 associated with the demolition of the proto-villa likewise produced substantial numbers of nails.

The finishing of the proto-villa presents some contrasts. Floors were simple, with crushed tile the most 'exotic' material used. The three core rooms of the proto-villa were, however, decorated with painted wall plaster. A similar decorative scheme may have been used in all three rooms, although there were perhaps differences in the colour of the dado and in border colours used around the plain rectangular panels. At least one room had a floral decoration in green and there are hints that there may have been another decorative scheme with white plants or flowers on a plain red background. It is impossible to tell if the painted decoration was an original aspect of the proto-villa or was added later. Whatever the case, the expense involved in providing this decoration contrasts with the total absence of evidence for the use of window glass. It is improbable that this could have been recycled so effectively as to leave no fragments whatsoever.

The principal impression derived from the new buildings and related features is of an attempt to make a mark on the local landscape, both in a physical sense and presumably also in terms of asserting a position in the social hierarchy of the area. This was achieved by elements which combined physical (domestic), ceremonial and religious aspects and were not just confined to the focal area of the settlement. Nothing is known of possible access routes to the site from, for example, the south-west, but the orientation of the principal structures in all periods supports the view that the main approach to the site was always from the south-east. This may have become more formalised in the following period, but ditches assigned to this one prefigure the establishment of a trackway and suggest an attempt to manage the approach to the site. The main features of the appearance of the site from this direction would have been the upstanding post complex (10700) behind which was a boundary with a substantial gated entrance and to the left, rising above the boundary, the temple. The exact function of the standing post cannot be known, but most of the best known analogies occur in religious/ritual

contexts (see above). The enclosure boundary itself may not have been particularly imposing (and the south-eastern side was more substantially defined than, for example the north-east side from which there was presumably no significant approach) but a fence or hedge on top of the bank would have provided an effective screen to the interior. The gateway, in two slightly different locations in successive phases, was not centrally positioned, but was set to one side of the enclosure facade, perhaps to avoid intrusion on views along the central axis of the site. It was nevertheless at least initially an imposing feature, with posts set in pits 1 m across.

Once inside the enclosure the visitor was confronted by a possible gate keeper's lodge, although the interpretation of feature 11640 is inevitably somewhat speculative. Behind it lay the main house, but this was fronted by a probable fence line (11460), unlikely to have been intended to screen the building but substantial enough to regulate movement towards the frontage. The reason for this is far from clear, but insufficient is known of the detailed layout of the proto-villa for it to be possible to determine where the building was entered. In front of the fence at its north-east end were the remains of a stone base with sockets set in its sides and centre (12735, for description see Middle Roman phase 2 below, but the origin of the feature was quite likely of the present period). The function of this feature is unknown, but had it had another one or two layers of blocks of similar size to those surviving it could have formed a plinth or base. This might perhaps have been for an item of statuary, which could have had religious or purely aesthetic significance, or both, but in any case the feature probably indicated another way in which the use of space in this period differed from that of the late Iron Age. With regard to movement around the exterior of the proto-villa itself, the deposition of large quantities of finds in ditch 20400 immediately north of the building suggests that that boundary was not directly accessed from the rear of the building, but rather through an entrance (presumably subsidiary) in its north-east wall.

As already indicated, the temple was probably the most striking component of the new settlement layout - allowing for the fact that there could have been other structures in the lost south-western part of the enclosure, perhaps including a bath-house as discussed above. This building is, however, problematic principally because of the difficulties of marrying the two halves of the plan, but the present interpretation appears best to fit the morphological evidence. The plan may be that of a Romano-Celtic temple of fairly standard form, but with some additions and other features of less typical character. From inside out the first of these is the apparent subdivision of the cella. The purpose of this feature is unclear: provision of a stairway access to a higher level is (almost) unparalleled in temple structures. Exceptionally, two levels have been suggested for the temple-mausoleum at Bancroft (Woodfield 1994, 239-241), but this arrangement did not involve the use of a defined stairwell. Such an interpretation of the Thurnham cella division seems very unlikely, therefore. Definition of a 'sanctuary' area by means of a clearly defined dividing wall is also rare (seen for example at

Silchester (Lewis 1966, 168, fig. 26) and perhaps Temple 4 at Springhead (Penn 1960, 118-121)), although it is perhaps more likely at Thurnham. If so, this suggests that the temple was aligned to the north-east, despite the presence of an entrance on the north-west side. This arrangement of divided cella and north-eastward alignment may be shared with a temple in the complex at Pommern, Germany (Klein 1897), but is excessively rare. The extension of the temple on the south-west side finds parallels, for example, at Frilford, where a substantial addition on the west side of the temple was divided into three east-west aligned rooms, thought to have been added at some time in the 2nd century (Bradford and Goodchild 1939, 28, 31). The arrangements for access are thus rather unusual. The south-east facing aspect of the site would have favoured an entrance on this side of the building, putting it in the mainstream of known Romano-British and Gallic temples, the great majority of which faced between east and south, but with an eastern aspect most commonly favoured (Lewis 1966, 32; Fauduet 1993, 113), as it probably was in the Iron Age (Oswald 1997, 92). All the present evidence, however points to access from the north-west side, presumably reflecting the direction of the proto-villa house, and from the north-east, although the interpretation of the 'porch' structure remains uncertain. Perhaps the most compelling argument in favour of it providing an access to the temple is the way in which its open end coincided with an opening in the enclosure boundary sub-group 10660. The presence of the crushed tile surface against the south-east wall of the temple would be consistent with access along, as if it was intended to minimise the visual intrusion of non-residents of the site accessing the temple. Why this should have been desirable is unknown, however, and it is perhaps curious that access was thereby provided (perhaps by steps) directly into the ambulatory, rather than into the area surrounding the temple. A further implication of this arrangement, if it has been correctly interpreted, is that the ambulatory was probably not generally open, supporting the suggestion of Muckelroy (1976) that this was typical for Romano-Celtic temples in Britain.

The visual impact of the temple on approach from the south-east has already been mentioned. The structure would have been continuous with the line of the south-eastern enclosure boundary ditch 10660, although the outer boundary feature 10770 ran in front of the temple and was enlarged at the point where it coincided with the position of the temple, being rather slight elsewhere. This variation may have been intended to emphasise the restriction of access to the temple except at certain approved positions, but the distance between the inner lip of the ditch and the temple wall  $(c \ 2 \ m)$  would easily have been adequate to allow movement there along the crushed tile path 10780.

The temple was not distinguished by the presence of finds that shed any further light upon it, but such an absence of votive material, while generally unusual, is not uncommon in the context of temples closely related to villa complexes (Alex Smith pers comm), and is also seen in the shrine at Westhawk Farm (Booth 2001, 17).

The existing components of the site give little indication of the way in which it might have functioned as an agricultural unit. There is no reason to suppose, however, that this was not important at Thurnham, for all the apparent emphasis on status display and redefined religious affiliations, although obvious foci of agricultural activity, such as the probable granaries of the previous period and the other agricultural buildings of later ones, are lacking in the excavated area. It is possible that foci of agricultural activity were in the northern part of the site beneath the later aisled building and perhaps particularly in the missing south-west corner. Quantities of plant and animal remains were significantly greater than in the preceding period, which might indicate intensification of agricultural practice or reflect different patterns of disposal of processing and domestic waste. Particularly large assemblages of charred plant remains came from ditches 10660 and 12705 on the south-eastern side of the villa enclosure and 20400 behind the proto-villa building on the north-west. These were all dominated by cereals, which included grains of barley, emmer and free-threshing wheat as well as spelt wheat, but the chaff remains suggested that this last was much the most important cereal. Oats were also present but were considered to be a weed. The remaining weed component was small, but included plants of damp ground such as sedges as well as occasional indicators of the exploitation of chalky free-draining soils reflected by the presence of pink (Dianthus sp.). Both habitats are present in the immediate vicinity of the site but the presence of *Dianthus* may reflect control of an estate extending up to the Downs some 2 km to the north.

Animal remains were sparse and poorly preserved. The occurrence of the main domesticates was consistent with the evidence from the previous phase, with sheep/goat dominant, followed by cattle and pig. The presence of very young individuals within the assemblage suggests that both sheep/goat and pig were being raised near to or on the site. The mandibles also include those of older adult individuals which suggests that sheep/goat were raised for wool and perhaps milk production as well as just for meat. The very limited data for cattle suggest a similarly wide range of ages. Horse, dog and fowl were also present and fragments of red and roe deer, duck, teal and woodcock were also recovered. The teal and woodcock remains and one red deer fragment came from ditch 20400 associated with the proto-villa, and might indicate the appearance of finer foods on the table there, but the numbers of fragments are so small that this is only speculative. The assemblage from 20400 had little indication of butchery or burnt bone, but included some evidence of gnawing, probably reflecting the nature of the deposit, dumped in the outer boundary of the villa. The ditch may have been accessible by animals from both inside and outside the enclosure.

Other aspects of the economy and society of the proto-villa settlement at this time are indicated by the relatively substantial finds assemblages. Pottery was drawn from a wide range of sources, although potentially high status imported material was only present in small

quantities and some of this material may have arrived at the site in the previous phase (see above). Comparison of the assemblages from ditches 20400 and 10660 shows some notable differences - of which that between the very low incidence of late Iron Age fabrics such as glauconitic fabric B9.1 in ditch 20400 and the correspondingly high levels of fine Upchurch (fabric R16) reduced wares there, in comparison with the reverse position in ditch 10660, may be significant in terms of differential ceramic use within the settlement. With regard to imported and other fine wares, however, there are fewer clear cut distinctions between the two assemblages; the representation of samian ware, for example, was very similar in both features. The only two Arretine sherds from the site did come from ditch 20400. If they represent a vessel in use within the proto-villa this could have been almost a century old by the time it was finally discarded. Glass vessels were also in use at this time, but were overwhelmingly containers (bottles, an unguent bottle and another flask) rather than table ware. The majority of glass fragments concentrated in ditch 10660 adjacent to the temple, but other pieces, notably the small unguent bottle (see above) were associated with the proto-villa.

The distribution of personal items such as brooches and hairpins was not restricted to any one particular area of the site. The former represent continuity of practice with the late Iron Age, while the latter, with examples in bone and copper alloy, indicate the adoption of new hair styles by some of the occupants of the site. Further hints about the occupants of the site may come from objects with military associations. One of the two pieces of military equipment from the site (Cool in Booth et al. 2006, no. 130) is a stud with a decorative pattern that is very closely paralleled by an example found in the Walbrook stream bed deposits (Wilmott 1991, 468; Webster 1958, 85 fig. 6. 151c) suggesting a 1st to earlier 2nd century date. Although an unstratified find, this piece is likely to have belonged to the early Roman period at Thurnham. The 1st century copper alloy basin handle from ditch 20400 already mentioned above is of a form typically with military or urban associations. Finally, Hilary Cool has noted the technological similarity between the military stud (brass with tin plating) and the single seal box (see Fig. 41 small find 10804) from the site (Booth et al. 2006). This piece was from a middle Roman context but was probably of 1st century date. A remarkably high incidence of seal boxes on rural sites has been noted by Derks and Roymans (2002) in Batavia, where there was a particularly strong tradition of military service. While the Thurnham evidence is far from conclusive, these metal objects in combination might suggest that one member of the household had seen military service, in line with the pattern suggested by Black (1994). A connection of this sort might also help explain the presence of the Claudian coinage noted in discussion of the previous period.

In summary, the overall character of the archaeological evidence suggests radical changes at Thurnham in the early Roman period, albeit with elements of continuity from

earlier practices. Unfortunately the paucity of environmental evidence for the late Iron Age period does not allow any estimation of the extent to which the fundamental economic basis of the site might have changed – perhaps the key indicator of whether the more obvious developments represented surface dressing on the face of agricultural continuity. This question aside, it is clear that domestic accommodation was transformed and that, despite the elaboration of its presentation, its importance within the wider setting of the settlement was apparently reduced in relation to a quite remarkable emphasis on formal religious and ritual expression, indicated not only within the settlement by the construction of a very substantial temple but by other features with a strong visual impact both within the enclosure (the possible statue base) and outside it (the monumental post feature).

The domestic aspect of this sequence of development finds parallels at a number of sites. The evolution from late Iron Age roundhouse settlement to early Roman villa house is reasonably well attested in southern Britain, for example at Gorhambury where, however, the sequence was not a simple one (Neal *et al.* 1990, 23) and at Piddington (Friendship-Taylor 1997, 48-9), though some of the supposedly well-known examples of this sequence, as for example at Park Street (O'Neil 1947), are based on slender evidence which does not necessarily involve the straightforward replacement of a circular structure by a 'Romanised' rectangular one (Rook 1997).

The scale of the new domestic building was actually quite modest (see above). Comparable early Roman 'villa' structures in timber are not particularly common. The plan of the proto-villa at Gorhambury was 'not fully understood' (Neal et al. 1990, 27), and at Piddington only fragments are known, while the comparable building at Barton Court Farm appears to have comprised a simple rectangle c 8.5 m wide and 28-30 m long (Miles 1986, 9) with no clear evidence of internal divisions. A coherent plan is present at Boxmoor, a site with other parallels to Thurnham (see further below), but this building was more elaborate, with projecting wings and a fairly complete surrounding corridor (Neal 1977, 57-59). A sequence of development from circular building direct to stone-built 'villa' may have been more common (as eg at Brixworth; Woods 1970), but this could reflect the difficulty of identification of early rectilinear buildings in older excavations, particularly if the alignments were the same as those of their stone-built successors. It is also notable that while the reconfiguration of Thurnham by the beginning of the Flavian period would have appeared as a fairly radical transformation of the site in comparison to its earlier character, this reconfiguration was as nothing compared to contemporary developments at nearby sites such as Eccles, where the early house measured 75 x 12.8 m (Detsicas 1983, 120).

A feature of a number of these early Roman timber houses is the occurrence of wall plaster, even if this was simply white, as at Barton Court Farm and Piddington, for example. The decorative schemes at Thurnham and Boxmoor were more ambitious, including a floral

element at the former site, although it is possible that the painting was not an original component of the proto-villa here (see above). The Boxmoor scheme (Davey and Ling 1982, 82) has been compared with late 1st century plaster from elsewhere in Britain, including sites in Southwark (Goffin 2005, 111). The Thurnham plaster can be seen in the context of this early Roman tradition, though lacking the complexity and quality for example of some of the Southwark material. If this decoration is to be seen as part of the overall manifestation of status display in this period its effect would of course have been limited to those who had access to the interior of the proto-villa, but they might nevertheless have included a wide spectrum of dependants and clients as well as members of the family and (presumably) the land-owning peer group.

The occurrence of a possible temple within the villa complex requires some comment. Such associations are not particularly common, either in Britain, or in the adjacent provinces, where examples tend to be simple structures (Derks 1998, 187). The temple-mausoleum at Bancroft has already been mentioned, but it and the later circular shrine lay at some distance from the villa itself. The temple-mausoleum at Lullingstone was closely associated with the main building complex, but was of late Roman date (Meates 1979, 123) although the construction of a circular shrine at this site was dated to the early 2nd century (ibid., 121). Also in Kent the circular feature at Darenth described as a cistern (eg Detsicas 1983, 103-5) may better be interpreted as a component of a shrine (Smith 1997, 291), albeit with a specific watery association. Other villas incorporating temple or shrine structures may include Chedworth, although the site has also been interpreted as a shrine complex (Webster 1983, where further comparanda are discussed). A better parallel is Cosgrove, Northants (Quinnell 1991). At the latter site the spatial relationship between the main house and the temple is broadly similar to that at Thurnham, but the alignment of both was broadly toward the southeast and the temple was placed almost on the central axis of the house rather than to one side as at Thurnham. The Cosgrove temple had a timber predecessor (a shrine incorporating posthole elements somewhat reminiscent of the arrangement of posts around the large upstanding post at Thurnham), which was probably contemporary with the main stone house, of approximately mid 2nd century date. Even if the Thurnham temple was, as is possible, a Flavian addition to the plan of the proto-villa complex - at the very least the construction of the two buildings would have been sequential - it may yet be the earliest reasonably clear example of a temple incorporated into a villa complex in Roman Britain.

What drove all these developments remains uncertain. The aspects of continuity with the previous period in terms of site definition and some aspects of the artefactual range suggest, but do not prove, that the development came from within the existing community rather than being imposed from outside. It may have been prompted in part by the influence of a family member who had performed military service. Such links may have impacted on

the economic fortunes of the occupiers of the site, although intensification of agriculture, particularly with regard to arable production, may also have led to increased prosperity. Other changes in social status may be hinted at by the changes n the archaeological record, but their nature cannot be defined by it.

### 4.4.3 Middle Roman, phase 1 (AD 120 to AD 150)

Early in the 2nd century the site underwent a major remodelling in a manner reminiscent of the start of the previous period (Fig. 25). This was primarily focused on the replacement of the principal building with a larger stone-built villa (20510) accompanied by the enlargement of the enclosure by once more creating a new rear boundary (10610) further to the north-west. Substantial post row fences (10580 and 11500) were raised along the inner edge of this boundary and also partly enclosing the villa building.

The south-eastern boundary was maintained along its existing alignment occupying the break of the slope on the rise up to the enclosure. However, the double ditch and bank of the previous period was replaced in part by a boundary ditch (12545) alongside the south-eastern side of the temple, terminating just north-east of the building and extending to the south-west beyond the excavation area. A substantial post row fence line (10760 and/or 10980) continued this boundary north-eastwards along the NE-SW alignment and a further ditch (12595) ran to the north beyond the limit of the excavation and represented an enlargement of the enclosure in this direction.

The temple building, and the standing post group directly outside the enclosure, remained apparently unaltered during this period. The only other significant addition within the enclosure was a substantial aisled building (15000). This was built shortly after the villa house, and was not much smaller than it. A stone-lined well (12370) serving the aisled building was constructed just north-west of it.

It is likely that the trackway (12685) approaching the site across the low-lying ground from the east was constructed in this period. A small trackside shrine (10750) was probably established at the same time on the approach to the villa enclosure adjacent to the junction of the trackway and a boundary ditch (10600).

### The enclosure

Each existing boundary of the enclosure was replaced early in this period as part of the remodelling of the site. As in the previous period, the existing enclosure layout was quite closely followed. The south-eastern boundary was redefined along its established alignment although this, and thus also the enclosure, was extended to the north-east. As a result of this enlargement the north-eastern limit of the enclosure now lay outside the boundaries of the

excavation. Remains encountered during the 1996 evaluation, comprising possible ditches and building materials dated from the late 1st century or later, show that significant activity did take place north of the excavated area, although these finds probably lay beyond the extended enclosure (URL 1997a).

The south-eastern side of the enclosure became a more complex series of boundaries comprising ditches and a substantial fence line. These essentially served the same roles as in the previous period allowing the temple to be seen whilst restricting direct physical access to the enclosure interior. A steep sided ditch (12545) was dug parallel to, and 0.9 m from, the south-eastern wall of the temple, recutting the south-western part of ditch 10770 of the preceding period (see Figs. 22 and 23 sections 10190, 10415 and 10420). At 1.8 m wide and 0.6 m deep ditch 12545 formed a moderate sized boundary between the temple and the exterior area. The small space between the temple and ditch appears to have been kept open with nothing to impede the view to and from the building, and access alongside the temple could have been maintained. In addition, the ditch would have provided drainage for rain water from the roof, channelling it to the south-west, away from the enclosure area. The north-eastern terminus of the ditch was square-ended with a broad flat base, and terminated coincident with the south-west end of the preceding period ditch (10660) and its probable associated bank.

The base of ditch 12545 was filled with a relatively clean silting deposit without any finds and the date of its construction relies upon the stratigraphic relationship with ditch 10770, which it replaced. The latter was probably levelled by the second quarter of the 2nd century as discussed above, suggesting that ditch 12545 was constructed at the start of this period. Secondary silting fills incorporating small amounts of building debris such as flint nodules, chalk, ragstone and tile fragments also accumulated in the ditch throughout this period, although none of these deposits was extensive, indicating that the ditch remained relatively stable after its initial excavation. The deposition of the upper fills comprising substantial quantities of roof tile relates to the subsequent period and is discussed below. These fills have been referred to above in relation to the evidence for the roof of the temple.

The boundary was continued to the north-east by a row of substantial postholes. Two post rows of almost identical character existed side by side (10980 and 10760, see Figs. 25 and 32 respectively); their precise phasing is difficult, but one is likely to have succeeded the other. Both rows comprise circular postholes/pits from 0.5 m to 0.8 m in diameter spaced at 1.5-2.0 m centre to centre. Most were packed with large pieces of Kentish ragstone and occasional roof tile fragments defining very clear dark silted postpipes, many of which appeared to be circular in plan although some were more square (see Fig. 16 sections 10153 and 10599). The posts were generally 0.20-0.25 m across and were set up to 0.40 m deep, representing substantial fence structures. Neither post row had clear entrances within its

alignment, but dependent upon phase association, one may have been related to an entrance structure (10950) in the subsequent period.

Dating evidence for both is inconclusive. Post row 10980 produced the larger pottery assemblage, of 80 sherds (513 g), whilst row 10760 only produced 22 sherds (332 g), many of which were recovered from the postpipes. The majority of the assemblage from 10980 came from postholes at the north-eastern end of the row coinciding with the south-eastern end of the aisled building and appears to have been subject to considerable post-depositional intrusion. Here quantities of later material were incorporated into the fills and probably derived from overlying soil layers (12725) that extended south-eastwards from the aisled building (see Fig. 16 section 10599). One clear example of this was the occurrence of a small Oxfordshire colour-coated sherd (dated to the 4th century) in the packing fill of posthole 15309.

However, it is fairly clear that both post rows were in existence at some point during the 2nd century. For example post 12602 of row 10760 contained 7 sherds (280 g), of a South Spanish Dressel 20 amphorae dated 100-150 used as packing material, whilst the packing fill of posthole 15091 produced 2 sherds (10 g), of a vessel in black-burnished ware category 2 (BB2) fabric R14 dated 150-270, suggesting a construction date around or after the middle of the 2nd century at the earliest. The dating evidence from the packing fills of row 10980 is slightly less clear and only broadly suggestive of a 2nd century date, but several sherds were no earlier than the late 2nd century, so this may have been the later construction. However, as noted above, the evidence must be treated with caution since the majority of the late sherds weighed under 2 g and could very likely have been intrusive from the later pottery-rich soils that sealed these fills.

A single posthole (11402) at the south-west end of row 10760 was clearly cut into the terminal of ditch 12545, potentially making this the later row (see Fig. 34). However, both rows converged at this point and posthole 11402 could have belonged to either.

It is likely that the primary post row did not immediately replace the earlier boundaries at the start of this period. The manner in which the terminal of ditch 12545 respected the southern end of ditch 10660 suggests that these features co-existed for a while. If the bank associated with ditch 10660 also survived from the previous period the two features may have continued to suffice as the enclosure boundary for a while before a fence line was added.

The fence lines were of different lengths. Row 10760 was limited to the space directly between ditch 12545 and the southern corner of the aisled building (15000) which it adjoined, and was therefore built after or at the same time as the aisled building, although this only confirms a date within or later than the second quarter of the 2nd century. Row 10980, on the other hand, was positioned slightly further east along the line of the former ditch 10770 before changing alignment very slightly to the north to run parallel to the south-east end of the aisled

building. The way in which this row respected the line of the earlier ditch 10770 may indicate that it was in fact the primary row, built as a direct replacement in the hollow of the infilled ditch.

North of the post rows and aisled building the south-east boundary of the enclosure was continued as a ditch (12595). Only the southern squared terminal of this was exposed in the excavation area, where it had a rounded profile 1.2 m wide and 0.4 m deep, making it smaller than ditch 12545 at the southern end of the post row fence lines. A small group of 14 sherds (246 g) recovered from the single silting fill indicates a late 1st century to mid 2nd century making it possible that this feature relates to the slight reorganisation of the boundaries here at the end of the preceding period. However, the marked spatial relationship between this ditch, post row 10980 and the aisled building strongly suggest that it originates in this period.

The rear boundary defining the north-western side of the enclosure was totally replaced at the start of this period. A ditch (10610) accompanied by a post row fence line (10580) along its inner edge was cut further to the north-west, enlarging the enclosure in this direction. It is likely that this event was concurrent with the levelling of the preceding ditch (20400), the two activities defining and creating the construction platform for the stone villa described below.

The ditch was very uniform, although quite slight at only 1.2 m wide and 0.6 m deep (see Fig. 35 section 10107). The uniformity of the feature was repeated by its sequence of three fills that were traceable along the entire length of the ditch. The lower portion was infilled with homogeneous sterile fills indicative of stable silting. The sterile nature of the infill is likely to have been a consequence of the accompanying contemporary fence line separating the enclosure interior, and thus the source of finds, from the ditch outside. The fence was positioned 2 m from the inner edge of the ditch. It was built of posts 0.2 m across set up to 0.3 m deep and held in place by Kentish ragstone rubble packing.

The post row packing fills only produced a very small pottery assemblage indicative of a late 1st to mid 2nd century date. The new boundaries themselves were therefore not well dated. Fortunately the association of the replacement of ditch 20400, the building of the stone villa and the contemporary creation of this ditch and post row is very clear and the first of these events is closely dated. Based upon the infilling of the former boundary it is clear that the new boundary was established between AD 110 and 150 although the activity is more likely to have been towards the earlier end of this range. The ditch and post row appear to have been maintained for a long period. The ditch became a stable feature with only a slight accumulation of material after the initial silting fills. It was only towards the end of the next period that the ditch was finally levelled (see below).

One final boundary assigned to this period was another post row fence line (11500) aligned at a right angle to row 10580 within the enclosure. This had the same characteristics

as row 10580 and formed a fence line 23 m long, which would have had the effect of screening the villa house from activities in the north-west corner of the extended enclosure. It is possible that this fence was added slightly after the rear boundary of the enclosure as several of the postholes were cut through the upper fills of ditch 20400 (see Fig. 25 and Fig. 19 section 10442) at a point where the ditch had been left as a shallow hollow rather than being levelled with clay as it was in the area of the new villa building. Pottery from the final fills here suggest an infill date from AD 120 to 150.

### The villa building 20510

The north-westward expansion of the enclosure created the space for the construction of the stone villa building (20510). This was also set further back than the preceding building and, consequently, was only built over the rear portion of proto-villa, preserving the floor levels of that building within its corridor area (Plate 7). The good preservation of features relating to the proto-villa within the later corridor demonstrates the continuous nature of the sequence here. The stone villa replaced the proto-villa immediately, leaving little time for the earlier floor levels and deposits to become disturbed or removed.

Construction was initiated by the backfilling and levelling of the earlier rear boundary ditch (20400) with redeposited clay as described above. This created a level construction area prior to the digging of the foundation trenches for the new building and equally marks both the demolition of the proto-villa and provides a *terminus post quem* for the construction date of the stone villa. The infilling and levelling event has already been shown to have occurred in the first quarter of the 2nd century, perhaps around AD 110.

Definition of distinct phases of construction in the villa initially proved difficult, because the flint nodule foundations did not show junction relationships very clearly. However, after detailed excavation across each of the walls it was apparent that, with the exception of the bath house range (20515) and an extension northwards (20160) described in the next phase, the rectangular ground plan of the stone building was of a single phase. The building was 32 m long on its NE-SW axis and 14.8 m wide (Fig. 26).

Variations in the construction of the foundations suggest variation in the form and structure of different parts of the upstanding building. Two distinct methods of foundation construction were present. The core block of the building had more substantial foundations, generally 0.8 m wide and 0.7 m deep. The foundations of the front wall of the corridor were of similar width but only 0.5 m deep. All these foundations had a course of large ragstone blocks placed in the base of the trench sealed by a compacted layer of clay and then filled with tightly packed flint nodules to surface level. Topping this was a bedding layer of mortar upon which were laid the primary wall courses (where surviving), with facing blocks of mortared Kentish ragstone and a mixed rubble and mortar core (Fig. 26 sections 10593,

10594, 10485, 10624 and Fig. 18 section 10337). Significantly, where the walls crossed the line of the backfilled ditch (20400) the foundations were deepened so that their trenches were cut to the level of the undisturbed natural clay. The deeper cuts contained several additional basal courses of ragstone blocks with the overlying flint nodules tightly packed and bonded with clay (Fig. 26 section 10653). The corresponding mortared wall courses were started below ground level. The lower courses followed the profile of the ditch but at ground level the stones were laid level to correspond with the remainder of the walls. This sequence can be clearly seen in plate 8 which shows the *in situ* eastern edge and base of ditch 20400 that the wall was constructed across corresponding to the deepest construction of the foundation. This method of construction only varied slightly throughout the core of the villa building where occasional alternate ragstone and clay or flint nodules and clay were utilised.

The outer wall foundations enclosing the south-west end, north-west rear side and north-east end of the building, and their accompanying internal divisions, were much less substantial than those in the core of the building. They were constructed only of compacted flint nodules with some clay bonding in places and were 0.6-0.7 m wide and only 0.4-0.5 m deep (Fig. 26 sections 10595, 10624, 10647 and 10626). Again where these foundations encountered the line of the backfilled ditch 20400 the trench was deepened significantly, although this was only identified at one location within the current excavation, at the north-east end of the building. At the south-west end of the building, excavated in 1958, the corresponding point where the foundations crossed the earlier ditch alignment was partially obscured by the later bath house structure and floor levels. The earlier foundation was identified in plan here, but the ditch was not. The foundation was not excavated nor was its construction method fully established.

The variation in foundation construction superficially suggests different phases of construction. Clear and conclusive evidence that the main villa building was constructed in a single phase relies upon the junctions between walls 20442, 20004 and 20021 and (to a lesser extent) walls 20258 and 20008 (Fig. 27). Here remains of the foundation of an earlier internal division wall (20442) between the rooms at the northern end of the building were revealed at the base of a demolition trench (20505) and had been rebuilt as wall 20019 (20520). The foundation of wall 20442 was aligned along the deepest part of the infilled proto villa ditch 20400 and, unlike the outer wall to the north, was constructed to a depth of 1.1 m with a basal ragstone 'raft' course(20404/20433), in the same manner as the foundations of the core of the villa. It was keyed into the ragstone foundation courses of wall 20004 to the south which was, in turn, keyed into wall 20021 at the northern end of the corridor very clearly making these of contemporary construction (Fig. 27 section 10654). To complicate matters, wall 20442 and most of its foundation had been removed and immediately rebuilt as wall 20019 along the western edge of 20442, with only the basal ragstone courses of the earlier foundation left *in* 

situ (Fig. 27 sections 10637 and 10654). No associated finds were present and the potential date and implications of this event are discussed in more detail below. At its north-east end the ragstone course of wall 20422 turned 90 degrees to the north-west as part of the foundation of wall 20007, but was confined to the limits of the earlier ditch. Beyond this in both directions (walls 20007 and 20259) the foundations were constructed of flint nodules compacted with clay within trenches 0.9 m deep (Fig. 27 sections 10636 and 10638). These became less deep with distance from the backfilled ditch, and levelled out at 0.5 m deep, consistent with the other flint nodule construction foundations (Fig.26 sections 10647 and 10626).

The foundation of the front corridor wall shared the same construction characteristics as those of the core rooms, except that it was shallower, at only 0.5 m deep (see Fig. 18 section 10337 and Fig. 27 section 10625). The corridor wall and foundation were the most extensively robbed part of the whole building.

Evidence for the tiled roof comes largely from material incorporated into the contemporary rear boundary ditch (10610) at a later date (see Fig. 32 for the tile deposit extent within the ditch). No deposits typical of roof collapse or demolition were found within or around the building and it appears that the site was effectively cleared of such useful material at a later date, as is suggested partly by the use of Roman tile in the fabric of the nearby parish church (Ashbee 1986, 143). Moderate quantities of roof tile derived from the villa were incorporated into the upper fills of the ditch throughout the following period and deposition of material there is discussed in more detail below. However, here the material provides information for the appearance of the roof. Four tile fabrics were represented by the *imbrices* and *tegulae*. Small quantities of the cream-pink Eccles fabric 2454 and orange-brown fabrics 3226 and 3238 were present, but the assemblage, and presumably the roof, consisted primarily (88% by weight) of tiles in a red fabric 2815 imported from the London area, possibly brought as a return cargo for exports of quarried stone from the Maidstone area (Betts 2006a).

Tiles in Eccles fabrics were almost certainly reused from the earlier building since the later production from this centre was apparently restricted to providing material for the Eccles villa itself (ibid.). The small quantity of Eccles material (5% by weight) represented in this assemblage confirms that new tile from this source was not available by the early 2nd century. It is possible that the reused Eccles tiles and the orange-brown fabrics were employed to create a decorative effect of a kind suggested for several buildings of different types in Britain (eg Bidwell 1996, 26-7).

The evidence for floors and interior decoration of the villa was almost non-existent. No associated floor surfaces were present, but this does not appear to be explained by later truncation. The late 3rd and early 4th century deposits associated with the smithy within the

villa lay directly on the pre-construction clay levelling layers, which clearly shows a genuine absence of floors at this point. The smithy is described in detail below. The clay layers within this room were quite undisturbed. Equally, no traces of tile, mortar or *opus signinum* fragments were present in any of the villa rooms of this period. This makes it almost certain that the floors would have comprised wooden planking, although positive archaeological evidence of this was equally lacking.

The majority of the evidence for painted decorative schemes within the villa derives from fragments built into the floor of the bath house in the succeeding phase. Analysis of the plaster collected in the 1958 excavation and of isolated fragments built into the foundation of a late internal partition wall (20018) do attest to elements of decoration in parts of the villa. Decorative schemes are limited and some of the material, probably from a 19th century collection, is of dubious origin. However, some fragments do suggest that several rooms were plastered, as would be expected. The only pieces that could be positively associated with a particular room were several small fragmentary patches apparently lying where they had fallen within the smithy room (Room F); here plain white plaster lay face down over the 4th century silts.

Direct evidence for heated rooms within the villa in this period is also lacking. None of the rooms showed any obvious signs of having been heated and no external furnaces were present. The only hint that some rooms may have been heated in this period was the presence of combed box flue and voussoir tiles in fabric 3226. This fabric is thought to date from the late 1st century, however, and might therefore have been associated with the proto-villa period (see above). Nevertheless, all the fragments in this fabric were recovered from various late 3rd and 4th century contexts, for example associated with the rubble collapse of the corn drier (10340), the aisled building well silts (12370) and the smithy within the villa (Room F). In most of these there is also an association with tiles in the later fabric 2815 produced until at least the mid 2nd century, and with other debris likely to have derived from the bath house, making an association with that building quite likely. In this case the early tiles were probably reused items, associated with the putative early bath house (see above).

Finally, an activity probably related to the construction process was the placing of a full term neonate burial (20431) in a corner of Room H at the north-east end of the building (Fig. 26). The shallow grave was cut into the upper backfill of the earlier boundary ditch (20400) and sealed by the late 3rd and 4th century deposits within this room. The inhumation is most likely to represent the common practice of foundation burial associated with the new building. This need not necessarily represent a sacrifice, since 'a natural death may have resulted in the opportunistic use of a potential life force to ensure the longevity of the building burial' (Philpott 1991, 100-101). However, the existence of a marked peak in full term

deaths such as this in the Roman period could be suggestive of infanticide immediately after birth and therefore potentially constitute evidence of such activity in a ritual context (Smith and Kahila 1992; Mays 1993).

### The aisled building 15000

Following the construction of the villa a large aisled building (15000) was built aligned NW-SE with its south-east gable adjacent to the enclosure boundary post row (10980) (Fig. 28). The ground plan of the foundations was not quite a true rectangle; the building had external dimensions of 21.2-21.6 m NW-SE by 13.6-13.9 m NE-SW and an internal area of 240m<sup>2</sup>.

The construction utilised both posts and masonry walls (Plate 9). The main structural component was two paired rows each of six large posts supporting the central, and largest, span of roof. These were of substantial proportions, with well defined 0.4 m square posts at both ends of each row. The posts in between were less well defined, but appeared to range between 0.35 m and 0.40 m square. All of these were set in large square pits between 1.5-1.8 m across (Fig. 29). With the exception of the two pairs at the south-eastern end of the building each pit was packed with clay and ragstone to stop the weight of the roof pressing the post bases into the natural clay (Plate 10). Substantial blocks of Kentish ragstone, flint nodules, occasional chalk pieces and clay deposits were packed around the posts to secure them upright. The centre to centre spacing of the post pits in each row was 3 m. Equally, the aisles were both 3 m wide from the centre of the arcade post to the internal line of the wall foundation, and the width of the nave was double this, at 6 m. The 1:2 ratio of aisle width:nave width is seen in many Roman-British aisled buildings.

The building was constructed on gently sloping ground and the posts were set progressively deeper towards the higher north-west end. At this end of the building they were 1.2 m and 1.3 m deep while at the south-east end the post pits were only 0.6 m deep. The individual posthole dimensions are listed in Table 5. The reconstructed section along the line of the building clearly shows that the bases of the posts were set level (Fig. 28 profiles). This can only have been to create a horizontal roof line, and strongly suggests that the posts, and possibly other components of the main roof trusses, were prefabricated.

Table 5: Building 15000, posthole dimensions, sequence from north-west to south-east

Southern row		
Cut Number	Post Pit Dimensions	Post Pipe Dimensions
15059	1.80 m x 1.80 m x 1.20 m	0.44 m x 0.38 m x 1.10 m deep

Northern row		
Cut Number	Post Pit Dimensions	Post Pipe Dimensions
15192	1.80 m x 1.70 m x 1.32 m deep	0.40 m x 0.40 m x 1.10 m deep

Southern row		
Cut Number	Post Pit Dimensions	Post Pipe Dimensions
15140	1.56 m x 1.40 m x 0.96 m deep	0.58 m diam. tapering to 0.30 m x 030 m at base. 0.96 m deep
15036	1.54 m x 1.50 m x 0.98 m deep	0.53 m x 0.43 m x 0.85 m deep
15027	1.75 m x 1.50 m x 0.99 m deep	0.38 m x 0.35 m x 0.88 m deep
15070	1.45 m x 1.34 m x 0.78 m deep	0.35 m x 035 m x 0.78 m deep
15020	1.50 m x 1.43 m x 0.68 m deep	0.45 m x 0.40 m x 0.60 m deep

Northern row		
Cut Number	Post Pit Dimensions	Post Pipe Dimensions
15080	1.52 m x 1.50 m x 1.04 m deep	0.40 m x 0.40 m x 0.90 m deep
15072	1.72 m x 1.72 m x1.05 m deep	0.50 m diam. at surface, 0.28 m diam. at base. 0.86 m deep
15085	1.55 m x 1.35 m x 0.92 m deep	0.50 m diam. tapering to 0.30 m x 0.28 m at base. 0.76 m deep
15078	1.50 m x 1.50 m x 0.9 m deep	0.35 m x 0.30 m x 0.78 m deep
15056	1.91 m x 1.56 m x 0.60 m deep	0.40 m x 0.40 m x 0.60 m deep

Only the foundations of the surrounding walls remained, but contemporary floor levels surviving both inside and outside the building show that the foundations probably survived to their full original height. The foundations of the outer long axis walls were a maximum of 0.2 m deep, although still quite broad at 0.8 m wide, and comprised flint nodules set in a loose orange sandy mortar (Fig. 28 sections 10679 a and b). This was made with a distinctive imported river gravel and an area of preserved soil horizons (12725) to the immediate southeast of the aisled building included a concentration of these in the soil. This probably represents the material storage or mortar mixing area as these were not encountered elsewhere on the site. These foundations would have been adequate to carry the aisle walls to eaves level, although this need not have been much more than head height. The north-west gable wall had a more substantial foundation, 0.6 m deep and 0.8 m wide, although this had been entirely removed by more recent stone robbing (15425). Its depth may have been intended to counteract the effects of a group of large infilled pits (15270 and 15158) that coincided with the line of the wall here, as the foundation was only cut to the surface of the undisturbed natural clay at the base of the pits. However, the coincidence of the deep foundation and the gable end is equally likely to reflect the raising of this part of the building to a higher level in stone than around the remainder of the building. The south-east gable wall was not excavated, but a similar scenario may be envisaged here.

Evidence for the wall superstructure was lacking, although a single neatly cut block of tufa was positioned over the foundations on the south-west side of the building. It was not

clear if this was *in situ* or fortuitously redeposited, as it was at the end of the foundation robbing. In addition several large blocks of roughly shaped Kentish ragstone were recovered from the silty infill of the robber trench of the north-west gable wall and are most likely to represent redeposited remains either of the wall or the more substantial foundation here. Direct comparison with the gable wall found at Meonstoke (King 1996) is not possible, but the latter site is useful for suggesting how the Thurnham building may have appeared. The evidence of the foundations suggests that the gable at Thurnham was raised in stone above the level of the aisle walls, which is in line with the construction found at Meonstoke, where the gable foundation was the same width but deeper at 1 m (ibid.). A small concentration of brick fragments recovered from outside the north-western gable suggests the presence of a string course or courses. These would have been consistent with the existence of a large gable wall, though they fall far short of the evidence for elaboration of the facade seen at Meonstoke.

A small assemblage of pottery (36 sherds, 459 g) was recovered from the loose mortared foundations and post pit packing fills, dating the construction of the building. Some of the material was clearly residual, while several equally clearly intrusive sherds had become incorporated in the exposed surface of the packing fills and related to the occupation of the building rather than its construction. However, the general character of the assemblage points to construction within the second quarter of the 2nd century with a small rim fragment from a dish of Monaghan type 5E3.1 in BB2 fabric R14 pointing to a date after c 130.

Consistent with a construction date shortly after that of the villa is the evidence for the tiled roof. A moderate quantity of roof tile (34.5 kg) was recovered from the later period deposits sealing floor levels within the building and is likely to have derived from the roof of the building, although no extensive collapse deposits were present. As with the villa, this absence is likely to represent removal of the tile from the site for reuse. The remains were dominated by the red tile fabric 2815 which formed 60% by weight of the total assemblage with 20% each of the earlier Eccles fabric 2454 and the orange-brown fabrics 3226 and 3238. The larger quantities of the Eccles fabric tiles here in a probable secondary context compared with the much smaller quantities reused in the villa possibly indicates a preference for the use of new tiles in the principal building, while more of the older tiles were reused on the aisled building.

At the north-west end of the building there was an internal partition between the aisle walls and the end arcade posts, which probably also extended at least partway between the posts with an entrance along the central axis of the building. This created a small separate room (15290) measuring 12.00 m by 2.75 m with a crushed tufa (15187/15385) and clay packed flint nodule surface (15348) across its south-western portion (Fig. 28). The partition may have been constructed partly in stone on the south-west side where the robber trench extended into the building and up to posthole (15059). Elsewhere it was probably a simple

wooden plank division attached to the posts, as the only evidence for its presence was clear straight edged distinction between the floor level deposits to either side. Activity at this end of the building was clearly of a domestic nature with several personal objects recovered from the later silts sealing the surfaces. These are discussed in the section below relating to the next (main) period of occupation, although the surfaces were certainly established as part of the primary construction. No deposits or features other than the floor surfaces actually date to the initial period of occupation and the building, as would be expected, was kept clean. The definition of small rooms at one end of aisled buildings is not an uncommon feature and is often related to domestic use, perhaps by individuals of higher status than any possible residents of the main part of the building. The simple separation of the full width of the end bay is not often found, however, or it may represent a phase of development prior to more extensive subdivision, particularly of the aisle spaces.

The main part of the interior otherwise produced little evidence of the function of the building. No floor surfaces were present and the sections excavated across the internal deposits suggest that the building had no more than an earthen or, at the best, an organic floor. The soils revealed were actually largely preserved from the earlier occupation of the site and the majority of the pottery and other finds recovered were residual. No clear entrances to the building were defined in the foundations, although a possible break in the north-eastern wall may have marked a side entrance 1.6 m wide (15418). The presence of the room at the north-western end suggests that a substantial entrance was not located here. The likelihood that the main portion of the building did have an agricultural function on the estate would require a major entrance. It could have been in the south-eastern gable end, but this appears inconsistent with the presence of the post row fence boundary on this side, although the 3 m spacing of the posts (12628 and 12629) either side of the central axis of the building could perhaps have accommodated an outward opening doorway at this point. Alternatively the north-east entrance could have been paired with a corresponding entrance in the south-west side, but no evidence for such an entrance was identified.

#### Well 12370

North-west of the aisled building an accompanying stone-lined well (12370) was constructed, probably to provide a water supply specifically to this building (Fig. 28). Only the upper 1 m of this feature was excavated as it lay outside the main development impact area. There is thus little evidence for its detailed construction, but its position in relation to the aisled building may indicate a close chronological as well as spatial association.

The well pit contained neatly laid drystone courses of large roughly-hewn ragstone blocks with clay packing forming a circular shaft with an internal diameter of 0.8 m. The well

was surrounded by a slightly irregular, oval terraced area 9 m by 4.5 m and 0.2 m deep, set with superimposed cobbled surfaces.

Only 3 sherds (8 g) of pottery were recovered from the clay backfill of the construction cut of the well. None of these was later than the suggested construction date for the aisled building. The well was maintained throughout the functioning life of the aisled building, as a very late Roman finds assemblage was recovered from the silts sealing the well and surfaces. This is discussed in detail below.

### Trackway 12685 and accompanying features

Outside the principal enclosure similar investment was made in enhancing access to the settlement. Although dating evidence for construction is very scant, the flint nodule cobbled trackway (12685) approaching the site from the east is likely to have been built in this period (Fig. 30). This overlay two narrow gullies (10480 and 10490) in use in the previous period and curved slightly to the north-west, following the gully alignments and reflecting continued adherence to the field boundaries that those features probably represented. At its eastern end the trackway survived as an aggered surface 0.1 m thick and 3.5 m wide. It broadened to 5.0 m across further west, where it became a shallow hollow way before terminating at the low-lying area (10690) at the base of the slope up to the occupation area.

A small drainage gully or field boundary (10320) flanked the southern edge of the trackway. The lack of a matching ditch to the north suggests that this functioned more as a boundary than as a substantial drainage feature. The evidence from the sediment infills and environmental evidence from other features (see further below) make it clear that this area was very poorly drained and probably waterlogged in winter. Any serious attempt at drainage would have required much more significant ditch systems. Although the single silting fill of gully10320 did not produce any finds, the stratigraphic sequence of the overlying silt and finds from a later ditch (10330) confirm that the trackway and ditch (10320) were of this period.

At the western end of the trackway an irregular north-south aligned hollow (10690) at the base of the slope running down from the settlement enclosure to the north-west was crossed by a roughly-laid hard surfacing of Kentish ragstone and flint nodules (10515 and 10516). A further crossing point was located 15.0 m to the north and was more carefully constructed, also of Kentish ragstone and flint nodules (10462). This was not obviously related to the trackway although five sherds recovered from a silt deposit upon it all dated within the range 120 to 200, suggesting that it was of the same general phase. The fact that feature 10462 was raised slightly higher and crossed the hollow at a narrower point may have made it easier to use in wet conditions. No continuation of either crossing point or of the

trackway was identified on the slope up to the villa enclosure from the western side of the hollow.

On the northern side of the trackway an existing ditch (10500) appears to have been replaced by another (10600) on an alignment at a right angle to the trackway. This was only 0.2 m deep but 1.0 m wide and flat based with a clear square terminus at its junction with the trackway. The blue/grey clayey fill of the ditch indicates water deposition comparable with the fills of the other ditches nearby. A possible trackside shrine (10750) was positioned on the western side of ditch 10600 (Fig. 31). This comprised a slightly sunken area surfaced with flint nodules (10508) approximately 3.0 m across bounded by the trackway and the ditch. A large posthole (10534/10599) packed with Kentish ragstone and containing a post 0.3 m in diameter was positioned at the western edge of the surface adjacent to the trackway.

Archaeological evidence for wayside shrines is often very difficult to identify, although they may have been quite common features, particularly at crossroads (Bird 2004). The trackside position of the isolated post and surface adjacent to a further boundary, in combination with artefactual evidence (below), supports the interpretation. The post was reasonably substantial but was only set 0.4 m deep, so it is unlikely to have stood very high, because a large free standing post would have required a rather deeper setting. Therefore it is possible that this could have been an altar-like structure, additionally defined by its associated cobbled surface. The associated finds assemblage was comparatively abundant when compared to the immediate surroundings. Most significantly, it included a Colchester Derivative brooch (small find 10089) which may have been deliberately damaged and a small hollow cast bronze base (small find 10060) from a fairly large statue recovered from the adjacent part of the silt deposit (11650) sealing the trackway (Fig. 31). In addition 69 sherds (781 g) of pottery were recovered from the more securely associated silt deposit sealing surface (10508), of which 20% were fine wares in South Gaulish samian (in forms 18/31 and 35) and Upchurch fabrics consistent with a 1st-mid/late 2nd century date.

The possible shrine and accompanying ditch may not have been entirely contemporary as one might have expected more finds to have been incorporated into the ditch fills adjacent to the shrine. The ditch only produced four sherds, although these included a fragment of a white ware flagon and a sherd in a fine Upchurch fabric. There were no finds in the ditch terminal closest to the trackway and it would appear that this was probably already infilled, at least to the depth represented by the archaeological horizon, prior to the construction of the shrine. However, the association of the shrine location and boundary ditch appears more than coincidental and it remains most probable that it was intentional, relating to the state of transition represented by the boundary, perhaps reflecting the importance of movement into or out of the enclosures most closely associated with the villa.

### Features NW of Hockers Lane

An isolated group of features belonging to this period was identified during the watching brief phase of works c. 500 m to the NW of the excavation at Hockers Lane (Fig. 3). These consisted of a short observed length of worn flint-cobbled trackway (338), 2.3 m wide, accompanied by a parallel ditch (337) along its eastern edge. Both were aligned NE-SW suggestive of a link between the Maidstone area and a route towards the base of the North Downs. A small assemblage (16sherds, 68 g) of pottery was recovered from the silting fills of the ditch suggesting an early-middle 2nd century date for its infilling although the trackway may have been in use earlier than this. A thin circular spread of charcoal rich soil (89) located nearby produced 31 sherds (777 g) of similar dated pottery. These features correspond broadly to Syddell's (1967) recorded location of 'A previously unknown site with ditches and pits of possible early Roman date noted east of the Maidstone-Sittingbourne road at approximately NGR TQ 787578.'. Although little can be said about the nature of this group and what type of activity or site they might represent, it is clear that a concentration of features exist at this point. These would appear to mark a site active in the late 1st and early 2nd century separate to those excavated at Hockers Lane and Thurnham Villa to the SE.

# 4.4.4 Middle Roman phase 2: (c AD 150 to c AD 250)

This phase was marked by only limited extensions to the principal buildings followed by an apparent change of focus in the occupation of the estate in the 3rd century (Figs. 32 and 33). Initially the site continued to develop into the late 2nd century with structural additions to both the villa and the aisled building. However, these were more modest in scale than previous constructions and were confined to the earlier part of this period only. The additions to the villa comprised a small bath house range (20515) added to the south-west end partly replacing the earlier structure here, and a large square room and apse (20160) added to the north-east corner of the building.

The aisled building had a small posthole structure (15120) added to its south-western side adjoining the post row boundary (10760). This had rammed chalk and clay surfaces and a central hearth within its interior. Within the small room of the main structure a clay oven (15280) was built and used through to the end of occupation in the building. This happened towards the end of the period at which point the building may have been abandoned and dismantled.

The temple building (12720) was demolished at the end of the 2nd century and the remains of the tiled roof were used to level the accompanying boundary ditch (12545). This was the only boundary of the primary enclosure to be altered or replaced in this period; a large post structure entrance (10950) was cut into the backfilled terminal of the ditch.

Substantial post rows (12590 and 10760/10980) flanked either side of the entrance, again conforming to the existing boundary location on the break of the promontory slope. The rear ditch (10610) and post row fence (10580) were retained throughout most of this period although a series of 'zoned' dumps of debris deposited into the top of the ditch towards the end of the period could also indicate the absence of the fence by this time.

Most of the activity in the later part of the middle Roman period was focused outside the principal enclosure and related to the working aspects of the estate (Fig. 33). A moderate sized 14-post building or barn (11250) was constructed towards the base of the slope east of the villa enclosure and was accompanied by surrounding drainage ditches and gullies (11090 and 11240). This had internal cobbled floor surfaces (11140 and 11150) and drains (11210 and 12550) with a deep stone and timber lined well (11010) close by to the east. These features were set to the west of a ditched boundary (10620) that linked into the flanking ditch or boundary (10330) aligned alongside the trackway (12685). Ditch 10620 may mark the limits of an outer or secondary enclosure specifically defining the working area beyond the principal enclosure. To the east of this and immediately opposite the 14-post building was an unusual pit (10570) with votive offerings placed in its base.

#### The enclosure

The only boundary to undergo major alteration during this period was the south-east frontage which saw the replacement of boundary ditch (12545) alongside the temple, which was also demolished at this stage, with a post row fence (12590) and the creation of a large post built entrance structure (10950) (Fig. 34). Both of these were cut into the backfilled ditch. The boundary also continued north of the entrance as a substantial fence line, although it is less clear which of the two post rows here (10760 or 10980) replaced the other. The relative merits of the dating and phasing of these fence lines has been discussed in the previous section and it appears most likely that post row 10760, spanning the 29 m between the southern corner of the aisled building and the entrance, was the later of the two and was constructed in this phase. However, row 10980 did produce the later pottery assemblage, although this was only from the postholes in an area of considerable later disturbance and intrusion and is not likely to represent the true date of this feature.

Post rows (10760 and 12590) were of similar construction with circular post pits up to 0.80 m across and 0.40 m deep, each with distinct packing deposits of Kentish ragstone, occasional tile and clay. These generally defined circular post pipes with a diameter of 0.20-0.25 m spaced at intervals between 1.50 m and 2.00 m. Row 12590 continued to the southwest beyond the excavation area and was sealed by a thin layer of accumulated soil which partially obscured the individual post pits. The dimensions of the individual postholes suggest a substantial barrier, more effective and imposing than the earlier ditched boundaries. This

view is reinforced by the accompanying entrance structure (10950). The focus of this structure was two massive rectangular post pits defining an entrance approximately 3.50 m wide These had surface dimensions of 1.50 m by 1.00 m and 2.50 m by 1.25 m and had been cut into the backfilled ditch (12545). The entrance was not properly identified until the very closing stages of the excavation owing to the presence of later soil layers sealing and obscuring the features in this area. As a result, post pipes were not identified although excavation of one of the pits (10869) showed it to be 1.00 m deep and heavily packed with large blocks of Kentish ragstone, flint nodules and redeposited clay (see Fig. 23 section 10190). This clearly held a substantial post, presumably matched by that in the unexcavated post pit (12594) of identical surface appearance to the south. Two smaller paired posts (12597 and 12598) were positioned approximately 2.00 m to the south-east and were almost certainly part of the same structure with ragstone packing holding posts up to 0.20 m diameter. Immediately outside this entrance was a crushed chalk surface (12715), irregular in plan with maximum dimensions of c 7.5 m by 8 m. The limited amount of pottery associated with this feature suggests an early Roman date but its location in relation to entrance 10950 strongly suggests that the two were linked. A further patch of cobbled surface (10758 and 10767) partly overlying the infilled ditch 12545 was probably also related to this entrance.

The relative sizes of the post fence lines and entrance structure in this period are particularly significant for the appearance of the boundary and become even more so when considered against their contemporary setting and the events that accompanied these changes to the boundary. Precise dating of this is difficult as discussed in relation to post row 10760, although it is clear from the few well stratified amphora and BB2 sherds present that this must have been erected no earlier than the second half of the 2nd century (see above). The southern extent of the post row boundary and the entrance features were equally poorly dated, largely because of the limited extent of excavation of these features. However, they were cut into the backfilled level of the earlier boundary ditch (12545) and sealed by a thin soil (10525), providing a secure stratigraphic position. The upper levels of the ditch show that this was filled in the second half of the 2nd century. The bulk of the pottery assemblage fell within this range and included a small, but fresh, component of coarse ware sherds in fabrics R8.1 and 8.3 dated 150-250 and fabric R1 dated 170-250. The soil layer sealing these levels produced an assemblage containing far more sherds dated to the late 2nd century sherds and later, some with date ranges extending into the 4th century. Together the evidence suggests that the boundary was altered in the last quarter of the 2nd century. It also appears that this was subsequently blocked to create a continuous boundary along this stretch. Four well defined postholes (12840) were erected in a row set 1 m back from the entrance. Again the date of this was not clearly established as these were only identified at the very end of the excavation although it was clearly done before the post row boundary became defunct in the 4th century.

A construction date post 175 places this boundary alteration within the same period as several other significant developments. Around the same time both the bath house range (20515) and north-eastern room (20160) extensions were added to the villa building whilst the temple building was demolished (see below for descriptions). The latter development may have been particularly significant as the new entrance structure was almost (but not exactly) on the central axis of the villa building, perhaps suggesting that the temple was demolished to clear the view to and from the principal residence. This centrally placed entrance with its relatively imposing structure, the cleared approach and view and the expansion of the villa building itself point to a significant period of development at the end of the 2nd century.

The existing rear boundary ditch (10610) and accompanying post row fence (10580) were maintained from the previous period. The ditch had become a stable feature by this time and is likely to have remained as a relatively established earthwork approximately 0.4 m deep (Fig. 35 section 10107). No significant deposits accumulated in this ditch until the latter part of this period.

Only a small assemblage of pottery, 31 sherds (105 g), with a broad date range of mid 2nd century to late 3rd century, was present within the post pipe fills of the post row. This simply suggests that the fence line had ceased to exist by the end of this period. A clearer date for the ending of this boundary is provided by the levelling deposits encountered across the top of the ditch (10610). The infilling of this almost certainly reflects the disappearance of the fence as material clearly derived directly from the villa was dumped into the ditch in distinct 'zoned' areas along its length (see Fig. 32). At the southern end the finds assemblage was dominated by roofing tile coinciding with the extent of the villa. Animal bones were dumped across the central portion in a smaller concentration and comparatively large amounts of pottery including near complete vessels were dumped to the north. Pottery sherds were present throughout the backfills but were distinctly concentrated in the north-western corner of the excavated area where a dump of vessels broken in situ was found in the ditch adjacent to the junction of post rows 10580 and 11500 (Fig. 36). The roof tile has already been discussed in relation to the villa building and reflects the materials imported to the site for the original construction of the stone villa before the mid 2nd century. The animal bone was very badly degraded, but some of the larger fragments were identifiable in situ. From this it was very clear that cattle mandibles dominated the assemblage. This was confirmed by postexcavation examination of the identifiable fragments, although sheep/goat was also well represented. The material is most likely to represent food items or preparation and debris directly associated with the villa, all discarded into the ditch. The pottery assemblage as a whole points to an infill date no earlier than the late 2nd century. This is particularly well demonstrated by the range of BB2 wares that formed 36% of the assemblage. Of these Monaghan's bead rim bowl type 5C7.1 and an everted-rim cooking-pot of type 3J0-5 have

date ranges from 170 to the mid 3rd century and 120-200 respectively (Fig. 35 vessels 70 and 66). Given the high incidence of sherds that have date ranges into the mid 3rd century, but a total lack of forms or fabrics that extend into the 4th century, it seems most likely that the ditch was levelled after 200 but before 250-270.

The pottery dump provides as insight into the use of vessels within the context of the villa. Clearly some 'antique' vessels remained in use late into the 2nd century and 3rd century with three substantially complete vessels (individual contexts 10498, 10499 and 11319) present in this deposit, each in grog-tempered fabrics. These included a jar in fabric B2 of Thompson (1982) type C2-2 dated c 50 BC to AD 70 (Fig. 36 vessel 61) which must have been a very old item by the time of its deposition. More indicative of the proximity of the villa was the samian ware, which was more common (7%) along this ditch than elsewhere across the site and corresponds in date to the main period of construction activity in the 2nd century. Glass table wares including an unusual shallow bowl were also present, supporting the suggestion that this debris probably derived from the villa house itself (Fig. 35 small finds 10362 and 10413). The boundary did not survive beyond this period and the zoned deposition may have particular significance relating to clearing the area and closing the feature. This is discussed in more detail and in relation to the broader developments of the estate below.

### The villa building

The primary construction of the stone villa in the previous phase was a substantial undertaking not matched by the later additions. Before the end of the 2nd century, however, a small bath-house range (20515) was added at the south-west end, partly replacing the earlier wing rooms here. A large square room and an adjoining apse (20160) were added to the north-east end of the building at about the same time (Fig. 37).

The bath-house range lay beyond the excavation boundary to the south-west and was destroyed by the Maidstone bypass (now the M20) after being excavated by Pirie (1960). This building was misinterpreted as a possible kitchen; a matter corrected by Detsicas (1983, 143) who identified the *caldarium*, *tepidarium* and *frigidarium* of the bath-house (Rooms O, P and Q) running from east to west, each with a projecting apsidal plunge to the south-west (Rooms U, T and S respectively) and a small changing room (Room R) to the north-west of the cold room. The apses seem to have been at least structurally secondary to the main row of rooms (O-R), implying two phases of construction within the bath suite itself. *Opus signinum* floors which partly survived across the changing room and *frigidarium* and within the accompanying plunge bath, were also part of this secondary phase, while sand bedding layers remained elsewhere. The latter may indicate the position of tiled floors that had been removed, but no evidence of this was recorded. Thresholds between the changing room, *frigidarium* and *tepidarium* were marked by tufa quoins and *imbrex* tile drains were built into

the primary wall course of both the *caldarium* and *frigidarium* plunge baths (Rooms S and U). This range was set back slightly from the frontage of the villa and extended 3.40 m beyond its rear wall line, but it did not extend (with the exception of the apsidal plunge baths) further south-west. being built directly onto, although slightly offset from, the earlier foundations of the south-west end wall of the villa. It seems very probable that the facing part of the former wing (Room N) was retained, although reduced in size, and incorporated into the alterations to provide a room of similar size to those of the new range.

The only peculiar feature of this otherwise classic bath arrangement is the absolute lack of evidence for heating. No remains of furnaces or hypocausts were recorded, possibly suggesting that the baths functioned or were used in an unconventional manner, although flue tile (not *in situ*) was recovered from apsidal Room S (Pirie 1960, 164). Additional evidence of heating is indirectly supplied by the remains of tile and tufa encountered elsewhere. As mentioned above, combed box flue and voussoir tiles in fabrics 3226 and 2815 were recovered from late Roman contexts, often in association with shaped tufa fragments (but see discussion above). This was particularly evident in the corn drier structure and associated rubble layer (10340), which appear to have been built directly from the remains of the bathhouse. Here both tile and tufa voussoirs were recovered, almost certainly derived from the roof of the bath-house.

The pottery dating evidence for the construction and demolition of the bath suite has been re-examined by Lyne (2006). Material relating to its construction was sparse, although several sherds with a broad 2nd century date were present. Most notable was a rim sherd from a jar of Monaghan type 3H1.3 in grey Thameside fabric R73 dated *c* 170-230 (Lyne 2006 - not illustrated in Pirie 1960) indicating a *terminus post quem* of at least AD 170 for the construction of the bath block. This extension appears to have had a relatively short life span as the silt and rubble debris sealing the floor levels produced fresh sherds from several part-complete vessels including a rouletted poppyhead beaker in fine Upchurch grey ware fabric R16 and a plain 'pie-dish' in BB2 fabric R14, all suggesting that the baths were unused by about AD 230. However, the presence of a coin of Postumus on the *opus signinum* floor of Room Q indicates some form of continued usage at least into the 260s (Pirie 1960, 165, 169).

At the north-east corner of the villa a large square room (V) of similar dimensions to the main reception was added with a small projecting apse (W) tacked onto the front of the main building (jointly identified as extension 20160). The foundations of these additions were much slighter than elsewhere within the villa. The construction trench was only 0.10 m deep or less, flat based and 0.55-0.60 m wide, infilled with a distinctive dark orange brown mortar and flint nodules. There was no evidence of how the structure was raised above ground level. The slight construction could imply that it carried a dwarf wall for a wooden superstructure,

but this does not seem likely to have been the case for the apsidal Room W and so may not have applied to Room V either.

The function of the rooms is not entirely clear, although a collection of plain white painted plaster, mortar and *opus signinum* fragments was recovered from a shallow rectangular pit (20497) at the centre of Room V. It is likely that this material derives from this room since trails of this debris (200113, 20114) extend to the opposing corners of the interior but not beyond. The apse also had an *opus signinum* floor surface (20062) that partly survived *in situ*.

A secure construction date for the extension is provided by the backfills of a pit (20495) underlying the foundations. The large flat-based oval-shaped pit, 2.6 m by 2.1 m and 0.4 m deep, was substantially open at the time of construction, being only partly filled by silting deposits (20048 and 20311) (Fig. 37 section 10596). The foundation was built over the silts, at which point there was a change from shallow flint and mortar construction to larger blocks of ragstone mortared together with a flint nodule infill. The pit was consolidated and levelled with alternate layers of flint nodules, ragstone pieces and mortar deposits. A pottery assemblage of 193 sherds (1282 g), was recovered from all fills. The material from the silts suggested that the pit was open in the mid 2nd century. Material from the construction backfills butting the foundation included 22 sherds in the BB2 fabric R14. These generally have a date range from 110 to 270 although they included a single sherd from a lid-seated jar of Monaghan Class 4L1 with a *terminus post quem* of at least AD 140. Two sherds from a grog-tempered jar in fabric R1 suggest a construction date after 170. The addition of the apse and square room therefore appears to be broadly contemporary with the construction of the bath-house range in the late 2nd century.

The date of pottery recovered from the deposits within Rooms V and W is comparable to that from the construction, with the majority of the material having date ranges from the mid 2nd to the late 3rd century. The scarcity of sherds with date ranges that extend beyond 270 also strongly implies that activity in these rooms had ceased by the end of this phase or early into the next. The core date range of use is suggested by a single sherd of a dish of Monaghan type 5C6 in BB2 fabric R14. This was recovered from the broken up remains of plaster and *opus signinum* within Room V and is dated AD 190 to 240.

## Pit and foundation 12735

An unusual pit (12735) was cut into the backfilled levels of ditch 10840 to the north-east of the proto-villa/villa. This was a substantial rectangular cut 1.90 m by 1.40 m with vertical sides and a flat base 0.45 m deep containing four large blocks of decayed chalk arranged in the four quarters of the pit covering the whole of its base. These had 0.15 m squared post sockets cut into them around the pit edges with a larger 0.20 m square post socket cut at the

central point (Fig. 38 and Plate 11). The central post socket was 0.30 m deep with the four smaller post sockets 0.20 m deep. A mixed packing deposit of flint nodules, chalk, tufa and ragstone rubble was set around the posts sealing the chalk blocks.

The pit must have been a foundation for an upstanding feature although what this was is not entirely clear. Considerable effort was involved in establishing a firm base and it is unclear if the posts held within the sockets were the actual upstanding feature/s or if these were intended only as a support for a larger object/s such as a statue. The position of the feature was clearly important as it was placed in an otherwise clear area north-east of the principal building overlooking the heart of the villa enclosure.

The construction date and primary phase associations of the pit are unclear, but it has been described here as the only secure related date is that of its demolition towards the end of this period. Its stratigraphic relationship to the earlier enclosure ditch (10840) places its earliest possible date towards the end of the third quarter of the 1st century (ie in the protovilla period). Equally the feature was almost certainly standing throughout the middle Roman period as its demolition can be dated between the late 2nd century (at the earliest) and the mid 3rd century (at the latest) on the basis of the small pottery assemblage (46 sherds, 280 g) recovered from a silty soil layer (10772) that sealed the feature after the posts had partly rotted *in situ* before being removed.

A possible hint at the primary association of the feature is given by its position. It lay in a direct line of sight from the entrance (12560) to the proto-villa phase enclosure and may have been intended to be framed by the entrance upon approach, although this raises the question of relationships to the possible entrance control structure (11640). The feature may also have related to the position of the fence line 11460, which might tip the balance of probability in favour of an earlier construction date; whatever its form and date, it must have been significant.

#### The aisled building and its occupation

Occupation of the aisled building (15000) continued throughout this phase with no obvious alteration to the outward or internal appearance and arrangement of the building other than the addition of a rectangular posthole structure (15120) to the south-west side (Fig. 39). This incorporated the five northernmost posts of post row boundary (10760) on the south-east and a shallow flint nodule foundation or plinth (12642) at its north-west end. Its north-east side was defined by the wall of the aisled building and the south-west side comprised a series of seven postholes varying in size from 0.25-0.55 m in diameter and generally very shallow, only just penetrating the clay. These outline a structure 13 m long and 5.5 m wide. Additional small internal postholes possibly defined divisions or structural support within the building. These did not appear to conform to a particularly regular layout, except at the north-west end

of the structure where an end room with an internal width of 2 m may have been defined by postholes 15039, 15042 and 15261 and the north-west end foundation (12642). In some respects this mirrors the layout of the more substantial parent aisled building to which this structure was attached.

Dating evidence from the posthole fills was sparse, but the structure clearly post-dated the erection of the post row boundary (10760). This itself was not precisely dated although it must have taken place after 150 and the evidence provided by the addition of the entrance (10950) and post row (12590) to the south-west suggests that it was actually some time after 170. The pottery from the post structure is consistent with this range and its latest dates do not extend past the mid to late 3rd century.

A small area of rammed chalk surfacing (15245) with squared edges conformed to the possible internal division at the north-west end of the building and may have marked the entrance to the structure or even an entrance into the aisled building. A sequence of superimposed hearths (15304) constructed of tightly packed flint nodules set in clay was positioned towards the central part of the building and was surrounded by remains of a puddled clay floor that had been scorched red nearest to the hearth (15284/5). Only small amounts of charcoal were recovered from the hearth and there were no other charred plant remains. The small amount of pottery recovered from the internal deposits was consistent with the date range of the posthole assemblages, suggesting that activity here did not extend beyond the mid to late 3rd century. The general lack of significant deposits and finds of all kinds might suggest that the structure only had a short life span, but this is not certain. The hearth and surfaces suggest that the function was domestic.

Evidence of activity within the aisled building (15000) was almost entirely confined to the room (15290) at the north-west end where the primary floor surfaces were sealed by a series of silt deposits dating to the end of this period. Finds from these reflect a similar date range to that of the adjoining posthole structure, with activity terminating in the mid to late 3rd century, and demonstrate that the room was kept fairly clean until the end of its occupation. Partly sealed by the silt deposits was a small beheive type oven (15280) (Fig. 39 insert). This had a foundation course of small ragstone blocks (15326) set upon clay bedding layers raising it slightly above the floor level (Plate 12). The sub-oval structure was 1.20 m by 1.00 m with a smooth hard fired internal clay surface covering an area 0.80 m by 0.60 m (15324). The surface projected slightly from the oven mouth from which an extensive layer of fine ash (15214) 0.05 m thick, representing rake-out debris, fanned out covering an area 4.90 m by 2.80 m. Identifiable charcoal remains largely comprised oak and ash (representing the main fuel debris), but also included the smaller fast burning species blackthorn and birch which could have been used as brushwood to ignite the oven fuel. This deposit also incorporated a moderate amount of finely processed cereals, predominantly spelt wheat

(*Triticum spelta*), and weed seeds. Chaff was conspicuous by its absence, making it unlikely that the occurrence of the cereals represented the use of processing debris as a fuel source, although the material could have derived from the final stages of cereal processing such as parching or drying at a household level. The weed seeds included typical arable and rough ground species such as dock and vetch or tare, but also included sedge indicating wet ground conditions relatively unsuitable for arable crops. As previously noted, the nearby low lying ground was poorly drained and would have been a suitable habitat for such species. The presence of seeds of a pink in an adjacent contemporary hearth deposit (15209) indicates that freely drained chalky soils were also being utilised to provide cereals.

Other food remains associated with the aisled building were recovered from the silt deposits within room 15290. The animal bones include a mix of wild and domestic species with cattle, sheep/goat, pig, domestic and wild fowl, roe deer, hare and fish all represented. The domestic species dominated and had the most frequent evidence of butchery marks, but the moderate assemblage of wild species reflects a varied diet. The wild species could also indicate seasonal changes in diet; they include Brent Goose, a winter visitor to Britain which is limited to estuarine areas and immediately surrounding farmland, making the Medway area the most likely source. Similarly, flatfish could have come from an estuarine source but herring, also present in the fish bone assemblage, is an open water species and may have arrived in a preserved form.

Some 107 pottery sherds (911 g) were recovered from the ash deposit (15214) while a larger assemblage of 829 sherds (6018 g) came from the silt deposits sealing the floor levels and oven. Analysis of this assemblage in terms of EVEs (total 6.36 EVEs) produced a very similar breakdown of fabrics to that of the contemporary ditch 10610 associated with the villa, and appears to represent the high status domestic element of occupation within the aisled building from the mid 2nd century through to the mid 3rd century (Figs. 39 (pottery from 15214) and 40). This is even more clearly reflected by the numerous small finds recovered from the silt deposits. These include several fragments of glass vessels, a bone gaming counter and hair pins, tweezers, a bronze drop handle from a piece of furniture, an unusual seal box lid and refitting fragments of a rectangular mirror with bevelled edges all in copper alloy and an iron slide key possibly reflecting the need to secure the building (Fig. 41). The seal box lid and mirror both probably date from the 1st century and so were already old items when the aisled building was constructed as were two 1st century coins (small find 10803 and 10997) also present. The very good condition of the objects suggests that they were all functioning items in the 2nd and possibly 3rd centuries, rather than redeposited rubbish; the pottery, which contains little residual material, perhaps confirms this. In contrast, the agricultural associations of the aisled building are hinted at by a large part of an iron spade shoe (small find 10974) also recovered from the silt levels.

The only clear indication of activity within the main part of the building in this phase was a small oven (12531) within the central 'nave', made from a pottery jar (in fabric B6, dated c 50-170) set on its side in a shallow hollow.

### The temple building 12720 and the infilling of ditch 12545

The temple constructed in the 1st century was maintained into and throughout much of the 2nd century. Some of the internal floor surfaces may have been patched or partly replaced within this period as several sherds from vessels in the coarse sandy grey fabric R73 dated 150 to 270 were recovered from a tightly packed surface (11451) in the central area of the temple. Otherwise there is little evidence of alterations or additions, suggesting that the structure was maintained in its original form.

The evidence for its likely demolition comes from the accompanying boundary ditch (12545) and the alterations made to the south-east boundary of the enclosure in the late 2nd century. The boundary ditch (12545), which was very specifically related to the temple, was backfilled in the late 2nd century as part of a rearrangement of the principal enclosure and the villa building. The backfill deposits comprised substantial quantities of roof tile clearly derived from the temple (discussed in detail above and see Figs. 22 and 23 for tile backfill deposits 10935 and 11641), although this alone does not necessarily indicate the demolition of the structure. However, the pottery from the backfills dates up to the late 2nd century whilst a thin silty soil layer (10525) sealing these deposits and extending over the surfaces of the temple produced pottery dating from the 3rd century. This deposit contained moderate quantities of iron nails throughout, as well as occasional fragments of ragstone, tile and flint nodules, and appears to reflect a soil and rubble accumulation post-dating the building. The combination of this evidence appears to date the demolition of the temple to the late 2nd century, apparently as a deliberate undertaking as part of the reconfiguration of the enclosure in relation to the villa building.

The pottery assemblage recovered from the ditch fills was of an unusual character. It comprised 174 sherds (2790 g) in total, the latest sherds in fabrics R8.1 and R8.3 dated 150-250 and fabric R1 dated 170-250. However, a considerable proportion (56% by count and 45% by weight) of the assemblage comprised vessels in fabrics and forms that significantly predated the middle of the 2nd century (Fig. 42). Substantial parts of several vessels were present in broken but fresh condition, suggesting that they were old but intact or near intact vessels at the time of deposition. These give the assemblage an 'antique' appearance and could reflect items deriving from within or otherwise associated with the temple being discarded into the ditch at the time of its demolition. A comparable deposit is known from the temple site at Coleshill in Warwickshire (Booth forthcoming), although 'antique' assemblages can occur in other contexts.

### 14-post building 11250 and its surroundings

To the south-east of the principal enclosure a new posthole building (11250) was constructed and surfaced with a substantial flint nodule cobbled floor (11140 and 11150). This was accompanied by a moderate size drainage ditch (11090), eaves drip gully (11240) and internal drains (11210 and 12550) (Fig. 43).

The building was aligned NW-SE and comprised two parallel rows of six evenly spaced posts with a slightly unusual feature of centrally placed gable posts between these at each end. Details of the individual posthole dimensions are listed in Table 6 and presented as paired posts with the southern row listed to the left and the northern row to the right and the gable posts (western and eastern) at the bottom of the table. A + indicates that the full depth of the posthole was not excavated owing to high water levels, although in each instance it is thought that the base was very near that excavated.

Table 6: Building 11250, details of postholes

Southern row		
Cut Number	Post Pit Diameter x Depth	Postpipe Diameter
11038	1.20 m x 0.60 m +	0.30 m
11296	0.95 m x 0.80 m	0.30 m
11288	1.10 m x 0.65 m +	0.20 m
11285	0.80 m x 0.80 m +	0.38 m
11282	0.80 m x 0.70 m	0.40 m
11278	0.80 m x 0.70 m +	0.40 m
11242	0.90 m x 0.70 m +	-

Northern row		
Cut Number	Post Pit Diameter x Depth	Postpipe Diameter
11269	1.00 m x 0.60 m	0.30 m
11245	1.20 m x 0.65 m	0.25 m
11125	1.20 m x 0.60 m +	0.20 m
11047	1.00 m x 0.80 m +	0.30 m
11152	0.80 m x 0.70 m	030 m
11197	0.95 m x 0.65 m	0.20 m
11226	0.80 m x 0.60 m	0.20 m

The building was positioned towards the base of the slope leading up to the villa enclosure, with a 0.60 m drop in ground level from the north-west to the south-east end of the building. Unlike the construction of the aisled building (15000), the posts of this structure were set at roughly equal depths along each row regardless of the slope (Fig. 44 sections). Postpipes were indicated or well preserved in all but one of the postholes and, measuring from the centre of postpipe to postpipe, these defined a building 15.5 m long by 6.5 m wide with the individual posts regularly spaced at 3 m intervals. In each identifiable case these were circular, with a diameter between 0.20 m and 0.30 m, and held firmly in place by flint nodule packing. These fills were slightly unusual in that very well-sorted nodules had been used for many of the packing deposits and remained as loose but densely packed fills with no silts or redeposited clay between the flints.

The north-east side of the building was flanked by a parallel eaves drainage gully (11240) lying 1.0 m to 1.5 m from the line of the postholes and a larger ditch (11090) lay upslope 1.5-2.0 m from, and parallel to, the north-west gable end. This ditch extended 5.0 m to the north-east beyond the line of the building and eaves gully before turning downslope parallel to the smaller gully, the base levels reducing consistently along its length to carry surface water clear of the building. This was the larger of the drainage features, with a splayed V-shaped profile 1.40 m wide and up to 0.30 m deep (Fig. 43 section 10256). The eaves gully (11240) similarly drained downslope to the southeastern end of the building (Fig. 43 sections 10244, 10234 and 10229). Both features were filled with homogeneous silting deposits. An eaves drainage gully matching that on the north-east was absent from the south-west side of the building. This area had been subject to deeper modern truncation that had removed the floor surface levels, although this is still unlikely to account for the complete absence of a gully here. Being the downslope side of the building this would not have been in so much need of drainage, but it is also possible that, because it was clear of ditches, the main access may have been to this side of the building.

The interior of the building had two further drainage features. These differed in character but both are likely to have been contemporary with the construction of the building and cobbled floor surfaces (11140 and 11150 respectively). In the northern corner of the building a short arc of stone-lined drain (12550) was neatly constructed of small ragstone slabs and drained out towards the eaves drip gully. The stones were set on edge in a 0.30 m wide flat-bottomed trench with a slab capping that had wear on the upper surface, showing that these slabs formed part of the floor level (Fig. 44 section 10261). The position of the drain in the corner of the building suggests that a specific activity took place here, but there is no indication of what this was, either from the floor level or from the sterile silt fill of the drain cavity, which only produced a negligible and probably incidental amount of charred cereal grain and no other finds.

The south-east end of the building was drained by a centrally aligned linear flint nodule filled trench (11210), 7.00 m long by 0.60 m wide and 0.20 m deep (Fig. 44 section 10243). This lay mostly outside the structure, extending 5.00 m past the gable post, and was similarly set flush with the floor level of the building (11150). Unlike the stone lined drain, this appears to have been a more general drainage channel.

The contemporary floor itself comprised two surviving portions (11140 and 11150) of what was originally a single continuous surface constructed of flint nodules tightly set into the underlying clay. Together, and ignoring the small gap separating the two remnants, these covered an area some 20 m NW-SE by 4.5-6 m NE-SW. The surface was clearly laid after the posts were erected, since the cobbles sealed the packing fills but the postpipe voids were visible.

A relatively well stratified pottery assemblage of 43 sherds (615 g), was recovered from the post packing fills, providing a *terminus post quem* for the construction of the building and its primary associated features. Some late 3rd century sherds in grog and fine sandy fabrics were clearly intrusive as they were associated with disturbed packing and postpipe fills and probably relate to the demolition or eventual decay of the structure. Overall, however, the assemblage points to a mid 2nd century construction date with a distinct cluster of fresh sherds with ranges between 120-170 most clearly demonstrated by fragments from a necked jar in east Sussex ware and a BB2 latticed 'pie-dish' (Fig. 43 vessels 99 and 100). Twelve sherds (64 g) with a very similar date range were recovered from the flint filled drain, confirming that it was constructed in this period. In addition the surface, if not the building, reflects a long period of use. Sherds incorporated into the floor and recovered from the patchy thin silts sealing it ranged widely in date, extending from the mid 2nd century into the late 4th century. The late Roman use of this area is discussed in more detail under the subsequent period below, but it is likely that the construction of a corn drier (10340) directly upon this surface utilised it and replaced, at least in part, the 14-post building.

The external surfaced area was extended to the south-east later in the 2nd century or early in the 3rd century by a similar surface (11033) sealing two pits (11100 and 11106) and part of the boundary ditch (10620) (Fig. 43). This was identical to the internal surfaces but was clearly a later addition as pits 11100 and 11106 produced late 2nd century pottery assemblages. The function or relationship of these pits to the building was unclear, but both had been cut into the silted ditch and could represent a replacement of the boundary with large posts. A more obvious posthole with a surviving postpipe was present to the north-east (11158), and the fill of pit 11106 contained large ragstones which looked like packing deposits. The form of pit 11100 was less obvious, but this may have been the result of limited excavation as most of the feature was obscured by the overlying surface which was not fully removed.

The building produced associated pottery and a few personal objects suggesting some domestic occupation within it. Much of the pottery was in fresh condition. It included two dishes and a jar in the BB2 fabric R14 and a variety of coarse wares all with a date range between the construction period (c AD 150) and the mid 3rd century. Finer wares included slightly more abraded sherds in fine grey and orange Upchurch fabrics (R16 and R17.1) and two rim fragments from a roughcast indented beaker in ?Sinzig fabric R33 (c AD 130-250). Of the personal items the most notable is a expanded copper alloy signet ring with an oval nicolo intaglio depicting a parrot with a bunch of grapes, suggesting an association with Bacchus (Fig. 43 small find 10549). The stylistic qualities of the ring are consistent with a mid 2nd century to 3rd century date and thus make it a contemporary loss. A further item was a small fragment of bone inlay decorated with a ring and dot motif (Fig. 43 context 10349).

The combination of the pottery and personal objects indicates a domestic component in addition to the likely agricultural character of the building (see below).

#### Well 11010

A deep stone-lined well (11010) was built to the east of the 14-post building (11250) between this and the boundary ditch (10620) (see Fig. 43). Dating evidence was very scant as only five sherds (36 g) of 1st to late 3rd century pottery were recovered from the clay backfills of the construction cut. Pottery was equally sparse from the various infills of the well shaft and despite detailed hand excavation only 32 sherds, 508 g, were recovered in total, the majority of which were from the uppermost levels and clearly residual. The placing of its construction within this phase is therefore somewhat tentative and based upon the associations with building (11250) and the earliest appearance of activity in this specific part of the site. The excavated fills produced slightly more conclusive evidence of belonging to the late Roman phase and are described accordingly in the subsequent phase.

Construction was a substantial task and perhaps reason alone to suggest that the well belongs to this phase as no other sizeable undertakings were attempted in this area in later periods. Excavation of the well was limited to a depth of 4.40 m below the existing ground level, although the well was in excess of 6.00 m deep as a rod could be pushed into the silts to this depth without encountering the base. It was set in a circular shaft 1.60 m across cut through drift deposits of glacial clay and flints into the undisturbed Gault clay. The well lining was in two parts. Oak box-frames (of which two stages were seen) were set at the lower level, overlaid with a circular lining of drystone Kentish Ragstone, tightly packed into the clay edge of the shaft up to surface level (Figs. 45 and 55). The stone lining was 4.00 m deep. The stiff clay edges of the natural mean that this may have been constructed unsupported although this would have been a daunting task at such depth. A similar, albeit comparatively very shallow, box-frame and stone lining combination was used at Northchurch and dated by dendrochronology to AD 200-250 (Neal 1977, 14).

The upper box-frame of well 11010 was of relatively simple construction comprising cross halving joints securing each timber to the next (Plate 13). The timbers, sturdy oak planks between 0.05 and 0.10 m thick, were reused. Mortice sockets, one of which was angled through to the face/rear side (12212), were present in the short sides of three of the timbers, (Fig. 46). One of the timbers also had a rounded and chamfered end with an opposing chamfered squared end (12211). The timbers presumably derived from a structure although it is not readily clear what type or form of building this may have been. The surface of the underlying frame was also briefly exposed. It was less well-constructed, with simple butt joins, and also showed signs of being made from reused timbers; chamfered edges and ends were noted.

#### Votive Pit 10570

A curious pit and gully (10570) arrangement was positioned on the eastern 'exterior' side of the outer boundary ditch (10620) opposite the 14-post building (refer to Fig. 33 for general location). This was cut into the damp clay, silts and peaty soils infilling the shallow hollow (10690) at the base of the slope leading up to the primary enclosure. The unusual character and the specific placing of items in the base of the pit highlight the votive nature of this feature.

The pit (10547) was quite substantial, sub-circular in plan (2 m by 2.5 m at the surface) and flat-based with steep sides 1 m deep. A contemporary gully (12380), 0.7 m wide and 0.3 m deep with a sharp V-shaped profile at its most substantial point, ran from the north-eastern side of the pit before turning sharply back on itself to the south and beyond the edge of excavation (Fig. 47).

A complete small necked storage-jar of Pollard (1988) type 21 in Patch Grove fabric R68 with a stabbed cordon decoration around the neck and girth was placed centrally in the base of the pit (Fig. 48 vessel 146). This was crushed *in situ* but had contained a charred deposit which had become slightly dispersed within the primary fill. The pot was accompanied by a complete lower stone of a rotary quern of Lower Greensand (small find 10976), probably a product of the Folkestone production centre, two complete *imbrices* in red fabric 2815 and a large roughly shaped block of Greensand (Fig. 48). These had been carefully placed in the base and leaning against the side of the pit (Plate 14).

The primary deposit (12377) infilling the base of the pit and sealing the pot was a fine mottled silt and clay that had resulted from natural silting. After the objects had been placed in the pit this was left open to the elements and its position within the low lying hollow would have ensured that it collected and held water. Even during the excavation and despite extensive modern land drainage the pit held water and only drained over a period of several days in dry spells. In combination with the accompanying gully the pit may have been deliberately placed to allow water to drain into it and there may have been some significance attached to the way in which objects became immersed, possibly repeatedly. In this connection it is quite likely that the gully, the base of which sloped down slightly towards the pit, was intentionally arranged to drain water into the pit rather than away from it.

The charred remains from the pot consisted almost entirely of well sorted chaff fragments predominately of spelt wheat (*Triticum spelta*) with a small amount of barley (*Hordeum* sp.) and occasional oat, although this last is likely to have been an arable weed rather than the primary crop (Smith and Davis 2006, context 12377 sample 10398). Ritual deposition of functional querns, particularly in pits, has been identified on many Romano-British sites; these objects have a readily interpretable association with food preparation (Hill

1995, 131; Shaffrey 2003, 164). This symbolism would appear to be confirmed here by the association with a storage jar and the charred residue from the final stage of cereal processing. However, the role of the roof tile is less easy to interpret, although it could represent the home.

The primary fill and finds were sealed by a deliberate backfill (12347) consisting of mixed clay with charred remains incorporated into it. This only partly infilled the pit which remained open to a depth of 0.5 m, along with the gully. Eventually the pit and gully were levelled through natural silting (10548) although further activity, possibly of a similar votive or ritual nature, is suggested by the presence of further quantities of charred spelt wheat (*Triticum spelta*) chaff dispersed throughout the deposit (sample 10375). Alternatively this may just reflect the location of the feature adjacent to an area of crop processing, where waste material could have become incorporated into the fill quite easily.

The primary vessel is not a closely dateable form, having a date range between *c* AD 30-150. However, it may have been deposited at about the end of this period or possibly some time later. An assemblage of 22 sherds, 328 g, recovered from the upper silting fill levelling the pit included beaker sherds in the fine Upchurch fabric R16 and part of a flagon in fabric R17.1 dated 70-190 and 43-100 respectively. More significantly, it also included sherds in the coarse grey sandy fabric R73 dated to 150-270. The evidence is not conclusive but a date near the middle of the 2nd century seems most likely for the excavation of pit 10570, perhaps coinciding with the construction of the 14-post building (11250) associated with the agricultural production of the estate. The pit may therefore mark a type of foundation offering at this stage. This association seems to be emphasised by the physical position of the pit immediately opposite the building but separated from the 'functional' or working area by the boundary ditch (10620).

#### Trackway 12685 and the outer enclosure or boundaries

The trackway established in the previous period continued in use throughout the middle Roman period. Ruts were absent, despite the fact that they would have formed easily in the soft underlying clay, which may indicate that the trackway only received light traffic. Alternatively, the lack of ruts may reflect a high degree of maintenance, or the fact that the trackway became sealed relatively quickly by a layer of silt (11650), particularly across its lowest lying part, where a dark/grey black, relatively stone-free deposit covered the trackway and extended into the shallow hollow at its western end, also sealing the roughly surfaced crossing points here. This deposit was, at least in part, a water borne silt, emphasising the generally poorly drained character of the soils and the water collecting capacity of any undulations within the topography. A small group of 38 sherds (337 g) of mixed pottery, all with a general 2nd century to mid 3rd century date range, was recovered from the silt.

A more substantial ditch (10330) (Fig. 33) replaced the earlier ditch (10320) along the southern side of the trackway. This had a sharp V-shaped profile 1.4 m wide and 0.6 m deep at its western end, grading into a slightly shallower and rounder profile 0.8 m wide and 0.3 m deep to the east. It was clearly a direct replacement for and performed the same function as the earlier ditch, and was similarly filled with a slightly gleyed blue/grey clayey silt. As with the other ditches on the low lying ground near the trackway this is characteristic of water-deposited sediments and the presence of standing water within the ditch.

Despite the nature of the fills of 10320 and 10330, ditch 10320 in the previous period was interpreted primarily as a boundary rather than a drainage feature. That view is supported in this period by the placing of a further ditch (10620), perfectly straight and aligned NE-SW, running from the western end of ditch 10330. Ditch 10620 had the same dimensions, slightly varying profile and silt fill as the track-side ditch. The two features met with slightly rounded terminals. Significantly, ditch 10620 defined a secondary or outer south-eastern boundary to the villa area, enclosing the newly built 'agricultural' building (11250) and separating it from the low lying ground extending to the east. It thus reflects a similar principle in layout to that seen at large villa estates such as Gorhambury (Neal *et al.* 1990).

## 4.4.5 Middle Roman (c AD 120 to c AD 250) discussion

### **Boundaries**

The development of the site in the middle Roman period shows a pattern of elements of transformation and of continuity similar to that seen in the change between late Iron Age and early Roman periods. With regard to boundaries, the south-eastern side of the main enclosure remained the one constant feature. The associated temple structure was retained, at least for a time, and was approximately balanced by a new structure, the aisled building, framing the left hand side of the view from the front of the main domestic unit. The latter, a completely new building, was probably the primary component in the extended programme of construction undertaken in this period, associated with reconfiguration and expansion of the main settlement enclosure and also with the development of a new working area outside it and itself defined by further boundaries.

Once redefined at the beginning of the period the rear (north-western) boundary of the enclosure remained effectively unaltered until it finally fell out of use probably in the later 3rd century. The evolution of the south-eastern boundary remained more complex, one of its more curious features being the continued relocation of the principal entrance. Even in its ?final form as structure 10950 this was not exactly on the central axis of the villa house, although perhaps close enough not to have been a problem (on the assumption that an axial site layout was preferred, which seems to have been the case). A feature of the boundaries in this period

is the use of fences based on upright posts set in individual pits. This must have involved a considerable expenditure of effort and is perhaps for that reason not very commonly seen, although the technique was used in a similar way at Keston in period VI, dated to the 3rd century (eg Philp *et al.* 1991, 66-7). One effect of the reworking of the south-east boundary of the enclosure in this way was to produce a fence-line more nearly parallel to the frontage of the main villa house, but it is uncertain if this was intentional. The importance of this boundary and the (eventual) principal entrance through it was enhanced by the provision of a chalk surface in front of the gateway, which could have provided a striking visual effect upon approach.

The siting of the villa house is informative for interpretation of the boundaries of the principal enclosure in this period. The new building was set on the same axis as the protovilla, suggesting that this point had remained unchanged as a central focus. However, the boundary of the enclosure had clearly been extended to the north-east at or shortly after the start of this period. The creation of the internal post row boundary (11500) to the north of the villa building may have been significant for maintaining an impression that the building was centrally placed within the main enclosure, even though this had been enlarged. The projected location of the south-western boundary of the enclosure would have been on the break of the plateau slope on this side, as it was to the south-east. Its likely position in relation to the villa suggests that the building was centrally placed between this boundary and post row (11500) to the north-east, indicating that the south-western boundary position remained unchanged throughout both the previous and present periods. This is consistent with the topographical setting of the enclosure on the plateau and the evidence for the stationary (if complex) south-eastern boundary.

#### The villa house

The relative construction sequence of the north-west boundary and the new villa house is unknown, although the two were clearly closely related. The first stage of the villa construction process was the infilling of the rear boundary ditch associated with the proto-villa. The proto-villa itself, however, probably remained standing while the new house was under construction and need only have been demolished when the front corridor of the new house was erected. This could have happened at a late stage in the building programme by which time the main building could have been habitable. This spatial relationship is exactly the same at Boxmoor in Hertfordshire, although there the first building was burned 'perhaps to make way for the later house' (Neal 1977, 59), with the implication that these events were sequential. Such need not have been the case at Thurnham. The chronology of the two sequences is quite similar, the stone founded Period 2 house at Boxmoor being built 'probably during the Hadrianic-Antonine period' (ibid., 65), while a slightly earlier date (perhaps c AD

120) is preferred at Thurnham. A similar relative sequence is also seen at Gorhambury in the later 2nd century, where it was considered likely that the old (Period 8) house could have remained occupied while the new one was built (Neal *et al.* 1990, 57).

The dating evidence for the construction of the aisled building at Thurnham is not particularly good, but it seems likely that it was built after the new main house and was then followed, perhaps around the middle of the 2nd century or a little later, by the 14-post building, although the construction of the latter, a smaller building and entirely in timber, was probably rather more straightforward.

The plans of the main house and the aisled building are quite conventional. Combination of the evidence from the present excavation with the ground plan recovered in 1958 shows that the core of the primary building was surrounded by a symmetrical arrangement of rooms at each end of the building, joined at the rear by a range of slightly unequally-sized rooms. The overall size in this phase, 32 m x 14.8 m, is modest, but not unduly so. It is broadly comparable to buildings at Cobham, Sandwich and Lullingstone (period 1), for example, although much smaller than the early villa at Eccles, already mentioned in contrast to the proto-villa. The plan incorporates elements long recognised as forming a 'set' of rooms (set S5, Drury 1982, 295-298), the component here being rooms B-E, the latter interpreted by Drury (and J T Smith (1997, 49-50)) as a 'vestibule' or 'lobby' serving a principal room (D) with paired subsidiary rooms (B and C) on the other side. The formation of the core of a domestic unit using such a room set with an additional larger room at each end, as seen here at Thurnham, has several parallels amongst Romano-British villas, for example at Little Milton, Ditchley and probably Barton Court Farm, all in Oxfordshire and Boxmoor, Herts (Drury 1982, 295-8), while in Kent such an arrangement was incorporated into the Farningham II villa (ibid.; Meates 1973, 4). Apart from Barton Court Farm, all these examples may be assigned to the late 1st or early 2nd century (Drury 1982, 298).

The similarities between Thurnham and Boxmoor are particularly marked. Their central blocks, consisting of the same room 'set' (the 'vestibule' is to the right of the central room at Thurnham (as seen from the front of the building) and to the left at Boxmoor) with a larger room at each end, are respectively c 25.2 x 8 m and 26.2 x 8 m. Both had projecting two-room wings with their front walls linked by a corridor foundation. The principal difference between the two buildings is that the wing rooms at Boxmoor were wider and did not extend behind the rear of the main rooms - the back of the building being occupied by a single continuous corridor, while at Thurnham the rear 'corridor', subdivided from the beginning, ran between the rearward projecting wings in the same manner as the front corridor.

The significance in a domestic context of the room sets identified by Drury remains debatable, but he rejected (ibid., 299) the idea that they indicate the unit system of villa occupation as advocated by Smith (1978; 1997). Neither addressed in detail the question of

the function of the two smaller rooms (although Smith (1997, 50) again uses the term 'lobby' in this context), or considered the question of the relationship of any of these rooms to possible upper floors - a concept dismissed more or less out of hand by Smith (ibid., 128-9). At Thurnham the very solid construction of the core part of the building and its internal walls certainly indicate a more substantial superstructure for this part of the building than for the wings and corridors, and may suggest that it had an upper storey. It seems likely that the slighter outer foundations supported a lean-to style of construction with a tiled roof, effectively enveloping the core.

Comparisons with the foundations of standing and ruinous medieval buildings constructed with similar materials and techniques demonstrate that foundations of the size seen at Thurnham could easily have carried the weight and thrust of a building with an upper storey and a heavy roof (Neal 1996). Excavated Roman structures such as at Meonstoke and Redlands Farm, Stanwick show that two storeys could have been the norm for higher status buildings and only required moderate foundations for their support. The Stanwick building had walls 0.5 m thick raised to a gable top c 6.5 m high (Keevill 1996), while at Meonstoke the gable end had an approximate maximum height of 13 m on a 1 m deep foundation (King 1996).

It has been assumed here that whatever its height the superstructure of the building was of stone - probably principally of ragstone, but flint might also have been used. The assumption is borne out by the presence of a mortar bedding layer above the flint foundation material. It is worth noting, however, that the 2nd century building at Boxmoor was of cob (Neal 1977, 60) and the ?late 1st century building of Farningham II also had cob ('clay') walls (Meates 1973, 2-5), on foundations respectively of rammed chalk and flint, the latter not dissimilar to those at Thurnham, while 'clay' walls were also used in part of the Antonine villa at Lullingstone (Meates 1979, 61). At Farningham the existence of an upper storey was presumed, although there was no direct evidence for it (Meates 1973, 3). With regard to the outward appearance of the Thurnham villa it was noted above that the outer wall of the front corridor had a slightly deeper foundation than the other outer parts of the house. The fact that this was the most completely robbed part of the building suggests that this wall was built of better quality and larger stones than the other outer walls, consistent with the importance of the frontal aspect of the villa. Such stones would have been particularly desirable for reuse. The roof was covered in red tiles (fabric 2815) probably derived from a source nearer to London than the yellow Eccles tiles employed in the proto-villa (Betts 2006a).

The careful deepening of the foundations across the line of the earlier ditch demonstrates a reasonable level of structural understanding. However, this may not have been enough because wall 20442, between Rooms H and I at the north end of the building, was replaced. This occurrence is undated, but may have occurred from necessity rather than as a

result of a change in the plan of the building since the new wall (20019) was built directly alongside the earlier one. While it was almost in line with the north-west wall of the later Room V the correspondence is not exact, and the construction details were very different, so it is most unlikely that wall 20019 was related to Room V in any way. The rebuilding may possibly have been a consequence of subsidence, since wall 20442 effectively acted as a buttress for one of the main load bearing walls (20004), despite being built along the line of the backfilled proto-villa ditch.

The internal arrangements of the villa may not have matched its external appearance. There was limited evidence for painted plaster on the walls in some rooms, but no indication of solid floor surfaces or of heated rooms. Not even the probable main reception rooms appear to have had solid floors. Unless the pre-construction clay levelling layers had served as floors it seems that there were no subsequent deposits corresponding with the main phases of villa use. From this it has been inferred that the floors were raised ones, of timber. Possible support for this interpretation can be adduced from the lack of evidence for in situ plaster on the surviving wall fragments. If the putative wooden floors had been placed on joists set into the walls at or above the level of the first masonry course, plastering would have commenced at a slightly higher level and could not therefore have survived once these courses were removed. Nevertheless, the lack of significant evidence for decorative flooring and heating provides an interpretative dilemma, exacerbated by the lack of associated stratified deposits in any of the rooms, with the exception of the late smithy deposits in Room F that reflect a secondary use. Identification of the primary use of rooms is therefore dependent upon the interpretation of the ground plan. Little of certainty can be said here further to the discussion of room 'sets' above. The central room (D) may have been the principal reception room and the narrow corridor (E) separating this from the large Room F seems a likely place for a stairwell to the upper storey. Beyond this, evidence even of how people moved around the building is lacking as thresholds in the foundations and basal wall courses are absent.

The extensions to the building in Phase 2 of the Middle Roman Period, possibly all made in the last quarter of the 2nd century, were relatively modest in scale, but suggest responses either to changing circumstances and/or to developing trends in villa architecture. Either way the investment suggests continuing high status domestic activity at Thurnham at this time. It is possible that the addition of Room V at the north-east corner of the villa should be seen in the context of developments in social practice, although analysis, for example of seasonal dining rooms in a Romano-British context, has tended to focus upon rooms with mosaic pavements (Cosh 2001). The spatial relationship of Rooms V and W strongly suggests that they were directly linked - perhaps involving the removal at least of parts of the original north-east and south-east walls of Room H. There is, however, no direct evidence for this, nor any hint that the opus signinum floor provided in Rooms W and (very probably) V,

contrasting with the evidence from Phase 1 of the villa, extended into Room H. The apsidal Room W is too small (with maximum internal dimensions of c 4 m x 2 m) to have functioned meaningfully in its own right, but could have been a significant feature as part of a larger ensemble.

The bath-house has been discussed above and little can be added either to Pirie's account or Detsicas's reinterpretation. Given improved understanding of the overall plan of the villa house it seems most logical that the heated rooms should have been stoked from the west end, and it might be suggested that the small west end room (R) formed, or more likely was connected to, a praefurnium, thus reversing the sequence suggested by Detsicas. This would have two advantages, first that the bath suite was entered from within the main house, either from Room A or Room N, and second that it was stoked from outside rather than inside the building. The presence of the opus signinum floor in Room R, and the width of the opening between it and Room Q, make it most unlikely that Room R can itself have been the praefurnium. Pirie's account (1960, 162) does state, however, that there was 'no sign of an entrance along the west wall' [of Room R]. This ought to preclude the presence of additional features to further west but it is also clear that plough truncation was fairly extensive here as the opus signinum floor was 'immediately below the topsoil' (ibid., 164). The working arrangement of the bath suite therefore remains unclear. Detailed interpretation of it is greatly hindered by the fact that supports for raised floors and other ceramic components of the heating system appear to have been completely stripped out of these rooms. This does raise the question of the absence of evidence for heated rooms in the main house - could this have been comprehensively removed in the same way? The question is unanswerable, but on balance the evidence is best taken at face value, whatever its implications for the character of domestic occupation within the villa.

In the same way that the replacement of wall 20442 at the north-east end of the building might have been a consequence of subsidence there, it is possible that the construction of the bath-house range at the south-west end over the foundations of the primary phase of the villa, rather than as an addition to the existing footprint, might suggest that this part of structure had to be demolished and rebuilt, potentially because of subsidence into the underlying early Roman ditch (20400). The fact that the bath-house probably incorporated a standing part of the existing building (Room N) along the frontage that had not been built over the line of the earlier boundary ditch might also support this suggestion.

The bath-house was one of the few areas of the villa to produce evidence for finishing, in the form of painted wall plaster, the use of which may have been quite restricted. As in the proto-villa there is a total lack of evidence for glazed windows, and a single iron slide key (small find 10999) is the only indication of the concern with security often seen on villa sites although this was found in association with the aisled building and not the villa.

#### *The aisled building*

The aisled building, like the main villa house, was in many respects a 'typical' building. In plan a simple seven bay structure, it lies towards the lower end of the size range for such buildings (cf eg Morris 1979, figs. 35-41). In overall size and proportions it is broadly comparable, for example, to buildings such as Castlefield (Andover) and Clanville 1, both in Hampshire (ibid.), and possibly Building XII.3 at The Beeches, Cirencester (McWhirr 1986, 71-77), although the latter, an entirely 4th century building, was more subdivided and its very interpretation as an aisled building has been doubted (Roskams 1986). Other approximate comparisons include the simple Barns 1 and 3 at Orton Hall Farm, respectively *c* 25.2 x 13 m and 21.4 x 11 m externally, the latter dimensions excluding an added room at the west end (Mackreth 1996, 55-62, 66). The single subdivision at Thurnham, separating the north-west end bay from the rest of the building with no further elaboration of the plan, is surprisingly hard to find parallels for, although Orton Hall Farm Barn 3 had a partition between the nave posts separating off the two easternmost bays (ibid., 60).

In contrast with the simple plan is the evidence for prefabrication. The variation in the depths of the post-pits to compensate for the fall in ground level strongly suggests that at the very least the principal posts were brought to the site already cut to a single length, and might indicate that they arrived as parts of pre-formed trusses. The arrival at site of timber already cut to length, and the existence of kit frames, has been suggested on the evidence of a well preserved mid 2nd century timber building excavated on the Southwark waterfront, London (Brigham *et al.* 1995). At Thurnham the setting of the post bases at the same level demonstrates a good understanding of the structural forces exerted by a large building and ensured that the weight of the roof would have been evenly distributed across all twelve posts.

Mackreth (ibid., 67-70) has provided a good recent discussion of the issues involved in understanding the structure of these buildings. His view with regard to Orton Hall Farm was that the traditional 'basilican' reconstruction was not sustainable and should be replaced with a more simple form, probably with a hipped roof. In contrast, work at Meonstoke (King 1996) has reasserted the validity of the basilican form, at least for that building. This could have been followed by the building at Thurnham, where the demonstrable difference between the side and end walls argues in favour of the presence of stone built gable ends, which possibly incorporated tile string courses. The well-set aisle posts were substantial and could have allowed for a raised nave area and clerestory consistent with the larger gable. Such an arrangement at Meonstoke was accompanied by different roof pitches with a steep pitch over the nave and a projected shallower pitch for the aisles, reflected in the material remains of the roof with the use of *tegulae* and *imbrices* likely to have been restricted to the aisles and stone tiles with peg holes on the steep roof (King 1996, 65-66). At Thurnham only ceramic tile was

present across the whole site. Roofs of *tegulae* and *imbrices* would have been of relatively shallow pitch, although lighter wooden shingles or thatch could have been used on steeper roofs. The rather fragile construction of the Southwark building was consistent with some evidence that it was roofed with oak shingles (Brigham *et al.* 1995, 22-3, 47), so the potential use of such material should not be ruled out. Barn 1, at Orton Hall Farm, Peterborough, of similar size to the Thurnham building, has been interpreted as having a single span roof using thatch (Mackreth 1996, 69). However, the Thurnham structure may have been more substantial, with much consideration given to the forces exerted by the building. The size of the aisle posts and the deep gable wall foundations suggest that the overall form of the building was closer to that of Meonstoke than Orton Hall Farm.

# The 14-post building

The 14-post building probably represented a rather different building tradition. Superficially similar to the aisled building, not least in the fact that its plan dimensions are almost exactly the same as the area defined by the nave arcade posts of the latter, it is in fact quite different. The characteristics of the type are carefully paired post settings (as in most aisled buildings), but these appear to define the line of the main walls, with no aisles. In addition one or two post settings of similar size to those in the long sides are found in the short sides. Excavated buildings clearly conforming to this type appear to be few and are possibly confined to south-eastern Britain. Four comparable buildings are known at three other sites in the region and all are of mid to late 2nd century construction (Booth et al. forthcoming). These comprise Building D at Westhawk Farm, Ashford (ibid.), Building 550 at Bower Road, Smeeth (Diez 2006a) and two different examples, Centre Timber Building and North Timber Building, at the villa site at Warbank, Keston (Philp et al. 1991, 59-61, 81-87), all in historic Kent (Keston is now in the London Borough of Bromley). The Thurnham example is a significant addition to this group, having preserved in situ floor surfaces and lacking the extensive truncation of the upper deposits seen at some of the other sites. Based upon the posthole arrangement the building covers a little over 100 sq m, which is only slightly smaller than the example at Bower Road but almost identical to Westhawk Farm and the Centre Timber Building at Keston. Interestingly the floor surface at Thurnham extended beyond the south-east end wall and up to the edge of the eaves drip gully to the north-east. There is no evidence that the walls extended this far (closely set drainage gullies were a feature of the buildings both at Bower Road and Westhawk Farm), and it is quite likely that the walls comprised planking attached to the posts in a manner similar to that of the timber building excavated at Southwark (Brigham et al. 1995:31-32). A scatter of iron nails along the gully and from the floor surface might indicate that the walls were attached in this way rather than being of (for example) wattle and daub construction. If so, the floor surface extending up

to the drainage gully may have been an extra means of draining the external surface adjacent to the wall. The extension of the cobbles beyond the south-east gable end would also have created an external yard-like surface.

The 14-post building was probably gable ended, although it has been tentatively suggested that the centrally positioned gable post(s) might reflect a hipped roof construction (Booth *et al.* forthcoming). The distance of drainage ditch 11090 from the north-west wall of the building shows, however, that this feature was arranged only to cope with water draining from the downslope surface and not directly off the roof. The nature of the roofing material remains uncertain. A moderate amount of roof tile was recovered from the vicinity of the building and the size of the posts suggests that the structure was capable of carrying a tiled roof, but consideration of the contexts of this material suggests that much of it may have been recycled for other purposes. Other examples of this building plan (fairly certainly those at Bower Road and Westhawk Farm) may have been roofed with organic material (shingles or thatch) and these could have been used at Thurnham as well.

Several lines of evidence suggest the functional interpretation of this building. Its architectural character and position are particularly significant. It can be no coincidence that the building was located close to the main enclosure but below the direct line of sight from the villa house, and the likely character of its construction may indicate that it had a primarily agricultural function, although some of the finds suggest that there was also a domestic component to its use, even if this did not reflect the intended purpose of the building at the time of its construction. The view that the domestic element was of relatively minor importance is reinforced by the lack of domestic hearths or ovens within the building and by the utilitarian appearance of the surfaces and drains. The fills of the drainage ditch and eaves gully produced an assemblage of charred plant remains comprising moderate amounts of cereal grains, chaff and weed seeds. These were recovered in equal quantities from around the drainage ditch and gully, although some of the material from the north-west terminal of the eaves gully may have been intrusive since occurrences of germinated spelt (Triticum spelta) there are more consistent with material in the larger samples recovered from the corn drier later built directly over this gully. However, the general appearance of the assemblage is consistent with the other samples and suggests that significant cereal processing was being undertaken in the immediate vicinity while the building was standing. That the building was associated with these activities, and that it was used for the storage of processed cereals, is quite likely. The comparable building at Bower Road produced convincing evidence of a similar function in relation to the storage of processed cereals, although the wider context is less clear (Diez 2006a). Again there was a lack of material suggesting significant domestic activity. Agricultural functions are clearly implied by the context of the Keston buildings.

## Religious activity

The evidence for religious activity in this period is varied. The temple was initially retained but was apparently demolished at some time in the second half of the 2nd century, for reasons which are unknown. One effect of the demolition would have been to broaden the view from the front of the main villa house, but it seems improbable that this would have been an overriding consideration, although it is conceivable that the symmetrical aspect of the villa layout was restored by the provision of a further building immediately south-west of the location occupied by the temple. As far as is known the large upstanding post feature still survived, although its precise function remains speculative. Further removed from the main domestic complex there was more evidence of religious activity. A small wayside shrine is suggested by the group of finds associated with an outer boundary ditch beyond the 14-post building. Its location was surely significant - the place for deposition of offerings on leaving or entering the defined area associated with the villa. The relatively small numbers of objects recovered may disguise the fact that organic offerings, such as the flowers commonly seen at modern shrines, were routinely made. The statue base might imply a dedication to a particular deity, but this need not imply that the shrine was specific to that individual, evidence for multiple dedications being common at many Romano-British shrines.

If the wayside shrine (speculatively) suggests concern with journeys, the contents of pit 10570, and its location close to the 14-post structure (but notably separated from it by a boundary ditch) suggest a fairly direct association with the agricultural activities focused in this part of the site. As this feature appears to have been dug at about the same time as the agricultural building was constructed the contents of the pit may have been intended as a foundation deposit to ensure the success of the crop and cereal production.

The occurrence of a pot full of cereal chaff has a striking parallel in the roadside settlement at Wilcote, Oxfordshire, where a vessel filled with spelt chaff was recovered from a 2nd-3rd century feature interpreted as a clay quarry pit (Barber *et al.* 2004, 263; Pelling 2004, 331). This and associated features were also notable for containing 'an assemblage of miniature, repaired, reworked and deliberately damaged copper-alloy and iron objects, with probable votive associations' (Barber *et al.* 2004, 264). The significance of the association of this material and the chaff-filled pot was not discussed, however.

## Economy and status

The construction of the aisled building and in particular the provision of the 14-post building and associated features marks the first appearance of installations directly related to the agricultural character of the site. Presumably such installations had existed in the protovilla period but either did not survive later developments or lay outside the limits of the excavation. Charred deposits from the aisled building included both grains (mostly

indeterminate, but probably mainly of wheat) and chaff, the former concentrated in the end room and the latter in samples from the main part of the building, while the deposits from the votive pit adjacent to the 14-post building were completely dominated by chaff. Spelt wheat is likely to have been dominant, but barley and oats (the latter considered to be a weed rather than a crop) were also present. The animal bone assemblages for this period were very poor. The general picture based on the limited data for minimum numbers of individuals suggests that cattle and sheep had attained numerical parity, compared to the previous period in which sheep were more common, but the numbers are so low that even this general conclusion must be treated with caution.

The relative poverty of the data with regard to agriculture makes wider consideration of the economic development of the site in this period difficult. It is possible, however, that the new aisled and 14-post buildings, and the provision of enclosure boundaries associated with the latter, reflected an increase in the scale of arable production from about the mid 2nd century. Whether this represented a change of emphasis at the expense of pastoralism, or overall expansion of the capacity of the estate, is impossible to say.

Overall assessment of the character of Thurnham in this period rests very largely with the evidence of the structures themselves, discussed above, and what this suggests about the status and pretensions of the occupants of the site. These buildings did not generally produce finds assemblages that allow clear characterisation of the site as a whole, or of variation within it, in the way that was possible for the early Roman period.

The impression given by the structures is one of steady development with, as already indicated, aspects of continuity (represented by the survival of the temple and perhaps of the putative early bath-house) alongside developments in the principal domestic accommodation and agricultural buildings. A programme of demolition - proto-villa, temple, early bath-house - and construction - stone villa, aisled building, extensions to stone villa, 14-post building (the relative sequence of these last two is not certain) - may have extended over a period of some 60-70 years, although presumably with breaks in the sequence. At the same time, physical expansion of the area containing buildings, and the definition of at least parts of this increased area with ditched enclosure boundaries, is consistent with the general impression of aggrandisement conveyed by the buildings themselves. Thereafter there were no significant discernible developments that represented enhancement rather than modification of the main structures of the site, or of the boundaries that enclosed them. Because of the limit on the area of excavation it is impossible to be certain if the L-shaped arrangement of principal house and aisled building which prevailed after about the middle of the 2nd century formed the major elements within the principal enclosure, or whether another building or buildings replaced the temple. An arrangement, not necessarily strictly symmetrical, with flanking buildings on both sides of the (?)principal house is considerably more common than a single L-shaped plan;

examples of various dates incorporating one or more aisled buildings include Hambleden (Cocks 1921), Mansfield Woodhouse (Oswald 1949), Sparsholt (Johnston 1978, 80-1), Stroud (Williams 1909) and Winterton (Stead 1976). The gable ends of aisled buildings like the Thurnham example, and certainly like the Meonstoke example, thought to have been a component of a larger building ensemble (King 1996, 67-8), would have been a particularly striking part of the visual effect of the approach to sites with this types of layout.

The finds do not include material of notably high status. A moderate quantity of samian ware from fills of the rear boundary ditch (10610) was contemporary with phase 1 and the early part of phase 2 of the middle Roman period but hardly represents conspicuous consumption. Other aspects of the pottery assemblage are consistent with this. More significantly, glass vessels were also present, but were not particularly numerous. Metal and other small objects are insufficiently numerous to allow close characterisation of the nature of occupation, and Cool (in Booth *et al.* 2006) suggests that the inhabitants of the masonry villa complex 'had a more impoverished lifestyle than those of the proto-villa'. As in the previous period, objects of appropriate date are sometimes unstratified or come from significantly later contexts. A single military object, a horse pendant, falls into this class, as does one of two finger rings, with an enamelled bezel. The only other ring from the site, with an intaglio carrying a device of parrot and grapes, was associated with the 14-post building (see above). The significance of this association is unknown.

# 4.4.6 Late Roman (AD 250 to AD 420)

Occupation of the villa underwent dramatic changes during this period. Most notable was the relative lack of features that originated within this period. All of the existing boundaries were allowed to infill by silting or, in the case of upstanding fence boundaries, to decay *in situ* either by the end of the previous period or early within this one. These boundaries were not replaced in any obvious form and the cumulative evidence suggests that they were not physically maintained at all.

This pattern was repeated in the principal dwellings, the villa and aisled building. The villa bath-house (20515) went out of use and was probably demolished in the mid to late 3rd century and one of the main rooms (20000, Room F) of the ground floor was converted into a small scale iron smithy, possibly recycling scrap material from around the estate (Fig. 49). To the rear of the villa an infant (10640) was inhumed in a coffin set in a stone-lined grave, also in the mid to late 3rd century. However, some evidence of domestic occupation in the later 4th century is indicated by the creation of a sunken oven (20036) in Room B of the villa. This was backfilled in the late 4th or possibly even as late as the early 5th century.

Occupation of any kind within the aisled building ceased early in this period at the latest. The only pottery assemblages dated to within this period were those recovered from the fills of the post pipes, showing that the building had ceased to stand by the end of the 3rd century. Activity in the vicinity of the building was evidenced by an accumulation of silty soil filling the hollow and sealing the surfacing around the well (12370) previously associated with the building. This produced coins and pottery dated into the late 4th century. A mixed soil (12725) immediately south-east of the aisled building also produced 4th century coins and pottery.

The main focus of activity was away from the former principal dwellings and around the 14-post building (11250) (Fig. 50). This building was either altered or perhaps demolished in the late 3rd century as a corn drier (10340), constructed of rubble from the bath house, replaced the north-west end and utilised the cobbled floor surface of the former building. The corn drier functioned throughout the 4th century, before collapsing and sealing the final use deposits *in situ*. Immediately north of this a rectangular area was terraced into the slope and surfaced with flint nodules (11220). This appears to have been directly linked to the construction of the corn drier and may have been a loading/unloading area with cart ruts (12695 and 12700) penetrating the surface. This area was covered with a dark silty soil (11030) accumulation which produced a pottery assemblage spanning the 4th century.

East of the corn drier the well (11010) also remained in use. This produced an excellent sequence of waterlogged fills providing detail on the surrounding landscape, but these deposits are poorly dated and it is not clear when the feature was finally infilled. However, the infill sequence was of an unusual kind and included a variety of wild animals as well as rubble and tree branches.

#### The villa building and smithy 20000

As noted in the previous period, the bath-house range (20515) had gone out of use by the mid to late 3rd century, with destruction debris sealing the floor surfaces (Pirie 1960, 165). There appears to have been no attempt to maintain this part of the villa. The fact that a central main room was converted to a smithy implies that a significant change in the status and function of the site occurred at this time.

The smithy occupied the large Room F at the north-east end of the core block of the building and was represented by significant *in situ* remains of hearths and associated slag and fuel debris (Fig. 51). All the hearths and associated deposits directly overlay the early 2nd century clay levelling layers that infilled the boundary ditch (20400) before the construction of the stone villa building (20510). The lack of any intervening deposits or pottery from the occupation phases before the existence of the smithy shows that the primary floor surface must have been removed to accommodate the hearths. The complete absence of any flooring

materials or even bedding deposits for these suggests that the primary floor was constructed of raised wooden planking (see above). This would also explain the lack of any significant post-construction deposits within the other rooms, which survived to the same level as the deposits in the smithy room. Some truncation of the uppermost levels of the occupation sequence within the villa cannot be excluded, but this was clearly limited in the modern period (more than might have been expected), as is shown by the comparison of the evidence from the 1933 and current excavations (see above).

The main focus of the metal working activity was towards the centre of Room F where a series of reddened patches and ash deposits identify the main hearths. The largest concentration of heat affected clay and silt was discoloured to shades of orange, pink, red and purple (20096) relating to successive hearths and ash deposits. At the western end of this a collection of tufa blocks and flue tiles (20115) are likely to represent the base of a raised hearth (Keys in Booth *et al.* 2006). A ground level hearth of distinct reddened clay distinguishable within the 20096 sequence of deposits was positioned next to this and a fine light grey ash layer (20095) extended southwards from between the two. At the eastern end a collection of *imbrices* neatly arranged side by side with fragments of *tegulae* (20094) was covered by a mortar deposit (20073) which had been scorched red in places. This was almost certainly the base of another raised hearth. These hearths appear to have been principally used for high temperature welding; a distinct concentration of slag spheres was noted from adjacent samples of metal working debris (Keys in Booth *et al.* 2006).

In contrast to the welding area at the centre of the room a large hearth (20098), represented by a scorched red and purple area over 1.0 m across positioned centrally against the southern wall, was used exclusively for more typical secondary smithing processes. Surrounding hammerscale deposits identify the probable position of an anvil between this and an adjacent small hearth (20141). The latter was the best-defined of the hearth/furnace bases, being a small, circular, flat based and vertical sided pit 0.2 m deep and 0.4 m across, with a shallow sloping inlet on its western edge (Fig. 51 section 10372). The clay edges and base were fired red with an oak charcoal deposit (20139) *in situ* across the base. Morphologically this appears to be a characteristic hearth or furnace base with the air source provided from the sloping inlet. However, the hearth lacked the typical slag remains that would be expected, although cinder, fuel ash slag and hammerscale were all present in the upper fill. The hearth may have been short lived and/or cleared out before the deposition of secondary fills.

Limited quantities of hammerscale suggest that another anvil was positioned north-west of hearth 20098. A 0.45 m diameter circular pit (20146), vertical sided and with a flat base 0.18 m deep, was located here (Fig. 51 section 10378). This may represent a setting for a large tree stump style anvil and would have been ideally placed close to the hearth, allowing the smith to minimise heat loss while turning between the anvil and the hearth.

An additional ground level hearth (20097) with a scorched red silt clay base and fine light grey ash *in situ* above was located towards the north-east side of the room. This was also ideally placed to allow the smith to pivot between the hearth and an anvil which was probably in the centre of the room. The hearth was set upon a localised area of flint nodules that had been utilised as a surface (20109) but had originally formed part of the early 2nd century infill of the boundary ditch (20400).

The overall scale of the smithing operation was relatively small despite the number of hearths created and used. The quantities of slags and debris resulting from smithing were low, although the larger items, such as the hearth bases that are generally absent from the assemblage, are likely to have been removed periodically from the room. A small concentration of twisted and bent nails and other iron scrap was recovered, particularly from the latest levels of the smithy sequence, and could indicate the collection of scrap iron from surrounding buildings for recycling. This is consistent with the hammerscale and welding evidence which suggests that the smithy was producing items from small or existing iron pieces. Such scrap would have been readily available on site.

A moderate sized assemblage of 472 sherds (3570 g) of pottery was retrieved from all the excavated contexts of the smithy including a brown silty soil accumulation (20058) that represents the final evidence of use in this room and overlay many of the hearths. The fabrics are dominated (71% by count) by products from the Thameside kilns of North Kent and include a necked-jar in Pollard's Class GFXVI dated 250 to 300 (Pollard 1983, fig. 15 no. 70) and a developed beaded-and-flanged bowl of Monaghan Class 5A5 dated 240/70 to 370 both in the BB2 fabric R14. Late Roman grog-tempered wares in fabrics LR1 and LR1.1 were also present and include fresh sherds from two everted-rim jars of Lyne (1994) type 7A1 dated 270 to 300 (Fig. 51 vessels 101 and 102). Several other vessels in some of the minority fabrics provide a similar date range and show that the smithy was operating in the later part of the 3rd century. Four barbarous radiates (small finds 10800, 10814, 10836 and 10844) recovered from the working levels substantiate the date range of the pottery (see Table 7 below and Fig. 49 for the 3rd century coin list and distribution). Two further radiates of Tetricus I, dated 270 to 273, (small finds 10112 and 10113) were recovered from the base of the ploughsoil directly over the smithy whereas only two other barbarous radiates (small finds 10178 and 10997) were recovered from the site beyond the confines of this room. This clearly points to a late 3rd century focus on the smithy. The reuse of tufa and voussoir tile as a hearth base (20115) also corresponds well with the dated collapse of the bath house range where these materials are most likely to have originated.

Table 7: Late 3rd century coin list

Small Find Number	Coin Identification	Date
10112	Radiate ('antoninianus'). Tetricus I.	?AD 271-272
(recovered from the base of	Obv: IMP C G P ESV T[ETRI]CVS AVG.	
the ploughsoil over the smithy - not shown on figure 49)	Rev: V]ICTOR[IA AVG. Victoria standing left.	
10113	Radiate, ?irregular. Tetricus I.	?AD 270-273
(recovered from the base of	Obv: IMP C TETRICVS P F [AVG].	
the ploughsoil over the smithy - not shown on figure 49)	Rev: SA[LVS AVGG. Salus standing left.	
10178	Barbarous radiate. Very poor condition.	c AD 270-295
10800	Barbarous radiate.	c AD 270-295
	Rev: SPES[, Spes standing left.	
10814	Barbarous radiate.	c AD 270-295
10836	Barbarous radiate.	c AD 270-295
	Obv: poss TETR]ICVS AVG.	
	Rev: Figure standing left.	
10844	Barbarous radiate.	c AD 270-295
	Rev: Sol.	
10997	?Barbarous radiate.	c AD 270-295

Whilst smithing was clearly a major activity within this room, other activities may also have been focussed here. Charred plant remains in a highly processed state were present in moderate quantities, both in the ash directly associated with the hearths and in the soil layer (20058) sealing these. The grains were of spelt (Triticum spelta) and barley (Hordeum sp.) with only small quantities of chaff and some of the smaller weed seeds present in very small quantities. Sloe (Prunus spinosa) and garden pea (Pisum sativum) were also recovered from layer 20058 (from a sample only examined in the assessment). The lack of chaff and weed seeds makes it unlikely that these deposits resulted from the use of processing waste as a fuel source for the hearths. A varied animal bone assemblage (238 fragments, 2.3 kg) was also present, containing remains of the major domestic species along with dog, red deer and hare. Butchery and carnivore gnawing marks were present on several fragments suggesting that this was domestic waste left lying around. This in turn may suggest that the users were either careless in discarding waste or that the room was only occasionally used. Interestingly a concentration of small mammal bones from the soil layer (20058) could possibly have resulted from owls using the room and dropping their pellets here (Kitch, in Hamilton-Dyer and Kitch 2006). This would only have happened if they were not subject to frequent human disturbance.

The smithy was probably a relatively short lived feature with the pottery and coin dates clustering within the late 3rd century. Its use may have extended into the 4th century as two Beata Tranquillitas AE2 coins (small finds 10213 and 10214) minted in London and dated 323 to 324 were recovered from the sealing soil layer (20058). These were in very good condition and are unlikely to have been in circulation long prior to deposition. Despite the use of the room as a smithy, it appears to have been in reasonable standing order. The surface of the overlying soil layer (20058) produced many fragments of plain white-painted plaster within it, including one large block (20072) over 1.0 m by 0.8 m across lying face down (note that layers 20058 and 20072 post date the smithy hearths and are not indicated on Fig. 51). Clearly some of the more delicate elements of the building were present into the 4th century.

The only feature and deposits to date from the later part of the 4th century within the villa was a single sunken oven (20036) (Fig. 52). This was constructed within the small square Room B (20030) within the original core of the stone villa building (20510). As elsewhere within the villa, there were no deposits present above the early 2nd century levelling clays that related to the primary use of the room although a stone layer (20081) sealing the top of the earlier ditch infills may have been utilised as a surface in the same way as similar deposits within the smithy room. The oven was oval in plan, 1.9 m long by 1.6 m wide and sunk 0.55 m below the surface of the clay levelling layers. The absence from the room of any deposits or finds of similar date to those within the oven itself indicates that the contemporary occupation level may have been truncated and removed at a later date. However, as noted above, the survival of the smithy deposits at similar levels and in similar physical conditions suggests most of the rooms had boarded floors. The survival of these into the 4th century could explain the general absence of late deposits within the building.

The oven is likely to have had a fired clay dome; 37 fragments of grey fired clay (117 g) recovered from the upper backfill (20037) probably reflect this structure. Numerous fragments of reused roof and flue tiles with mortar on their broken edges were also recovered from both the upper and the underlying main backfill deposit (20067), together with frequent mortar inclusions and pieces of Kentish ragstone up to 0.30 m by 0.15 m by 0.10 m in size, some of which showed signs of scorching. The concentration of the ragstone rubble around the edges of the feature suggests that it possibly formed part of the structure in a similar way to the surviving stone course of the ground level oven (15280) within the aisled building. Alternatively, the stones just represent building debris from the villa itself, subsequently burnt.

An assemblage of 88 sherds (1098 g) of pottery was recovered from the backfills (20037 and 20067) of the oven derived from comparatively few vessels (Fig. 52 pottery). These included a beaded-and-flanged bowl in grog-tempered fabric LR1 (vessel 111) dated c 370 to 420. Other 4th century products were represented by vessels in the Thameside sandy

grey fabric LR2.3, Alice Holt/Farnham fabric LR5 and Portchester D/Overwey fabric LR6 (vessels. 114, 115, 116). Fine wares included two Oxfordshire red colour-coated bowls of Young (1977) types C51 and C79 dated 240 to 400 and 340 to 400. An Oxfordshire white-slipped mortarium sherd and a rim fragment in Much Hadham oxidised fabric LR13 might be residual on the basis of the small sherd sizes.

This assemblage clearly dates the backfilling to after 370, and the presence of two tiny convex-sided deep dishes in the local grog-tempered fabrics LR1 and LR1.1 and an equally tiny hook-rim jar in the Alice Holt fabric LR5 (vessel nos. 112, 113 and 115) could be indicative of an early 5th century date. Such small poorly finished vessels are often noted elsewhere as being characteristic of the latest Roman/sub-Roman assemblages in south-eastern Britain (Lyne 2006). Their presence suggests that the oven was contemporary with the late 4th and early 5th century activity focused around the corn drier.

Charred plant remains were well preserved in the oven and, in contrast with the corn drier evidence, these were mixed cereals that had been finely sorted with very little chaff or weed seeds remaining. Hulled barley (*Hordeum* sp.) was most common amongst the identifiable remains with smaller quantities of spelt (*Triticum spelta*) and occasional items of emmer (*Triticum dicoccum*) and free-threshing wheat (*Triticum aestivum*) present. The edible large seeded vetch/garden pea (*Vicia* sp./*Pisum sativum*) was also noted in the charcoal basal fill (20071) related to the final firing of the oven. None of the cereals showed signs of germination before charring. The contrast with the corn drier evidence is again marked in this respect. The material from the oven reflects a domestic assemblage in which the cereals were fully processed and useable items.

A small group of animal bone, 60 fragments, 1.3 kg, consisted mostly of cattle, with some butchery marks evident. A horn core and a red deer antler fragment were also incorporated into the backfill and could represent activities other than cooking within the villa. The cereal evidence and faunal remains indicate domestic use, if not occupation, of the villa up to the end of this period. However, the lack of evidence for the state of the structure at this point and later means that it is not clear if this activity utilised convenient remaining shelter or a fully functioning building. Tantalisingly, a single small fragment of 4th century window glass (small find 10651) from the surface of pit 12735 suggests that at least part of the building remained standing and was maintained in a manner appropriate for a high status building, although this deposit is likely to date from the earlier part of the 4th century.

#### **Burial** 10640

In contrast with the otherwise limited evidence for high status activity associated with the villa in this period was a small stone lined grave containing a 4-8 month infant positioned to the rear of the villa building roughly parallel to the rear boundary (see Fig. 49 for location and

Fig. 53 for detail). Considerable effort had been lavished upon the burial with the small rectangular grave neatly lined with Kentish Ragstone blocks (10628). The child was placed in a wooden coffin represented *in situ* by a faint but noticeable stain and six nails in the base along the edges of the stone lining. A single large block of ragstone was used to cap the grave at its north-eastern end, creating a canopy over the head and upper torso part of the body. Accompanying the child were two complete vessels; a tiny rouletted beaker of Monaghan Class 2C2 in a rough grey Thameside fabric R73 (vessel 118, context 10629) and a straight-sided dish of type 5E1.5 in polished black BB2 fabric R14 (vessel 119, context 10631) with a star graffito on its side. The date ranges of these vessels (c AD 250 to 280 and 170-300 respectively) suggest that this was a late 3rd century interment. The vessels lay above the right tibia, fibula and foot bones with the beaker standing upright within and towards one side of the dish. They were presumably placed within rather than on top of the coffin. The dish may have been ritually damaged before deposition as a small portion of it was missing.

Other items may have been placed within the coffin, but their provenance and interpretation is less clear. Two translucent dark blue annular glass beads with diameters of less than 3 mm were recovered from the sample of the grave backfill (context 10634) around the skeleton and could represent a jewellery item, although this was not identified during the careful excavation. They may be incidental inclusions in the backfill but given the lack of similar items across the site, this seems unlikely. Clearly identified within the grave but without parallel is the presence of a short fragment of rib bone from a large mammal, probably cattle. This was placed or laid flat in the base of the grave/coffin alongside the skull of the child. It appears to have been purposefully shaped, with rounded ends, but the soil conditions were not favourable to preservation and it had become pitted, soft and fragmented prior to illustration, making it unclear if the shaping was deliberate. Its size, shape, material and association with the child leads to the suggestion that it may have been a teething tool, although direct Roman comparisons for this are unknown. Teething typically starts between the ages of 4 and 7 months and bone is considered a suitable material for this, being used historically, along with ivory, for teething rings and rattles. A worked flint was placed alongside the bone although it is less clear if this was an incidental or curated item.

## *The aisled building*

Occupation within the aisled building had ceased by the end of the previous period. The only hint of any activity within this period derives from a moderate assemblage of pottery, 161 sherds (1775 g), recovered from the post pipe silts, of which 7% by count post dated AD 270 and perhaps indicate activity in the immediate vicinity into the 4th century. Grog-tempered fabrics and grey sandy Thameside products dominate the latest part of the assemblage, as elsewhere on the site, and support the view that occupation at this time was generally of

relatively low status. The assemblage as a whole also very clearly demonstrates that the building was no longer standing by the end of 3rd century.

No distinct demolition or collapse deposits were present within or around the building, with the exception of a small area of tile and mortar within the end domestic room (15290) sealing the lower silting deposits. This in itself does not demonstrate how the building ended its life but it seems probable that any useful material would have been removed from site and reused. Several of the post pipes show that the main structural posts were allowed to rot *in situ*; frequent fine mortar fragments were incorporated into the silts. The building may have been simply left to decay, but it is possible that the main posts were sawn off above ground level and removed for reuse.

Preserved soil horizons (12725) producing coins and pottery of 4th century date were present immediately north-west and south-east of the building, clearly indicating activity here (see Fig. 49). The presence of material of this date in the post pipes and at either end of the building perhaps suggests that contemporary deposits from within the area of the building have been truncated and removed.

One of these soils had accumulated in the shallow hollow sealing the cobbled surfaces around the well (12370) associated with the aisled building. The well had fully silted during the 4th century so it does not appear that it was itself the focus for the deposition of finds here. Rather, silts formed naturally in the shallow hollow; the artefacts within the silts reflecting the general character of activity and/or occupation during this period. A large proportion of the pottery assemblage (274 sherds, 2402 g) was residual, although a significant amount of 4th century products was also present. These largely comprised coarse wares from a variety of sources such as the Thameside kilns, the Alice Holt/Farnham kilns and the Orpington-Dartford area. A deep convex-sided dish in blackened Overwey/Portchester D fabric LR6 and dated 370 to 420 shows activity into the end of the Roman period and possibly beyond. Contemporary fine wares from this assemblage were limited but include a variety of Oxfordshire red colour-coated vessels and a Lower Nene Valley colour-coated beaker. A body fragment from a light green 4th century glass vessel was also present.

14-post building 11250, the corn drier 10340 and surfaced area to the north (11220)

In comparison to the apparent decline in activity associated with the former high status domestic dwellings, the area of the 14-post building (11250) witnessed continued activity throughout this period. The main developments were the construction of a corn drier (10340) directly on the north-west end of the existing cobbled floor surface (11140) of the building, and the creation of an adjacent surfaced terrace (11220) (Fig. 54).

The corn drier comprised two drying chambers each with internal areas of 1.4 m by 1.2 m fed by back-to-back L-shaped flue channels positioned along the line of the northern wall

of the 14-post building and superimposed on its north-western corner (Plate 15). If the building had remained standing the southern chamber of the drier would have been within the interior with the northern chamber to the exterior, but this would have necessitated the removal of one structural post (11245), over which the flue was constructed. However, with additional bracing to the eaves the building could conceivably have remained standing. Examples of corn driers constructed within the non domestic buildings of villa and non villa rural sites are well known, as in the North Timber Building at Keston (Philp *et al.* 1991) and Barns 2 and 4 at Orton Hall Farm (Mackreth 1996), although these examples were placed within the central axis of the buildings or between posts, or the multiple examples, both inside and outside buildings, at Hambleden, Bucks (Cocks 1921).

Direct pottery dating evidence for both the construction of the corn drier and the removal or modification of the 14 post building is sparse. A small group of pottery (20 sherds, 242 g) was recovered from the post pipes of the 14 post building and included local grog- and sand-tempered vessels in fabrics LR1.1, LR2.1 and LR2.2 which suggest that the building may have ceased to exist as a whole by the mid to late 3rd century. The packing of several of the postholes had collapsed into the post voids without any substantial evidence of the posts having rotted *in situ*, suggesting that at least parts of the building were actually dismantled (e.g. postholes 11047, 11152, 1038, 11282 and 11281, Fig. 44). Dating evidence for the construction of the corn drier is indirect and relies principally upon the types and sources of the material used in its fabric.

A bedding layer of sandy clay was laid directly onto the existing floor surface of the 14-post building before the structure was raised in ragstone rubble, which survived two courses high. In addition this structure incorporated several blocks of shaped tufa and rubble pieces including at least one identifiable voussoir in its fabric. Flue and roofing tile was also present in the surrounding rubble derived from the collapsed parts of the structure. Together, the evidence suggests that the construction had utilised materials from the defunct bath-house range of the villa. This had been reduced to rubble by the mid to late 3rd century so the corn drier must have been constructed after this date. Together, the dating suggests that the corn drier replaced the 14-post building, rather than being an addition to it, possibly as late as the early 4th century.

The corn drier remained in use throughout the 4th century and appears to have been well maintained. Only thin silty deposits incorporating charred remains relating to its use were present in the flue and drying chambers, sealed by rubble collapse deposits which extended over the floor surfaces. The rubble produced late 4th century pottery consistent with the sherds recovered from the thin silts generally sealing the floor surface (11140 and 11150). The likely construction and use of the corn drier and floor throughout the 4th century was further demonstrated by the recovery of an AE2 of Genio Pop Rom type (dated 313-315) in

very good condition from the interior of the southern flue, two Gloria Exercitus coins dated 330-335 and 335-341 from the surrounding floor and a fallen horseman type minim dated *c* 350-365 from the surface of the posthole within the northern flue area (see Fig. 54 small find locations 10319, 10379, 10381 and 10596 respectively). A dark grey soil layer which accumulated over the rubble collapse deposits produced a silver siliqua of Honorius minted in Milan and dated AD 395-402 (small find 10119), probably extending the range of activity here into the early 5th century. These form part of a distinct concentration of 4th century coins in the vicinity of the corn drier as opposed to the more scattered occurrences of similarly dated coins within the former principal enclosure (see Table 8 below and Figs. 49 and 50 for the 4th century coin list and distribution).

Table 8: 4th century coin list in general date order

Small Find Number	Coin Identification	Date
10358	AE2. Concordia Militum. AD 310-312	
	Obv: CONSTANTINVS P F AVG.	
	Rev: CONCORD MILIT. London.	
10319	AE2. Genio Pop Rom.	AD 313-315
	Obv: IMP LICINIVS P F AVG.	
	Rev: GENIO POP ROM. Trier.	
10919	AE2. Soli Invicto Comiti.	AD 315
	Obv: IMP LICINIVS P F AVG.	
	Rev: SOLI INVICTO COMITI. London.	
10297	AE2. Soli Invicto Comiti.	AD 316-317
	Obv: IMP CONSTANTINVS AVG.	
	Rev: SOLI INVICTO COMITI. Trier.	
51	AE2. Beata Tranquillitas.	AD 321
(recovered from topsoil -	Obv; CONSTAN TINVS AVG.	
not located on figs. 49/50)	Rev: BEATA TRAN QVILLITAS, VO/TIS/XX. Trier.	
10959	AE2. Beata Tranquillitas.	AD 322
	Obv; CONSTANTINVS IVN NOB C.	
	Rev: BEATA TRAN QVILLITAS, VO/TIS/XX. Trier.	
10956	AE2. Beata Tranquillitas.	AD 322-323
(recovered from topsoil -	Obv: CONSTAN TINVS [AVG].	
not located on figs. 49/50)	Rev: BEATA TRAN QVILLITAS, VO/TIS/XX. Trier.	

Small Find Number	Coin Identification	Date
10213	AE2. Beata Tranquillitas.	AD 323-324
	Obv: CONSTANT INVS IVN N C.	
	Rev: BEAT TRANQLITAS, VOT/IS/XX. London.	
10214	AE2. Beata Tranquillitas.	AD 323-324
	Obv: CRISPVS NOBIL C.	
	Rev: BEAT TRANQLITAS, VOT/IS/XX. London.	
10357	AE3. Providentiae Augg.	AD 327-328
	Obv: CONSTAN TINVS AVG.	
	Rev: PROVIDEN TIAE AVGG. Trier.	
10828	AE3. Providentiae Augg.	AD 327-328
	Obv: CONSTAN TINVS AVG.	
	Rev: PROVIDEN TIAE AVGG. Trier.	
10356	AE3. Urbs Roma.	AD 330-335
	Rev: Wolf and twins. Trier.	
10379	AE3. Gloria Exercitus.	AD 330-335
	Obv: CO[NSTANTINVS MAX AVG].	
	Rev: Gloria Exercitus, 2 standards. Trier.	
10104	AE3. Gloria Exercitus.	AD 335-341
	Obv: CONSTANTIVS AVG.	
	Rev: GLORIA EXERCITVS (1 standard). Trier. (mintmark incomplete).	
10381	AE3/4. Gloria Exercitus (?irregular).	?AD 335-341
	Obv: ]P F AVG.	
	Rev: 2 soldiers, 1 standard.	
11011	AE3. Fel Temp Reparatio.	AD 346-350
	Rev: [FEL TEMP R]EPARATIO, phoenix on pyre. ?Trier.	
10388	AE3. Fel Temp Reparatio.	?AD 346-360
	Obv: [D N CONSTAN] TIVS P F AVG.	
	Rev: FEL TEMP REP, fallen horseman.	
10596	Minim. ?Fel Temp Reparatio.	c AD 350-365
	Rev: degraded fallen horseman type.	
11036	Minim. House of Constantine.	?c AD 350-365
	Obv: cut down bust.	
10354	AE3. House of Valentinian.	AD 364-378
	Rev: ?Gloria Romanorum, emperor and captive.	

Small Find Number	Coin Identification	Date
10176	AE3. House of Valentinian.	?AD 364-378
	Rev: standing figure eg as Gloria Romanorum or Gloria Novi Saeculi.	
10005	AE3. ?Gloria Novi Saeculi. Arles (mintmark	AD 367-375
(recovered from topsoil - not located on figs. 49/50)	incomplete).	
10119	Silver Siliqua.	AD 395-402
	Obv: D N HONORI VS P F AVG.	
	Rev: VOT V MVLT X in wreath. ?Milan.	
10134	AE3. Illegible.	?4th century AD
10353	AE3. Illegible.	?4th century AD
10714	AE3. Illegible.	?4th century AD
11034	AE4. Illegible.	3rd or 4th century AD

This date range was mirrored by the deposits associated with a cobbled surface (11220) terraced into the slope to the north of the corn drier. A rectangular area approximately 8 m by 5 m was cut into the shallow slope 1.3 m from, and parallel to, the north-east side of the corn drier, removing the upper portion of the infilled drainage ditch (11090) associated with the 14-post building (11250). This was surfaced with a single layer of small flint nodules set into the underlying clay and extending to the south-east as a slight spur off the main rectangular area along the line of the earlier ditch terminal. No dating material was directly associated with its construction although the ditch was certainly infilled by the mid 3rd century, suggesting that the construction of the surface was probably contemporary with that of the corn drier and perhaps directly associated with it.

Two wheel ruts (12695 and 12700) 1.8 m apart were cut into the surface parallel to the corn drier, perhaps suggesting that this was the main access point for activities focused on the corn drier. Several deposits relating to the use of the corn drier were identified in or around the structure. Charred remains occurred in the base of the flue area and in the drying chambers themselves whilst the soil layer (11030) sealing the cobbled surface also produced large concentrations of charred seeds presumably relating to loading/off loading and debris clearance from the corn drier. Some of the debris appears to have been dumped to the east infilling the surviving shallow depression (10690) at the base of the slope. Here an extensive layer (10528) consisting almost entirely of charred cereals and other seeds overlay the silted fills of the former boundary ditch (10620) (see Fig. 50). This stratigraphic level included general silt layers and produced five 4th century coins (small finds 10353, 10354, 10356,

10357, 10358) reflecting use from the early part right through to the later decades of this century.

The charred plant remains were relatively consistent in their composition. The cereals were dominated by spelt wheat (*Triticum spelta*) with smaller quantities of hulled barley (*Hordeum* sp.) and oats (*Avena* sp.) present, although the oats may have been included as a cereal weed rather than as a crop. In many cases the spelt wheat had germinated before charring, leading to the suggestion that malting was undertaken at the corn drier. The presence of large seeded vetch/garden pea (*Vicia* sp./*Pisum sativum*) also suggests that other crops were processed here.

In addition to probable use of the drier for parching of cereals (prior to grinding), other processing operations were undertaken at this location. Equal quantities of chaff and weed seeds were included in these deposits showing that the crop arrived as a harvest rather than having been subject to primary processing within the field. These included seeds of a mixed range of wild plants, varying from damp, heavy soil loving sedges (*Carex* sp.) to free draining light soil species such as the pink (*Dianthus* sp.). Such mutually exclusive species show that the wider landscape was still being exploited and its products processed at the villa. The damp-loving species could have grown on the surrounding low-lying ground but the pinks are most likely to have come from the slopes of the downs approximately 2 km to the north.

The end of use of this part of the site probably fell in the early 5th century. As already noted a coin of Honorius was found here, but the composition of the pottery assemblage was equally informative. A group of 452 sherds (4062 g) was recovered from the silting layer (11030) sealing the terraced surface and the deposits infilling the cart ruts. The fabrics represented are markedly different from those of the 3rd century and earlier assemblages in that the most significant group of fabrics comprise the late Roman grog-tempered wares LR1, LR1.1, LR1.3, LR1.4 and LR1.5 (46% by sherd count) (Fig. 54 pottery). These are mostly crude handmade vessels, including a thick walled cooking pot with a rounded base with parallels at Burgess Hill in Sussex (Lyne 1999), dated to after AD 370 and associated there with early Saxon pottery in a sandy fabric (ibid., 54). The possibility that activity at Thurnham continued into the 5th century is further suggested by a single fine-sanded handmade sherd fired black with brown surfaces recovered from one of the wheel ruts (12695). This could be of early Saxon date.

#### Well 11010

A series of waterlogged deposits infilled the lower levels of the well shaft constructed in the previous period (see above). These comprised a sequence of two lower rubble deposits (12227 and 11517) overlain by organic rich deposits (11516, 11984, 11982 and 11981) with a series of slender hazel stakes inserted around the interior circumference of the well in successive

tiers (e.g. 12089, 12090) as the well infilled (Fig. 55 and Plate 16). Unfortunately artefactual dating evidence was largely absent from the fills, as noted above, although one of the wooden stakes analysed for the assessment had a radiocarbon date of cal AD 250-540 (GU-9077, 1640±50 BP), confirming that the infilling largely occurred in this period or possibly even later (Allen and Lawrence 2006).

The rubble fills (12227 and 11517) comprised sizeable Kentish ragstone blocks up to 0.40 m by 0.20 m by 0.20 m with many water filled voids between them and only small amounts of fine silt/clay. Such blocks were conspicuously absent amongst the dense plant remains incorporated into the fills above, strongly suggesting that they represent a single rapid backfilling event, deliberately thrown into the well. The blocks must have been carried here specifically for this as no known stone structure or deposit that could have been a source of the material was located near to the well. The quantity of stone also represents much more than could have derived from the possible collapse of any upstanding structure of the shaft.

The lower of the rubble deposits (12227) included a significant assemblage of animal remains and despite difficult excavation conditions in murky shallow water, it was clear that articulated larger mammals were present. Analysis confirmed this and identified the remains of two roe deer (*Capreolus capreolus*); a complete adult male and the partial remains of a juvenile less than 12 months old that was almost certainly complete *in situ*. The skull of the adult male had a set of well developed antlers. These were well worn around the tines and other contact points indicating that the animal was introduced to the well some time between the start of spring and the end of summer/autumn. Accompanying these was a near complete female tawny owl (*Strix aluco*), several antler fragments from red deer (*Cervus elaphus*), the right side of a large male pig skull that had been purposely split in half and a mandible possibly from the same animal displaying cut marks consistent with the removal of the head from the carcass, all recovered from the lower rubble deposit at a similar level. This assemblage is suggestive of ritual deposition (see further below).

Above the rubble infills the sequence of waterlogged deposits consisted almost entirely of organic remains including unworked tree branches and twigs, leaf litter, moss that even retained its green colour upon initial exposure and large quantities of smaller organic remains. The only faunal remains recovered from these deposits was a near complete red deer antler with some skull attached recovered from context 11982 and a pig mandible from context 11984. The antler and skull remains are reminiscent of the larger faunal assemblage in its apparent unusual character in comparison to the rest of the site and as such could reflect some continued use of the well in a ritual context at these levels. However, no other finds were recovered to indicate any particular specialised use.

The sequence of slender stakes or rods inserted around the interior of the shaft was also unusual, being without a clear function. These were present in three distinct tiers throughout

the approximate 3.00 m depth of excavated waterlogged infills. Each tier was pushed into the silts to hold it in place replacing, and slightly overlapping, the tier below, presumably as the well became progressively infilled (e.g. Fig. 55, stakes 12089 and 12090 and Fig. 45, 12218, 12219, 12220 12221 and 12222). The individual rods were of hazel (Corylus avellana) chopped from coppice with the heel visible on several examples and were often in excess of 1.00 m long although only up to 45 mm in diameter. It is possible that they were intended to hold a lining in place to act as a type of filter and deposits of leaf litter and mosses were clearly evident between the rods and well shaft (e.g. 11985, 12148, 12164). However, the rods were too infrequently and widely spaced to fulfil such a role without any other obvious means of retaining the organic deposits in place. Moss used as a filter in a stone lined well at the villa at Barton Court Farm, Oxfordshire was dominated by woodland floor species that could easily be hand collected but must have been brought some distance (Miles 1986, 22-23). In contrast, the Thurnham samples were dominated by species that would have naturally flourished in the damp shaded conditions of the shaft suggesting that this was not a deliberately introduced lining. Whatever the function of the rods the role they played was clearly an important one as this process was repeated as the well infilled. It is also worth considering that the association with the level of animal 'burials' could imply that this role was not entirely functional.

## Well 11010 and the surrounding habitats

Plant, insect and snail remains were all preserved within the waterlogged conditions of the well providing a detailed picture of the immediately surrounding habitats in the late Roman period. The most striking feature, during excavation and subsequently confirmed by analysis, was the dominance of trees and shrubs from a woodland habitat. Ash (Fraxinus excelsior) was the principal species, most conspicuously represented by numerous complete seed keys, suggesting that branches actually overhung the well throughout the period of infilling. Analysis of the pollen confirms that trees dominated, forming 75-85% of total pollen with ash representing 72% of this figure (Scaife 2006). Smaller quantities of oak (*Quercus* (cf. robur), alder (Alnus glutinosa), holly (Ilex aquifolium) and birch (Betula pendula) were also present as pollen and plant remains in the form of small branches, twigs, leaves and, in the case of alder, a seed cone (Mark Robinson pers. comm.). Smaller under storey and hedgerow species such as hazel (Corylus avellana), hawthorn (Crataegus monogyna), wayfaring tree (Viburnum lantana), sloe/blackthorn (Prunus spinosa), dogwood (Cornus cf. sanguinea) and apple (Malus domestica/sylvestris) were also represented. The frequency of blackthorn twigs and sloes present, similarly suggested very close proximity to the well. A number of hazel nut shells opened by red squirrels were also recovered from the fills.

The tree and shrub species present illustrate a woodland habitat either with enough open areas within the canopy to allow the less shade-tolerant species such as sloe/blackthorn to grow, or possibly with these species confined to the edges of tree cover. Ash favours calcareous soils and although the clay at Thurnham is slightly acidic, this is not to the level that would exclude ash from thriving. Indeed a stand of overgrown coppiced ash trees remains in the existing Honeyhills Wood adjacent to the villa. All the species listed above can be found within the woodland. The dominance of ash suggests that the tree cover represents regenerated woodland as this species readily colonises open ground and grows rapidly in such situations, but will not tolerate dense shade. Other plant species present, particularly stinging nettle (*Urtica dioica*) and elder (*Sambucus nigra*), favour disturbed nutrient rich ground and are frequently found in association with occupation or activity areas of settlements. Of the snail species recorded both *Trichia hispida* and *Trichia striolata* thrive in nutrient rich habitats and are frequent inhabitants of nettle beds, whilst the presence of scarabaeoid dung beetles similarly suggests some proximity of these conditions within the higher levels of waterlogged preservation of context 11982.

The terrestrial insects recorded do not reflect the dominance of woodland to the same degree although species of carabid beetles typical of woodland were present. Grassland insects such as the grass-feeding bug *Aphrodes* sp. and the elaterid beetle *Agriotes* sp. were present and perhaps indicate that grassland was of greater significance than the plant remains suggest. Indeed the dominance in the pollen and plant records of ash is most likely to have been influenced by an individual or group of trees overhanging the well. However, the percentages of grassland snails in relation to woodland species does not suggest that open grassland or even open woodland was a significant habitat in the vicinity of the well; This remained essentially a wooded habitat.

Particular note should be made of the presence of honey bees (*Apis mellifera*) from the moss rich 'lining' (11985). A reference in Virgil (*Georgics* IV, 18) refers to the siting of beehives where there were *liquidi fontes et stagna virentia musco* ('clear springs, pools fringed with green moss' trans R A B Mynors). Intentionally or not, the well would certainly have provided that. Beekeeping could have expanded the range of economic activities undertaken at the site in the late Roman period.

Surrounding damp habitats are represented in smaller quantities than the woodland species but still suggest relative proximity. Alder is the only tree species present that has a preference for damp soils and is most commonly found in association with water courses, where it is capable of surviving its dormant period with its roots in waterlogged conditions. It has already been noted in the feature descriptions that the area at the base of the slope immediately to the east of the well was a damp habitat. The flatter ground further to the east is also relatively low lying and would have been seasonally waterlogged, with the ditches across

this area having gleyed clay fills consistent with waterlogged conditions and standing water. The plant species reflected by the pollen and macroscopic remains include branched bur-reed (Sparganium erectum) and spike-rush (Eleocharis palustris/uniglumis). Branched bur-reed is a semi-aquatic species that grows in mud or shallow water in ponds, ditches and slow-flowing rivers and on ungrazed marshland. Spike-rush requires its roots to be submerged in water for at least part of the year and is often associated with seasonally flooded ground, especially grassland. Other species represented by the pollen remains that require damp conditions include meadowsweet (Filipendula ulmaria), comfrey (Symphytum, and ragged robin (Lychnis flos-cuculi). Ragged robin also prefers shaded conditions and is often associated with wetter parts of hedgerows or woodland.

The plant and snail species therefore complement the evidence provided by the soil deposits and charred remains encountered. They depict, very vividly, disturbed ground typical of occupation or activity areas and regenerated woodland. The faunal remains are also consistent with these habitats. The numerous remains of ash and sloe in particular show that these were overhanging the well. The concentration of plant and tree debris within the well suggests that it is unlikely to have been extensively used for domestic purposes at this time, although this should not necessarily be taken as representing abandonment and disuse of the site. The wooden stakes inserted around the internal edge of the shaft show that it still had a role in the functioning of the site and was regularly 'maintained' by human intervention, although the role may have been religious, reflecting continuity of the significance established by the unusual faunal assemblage in the lower excavated levels.

## The nature of activity and occupation

A fundamental change in the character of the site is indicated by the lack of evidence for domestic activity in both the main villa house and in the aisled building. At the same time the emphasis on cereal production and processing first seen clearly in the middle Roman period was maintained. Activity within the principal settlement enclosure seems to have been relatively restricted. Within the main house it was confined to specific rooms. In Room F the smithing operations were of distinctly non-domestic character, while the large oven in Room B, in use at a later date in the 4th century, may have been simply for cooking, but nevertheless represented a significant change of use in this part of the building. Elsewhere, activities such as the stripping of the bath-house for reusable building materials may have been an intermittent operation, although a distinct phase of this activity was presumably associated with the construction of the corn drier outside the enclosure to the east. What is less clear is whether the recycling of material was consequent upon the collapse or merely the disuse of the bath-house. Deposits described as 'destruction debris' (Pirie 1960, 165) may be more consistent with the latter alternative, followed by demolition for recycling of materials. Pirie's

account gives no suggestion of structural difficulties caused by subsiding foundations, as suggested at the north-east end of the building in the previous period although the underlying cause of this in the earlier proto-villa period ditch was not identified nor considered in this excavation.

The fact that pottery and other debris were associated with the late features within the villa house does indicate that some level of domestic activity was maintained, but the very localised distribution of such material is striking. It suggests that this activity was at a low level and most likely was directly linked with the specific activities in Rooms B and F, rather than reflecting more general occupation within the building. At a general level this observation is probably true of the rest of the main settlement enclosure area, but it is not, however, fully supported by the coin evidence, because although coins are few in number they do occur in the vicinity of all the major structures, including the temple and the aisled building, both out of use by this period, as follows (Table 9):

Table 9: Location and number of late 3rd and 4th century coins

Structure/Area	Within building	Outside building	Date of latest coin
Villa house	8 (from Room F)	2	335-341
Aisled building	?2	6	350-365
Temple	1	2	364-378
14-post building/ corn drier	?5	5 (hollow 10690 to east)	395-402
Unlocated etc	4 367-375		367-375
Total (within and outside)	35		

The significance of these occurrences is debatable, but activity in the vicinity of both the aisled building and the temple into the second half of the 4th century is implied, even if this was at a minimal level, and possibly associated with continued removal of building materials for reuse elsewhere.

The one feature which contrasts with the evidence of very utilitarian functions is the infant burial 10640, for which the pottery evidence suggests a probable late 3rd century date. The two glass beads, more likely to have been associated with the burial than to be chance inclusions in the fill, are consistent with such a date but could also have been later. Apart from the probable foundation infant burial of the middle Roman period this was the only Roman burial within the excavated area. Presumably a family/estate burial plot was maintained for most of the period of use of the site, and it is possible that this was walled and contained elaborate burials in line with a well-known regional tradition (eg Jessup 1959, 23-32). The reason why burial 10640, clearly made with some care, was located adjacent to the villa house is unknown, but it seems unlikely that the break with earlier practice was simply a

consequence of the end of domestic occupation within the house - in that case other burials might have been expected. Did the burial represent the final act of the occupants of the house in the middle Roman period, prior to or associated with a fundamental change of use of the building?

The low level and perhaps intermittent character of activity in the principal enclosure area was reflected by the failure to maintain the enclosure boundaries in any way after the end of the middle Roman period. These were presumably abandoned to natural processes of silting and decay, rather than being systematically obliterated. There is equally little indication of the maintenance of boundaries further east; the ditch separating the 14-post building from the lower-lying ground further east seems to have silted up and not been renewed. Although it is uncertain whether the 14-post building was retained or was removed to make way for the corn drier, agricultural activity in this area was relatively intensive, indicated both by the widespread occurrence of charred plant remains and also by the evidence of wheel ruts in the cobbled surface adjacent to the corn drier and apparently associated exclusively with it, rather than with the earlier phase of the 14-post building. The range of cereals was comparable to that seen earlier; assemblages were dominated by wheat, most probably spelt, and there was perhaps a little more barley than in the middle Roman samples, with a small concentration in the vicinity of the oven in Room B of the villa house, but this was very much of secondary importance. Evidence for malting, in the form of large numbers of cereal grain sprouts and the sprouted grains themselves, was scarce, so the extent of this operation, often associated with corn driers (van der Veen 1989), is inconclusive (Smith and Davis 2006). Other processing activities such as parching in advance of milling may therefore have been more important here. Certainly quantities of chaff were generated and these were probably used as fuel, both in the corn drier itself and perhaps elsewhere.

Overall the evidence indicates continued if not enhanced emphasis on the productive potential of the area, principally in terms of cereals but also perhaps in relation to recycling of resources such as building materials and iron. For these activities a high status domestic focus was not required; it was presumably located elsewhere, for whatever reason.

The activities for which there is evidence may thus be seen within the framework of continuing exploitation of the villa estate, rather than of its disintegration. The removal of the focal domestic unit could reflect the absorption of the estate into a larger unit with its own focus, or its relocation at another site leaving the Thurnham complex as a subsidiary agricultural unit, amongst other possibilities. It is highly improbable that the villa house was abandoned as a major domestic unit simply because of possible structural difficulties. Equally the demolished bath suite seems unlikely to have been replaced by an unattached bath-house elsewhere within the principal enclosure.

At a number of the villas in the region for which there is adequate evidence, such as Eccles (Detsicas 1983, 124), Lullingstone (Meates 1979, 22-24) and Keston (Philp *et al.* 1991, 111-132), the principal structures were retained as domestic units well into if not up to the end of the 4th century. At The Mount, Maidstone, in contrast, the latest structural evidence was dated *c* AD 275-325 (Houliston 1999, 93-100), and at Snodland the construction of hypocausts in two rooms in about the mid 3rd century (Birbeck 1995, 88-90) was interpreted as representing a change of use to an agricultural function in this part of the complex (ibid., 118-9), on the basis of analogy with a similar feature at Eccles interpreted as a corn drier (Detsicas 1971, 29-30). The reasons for this interpretation are not very clear in either case, however. Whatever the truth of the matter, evidence for 4th century activity at Snodland, as at The Mount, was scarce (Birbeck 1995, 119-120), a situation broadly comparable to that at Thurnham. While the 1992-4 excavation at Snodland only examined a small part of the site and the resulting picture may not be representative of its development as a whole, it is at least broadly consistent with that from earlier work (eg Ocock and Syddell 1967, 207-9).

Although part of the character of the Thurnham villa changed fundamentally after the mid 3rd century, occupation of a sort did at least continue until the end of the Roman period, with the oven in Room B of the villa house and activity in and around the corn drier both producing material dated to the last quarter of the 4th century if not later. The distinctive pottery of this final phase was mostly grog-tempered and handmade, but not necessarily all of very local origin. Fine wares are poorly represented in these assemblages but consisted principally of Oxford products, some of which may have continued to reach the site at the very end of the Roman period. Such vessels were very widely distributed across southern Roman Britain and need not have carried particular connotations of status, except when present in large quantities. Only occasional objects hint at anything other than a lower order agricultural settlement. These include occasional glass fragments; one of window glass and two from vessels, one a facet-cut funnel-mouthed cylindrical bottle or flask, a type extremely rare in Britain (Cool in Booth *et al.* 2006). This last was found in a poorly-defined deposit adjacent to the south-east end of the aisled building. These pieces are too scarce for their significance to be clear.

The one other aspect of activity on the site in the middle Roman period that seems to have been maintained into the 4th century is the location of ritual activity in the vicinity of the 14-post building, this time centred around well 11010. The combination of the faunal assemblage and the rapid rubble backfill suggests that deposition of the latter may actually have been intended to kill, submerge or, at the very least, bury the animal remains within the well. The preservation of skin soft tissue in association with the deer indicates that the animals were intact when deposited and not carcass remains or waste. Similar 'unusual' types

of deposit are often encountered within Roman wells, particularly in the late Roman period, and are recognised as functioning beyond the normal confines of domestic well use. The complete absence of what could be considered normal domestic refuse assemblages of pottery and animal bone was notable at Thurnham. As a comparison it is interesting to note that within a well at Brislington villa, Avon, '....some tons of coarse building material, evidently the remains of the villa ....(overlay).... a large collection of faunal remains, mostly ox skulls....' (Barker 1901). This is very reminiscent of the Thurnham sequence and in a short critique of similar unusual deposits in wells, Poulton and Scott (1993) identify these as representing specifically votive or religious deposits and entertain the idea that the primary function of such wells was actually ritual, particularly when they occurred as one of a pair (ibid., 124). Unless the well was functionally linked to the adjacent 14-post building, which is certainly possible, this interpretation could apply here, the well being located away from the main domestic areas and being complemented by well 12370 adjacent to the aisled building, in an area where, as already seen, there was continuing 4th century activity. Another feature (pit 10570) with clear ritual associations was also located nearby but was earlier than it, at least in terms of the date of its final infill.

# 4.5 Towns and their Rural Landscapes II - The post-Roman and Anglo-Saxon Landscape (c AD 410 to c AD 1000)

Direct evidence of a sub-Roman and/or early Anglo Saxon presence at the site was essentially non-existent. Some of the activities discussed in the previous period may have extended at least into the early 5th century. The latest securely dated find was the silver siliqua of Honorius dated AD 395-402, but the character of some of the latest Roman pottery also suggests that activity continued into the 5th century. A single sherd, weighing only 2 g, in a fine, sand-tempered handmade fabric, fired black with brown surfaces, was recovered from cart rut (12695) adjacent to the corn drier area and could conceivably be early Anglo-Saxon in date. Two chaff-tempered sherds (7 g) were also encountered from the posthole row (15170) although no obvious late/sub-Roman or other Saxon activity was evident here. Otherwise the lack of any substantial features dated to this period suggests that the site may have been abandoned fairly early in the 5th century. Evidence for Anglo-Saxon burials is known from Thurnham village, about 1 km north-east of the present site (see above).

# 4.6 The Medieval and Recent Landscape - c AD 1000 to the modern day

Two separate periods of varying activity were represented within the excavation boundaries from this broad period. An area of sparse early medieval remains was located at the south-

eastern end of the site adjacent to Thurnham Lane and the Scheduled Ancient Monument of Corbier Hall (SAM KE 309). This activity did not extend past the 14th century, after which there was a complete hiatus of activity until the post-medieval period represented by drainage features and land divisions. This non occupational rural land use characterised all of the archaeological remains from this point until the present.

# 4.6.1 Early Medieval (AD 1000 to AD 1350)

The early medieval archaeological remains were limited to the eastern part of the site between the existing Thurnham Lane and the linear low-lying natural hollow that crossed the site approximately 100 m to the west of, and parallel to, the lane (Fig. 56). The western extent of this activity was marked by several short lengths of ditch (10240, 10355, 10360, 10520) aligned roughly north-east to south-west defining a boundary between the low-lying hollow and the slightly higher ground towards Thurnham Lane. The ditches had splayed U-shaped profiles between 0.2 m and 0.35 m deep and between 0.7 m and 1.2 m wide. Their fills differed slightly, with single clayey silting fills in ditches 10355 and 10360 and darker silty fills in ditches 10240 and 10520. The latter also contained more frequent fragments of pottery, oyster shell, animal bone and charcoal. The small pottery assemblages from each ditch date consistently from the mid 12th century to the late 13th century and largely comprised plain coarse ware jars, although occasional decorated sherds were also present (Fig. 57 vessel nos 2 and 3). The concentration of finds within the ditches was accompanied by a localised soil layer (10015/10084) with its western limit neatly defined by ditch 10455. This soil layer produced similar quantities of pottery and particularly oyster shell, but also contained several iron nails, an iron knife, lead run-off, a medieval style (rather than residual Roman) lead pottery plug, and a silver cut halfpenny of Henry I dated 1100-1135, and appears to represent a concentration of activity in this particular area. An iron prick spur, most likely to be of 13th or 14th century date, came from a posthole cut into this deposit (Fig. 57 small find 10000).

Two small groups of postholes, of which the southern group was adjacent to soil layer 10015, may represent structures of this period. Neither of these groups formed recognisable structural ground plans although a cluster of shallow pits and postholes adjacent to the eastern edge of ditch 10360 included two large postholes (10045 and 10092) with ragstone packing that held posts with diameters over 0.2 m. South of these another localised cluster of features close to the terminals of ditches 10455 and 10520 included shallow pits, postholes and a fallen charred post or beam (10058). Assemblages of early medieval pottery, particularly in the East Kent shelly-sandy coarse ware fabric EM3A, from these possible structures were consistent in date and character with those recovered from the ditches. These suggest that some form of occupation may have taken place within this area; a view supported by the more

varied associated finds from the adjacent soil layer (10015). However, the small quantities of material present and the narrow date range suggest that this occupation was short-lived and possibly of relatively low status.

These remains are undoubtedly related to the adjacent medieval manor of Corbier Hall preserved as a Scheduled Ancient Monument (SAM KE 309) immediately north of the CTRL boundary. The site takes its name from Robert Corbie, who held the manor in the late 14th and early 15th century (Wallenberg 1934, 235). A recent aerial photograph shows an L-shaped building with surrounding ditch-like cropmarks (Plate 17). The site did not escape antiquarian interest, as noted by Ashbee (1986, 155-156), and in the mid 19th century Sir George Hampson 'laid bare what appears to have been the lower story of the hall of a mansion called Corbie's Hall....The whole was surrounded by a moat, of which considerable traces are left on one side, facing about north-east.'. Ashbee made a visual inspection in 1933 when the open remains of the building were being plundered for materials. He recorded a rectangular building 60 ft by 30 ft of mortared ragstone, chalk and flint nodule walls with foundations exposed to a depth of 5 ft (ibid., 156). This clearly represents the principal building that would have been the focus for the activity represented by the more limited remains encountered within the excavation.

The southern side of the probable moat lay within the excavation area and comprised a broad splayed ditch (12600) aligned NW-SE and measuring 7.40 m wide at the surface and 1.65 m deep (Fig. 57 section 10034). This was infilled with a series of sterile stiff blue/grey clays across the lower portion and levelled by a humic topsoil (10122) that contained modern barbed wire and partly rotten wood, consistent with Ashbee's note that the upper portion of the moat was levelled by 1957 to produce arable fields (ibid.). The OS 1st edition six inch map for Kent dated 1869-1870 depicts the 'Ancient Remains' of the building which appear to have been clearly visible; probably as a result of the excavations by Hampson (Fig. 58). Some of the surrounding boundaries also shown on this map clearly reflect the surviving moat around its northern side and the ditch encountered within the present excavation to the south. These ditches were presumably maintained after the abandonment of the manor house and into the 20th century primarily for their drainage capabilities. The western arm of the moat and a narrower southerly extension of it (ditches 12665/70, see below) appear on the aerial photograph adjacent to a parch mark that dog-legs across the site.

The moated manor existed within a relatively densely occupied rural landscape. In common with other parishes occupying a similar topographical location the outline of Thurnham parish was relatively long and narrow, giving access to a range of agricultural and other resources extending from the top of the North Downs down the scarp and the lower slopes and almost to the margins of the Weald. The significance of the 'thorn' (= thorn bush) element in the place-name of Thurnham itself (Wallenberg 1934, 233) is unclear - did it relate

to a distinctive feature, or was it perhaps indicative of scrub/woodland regeneration in the post-Roman period? Thurnham Lane, immediately adjacent to Corbier Hall on the east, is likely to have been of medieval or earlier origin as part of a network of tracks and lanes that linked the villages of the area and provided north-south communication down the spine of the long parishes. Thurnham Lane itself forms part of the latter pattern, running directly from the 12th century Thurnham Castle, sited at the top of the scarp slope of the North Downs c 1 km north-east of the moated site, across Pilgrims Way and to Bearstead 2.5 km south of the castle.

A shallow surfaced hollow way or track (10440) aligned across the south-eastern corner of the site presumably formed part of the network of minor communication routes. This was no more than 2.0 m wide and 0.2 m deep and surfaced with flint nodules. Cart ruts along either side show that it was used by wheeled transport. The silt layer sealing the surface only produced 3 sherds, 27 g, of pottery dated from the late 11th to mid 13th century. However, the condition of the sherds gives little reason to consider them residual or intrusive, indicating that the track was a contemporary, medieval feature. The eastern end of the track aligns upon a kink in Thurnham Lane where this turns to the south. Historical and current maps show a track and, subsequently, a footpath on the same alignment, which forms a direct link south-west towards to the existing Chapel Lane Farm, formerly Pleasant Farm (Fig. 58). This is a timber-framed late medieval building, although the dating of the track within the excavated area suggests that the origins of the farm could be earlier (SMR KE 8581).

## 4.6.2 Post-medieval to modern (AD 1500 to present)

There was little evidence of activity or land use from the cessation of activity in the 13th century through to the appearance of a series of field ditches first shown on the 19th and 20th century maps. These are shown on the OS first edition six inch map of 1869-70 linking into the extant moat ditches of Corbier Hall and extending north to Parsonage Farm (now Court Farm) (Figs. 2 and 58). The mapped features within the site boundaries were all identified as ditches on the ground. They were arranged on an axial layout based upon the existing moat ditches and topography (Fig. 59). The date of origin of these features was not clearly established as few finds were present within the ditch fills, but Court Farm, which relates to the northern part of this boundary system beyond the excavation area, includes a Grade II listed farm building of the 17th century. Several of these boundaries are likely to have been in existence by that date or even earlier as the land clearly remained in use in the late medieval and early post-medieval periods. Thurnham village, located at the base of the North Downs on the higher ground to the north of the site, includes several fine late medieval and early post-medieval listed buildings, reflecting the agricultural wealth of the area in this period (as in the

Roman period this presumably involved mixed farming, including exploitation of woodland resources located some distance to the south, but the more immediately local emphasis is likely to have been on production of wheat and barley). The survival of the moat ditches of Corbier Hall into the 20th century may also represent a continuous link between medieval and post-medieval land use in the area.

Land improvement through drainage appears to have been a major factor dictating the layout of the boundaries. This governed the placing of the earliest ditches in this sequence, which provided a drainage outlet to the south in the lowest part of the site. The first of these to be detected was a silt and clay filled ditch (12670), part of which survived at the western edge of a much larger ditch (12665), which had a sharp V-shaped profile 5.0 m wide and 1.8 m deep. At its northern end 12665 was linked into the south-west corner of the moat ditch (12600) and formed a post medieval extension of the moat system. A backfill of mixed modern debris which included brick, concrete pipe and corrugated iron, levelled ditch 12665. Maintenance of the ditch into the 20th century, meant that the date of its construction was not established.

Other ditches ran into 12670/12665 from the north-west. The earliest of these (10290) had an infill reflective of the predominantly wet conditions at the start of the drainage process, consisting of a stiff grey/blue water-deposited clay. At its north-western end this ditch linked into a corner of a zig zag aligned ditch (11770) which performed a similar drainage function, its southern arm following the low lying contour of the former shallow hollow (10690) that existed in the Roman period at the base of the slope up to the villa. A further ditch (11780) lay roughly parallel to this stretch of 11770 to the north-west and together they defined a narrow strip of land shown infilled with woodland on the 19th century maps. The historical maps show both these ditches following slightly irregular courses, suggesting that they were more stream-like than regular drainage ditches. The maps also show that the area of the principal villa enclosure on the higher ground to the west was open ground in the 19th century.

The north-west to south-east boundaries defined the southern edge of Corbier Hall Wood. This is shown on the historical maps and by 1870 the earliest ditches (10290 and 11730) had been replaced by a smaller ditch (10460) moved slightly to the south. Meadows were maintained to the south of this, occupying the lowest ground. Prevailing damp conditions here were noted by Ashbee (1986, 145) in 1933 and a short track flanked by ditches (10560, 12640, 12650, 12660) linked the low lying meadow and the former villa area on the raised ground through the narrow strip of woodland. The use of these fields as meadow and summer pasture was reflected by a brick-built sheep dip (12684) identified south of the woodland boundary towards its eastern end.

The ditches were accompanied and supplemented by a continuous sequence of buried land drains. The earliest of these are confined to the slightly drier area of the slope below the

villa where a herringbone layout (12836) was constructed entirely of small ragstone pieces, chalk, flint nodules and Roman tile fragments derived from the villa or other Roman buildings. To the south of this another system running diagonally to the slope and probably part of a similar layout was constructed of chalk pieces.

The history of drainage culminates with the radical change to an agrarian regime in the mid 20th century. Corbier Hall Wood was levelled, all the ditches infilled and the remains of Corbier Hall infilled and covered over. Numerous tree holes (12750) with burnt flint, burnt clay and charcoal inclusions littered the area to the north of the woodland boundary (10460) reflecting the woodland clearance. As the land was turned over to arable the sheep dip was also backfilled. A more extensive drainage pipe system (12835) was also installed, mirroring in part the layout of the earlier ditch system. All this occurred in the 1950s, coinciding with the construction of the Maidstone Bypass (M20).

One final boundary of significance is the parish boundary between Detling and Thurnham. This was identified in the CTRL corridor as a shallow ditch and bank earthwork (9512 and 9513) aligned NE-SW through the centre of Honeyhills Wood. This was positioned along the top of a shallow crest and appears on the historical and current maps. There was no dating evidence from the section across the earthwork although the sequence of ditch infills and bank upcast deposits suggests that it had previously been maintained and redefined on several occasions (Fig. 60 section 504). Other earthwork boundaries existed in the woodland and are discussed below. The parish boundary is worthy of particular note, however, for its relation to the villa. At the point where the parish boundary passes through the woodland it is aligned parallel to the boundaries of the middle Roman villa enclosure to the east, although how much this reflects the natural topography as opposed to a relict boundary system is not certain. However, it is interesting to note that where the parish boundary reached a point south of the villa enclosure, it turned from the parallel alignment to one more nearly north-south, having no relationship with the main Roman alignments.

## 4.7 Unphased features

## 4.7.1 Earthworks within Honeyhills Wood

Several extant earthwork features had previously been identified within the boundaries of Honeyhills Wood as a part of a historic landscape survey (URL, 1997b). These consisted of linear ditch and earthen banks, trackways and a pond. One of the ditch and bank features (9512 and 9513) represents the parish boundary between Thurnham and Detling and is discussed above. Upon field inspection the trackway/s and pond all appeared relatively recent although an additional ditch and bank (9710 and 9711) and an associated bank earthwork (9712) were of a more uncertain origin.

Ditch and bank 9710/9711 was aligned NE/SW with the bank along the western edge of the ditch. At its NW limit an apparently contemporary bank earthwork (9712) ran NW/SE forming a T-shaped junction. No trace of an associated ditch was apparent although this would seem a likely accompaniment to the northern side. Only the southern part of 9710/9711 was affected by the CTRL corridor and this was investigated at two points during the excavation of the adjacent villa. Both sections failed to produce any conclusive evidence as to the date origin or use of the earthworks although this did show the feature to be of a single phase. The ditch was 2.00 m wide and shallow at a maximum of 0.45 m deep with the bank having less definable limits due to the erosion and slumping of its upper horizon (Fig. 60 section 508). The ditch was infilled by a homogeneous sterile clayey soil (3502). The primary upcast deposit (3506) of the bank remained *in situ* and was 2.5 m wide. This incorporated the sparse remains of a buried soil horizon of a similar appearance to that observed below the villa construction level to the immediate east. The only deposit that could be clearly associated with the current woodland conditions was a thin humic leaf litter horizon (3501) that extended over and across the bank and ditch.

Both the excavated earthwork and contemporary bank (9712) were clearly of premodern date as demonstrated by *in situ* ash coppices growing over these. However, these were of no great antiquity as each stool only showed one or two coppice cycles before being allowed to mature to the current multi-branched trees. Unlike the post medieval and modern field and drainage boundaries recorded to the east none of these earthworks are shown on any of the historical maps. This strongly suggests that they predate this period, a suggestion enforced by the presence of established woodland also shown on the maps that would make the construction of linear boundaries here unlikely.

The alignment of the earthworks perhaps provides the best indication of their date. The excavated ditch and bank are very clearly aligned parallel to the Roman boundaries of the villa enclosure. The rear ditch and post row boundary (10610 and 10580) of the middle Roman period enclosure lie 107 m to the southeast of the extant earthwork. This implies some degree of contemporary relationship or existence between the two. However, this should be tempered against the lack of dating evidence from the excavated earthwork. Two very small and abraded late Iron Age or early Roman sherds were recovered from the bank upcast but if it was contemporary with the Roman occupation of the villa one might reasonably expect the presence of larger or better preserved assemblages. The lack of these could be explained by its distance from the villa enclosure and function or use of the surrounding space. Of course, the Roman enclosure layout is also based upon a preceding Late Iron Age enclosure so it may be possible that the earthworks originate from this period. This is more unlikely though given the size and layout with the large enclosures suggested by the extant earthworks more in keeping with the dimensions of the Roman enclosure. Its also possible that the parish boundary

discussed above could originate from this period although, again, this lacked any clear dating evidence.

#### 5 GUIDE TO THE ARCHIVE

The site has been analysed and published as part of the Channel Tunnel Rail Link Section 1 Post-excavation Project. This Integrated Site Report is one of 20 publication level site reports available to download from the Archaeology Data Service website: http://ads.ahds.ac.uk/catalogue/projArch/ctrl/. These present synthesised data from key site sequences at an interpretative level that can be assimilated into complementary studies. The ADS site also includes six schemewide specialist reports, which provide synthetic overviews of the specialist data from CTRL Section 1 in its regional context. Underpinning the site reports and overviews, is a comprehensive archive of individual specialist reports and databases, which are also available to download. The CTRL reports and data can be accessed through the 'Project Archives' section of the ADS website.

Hard copy publication of the CTRL Section 1 results comprises a single volume synthetic overview of the excavated results in their regional context, which includes a complete site gazetteer and guide to the archive (Booth *et al.* 2007).

Table 5 below details all available digital data for the Thurnham Villa site. The Post-excavation assessment report is included in the digital archive, but assessment databases have only been included for categories of material which were not subsequently subject to full analysis. All reports and accompanying figures are presented as downloadable, print-ready Adobe Acrobat files (.pdf). ADS also maintain archivally stable versions of report image pages (.tiff), sometimes available at higher resolution than the pdf versions. Report texts and databases are also available as text files (.rtf and .csv respectively). The digitised site plan is available as an Arcview shapefile (.shp) and in drawing exchange format (.dxf).

Table 10: Digital archive components

	Principal authors and organisation
THA ICD	Lawrence S (OWA IV)
_	Lawrence S (OWA JV)
IHM_ISK	Lawrence S (OWA JV)
THM	Lawrence S (OWA JV)
111111	Edwichee 5 (0 Wils v)
THM CAD	CAD drawing
THM_GIS	ESRI ArcMAP GIS project
THM_GIS	GIS limit of excavation shapefile
THM_GIS	GIS feature plan - All features
THM_GIS	GIS feature plan prehistoric
THM_GIS	GIS feature plan Late Iron Age
THM_GIS	GIS feature plan middle Roman phase 1
ITHM_GIS	GIS feature plan middle Roman phase 2
THM GIS	GIS feature plan late Roman
	GIS feature plan medieval
	GIS feature plan medieval GIS feature plan post-medieval
111W_GIS	G15 Teature plan post-inedieval
CER CBM THM	Betts IM (MoLSS)
	Lyne M (Freelance)
CER_MED_THM	Mepham L (OWA JV)
	Booth P (OWA JV)
SFS_THM	Booth P (OWA JV), Cool H (Freelance),
	Keys L (Freelance), Northover P (Oxford
ENV Fauna THM	Univ) and Shaffrey R (OWA JV)  Kitch J (OWA JV)
	Smith W (OWA JV) and Davis A (MoLSS)
	Stafford E (OWA JV)
	Stow L
	Scaife R (Freelance)
	Giorgi J (MoLSS)
	Challinor D (Freelance)
	Witkin A (OWA JV)
DAT_THM	Allen MJ (OWA JV) and Lawrence S
	(OWA JV)
Tann and and	In a practical
	Betts IM (MoLSS)
ICER_ROM_THM	Lyne M (Freelance)
CER MED THM	Mepham L (OWA JV)
	Booth P (OWA JV)
	Cool H (Freelance) and Lawrence S (OWA
515_11111	JV)
SFS_THM	Keys L (Freelance)
SFS_THM	Shaffrey R (OWA JV)
ENV_Fauna_THM	Kitch J (OWA JV)
	1 1
ENV_Charredplants_THM	Smith W (OWA JV) and Davis A (MoLSS)
ENV_Charredplants_THM ENV_Charcoal_THM	Smith W (OWA JV) and Davis A (MoLSS)  Challinor D (Freelance)
	THM_GIS THM_ENV_GER_MED_THM ENV_Fauna_THM ENV_Charredplants_THM ENV_Molluscs_THM ENV_Molluscs_THM ENV_Pollen_THM ENV_Waterloggedplants_THM ENV_Charcoal_THM HUM_THM DAT_THM  CER_CBM_THM CER_CBM_THM CER_ROM_THM SFS_CINS_THM SFS_THM SFS_THM SFS_THM

Post-excavation assessment			
Post-excavation Assessment	THM PXA	OA	

Table 11: Artefactual and environmental archive index: All sites summary totals

Item	Number of fragments	Weight (g) if appropriate
Flint (excl. sieved material)	348	-
Pottery	16544	139959+
Ceramic Building material	9781	873487+
Plaster (painted and plain)	350+	-
Fired clay	1580	10833+
Metalwork (excl. coins)	1090	-
Coins	55	-
Glass objects	8	-
Glass vessels	97	-
Bone objects	13	-
Fired clay objects	11	-
Shale objects	1	-
Slag (not quantified in detail)	1000+	21500
Stone	1102	
Human Bone	2 infant burials	-
Cremation Burial	1	389
Worked (waterlogged) wood	91	-
Animal Bone	9905	67366
Shell	996	-

The following tables provide site level detail of the artefact components to the archive.

Table 12: Artefactual and environmental archive index: Hockers Lane, ARC 420/99 62+200-63+000

Item	Number of fragments	Weight (g) if appropriate
Flint (hand collected)	5	-
Flint (sieved)	120 small fragments	-
Pottery (total)	842	4915+
Pottery (hand collected)	724	4915
Pottery (sieved)	118	-
Ceramic building material	19	-
Metalwork small finds (total)	3	-
Iron	1	-
Copper Alloy	1	-
Coins	1	-
Glass	1	-
Bone objects	1	-
Fired clay	48	-
Slag	6	-
Stone	19	-
Human bone (total)	1	-
Animal bone (total)	1533	5960
Animal bone (hand collected)	866	5264
Animal bone (sieved)	667	696
Shell	39	-

Table 13: Artefactual and environmental archive index: Honeyhills Wood, ARC 420/99 63+000 - 63+400

Item	Number of fragments	Weight (g) if appropriate
Shell	3	-

Table 14: Artefactual and environmental archive index: Honeyhills Wood ARC HHW98

Item	Number of fragments	Weight (g) if appropriate
Flint	1	-
Pottery	2	-
Fired clay	4	-

Table 15: Artefactual and environmental archive index: Thurnham Villa, ARC 420/99 63+400 - 63+900

Item	Number of fragments	Weight (g) if appropriate
Flint	6	-
Pottery	5	64
Ceramic building material	25	-
Metalwork (total)	2	-
Copper Alloy	1	-
Iron	1	-
Stone	2	-
Animal Bone	10	-

Table 16: Artefactual and environmental archive index: Thurnham Villa (Principal Excavation), ARC THM98

Item	Number of fragments	Weight (g) if appropriate
Flint (total)	1064	-
Flint (hand collected incl. burnt pieces)	334	-
Flint (sieved)	730	-
Pottery (total)	15688	134980
Late Iron Age and Roman pottery (hand collected)	13911	127673
Late Iron Age and Roman pottery (sieved)	1384	4446
Medieval and Post-medieval pottery	393	2861
Ceramic building material (excluding fired clay)	9736	873487
Plaster (painted and plain)	350+	-
Fired clay	1528	10833
Metalwork from the primary metal detector survey (total)	54	-
Metalwork (total)	1140	-
Iron	949	-
Copper Alloy	104	-
Lead/Lead Alloy	33	-
Coins (copper alloy, LIA and Roman)	50	-
Coins (copper alloy, Post-medieval)	2	-
Coins (silver, Roman)	1	-
Coins (silver, Medieval)	1	-
Glass and frit objects	8	-
Glass vessels (total)	96	-
Glass vessels, Roman	92	-

Item	Number of fragments	Weight (g) if appropriate
Glass vessels, Post-medieval	4	-
Bone objects	12	-
Fired clay objects	11	-
Shale objects	1	-
Clay pipe	4	-
Slag (micro slags not quantified)	1000+	21500
Stone (total)	1080	-
Stone (objects and worked pieces)	32	-
Stone (fragments)	942	-
Stone (tufa)	106	43458
Unburnt human bone	2 infant burials	-
Cremation burials	1	389
Worked (waterlogged) wood	91	-
Animal bone (totlal)	8362	61406
Animal bone (hand collected)	5356	59223
Animal bone (sieved)	3006	2183
Shell	954	-

Table 17: Artefactual and environmental archive index: Thurnham Lane to West of Crismill Lane, ARC 420/99 63+900-66+350

Item	Number of fragments	Weight (g) if appropriate
Flint (excl. sieved material)	2	-
Pottery	7	-
Ceramic building material	1	-
Slag	2	-
Stone	1	-

In the following table the paper archive is listed separately for the two excavation code areas ARC THM98 and ARC HHW98 and jointly for the watching brief areas between chainage codes ARC 420/62+200 - 66+350. However, with the exception of 62 context records for the Thurnham Villa watching brief area virtually all of the watching brief archive relates to the excavation and recording of the enclosures discovered at Hockers Lane.

Table 18: Fieldwork and research paper archive by site code

Record Group	Contents	Comments
В	Final report	
_	Brief areas	
	/99 62+200 - 66+350	
В	Site Diary	
	Daily journal	45 sheets
В	Primary Context records	
	List of context records	11 sheets
	Context records	341 records
В	Survey Data	
	List of levels	5 sheets
В	Catalogue of drawings	
	List of plans	1 sheet
	List of sections	3 sheet
В	Primary drawings	
	Sketch plans and copies	4 sheets
	Plans (A1)	3 sheets
	Plans (A4)	11 sheets
	Sections (A4)	29 sheets
С	Primary finds data	
	List of Small finds	3 sheets
	Small find object record sheets	4 sheets
	Stone record register	1 sheet
С	Finds Box and bag lists	
	Finds compendium	4 sheets
	Box contents sheets	12 sheets
Е	Primary environmental records	
	List of samples/record sheets	3 sheets
Е	Synthesised environmental records	
	List of flots	1 sheet
	Processing records	6 sheets
Honeyhill	s Wood	•
ARC HHV	W 98	
В	Site Diary	
	Daily journal	7 sheets
В	Primary Context records	
	List of context records	6 sheets

Record Group	Contents	Comments
	Context records	53 records
В	Synthesised context records	
	Trench notes	7 sheets
В	Survey data	
	List of levels	2 sheets
В	Catalogue of drawings	
	List of plans	1 sheet
	List of sections	1 sheet
В	Primary drawings	
	Plans (A4)	5 sheets
	Sections (A4)	9 sheets
С	Primary finds data	
	Finds context checklist	2 sheets
С	Finds Box and bag lists	
	Finds compendium	1 sheet
	Box contents sheets	3 sheets
D	Catalogue of photographs	
	Black & white photo index	1 sheet
	Colour photo index	1 sheet
Е	Primary environmental records	
	List of samples/record sheets	2 sheets
Е	Synthesised environmental records	
	Processing records	1 sheet
Thurnham ARC THM	n Roman Villa (Principal Excavation) M 98	
В	Primary Context records	
	List of context records	125 sheets
	Context records	3686 records
В	Synthesised context records	
	Matrices (A1 sheets)	6
В	Survey Data	
	List of levels	84 sheets
В	Catalogue of drawings	
	Note on plan numbers	1 sheet
	List of plans	10 sheets
	List of sections	22 sheets
В	Primary drawings	
	Plans A1	187 sheets
	Plans A4	60 sheets
	Sections A1	9 sheets
	Sections A1	, , , , , , , , , , , , , , , , , , , ,
	Sections A4	388 sheets
C	Sections A4	
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Note: Research archive data to be added to the above table once finalised (format to be discussed).

#### 6 CATALOGUE OF ILLUSTRATED FINDS

References by author to pottery types in the catalogue are as follows:

Monaghan (1987), Pollard (1988) and Thompson (1982)

## Figure 6

Small Find 10071 Small knife or dagger blade. Sub-lozengic blade section; rounded, sub-trapezoidal hilt plate with V-shaped nick in top and deep, U-shaped rivet notches symmetrically placed on either side. Rust brown encrustation over pale-green pitted surface. Middle Bronze Age. Waterhole 10288

Small Find 10072 Needle or pin. Formed from circular section wire with the head or eye fashioned by bending the end of wire over. Rust brown encrustation over dull green pitted surface. Middle Bronze Age. Waterhole 10288

## Figure 7

- 2 A slack-profiled vessel in rough black glauconitic fabric B9.1; polished both externally and internally. 150-50 BC. Ditch 255.
- 3 Rim from weak-profiled vessel in polished similar fabric. 50 BC-AD 50. Ditch 255.
- 4 Bead-rim jar of Thompson type B5.1 in polished similar fabric. 50 BC-AD 30. Ditch 255
- 5 Bead-rim jar of Thompson type B2.2 with corrugated shoulder in similar fabric. 50-1 BC. Ditch 255.
- 7 Hole-mouthed jar or saucepan pot in black fabric B9.1 with knife-trimmed body. *c* 150 BC-AD 50. Enclosure Ditch 109.
- 13 Jug of uncertain type in black fabric B1 fired rough brown with triple reeded handle. c AD 1-50. Pit 69.
- 14 Copy of Gallo-Belgic CAM 1 platter (Thompson type G1-1) in similar fabric with overall polish. *c* 20 BC-AD 30. Pit 69.

- 8 Bead-rim jar of Thompson type B2.2 with corrugated shoulder in quartz-sand-tempered fabric B8. *c* 50 BC-AD.50. Enclosure Ditch 134.
- 9 Lid-seated butt-beaker of Thompson Class G5-6 in black glauconitic fabric B9.1 with surface polish. *c* AD 1-50. Enclosure Ditch 134.
- 10 Copy of ?CAM 13 platter (Thompson type G1-8) in very fine grog-tempered fabric B1. *c* AD 20-60. Enclosure Ditch 134.

- 11 Necked jar of Thompson type B1.1 in polished, siltstone grog tempered fabric B2.1. Ext. rim diameter 180 mm. *c* 50 BC-AD 70. Enclosure Ditch 134.
- 12 CAM 8 platter in Gallo-Belgic Terra Rubra fabric TR2 fired polished orange. *c* AD 25-65. Enclosure Ditch 134.

- 1 Bead-rim storage-jar in reddish-brown, grog-tempered fabric B2 with decorated shoulder cordon. *c* 25 BC-AD 50. Enclosure Ditch 11470.
- 2 Bead-rim jar of Thompson type C1-1 in black fabric B2 fired buff-brown. *c* AD 1-50. Enclosure Ditch 11470.
- 3 Necked jar of Thompson type B2-1 in polished brown-black very fine fabric B2.1 variant with a shoulder cordon. *c* 50 BC-AD 50. Enclosure Ditch 11470.
- 4 Everted-rim jar of Thompson type B4.2 in polished brown-black fabric B2.1. Enclosure Ditch 11470.
- 5 Body sherd from closed-form in glauconitic black fabric B9.1 with stabbed decoration. Enclosure Ditch 11470.
- 6 Necked-jar of Thompson type C2.1 in similar fabric. Enclosure Ditch 11470.
- 7 Rim sherd from ?cup of Thompson Class E1 in patchy brown/grey-black fabric B9. c 25 BC-AD 50. Enclosure Ditch 11470.

- 9 Bead-rim jar of Thompson type C1-2 in buff oxidised fabric B2.1 with combing on its body. Enclosure Ditch 10840
- 10 Everted rim from jar in polished black fabric B2. Enclosure Ditch 10840.
- 11 Bead-rim jar with corrugated shoulder of Thompson type B2-2 in brown glauconitic fabric B9.1 fired black. *c* 50-1 BC. Enclosure Ditch 10840.
- 12 Another, much smaller, example in similar fabric. Enclosure Ditch 10840.
- 13 Another example with less-developed bead-rim in similar fabric with polished rim and corrugated shoulder above linear chevron burnishing on its body. Enclosure Ditch 10840.
- 14 Lid-seated bead-rim of Thompson type C5.1 in similar fabric. c AD 30-50. Enclosure Ditch 10840.
- 15 Everted-rim jar of type B2.1 with corrugated shoulder. Enclosure Ditch 10840.
- 16 Another example with weaker everted rim in similar fabric. Enclosure Ditch 10840.
- 17 Another example in similar fabric. Enclosure Ditch 10840.
- 18 Bead-rim jar of type C3 in similar fabric with combing on its body. Enclosure Ditch 10840.

- 19 Simple bead-rim jar of Thompson Class C3 in shell-tempered fabric B6. c AD 1-50. Enclosure Ditch 10840.
- 20 Another, more-developed, example in similar fabric. c AD 1-50. Enclosure Ditch 10840.
- 22 Bead-rim jar of Monaghan type 3E8.2 in grog and silt tempered fabric B5. *c* AD50-70. Enclosure Ditch 10840.

Small Find 10966 Nauheim Derivative brooch. Copper alloy. Soil Layer 12725.

Small Find 4 (ARC 420 63+500/99 watching brief) Nauheim Derivative brooch. Copper alloy. Cxt 294 = ARC THM98 Clay Levelling 11670.

Small Find 10767 Langton Down brooch, upper part only. Copper alloy. Soil Layer 12725.

Small Find 10771 Colchester brooch. Copper alloy. Clay levelling layer 20057.

Small Find 10857 Colchester brooch. Copper alloy. Ditch 11160 (Post medieval).

Small Find 10899 Rosette brooch. Copper alloy. Soil Layer 12725.

Small Find 10283 Rosette brooch. Copper alloy. Disc upper bow retaining two vestigial lugs on either side and remnants of solder for the attachment of the missing front plate. SF 10283. Soil Layer 12725.

Small Find 10772 Bagendon brooch. Brass with tin plating (XRF). Iron hinge bar and copper alloy pin. Two small iron rivets inserted on either side of upper bow. SF 10772. Clay Levelling 11670.

Small Find 10627 Hod Hill brooch. Gunmetal with tin plating; bronze pin (XRF). Post Row 10980 (packing deposit).

Small Find 10298 Hod Hill brooch. Copper alloy. Soil Layer 12725.

- 33 Neck-cordoned bowl of Thompson type D1-1 in polished black fabric B1 with lightly-combed decoration on the shoulder. *c* 25 BC-AD 50. Ditch 10660.
- 34 Necked jar in brown-black fabric B2. c AD 70-150. Ditch 10660.
- 35 Smaller example in similar fabric with polished exterior. c AD 70-150. Ditch 10660.
- 36 Gallo-Belgic platter copy of Thompson type G1-12 in similar fabric fired patchy black/buff. c AD 10-60. Ditch 10660.
- 37 Everted rim jar of Thompson type C2.1 in grey-black fabric B2.1. *c* AD 1-60. Ditch 10660.
- 38 Lid-seated jar in polished brown/black fabric B2.3. c AD 50-170. Ditch 10660.
- 39 Lid of Thompson Class L6 in polished black fabric B5.1. c AD 1-60. Ditch 10660.
- 40 Dish of Monaghan Class 7A2 in grey fabric R16. c AD 43-100. Ditch 10660.
- 41 Honey-jar rim in hard pink ?Otford fabric fired buff-pink. c AD 50-70. Ditch 10660.

42 Cup of CAM 56C form in Terra Nigra fabric BER12. c AD 30-65. Ditch 10660.

## Figure 20

- 52 Small beaker with weak everted rim in grey Upchurch fabric R16. c AD 50-120. Ditch 20400.
- 53 Everted-rim beaker of Monaghan type 2I4.1 in similar fabric. c AD 90-150. Ditch 20400.
- 54 Biconical beaker of type Monaghan type 2G1 in similar fabric. c AD 60-130. Ditch 20400.
- 55 Bowl of Monaghan type 5B0.2 in similar fabric. c AD 50-70. Ditch 20400.
- 56 Bowl of Monaghan type 5B6.2 in similar fabric. c AD 70-130. Ditch 20400.
- 57 Platter of Monaghan type 7A1 in similar fabric. c AD 43-120. Ditch 20400.

Cxt 20237 Bowl of Monaghan type 5B6 in similar fabric. c AD 70-130. Ditch 20400.

Small Find 10715 Hair pin. Bone. Ditch 20400.

Small Find 10878 Hair pin. Copper alloy. Ditch 20400.

Small Find 10879 Basin handle, Copper alloy, Ditch 20400.

Small Find 10889 Drill bit. Iron. Ditch 20400.

Small Find 10898 Toilet spoon. Copper alloy. Ditch 20400.

Small Find 11005 Unguent bottle, rim fragment. Ditch 20400.

Small Find 11006 Knife. Iron. Ditch 20400.

59 Haltern type 1A platter in Arretine fabric R41. Ditch 20400.

## Figure 31

Small Find 10060 Statue base. Copper alloy. Silt Deposit 11650.

Small Find 10089 Colchester Derivative brooch. Copper alloy. Silt Deposit 11650.

#### Figure 35

Small Find 10362 Base fragment from a glass vessel. Ditch 10610.

Small Find 10413 Conical glass dish. Ditch 10610.

- 64 Lid in sandy grey Canterbury fabric R5. c AD 70-175. Ditch 10610.
- 66 Everted-rim cooking-pot of Monaghan type 3J0-5 in BB2 fabric R14 with acute lattice on the body. *c* AD 120-200. Ditch 10610.
- 68 Pie-dish of Monaghan type 5D1.6 with acute-lattice decoration in similar fabric. c AD 120-180. Ditch 10610.
- 69 Similar dish but of Monaghan type 5D2 in similar fabric. c AD 120-180. Ditch 10610.
- 70 Pie-dish of Monaghan type 5C7.1 in similar fabric. c AD 170-230. Ditch 10610.
- 74 Poppyhead beaker of Monaghan Class 2A3 in fine Upchurch grey ware fabric R16. c AD 100/110-130/50. Ditch 10610.
- 77 Hooked flange mortarium in soft cream-buff fabric R62. c AD 100-150. Ditch 10610.

- 61 Everted rim jar of Thompson type C2-2 in black fabric B2 with vertically combed body below polished shoulder and rim. *c* 50 BC-AD 70. Ditch 10610.
- 63 Necked jar with corrugated neck of Pollard type 19 in grey fabric R68 fired smooth brown. *c* AD 70-130. Ditch 10610.

## Figure 39

Cxt 15214a Lid-seated jar of Monaghan type 3L2 in fabric B6.

Cxt 15214b Lid-seated jar of Monaghan type 3L10 in fabric B6.

Cxt 15214c Bead-rim facetted jar of Monaghan type 3G3 in fabric R73.3.

Cxt 15214d Bead-rim facetted jar of Monaghan type 3G3 in fabric R73.3.

- 81 Bead-rim jar of Thompson Class C4 in brown-black fabric B2.1 with resin on the shoulder. *c* AD 30-100. Occupation horizon within Room 15290.
- 82 Shoulder sherd from jar of Thompson type B2.4 with corrugated neck, in fabric B2 variant with incised arcading. *c* AD 50-100. Occupation horizon within Room 15290.
- 83 Necked bowl of Pollard type 19 in grey-brown Fabric R68. c AD 50-150. Occupation horizon within Room 15290.
- 84 Bead-rim jar with rim top reeding in grey grog and shell tempered fabric B5.1 fired lumpy buff-brown. *c* AD 70-150. Occupation horizon within Room 15290.
- 85 Another variant in similar fabric. c AD 70-150. Occupation horizon within Room 15290.
- 86 Lid-seated jar in sandy grey Canterbury fabric R5. c AD 130-175. Occupation horizon within Room 15290.
- 87 Everted-rim cooking-pot of Monaghan type 3J2.3 in black BB2 fabric R14. *c* AD 120-200. Occupation horizon within Room 15290.
- 88 Flanged bowl of London type 669 in black BB2 fabric R14. c AD 100-160. Occupation horizon within Room 15290.
- 89 Bead-rim bowl of Monaghan type 5D7.1 in black fabric R14 with wavy burnished line on the exterior. *c* AD 120-180. Occupation horizon within Room 15290.
- 90 Bead rim bowl of Monaghan Class 5D4 in grey fabric R14 variant fired flecky blue-black with vertical lines burnished on its exterior. *c* AD 110-180. Occupation horizon within Room 15290.
- 91 Bead rim bowl of Monaghan type 5C6.1 in black fabric R14. *c* AD 190-240. Occupation horizon within Room 15290.

92 Dish of Monaghan Class 5F7 in similar fabric. c AD 170-230. Occupation horizon within Room 15290.

93 Dish of Monaghan type 5E0.1 in similar fabric. *c* AD 170-230. Occupation horizon within Room 15290.

94 Beaker of ?CAM 406 form in BB2 fabric. c AD 150-250. Occupation horizon within Room 15290.

95 Bead rim jar of Monaghan type 3F2.4 in grey-black fabric R73.2. *c* AD 70-50. Occupation horizon within Room 15290.

96 Convex-sided dish of Monaghan type 5E2.3 in very-fine-sanded grey fabric R73. c AD 110-300. Occupation horizon within Room 15290.

97 Cup Drag 27 copy of Monaghan type 3H1.2 in fine grey fabric R16. c AD 90-130. Occupation horizon within Room 15290.

98 Bowl Drag 38 copy of Monaghan type 5B1.1 in similar fabric. *c* AD 140-250. Occupation horizon within Room 15290.

## Figure 41

Small Find 10788 Mirror, rectangular with bevelled edges. White metal with copper alloy corrosion, probably a high tin bronze. Occupation horizon within Room 15290.

Small Find 10804 Seal box lid. Tinned brass (XRF). Circular with central umbo and inserted central iron stud. Flange and umbo with radial grooves probably decorated with a ?copper-based niello inlay. Occupation horizon within Room 15290.

Small Find 10809 Drop handle. Copper alloy. Occupation horizon within Room 15290.

Small Find 10974 Spade shoe. Iron. Occupation horizon within Room 15290.

Small Find 10996 Counter. Bone. Circular with a central dot on upper face. Occupation horizon within Room 15290.

Small Find 10999 Slide key. Iron. Occupation horizon within Room 15290.

Small Find 11000 Strip. Bone. Rectangular L-shaped bar. Occupation horizon within Room 15290.

## Figure 42

Cxt 10935a Rim and neck from a fine cordoned bowl of Monaghan type 4J1 in Upchurch fabric R16 dated *c* AD 43-120.

Cxt 10935b Bead-rim jar of Monaghan type 3E4 in fabric MLIA2 dated c AD 30-70.

Cxt 10935c Facetted jar of Monaghan type 3G4.1 in fabric B8 dated c AD 30-70.

78 Everted-rim jar in black fabric B1 variant with shoulder band of deeply impressed acutelattice below horizontal groove. Ditch 12545.

99 Necked-jar in east Sussex ware variant of grog-tempered fabric B2 fired black. 14 Post Building 11250 (packing deposit).

100 'Pie-dish' of Monaghan Class 5D4 in BB2 fabric R14 with external lattice. *c* AD 110-170. Post Building 11250 (packing deposit).

Small Find 10549 Finger ring. Copper alloy. Circular-sectioned hoop expanding to oval sectioned bezel. Oval nicolo intaglio. Device - parrot, facing right in impression, and grapes. Gully 11240.

Cxt 10349 Inlay. Bone metapodial (?), fragment; one face retains three ring and dots. Surface 11150.

## Figure 46

Timber 12208 Well 11010

Timber 12209 Well 11010

Timber 12211 Well 11010

Timber 12212 Well 11010

#### Figure 48

146 Near complete small necked storage-jar of Pollard type 21 in Patch Grove fabric R68 with stabbed cordon around the base of the neck and another around the girth. c AD 30-150. Votive Pit 10570.

2 and 3 Complete imbrices in fabric group 2815. Votive Pit 10570.

## Figure 51

101 Handmade necked-jar of Lyne (1994) type 7A1 in polished black/brown fabric LR1.1. *c* AD 270-300. Smithy Room 20000.

102 Another example in similar fabric. c AD 270-300. Smithy Room 20000.

# Figure 52

111 Beaded and flanged bowl of Pollard type 205 in patchy black/buff fabric LR1. c AD 370-420. Oven 20036.

112 Convex-sided dish in grog-tempered fabric LR1 fired polished black. c AD 370-420. Oven 20036.

113 Convex-sided dish in siltstone-grog tempered fabric LR1.1 fired polished brown-black. *c* AD 370-420. Oven 20036.

114 Jar with pendant rim in pimply sandy grey fabric LR2.3. c AD 270-370. Oven 20036.

115 Greater part of small hook-rim jar of Lyne and Jefferies (1979) class 3C in high-fired pimply-grey fabric LR5. *c* AD 300-400. Oven 20036.

116 Larger example in similar fabric fired pimply blue-grey. c AD 300-400. Oven 20036.

#### Figure 53

118 Complete pentice beaker of Monaghan Class 2C2 in rough grey Thameside fabric R73 with rouletting on its girth. *c* AD 280-350. Burial 10640.

119 Shattered but near-complete dish of Monaghan type 5E1.5 in polished black BB2 fabric with star graffito on the side. *c* AD 170-300. Burial 10640.

Cxt 10634 Translucent dark blue annular glass beads (x2). Burial 10640.

## Figure 54

127 Rim sherd from slack-profiled lid-seated jar or bowl in patchy buff/ brown/grey fabric LR1.1. *c* AD 370-420. Soil Layer 11030.

128 Crude handmade hook-rim jar in patchy black/red/buff-grey fabric LR1.3 with very-profuse buff grog filler. *c* AD 370-420. Soil Layer 11030.

129 Smaller example in similar fabric. c AD 370-420. Soil Layer 11030.

130 High, hollow pedestal base in similar fabric fired patchy black/orange-brown. There is a central perforation and a trace of a further one in the lower part of the vessel outside the pedestal, both formed pre-firing. *c* AD 370-420. Soil Layer 11030.

- 131 Wheel-turned necked jar in very-fine-sanded patchy red/black fabric LR1.5 with additional sparse brown and red grog inclusions. *c* AD 370-420. Soil Layer 11030.
- 132 Another example in similar fabric fired black. c AD 370-420. Soil Layer 11030.
- 133 Hook-rim jar in grey similar fabric fired reddish-brown. c AD 370-420. Soil Layer 11030

- 1 Jar profile in fabric EM.M5. *c* AD 1125-1250. Posthole 10006.
- 2 Decorated body sherd in fabric EM.M5. Curvilinear tooling and rosette stamps. *c* AD 1125-1250. Beam Slot 10058.
- 3 Jug rim in fabric M38B. Rouletted around the rim. *c* AD 1200-1400. Posthole 10207. Small Find 10000 Prick spur. Iron. Four-sided pointed goad. Posthole 10006.

#### 7 BIBLIOGRAPHY

ADS, 2006 CTRL digital archive, Archaeology Data Service, <a href="http://ads.ahds.ac.uk/catalogue/projArch/ctrl">http://ads.ahds.ac.uk/catalogue/projArch/ctrl</a>

Allen, M, 2006 Radiocarbon dates from Section 1 of the Channel Tunnel Rail Link, Kent, CTRL scheme-wide specialist report series, in ADS 2006

Allen, M, and Lawrence, S, 2006 Thurnham radiocarbon report, CTRL Specialist Report Series in ADS 2006

Ashbee, P, 1986 A Roman Building at Thurnham: Excavations 1933, *Archaeol Cantiana* **103**, 141-158

Atkinson, M, and Preston, S J, 1998 The late Iron Age and Roman settlement at Elms Farm, Heybridge, Essex, excavations 1993-5: an interim report, *Britannia* **29**, 85-110

Barber, M, 2003 Bronze and the Bronze Age. Metalworking and society in Britain .c 2500-800 BC. Tempus Publishing, Stroud

Barber, A, McSloy, E, and Holbrook, N, 2004 Excavations in 2000 on the line of the Thames Water North-West Oxfordshire Supply Improvement pipeline, in *The Romano-British roadside settlement at Wilcote, Oxfordshire III. Excavations 1997-2000*, (A R Hands and Cotswold Archaeology), Brit Archaeol Rep Brit Ser **370**, Oxford, 260-340

Barker, W R, 1901 Account of a Roman Villa Discovered at Brislington, Bristol, December 1899, Bristol

Beck, RT, 1940 Unrecorded Saxon cemetery at Thurnham, Kent, Antigs J 20, 380-382

Betts, I M, 1992 Roman tile from Eccles, Kent, found at Colchester, in P Crummy, Excavations at Culver Street, the Giberd School, and other sites in Colchester 1971-85, Colchester Archaeol Rep 6, Colchester, 259-260

Betts, I M, 2003 Stone and ceramic building material, in C Cowan, *Urban development in north-west Roman Southwark*, MoLAS Monograph **16**, London, 105-118

Betts, I M, 2006a Thurnham Roman Villa: Ceramic building material and stone, CTRL specialist report series, ADS 2006

Betts, I M, 2006b Thurnham Roman Villa: Plain and painted wall plaster, CTRL specialist report series, ADS 2006

Bidwell, P, 1996 The exterior decoration of Roman buildings in Britain, in Johnson and Haynes (eds), 19-29

Birbeck, V, 1995 Excavations on a Romano-British villa at Churchfields, Snodland, 1992-94, *Archaeol Cantiana* **115**, 71-120

Bird, D, 2004 Roman religious sites in the landscape, in J Cotton, G Crocker and A Graham (eds), *Aspects of archaeology and history in Surrey*, Surrey Archaeological Society, Guildford, 77-90

Black, E.W., 1994 Villa-owners: Romano-British gentlemen and officers, Britannia 25, 99-110

Booth, P, 2001 The Roman shrine at Westhawk Farm, Ashford: a preliminary account, *Archaeol Cantiana* **121**, 1-23

Booth, P, forthcoming Pottery and other ceramic finds, in J Magilton, A Romano-Celtic temple settlement at Grimstock Hill, Coleshill, Warwickshire

Booth, P, Bingham, A, and Lawrence, S, forthcoming *The Roman Roadside settlement at Westhawk Farm, Ashford, Kent: excavations 1998-9*, Oxford

Booth, P, Champion, T, Glass, H, Garwood, P, Munby, J, and Reynolds, A, 2007 *On Track: The archaeology of the Channel Tunnel Rail Link in Kent* (ed Gardiner, J), Oxford Wessex Archaeology Joint Venture, Oxbow Books

Booth, P, Cool, H, Keys, L, Northover, P and Shaffrey, R, 2006 Small finds from Thurnham Roman Villa, *CTRL specialist report series*, in ADS 2006

Booth, P (ed) 2006 Ceramics from Section 1 of the Channel Tunnel Rail Link, Kent, CTRL scheme-wide specialist report series, in ADS 2006

Booth, P, and Howard-Davis, C, 2003 Prehistoric and Romano-British settlement at Queen Elizabeth Square, Maidstone, Oxford Archaeology Occ Paper No 11

Bradford, J S P, and Goodchild, R G, 1939 Excavations at Frilford, Berks., 1937-8, *Oxoniensia* 4, 1-70

Brady, K, 2006 The prehistoric and Roman landscape at Beechbrook Wood, Westwell, Kent, *CTRL integrated site report series*, in ADS 2006

Brigham, T, Goodburn, D, and Tyers, I, with Dillon, J, 1995 A Roman timber building on the Southwark waterfront, London, *Archaeol J* **152**, 1-72

Charles, T, 1844 Roman antiquities found at and near Maidstone in Kent, *Archaeologia* **30**, 535-538

Cocks, A H, 1921 A Romano-British Homestead in the Hambleden Valley, Bucks, *Archaeologia* **71**, 141-198

Cosh, S R, 2001 Seasonal dining-rooms in Romano-British houses, *Britannia* 32, 219-242

Davey, N, and Ling, R, 1982 Wall-painting in Roman Britain, Britannia Monograph Ser No 3, London

Davies, B, Richardson, B and Tomber, R, 1994 A dated corpus of early Roman pottery from the City of London, Counc Brit Archaeol Res Rep 98, London

Derks, T, 1998 Gods, temples and ritual practices: the transformation of religious ideas and values in Roman Gaul, Amsterdam

Derks, T, and Roymans, N, 2002 Seal-boxes and the spread of Latin literacy in the Rhine delta, in A E Cooley (ed), *Becoming Roman, writing Latin? Literacy and epigraphy in the Roman west*, J Roman Archaeol Supp Ser No **48**, 87-134

Detsicas, A P, 1963 Excavations at Eccles, 1962: first interim report, *Archaeol Cantiana* **78**, 125-141

Detsicas, A P, 1971 Excavations at Eccles, 1970 Ninth interim report, *Archaeol Cantiana* **86**, 25-34

Detsicas, A P, 1977a Excavations at Eccles 1976, Archaeol Cantiana 93, 55-60

Detsicas, A P, 1977b First-century pottery manufacture at Eccles, Kent, in J Dore and K Greene (eds), *Roman pottery studies in Britain and beyond*, Brit Archaeol Rep (Supplementary Series) **30**, Oxford, 19-36

Detsicas, A P, 1983 The Cantiaci, Peoples of Roman Britain, Gloucester

Diez, V, 2006a The Roman settlement at Bower Road, Smeeth, Kent, CTRL integrated site report series, in ADS 2006

Diez, V, 2006b The late prehistoric and Roman landscape at Snarkhurst Wood, Maidstone, Kent, CTRL integrated site report series, in ADS 2006

Drury, P J, 1982 Form, function, and the interpretation of the excavated plans of some large secular Romano-British buildings', in P J Drury (ed) *Structural Reconstruction: Approaches to the interpretation of the excavated remains of buildings*, Brit Archaeol Rep (Brit Series) 110, Oxford, 289-308

Fauduet, I, 1993 Atlas des Sanctuaires Romano-Celtiques de Gaule: Les fanums, Paris

Friendship-Taylor, R, 1997 Settlement and continuity? Two late Iron Age settlements and Roman sites in Northamptonshire, in R M and DE Friendship-Taylor (eds), *From round house to villa*, Upper Nene Archaeol Soc, 47-51

Giorgi, J and Stafford, E (eds) 2006 Palaeoenvironmental evidence from Section 1 of the Channel Tunnel Rail Link, Kent, *CTRL scheme-wide specialist report series*, in ADS 2006

Goffin, R, 2005 Painted wall plaster, in B Yule, *A prestigious Roman building complex on the Southwark waterfront Excavations at Winchester Palace, London, 1983-90*, Museum of London Archaeol Services Monog **23**, London, 103-145

Harding, P (ed) 2006 Prehistoric worked flint from Section 1 of the Channel Tunnel Rail Link, Kent, CTRL scheme-wide specialist report series, in ADS 2006

Hamilton-Dyer and Kitch 2006 Faunal remains from Thurnham Roman Villa, in Giorgi and Stafford (eds), ADS 2006

Haselgrove, C, 1995 Social and symbolic order in the origins and layout of Roman villas in northern Gaul, in J Metzler, M Millett, N Roymans and J Slofstra (eds), *Integration in the early Roman west*, Dossiers d'Archéologie du Musée National d'Histoire et d'Art IV, Luxembourg, 65-75

Hill, J D, 1995 Ritual and rubbish in the Iron Age of Wessex, Brit Archaeol Rep (Brit Ser) **242**, Oxford

Hobbs, R, 1996 British Iron Age coins in the British Museum, British Museum Press, London.

Houliston, M, 1999 Excavations at the Mount Roman Villa, Maidstone, 1994, *Archaeol Cantiana* 119, 71-172

Jessup, R F, 1959 Barrows and walled cemeteries in Roman Britain, *J Brit Archaeol Assoc* 3rd Ser 22, 1-32

Johnson, P, and Haynes, I (eds), 1996 Architecture in Roman Britain, Counc Brit Archaeol Res Rep 94, York

Johnston, D E, 1978 Villas of Hampshire and the Isle of Wight, in *Studies in the Romano-British villa* (ed M Todd), Leicester, 71-92

Keevill, G, 1996 The reconstruction of the Romano-British villa at Redland Farm, Northamptonshire, in Johnson and Haynes (eds), 44-55

Kelly, D B, 1967 Thurnham, in Researches and discoveries in Kent, Archaeol Cantiana 82, 297-8

Kelly, DB, 1971 Quarry Wood Camp, Loose: a Belgic *oppidum*, *Archaeol Cantiana* **86**, 55-84

Kelly, D B, 1992 The Mount Roman Villa, Maidstone, *Archaeol Cantiana* **110**, 177-237

King, A, 1996 The south-east façade of Meonstoke aisled building, in Johnson and Haynes (eds), 56-69

Klein, J, 1897 Der Marburg bei Pommern an der Mosel und seine Kultstätte, *Bonner Jahrbuch* **101**, 62-116

Lewis, M J T, 1966 Temples in Roman Britain, Cambridge

Lyne, M A B, 1994 Late Roman handmade wares in south-east Britain, Unpublished PhD thesis, University of Reading

Lyne, M A B, 1999 The pottery, in J Sawyer, The excavation of a Romano-British site at Burgess Hill, West Sussex, *Sussex Archaeol Coll* **137**, 49-58

Lyne, M A B, 2006 The late Iron Age and Roman pottery from Thurnham Roman Villa, Thurnham, Kent, in Booth, P (Ed) 2006

Lyne, M A B, and Jefferies, R S, 1979 The Alice Holt/Farnham Roman pottery industry, CBA Res Rep 30

Mack, R P, 1975 *The coinage of ancient Britain*, London (3rd edition)

Mackinder, T, 2005 Furfield Quarry finds, Kent Archaeol Soc Newsletter 66, 14-15

Mackreth, D F, 1996 Orton Hall Farm: a Roman and early Anglo-Saxon farmstead, East Anglian Archaeology **76** 

Margary, I D, 1973 Roman roads in Britain (3rd ed), London

Mays, S, 1993 Infanticide in Roman Britain, *Antiquity* 67, 83-8

McWhirr, A, 1986 Houses in Roman Circulator, Circulato

Meates, G W, 1973 Farningham Roman villa II, Archaeol Cantiana 88, 1-21

Meates, G W, 1979 *The Roman villa at Lullingstone, Kent Volume I: The site*, Kent Archaeol Soc Monograph Ser No. **1** 

Miles, D, 1986 (ed.) Archaeology at Barton Court Farm, Abingdon, Oxon: an investigation of late Neolithic, Iron Age, Romano-British and Saxon settlements, CBA Research Report **50** 

Monaghan, J, 1987 Upchurch and Thameside Roman pottery. A ceramic typology for northern Kent, first to third centuries A.D., BAR Brit Ser 173, Oxford

Morris, P, 1979 Agricultural buildings in Roman Britain, Brit Archaeol Rep Brit Ser 70, Oxford

Muckelroy, K W, 1976 Enclosed ambulatories in Romano-Celtic temples in Britain, *Britannia* 7, 173-191

Neal, D S, 1977 Northchurch, Boxmoor, and Hemel Hempstead Station: The excavation of three Roman buildings in the Bulbourne Valley, *Hertfordshire Archaeology* **4** (for 1974-1976), 1-135

Neal, DS, 1984 A sanctuary at Wood Lane End, Hemel Hempstead, Britannia 15, 193-215

Neal, DS, 1996 Upper storeys in Romano-British villas, in Johnson and Haynes (eds), 44-55

Neal, D S, Wardle, A, and Hunn, J, 1990 Excavation of the Iron Age, Roman and medieval settlement at Gorhambury, St. Albans, English Heritage Archaeological Report No. 14, London

Ocock, M A, and Syddell, M J E, 1967 The Romano-British buildings in church Field, Snodland, *Archaeol Cantiana* **82**, 192-217

O'Neil, H, 1947 The Roman villa at Park Street, near St Albans, Hertfordshire: report on the excavations of 1943-45, *Archaeol J* **102**, 21-110

Oswald, A, 1949 A re-excavation of the Roman villa at Mansfield Woodhouse, Nottinghamshire, 1936-9, *Trans Thoroton Soc* **53**, 1-14

Oswald, A, 1997 A doorway on the past: practical and mystic concerns in the orientation of roundhouse doorways, in A Gwilt and C Haselgrove (eds) *Reconstructing Iron Age societies*, Oxbow Monograph 71, 87-95

Parfitt, K, 2004 The bath-house excavation, in D R J Perkins, The Roman villa at Minster-in-Thanet. Part 1: Introduction and report on the bath-house, *Archaeol Cantiana* **124**, 33-45

Pelling, R, 2004 The charred plant remains, in Barber et al. 2004, 331-333

Penn, W S, 1960 Springhead: Temples III and IV, Archaeol Cantiana 74, 113-140

Philp, B, 1994 *The Iron Age and Romano-British site at Lenham, Kent*, Kent Special Subjects Ser No 7

Philp, B, Parfitt, K, Willson, J, Dutto, M, and Williams, W, 1991 *The Roman villa site at Keston, Kent. First report (excavations 1968-1978)*, Kent Archaeol Rescue Unit, Dover

Philp, B, Parfitt, K, Willson, J, and Williams, W, 1999 *The Roman villa site at Keston, Kent; second report (excavations 1967 and 1978-1990)*, Kent Archaeol Rescue Unit, Dover

Philpott, R, 1991 Burial practices in Roman Britain BAR British Series 219, Oxford

Pirie, E, 1960 Thurnham Roman Villa, Archaeol Cantiana 74 (published 1961), 162-70

Pollard, R J, 1983 The coarse pottery, including the kiln products, in P A Catherall, A Romano-British pottery manufacturing site at Oakleigh Farm, Higham, Kent, *Britannia* **14**, 103-141

Pollard, R J, 1988 The Roman pottery of Kent, Kent Archaeol Soc Monograph Series V, Maidstone

Poulton, R and Scott, E, 1993 The hoarding, deposition and use of pewter in Roman Britain, in E Scott (ed.) *Theoretical Roman Archaeology: First Conference Proceedings*, Aldershot, 115-132

Pringle, S, 2002 The building materials, in J Drummond-Murray and P Thompson with C Cowan, Settlement in Roman Southwark; Archaeological excavations (1991-8) for the London Underground Limited Jubilee Line Extension Project, Museum of London Archaeol Service Monograph 12, London, 151-161

Pryor, F, 2001 *The Flag Fen Basin. Archaeology and environment of a fenland landscape.* English Heritage, Swindon

Quinnell, H, 1991 The villa and temple at Cosgrove, Northamptonshire, *Northamptonshire Archaeol* **23**, 4-66

Richardson, A, 2003 Thurnham potin hoard, *Kent Archaeol Soc Newsletter* **59** (winter 2003/4), 1-2

Richardson, A, 2004 An Anglo-Saxon site at Thurnham, Kent Archaeol Soc Newsletter 62, 14-15

Richardson, A, 2005 *The Anglo-Saxon cemeteries of Kent*, Brit Archaeol Rep (Brit Ser) 391, Oxford

Riddler, I, 2004 Anglo-Saxon Kent: early development c. 450-c. 850, in T Lawson and D Killingray (eds), An historical atlas of Kent, Phillimore, Chichester, 25-28

Rook, T, 1997 The view from Hertfordshire, in R M and DE Friendship-Taylor (eds), *From round house to villa*, Upper Nene Archaeol Soc, 53-57

Roskams, S, 1986 Building XII.3 - a structural interpretation, in *Houses in Roman Cirencester*, (A McWhirr), Cirencester Excavations III, Cirencester, 72-77

Scaife, R, 2006 Pollen analysis of sediment fills from well 11010 from Thurnham Roman Villa, Kent, in Giorgi and Stafford (eds) 2006, ADS

Shaffrey, R, 2003 The rotary querns from the Society of Antiquaries' excavations at Silchester, 1890-1909, *Britannia* **34**, 143-174

Smith, J T, 1978 Villas as a key to social structure, in M Todd (ed) *Studies in the Romano-British villa*, Leicester, 149-85

Smith, JT, 1997 Roman villas A study in social structure, Routledge, London

Smith, P and Kahila, G, 1992 Identification of infanticide in archaeological sites: a case study from the late Roman-early Byzantine periods at Ashkelon, Israel, *J of Archaeol Science* **19**, 667-75

Smith, W, and Davis, A, 2006 Charred plant remains from Roman deposits at Thurnham Roman villa, in Giorgi, J and Stafford, E (eds), Palaeoenvironmental evidence from Section 1 of the Channel Tunnel Rail Link, Kent, *CTRL scheme-wide specialist report series*, in ADS 2006

Stead, I M, 1976 Excavations at Winterton Roman Villa and other Roman sites in North Lincolnshire, Dept of Environment Archaeol Rep 9, London

Syddell, M J, 1967 Annual Report for the Year 1967. Lower Medway Archaeological Research Group, *Archaeol Cantiana* **82** (published 1968), lv-lvi

Thompson, I, 1982 Grog-tempered 'Belgic' pottery of South-eastern England, BAR Brit Ser 108, Oxford

Trevarthen, M, 2006 The late Mesolithic and early Neolithic landscape at Sandway Road, Lenham, Kent, *CTRL integrated site report series*, in ADS 2006

Turner, R, 1999 Excavations of an Iron Age settlement and Roman religious complex at Ivy Chimneys, Witham, Essex, 1979-83, East Anglian Archaeol 88

URL, 1994 CTRL: Assessment of historic and cultural effects, final report, unpubl. report prepared by OAU for Union Railways Limited, Vols 1-4, CTRL Environmental Statement, in ADS 2006

URL, 1995a A report for the Oxford Archaeological Unit on a geophysical survey carried out at Thurnham Roman villa. Unpublished client report by Stratascan

URL, 1995b Union Railways Ltd Channel Tunnel Rail Link; 1994 surface collection survey (TIS 10324 [10403]), Unpublished client report prepared by OAU for Union Railways Limited

URL, 1995c Corbier Hall Geophysical survey

URL, 1996 Report on geophysical survey south of Corbier Hall for Union Railways Limited, unpublished report by Geophysical Surveys of Bradford for Union Railways Limited

URL, 1997a Thurnham Roman villa and land south of Corbier Hall, Thurnham, Kent. ARC THM 96 Archaeological Evaluation Report, contract No. 194/838, Unpublished client report prepared by OAU for Union Railways Limited in ADS 2006

URL, 1997b Historic landscape surveys at Longham Wood (ARC LHW 97), Honeyhills Wood (ARC HHW 97), Cobham Park (ARC CPW 97) and Ashendbank Wood (ARC ABW 97), TIS 192/084-01, Unpublished client report prepared by OAU for Union Railways Limited

URL, 1998 CTRL: Archaeology programme written scheme of investigation: Pilgrim's Way to Charing Heath Area 420, unpubl. report prepared by RLE for Union Railways Limited, in ADS 2006

URS, 1999 East of Hockers Lane, Detling, Kent ARC EHL 99, Archaeological evaluation report, contract no. S/400/SP/0009/P482, report prepared by Oxford Archaeological Unit for Union Railways (South) Limited, April 1999, in ADS 2006

URS, 2001 Thurnham Roman Villa, Thurnham, Kent (ARC THM98): Detailed archaeological works assessment report, unpubl. report prepared by OAU for Union Railways (South) Limited, in ADS 2006

URS, 2003 CTRL Section 1: Updated project design for archaeological analysis and publication, volume 1, unpubl. report prepared by RLE for Union Railways (South) Limited, in ADS 2006

URS, 2003 CTRL Section 1: Updated project design for archaeological analysis and publication, volume 2 - Contractors' method statement, unpubl. report prepared by RLE and Oxford Wessex Archaeology Joint Venture, for Union Railways (South) Limited, in ADS 2006

Van der Veen, M, 1989 Charred grain assemblages from Roman-period corndriers in Britain, *Archaeol J* **146**, 302-319

Wallenberg, J K, 1934 The Place-Names of Kent, Uppsala

Webster, G, 1958 The Roman military advance under Ostorius Scapula, *Archaeol J* 115, 49-98

Webster, G, 1975 Small towns without defences, in W Rodwell and T Rowley (eds) *Small towns of Roman Britain*, BAR Brit. Ser. **15**, Oxford, 53-66

Webster, G, 1983 The function of the Chedworth Roman 'villa', *Trans Bristol and Gloucestershire Archaeol Soc* **101**, 5-20

Williams, A M, 1909 The Romano-British establishment at Stroud, near Petersfield, Hants, *Archaeol J* **66**, 33-52

Wilmott, T, 1991 Excavations in the Middle Walbrook Valley, London and Middlesex Archaeol Soc Special Paper No 13

Woodfield, P, 1994 The architectural stonework, in R J Williams and R J Zeepvat, *Bancroft The late Bronze Age and Iron Age settlements and Roman temple-mausoleum and the Roman villa*, Buckinghamshire Archaeol Soc Monograph Ser No 7, Aylesbury, 225-241

Woods, P J, 1970 Excavations at Brixworth, Northants, 1965-70, the Romano-British villa, Part I, *Northampton Museum and Art Gallery J* **8** 

Young, C J, 1977 *The Roman pottery industry of the Oxford region*, Brit Archaeol Rep Brit Ser **43**