

RESCUE EXCAVATIONS IN THE OUTER COURT OF ST. AUGUSTINE'S ABBEY, 1983-84*

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WITH CONTRIBUTIONS BY

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INTRODUCTION AND SUMMARY

Salvage work undertaken in 1983-84 during the construction of a new Students' Union building for Christ Church College, Canterbury, revealed a complex sequence of archaeological deposits dating from the Middle Anglo-Saxon period to the present. The Anglo-Saxon features of eighth- and ninth-century date may relate to a small secular settlement north of the precincts of St. Augustine's Abbey, founded in *c.* A.D. 598. Agricultural levels post-dating this possible settlement culminated in a period of industrial activity, which in turn terminated sometime before the area was enclosed by the Abbot and Convent for an Outer Court during large-scale developments in the Abbey in the late thirteenth and early fourteenth centuries. The extensive foundations of a Cellarer's Range, which originally separated the new Inner and Outer Courts of the Abbey, were uncovered during the machine clearance of this site, together with a complex sequence of Outer Court metallings and service drains. The Outer Court and its associated building ranges to the north and south were probably demolished shortly after the Dissolution of the Abbey in 1538.

The grounds of the college were long known to have been part of the extensive precincts of the abbey, but until very recently they were

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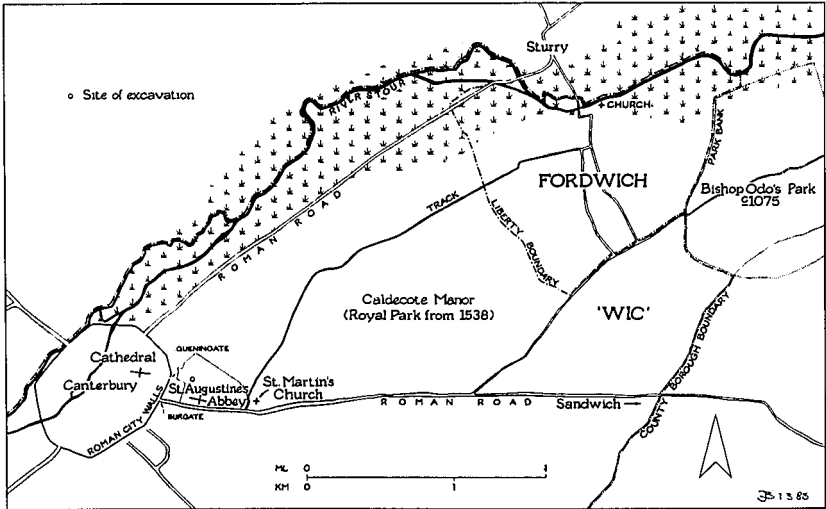


Fig. 1. St. Augustine's Abbey: Excavation Location Plan.

not included within the area of the scheduled Ancient Monument. They are surrounded by extant abbey boundary walls and contain ruined elements of at least one surviving service range (Plate I, D).

The first stage of the salvage operation began in November 1983, when members of the Trust staff visited the site following notification that machine work had already commenced. A bulldozer had by that time exposed and cut into the foundations of a large medieval building which later proved to be part of the Cellarer's Range flanking the south side of the Outer Court of the abbey. Over a wet and cold two-week period and with the agreement of the contractors, the foundations of this extensive range were cleared and recorded, together with an impressive sequence of Outer Court metallings and earlier medieval and Anglo-Saxon features.

Early in 1984, areas on either side of the Union building, which by that time was receiving its roof, were terraced. These terraces north and south were for future extensions to the finished structure. A number of main service-trenches and two large soakaways were also cut at this time. Following the machine clearance of these areas time was given to investigate the ground north of the Union building. Here a small 'island' of intact undercroft floors was examined, together with parts of the south wall and through-passage of the Cellarer's Range. A number of Anglo-Saxon and earlier medieval rubbish pits

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and a large medieval ditch were also located in this area. A brief investigation north of the Union building enabled the recording of a long section of the later medieval main drain which extended diagonally across the Outer Court on a north-north-west to south-south-east line from the abbey Kitchen to discharge probably in the city ditch. At least two subsidiary drains feeding foul water from a service range north of the Outer Court into the main drain were also recorded together with a section of terra-cotta water-pipe, which fed fresh water from the abbey's private water supply to the northern service range. A complex sequence of Outer Court metallings, medieval features and a thick deposit of 'ploughsoil', containing residual Roman, Anglo-Saxon and Early Medieval pottery, were also briefly examined.

The construction of the new Union building completely removed or severely damaged archaeological deposits which had remained undisturbed since soon after the Dissolution of the abbey in 1538. Those levels not completely removed during the preparatory levelling of the site were severely truncated by an extensive network of deep foundation pits and wall and service trenches for the new building. The construction of this new structure represents the most recent of a series of developments at the college dating back to its foundation in 1962 that have, at the very least, destroyed levels associated with the Outer Court of the abbey established in the early fourteenth century. The sequence of deposits and features exposed and truncated during the various stages of the development indicate that parts of the college grounds may have been occupied from the Middle Anglo-Saxon period onwards. Indeed, there is some evidence to suggest that a cemetery and extra-mural agricultural area may have existed here in the Roman period.

Regrettably, the speed of the Union building development did not allow for a thorough archaeological examination of the area and in the final analysis an opportunity to fully examine a complex and important archaeological site was lost.

PERIOD I: ROMAN OCCUPATION

Although no features of Roman date were identified, some form of activity during the Roman period was tentatively represented by a small collection of pot-sherds recovered from residual contexts and from machine-disturbed soils. Other Roman period finds included two fragments of glass, a coin of Cunobelin and a regular radiate; all gleaned from residual contexts. A small quantity of fragmented

Roman tiles, including *tegulae*, *imbrices* and bricks, was noted in machine-disturbed soils, in residual contexts and in exposed sections, though this debris could have been from Early Medieval buildings where Roman building materials were often re-used.

These residual and unstratified finds perhaps indicate sparse occupation spanning the period from the first to the third or fourth century A.D. and may relate to the presence of a known Roman cemetery in the area later covered by the abbey. The Roman street to Richborough leads eastwards from Burgate and runs through the later medieval Lay Cemetery of the abbey some 150 m. south of the development site. A second and as yet unlocated Roman street probably led from Roman Queningate in an easterly or south-easterly direction. It may have run just to the south of the present site, and perhaps joined the Richborough road in the vicinity of St. Martin's Church. To date, most of the known burials occur between the postulated positions of these two streets, the furthest burial being located some 210 m. east of the city wall. Most of the known burials (both inhumation and cremation) were uncovered in the Lady Wootton's Green area during sewer trenching in 1868¹ and in minor excavations by Professor S.S. Frere in 1951.² A marble tombstone fragment was also found in the Green outside the Abbey Gate in 1922.³ A number of Roman inhumation burials was located during trial trenching in the Lay Cemetery of the abbey in 1972⁴ and in 1981 two cremation burials of late first- to early second-century date were recovered from service trenches some 75 m. south of the Students' Union building in the Inner Court area. A 'clay kiln and circular bronze-smelting furnace' were found in 1929 associated with late first century A.D. pottery in the south-west corner of the abbey cloister.⁵

Although early deposits overlying natural head-brickearth were exposed during the cutting of foundation trenches and pier-bases for the new building, no identifiable Roman features were exposed. The early soil horizon, a uniform light brown silty clay 15–25 cm. thick, contained slight pebble and a small number of Roman tiles, isolated scatters of oyster shell and a few animal bones, (Fig. 4: Section AB, layer 65; Section CK, layer 105; Section HJ, layer 83, and Section PQ, layer 87). Much of the material, which appeared at different

¹ J. Brent, *Canterbury in Olden Times*, 2nd Edition, (Canterbury, 1879), 46 and P1. 10, No. 1.

² *The Archaeology of Canterbury*, vol. viii (forthcoming).

³ *VCH* (Kent) iii, (1932), 74 and *JRS.*, xxvii (1927), 214.

⁴ *Med. Arch.*, xxvii (1973), 144.

⁵ R.J. Pollard, 'Two Cremations of the Roman period from St. Augustine's College, Canterbury', *Arch. Cant.*, xcvi (1982), 318–24, and *VCH* (Kent), iii (1932), 74.

levels within the deposit, often pitching at angles, suggested that this primary 'made-ground' was disturbed soil perhaps consistent with an agricultural horizon. Much of the ceramic material was worn and abraded, a phenomenon again perhaps suggestive of residue contained within 'turned over' soil.

An alternative explanation for the scatter of Roman period finds may therefore be that the ground north of the postulated street leading from Queningate was only utilised for agricultural purposes, whilst the area south of it was, perhaps, a cemetery. The evidence for this interpretation, however, remains equivocal. No early deposits were excavated manually. The primary levels were severely truncated by later features and all conclusions and assumptions are entirely based on evidence hurriedly recorded at the base of machine-cut trenches.

PERIOD II: THE MID TO LATE ANGLO-SAXON LEVELS

A number of features dating to the Anglo-Saxon period was recorded during the salvage work. Residual Anglo-Saxon pottery of seventh- to eighth-century date was also recovered from machine-disturbed soils overlying natural brickearth and from residual contexts.

The Anglo-Saxon and medieval ploughsoil

Overlying the primary soil horizon sealing natural brickearth was a 30–40 cm. thick deposit of turned-over brown loam, (Fig. 4: Section AB, layers 64, 63; Section CK, layers 71, 70; Section EF-GH, Layers 146, 148, 79; Section HJ, layer 79; Section PQ, layer 86). This loose-textured, heavily worm-casted layer contained slight pebble and occupation debris consisting mainly of oyster shells and fragmented animal bones. Occupation debris was noted throughout the entire deposit, though no identifiable horizons were observed. The interface between the primary deposit of 'made-ground' (probably of Roman date) and the brown loam, though reasonably distinct in terms of soil colour and texture, was uneven and irregular with a mixing of the two deposits evident at the junction of the two layers. The brown loam appeared to be turned-over soil, perhaps ploughsoil, which may have developed over a considerable period. This layer, which extended across the entire redevelopment area, appeared to seal a number of Anglo-Saxon pits, whilst other features containing Anglo-Saxon material may have been cut from a low level of the deposit. A number of medieval features dating from the late eleventh century up to c. A.D. 1300 were almost certainly cut through the

deposit. Small quantities of Anglo-Saxon pottery dating from the seventh to the early eleventh century were recovered from the loam level during machine clearance together with Early Medieval sherds dating up to c. A.D. 1180. The implications are that this secondary deposit of 'made-ground' may have been associated with agricultural activity spanning the period from the late ninth century to the late twelfth century. This possible agricultural use of the area north of the abbey may have superseded and destroyed traces of earlier Saxon domestic occupation, of which only a small number of identifiable deeply-cut features remained.

Anglo-Saxon Features

A considerable number of features was observed during the mechanical reduction of the stratified deposits. The heaviest concentration of features observed in the truncated horizon occurred in the area immediately south of the Cellarer's Range and immediately north of the range extending to the line of the main drain. The continual presence of heavy machinery together with the high-priority clearance of the Cellarer's Range made it impossible to excavate the features north of the building.

A sampling strategy of stray finds churned up during the machine reduction of the stratified deposits was adopted to ascertain the date range of these intercutting features. The area chosen extended 8 m. west of Section AB, from the line of the eastern cross-wall of the Cellarer's Range to Section AD. Three members of staff collected pot-sherds from this area over a ten minute period. Of the 150 stray pot-sherds collected, 5 per cent were of Roman date, 29 per cent spanned the period from the seventh to the tenth century, and 66 per cent were medieval, dating up to c. A.D. 1300. These percentages compare favourably with the total ceramic assemblage recovered during the salvage work.

The excavated Pits (Fig. 2)

In only one small area south of the through-passage of the Cellarer's Range was it possible to excavate a number of intercutting features. Of the seven rubbish pits located in this area, four were of eighth to ninth century date (Fig. 4: Section PQ and a-b) and three from the eleventh and twelfth centuries.

Pit 133

This square-shaped pit cut 65 cm. below natural brickearth and capped by the loam 'ploughsoil' was cut by a large Early Medieval

ditch (130). The pit contained a lower fill of discoloured pale brown clay mixed with layers of burnt carbon and pale grey clay (133B and C). This primary fill was capped with lumps of yellow brickearth and carbon (133A). The uppermost pit-fill was a subsidence deposit consisting of stony brown loam mixed with pale brown clay (133). The pit-fills yielded thirteen pot-sherds of eighth-century date.

Pit 157

Only a fraction of this feature was within the excavated area. The feature was cut by an Early Medieval pit (158) and was sealed by the loam 'ploughsoil'. The pit, cut 60 cm. below natural brickearth, contained a uniform fill of pale brown clay flecked with carbon. A small number of oyster shells and animal bones were gleaned from the pit-fill. Although no datable sherds were recovered from this feature, its stratigraphic position and backfill (similar to pit 133) indicated that it was probably contemporary with pits 133, 122 and 129.

Pit 129

This feature cut by pit 122 was truncated during the cutting of a soakaway for the new building. The sub-circular shaped pit, cut at least 1.30 m. below natural brickearth, was not fully excavated. This feature may have been a well. The pit contained an upper fill (129) of stony grey-brown loam which yielded fragments of Roman brick and tile together with oyster shells, animal bones and eight sherds of eighth-century pottery. The lower fill (159) of pale brown silty loam, heavily flecked with carbon, contained only a few oyster shells.

Pit 122

This feature, which cut pit 129, was arguably the latest of the sequence of Anglo-Saxon pits. This rectangular shaped feature, cut 95 cm. into natural brickearth, had a primary fill (122A) of fine-grained grey-brown clay, heavily flecked with carbon. This deposit which contained traces of rotted organic matter, together with oyster shells and animal bones, was capped by a layer of gravel and a dump of pale brown clay, with oyster shells. These primary deposits yielded forty-five sherds of eighth- to ninth-century pottery and a coin of Aethelberht of Wessex and Kent (A.D. 858-866). The coin (Plate III C) was recovered from the uppermost fill of the pit and may have been deposited some time after the bulk backfill, perhaps during a phase of subsidence consolidation.

Other aceramic Features of possible Anglo-Saxon Date

A number of features, buried by the 'ploughsoil' horizon and identified only in machine-cut sections, may have been of Anglo-Saxon date. These were: Feature 62, a shallow pit in Section AB; Feature 149, a shallow pit in Section HJ and Feature 155, a ditch, running parallel to and under Section EG.

Discussion

Although a handful of sixth- to seventh-century pot-sherds was recovered during the salvage work, the greater percentage of Anglo-Saxon finds dated from the eighth to the ninth century, and it is in this period that the highest concentrations of features probably occurred, these possibly connected with domestic occupation immediately north of the Anglo-Saxon Abbey Precinct.

The line of the Roman street leading out from Roman Queningate may have survived into the Early Medieval period, perhaps eventually becoming the lane known to have existed in 1283 which ran 'between the door of the court of the Abbey' and its 'land at Nordholm.' This lane probably lay to the south of the present back lane leading to Christ Church College (the latter only became a lane after the Dissolution) and may have been the centre of Anglo-Saxon extra-mural settlement with houses built against and close to the street frontage. This area to the north of the abbey, still known as the North Holmes today, may conceivably have been in origin the site of a small secular settlement, which developed soon after the founding of the abbey by Augustine in c. A.D. 598 and continued in existence into the late ninth century. The scanty evidence recorded during the salvage work perhaps suggests that the occupied area then became open ground again, perhaps used for agricultural purposes. The settlement may therefore have been abandoned in favour of a location within the city walls during the troubled period of Viking incursions.

Although recent excavations have provided more evidence for occupation within the city walls in the Middle Saxon period, the most significant ceramic assemblages (particularly imports) and finds have come from outside the Roman town walls on the north-east, in particular from the present site and most recently from a site near St. Martin's Church. Although much more work needs to be done, the implications of the pottery and finds distribution tend to suggest that one area of Middle Saxon occupation lay outside the old Roman town walls together with a separate intra-mural settlement perhaps centred on the Cathedral. These separate intra- and extra-mural settlements may relate to the 'Innan burhware' and the 'Utan burhware' (the

people who live inside and outside the burh) recorded in ninth century documents and discussed recently by Dr Nicholas Brooks.⁶

The initial siting of the present settlement may have been dictated by the presence of the monastic establishment, indicating perhaps that the occupants were retainers of the religious house. A similar situation may have prevailed near St. Martin's Church, where a number of Middle Anglo-Saxon rubbish pits and a metalled street leading to the church may have been part of a settlement associated with the small religious community based at the church.⁷ A larger area of settlement may, however, have existed in the area north-east of Canterbury and south of the ancient River Stour estuary (covering much of the later parishes of St. Martin's and St. Mary's Fordwich). This area was probably called the 'wic', a word which comes from the Latin *vicus*, and means in the Middle Anglo-Saxon period, a trading settlement. It is very likely that most of the area from Fordwich to St. Augustine's and St. Martin's was in the seventh to the ninth century covered by this large open settlement. Fordwich is first mentioned in a charter of A.D. 675,⁸ and later evidence tells us that the area to the south was called Wic.⁹ There were similar settlements outside London, York and probably Lincoln, as well as at Dover and Sandwich in Kent. With the Viking invasions of the mid ninth century these large *wics* were probably destroyed, but from the tenth century a series of dispersed settlements grew up again at Fordwich itself (which became a separate borough probably in 1055), at Wic and St. Martin's.

Although the presence of imported Ipswich-type wares recovered from the Anglo-Saxon features during the salvage work may indicate a direct relationship between the extra-mural settlement and the abbey, an agricultural base for this community may be indicated by the subsequent 'ploughsoil' development. The total assemblage of mid to late Anglo-Saxon finds gleaned from the Union building site is of singular importance for the study of this as yet little known period of Canterbury's history. A thorough examination of these important levels would have undoubtedly provided a better insight into the nature of the occupation deposits summarily recorded here.

⁶ Nicholas Brooks, *The Early History of the Church of Canterbury*, (Leicester, 1984), 32-3. A very recent (December 1985) trial excavation in the most northern area of the Abbey Precincts has also produced Middle Anglo-Saxon pottery.

⁷ *Ibid.*, 251.

⁸ P.H. Sawyer, *Anglo-Saxon Charters* (London, 1968), No. 7, which is almost certainly a genuine charter.

⁹ First recorded in *Domesday Monachorum*.

PERIOD III: c. 1050–1300

Capping the Roman horizon and Anglo-Saxon features was a uniform deposit of ‘turned-over’ dark loam, interpreted as possible agricultural ‘ploughsoil’. This deposit (Fig. 4: Section AB, layers 64, 63; Section CD, layers 71, 70; Section EF-GH, layers 146, 148, 79; Section HJ, layer 79; Section PQ, layer 86), yielded residual Roman and Anglo-Saxon material, together with pot-sherds dating up to the second half of the thirteenth century.

This uniform deposit, located across the entire development area was cut by a large number of features of which only five were sampled. As previously mentioned, a very large number of features was identified during the preparatory machine levelling of the site, particularly in the area immediately north of the Cellarer’s Range. The sampling strategy undertaken west of Section AB, discussed above, revealed that 66 per cent of the total assemblage recovered from the machine disturbed soils in that area were of Early Medieval date; the bulk of the finds centring on the period from c. 1100–1200. Many of these truncated features, recognised only as soil stains, were undoubtedly domestic rubbish pits. Other features contained residues consistent with industrial activity. The only excavated feature containing industrial debris proved to be a casting pit (47). This feature, possibly one of the latest in this area prior to the construction of the Outer Court and the service ranges in c. 1300, may have been only one of a number of such features disturbed during the course of this redevelopment.

The excavated Features

The ditch

The earliest dated feature was a very large linear ditch aligned roughly east—west. This feature located in the area south of the through-passage of the Cellarer’s Range, was only partly excavated; the lower levels of the ditch being sampled by means of digging a narrow but deep trench east of the line PN to the position of pier base 16. The southern edge of the ditch was revealed for a length of approximately 3 m. The sump of the ditch was not found, but the feature must have been in excess of 3 m. deep with shallow-sloping sides. The angle of the ditch backfill suggested that the centre of the ditch lay within the excavated trench and that the ditch may have had a flat bottom. Allowing for a narrow but flat sump, the ditch may have been at least 9–10 m. wide.

Feature 66, at the south end of Section AB may have been part of

the backfill of the ditch. The casting pit (47), which was cut through feature 66, may well have been inserted into the upper levels of the ditch. It is perhaps a salient point to note that natural brickearth was not encountered during the excavation of the casting pit. Intact early stratigraphy (layer 65) was, however, noted approximately 0.09 m. south of the wall of the Cellarer's Range (11). If the termination of intact stratigraphy at this point represents the northern edge of the ditch and layer 66 a remnant of its backfill, then a ditch width of approximately 10 m. is again suggested.

The ditch (in the area south of the through-passage) was backfilled with laminated deposits of clay and loam. The earliest fills, three distinct layers of light brown stony clay (131, 130 and 127), yielded pottery dating from c. A.D. 1050–1150. The overlying fills of brown loam and pale brown clay (125 and 124) also contained sherds dating up to the mid twelfth century.

The only deposit likely to be associated with a weathering of the ditch edges during occupation was layer 131. This deposit of discoloured grey-brown silty clay yielded seven pot-sherds dating from c. A.D. 1050–1080. The remaining layers, probably associated with a single period backfill, contained small quantities of eleventh-century material but the chronological emphasis in these layers lay in the early to mid twelfth century. Despite the limited nature of the excavation, the pottery recovered from the ditch backfill suggests that this feature was probably cut in the third quarter of the eleventh century and backfilled in the mid twelfth century.

The considerable size of the ditch, approximately 10 m. wide and in excess of 3 m. deep, was over-large for a boundary and may have been cut for defensive purposes. The dating evidence places its cutting in the early Norman period, shortly after the Conquest. Quite why a ditch of this size was cut in this area and at this time is difficult to ascertain; only further excavation can evaluate this and the accuracy of the interpretation which was based on extremely limited evidence. One other possibility, however, is that the ditch was cut for the great drain coming out of the Reredorter. The line of the ditch is very close to the projection westwards of the probable site in the Reredorter for a drain (Fig. 2).

The pits

Despite the number of disturbances observed cutting earlier deposits in the development area, very few were sampled. Two rubbish pits were partially excavated in the area of the through-passage of the Cellarer's Range. Pit 158 was cut from the surface of the 'ploughsoil' deposit (86) in this area and yielded no datable finds. Pit 140, also cut

from the surface of the 'ploughsoil', yielded a corpus of pot-sherds dating up to c. 1100–1125, and may conceivably have been cut and backfilled before the ditch (130) was infilled.

The unexcavated Features

A number of possible medieval features was recorded in machine-cut sections. Two shallow features, possibly pits, were located in Sections EH and HJ. Feature 154/145 yielded twelfth-century pot-sherds (gleaned from the section) and pit 81 contained no datable finds, but was cut through the 'ploughsoil' deposit.

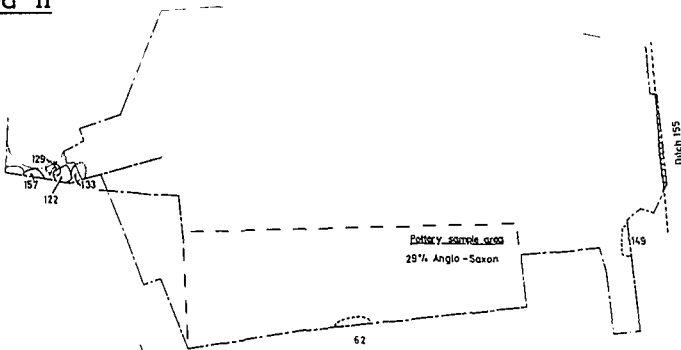
A possible ditch (180), aligned roughly north–south, was revealed in Section HJ. This feature, which cut the 'ploughsoil' deposits contained an upper fill of stony brown silty loam, capping dirty pale-brown clay; it yielded no finds and may conceivably have been a field boundary.

The Casting Pit (Fig. 3, inset plan and Plate III, B).

During the machine-clearance of the south-east corner of the site an extensive area of burnt orange clay mixed with carbon and vitrified clay lumps was exposed. This feature, one of a number of heavily burnt areas containing industrial residue, was systematically excavated to the line of Section AB. Only the west end of this extremely large feature was excavated. The construction pit was probably rectangular, being 7.5 m. wide and of unknown length. The feature aligned roughly east–west was cut to an average depth of c. 90 cm. At the base of the pit, part of a rubble masonry foundation of greensand and flints bonded in burnt orange-yellow sandy mortar (46) extended on a north-east to south-west axis into Section AB. A thickening of the wall (from c. 48 cm. to 62 cm.) at the point of intersection with the trench edge indicated the presence of a wall at right angles to wall 46, extending under the section. On the line of Section AB the wall foundation had been demolished to a single course of rubble masonry. The northern end of the wall, however, survived to three courses, standing to a height of c. 45 cm. A shallow terrace, 35 cm. deep, had been cut into the base of the construction pit, east of the wall. The terrace extended approximately 50 cm north of the wall 46, terminating in an eroded but roughly vertical face. A third wall at right angles to wall 46 may have been located in this position, but all trace of it removed during a subsequent episode of robbing. The base of the terrace within the masonry structure was heavily fired and a well-defined 'crust' of vitrified clay (45) abutted the fire-fractured and burnt internal face of wall 46. The floor terminated close to and at right angles with the end of wall 46. This

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Period II



Period III



Periods IV & V

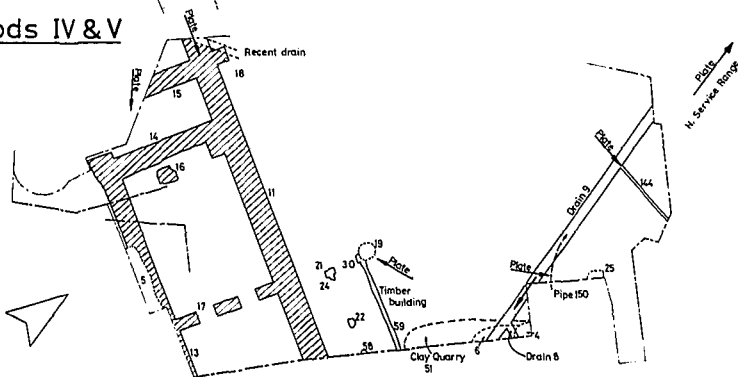


Fig. 3. St. Augustine's Abbey: Phased Plans of excavated and observed Features in the Outer Court Area.

scar is perhaps supportive evidence for a wall at right angles to the surviving masonry. The base of the construction pit north, south and west of the internal terrace was sealed by a 1–3 cm. compacted tread of dirty grey clay, mixed with mortar specks (47). This deposit may have been construction residue. The layer was in turn sealed by a dumped deposit of silty brown loam mixed with dirty pale yellow clay (44). This dump was probably residue from the backfilling of the construction pit, after the masonry walls had been built. Three stake-holes (48, 49 and 50), located at the base of the construction pit and cut to an average depth of 10–16 cm., were of unknown purpose, but may have been inserted from a higher level perhaps as ancillary supports for a flimsy timber roof covering the masonry structure. No trace of a possible stoke-hole for the structure was found in the excavated area. This must have been located somewhere east of Section AB.

Following an unknown period of use, the masonry structure was demolished and robbed to its foundations. During the robbing the burnt floor (45) was also disturbed. The robber pit was subsequently backfilled with successive layers of burnt clay debris (including numerous casting-mould fragments) and dark loam. Three successive dumps of burning (43, 41 and 39) were discerned in the lower backfill, separated by dumps of dark brown loam (42, 40 and 38). These dumped layers were in turn cut by a later disturbance containing further deposits of burnt clay and mould fragments (37). The remaining hollow was then infilled with a deposit of dark brown loam (36) which was in turn eventually capped by the undercroft floors of the Cellarer's Range.

Only residual pottery dating up to c. 1150 was recovered from the robber pit's backfill (layers 37 and 38). The casting pit was probably built over a large ditch infilled by the mid twelfth century (130). Subsidence of the backfill within the casting pit led to evident consolidation of the undercroft floor. The subsidence of the pit during the life of the later building may indicate that only a short period separated the final infilling of the pit and the construction of the range. The evidence for this is equivocal and a construction date sometime after the mid twelfth century and before c. 1300 can be confidently suggested.

Besides the small number of pot-sherds, the robber pit backfill yielded quantities of metal-rich carbon (containing traces of copper and tin), fired clay (some partly vitrified) and vitreous slag, which could have formed in a hearth or furnace where metal was being melted. The fired clay – residue from casting moulds – displayed varying degrees of burning and almost all the fragments recovered bore traces of copper alloy on their surfaces. When first discovered,

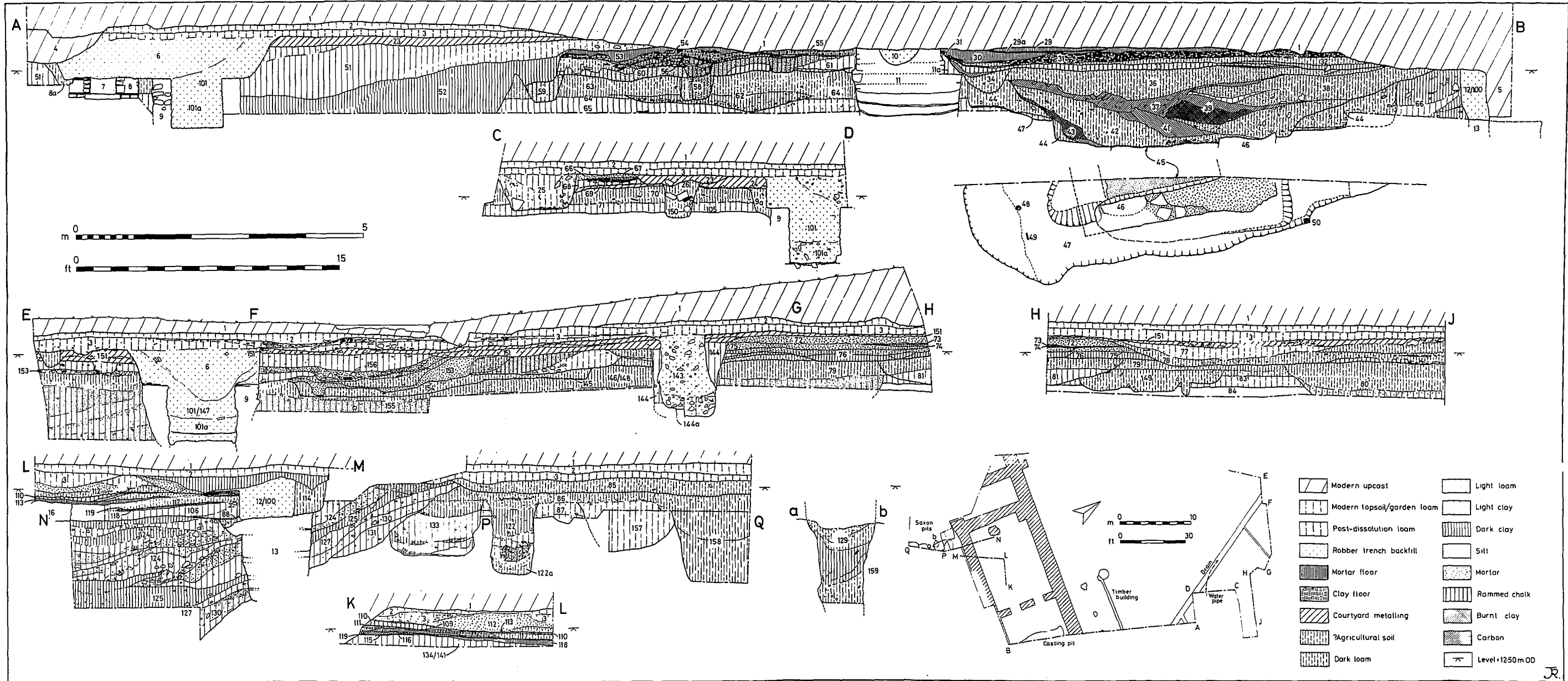


Fig. 4. St. Augustine's Abbey: Principal Sections of stratified Sections in the Outer Court Area and inset Plan of the Casting Pit.

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the feature was interpreted as a bell-casting pit, but an analysis of the mould fragments by Justine Bayley (see below) indicates that the fragments do not conform to the shape expected for the manufacture of bells and that the industrial residues may conceivably have been associated with the casting of monumental plaques for use perhaps in the abbey church.

The total assemblage of finds and observed and excavated features of Period III date indicate a complex occupation sequence from *c.* 1050 to 1300. Of particular interest is the evidence for industrial activity. Verbal reports of features similar to the casting pit were recounted to the author by members of the college staff, who were present during the early 1960s and later phases of developments at the college. Overall, the sequence of archaeological deposits pre-dating the establishment of an Outer Court for the abbey in the early fourteenth century, indicates almost continuous activity from the Middle Anglo-Saxon period, which culminated in a phase of industrial activity perhaps associated with the manufacture of metalwork for the abbey. This last period also coincides with the Norman rebuilding of the abbey on a large scale (*c.* 1070–1150). The northern boundary of the abbey at this time was probably immediately to the south of the excavated site.

PERIOD IV: *c.* 1300–1550

The licence for the abbot and convent to enclose a block of land measuring 150 ft. by 80 ft. immediately north of the abbey Precinct (given in July 1300)¹⁰ was probably rapidly followed by the enlargement of the new Outer Court for the abbey. An earlier stage of the expansion (a licence granted in November 1283)¹¹ saw the abbot being allowed to enclose the lane between the door of the court of the abbey and his land at 'Nordholm'. These licences represent just two stages of a major phase of expansion of the abbey buildings which effectively saw an enlarging of the Inner Court in the late thirteenth century and a relocation of the principal service buildings in a new northern Outer Court. Apart from probably relocating the great gate, the abbey moved the Cellarer's Range from the west side of the great Cloister to the north side of the enlarged Inner Court (a building range which effectively separated the Inner and Outer Courts). A new range of service buildings, almost certainly for the

¹⁰ *Cal. Pat. Rolls* Ed. I, (1292–1301), 527.

¹¹ *Cal. Pat. Rolls* Ed. I, (1281–1291), 51.

Brewhouse and Bakehouse, was constructed on the north side of the new Outer Court. (The ruined western end of this range still stands. Plate I, D.)

During the initial clearance of the Students' Union site, the foundations of a large masonry building, aligned approximately east—west and later identified as probably being part of the Cellarer's Range, were exposed and partly truncated by the bulldozer. Levels, undoubtedly associated with floors within the building, together with yard metallings to the north of it, were also exposed or truncated. *The recording of this structure was considered a high priority and by negotiation with the contractors, a small team of Trust staff and volunteers attempted to expose and clean the remains of this building. The contractors were not prepared to delay machine-clearance, but fortunately since much of the area containing the building had been reduced to formation level for the new structure, it was possible to clear and record the foundations while machining continued in the northern half of the site. During the latter stages of development a small section of undercroft floors was examined and further portions of the building were recorded.*

The Cellarer's Range (Plate II, A, Plate II, B)

The foundations uncovered during the salvage work were for a building of external width measuring 11.60 m. (internally 8.20 m.) and of unknown length. The north wall (11) robbed to sub-foundation level, was 1.95–2.00 m. wide. Only one small portion of intact superstructure of four chalk-blockwork courses bonded in a pale-brown mortar and standing to a maximum height of 42 cm. was located at the east end of this wall. This fragment of wall superstructure was 1.50 m. wide and was rendered externally with plaster. A single chalk-blockwork foundation course, on average 20 cm. thick, overlay a sequence of rammed chalk and mortar sub-foundation deposits extending down at least 1.50 m. (the full depth of the wall foundation was only observed along Section PN, cut through the south wall). The south wall foundation (13) was 1.25 m. wide. Only sub-foundation deposits of rammed layers of chalk and mortar survived. A well-defined robber trench 0.95–1.05 m. wide (12) overlay the remaining portion of the sub-foundation. The construction trench backfill, of dark brown clayey loam (114) yielded a small corpus of residual late twelfth- to early thirteenth-century pot-sherds.

Two transverse wall foundations (14 and 15) 1.50 m. to 1.75 m. wide, set 3.66 m. apart, indicated the position of a through-passage or gateway passage joining the Inner and Outer Courts. These cross-walls were of contemporary build with the north and south walls and

of identical construction. A single external buttress (18) was located opposite the western cross-wall. The buttress, of contemporary build with the main north wall, was 1.00 m. wide and extended 1.00 m. north of the wall. The buttress sub-foundations were of rammed chalk and mortar underlying a foundation of three chalk-blockwork courses. The fragmentary remains of an *in situ* flat-chamfered greensand block surmounted the buttress foundation.

An internal pier base (16) capped by a large 30 cm. thick, roughly hewn greensand block, measuring 1.30 m. east—west, by 1.60 m. north—south, was located in the centre of the building range, 40 cm. east of the eastern cross-wall of the through passage. A corresponding thickening of the main north wall (from 1.95 m. to 3.00 m.) east of the passage walls indicated the position of the possible staircase, entered from the north, leading up to the first floor, a similar arrangement to the *Domus Hospitum* at Christchurch Priory¹² and also probably to the still surviving (though heavily restored) Guest Hall on the west side of the abbey's Inner Court.

A third internal cross-wall (17), 10 m. east of the pier foundation, suggested the existence of two major internal openings at undercroft level. The foundations, 0.95 m. wide, were interrupted by openings 1.45 m. wide. The north and south elements of the cross-wall were of contemporary build with the main north and south walls.

Intact construction levels were recorded in a small island of undisturbed stratigraphy contained by the line of Sections PN and LK. In this area, a construction horizon of trodden poured mortar, mixed with crushed chalk (88) sealed the earlier sequence of deposits associated with the backfilled ditch (feature 131). This deposit 2.4 cm. thick capped the remains of the construction trenches for the principal south wall and the east passage wall and originally abutted the wall foundations. The horizon was sealed by a 25 cm. thick dump of redeposited brickearth flecked with mortar and crushed chalk (Section LM, layer 106; Section KL, layers 134 and 141). Layers 134 and 141 yielded a large quantity of residual Roman, Anglo-Saxon and mid to late twelfth-century pottery together with sherds dating up to the late twelfth century. These construction deposits were capped by the primary undercroft floor (118) of rammed and poured mortar, 2–10 cm. thick. The machine-cut section (Section AB) through the building revealed a different sequence of deposits. Here an internal construction trench for the north wall (11A) backfilled with redeposited brickearth, was sealed by a thin lens of carbon and a 10–15 cm. thick deposit of rammed chalk and mortar (33). This layer,

¹² *The Archaeology of Canterbury*, vol. iii, (forthcoming).

undoubtedly the primary undercroft floor, capped the final backfill of the earlier casting pit (36). A small, shallow pit (34) underlying the rammed chalk floor, located against the inside face of the north wall, may have been cut during the construction process. The pit was backfilled with light brown clayey loam, flecked with mortar and chalk.

The possible Workshop, North of the Cellarer's Range

Of similar date to the Cellarer's Range was a small timber-framed structure, possibly a workshop, located against the main north wall of the range. This structure, 5.40 m. wide with its western end on line with the eastern cross-wall of the range, was probably built after the principal walls of the Cellarer's Building had been constructed. Indeed, it is quite possible that the principal transverse members of the framed structure may have been fixed into the fabric of the north wall.

A 70 cm. wide trench, filled with rammed dirty chalk (59) marked the line of a foundation designed perhaps to receive a timber-plate for the north wall of the workshop. The trench cut to a maximum depth of 50 cm. below the contemporary ground surface, terminated at its west end with a post-pit (30), 60 cm. in diameter filled with rammed chalk. A soil stain for a post-pit approximately 22 cm. in diameter was identified in the pit backfill.

Three posts divided the building longitudinally into two equal halves. The easternmost post (58) located in Section AB, was set in a post-pit 55 cm. wide cut 43 cm. deep. A soil stain for a post 30 cm. in diameter was noted in the backfill. The post-pit was backfilled with dirty brown loam heavily flecked with chalk and mortar. A second post-pit (22) was located 2.50 m. east of Section AB. This sub-circular feature, contained a backfill of rammed chalk and traces of a post 25 cm. in diameter. Two intercutting post-pits (21 and 24) defined the west end of the structure. These pits, probably cut simultaneously, contained a backfill of dirty rammed chalk, and soil stains for posts 25 and 23 cm. in diameter, respectively.

The precise nature of the building frame was not established, but a simple pent-roof possibly covered the structure. The row of internal posts may have been for subsidiary roof-supporting members or may relate to subdivisions or fixtures within the building. The deposits within the structure comprised layers and *laminae* of crushed chalk, poured mortar, and loam containing stone and chalk chippings (60 and 61). These layers may have been rough working-floors associated with a mason's workshop. The north wall of the timber building and post 58 were abutted by these deposits, and were probably aggregated gradually during the working processes. Post 58 was

withdrawn during the working life of the building and the remaining void was filled with a deposit of dirty loam mixed with mortar and chalk. The early deposits were capped by a levelling dump of light brown loam flecked with chalk (57) and a new laminated 'working-floor' of poured mortar and mortary stone and chalk rubble, (55 and 56) developed over this new horizon. A further levelling deposit (54) of bright yellow clay capped the intermediate floor, which was in turn capped by a third and final floor of laminated white lime mortar (53).

The withdrawal and subsequent sealing of post-hole 58 suggests that this feature at least may have been for an internal fitting or division within the building rather than a load-bearing or structural element of the frame. The remaining posts (all machine-truncated) appeared to have been withdrawn when the building went into disuse. The plate supporting the north wall was also removed when the building was demolished.

Contemporary with the life of this structure was a huge, deep feature (52) cut just outside the workshop's north wall. This disturbance, which extended at least 2.00 m. into the excavated area and continued to the line of Section AD, may conceivably have been a clay quarry. The feature was backfilled with redeposited dirty brown clay (52) late in the life of the timber building. This bulk infill was capped by deposits of brown loam and pale-brown silty loam (51), which also filled the void marking the line of the workshop north wall, and covered the final working floors within the building. This extensive levelling deposit was in turn sealed by dumped deposits and metallings associated with the surfacing of the Outer Court (23).

The Outer Court Levels

Capping the early fourteenth-century ground surface north of the Cellarer's Range and the possible workshop and clay quarry, was a sequence of levelling deposits laid down prior to the establishment of a metalled courtyard for the Outer Court. All these deposits were removed during the machine-clearance of the site and only a summary of the complex overlapping layers and *laminae* appears in the published sections (Section AB, layer 51; Section EH, layers 72-76, 153 and 156; Section HJ, layers 72-76, 77 and 78).

In Section AB the possible clay quarry and workshop were capped by thick deposits of light brown silty clay (51). These deposits were cut through by the main drain (9), and a late medieval drain (8). The dumped layers were capped by a 10-22 cm. thick layer of rammed gravel mixed with brown loam (23). The gravel, containing quantities of fragmented peg-tiles and oyster shells, was laid shortly after the

construction of the northern service range and Cellarer's Building as a durable courtyard surface for the Outer Court. The courtyard was undoubtedly remetalled or patched during its life; these episodes of repair and maintenance showing as differently coloured layers of gravel and isolated dumps or mortar 'hard core', oyster shells and crushed peg-tiles.

A more complex sequence of dumped deposits culminating in the deposition of courtyard metallings was observed in Sections EH and HJ. Here depressions in the ground surface south of the northern service range were infilled with layers of construction debris, redeposited brickearth and loam (153 and 156). These layers, 20–55 cm. thick, were also associated with horizontal layers and *laminae* of 'upcast', perhaps residue from the cutting of construction trenches for nearby buildings (76), together with deposits of poured mortar (layers 72–75). The deposits of pale yellow sandy mortar and off-white lime mortar may indicate the presence of an extensive mortar-mixing area in the north-east corner of the site. A disturbance cutting these horizontal deposits was noted in Section HJ. This shallow, flat-bottomed feature, 40 cm. deep, cut for an unknown purpose, was backfilled with layers of rammed chalk and light brown and dark brown loam (layers 77 and 78). The sequence of deposits observed in these sections was cut by the main drain (9) and a contemporary but smaller interconnecting drain (144). The levelling deposits (and drains) were capped by 10–30 cm. of dirty rammed gravel (151) containing dumps of oyster shell, mortar and crushed peg-tiles. These horizontal deposits represented the maintained and repaired metallings for the Outer Court. Similar laminated deposits of gravel, 'hard core' and mortar for the Outer Court metallings (layers 66–69 and 24) were located sealing the early fourteenth-century ground surface (70) in Section CD. These deposits which capped the construction trench for the main drain (99) were cut by two Late or Post-Medieval features (25 and 150).

The main Drain (Plate I, A)

A large masonry-built drain (9) was uncovered and truncated during the machine-clearance of the north-east corner of the Students' Union site and in the subsequent levelling of the area to the north of it. The drain, aligned approximately south-south-east to north-north-west, was built prior to the laying of the Outer Court metallings during the construction of the principal court ranges. The drain probably fed foul water from the abbey Kitchen and associated buildings diagonally across the Outer Court, west of the northern

service range and onwards perhaps discharging eventually into the city ditch.

The drain, exposed for a length of 22 m. was trench-built in a cutting 1.55 m. wide. A drain fall from south-south-east to north-north-west was recorded. The base of the construction trench was lined with crushed chalk set in a dirty yellow mortar. Mortared chalk rubble walls on average 30 cm. wide were raised off this foundation to a maximum height of 95 cm., terminating with a string-course of mortared peg-tiles. The bedding deposit was sealed by a 1–2 cm. thick layer of mortary pale-yellow sand which abutted the rubble walls on either side of the construction trench. A number of regularly spaced scars extending across the full width of the trench, set approximately 60–70 cm. apart, indicated the position of stone slabs lining the base of the drain. Well-cut 'facing' blocks of chalk recovered from the robber backfill of the drain (101 and 147) were probably residue from the internal lining of the drain, built over the paving slabs and against the rough-face of the internal walls.

The string-course of peg-tiles bonded to the top of the rubble lining walls marked the spring of a possible barrel-vault covering the drain. The existence of a barrel-vaulted top was also indicated by the presence of a number of *vousoir* chalk blocks recovered from the robber trench backfill.

The secondary Drain (Plate I, B)

A secondary but probably contemporary drain (144A) aligned roughly east—west was uncovered in the area north of the Union building. The drain, designed to feed foul water from the northern service range into the Great Drain, was trench-built in a cutting 1.50 m. wide and 1.30–1.40 m. deep. The base of the cutting was lined with a bedding of poured mortar (144B). A lining of faced and mortar-bonded chalk blocks, set 20 cm. apart, was built off the bedding deposits to a maximum surviving height of three courses. The remaining trench area behind the facing blocks was backfilled with mortared chalk rubble capped by redeposited brickearth (144). The facing blocks were probably carried up to the full height of the construction trench for the 20 cm. wide drain. The drain was probably capped by stone or chalk slabs and sealed over by courtyard metallings (151).

The later Drain (Plate I, A)

A brick-built drain (8) was located at the north end of Section AB during the machine-clearance of the area. This feature, aligned



A



B



C



D

St. Augustine's Abbey. A. Main Drain 9 and Late Medieval Drain 8, looking South. (Scale: 2 m.) B. Service Drain 144, looking East. (Scale: $\frac{1}{2}$ m.) C. Water-pipe 150, looking North-east. (Scale: $\frac{1}{2}$ m.) D. Surviving Fragment North Service Range, looking North-west.

east—west, was also probably designed to feed foul water into the main drain. The drain, built late in the life of the Outer Court was set in a construction trench 1.65 m. wide. Rubble brick walls 25 cm. wide, bonded in a pale yellow sandy mortar, were built on either side of the cutting over a bedding of poured yellow mortar. Chalk slabs 60–65 cm. wide were laid between the rubble walls and a lining of whole, well-pointed bricks and occasional chalk blocks was built over the slabbed floor against the rubble lining walls.

The Water-pipe (Plate I, C)

Cutting the court metallings in the north-east corner of the development area was a Late Medieval water-pipe (150), laid perhaps to supply fresh water to the northern service range. The pipe run, set in a trench 50 cm. wide and 75 cm. deep, extended north-west to south-east from Section CD to the line of the main drain. From this point onwards the pipe was probably inserted into the construction trench backfill of the main drain, perhaps diverging from the drain just outside the west end of the service range. The ceramic pipes, probably manufactured locally, were 39 cm. long with extended tapering flanges 3 cm. long. The pipes, approximately 10 cm. in diameter externally, were joined by flanges which were packed with clay. The pipes were laid at the base of the construction trench and covered with sticky redeposited brickearth. An upper backfill of brown loam (26) containing rubble chalk and stone blocks, together with fragmented peg-tiles was in turn capped by a layer of dirty gravel mixed with mortar and chalk (23).

The Undercroft Floors of the Cellarer's Range

Deposits associated with repairs and maintenance of the undercroft floor of the Cellarer's Range were excavated in a small area east of the through-passage (Sections LM and KL). A further sequence of floor deposits were recorded in Section AB.

The primary undercroft floor east of the through-passage was uniformly capped by a thin lens of grey-brown trodden occupation loam (119). This thin layer was sealed over in isolated areas (see Section KL) by later floor *laminae* comprising poured off-white mortar (116), puddled orange clay (115) and occupation loam (111). A dump of mortary brown loam containing rubble chalk lumps (117) capped the primary mortar floor (118) and the later *laminae*. This 20 cm. thick deposit was in turn sealed over by a mortar floor (113). The sequence of layers in this small area was completed by a rammed chalk floor 3–10 cm. thick (10).

The corpus of pot-sherds, recovered from the matrix of the chalk



A



B

St. Augustine's Abbey. A. Cellarer's Range, looking South-west. (Scale: 2 m.) B. Cellarer's Range South Wall, through-passage and Pier Base, looking South-east. (Scale: 2 m.)

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floor (110) and from the laminated deposits underlying it, was of early to mid fourteenth-century date. This material suggests that the sequence of floors in this area represents a period of floor maintenance spanning no more than fifty years or so. The rammed chalk floor was worn and pitted with compacted occupation loam (109) infilling shallow depressions in its surface. The rammed chalk horizon may therefore have survived as a floor receiving little maintenance from the mid fourteenth century up to the demolition of the Cellarer's Range in the mid sixteenth century.

The floor deposits recorded in Section AB indicated that considerable subsidence in the area overlying the casting pit had occurred during the life of the building. Traces of repair in clay to the primary rammed chalk floor (33) were apparent in the section. The primary deposits were capped by a 10 cm. thick dump of compact mortary loam (32) and a thick layer of crushed peg-tiles (31), undoubtedly laid to counteract subsidence. A poured off-white mortar floor of two phases (30 and 29) separated by a lens of occupation loam (29A) capped the dumped deposits. The sequence of floors in this area was truncated by a disturbance associated with the deposition of a topsoil mound over the site in the 1960s. The floor levels east of the through-passage were sealed by mid sixteenth-century demolition deposits (112).

PERIOD V: THE POST-DISSOLUTION AND MODERN LEVELS *c.* 1550–1984

Following the Dissolution of the abbey in 1538, Henry VIII retained the abbot's lodging and other buildings around the east, south and west sides of the Inner Court and converted them into a small Royal Palace. The Cellarer's Range north of the Inner Court was no longer needed and so it was demolished. A new wall, interrupted by a gate, was built probably in *c.* 1539–40 to cut off and reduce in size the northern part of the Inner Court.¹³

The occupation levels within the Cellarer's Range were sealed by a 30–40 cm. deposit of loose abraded mortar containing chalk lumps and stone chips and fragmented peg-tiles (112). The walls of the range were demolished to their foundations and the robber trenches backfilled with mortary loam (layers 10, 12, 100 and 121).

The drains north of the Cellarer's Range were systematically robbed from the latest surface of the Outer Court, and residual debris thrown back into the robber trenches (the main drain, layers 6, 101,

¹³ The last ruins of the Outer Court buildings are shown on King's bird's-eye view.



A



B



C

St. Augustine's Abbey: A. Cellarer's Range North Wall and Undercroft Floors (in Section AD), looking East. (Scale: 2 m.) B. Casting Pit, looking North. (Scale: 2 m.) C. Coin (obverse) Aethelberht of Wessex A.D. 858-866. (Scale 2:1).

101A, 147 and 152; the northern drain layer 143; the brick drain layer 7).

The demolition deposits and robber trenches were uniformly sealed across the entire site by 20–40 cm. of pebbly brown loam containing peg-tile debris together with deposits of mortar, crushed chalk and rubble (3). Only three features were noted cutting post-Dissolution 'topsoil', Pit 25 in Section CD; Pit 19 and an extensive soil disturbance (85) noted in Section PQ, possibly connected with post-Dissolution terracing.

The 'topsoil' horizon was in turn sealed by a 10–20 cm. layer of imported fine grained dark loam (2) possibly laid in more recent times to level the site and bed an extensive grass lawn. This horizon was eventually covered by a huge mound of soil (1), residue from construction trenches for nearby developments within the college in the 1960s.

THE POTTERY

N. Macpherson-Grant

For its size, this excavation produced some extremely useful assemblages, particularly for the difficult and poorly represented Mid to Late Saxon period. The pit group (122) discussed below is an important key addition to the local ceramic sequence, and the quantity of Ipswich-type sherds is unusually high. This pit group is only the fourth of its type to be recorded from Trust excavations. Its relative importance was immediately appreciated, but not fully understood until our recent 1985 excavation at St. Martin's Hill produced two further small pit groups and similar quantities of local and imported wares. The present group is crucial for establishing the chronological/formal links between Early to Mid and Late Saxon Canterbury assemblages, but only comes into perspective when viewed alongside the St. Martin's Hill and comparable Mid to Late Saxon material from the city. Accordingly, a thorough examination of the Pit 122 material, its formal inter-relationships and the implications of the imported wares are deferred. Here only key aspects are highlighted following an overview of the excavation's pottery. In turn, there is a brief note on the sequence from the Early Medieval ditch.

Summary of the Pottery

If the quantities of pottery (per period) are representative of the

adjacent unexcavated area, the following occupation sequence is suggested:

Period I

Sparse Roman activity from the first to third/fourth century.

Period IIA

Saxon occupation or activity beginning in the seventh century with a modest quantity of organic-tempered pottery.

Period IIB: 'Domestic Occupation'

If current dating of later Saxon wares is correct, a slight hiatus may have followed the seventh-century activity, followed by definite occupation from the mid or later eighth and well into the ninth century, represented by Pit 122 (Fig. 6) containing purely Mid to Late Saxon pottery, a coin of Aethelberht of Wessex and Kent (858–866) and imported Ipswich wares. Later levels also produced residual local wares and both fine and 'pimply' Ipswich wares.

Period IIC: 'Agricultural Activity'

Fabric quantities suggest a decrease in occupation during the Late Saxon period, lasting until approximately the mid or later eleventh century.

Period III

The bulk of the pottery from this excavation is of Early Medieval date and from the late eleventh/early twelfth century occupation seems intensive, possibly peaking in the mid to late twelfth century. From the twelfth century occupation it appears continuous throughout the thirteenth century, though with a possible decrease in the first half.

Period IV: 'The Cellarer's Range'

Definite late thirteenth-century occupation is represented by material gleaned from construction and occupation deposits associated with the Cellarer's Range broadly dated by documentary evidence to 1300. Occupation continued through into the mid to late fifteenth century, probably terminating in the early sixteenth century (Period V).

Period II: The Mid to Late Saxon Pits (Fig. 5)

Full fabric descriptions are omitted here, but ware headings are

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followed by their standard (C.A.T.) period letter-code and fabric number-code (e.g. Early to Mid Saxon organic-tempered ware – EMS 4). The coding (for discussion brevity) is based on a combination of detailed thin-section analyses of Canterbury Saxon pottery by Dr Ailsa Mainman and further refinements by the author.¹⁴

Pit 129

1. *Mid to Late Saxon coarse sandy ware* (MLS 3). Jar. Pit also contained one organic-tempered (EMS 4) and four Mid to Late Saxon sandy ware (MLS 2) sherds, together with one of 'pimplly' Ipswich-type ware with characteristic wide-spaced horizontal wheel-ribbing.

Pit 133

2. *Mid to Late Saxon coarse sandy ware* (MLS 3). Small pot. Besides residual Roman material, 133 also had a small quantity of EMS fabrics (including two EMS 4) one transitional Mid to Late Saxon organic-tempered sandy ware (MLS 1) and one sherd of MLS 2. Also:
3. Jar base in very hard, very coarse-gritted wheel-thrown ware (problem ware – see discussion – e).

Pit 122 (Canterbury Key Pottery Group MLS 3)

Primary fill 122A

4. *Mid to Late Saxon shell-filled ware* (MLS 4). Cooking-pot. Heavy edge/face wear, soft, laminated.

Secondary fill 122

- 5–8. *Mid to Late Saxon sandy ware* (MLS 2). Nos. 5–6 are large boss-decorated jars. On no. 5, the bosses are large and *repoussé*, on 6, incipient and applied. All pots hand-made mostly knifed internally with varying degrees of vertical external knifing, followed by patchy

¹⁴ The full rationale for both appears in *The Archaeology of Canterbury*, vol. v, Part 2, (forthcoming), but see A. Mainman, 'Studies of Anglo-Saxon Pottery from Canterbury', in (Eds.) I. Freestone, C. Johns and T. Potter, *British Museum Occasional Paper* no. 32, (London, 1982), 93–210.

FEATURES CUT BY PIT 122 :

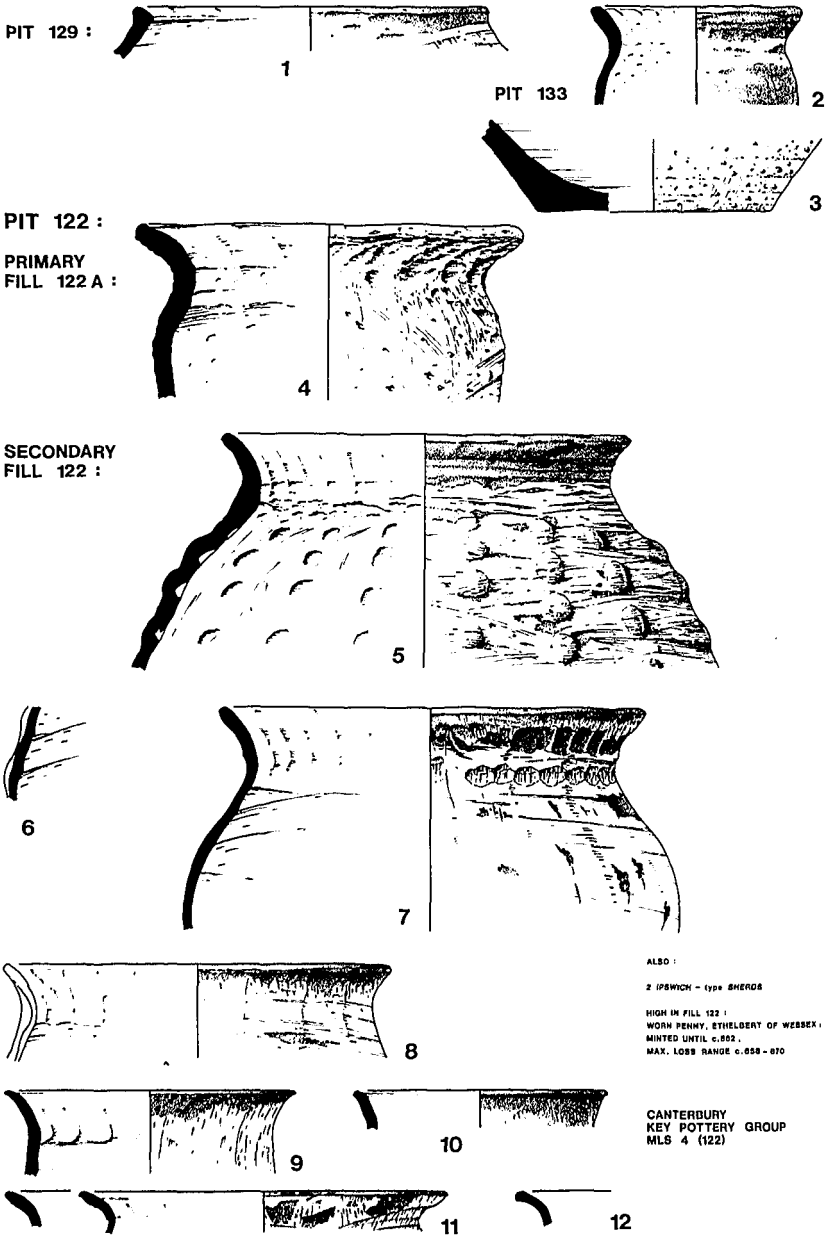


Fig. 5. St. Augustine's Abbey: Period II: Mid-Late Saxon Pottery (Scale: 1/4).

burnishing (good on the fine jar no. 5). Over 300 sherds, mostly small, with fairly high edge wear – representing three to four vessels.

- 9–12. Late Saxon (Canterbury) sandy ware (LS 1). Small jars. No extant internal trimming – vertical externally. Nine sherds altogether, isolated in this context partly by fabric, form and particularly presence of more marked rim smoothing (?finished on tournette).

Fill of 122 also contained two sherds of fine Ipswich-type ware.

Discussion

Only the main points are outlined here:

(a) Both pits 129 and 133 contained the coarse MLS 3 fabric. The Marlowe and Castle/Stour Street sequences both indicate a broadly late seventh- to late eighth-century range for this ware, and the earlier part of this bracket is supported by pot 1 (129), since (though formal studies are incomplete) its form is atypical amongst eighth-century or later material. For this fabric, the form of pot 2 (133) is paralleled in a Castle/Stour Street group, dated *c.* 700–750 or marginally earlier. Both pits also contained the sandy MLS 2 fabric currently felt to be an eighth- to early ninth-century ware.

(b) The sump of Pit 122 (122A) contained the shell-filled pot 4. Sandy MLS 2 sherds from this primary deposit were from the same vessels represented in the upper fill of 122. Also in 122 were two fairly worn fine Ipswich-type sherds. The sherds from all three fabric types are generally small and abraded – suggesting strongly a degree of contemporaneity. This is a useful possibility, because there is growing evidence that the combination of Ipswich-type wares, boss-decorated local sandy wares and shell-filled products is more than a coincidence.

Placing this combination chronologically is difficult. The same upper fill of 122 also contained a small quantity of the LS 1 fabric. This sandy ware becomes the Canterbury ‘tradition’ running through from the Late Saxon to Late Medieval periods with an arguable starting point between *c.* 775 and 825. Superficially the two sandy wares MLS 2 and LS 1 are similar, both in fabric, and, during this transitional period, in surface treatment. But there does seem to be a genuine difference: in the MLS 2 fabric the sand grains appear less well sorted and marginally finer. For the LS1 products in 122, their forms suggest an early date in this tradition and their small quantity tends also to argue for a date towards the early ninth century (rather than the late ninth when this fabric is firmly in evidence). Stylistically,

boss decoration should be a useful indicator, but parallels are not yet fully understood, though for a number of reasons to be discussed in the forthcoming St. Martin's Hill report, external and Continental stimuli should be looked for. Boss-decorated sherds are illustrated by Frere from Canterbury Lane¹⁵ in a group associated with Badorf-type ware and dated c. 850–950. By comparison with other forms in this group these sherds are already somewhat residual. So again a ninth-, rather than tenth-century date is likely.

(c) The Aethelberht of Wessex penny came from high in the fill of Pit 122. Its presence is a blessing, but complicated by the fact that it is worn and came from a part of 122 which may in fact be a late slump into the pit. Its presence indicates two main possibilities:

1. The whole pit-fill, including pottery and coin are contemporary, or,
2. If the coin is a late arrival, then the pottery, itself fragmentary (and therefore perhaps already residual), may have been deposited considerably earlier.

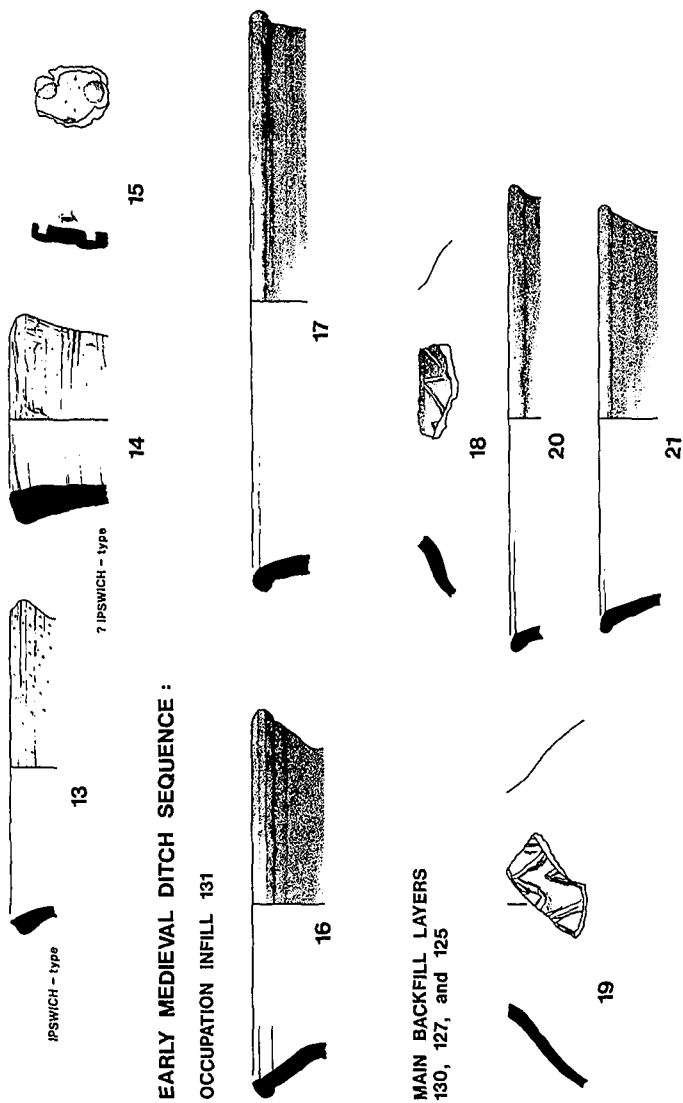
If the coin loss-date is unlikely after c. 870, the available evidence from the city and the pit contexts at present suggest a date between c. 800/825–870 for Pit 122.

(d) Though the full implications cannot be detailed here, the sequence of Pits 129 and 133, cut by 122, and their contents are crucial. Though there are problems still, the forthcoming thorough assessment of this and recently excavated material should now make it possible to fill a major gap in our understanding of the local ceramic sequence, the Mid to Late Saxon transition, and also to place more accurately the beginning of the Canterbury sandy ware industry.

(e) Pot base 3 (Pit 133) is a problem ware. It may be a local product copying imported late Roman Mayen coarse ware, but to date has *not* been recorded from pre-'dark earth' contexts in the city. It is invariably found in Early or Middle Saxon levels, and though pre-Saxon manufacture cannot be ruled out, it is included here as a potential Saxon ware. This and related material will be overviewed in the St. Martin's Hill report.

(f) Pots 13–15 (Fig. 7) are from residual contexts. Nos. 13–14 are Ipswich-types, included for their forms, and 15 is in mid to late Saxon boss-decorated shelly ware (MLS 4).

¹⁵ S.S. Frere and S. Stow, *Excavations in the St. George's Street and Burgate Street Areas, The Archaeology of Canterbury*, vol. vii, (Maidstone, 1983), Fig. 97, 322, 324.



EARLY MEDIEVAL DITCH SEQUENCE :

OCCUPATION INFILL 131

MAIN BACKFILL LAYERS
130, 127, and 125

Fig. 6. St. Augustine's Abbey: Pottery. Nos. 13-15: Residual Mid-Late Saxon. Nos. 16-21: Period III Early Medieval (Scale: 1/4).

Period III: the early medieval Ditch Sequence (Fig. 6)

Ditch 124

Occupation infill (131)

- 16–17. *Early Medieval (Canterbury) sandy ware* (EM 1).
Cooking-pots. By comparison with material from other city sites these two can be dated to c. 1050–1080/1100.

Main backfills (130, 127, 125)

- 18, 20–21. *Early Medieval (Canterbury) sandy ware*. No. 18 is from a small, probably spouted, pitcher, with incised wavy-line decoration. Nos. 20–21 are cooking-pots.
19. *Early Medieval North French or Belgian reduced ware*. Probably a spouted pitcher with roughly-incised decoration.

Discussion

Both nos. 20–21, particularly 21, would fit in the bracket c. 1080/1100–1150, though the emphasis for no. 20 would be before c. 1100. It is the two pitcher sherds that are likely to place the main backfill of ditch 124 around the mid twelfth century or slightly later. As imports, the full local date-range for early medieval Continental grey wares has not been established, but to date none have been recovered from deposits prior to c. 1100. The implications from the *Aula Nova* and Mint Yard excavations within the Cathedral Precincts are that imported grey ware pitchers were not arriving in any quantity in Canterbury until towards c. 1150. The available evidence from the city as a whole is that a mid twelfth-century date is also broadly co-incident with local developments in pitcher forms (mostly copying imported north French forms) and the introduction of glazes. It is useful to have the present further confirmation of this cross-fertilisation. The lack of local coarse ware forms specifically of the second half of the twelfth century imposes some caution, but a date between c. 1125–1150/60 would be appropriate for the bulk infill of this ditch – with a strong emphasis towards the end of this range.¹⁶

Acknowledgements

The author is particularly grateful to John Hurst for discussion and confirming the identification of the Ipswich-type wares.

¹⁶ *The Archaeology of Canterbury*, vol. iii (forthcoming).

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THE SMALL FINDS

P. Garrard

A selection of the significant finds from the excavation is published here. The finds are numbered consecutively and in each case the small find number, context number (in brackets) and description appear at the end of each entry.

The Coins

1. Iron Age coin. Lyn Sellwood writes:
'Bronze coin of Cunobelin. Probably Mack 260; possibly Mack 260a. Weight: 1.45 gm. *Obv.* Sphinx crouching to the right. *Rev.* Nude male figure.

Mack describes the obverse as including the inscription CVNO (abbreviated form of Cunobelin) and showing the Sphinx upon an exergual line. The reverse bears the inscription CAM (abbreviated form of CAMULODUNUM, the mint site), and the male figure, standing on an exergual line apparently carries a human head in his right hand and a staff in his left. There is an altar behind. None of these details are visible on this example.

The coin in question is worn, and it is only by virtue of the well-preserved wing of the Sphinx that a degree of certainty in the identification was possible.

It is generally believed that Cunobelin's reign extended from c. A.D. 10–40. The Mack 260 bronze type is described by Allen as "developed" and may belong to the latter part of the reign.' 2 (106) Cellarer's Range construction deposit. Residual.

2. Roman bronze coin. Regular radiate. c. A.D. 260–270. *Rev.* illegible. 4 (122) Upper fill of ninth century pit. Residual.
3. Anglo-Saxon silver penny. Dr M. Metcalf writes:
'Wessex, King Aethelberht, 858–66. "Open Cross" type (minted until c. 862).

The coin's date of loss is unlikely to be later than c. 870. About a quarter of the flan is missing, and the reverse is heavily encrusted, making it quite impossible to read the moneyer's name.' 8 (122) Upper fill of ninth century pit. Plate IIIC.

Metal Objects

4. Disc. Diameter: c. 17 mm. G. Egan writes:
'Piece of sheet copper or alloy, roughly cut into an irregular

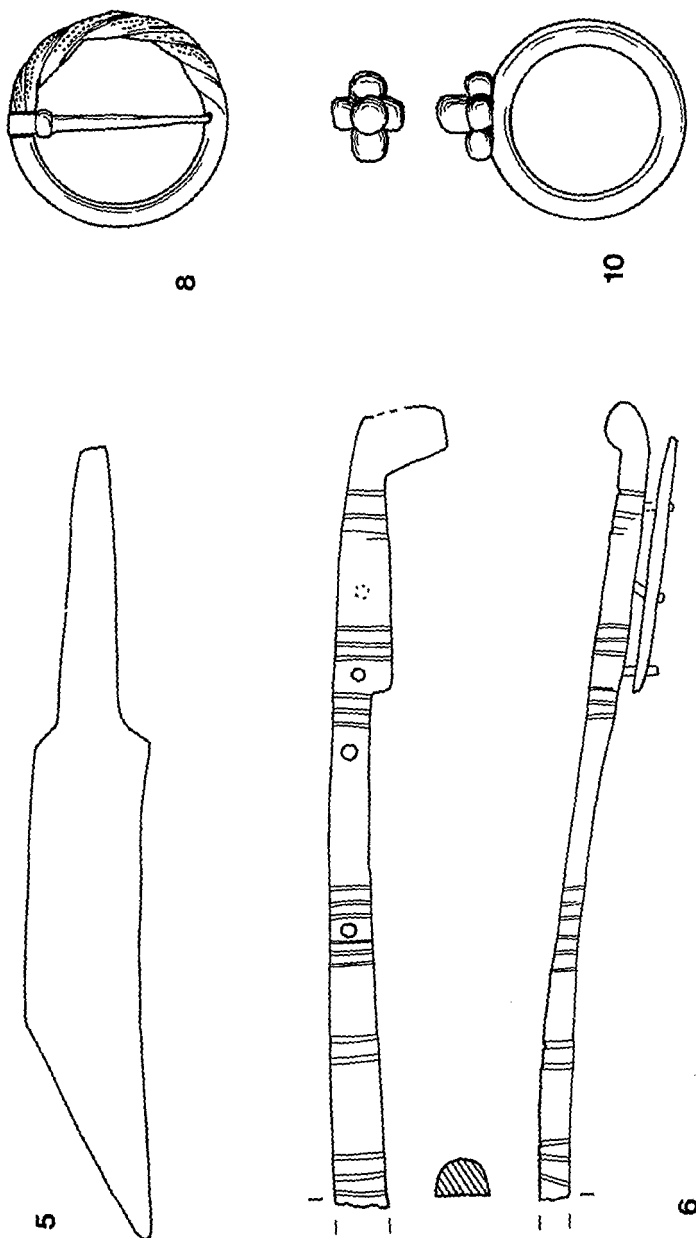


Fig. 7. St. Augustine's Abbey: The Metal Objects (Scale: 1:1).

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octagon. Crudely scratched on both sides, one with a cross patée, and on the other apparently randomly.

The purpose of this object is unknown. The scratched cross and find spot may suggest it had a religious significance.' 1 (106) Cellarer's Range construction deposit. Not illustrated.

5. Iron knife with angled back and whittle tang. Complete. Length: c. 100 mm. Drawn from x-ray. 21 (133A) Lower fill of ninth century pit.
6. Iron fitting made of two strips, both broken, and fixed together by rivets. The space between possibly enclosed leather or another organic material. The upper larger piece is decorated with groups of inlaid copper alloy bands. Drawn from x-ray. 10 (122A) Lower fill of ninth century pit.
7. Copper alloy key. LMMC Type A1. Complete. Length: 60 mm. 17 (141) c. thirteenth-century dumping layer. Not illustrated.
8. Copper alloy ring brooch. 6 (120) Post-1300 construction layer.
9. Iron D-shaped buckle. Complete. 40 × 34 mm. Cf. *The Archaeology of Canterbury*, Vol. v, Part ii, no. 292, (forthcoming). 28 (147) Mid sixteenth century robber trench backfill.
10. Copper alloy gilded finger-ring with a large bezel, imitating gold rings of the early sixteenth century, although rings of this type are known to persist into the later part of the century. My thanks to John Cherry for his advice on this ring. 3 (7) Silt in a late medieval brick built drain.

THE EVIDENCE FOR METALWORKING

J. Bayley

The material submitted for examination (from layers 37, 39 and 41) was gleaned from the backfill of a large industrial feature, located under the Cellarer's Range flanking the south side of the abbey's Outer Court. The finds included one cylindrical metal bar about 200 mm. long and 25–30 mm. across, but the majority were pieces of fired clay. These displayed varying degrees of burning and some were partly vitrified. Almost all had some trace of copper alloy on their surface. These metal-rich areas were analysed qualitatively by X-ray fluorescence to determine the types of alloys being worked.

The fired clay gave the immediate impression that it was pieces of bell mould, but more careful examination could not support this as the shape of the original surfaces was not sufficiently curved. The fabric was much less dense than ordinary fired clay because it

contained a very high proportion of fine vegetable matter. This was usually incorporated into moulds for large objects, often in the form of *animal dung*, to give them sufficient elasticity to allow for the contraction of the metal; a more rigid mould would have cracked the casting as it cooled. The mould fragments were oxidised fired at a low temperature giving them a buff colour except for a band adjacent to the original, modelled surface which was almost black in colour. The original surfaces, where they survive, have a thin, fine coating of off-white clay.

The metal-rich deposits of these mould fragments contained copper and a small amount of tin, probably not more than a few per cent in the alloy being cast. Traces of lead were universally present, but not at a significant level while one or two pieces also gave very *weak signals for zinc*.

As well as the mould fragments there was a number of more highly fired pieces of the same or a similar fabric. These had a deep red or mid grey colour and a flat surface that was vitrified to a depth of 10–12 mm. The exposed surface of this vitrified layer contained significant amounts of metals, but its composition appeared rather different to that on the moulds. The major element was again copper, but the proportion of tin was far higher and the amounts of lead and zinc were larger though still hardly significant. These are probably bits of the mould structure that had been subjected to a far higher temperature, maybe because they were near to the in-gate where metal entered the mould. They could also have been *structural parts* of a furnace where the metal was melted, though their non-refractory nature would seem unsuitable for this sort of use.

The final type of material present was vitreous slag which was similar in some ways to the vitrified clay but contained considerable amounts of metals throughout, rather than just on the surface. The elements detected were copper with major amounts of tin and traces of lead. This slag could have formed in a hearth or furnace where metal was being melted.

The metal cylinder was also analysed and shown to be of a similar composition to the metal on the mould fragments, i.e. copper containing a few per cent of tin and a trace of lead. This could be either a raw material for the metalworking industry or one of its products.

It must be assumed that all the debris is the remains of a single industry as it was all found together and the total quantity is not large. However, interpreting the observations and analyses is not straightforward as there are contradictions to be resolved. Some of the evidence could be used to support the theory that bells were being cast. There is the pit with burning (a bell pit?), mould fragments in

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the right fabric for bell mould and, in the vitrified deposits, indications that high-tin bronzes were being worked; bells are always made from this sort of alloy. On the other side of the argument, it must be said that the shapes of the mould fragments are not right for bell mould and the metal actually on the moulds is of the wrong composition, containing far too little tin. What can be said, with some confidence, is that large copper alloy objects were being cast, possibly in the pit which contained the debris, and that they were made of bronze (copper and tin) rather than brass (copper and zinc). Possible candidates would be large items for the abbey church such as monumental plaques which would fit with the shape of the fragments of mould recovered.

THE GLASS

J. Shepherd

1. Fragment of the side of a square-sectioned bowl (Isings Form 50). Mould blown thick bluish-green glass. Late first/second century. Unstratified. Not illustrated.
2. Fragment of the rim of a bowl. Blown; bluish-green glass. Rim folded out and down to give hollow tubular rim. Late first/second century. (122) Upper fill of ninth-century pit. Residual. Not illustrated.
3. Small fragment of medieval window glass. Indeterminate colour and deep surface decomposition. 12 (141) *c.* thirteenth-century dumping layer. Not illustrated.
4. Fragment of window glass – cylinder. Thick indeterminate colour. Rolled end. 12 (141) *c.* thirteenth-century dumping layer. Not illustrated.
5. Small fragment of window glass. Indeterminate colour and deep surface decomposition. (143) Backfill of robber trench to north drain of service buildings. Not illustrated.

