EVIDENCE OF A DISTINCT FOCUS OF ROMANO-BRITISH SETTLEMENT AT MAIDSTONE? EXCAVATIONS AT CHURCH STREET 2011-12

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An archaeological evaluation and excavation were conducted by Canterbury Archaeological Trust between November 2011 and March 2012 at Church Street, Maidstone, in advance of the redevelopment (**Fig. 1**). The site is located close to the town centre, on the west-facing slope of the valley of the River Medway (which

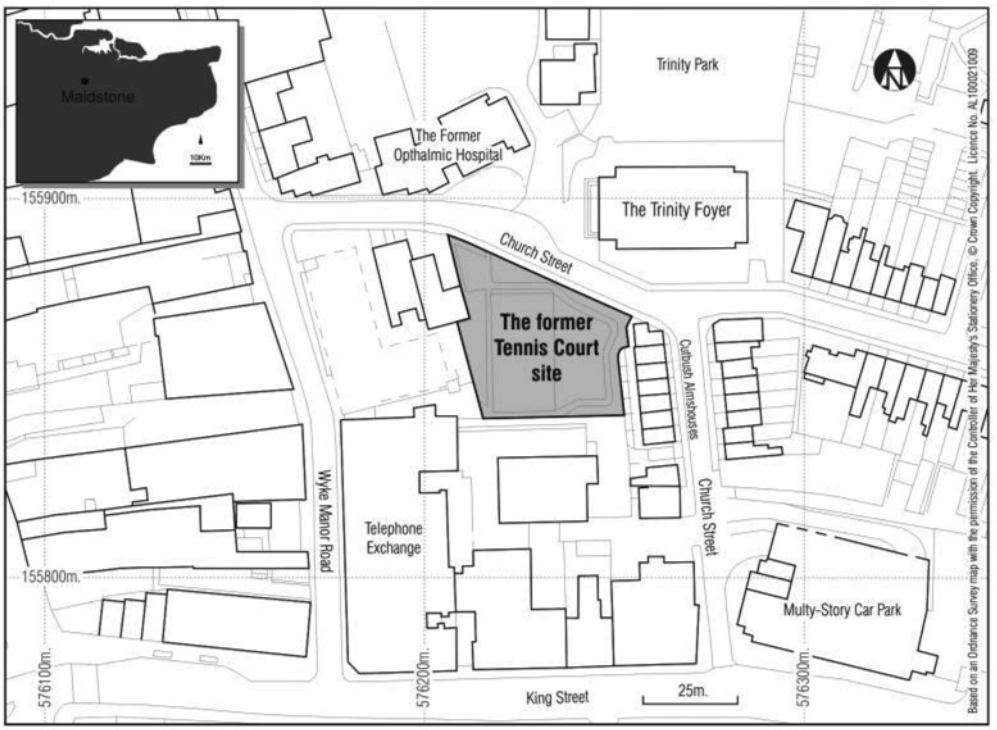

Fig. 1 Church Street, Maidstone: site location plan.

runs around 500m to the west) on gently sloping ground, from approximately 23m AOD at Church Street down to 21m AOD at the southern boundary of site. The proposed development area comprised around 0.15ha of amenity land previously occupied by a tennis court constructed in the early twentieth century. The excavation focussed on a roughly rectangular area within the overall development area, just *c.*505m^2 in extent, bounded to the north by the stone walling running parallel to Church Street, to the east by Victorian almshouses, and to the south and west by tennis court remnants, modern office buildings and a St John's Ambulance station. The following account uses Group ('G') and Set ('S') numbers, as appropriate, in referring to contexts.

Natural geology (G1) was identified from approximately 0.42m up to 1.31m beneath the present ground level (21.29-22.31m AOD), and consisted of compacted Kentish Ragstone and sandstone in yellow white, friable, coarse silt (Hythe Beds) overlain by substantial areas of dark brownish orange, firm, slightly silty clay.

The earliest evidence for activity on the site was represented by a series of intercutting north-east/south-west aligned ditches near the eastern boundary of the excavation (**Fig. 2**). These were:

G4 (with a U-shaped profile and an undulating base, 1.2m wide and 0.35m deep),

G5 (with a U-shaped profile 1.7m wide and a flatish base, 0.7m deep),

G6 (1.8m wide and 0.3m deep with steep sloping sides and a flatish base).

Sample excavation revealed that ditches had similar silty clay fills, the earlier identified as erosion deposits, while upper fills seemed to result from deliberate backfilling. Primary deposits in ditch G5 produced an early potin coin (SF8) dated to the first half of the first century BC, while its upper fills contained a late Colchester brooch (SF18) probably discarded after AD 43; the ditches yielded pottery dated no later than the Late Iron Age.

Further to the north-west was an enclosure ditch (G2) formed by two linear features with variable profiles, up to 1m wide and 0.4m deep with concave bases. These terminated within the site, thus creating a 3.5m wide entrance. The ditches were again aligned north-east/south-west and again contained only Late Iron Age pottery. A later potin (SF7), dating to the second half of the first century BC at the earliest, was recovered from this feature.

Three shallow post-holes (G9) of similar size (around 0.5m in diameter and 0.05-0.15m deep) were located towards the central and southern part of site. These appeared to be on a curved north-south alignment, but it remains unclear whether they were contemporary with one another or even within the Late Iron Age phase. It is suggested that their proximity to the enclosure ditch may indicate such a date.

A possible trackway (G3) also extended across and beyond the limits of the site on a north-east/south-west alignment. This was fairly narrow at just 0.5-0.9m wide, with a shallow scooped profile. Pottery retrieved from the fills suggested a late first- to early second-century date. It was clear that this trackway respected the alignments of the Iron Age boundary and enclosure ditches.

An indistinct, sub-circular feature (G7), with a linear flue, appeared to cut the backfill of the easternmost Iron Age boundary ditch. The feature, which was 1.56m

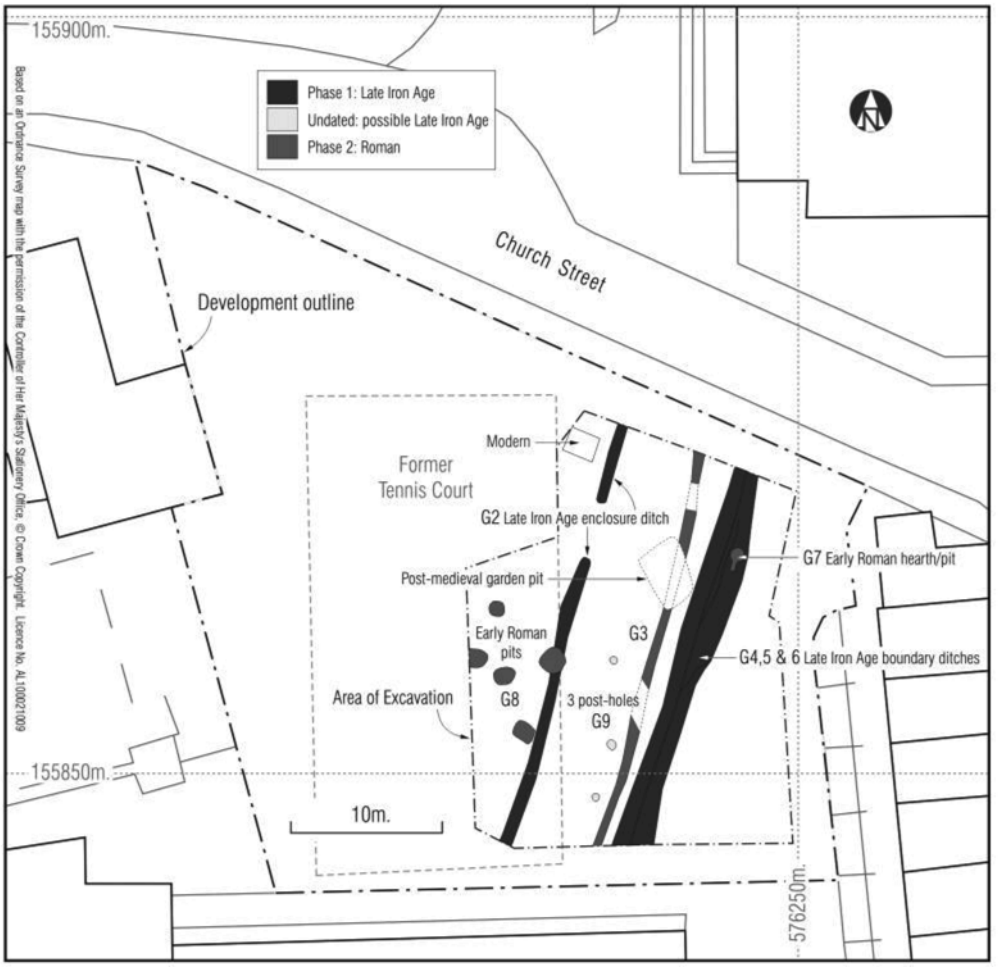

Fig. 2 Church Street, Maidstone: Archaeological features.

long, 1.1m wide and 0.28m deep, has been tentatively interpreted as a hearth or oven. It appeared to have been lined with redeposited clay and pottery sherds, sealed by clayey silt containing much carbon as well as patches of orange, red and yellow burnt clay. The pottery was of an early Roman date, and a sample taken from the fill revealed a fair quantity of daub or heat-affected earth as well as some charred cereal grain (see below). A well-preserved wheat grain from this context was submitted for radiocarbon dating, dating the hearth deposit to cal BC 40-cal AD 120 (1964±36 BP; UBA-23797).

Five sub-circular pits (G8), most (S105; 107; 113; 152) just over a metre wide and 0.5-1m deep, and one (S182) 2.2m long, 2.12m wide and 1.37m deep, were located within the western area of site, all west of the earlier enclosure ditch. Each pit contained a similar sequence of deposits indicating the disposal of domestic and human waste. Samples taken from the fills confirmed a cess-pit function, but

not exclusively so. Pottery from the pit fills dated from the Late Iron Age through to the second and third centuries AD. In addition, an iron Roman key (SF15), some possible hobnails (SF4) a fragment of quern stone (SF1) and the lower part of a pipe-clay figurine (SF17) were retrieved from the primary and early fills of these pits, along with animal bone, shell and charred plant remains (see below). A sprouted spelt-type grain from a concentration of the material in the upper fill of pit S113 produced a radiocarbon date of cal AD 90-310 (1826±27 BP; UBA-23798).

The pottery *by Andrew Savage*

In total 425 sherds of pottery, weighing *c.*7,755g, were recovered, from 28 contexts, comprising a small range of both coarse and fine types. Sherds are generally small or medium sized and moderately to heavily worn. Most came from Late Iron Age ditches (G2, 5 and 6; 230 sherds), Romano-British pits (G8; 142 sherds), trackway (G3; 23 sherds) and hearth (G7; 28 sherds).

About 60% of the pottery by sherd count is of Late Iron Age 'Belgic' (pre-conquest) date and most of this was recovered from ditch Groups 2, 5 and 6. The remainder is Roman, and is apparently mostly mid-late second century AD in date although a little dates to the late first or early second.

Although the range of identifiable 'Belgic' forms is limited, they suggest activity in the late first century BC to mid-first century AD and a number of fabrics are clearly present, containing different proportions of tempers such as grog, flint and sand (see discussion below), some of which are well known in the Medway valley. The period was one of predominantly local pottery manufacture and great local variation. The assemblage offers the opportunity to quantify these principal fabric variants in use here over a relatively short period of time. Although the limitations of the material recovered preclude detailed statistical interpretation, some useful observations can nonetheless be made, particularly concerning, the range and dating of the material which was recovered.

Given the generally poor quality of the material, it was decided that the few larger rim-sherds which might otherwise be drawn can adequately be described by reference to published parallels or by description, using terms in common usage. Both black-burnished wares and fine Upchurch-type wares are described using the typology established by Monaghan in his study of the pottery of the Upchurch and Thameside pottery industries (1987). The principal LIA/'Belgic' coarseware, tempered with grog, glauconitic sand and flint is described using Thompson's typology (1982).

The range of coarseware forms and fabrics seen falls into the pattern described for the west Kent/Medway ceramic 'style zones' by Pollard (1988) and Thompson (1982). Most of the pottery represents types of grog-tempered, flint-tempered and glauconite-rich sand-tempered coarsewares (fabrics B2, IB1 and B9.1) which are widely distributed within that area. Coarseware from outside the Medway valley/ NW Kent/Thameside areas is apparently absent. A small quantity of imported fineware comprise five sherds of Early Gaulish types of late first century BC to mid-first century AD date (see below) and four sherds of first and second century AD south and central Gaulish samian.

Iron Age ditches (G2, 4, 5, 6; 230 sherds: c.3,650g)

The pottery from these ditches suggests activity perhaps from the late first century BC to the mid-first century AD, extending up to but perhaps no later than the conquest period. It should be noted that group G4 yielded only a single sherd of grog-tempered ware. Although this fragment is similar in character to material recovered from the other ditches, it constitutes such scanty evidence that the dating of the feature must clearly rest on other considerations.

Although two sherds of an indented reduced sandyware beaker (G2, S174; cf. Monaghan class 2D) post-date the rest of the ditch material by at least around 100 years, they may well be intrusive, as S174 is cut by one of the Romano-British pits.

Maidstone lies within Thompson's pottery zone 4, the central Medway valley. The soils here are partly derived from glauconitic sandstone. Thompson asserts that glauconite-rich sandyware is used to make 'Belgic' forms in the century before the conquest and that it is contemporary with grog-tempering in these forms (Thompson 1982, 12). Glauconitic sandyware comprises 25% of all the pottery from phase 1 deposits, by sherd count. This finding may be compared with a sample of 34 sherds of pottery recovered from a group of Late Iron Age (pre-conquest) pits at nearby Fremlin Walk, Maidstone, which were mostly of Glauconitic ware (Edwards 2007). At Church Street almost all of the remainder of the coarsewares are tempered with flint (23%), and grog (41%). There were six imported fineware sherds. Five of these were early Gaulish wares, all falling within a late Augustan-Tiberian date range and including central Gaulish micaceous ware jar of form CAM262 (G2, S141; Hawkes and Hull 1947), a fine whiteware flagon and a *terra rubra* pedestal cup (both G6, S148).

A small number of rim sherds representing four typologically diagnostic Thompson (1982) coarseware form types were identified, all of which are dated late first century BC to mid-first century AD. They were:

Type C1-2 rounded jars with internally thickened rims in flint and grog-tempered ware (G5, S123, G6, S148 [same vessel] and G2, S145),

Type C1-4 rounded jars with bead rims in glauconitic sandyware (G5, S117; G2, S145),

a Type B5-3 barrel jar (G6, S148) in coarse grog-tempered ware,

a Type B3-6 necked jar (G2, S163) in coarse grog-tempered ware.

Although the number of rims recovered is so small as to make any comment speculative, it is worth noting that the Type C1-2 and C1-4 bead rim jar variants are mutually exclusive on this site in terms of fabric, the former occurring only in flint- and grog-tempered ware, the latter only in glauconitic sandyware.

The only other individual finding of note was the presence of four sherds of a single grog-tempered jar (G2, S145) which showed traces of a possibly resinous internal deposit.

Examination and comparison of individual deposits generally identified no great chronological variation between lower and upper ditch fills. This finding may reflect both small sample sizes and the typological conservatism of the few identified

forms. One or two differences, however, should be noted. The pottery from recut ditch G6 does stand out in two respects which may suggest a date firmly at the upper end of our general dating bracket for the ditches. Firstly, glauconitic sandyware comprises only 3% of a total of 67 sherds, which contrasts with proportions of 29% and 44% from Groups G2 and G5, respectively. This lower proportion may reflect the diminution of the ware in early part of the first century suggested by Pollard (Pollard 1987). Secondly the latest identified material comprises one sherd from a south Gaulish Drag18 dish (G6, S148) which is pre-Flavian, but not likely to be earlier than mid-first century. Additionally, the upper fill of ditch G5, S171 yielded two sherds of grog-tempered 'Patch Grove' ware, a type which may have had its inception in the mid-first century AD (Pollard 1988), as well as a copper alloy brooch of post-conquest date (see below).

Romano-British hearth (G7; 28 sherds: c.1,600g)

Pottery associated with the hearth, which cuts ditch G6, suggests post-conquest activity. Nearly all of it represents fragments of a single necked everted-rim jar of 'Patch Grove' type. A mid-first century AD inception for this ware is possible and Pollard suggests that it was commonest in the late first and possibly early second centuries, although jars of this type continue in use into the third (Pollard 1987). The remainder of the pottery comprises two sherds of grog-and-shell tempered ware and one of oxidised Upchurch-type. An early post-conquest date for the hearth is clearly possible, although given the long life of 'Patch Grove' jars a later date cannot be precluded.

Romano-British pits (G8; 142 sherds: c.2,200g)

Most of the Roman pottery from the site was recovered from Group G8, sets S105, S107, S113, S152 and S182. The other sets were aceramic.

Late Iron Age/'Belgic' material is present in all the pits, constituting 32.4% of the total. The remaining Roman pottery is rather homogeneous in character and chronology, suggesting a mid or later second-century AD date.

Within each pit, analysis of the upper and lower fills reveals no chronological variation. It would seem therefore that they represent a relatively short phase of activity. In this regard it is pertinent to note that whilst the pits contain significant quantities of residual Late Iron Age material, there is nothing that necessarily represents the later first or early second centuries AD, or is even likely to do so, such as the bead-rim sandyware jars, shell-tempered wares or early Upchurch-types that are common in that period. A single sherd of typologically undiagnostic south Gaulish samian (S152) need not necessarily date later than the mid-first century.

The largest sample of material (84 sherds) was recovered from the lower fill of set S182, the remainder being quite evenly distributed between the other pits. All contain BB2, which should date to c.AD 120/130+. There were three rim-sherds from undecorated 'pie-dishes' of rounded rim-profile, cf. Monaghan type 5C1, which are dated to between AD 120/150-230/250; sherds of second century central Gaulish samian, including fragments of two Drag 33 cups and a Drag 37 bowl, were identified in sets S105 and S182. Twelve sherds of reduced sandyware

(fabric R73), all from closed forms, would appear to be typical of north-west Kent/ Thameside manufacture, as previously seen and described at the Mount Roman villa and Fremlin Walk, Maidstone (Savage 1999; Edwards 2007). Single sherds of harder-fired grog tempered ware, ?R1 and sand-tempered ware, ?LR2 in sets S107 and S152 appear to parallel similar wares in east Kent which are common in the late second and third centuries, although their identification here is uncertain. Similar sherds were seen in deposits of mid-second to early third century AD date at the Mount (Savage 1999). None of the pottery necessarily post-dates the mid-late second century.

Trackway (G3; 23 sherds, c.200g)

Most of this material is clearly Roman and indicative of a late first or early second century AD date. Seventeen sherds of fine Upchurch-type ware (S135) represent two vessels: a reduced carinated beaker of Monaghan type 2G dated *c.*70-130 and an oxidised cream-slipped closed form which could be of similar date. Sherds of a second type 2G beaker were recovered from set S147.

Registered Finds *by Andrew Richardson*

Iron objects make up the majority of the registered finds assemblage from the site. The majority of these were nails (SFs 2-5, 9-10, 12, 14-15, 18-22) some with traces of mineral-preserved wood on their shafts, indicating they had been fixed into a wooden object of some type. Most notable among the iron finds from Roman contexts were a large complete key (SF15; 120mm long, 44mm wide, 22mm thick and 83g) from the lower fill of pit S182 (**Fig. 3**) and a group of probable hobnails from the primary fill of pit S113. The stem of the key is round-sectioned for two-thirds of its length and tapers towards the bit, but expands to become square-sectioned at its wider end and terminates in a transverse cylindrical loop. The bit has three rectangular wards which project backwards and get progressively longer away from the stem.

The *copper alloy* finds from the site included two coins and a brooch. All appear to be of Late Iron Age date. The coins are Flat Linear potins; 1 (SF8) found in the primary fill of ditch G5, was the earlier in date, being an example of a Flat Linear I type; these are generally dated to the first half of the first century BC. Another potin (SF7), from the fill of enclosure ditch G2, was of Flat Linear II type, generally dated to *c.*50-30 BC. Both coins were probably deposited in the second half of the first century BC at the earliest.

The upper fills of ditch G5, along with abundant pottery of late first century BC to mid first century AD date, contained a copper alloy bow brooch (SF18) (Fig. 3). This is more-or-less complete with spring and pin intact, and appears to be an example of Mackreth's type C7.d, defined as a 'Late-Small Colchester with solid footplate' (Mackreth 2011, 43-4, pls. 26-27). Colchester brooches, which are derived from a Continental form, are very common finds in the South-East (Bayley and Butcher 2004, 148-9). They began to be manufactured in Britain before the Roman conquest, but manufacture and use certainly continued after that and most date range to the middle years of the 1st century AD (*ibid.* 150). The brooch from

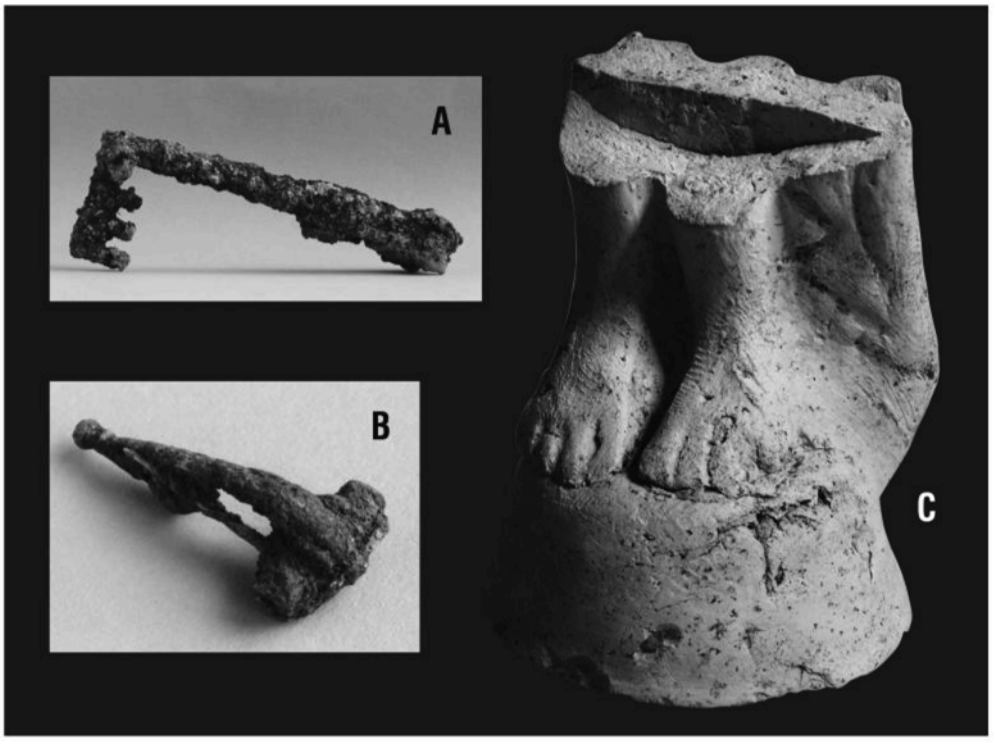

Fig. 3 Selection of finds from Church Street (not to scale): A: Key, B: Brooch, C: remnant of pipe-clay figurine.

Church Street appears to be a late example of the type, and as such was probably made, used and discarded or lost after AD 43.

Clay Figurine: the lower section of a Roman, mould-made, white clay (often described as 'terracotta' or 'pipe clay') figurine was recovered from the lower and main fill of pit S105 (Fig. 3). This example depicts Venus Anadyomene (Venus rising naked from the sea) and was one of the main types produced by workshops in the vicinity of Allier in Central Gaul (Wallace 1995, 2). Along with the Dea Nutrix type (Mother-Goddess enthroned, with infants) this is the type most commonly found in Britain (ibid.). Jenkins (1958) discussed the Venus figurines in Kent, noting their concentration in the South-East of Britain and suggesting that they entered the province from Gaul through London and Kentish ports, probably in association with the import of Central Gaulish samian pottery (1995, 1183).

Part of a *lava stone quern* was recovered from the upper fill of pit S107. Fragments of such querns, manufactured in the Rhineland from Niedermendig Lava, are frequently found on Roman sites in Britain (Peacock 1980).

Animal Bone *by Susan Jones*

The *Late Iron Age* phase produced a total of 92 fragments of bone from 13 contexts.

Fragments from the boundary ditch contexts were in a worse state of preservation than the enclosure ditch. This may reflect a situation where remains were exposed on the surface within boundary ditch contexts for periods of time prior to becoming buried. It is possible that deposits in the enclosure ditch were not left exposed for as long as finds in the boundary ditch. 7% of fragments displayed signs of canid gnawing whilst none showed signs of rodent gnawing. A small number of long bone fragments showed evidence of deliberate fracturing with smooth helical fracture lines and impact scars. These remains were only present in the enclosure ditch and may be indicative of a deposit created as a result of marrow extraction activities or as remains from pot boiling for stock or render. Identified species included cattle, dog, sheep/goat, horse and pig. A minimum number of nine animals were represented in the assemblage: three cattle two sheep/goat, two pig, one horse and one dog.

Cattle were the most common, the large majority of bones being from the cranial or foot region of the body and likely to represent primary butchery waste. Only a small number of highly fragmented meat-bearing bones were identified, distributed amongst butchery waste. No femoral or radius fragments were observed in the assemblage. Deposits included a single left mandible in the terminus of the enclosure ditch (G2) and another in boundary ditch G4, the only animal bone identified in this deposit. Tooth wear data from the mandibles in the assemblage suggested that two animals were sub adults aged between 18 and 40 months and one was an adult aged over 40 months Fusion data was minimal; two bones were fully fused, suggesting one animal was over 3.5 years old.

Sheep/goat was identified in 6 contexts, and contrasted with the pattern for cattle, being predominantly meat-bearing bones. Cranial butchery waste was only located in boundary ditch contexts (G5) amongst fragments of prime meat bearing elements. Deposits identified in the enclosure ditch (G2) and ditch G6 were almost all main meat-bearing bones and may be interpreted as deposits of food waste. Metapodial fragments were the only other elements found alongside these deposits. Tooth wear data from two mandibles suggested that a juvenile animal aged between 2-12 months and a young adult aged 2-4 years were within the assemblage. Again fusion data was sparse but corroborated the data from tooth wear patterns.

Pig was only identified in two boundary ditch contexts (G5). One context contained the remains of a neonatal cranium that was probably complete at the time of burial along with fragments of another juvenile cranium. A complete juvenile tibia accompanied the heads.

Horse was identified in boundary ditch contexts (G5), and consisted of two adult metapodials, both left sided, and a metacarpal and a metatarsal, both of which were severely gnawed. The only representation of dog was also in group G5, a single left metatarsal which was unfused, suggesting the animal was under 8 months of age (Silver 1969, 285-6).

Only one butchery mark was identified in the assemblage, a cattle scapula with the spine trimmed and chopped obliquely through the neck. These processes may reflect portioning and fileting processes.

The *Romano-British* phase of the site produced the greatest volume of bone with 201 fragments deriving from 12 contexts, the vast majority (98%) from the pits (G8). 90% of this assemblage was in good condition, suggesting that the majority of fragments were not left exposed to the elements for lengthy periods of time.

2% of the assemblage showed signs of canid gnawing and as in earlier phases none showed traces of rodent gnawing. 1% of bones had been exposed to heat. Those that were burnt demonstrated heating or singe marks around fracture lines suggesting they had been heated around the broken end of the bone presumably to aid marrow extraction. A high rate of fragmentation overall resulted in 72% of the fragments not being identified to species. 96% of the fragments, however, were either cattle or large mammal bone, suggesting that the deposits reflected a processing activity connected overwhelmingly with larger mammals. Overall, a minimum number of eight animals was represented in the assemblage: four cattle, one sheep, one pig, one horse and a dog.

The range of elements identified in cattle represented all parts of the body except the mandible, scapula, femur and lower toe bones. Thirty-six bone fragments displayed butchery marks suggesting that cleaver type tools were used to divide the carcass and break open bones whilst finer bladed knives may have been used for cutting, filleting and disarticulation. Early carcass division techniques were evidenced by marks on vertebrae and the axis bone. Two axis bones displayed chop marks in different locations, one made from a superior position and one from a lateral position. These were presumably made to remove the head during the early stages of butchery. Sagittal splits on a small number of vertebrae suggested that the carcass may have been divided axially. It is possible that the carcass was strung up, following removal of the head and divided through the central axis of the body. A number of metapodial, radial and tibial fragments had been split open longitudinally in both axial and transverse planes presumably to aid marrow extraction, whilst a number of shaft fragments displayed small chops into the medial or lateral edges of the shaft. These were probably made to instigate a helical break opening the bone to extract marrow. Smaller bones, including the astragalus, had been chopped into segments, one obliquely, one transversely and one sagittaly, presumably to create small pieces for rendering. The variety of marks made to divide the astragalus, split bones open and cut into the axis suggests that butchery techniques were not consistent or followed a standardised process. This may suggest different people may have been involved in butchery processes, each perhaps with their own preferred method for dividing and processing the carcass.

Ageing data was sparse for cattle, no tooth wear data was available from which to assess age at death and only 16 bones displayed epiphyseal fusion state, all of which were fused. This may suggest that the cattle were all skeletally mature at the time of death.

Only two fragments of sheep were observed in the assemblage, a tibia in a boundary ditch and a fragmented horn core in a rubbish/cesspit. Both specimens suggested that a juvenile animal was present in the assemblage. The unfused tibia suggested that the animal was under 2 years of age. Two pig fragments were present, a cranial/maxillary fragment of a juvenile male and a thoracic vertebra that also displayed juvenile traits, the vertebral epiphysis being unfused. A dog maxilla from an older adult with worn teeth and a horse metapodial fragment were also identified amongst the rubbish/cess pit deposits. The horse bone showed evidence of fresh fracturing and may again have been utilised to extract marrow.

House mouse *(Mus Domesticus)*, field vole (*Microtus Agrestis*), common shrew *(Sorex Araneus)* and common frog (*Rana Temporania*) were also represented in

the pit fills. In addition a small number of post cranial rat bones (*rattus rattus)* were identified.

Bird remains *by Enid Allison*

The earliest remains were fragments of medium-sized bird(s) and a small passerine from a sample from the upper fill of one of a series of ditches in the eastern part of the site (G4). One of the medium-sized fragments contained medullary bone indicating a female bird in laying condition. Traces of eggshell (~0.325-0.35mm thick) were also present in the same sample. Eggshell of such thickness lies within the range recorded for various breeds of domestic fowl by Keepax (1981) and Sidell (quoted in Serjeantson 2009, 174) but, without other evidence for the keeping of domestic fowl, eggs of similarly sized wild birds cannot be ruled out.

The group of later pits containing a range of domestic waste including cess produced some identifiable bird remains (G8). Domestic fowl (*Gallus gallus*) was represented by fragmentary long bones and wing and toe phalanges in samples from the primary fills of two of the pits (S107, S152), the phalanges suggesting waste from carcass preparation. A femur fragment with medullary bone on the inner surface was from a laying hen. Indeterminate fragments of medium-sized bird bone recovered from five samples from the pits may also be mainly of domestic fowl. Left and right tarso-metatarsi of a large goose were recovered by hand-collection from the main fill of a large rubbish/cess pit (S182). The bones represent the non-meat bearing parts of the lower leg that would typically be removed during carcass preparation. Measurements of the bones corresponded very well with means obtained for seventeen modern domestic goose tarso-metatarsi by Bacher (1967), and fell around the extreme uppermost limits for twenty-one greylag geese (*Anser anser*) given by Bacher (1967) and Boessneck *et al*. (1979). Only one of the modern greylag specimens in the latter work had a shaft breadth comparable with this specimen. The greylag is the largest wild goose occurring in Britain and the ancestor of the domestic form. Bones of small passerine birds recovered from two samples were fragmentary and were not identified further.

The fish remains *by Alison Locker*

Fish remains reported here comprised three identifiable bones and four indeterminate recovered from two samples from Iron Age ditches and 46 identifiable bones and 309 indeterminate from five early Romano-British pits (G8). The pits contained some residues of cess. Pit samples <7> and <10> included a few bones from the sample 'washover': five indeterminate fragments and one plaice/flounder bone respectively. The following taxa were identified: indeterminate ray (Rajidae), eel (*Anguilla anguilla*), herring (*Clupea harengus*), smelt (*Osmerus eperlanus*), roach (*Rutilus rutilus*), indeterminate Cyprinidae, Gadidae (cod family), plaice/ founder (*Pleuronectes platessa/Platicthys flesus*), and indeterminate flatfish. The most common species were eel, herring and plaice/flounder, comprising 40 of the 49 bones identified to species. The indeterminate category was mostly from pit samples <1> and <2>, all were heavily fragmented and/or non specific such as ribs and fin rays.

Most of the remains came from pits with some evidence of burning, including a plaice/flounder post temporal from sample <1>. There was limited evidence of cess material in some pits but none of the fish bones displayed the characteristic distortion associated with passing through the digestive tract, although all were small enough to have been eaten (including the fragmentary indeterminate fin rays). Maidstone is some eight miles from the Medway estuary and the small but varied fish assemblage indicates the consumption of marine fish that could also have been caught in the estuary, especially in their juvenile stages, and the fish here are all small, except for ray.

The only exclusively freshwater species was roach, a ubiquitous cyprinid species identified from a small pharyngeal bone and from an individual of around 12cm in total length. Two other indeterminate 'cyprinid' bones were identified.

Ray was identified from a single denticle, a small bony structure that lies under the skin, many ray species are found in inshore shallow waters. Herring were represented by vertebrae only and would have been part of the most southerly breeding group of herring in the North Sea, the 'Downs' group. Young herring enter estuaries (often together with sprats, caught together as 'whitebait') and these vertebrae, intermediate in size, may have been from fish caught inshore or in the estuary as juveniles. Both plaice and flounder (difficult to separate on the particular bones identified here) are found as young fish in estuaries with flounder also entering freshwater. Two of the 'flatfish' bones were tubercles found under the skin of some adult flatfish species. The only 'gadid' bone was a fragment of small supra cleithrum, probably from a juvenile whiting (*Merlangius merlangus*) also found in inshore waters.

Both eel and smelt are migratory, eel migrating from freshwater to marine to breed, and smelt the reverse. The eel bones were from small fish, skull bones suggest under 25cm total length, caught in their freshwater stage. Smelt migrate into freshwater to breed, and have been part of traditional fisheries, especially in the Thames; here smelt was represented by two well preserved fragments of dentary.

Marine mollusc shell *by Enid Allison*

Considering the small quantities and high fragmentation of the shell recovered, a fair range of taxa was recorded. Fragments in the earliest deposits dating to the first century BC to the first century AD in ditch G4 and ditch terminus G2 were mainly of cockle (*Cerastoderma sp.*). Traces of oyster (*Ostrea edulis*), mussel (*Mytilus edulis*), peppery furrow (*Scrobicularia plana*), baltic tellin (*Macoma balthica*), and indeterminate bivalve shell possibly of a sixth species were recovered. Cockle fragments and indeterminate marine shell were present in the lower fill of a posthole/pit (G9, S130).

The backfill of an early Roman hearth (G7) contained a variety of shell types: cockle mussel, baltic tellin, a nut shell (*Nucula*), another unidentified bivalve, and a small winkle (*Littorina sp.*).

Oyster fragments were more common relative to other shell in the three later pits fills (G8). Some fragments were orange-stained probably due to the presence of cess as well as other domestic refuse in the pits. Tiny fragments of cockle and mussel shell were recorded from one pit.

The Charred and Mineralised Plant Remains *by Wendy J. Carruthers*

Late Iron Age

Sample 5, boundary/enclosure ditch G2 – the sample came from the single fill of this ditch. A low concentration (3 fragments per litre of soil processed or 'fpl') of charred cereal grains (bread-type wheat, emmer/spelt, barley, oat) and spelt de-husking waste was present in the ditch. A similar range of weed seeds was present as in the other samples (vetch/tare, dock, brome, fat hen). One item of note was a poorly preserved flax seed (*Linum usitatissimum*) indicating an additional crop grown as an oil seed, for fibre or for both.

Sample 6, ditch terminus G2 – the upper fill of this ditch terminus contained a slightly higher concentration of poorly preserved cereal grains (bread-type wheat, emmer/spelt including one sprouted grain and several barley grains) and some spelt de-husking waste (6 fpl). The presence of a charred rose seed, hazelnut shell fragment and blackberry seeds could suggest that a thorn hedge had been present along the ditch, although all items also could represent food waste. Black bindweed (*Fallopia convolvulus*) and cleavers (*Galium aparine*) are climbing plants that scramble through hedgerows, though both are also considered to be arable weeds.

Sample 10, ditch fill G4 – the sample came from the upper fill of a ditch. Moderate amounts of spelt processing waste were present (10.9 fpl) and the range of weed taxa was similar to the other features examined (mainly vetch/tares, knotgrass (*Polygonum aviculare*) and grasses). Some sprouted emmer/spelt grains were present but these were outnumbered by grains with no obvious signs of sprouting.

Sample 4, pit/posthole G9 – a small quantity of charred spelt de-husking waste with two indeterminate wheat grains and three poorly preserved barley grains was present in the lower fill of this feature, perhaps representing background waste (concentration = 1.8 fpl).

Early Romano-British

Sample 8, Hearth fill G7 – this context contained frequent daub or heat-affected earth that represented the hearth fabric. The flot was surprisingly productive (18.1 fpl) in terms of both cereal grains and chaff fragments, and the assemblage as a whole was different in character to those from the pit and ditch samples. A wider range of cereals was represented, including two free-threshing crops whose remains are rarely present in large numbers in Roman deposits; bread-type wheat (*Triticum aestivum*-type) and possible rye grains (cf. *Secale cereale*). At least 25 grains of bread-type wheat and 6 possible grains of rye (with one sprouted) were recorded. This sample was the only one of ten examined that contained a reasonably high percentage of grain (45% grain, 49% chaff and 6% weed seeds). The assemblage most likely contains a much higher proportion of spilled and discarded food items than the other samples, which contain primarily waste. Barley was scarce (2 grains, one sprouted) and five oat grains (*Avena* sp.) were present. Spelt

glume bases and spikelet forks were still the dominant components of the chaff and a similar range of weed species was represented. More detailed comparisons between this sample and the other nine are made below.

Samples 1 (lower fill of rubbish/cess pit S105) and 2 (rubbish/cess pit S107) G8 – these two pits produced very similar assemblages and appear to have contained similar types of waste. Domestic (pot, small-scale cereal processing waste, redeposited cess) and industrial waste (metalworking residues) were present in both pits. In pit S105 the deposition of faecal material was confirmed by the presence of mineralised food remains including 12 apple (*Malus sylvestris*) and apple/pear seeds (*Malus/Pyrus* sp.), an elderberry seed (*Sambucus nigra*) and a possible medicinal plant, a hemlock seed (*Conium maculatum*). In pit S107 a wider range of mineralised remains was preserved and the presence of some faecal concretions containing bran 'curls' indicated that more concentrated, or better preserved, faecal waste was present. Foods included apple (6 seeds), a cherry or sloe-sized *Prunus* species, elderberry, mallow (*Malva* sp.) and henbane (*Hyoscyamus niger*) – perhaps another poisonous but externally medicinal plant. Nettle seeds (*Urtica dioica* and *U.urens*) were also present. Alternatively, nettles, henbane and hemlock may have been growing on a midden in which faecal and domestic waste had been deposited. In both features mineralised grass, sedge, spike-rush, bracken, and moss remains (mostly unidentified stem fragments but also some seeds) may represent toilet wipes or material such as waste floor covering deposited to reduce odours. It is notable that no exotic foods were present, apart from, perhaps, cultivated apples. However, because mineralised preservation was not particularly good in these two features it is likely that these remains represent just a small fraction of the foods being consumed.

The charred plant remains consisted of small amounts of cereal processing waste that was probably the product of day-to-day crop cleaning activities. Spelt wheat with a trace of emmer were the only cereals represented. The fact that very few weed seeds (consisting of brome grass and small weedy vetch/tare) and no culm nodes were present suggests that the waste derived from the de-husking of cleaned spikelets prior to cooking.

Sample 3, Pit S113, G8 – the sample came from the uppermost fill of a pit that also contained other types of waste, including daub and pot. This rich charred deposit consisted primarily of spelt processing waste derived from very clean spelt spikelets. Out of over a thousand charred remains in the 25% sub-sample quantified (from 2.5 litres of soil), only 26 items were not from cereals. These included a couple of small hazelnut (*Corylus avellana*) shell fragments, seeds from five types of weeds that had probably been growing as contaminants of the spelt crop (including vetch/tare (*Vicia/Lathyrus* sp.), dock (*Rumex* sp.), corn cockle (*Agrostemma githago*) and long-seeded grasses (various *Poaceae*), and a possible fungal sclerotia similar to ergot. Amongst the large quantity of spelt chaff and much smaller numbers of spelt-type grains, only two possible bread-type wheat grains, a possible emmer spikelet fork, two sprouted hulled barley grains and three oat grains (including two sprouted and one confirmed as wild

oat (*Avena fatua*)) were recorded as relict crops or contaminants. The spelt remains consisted of at least 93% chaff. (NB many of the poorly preserved emmer/spelt chaff fragments were not quantified). Cereal grains were not abundant, but of the 70 hulled wheat grains present, 75% had sprouted. In addition, several of the crop contaminants had sprouted, including oats, barley and brome grass, and detached sprouts were frequent. It is very unlikely that such a high rate of germination would have occurred accidentally (see notes on malting in archive report), so the deposit appears to represent the waste removed from roasted malted grain, or 'cumings'. Once the spelt grain had been sprouted it would have been gently roasted in a kiln or oven to stop the process and to dry the grain ready for crushing into grist, prior to extracting the malt. The sprouts and chaff would have been rubbed off and removed prior to coarsely grinding the grain into grist. This type of waste would have been useful as tinder, and fuel if produced in sufficient quantities.

Sample 7, pit S152, G8 – the sample came from the primary fill of this rubbish/cess pit. Metalworking residue and traces of mineralised faecal material were present, but no faecal concretions were found in the residue. Although fish bone was present, the only mineralised remain was an unidentified nodule of the type characteristic of cess pits and middens (Carruthers 1988). Either the preservation conditions were not correct for faecal material to become mineralised (perhaps too well-drained), or only small amounts of redeposited cess were present. The charred plant assemblage was of a moderate size (4.5 fpl) and was dominated by spelt processing waste, with just a trace of emmer chaff and a barley grain. Weed taxa included dock, brome grass, grass seeds, cleavers and black bindweed. In addition two charred mallow seeds (*Malva* sp.) were present, perhaps representing a food or medicinal plant that is often associated with Roman sites. The mucilaginous leaves have been used for poultices and ointments in the past, they can be eaten like spinach or made into soups, and the seeds make a tasty snack. Mallows also have attractive flowers and are common around waysides and gateways, so they may have naturalised around Roman sites following their introduction or collection from the wild. It was not possible to determine whether a common British species (perhaps *Malva sylvestris*) or introduced species was present from the charred seeds alone.

Sample 9, pit S182, G8 – this sample came from the main fill of a large rubbish/cess pit. Mineralised evidence of foods being consumed was limited to two sloe- or cherry-type *Prunus* sp. kernels (i.e. small and very rounded). Charred plant remains were very similar in character to the other rubbish/cess pits, although the concentration was a little higher (11.8 fpl). Spelt processing waste was the main component though a trace of emmer chaff was present. A similar range of weed taxa was present, including brome grass, dock and vetch/tare.

Discussion of Romano-British material

The recovery of mineralised faecal material often provides important supplementary

evidence about diet, including details about foods such as fruits and spices which are rarely preserved by charring. However, the mineralisation at Church Street was poor, perhaps due to insufficient moisture in the cess pits, so only a few large items appear to have been preserved. Although there was no definite evidence for exotic or cultivated fruits, the very large size of the apple pips suggests that imported cultivated apples (*Malus domestica*) rather than crab apples (*Malus sylvestris*) could be represented, but this remains unproven. In addition, the small, rounded *Prunus* kernels could have come from cherries (*Prunus avium*) rather than native sloes, but insufficient identification features were preserved. Other mineralised remains may represent medicinal plants, foods, or wild vegetation growing on middens (e.g. hemlock, henbane, elderberry, mallow) as noted above. Grass/rush/straw/sedge stems and other types of vegetation including mosses, bracken and spike-rush probably came from plant material used as toilet wipes or deposited to soak up liquids and reduce odours. These remains are common features of cess pit assemblages. It is interesting to see that no mineralised fly puparia were present and only a few millipede segments and woodlice fragments were found, suggesting that the cess pits may have been covered when in operation, or at least were not especially rich and wet, as suggested in Saxon *Hamwic* (Carruthers 2005). Once again, however, poor preservation could have been a limiting factor.

The rubbish pits were receiving small amounts of faecal waste (or possibly larger amounts, most of which decayed away) and low concentrations of spelt processing waste with occasional grains, deriving from day-to-day cooking preparations. Sprouted grain was only found in the pit containing the dump of 'cumings' or malting waste and not in the other four pits. The spelt processing waste was very low in weed seeds and no large items such as culm nodes were present, so it is likely to have come from the de-husking of cleaned spikelets of spelt which had been grown in well-maintained fields, i.e. uncontaminated by previous crops or bad weed infestations of large-seeded weeds such as oats and brome. In addition, for samples 1, 3, 7, 8, 9 and 10, a robust variety of spelt was being grown, judging from the width and sturdiness of the glumes. If these samples are used as a guide to the principal cereals being consumed, spelt wheat would appear to be the only grain eaten by the occupants. However, taking into account the results from the hearth sample it is likely that bread-type wheat and possibly rye were also important in the diet, but their remains have been under-represented in the charred assemblages because they are free-threshing cereals. A fairly pure spelt malt was being used for brewing, rather than a spelt/barley malt which would be more effective because of better production of malting enzymes by barley. A Roman site in Andover, Hampshire, recently examined, has produced malted spelt with barley deposits at a ratio of around 3 to 2 spelt to barley (East Anton; Carruthers, in preparation).

A number of other Roman sites in Kent have produced evidence for malting spelt wheat, the closest of which is the Mount Roman Villa a short distance to the west of the Church Street site (Houliston 1999). Two samples from a construction backfill and post-pit dated to *c.*AD 175-250 produced spelt chaff-dominated, rich assemblages very like the 'cumings' from Church Street. Robinson (1999, 149) suggested that this was the most likely interpretation for these deposits, since some sprouted grain and large quantities of detached sprouts were present. Two earlier Roman samples (AD 150-225) were dominated by clean spelt grain (not sprouted, very few weed seeds)

with lesser quantities of chaff. A very similar range of weed seeds to Church Street was present, suggesting that comparable soils were being cultivated.

Further north in the Ebbsfleet valley at Northfleet villa, brewing appears to have been taking place almost on an industrial scale during the Roman period. Malting ovens, a barn and three brewing tanks with the largest holding up to 16,000 pints were excavated. Large numbers of germinated grains and detached embryos were recovered from samples dated from the Early Roman through to the Late Roman periods. Germinated barley was not found until the Late Roman period, perhaps indicating some changes in practice (Barnett *et al.* 2011).

To the east, on and around the Isle of Thanet, three Roman sites provided evidence of brewing using fairly clean and pure spelt wheat. At Nonington, malted grist (coarsely ground roasted grains) was recovered from a *c.*AD 120-150 building (Helm and Carruthers 2011). At Downlands, Walmer (Pelling 2010) chaff-rich samples from a boundary ditch represented 'cumings' from the malting of spelt wheat, as at Church Street. At Monkton on the Isle of Thanet larger excavations of a Romano-British settlement produced deposits of 'cumings' from the malting of spelt wheat in several pits, as well a wider range of food plants including stone pine nutshell, a possible fig seed and large pulses including peas (Pelling 2008). It is clear that Kent was a major centre for brewing at this time and that spelt wheat was being grown on a large scale to satisfy the demand for ale.

Interpretation of the Site (**Fig. 4**) *by Jake Weekes*

The Church Street site offered only a relatively small selection of features, but their archaeological value is clearly rich. Late Iron Age occupation at the site appears to have commenced sometime in the early first century BC by people laying out boundaries and enclosures and using potin coinage probably as part of an embedded economy. As Sue Jones has noted, in the later Iron Age there is a visible shift towards higher proportions of cattle over other domesticates (Jones; 2010; 2012; 2013; see Hambleton 1999, 59). While the predominance at Church Street, Maidstone, may just reflect a bias created from the small sample size, the increased proportions of cattle could reflect local communities adopting a diet that favoured beef (*ibid;* see King 2005, 232; Vigne 1992). Moreover, there are some interesting suggestions of placed deposits: Jones (2013) points out that it is possible that cattle mandibles, both left sided, were placed as special deposits in the enclosure ditch terminus (G2) and a boundary ditch (G4). A complete neonatal pig cranium and complete juvenile limb bone, deposited together, may also reflect such depositional practice, and horse and dog remains were all left sided metapodials, suggesting ritualised selection (cf. Jones 2012).

The Fremlin Walk excavation (Edwards 2007) to the west revealed part of a landscape of pits and occasional linear features, phased on the basis pottery fabrics – Late Iron Age (pre-Roman conquest) and Late Iron Age/Early Roman (so called 'Belgic' Ware). The earlier activity was represented by five pits that yielded pottery and butchered animal bone, while the later included a ditch with associated postholes which may have formed a fence line or palisade. Several pits containing pottery and animal bone were also dated to this period. All of this sounds markedly familiar to the Late Iron Age phase at Church Street, and clearly places that site in

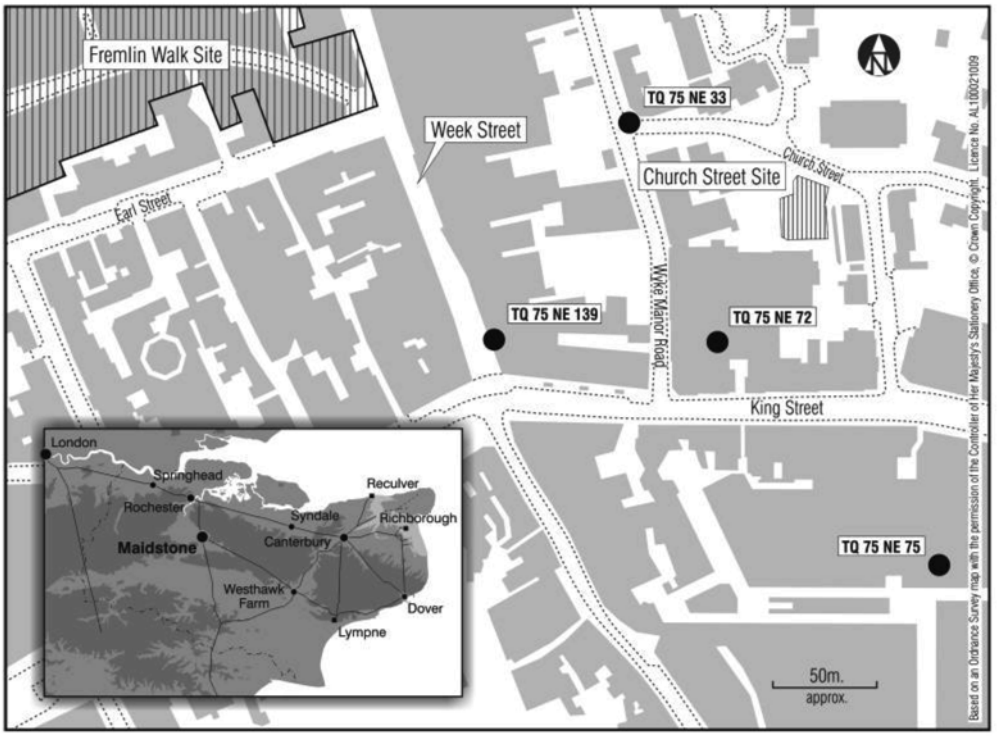

Fig. 4 Location of Site in relation to nearby sites and finds in Maidstone and in the wider context of Roman Kent.

a broader, probably mainly rural landscape. The Church Street boundary had been repeatedly reified by ditches

It is interesting to note that ditches at Fremlin Walk appear to have approximately aligned with the (apparently) later Roman road, while those at Church Street do not. There are clear elements of both continuity and discontinuity at the Church Street site, even given the caveat that this is such a small area. It is clear for example that the Roman period trackway (G3) respects an Iron Age grain in the topography (G2, G4, G5, G6, and possibly G9), yet by the same token the early Roman hearth (Gx) cut the silted up remnants of the Iron Age boundary markers, and the cluster of fully Roman period pits (G8) apparently did not heed the old causewayed enclosure ditch.

In terms of the established Roman period, the reader may have noted that much of this report has been dedicated to a detailed consideration of five sub-circular pits and a single hearth/oven. First and foremost, the presence of this pit cluster and its range of contents is clear evidence of domestic settlement nearby, to which we can add the upper and lower stones of another quern stone found in the garden of a house in Church Street in *c*.1900 (TQ75 NE72), and a possible Romano-British building (HER: TQ75 NE139), 120m away at the corner of Week Street and the High Street (Fig. 4). Moreover, the pit contents clearly attest to much variety in the dietary habits of a Romano-British settlement.

And yet, typically for Maidstone, the question remains as to what *type* of settlement this evidence represents. In this respect, while the possible trackway at Church Street may seem at first glance one of the less interesting features on the site, it could also begin to point to a 'connectivity' between apparently dispersed occupation. Indeed, if the Late Iron Age ditches and entrance way at Church Street were in any way extant at the beginning of the Roman period, the whole configuration of the site could represent a section of north-east/south-west aligned thoroughfare heading downslope. This conjectural alignment would intercept the Roman road which is known to pass some 140m west of the site (Margary 1955, 38), near the line of Week Street. A hoard of 58 *sestertii* dating from the reign of Domitian to that of Commodus found in 1935 at the corner of Church Street and Marsham Street (TQ75 NE33) marks early Roman activity nearer east side of the road, which linked Rochester to the iron-rich Weald and on towards Hastings. This was part of a network of travel and transportation routes in Kent (Fig. 4) within which Maidstone seems likely to have been a nodal point; perhaps significantly, the junction towards Ashford and beyond lay less than four miles to the south, where there was a walled roadside cemetery.

'Villas' have been excavated in the vicinity of the Church Street site, like the Mount Villa, about 0.75km to the north-west (Houliston 1999; TQ757 562), and that on Bower Lane (TQ751 552) discovered fairly recently on the west bank of the river. Such evidence has perhaps dominated views of the Roman period in the area, and suggests an agricultural, rural context for the sites on the east bank, near the road (Edwards 2007). The Church Street site could of course fall within such a landscape, or be associated with an as yet unknown 'villa', to the east.

Yet the increasing evidence of occupation to the east of the Medway in Maidstone could also be hinting at some sort of discrete settlement, perhaps ribbon development centred on the road.

It should of course be remembered that this evidence includes cemetery areas, for which a roadside location is typical, even if the deceased lived elsewhere. Denoting a probable small cremation cemetery, a number of Romano-British 'urns' have been found, at the junction of Earl Street and Pudding Lane in 1715 (TQ 75 NE 32), at St Faith's Street in 1850 (TQ75 NE31), and in 1932 at the Earl Street end of Havock Lane (TQ 75 NE 32; at approximately TQ 7589 5587) and beneath the former Crowhurst's Stables (*ibid*; at TQ 7590 5588). To the north of these, an amphora handle (TQ 75 NE 64) and (possibly Roman period but undated) disarticulated human bones are recorded as stray finds in Brenchley Gardens. Inhumation burials, to the south of Faith Street, were excavated as part of the Fremlin Walk project (Edwards 2007), where a large number of various Roman period features were also identified, although admittedly clustered nearer the river than the road. The latter included boundary or enclosure plots in the form of ditches and post-holes, as well as the remains of a large timber building. Occupation here has been rather loosely dated (*ibid.*, 86) on the basis of wide ranging pottery typologies, to between the first and the third/fourth century AD; an earlier date in this range seems more likely, as at Church Street.

But despite such caveats, the new evidence at Church Street and elsewhere in central Maidstone would not preclude some sort of early Romano-British nucleation, or ribbon development, near an important meeting place of road and river. What

we might call a small town, comparable with the Westhawk Farm settlement at Ashford (Booth *et al.* 2008) is certainly a step too far on the present evidence, but some settlement focus other than villa complexes seems a real possibility here. Such a settlement would surely be well placed economically in terms of the Wealden iron industry and communications, just like the Westhawk complex, and indeed near to the junction of the road heading in that direction. From the Church Street and Fremlin Walk evidence it would seem that it developed from an existing Late Iron Age establishment, again as elsewhere.

More pieces of jigsaw are certainly needed in order to understand just what sort of a place this was in the early Roman period, but is it too early to begin referring more confidently to the 'Romano-British settlement at Maidstone'?

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