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Archaeological Investigations in the Great Court of the Augustinian Priory of Llanthony by Gloucester, 2005

By TIM ALLEN and DAVID SCORE

With contributions from PAUL BLINKHORN, SHARON CLOUGH, JOHN COTTER, KATH HUNTER, JULIAN MUNBY, REBECCA NICHOLSON, IAN SCOTT and LENA STRID

Illustrated by JULIA COLLINS, MATT BRADLEY, HANNAH KENNEDY and MAGDALENA WACHNIK

The project was initiated by Scott Wilson on behalf of GLOSCAT, in respect of a planning application (04/00607/FUL) to redevelop the area known as Gloucester Quays, situated south-west of the historic centre of Gloucester, and alongside the River Severn. Part of this area, situated west of the Gloucester and Sharpness Canal, is known as Llanthony Wharf, and within this was the proposed site of Gloucester College, in advance of which the 2005 excavation (centred on OS Nat. Grid SO 82485 18040) was undertaken (Fig. 1). Llanthony Wharf includes an area of *c*.4 ha that has statutory protection as the site of Llanthony Secunda priory (SAM no. 337), although the precinct originally extended beyond the canal to the east, and further north under and beyond the site of Gloucester College (Fig. 2).

The remains of Llanthony priory are located on generally flat ground *c*.5 m OD. The geology of the site comprises Lower Lias Clays overlain by Estuarine Alluvium in the north and west of the area.

SUMMARY HISTORICAL BACKGROUND

Llanthony by Gloucester (also known as Llanthony Secunda), a priory of Augustinian canons, was established on the outskirts of Gloucester in 1136 as a refuge of the priory at Llanthony (Monmouths.) following the rebellion of the Welsh in 1135. The church was consecrated in 1137. When it was safe to return to Wales, the priory at Gloucester was maintained and prospered, becoming independent in 1205. Despite a serious fire in 1301, by the 15th century it had far outgrown its mother house, which it absorbed in 1481. The prior at the end of the 15th century, Henry Deane, reconstructed both the church and precinct, including the outer gatehouse that survives today, and entertained the court of Henry VII, both in 1500 and in 1501 (Watts and Hughes 2004, 19). When it was dissolved in 1538, Llanthony Secunda was the wealthiest (and one of the largest) Augustinian priories in England.

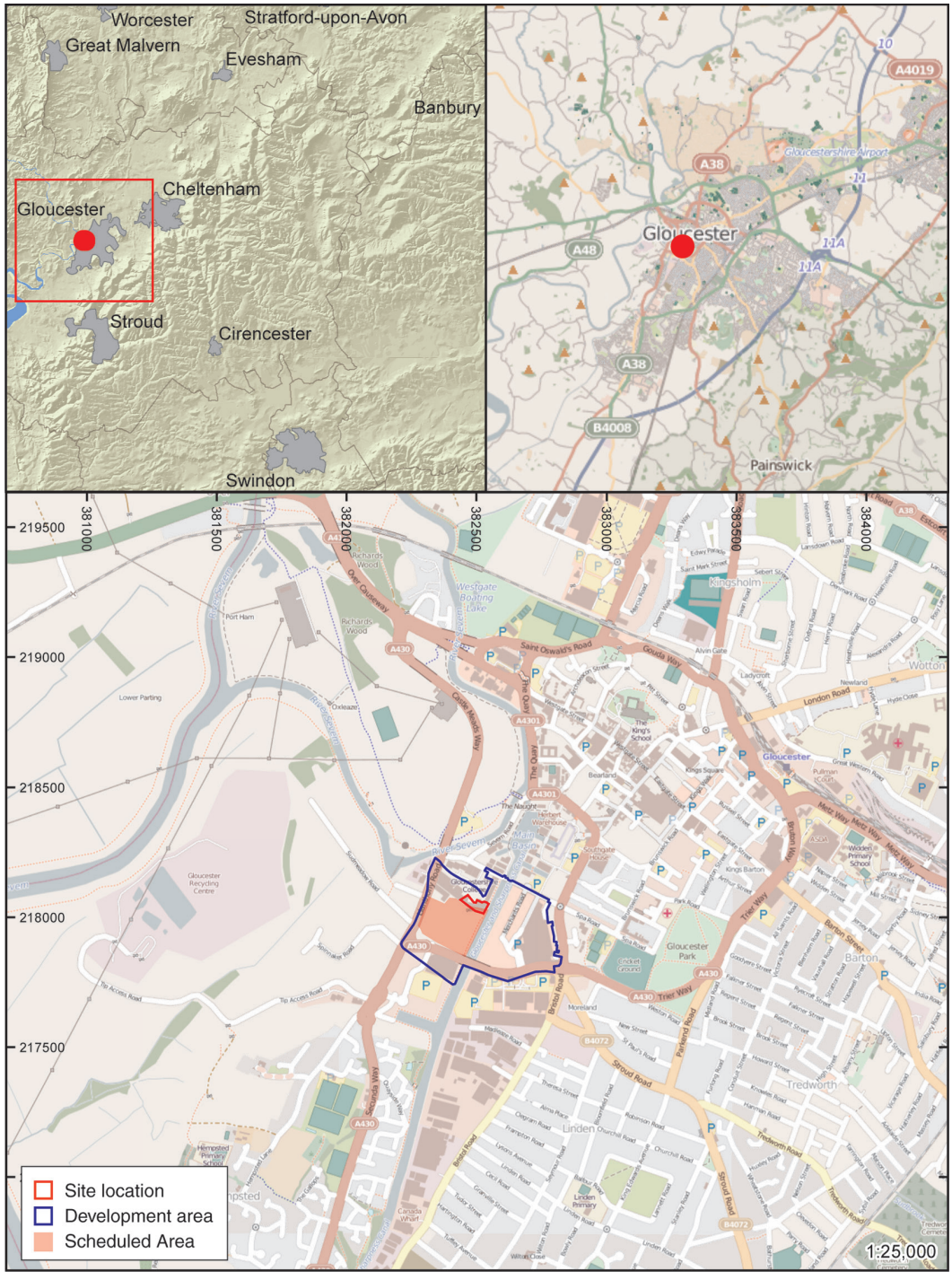


Fig. 1. Site location.

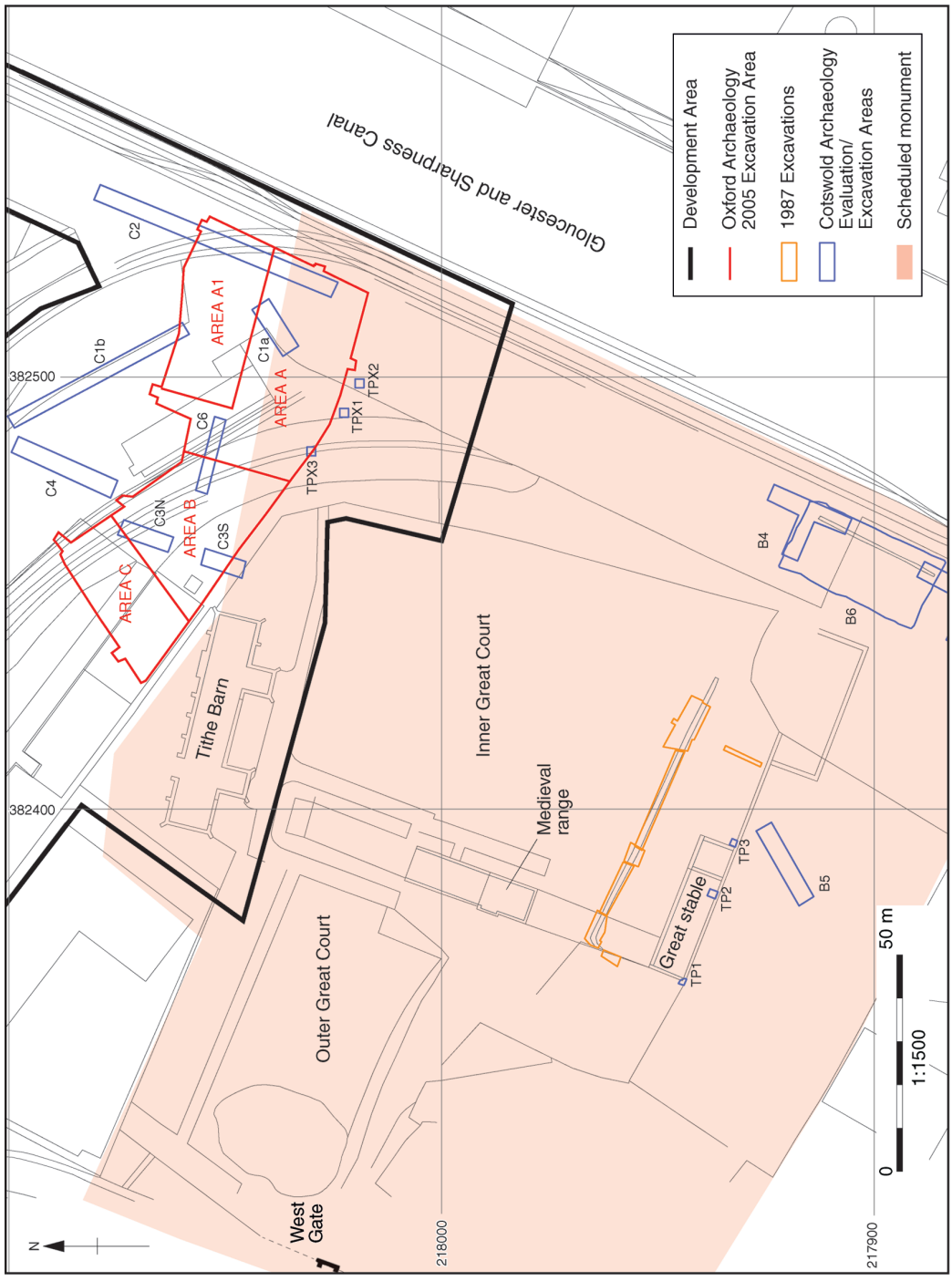


Fig. 2. Areas of investigation.

The documentary history of the site after the Dissolution has been extensively researched (Hughes and Rhodes 2003) and the following summary draws very heavily on this. The nave was turned into a parish church, and part of the cloister became the home of the Porter family, who were granted the lands and properties of the priory by the Crown (Hughes and Rhodes 2003, 11–14). The Porters remained in possession until the early 17th century, when the property passed by marriage to the Scudamores, who leased it to tenants, providing the first detailed descriptions of the site. During the Civil War the house suffered both from Parliamentarian and Royalist forces, and was pulled down shortly afterwards (Hughes and Rhodes 2003, 15–17). The church was also demolished, and the tithes granted to nearby Hempsted church.

The west range of the Great Court was converted into a dwelling house, and this court, together with the Outer Court to the west, became the focus of a farm. In 1794–6 the Gloucester and Berkeley Canal was cut through the site east of the Great Court, uncovering much stonework, but no further details were recorded. In the 1840s excavation for a canal basin was begun just north of the surviving buildings of the Great Court, during which the landowner William Jones discovered and recorded five Norman pier bases *in situ* surrounded by encaustic tiles. These are assumed to be from the priory church (Hughes and Rhodes 2003, 26–8).

The canal basin, however, was never finished, and was converted to a yard for the Gloucester and Forest of Dean railway, while instead the canal along the Llanthony frontage was widened. During the widening, an architect, J. Clarke, recorded two east–west walls east of the Great Court, and claimed that these represented the chancel of the vanished priory church (Clarke 1853; Hughes and Rhodes 2003, 29–31).

The farm continued in use throughout the 18th and 19th centuries, though many of the medieval buildings were demolished or (like the great barn) robbed of their roof and much stone. In the 20th century the house was occupied by a succession of further private tenants, the last of whom, R.J. Powell, tipped spoil throughout the site and sublet most of it for caravans and industrial yards (Hughes and Rhodes 2003, 36–7).

The site was first made a Scheduled Ancient Monument in 1949 (Gloucestershire No. 337), and Gloucester City Council purchased the site from British Railways in 1974, though the process of acquisition was not completed until 1991. The scheduled area was extended in 1988 to the south and east, specifically to include Clarke's interpretation of the location of the church and cloister (Watts and Hughes 2004, 23). The Scheduled area does not include the area north of the Great Court (Fig. 2). The Llanthony Secunda Priory Trust was set up in 2007 to manage the site, and assumed full responsibility in 2013.

ARCHAEOLOGICAL BACKGROUND

In 1987 trenches were dug across the southern part of the Great Court by Malcolm Atkin, tracing a main drain and also investigating the adjacent stone range on the south side (Fig. 2). Atkin also excavated at the West Gate of the priory in the Outer Court. The records are with Gloucester City Council (Atkin 1987; HER 18/87), but these investigations have not been published.

In 2002 a series of archaeological investigations began prior to redevelopment. Reports are deposited with the Gloucester HER. A ground probing radar (GPR) survey of 0.5 ha north of the scheduled area identified several areas of potential archaeological remains, although these were difficult to interpret (Taylor *et al.* 2003). A review of the historical and documentary sources followed (Hughes and Rhodes 2003), whose most significant finding was that the church and cloister almost certainly lay north of the Inner Great Court under the railway yard, outside the scheduled area. In the same year a TR resistivity survey of the north-east and central part of the

Inner Great Court was carried out (Spry 2009). Unfortunately the previous use of the site as a caravan park made the results almost impossible to interpret.

This was followed with archaeological evaluation and excavation, for which the Trust was advised by Andy Mayes of consultants URS (formerly Scott Wilson). Evaluations were carried out between 2003 and 2005 by the Cotswold Archaeological Trust (hereafter CAT) (see Fig. 2). The work carried out to the end of 2003 was pulled together in an Environmental Impact Assessment (Scott Wilson 2004), and a summary of Rhodes' and Hughes' conclusions, and of the initial evaluation trenching, was published (Watts and Hughes 2004).

In 2005 an area was selected for excavation in advance of the construction of Gloucester College. This lay partly within the scheduled area and partly outside it to the north (Fig. 2). The area outside the scheduled area was initially stripped by CAT, but the work was then transferred to Oxford Archaeology (hereafter OA), who carried out the excavation in accordance with a Project Specification provided by Scott Wilson (2004), approved by the Gloucester City Archaeologist Richard Sermon and by Robert Iles of English Heritage. The excavation and watching brief was completed and approved by the curators by December of the same year.

A post-excavation assessment of the results of the excavation was submitted in 2006, and interim reports published (Hardy 2006; 2008), but funds to complete the publication were not forthcoming. In 2008 URS commissioned CAT to carry out further investigation of the south-east corner of the Great Court, between two previous evaluation trenches. The discovery of significant medieval remains prompted a small area excavation (Fig. 2, B6), reported upon in 2013 (CA 2013). CAT also dug three test-pits in and around the brick range in the south-west part of the Great Court (hereafter the Great Stable) (Fig. 2; CA 2009).

OA were asked to complete the publication report on their 2005 excavations in 2013. A full account, which also includes finds reports on evaluation trenches in the same area dug by CAT, is deposited in the Gloucester City HER (Allen *et al.* 2014). This article is a summary of that report.

PHASING OF THE EXCAVATED REMAINS

An outline plan of the excavated area is shown in Figure 2. The aim of the work was to limit excavation to impact depth, and in consequence the archaeological sequence was not bottomed. Within the site Area A (mostly the Scheduled Area) was subject to a greater level of hand-investigation than Area B, where only the direct impacts of pile caps were excavated by hand. The limited hand-excavation, combined with the heavy robbing of building walls and the areas of contamination or later disturbance, has made the establishment of a stratigraphic sequence difficult, and dating that sequence even more so. For many features and structures, there are very few dateable finds, and as the finds only provide a *terminus post quem*, the dates suggested could be considerably earlier than was in fact the case. Evidence for stylistic changes in the layout or plan of buildings that inform dating is also very slight. What is presented below is therefore a plausible interpretation of the evidence rather than established fact, although some elements are better dated than others.

Phase 0: Roman or 12th-century activity (Fig. 3)

Apart from the occasional sherd of Roman pottery and fragment of tile found in the alluvium treated as natural, the earliest activity identified within the excavations probably comprises pits 3051 and 3150 (grouped as 5016) on the east side of the site. Both features as found cut only into the natural and contained only Roman finds, although fragments of mortar may indicate that

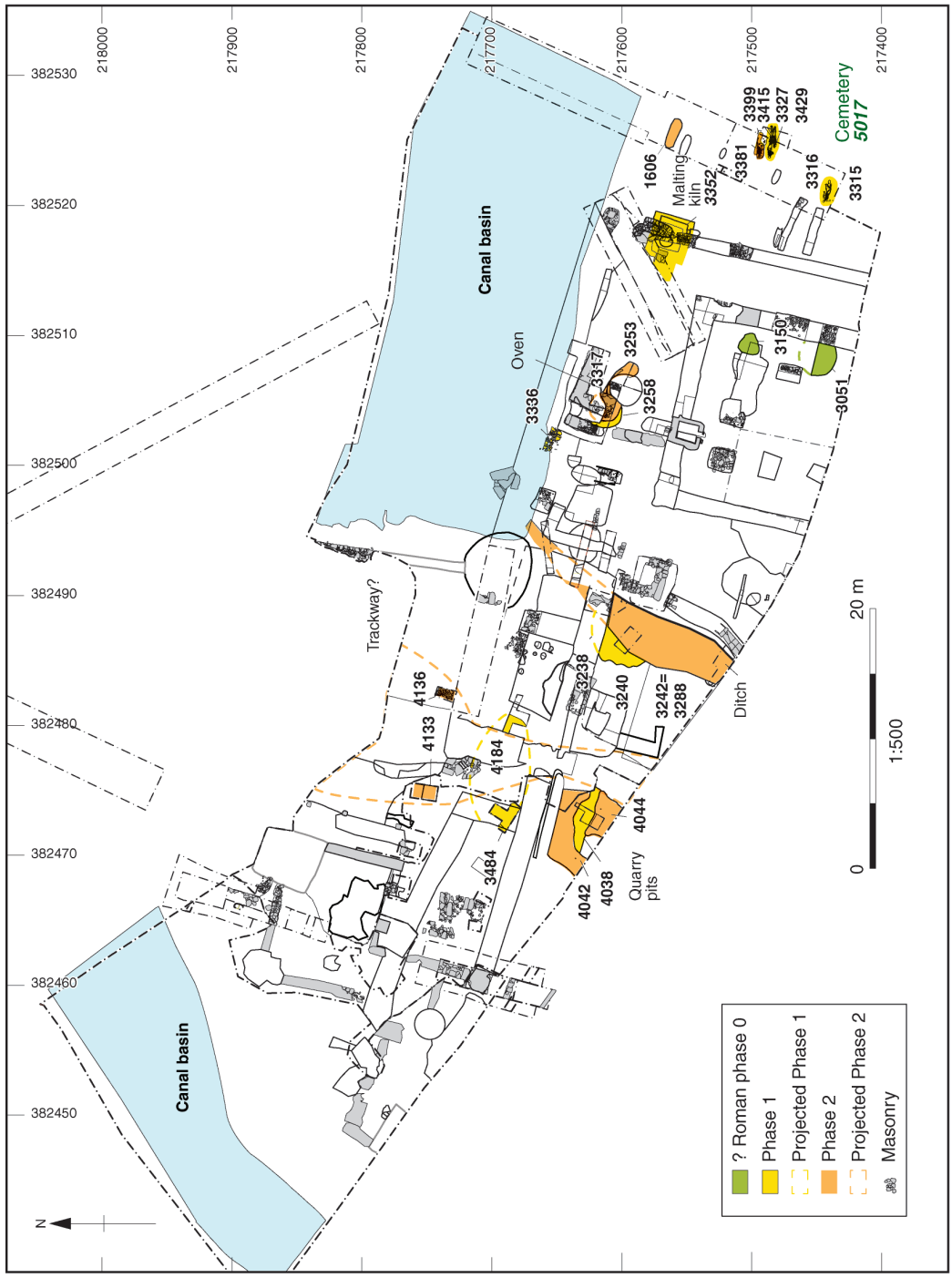


Fig. 3 Features belonging to Phases 0, 1 and 2 (Roman? and 12th to early 14th century).

these were medieval pits associated with early construction activities. Otherwise, a little 12th-century pottery was found, but this was residual in later features.

Phase 1: Late 12th- to 13th-century activity (Fig. 3)

Early pits 3238 cut by 3240 (Group 5013) in the centre of the site both contained 13th-century pottery, and pit 3258 north-west of 3051, though not dated directly, was cut by a pit containing late 13th- to mid 14th-century pottery. Pit 3238 also contained a single tile fragment tentatively dated to the 16th or 17th century. If the pottery is residual, and the tile fragment is correctly dated, then the whole sequence of features in this part of the site is post-medieval. A large assemblage (150 sherds) of pottery of the late 13th or early 14th century was however recovered from the lowest fills of the ditch that cut these pits, and the tile fragment was probably intrusive, or was earlier than the date assigned. Pit 3238 contained domestic waste including fishbones and scales, but also included nails, lead offcuts and slag, so was perhaps used during construction or alteration works.

A large pit or quarry 4184 underlay the west end of Building 5001 and the east end of Building 5019 (layer 3484), and, though undated, may belong in this phase. There were several further large pits or quarries south of this (Group 5014), the earliest of which (4038) included a sherd of 13th-century pottery and a considerable quantity of burnt limestone. It would be tempting to associate the burnt limestone with the documented fire of 1301, which caused much destruction in the priory. None of the burnt limestone, however, was clearly dressed, so they need not have been from buildings, and could have derived from malting ovens similar to structure 5006, from hearths or other ovens, or from the burning of limestone for lime mortar. There was also a fragment of post-medieval brick in 4038, but it seems unlikely that all of these features were post-medieval. If they were medieval, they must have been backfilled by the time substantial development of this part of the Great Court began, i.e. in Phase 3.

At the east end of the site burials were being made in what was clearly a monastic cemetery (Group 5017). Successive skeletons 3316 and 3315 (radiocarbon-dated to 1170–1270 cal. AD) both date between the late 12th and late 13th century, and further north skeleton 3327 was radiocarbon-dated to 1220–80 cal. AD.

A malting kiln 3352 in the north-east corner of the excavation (Group 5006) may also have been of this date, although all the surviving fills relate to the backfilling, which was 14th-century in date. The construction of the kiln may have incorporated human bone from the adjacent cemetery, in which case this structure was not primary, but the evidence is equivocal.

A short length of probable foundation 3336 to the west of the kiln may also have been of this phase, as it was cut by a feature containing burnt fills probably associated with oven 3262 (see Phase 2 below).

Phase 2: Late 13th- or early 14th-century activity (Fig. 3)

A ditch 3242/3288 (Group 5012) was dug down the centre of the site, and 3243 and 3108, the lower (but not primary) fills of this, contained much pottery and environmental remains of late 13th- or early 14th-century date, possibly derived from kitchen or other domestic middens. An associated coin was only current in the third quarter of the 13th century. It is possible that layers 3045 and 3080 were contemporary fills.

The malting kiln 3352 may well have continued in use at this time. To the east, further burials were made in the cemetery. Skeletons 3429 and then 3415 overlay skeleton 3327, and must date

to the late 13th century or later, while the grave containing skeleton 1606 included 14th-century pottery.

Between the ditch and malting kiln an oven 3317/3253 cut pit 3258. This oven was half-excavated, and was circular with a floor of limestone and sandy mortar, a flue on the east side and a superstructure of fired clay. This was in turn cut by a possible replacement 3262 (only visible in section) just to the west. These structures may have been built to assist the construction of building 5009 adjacent to the south (see below).

Phase 3: Late 14th- or early 15th-century activity (Fig. 4)

Building 5009 consisted of the north wall and the northern part of the west and east walls of a range over 16 m wide orientated NNW–SSE, with a row of three aisle posts on the north and two rows along the west and east sides. It probably dates to this period, as the construction cut contained a worn Wessex-type floor tile of late 13th- or 14th-century manufacture, and a garderobe was later inserted that was in use in the 15th or early 16th century. Wall 5015 adjacent may also belong to this phase (but see Phase 4 below). The layers to the west (Group 5011) may comprise both earlier deposits and those derived from its construction, but were not independently dated. The slot, pit and posthole cut into them perhaps belong to a structure used during construction.

West of this building, the open ditch 3242 had a stone drain inserted, numbered 3246. Around and overlying this the ditch was filled with soils 3070, 3244, 3111, 3287 and 3412, which contained a variety of finds, most of them probably derived from the fills excavated from the ditch. These included pottery and a Wessex-type decorated floor tile of late 13th- to mid 14th-century date, 50 sherds of mid 14th- to 15th-century pottery, a worn floor tile of late medieval date and a fragment of ridge tile tentatively dated to the 16th or 17th century. If not earlier, soils 3045/3080 also belong with these. A few fragments of 16th-century tile were also present, but these are believed to belong to the later robbing of the culvert. The fills of the culvert (3068/3067, 3112/3113, 3284) contained few finds, and none of these were later than the mid 14th century.

Building 5019 was a rectangular range orientated WNW–ESE, between 6.8 and 8.4 m wide and *c*.20 m long. There were three rooms, the eastern and central ones almost a mirror image of those in Building 5001 (see below). It may have been constructed in Phase 3 or Phase 4, as dating evidence from the structure itself is almost non-existent. The earliest surviving wall was probably 4145 (Group 5022). The relationship of 4145 to the robbed external walls of Building 5019 is uncertain, although it is aligned parallel to the eastern robber trench 3485 and to wall 4012 to the west. There was no trace of a continuation south of robber trench 4022, nor north of robber trench 4027, at least at the level reached by excavation, so it seems unlikely that 4145 belonged to an earlier building. Wall 4145 could therefore have been an internal wall of Building 5019, dividing an eastern rectangular room from a smaller western room.

The foundations of wall 4145 were apparently abutted by a stone platform on both sides, which began only 0.4 m from the line of the southern robber trench, and continued north for at least 0.8 m. These may have been laid down to stabilize an area of former quarrying before the wall proper was built, though this is unproven. It is unlikely that they represent an earlier structure cut through by the wall, as the stones butted tightly against the foundations of 4145 on both sides, and if 4145 was later, it could simply have been built on top of this stone surface.

The western platform was overlain by at least 0.5 m of homogeneous fill; the eastern one by a levelling layer only 0.3 m thick, followed by a series of floors. Charcoal upon these suggested the presence of a hearth just to the east of the excavated sondage, close to the south wall of the building. The last of these floor and occupation layers was 4149, which had a *terminus post quem* of the later 14th century.

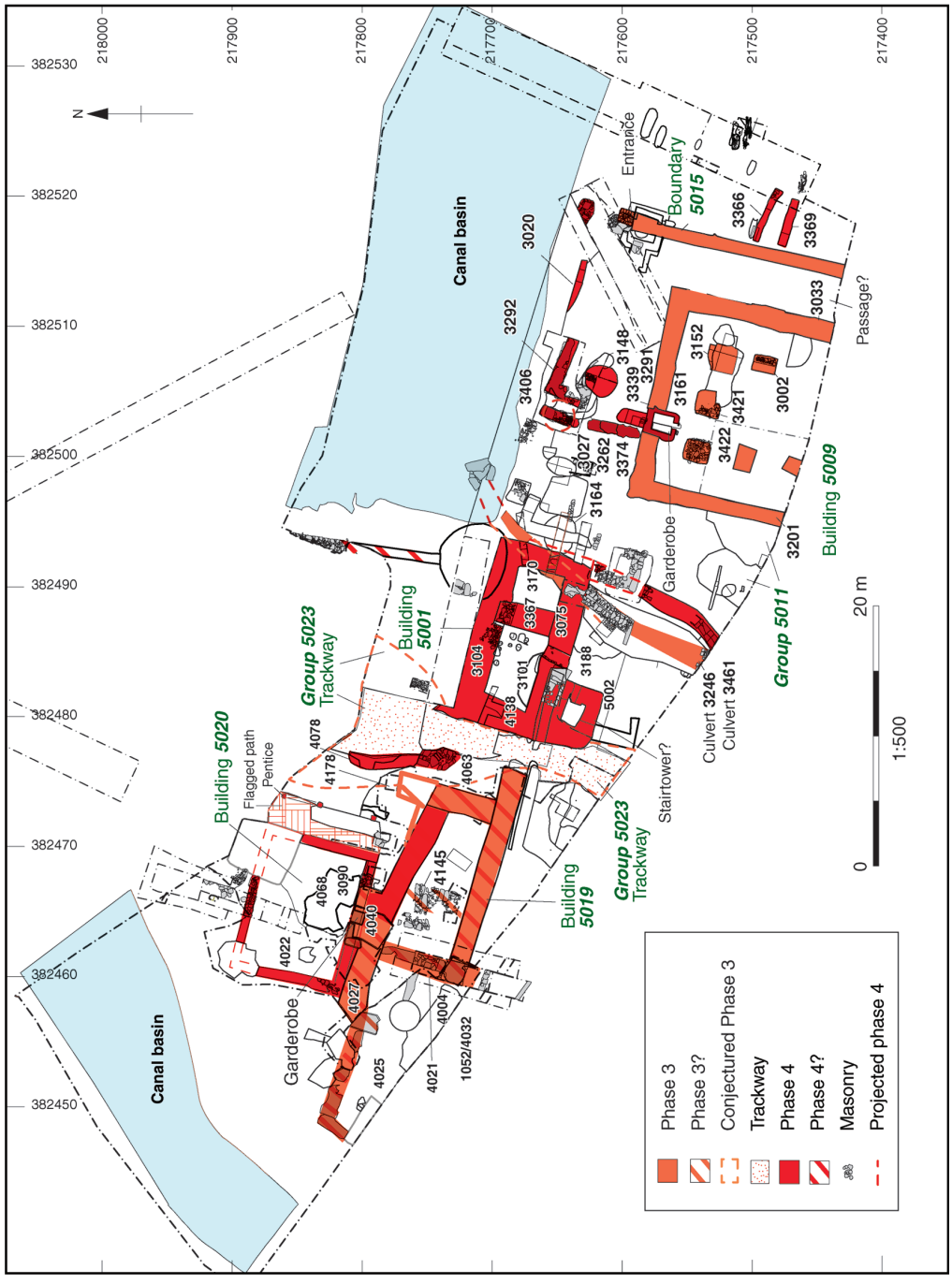


Fig. 4 Features constructed in Phase 3 (later 14th and early 15th century) and Phase 4 (later 15th century and early 16th century).

On the north side Building 5019 had a projecting garderobe. As a continuous layer of mortar was exposed right across the north wall and the garderobe at foundation level, it seems that this was an original feature.

It is also possible that the robbed foundation 4178 north-east of the recorded plan of Building 5019, which was overlain by a pit containing late 15th-century or later finds, belonged to a primary layout of this phase, so this is indicated on Figure 4.

The size of the foundations and robber trenches of Building 5019 was very like those of Building 5001, and both buildings lay either side of trackway 4080 (Group 5023), suggesting that they may have been contemporary, and have performed a common function (see Phase 4 below). Against this, the offset alignment of these two buildings may indicate that they were not constructed at the same time, and Building 5019 may have predated Building 5001, though probably not by very long.

Phase 4: Late 15th- and early 16th-century activity (Fig. 4)

Building 5001 was rectangular, 14 m long and 8 m wide, and was divided into two rooms, the larger on the west. Like Building 1519 it was orientated WNW–ESE. Its construction probably involved the destruction of drain 3246. A very large stone was found within the robber trench at the south-east corner of 5001, and was aligned almost exactly on the line of the west side of culvert 3246, raising the possibility that this drain might have been incorporated into the foundation of the building, rather than being destroyed by it. The very rough dressing of this large stone, however, in contrast to the very neat construction of the drain to the south and north, argues against this, and it is probable that the adjacent culvert or drain 3461 a little further east (Group 5026) was built at this time to replace it. Stratigraphically drain 3461 was later than 3246, but the construction fills around drain 3461 contained finds of similar date to those of the earlier drain, and the few finds from the fill of the later drain were also medieval.

Some of the capstones of drain 3461 were removed before the cut in which the drains lay was backfilled, and the soil overlying both (3413) included 16th-century finds. The relationship between Building 5001 and drain 3461 was not established for certain, but the slight shift in alignment between the two drains has no other logical explanation. A slight curve westwards in the east side of the robber trenches of 5001 might also support the view that drain 3461 lay alongside the building, and was not cut by it. The maintenance of the same drainage functions is less likely if Building 5001 was post-Dissolution.

Building 5001, and a southerly projection 5002, probably a stair tower, were almost entirely robbed out, but as it cut drain 3246, 5001 must be 15th-century or later. The only datable find was an iron casket key of 13th-century or later date from foundation 3103 on the north side. In the west room the floor was cut by a group of postholes, but none of these contained dating evidence. Building 5001 was abutted to the west by a metalled track running south–north towards the church and cloister from the Great Court. The sequence of trackway and yard deposits (Group 5023) cut by the robbing of 5001 included deposits containing 16th-century tile, but there was no direct relationship with its construction.

Although Building 5019 was not constructed exactly in line with the south side of Building 5001, the two buildings had similarly massive walls, and both ran up to, and bounded, the north–south trackway. The south wall of Building 5019, or its foundation, projected eastwards beyond the east wall, perhaps specifically to narrow the trackway at this point to a width of just under 3 m. The east wall of 5019, and the west wall of 5001, were parallel and just over 5 m apart. At their north ends the gap between them was divided by the expanded terminal of a length of wall 4063, which probably supported a pillar dividing the gateway on the northern side into a narrower

and a wider arch to west and east respectively. The expanded east side of this pillar foundation was matched by a bulge in the robber trench at the north-west corner of Building 5001, perhaps marking the other edge of the wider arch.

Evaluation had suggested that the construction cut for pillar foundation 4063 was later than the trackway deposits, and so was post-medieval (CAT unpublished records). The cut is however very wide for a construction cut, and the absence of any metalled surface overlying it suggests instead that it was an exploratory robber trench, leaving the date of the gatehouse open. A foundation 4078 continued northwards from 4063 along the edge of the track for 7 m, and was abutted both by yard surface 4080 and by a repair 4079. It seems likely that pedestrians entering the gate were originally directed west of 4063 and wall 4078 (Group 5024).

Together these buildings clearly formed a gatehouse range. Chronologically this can best be accommodated within the 15th or early 16th century, being constrained only by the date at which drain 3461 replaced 3246, and the date at which building 5020 was constructed. The form of the gatehouse, with a wide and a narrow arch, is particularly characteristic of the late medieval period, rather than the Tudor period, when single arches flanked by symmetrical corner towers were more favoured.

Building 5020 comprised a single rectangular room measuring 11×9 m. A single fragment of worn brick from the layer on which the south wall of Building 5020 was constructed was assigned a 15th- to 17th-century date. If not intrusive, this suggests a later 15th-century or later date for Building 5020, though dating based on a single fragment is not very secure. Other finds comprised an undated lead seal and shattered glass from a medieval window. The southern wall was abutted by a stone platform that included brick fragments, and so presumably dates to the 15th century or later.

The relationship between Buildings 5019 and 5020 is uncertain. The surviving southern wall of 5020 was clearly cut by the robbing of a garderobe belonging to building 5019. This might indicate that 5020 had been demolished prior to the construction of 5019, making the latter 16th-century or later. The garderobe chute was angled northwards, indicating that it discharged into a pit or drain to the north, i.e. within the area of Building 5020. The mortar floor of Building 5020 did have an irregular gap just north of the garderobe chute, but this only measured approaching 1.2 m across, and there was no trace of any lining, making its interpretation as a garderobe outfall pit cut into the floor of Building 5020 doubtful.

The north edge of the garderobe matched that of the southern wall of Building 5020, so it is alternatively possible that Building 5020 was constructed after Building 5019, incorporating the projecting garderobe into its southern wall, and sealing the infilled garderobe outfall pit below its mortar floor, which then settled, resulting in an irregular depression. On balance, this latter interpretation seems more likely.

East of Building 5020, a line of posts supported on post-pads may also have been added at this stage to provide a pentice or covered walkway alongside the building, with a flagged floor 4017. Fragments of decorated tile of late 13th- to 15th-century manufacture were recovered from either layer 4077 or 4018 adjacent to this.

A garderobe 3161/3221 (Group 5008) was added in the north wall of Building 5009, and fill 3210 accumulated inside. Layer 3210 was probably part of the fill during use, and this contained 15th-century potsherds and a lace tag. Overlying this was rubble infill 3143, from which came a 15th- to mid 16th-century quarry tile. The robber trenches of the building itself (3010/3338) include 15th- or 16th-century ridge tile and mid 16th- to 17th-century bricks. The garderobe therefore probably remained in use until the Dissolution, and was probably demolished soon after. Just outside, an access pit 3291 for cleaning out the garderobe was also of this phase, as was probably wall 3374 just to the west, abutting Building 5009, though this is not dated.

This wall (part of Group 5007) probably continued after a gap as wall 3027, which cut the fills of oven 3262, up to a corner foundation 3406, which it abutted. 3406 may also have been cut into the fills of 3262. This wall may have surrounded a large pit or well 3148, which cut the fills of earlier oven 3317, and the backfill of which was 15th- and 16th-century in date. There appear to have been at least two phases of wall surrounding this pit, as wall 3292, which ran slightly obliquely to 3027 just east of 3406, also formed a corner around 3148 and ran east. It is possible that these walls were associated with wall 5015 east of Building 5009, and formed an enclosed passage and yard.

Wall 5015 east of Building 5009 ran parallel to it over the top of malting kiln 5006. The wall provided very little direct dating material, as it was largely robbed out. Where it passed over the backfilled malting kiln the wall was apparently repaired, and the repair wall contained worn Wessex-type decorated floor tile fragments, suggesting a mid 14th-century or later date for this. Abutting wall 5015 on the east side were two smaller walls, one of which (3366) clearly overlay some of the burials that were excavated and dated to the 13th or 14th century. This wall (and the cemetery) were surrounded and overlaid by layer 023, which contained a wide variety of finds, the latest dating to the later 15th or 16th century. Mortar layer 3395 abutting wall 5015 in the south section may be equivalent to 023, which was interpreted as a reworked soil, incorporating human bones from the cemetery burials during cultivation in the post-medieval period.

Wall 5015 may have been built with Building 5009 in Phase 3, but was alternatively a later addition, perhaps associated with walls 3292 etc. to the west. Layers that abutted it suggest that it may have remained standing after the Dissolution and, like Building 5009, was probably demolished during the later 16th or early 17th century. A possible western return within evaluation trench C1a (110) was robbed by a cut containing a fragment of 18th- or 19th-century brick. This could perhaps date the robbing of this wall, as it underlay dumped material from the excavation of the canal basin, which can be dated by documentary evidence to the very end of the 18th century, but does not date the construction of wall 5015 or its initial robbing.

Phase 5: Mid 16th-century Dissolution and conversion to a country house (Fig. 5)

Masonry pier 4063 was abutted by trackway surface 4080, which was the latest exposed surface, and believed to be contemporary with 4113 abutting the north side of Building 5001. 4113 overlay a silt layer that contained worn 16th-century tile, so masonry 4063 and the yard adjacent were still in use after the Dissolution.

Wall 4078 north of pier 4063 (see Fig. 4) was heavily robbed out, and its north end was overlain by yard layer 4077, which abutted the track continuing north, and also respected the pentice adjacent to Building 5020 on the north. The pentice, and probably also Building 5020 adjacent, therefore continued in use in this phase. The boundary formerly marked by wall 4078 was now simply marked by different types of floor surfacing.

Building 5019 may have undergone some change of use, as the floors in the east room were cut away by a large deep pit (4031/4148), backfilled with layers containing 13th-century pottery except for one 15th-century scrap at the top. This pit extended right to the edge of the east wall of the building, and the planned limits of this feature overlap with the angled line of the northern robber trench 4027. This contradiction was not resolved on site, as no excavation was carried out along the north-east side of the building. The nature of the robbing backfill of the walls however suggests a 17th-century date (see below), so it is likely that the building was still standing during this phase, but that the east room was put out of use by the digging of the pit at some point.

Building 5001 continued in use, and may have had structure 5010, an approximate square some 1.6–2 m across, added to its south-east corner, as 5010 incorporated a substantial proportion of reused masonry from the former abbey buildings. Although the architectural fragments were no

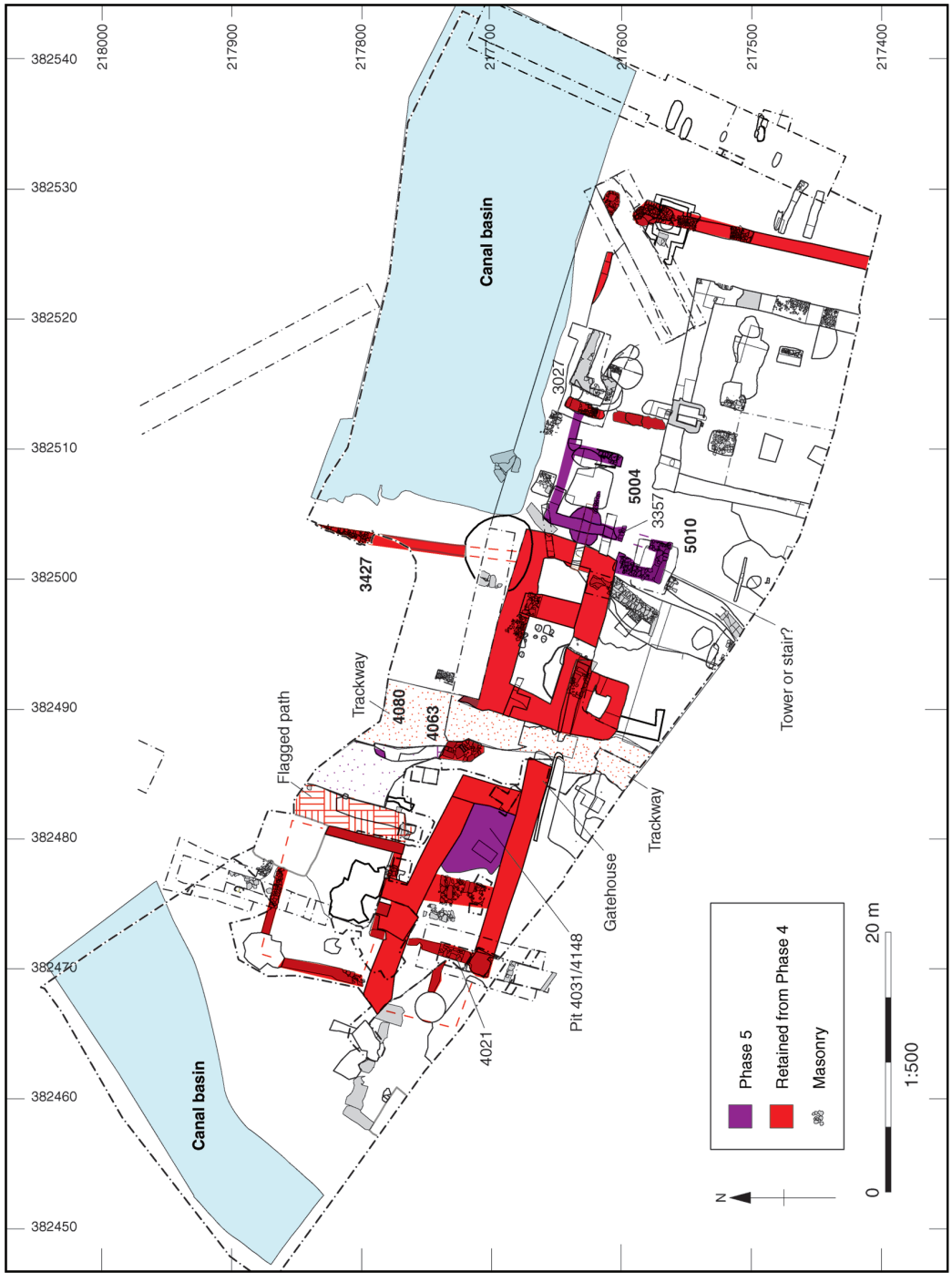


Fig. 5 Features constructed in Phase 5 (mid 16th to mid 17th century).

later than the 14th (or perhaps 15th) century, this structure overlay and destroyed drain 3461, which has been dated to the later 15th century. The removal of capstones from drain 3461 was probably carried out at this time, as layer 3413 infilling the hollow above both culverts at the south edge of the site was of 16th-century date.

It is alternatively possible that structure 5010 was even later, as its east wall was in line with Structure 5004, whose west wall ran parallel to Building 5001 and overlay pit 3164, whose fill included a large sherd of pottery dated to the later 16th or 17th century. There was also a robber trench found in the top of the robbing of 5001 on the line of the west wall of Structure 5010. It is therefore possible that Structures 5010 and 5004 were not constructed until the 17th century, but it seems more likely that the reuse of this stonework occurred shortly after the demolition that followed the Dissolution. Neither Structure 5004 nor the possible continuation of 5010 over the robbed east wall of Building 5001 need have been contemporary with the construction of 5010. Although much slighter than stair tower 5002, Structure 5010 may have been erected to give the impression of a matching tower at the south-east corner of Building 5001.

If 5010 and 5004 were contemporary, the straight end 3357 at the south end of Structure 5004 suggests that there may have been a ground-floor entrance into 5010 on the east side, perhaps giving access to a narrow passage between 5004 and the east wall of Building 5001. Alternatively, the west wall of 5004 could have supported a stair rising to the first floor of Building 5001, and to a first-floor room in Structure 5010, with access at ground level into the south-east corner of 5001. In the absence of better-preserved evidence, however, this remains speculative.

Structure 5004 consisted of the west wall and parts of the north and east walls of a building or enclosed area open to the south. This was probably an agricultural building, though too little remained to be sure of its plan or function. Its north wall may have continued as far as wall 3027/3374 (part of Group 5007) north of Building 5009 (as shown on Fig. 5). The robber trench of wall 3374 contained a substantial proportion of reused architectural fragments, and these may have come from the wall itself. If so, this might indicate that this wall too dated just after the Dissolution, although the architectural fragments could simply have been dumped from elsewhere. Changes to the church fabric at an earlier date, while perhaps less likely in view of the likely origin of these fragments in a monumental tomb, cannot be ruled out entirely.

Building 5009 was probably demolished at this time. Rubble fill 3143 in the garderobe, and robber trenches 3009/3037 with fills 3010 and 3338, indicate a 16th-century date for demolition. It is possible that wall 5015 remained standing, and that a second parallel wall was built along the east edge of the demolished Building 5009, but this is not confirmed.

Phase 6: Mid 17th-century and later activity: the Civil War and afterwards (Fig. 6)

At the south edge of the site, grave 3417 was cut into layer 3413, so must be of post-medieval date. The grave itself was not fully excavated, only a few bones were retrieved and there were no finds, but the most likely date for this occurrence is the Civil War, when Waller's troops were besieging Gloucester.

The robber trenches of 5001 were backfilled with rubble including brick, though the date of this material was not established. On the east side this backfill was cut by a shallow linear cut, itself apparently a robber trench, whose fill included a complete 15th- or 16th-century brick, two very worn ridge tile fragments and four floor tiles glazed black or white, suggesting a 17th-century date for the group.

The robber trenches of Building 5019 included a large number of bricks, though most were not kept or dated. Fill 1014 from the evaluation contained 14th-century pottery and brick (not kept) that was dated to the 17th century. The common presence of brick certainly suggests a 16th- or

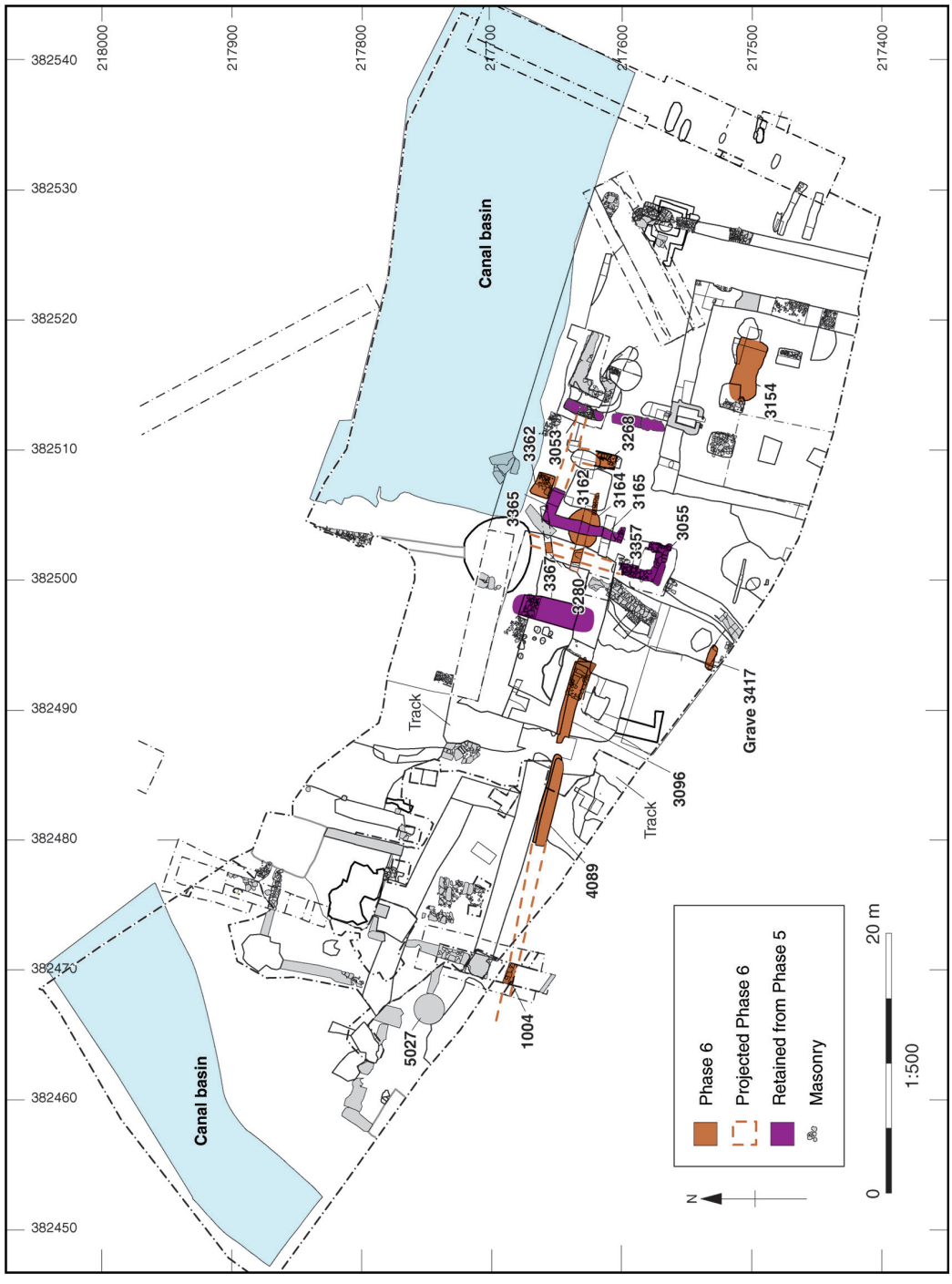


Fig. 6 Features constructed in Phase 6 (later 17th century and after).

17th-century date for the demolition. Documentary evidence strongly indicates that all of the primary structures relating to the main house were demolished after the Civil War, i.e. in the mid and later 17th century.

The infilled robber trenches of both Buildings 5019 and 5001 were cut by the foundations of east–west walls 3096 and 4089 (Group 5003), which followed a slightly more south-westerly line, but preserved the entrance along the track between buildings 5001 and 5019. Wall 4089 is continued further west as wall 4004, and is in line with the north wall of the surviving barn. A low wall along this line is shown on 18th-century illustrations (Hughes and Rhodes 2003, Ill. 14a & b), together with a gate, though it is unlikely that the latter is the excavated gap between these walls.

Walls 3096 and 4089 formed a replacement boundary for the gatehouse range, running east from the Tithe Barn, and leaving an entrance between them to the area of the former church and cloister to the north. It is possible that the middle walls of buildings 5001 and 5019 were left standing at right angles to these; the robbing of the central wall of 5001 was certainly later than that of the rest of the building, while wall 5022 was not robbed out like the rest of building 5019, so may also have survived for longer.

Building 5010 probably remained standing, as a shallow robber trench 3166=3280 was recorded in line with its west wall running along the top of the infilled robbing of the east wall of Building 5001. While this may have been a replacement for the west wall of Structure 5004, it may instead have been added to preserve the stair to the first floor of Structure 5010, which perhaps had an agricultural storage function.

These walls do not appear to have lasted for very long, as there were no finds later than the 17th century from them. Wall 3357 included tile of 13th- to 16th-century date, and wall 3268 further east a fresh fragment of quarry tile of 15th- or 16th-century date. The robber trench of the west wall included 16th- or 17th-century brick in fill 3046, and the north robber trench further bricks of this date in fill 3363. The robbing of wall 3268 was cut by pit 3269, whose fill 3274 contained two fresh ridge tile fragments and a triangular floor tile, possibly Malvernian, all of 16th-century type. The illustrations and maps of the later 18th century show no sign of any buildings here.

SUMMARIES OF FINDS AND ENVIRONMENTAL REPORTS

Pottery by Paul Blinkhorn

The medieval and post-medieval pottery from the main excavation comprised 546 sherds (9,548 g), with another 185 sherds (2,941 g) from the evaluation trenches. Twenty sherds (163g) of abraded Romano-British pottery were also noted. The range of pottery types is typical of sites in the region (Vince 1984). It is dominated by wares from Worcester and the Malvern region, along with smaller quantities from Oxfordshire and the Cotswolds, and there is a single sherd of Saintonge ware. Most pottery is of the later medieval period, and one notable feature of these assemblages is that, other than two fragments of skillets, pottery associated with the preparation and consumption of food is entirely absent, the emphasis being on drinking vessels.

Ceramic Building Material by John Cotter

A total of 220 fragments of ceramic building material (CBM) weighing 26.888 kg was recovered. These range from the late 12th or 13th century to the late 19th or 20th century, though most (by sherd count) appear to be medieval (up to *c.*1500). With rare exceptions, the assemblage is in a very

fragmentary and worn condition. There were 46 fragments of decorated floor tile representing up to 26 tiles, all probably of 13th- and 14th-century date, although some 'printed' tiles might be 15th-century in origin. Wessex floor tiles included both scooped and stabbed keying. Deeply inlaid slip designs and shallower printed designs were present. Some Llanthony tile designs show close affinities with the tile pavements at Cleeve abbey (Somerset) and Hailes abbey (Glos.). Tiles from Brockworth Court, a rural residence for Llanthony, are reported upon in this volume (Keen, below), but none matches the material considered here. None of the tiles or bricks was found *in situ*, and none of the stratified groups of CBM was large enough to merit detailed analysis. Malvernian Ware ridge tile fragments were relatively frequent, but there was very little flat roof tile, suggesting that roofs were of stone.

Metal Finds by Ian Scott

There were 199 objects of iron, 32 of copper alloy and 86 of lead, only 12, 7 and 12 of which respectively come from the evaluation trenches. There is a single cut silver Long Cross penny. Both assemblages are dominated by nails and nail fragments, miscellaneous metalwork and metal waste (melted metal or offcuts). The structural fittings comprised 164 nails (194 fragments), five staples, and a washer. There is also a door stud, a key, a lead tracery ventilator and five pieces of window came. Other items of note comprise a page turner or holder, a casket key, a jeton, a seal or pan weight, several buckles or buckle plates and lace chapes.

Glass by Ian Scott

The glass from the main excavation comprises 47 sherds including 42 sherds of window glass. All the window glass is plain, devitrified and probably medieval. The only other finds were a tentatively identified rim sherd from a hanging lamp (now lost). The glass from the evaluation trenches comprises 41 sherds, of which 39 are window glass. The window glass is devitrified and almost certainly medieval, and the majority is painted glass, mostly 'geometric grisaille' of the 13th or 14th century. The other fragments from both are 18th-century or later.

Architectural Stonework by Julian Munby

Nineteen fragments of architectural stonework, all redeposited, were found. Almost all are of fine oolitic limestone from the Cotswolds, and probably from Birdlip limestone. While the attached shafts may have come from the primary church, the majority probably comes from the 14th-century rebuilding, or later works. The assemblage includes part of a stone coffin with a 'head and shoulders' tapering profile and drain holes in the base, probably of 12th- or 13th-century date.

Human Bones by Sharon Clough

Nine largely complete medieval human skeletons were recovered, four of which were dated, either by associated pottery or by radiocarbon dating, between the late 12th and 14th century. Eight of them were adult males, six of these over 40, and the other was a child of 9–11 years. Adult stature was within the normal medieval range. Burial positions included extended supine, extended prone and, unusually, three individuals flexed on one side. Fragments of another 19 individuals were recovered, and these were also predominantly males, with a few children. The group suggests members of the monastic community. A few bones from a post-medieval burial of an adult male were also recovered.

Animal Bones by Lena Strid

The animal bone assemblage comprised 1,552 re-fitted fragments from medieval and early post-medieval features. Only 52 bones (3.4 per cent) came from sieved soil samples. The bones were in fairly good condition, and were dominated by domestic species, notable exceptions being fallow deer, hare, rabbit and sparrowhawk. When divided by phase, numbers are too small for detailed analysis.

Fish Bones by Rebecca Nicholson

Almost 600 identifiable fish bones were recovered, as well as eggshell. These came from a midden-type deposit, a pit and a late medieval garderobe. Herring and eel bones were commonest, but a wide variety of freshwater and saltwater species was present, including small and tiny flatfish, and larger fish such as hake, haddock, mackerel, plaice, small flounder, salmon and conger eel.

Charred and Mineralized Remains by Kath Hunter

Remains were analysed from three later medieval deposits. Cereals were few, but they indicate the consumption of fruit such as apple/pear, plum/damson, fig and grape, and hazelnut and walnut shells probably indicate that nuts were also eaten.

DISCUSSION OF EXCAVATED REMAINS by Tim Allen

Historic Map Evidence

This section draws heavily on Hughes and Rhodes 2003 and the published summary of many of their conclusions (Watts and Hughes 2004). Historic maps only begin in 1780, and none of the late 18th-century and early 19th-century maps shows any remaining trace of the church, cloister or of the buildings found in the excavations. The only exception is the well at the west end of the excavation (Fig. 6, Group 5027), which is marked on more recent maps and may be 19th-century in origin.

Several paintings and drawings of the 18th century also bear out the lack of any surviving monastic buildings in this part of the site (Hughes and Rhodes 2003, Ill. 14a & b; Morriss 2009, fig. 4). One 17th-century sketch of the priory site shows a variety of standing buildings, but is not sufficiently detailed to establish whether any of these might lie within the excavation area (Hughes and Rhodes 2003, Ill. 13).

Hughes and Rhodes also consider the post-medieval documentary history in considerable depth, and it is clear that there were two major phases of destruction on the priory site, the first at or soon after the Dissolution, the second shortly after the Civil War. Considerable damage was done to the site during the Civil War: Waller admits to the demolition of a tower during the attack on Gloucester in his letter to Lady Scudamore, and Lord Scudamore claimed that the damage was considerably more extensive (Hughes and Rhodes 2003, 15–17). Certainly the nave of the monastery church was not used as a parish church afterwards, being replaced by the church at Hempsted nearby, where a new rectory was completed in 1671 (Watts and Hughes 2004, 21).

The Roman Evidence (Fig. 3)

A few Roman sherds and tile fragments were found, but only in pits 3051 and 3150 was this material not clearly residual. A malting kiln of Roman date was reportedly found immediately south of the priory (Morriss 2009), but the HER has no record of this and the report is probably incorrect. Pits 3051 and 3150 may have been of Roman date, but in the absence of Roman structures near by, the mortar in these pits probably belonged to an early phase of the medieval priory, the finds being residual. The Roman finds may have derived from manuring onto fields from Gloucester.

The Medieval Period

Preconceptions

In the following discussion Llanthony means Llanthony Secunda and Llanthony Prima is called Llanthony Monmouthshire. Shortly before excavations began, Hughes and Rhodes (2003) concluded that the church and cloister at Llanthony had lain to the north of the surviving buildings of the Inner Great Court, and a summary to this effect was published the following year (Watts and Hughes 2004). The 2005 excavations were therefore expected to find the south side of the cloister.

In an interim report Hardy (2008, fig. 2) published a plan showing the 2005 excavations in relation to Watts' and Hughes' conjectured position of the priory cloister. This placed the south cloister walk immediately north of the excavated buildings, such that the excavation should have included part of the refectory. All but one of the fragmentary walls found were, however, late medieval or later. One possible early east–west wall was seen, but was overlain by later medieval activity, so is unlikely to have belonged to the main claustral buildings. Instead, Hardy suggested that the excavated buildings represented a range of service buildings south of the cloister (Hardy 2008).

Considering the common alignment of the Tithe Barn and the south sides of buildings 5019 and 5001, and Building 5009 east of this running south at right angles, the excavated buildings clearly occupied the east part of the north side of the Inner Great Court and the north end of the east side (see Fig. 2). If the cloister did lie north of the Inner Great Court, it must have been further to the north or north-east.

The limited scale of investigation and of resulting finds from several of the buildings has meant that it is not possible to be certain about their function. Had this been possible, the position of the cloister might have been pinned down more tightly, due to the broad similarities in layout followed by most abbeys and priories. Without this, the discussion that follows must inevitably consider a wider range of possible functions for the excavated buildings. The position of the church and cloister will be mentioned where the excavation offers any new evidence and will be considered further in the concluding part of the discussion.

The Cemetery (5017)

With the exception of one grave overlying the infilled culvert, all of the graves were found at the east end of the excavation, and clearly represent a cemetery. This lies within the area described as 'the Churchyard of Llanthony afforesaid aunciently belonging to the priory' in a lease of 1670 (Hughes and Rhodes 2003, 18), divided by a wall on the east from the High Orchard, which is identified on maps of the 19th century (Hughes and Rhodes 2003, 9).

All of the burials that were dated, whether by radiocarbon dating or by finds, were of late 12th- or 13th- or, in one case, 14th-century date, making the graves among the earliest medieval

features from the excavations. The spread of rubble 023 that overlay the burials included 16th-century finds, and is interpreted as a demolition layer from the time of the Dissolution, later mixed by cultivation. Hardy (2008, 25–6) argued that the churchyard continued to be used after the Dissolution, when part of the church was retained as a parish church, up until its destruction during the Civil War. There is, however, no clear evidence to suggest that any of the excavated bodies were post-medieval.

Six of the seven skeletons recorded in detail were those of adult men; the seventh was a sub-adult of 9–11 years. Although a small group, this suggests that the cemetery may have been monastic, rather than that of lay people attached to the priory.

Skeletons were tightly clustered and graves intercut, suggesting that the area of the cemetery was limited. One section drawing recorded undisturbed natural in the excavation edge east of Building 5009 at the same level as grave soil 024 and, if correct, the cemetery did not extend south of the excavation. This is not, however, certain. Charnel found in pit 3235 against malting kiln 3352, and human bone within the backfill of the kiln, probably disturbed during the construction of wall 5015, suggest that the cemetery extended northwards at least as far as the oven.

No graves were found cut by the east wall of Building 5009, or west of this, suggesting that the western limit of the cemetery was well defined. The dated graves are earlier than the masonry structures in this area (except perhaps for malting kiln 3352), but although excavation was limited, the absence of human bones beneath Building 5009 or further to the north or west suggests that this limit was defined early on. No earlier boundary to the cemetery was found, so either an earlier boundary had been removed by the east wall of Building 5009, or it was marked only above ground by a bank or hedge line.

A similarly restricted area was found at the 12th-/13th-century infirmary cemetery at St Mary Spital, London, which was only bounded by buildings on the east side, yet whose graves occupied a clearly-defined rectangle with a surrounding gap on the other three sides (Thomas *et al.* 1997, 37–40 and fig. 14). The graves there were ordered in rows, with only limited intercutting, the latter probably due to the relatively short life of that cemetery before rebuilding of the abbey put it out of use. In contrast, the cemetery at Llanthony was certainly in use from the later 12th into the 14th centuries, and as only a very small area was examined, and this was only excavated to the depth of impact, the overall period of use of the cemetery remains uncertain. The fact that wall 5015 disturbed graves does not provide an end date for the cemetery, as this wall lay right at its edge, and burial could have continued further to the east.

The discovery of an articulated arm redeposited within a later grave suggests that the intervals between burials were sometimes short, so that bodies were disturbed before they had been completely defleshed by decay. This was also the case in the lay cemetery at Abingdon abbey (Oxon., formerly Berks.), where the area devoted to this cemetery within the precinct was not large, although the adjacent town and outlying villages supported a substantial population. At Llanthony it suggests either a particularly large number of monks, or particularly adverse conditions at some period during the use of the cemetery.

The number of canons at Llanthony prior to the Black Death was 30, 19 of whom were taken by the plague (*VCH Glos.* II, 90), and the numbers recorded at other dates were all fewer than 30 (Robinson 1980, Appendix 20, 401). It is possible that the redeposited limb came from the period of the Black Death or another of the sporadic outbreaks of plague in the 14th century. Alternatively, the construction of buildings outside the excavated area may have significantly constrained the size of the cemetery, resulting in more frequent recutting of earlier burials.

With regard to the position of the church and cloister, coffins and bones were found during the widening of the canal in 1852 (Hughes and Rhodes 2003, 29), the former 'on the spot where the chapel is supposed to have stood'. These may have been within the church or chapter house,

but no precise details of their location are known. The areas to the east or north of the church were generally reserved for the burial of the religious community (Gilchrist and Sloane 2005, 60). The area south of the choir and east of the chapter house was also often used, as at Norton priory (Cheshire) (Brown and Howard-Davis 2008, 50 fig. 20) or Worcester (Barker 1994, 40), perhaps providing some indication of the likely eastern limit of the cloister to the north.

Other Early Features

West of the cemetery, several pits of the late 12th or earlier 13th century were found, one containing lead slag suggesting use during construction. Oven 3317 may also have been constructed here in this phase for the same purpose.

Further west, a number of large irregular pits interpreted as quarries for monastic buildings are tentatively attributed to this period, though they are not closely dated. These were presumably for sand and gravel as ingredients for mortar.

Overall, the evidence suggests that this area was peripheral to the core of the monastery. Stone quarry pits were often dug within the precinct when the monastery was first established (Bond 2001, 330), but were normally some distance from the church and main claustral buildings, only being overlain by buildings as the monastery developed and expanded.

Later 13th- and Earlier 14th-Century Developments (Fig. 4)

The cemetery continued in use. Two successive clay ovens and a large stone malting oven were found in the north-east part of the site, and large quantities of pottery and animal bones were discarded into a drainage ditch some 10 m further west.

With a diameter of 2.2 m, oven 3317 was little smaller than stone-built examples in main abbey kitchens; e.g. 2.4 m at St Gregory's, Canterbury (Hicks and Hicks 2001). Only a small part of the oven that replaced it survived in section, and its size is unknown. There is no indication that these ovens were under cover, although they would not have lasted long unless they were. This perhaps indicates that they were temporary structures, built to supply the workforce during a particular phase of construction, rather than for the use of the monastic community. If so, any link with the claustral buildings may be illusory.

Malting Kiln 3325 (Structure 5006)

This kiln lay east of the ovens. The characteristic square shape and sloping sides of the chamber show that it was probably a malting kiln, though excavation did not reach the base. Examples of these are known from the Late Saxon period (Hardy *et al.* 2007) and throughout the medieval period.

Malting kilns are sometimes found within buildings, as at the grange of Abingdon abbey at Dean Court Farm, Cumnor (Oxon.) (Allen 1994, figs 54–5), or at Mount Grace priory (NR Yorks.) (Coppack 1990, fig. 72), but are also sometimes external, for example the Late Saxon kiln at Highham Ferrers (Northants.) (Hardy *et al.* 2007) and the 14th-century example at Allcourt Farm, Lechlade (Stansbie *et al.* 2013). Despite the absence of any covering building at Higham Ferrers, abundant fired clay with wattle impressions indicated a clay superstructure (Hardy *et al.* 2007, 135–40), and it was suggested that this might have been renewed every year. At Lechlade there was a stone-lined sunken chamber attached to the kiln, and plenty of limestone in the backfill, suggesting that this had had a stone superstructure, but there was no evidence that the kiln itself was within a building (Stansbie *et al.* 2013, 32–5). At Llanthony no evidence of a surrounding

building was found and, as virtually no fired clay was recovered from its backfill, it is most likely that it had a superstructure of stone.

Human bone was found just outside the oven within a cut interpreted on site as the construction cut, suggesting that the oven had been dug into the cemetery. There are plenty of other monastic sites where cemeteries are disturbed by later medieval building, for example at Norton priory for the Lady chapel (Brown and Howard-Davies 2008) or at Abingdon abbey for an octagonal belltower within the lay cemetery (Allen 1990, 77 and fig. 4). There was little associated dating material in this oven, but no pottery later than the 13th century was recovered from the backfill.

Malting ovens are, however, generally constructed against the side of the cut, not freestanding, so the bone may alternatively have been buried in a pit dug against the outside of the oven. If so, it may have related to the disturbance of burials during construction of later wall 5015, like the human bone found in the backfill of the oven. This would allow the malting oven to have been an early structure, as the associated pottery would suggest.

The malting kiln was probably earlier than Building 5009, as wall 5015 which overlay it seems to have been built soon after Building 5009 (see later 14th-/early 15th-century developments). The refectory at this time presumably lay to the north and the kitchen perhaps to the north-west.

Group 5012 – Pits 5013 and Ditch 3242

The 13th-century pits were cut by a drainage ditch of late 13th- or early 14th-century date. The position of the ditch at the north side of the Inner Great Court suggests that it acted as a drain from buildings to the north or north-east, probably belonging to the cloister. The quantity of finds in the ditch fills suggests that it lay close to a refectory or guesthouse, or to an associated external midden, like that suggested at Norton priory (Brown and Howard-Davis 2008). The absence of kitchenware amongst the pottery, and of butchered animal bones, does not indicate a close association with a kitchen.

The ditch was probably dug some time before the construction of Building 5009 to its east. Dating evidence for the construction of Building 5009 is limited to a page-holder from a group of stones below the robber trench, thought to date, or predate, the building's construction, and a fragment of worn Wessex-type decorated floor tile from the construction trench on the north side. Wessex-style decorated tiles (other than in London) were manufactured either in the late 13th century or early 14th century, and worn examples are unlikely to predate the early to mid 14th century (Cotter pers. comm.).

A concentration of lead slag was also recovered from an early ditch fill, and from layer 3144 to the east, just outside Building 5009. The lead working may perhaps indicate that this was used as a temporary workshop area during its construction, so that slag was discarded onto the ground and into the open ditch. The dumping of material into the ditch would seem to indicate either a period of neglect, or that this occurred only towards the end of the effective use of the ditch, when it had already been decided to replace it with a covered drain.

Later 14th-/Early 15th-Century Developments (Fig. 5)

Building 5009

While accepting that the finds only provide a *terminus post quem*, Building 5009 was probably constructed in the mid 14th century, so was clearly not part of the primary layout. Garderobe 3161=3221 was inserted into the north wall, most likely during the 15th century, and appears to have gone out of use in the mid to late 16th century, shortly after the Dissolution. The building

was demolished either shortly afterwards or during the 17th century, possibly during the ravages of the Civil War.

In his interim publications, Hardy suggested that Building 5009 was perhaps a kitchen (Hardy 2006; Hardy 2008). The position of the kitchen in Augustinian priories, for instance at Norton, Kirkham (NR Yorks.) and St Gregory's, Canterbury, is at the south-west corner of the cloister, or south of this, enabling the kitchen to serve both the refectory and the prior's lodging in the west range (Brown and Howard-Davis 2008; Hicks and Hicks 2001). At Llanthony, pillars from the Norman church were found during digging for a canal basin in Sizes Ground to the north (Watts and Hughes 2004, 25). Watts and Hughes (2004, 26 fig. 6) interpreted this to mean that the nave and cloister lay due north of the excavation, but it is possible that the pillars, and thus the nave, may have been further east, close to the existing canal.

There is, however, no trace of any internal structures or of burning within Building 5009 to support interpretation as a kitchen. The only evidence is circumstantial: the ovens and malting kiln adjacent to the north, and large quantities of pottery and animal bones in the drainage ditch, and in the later infilling around the culverts, to the west. The relative dates of these structures and deposits have, however, already been discussed, leaving no substantive evidence to support this interpretation.

Building 5009 was 16.3 m east–west and at least 13 m north–south, with what appear to be two rows of internal piers. Buildings containing rows of piers at other monasteries were sometimes open halls with central hearths, like those at Kirkstall (WR Yorks.) and Tintern (Monmouths.) abbeys (Coppack 1990, 104 and fig. 67; Courtney 1989, 104 and fig. 6). The lack of a flagged floor and absence of internal structures or stratigraphy in Building 5009 suggest rather the undercroft for a two-storey building, as does the later insertion of a garderobe. The size and orientation of Building 5009 would be consistent with the undercroft of the west cloister range, with wall 5015 adjacent perhaps belonging to the west cloister walk.

The same objections exist to the interpretation of Building 5009 either as a kitchen or as the undercroft of the west range. This building is too late to have been part of the original layout of the cloister, and no indications of earlier buildings were found, although the base of the stratigraphic sequence was not reached over much of this area. In addition, such an interpretation would mean that the adjacent cemetery was in the cloister. Although burials were sometimes made in the cloister walk, a dense cemetery like that found here would be extremely unusual.

The position of Building 5009 might suggest a second dormitory, as at Battle abbey (Sussex) and at Kirkham priory (Hare 1985; Coppack *et al*. 1995, fig. 14). At Kirkham the gap between this and the east range of the cloister was only 2 m, but at Llanthony there was a gap of at least 8 m between Building 5009 and any other building to the north. At Battle abbey there was a passage dividing the range in two just south of the refectory, allowing access into the open area to the east (Hare 1985, fig. 3), and it is possible that there was a similar arrangement at Llanthony. A gap of 8 m or more, however, seems rather excessive.

The Battle abbey dormitory was 13.5 m wide, and part had two rows of columns in the undercroft; the Kirkham example had one row of columns in the undercroft, but was only just over 10 m wide. If Building 5009 was an additional dormitory, it suggests a large number of monks at the time that it was built. The likely date of construction is too early for the closure of Llanthony in Monmouthshire in 1481, and the influx of monks from there. The addition of a garderobe late in the medieval period is consistent with a pattern of increased personal comforts for monks in many abbeys and priories at this time, and the contents of the garderobe might suggest a prosperous lifestyle that included hunting with hawks.

A building at right angles was observed by Clarke in the western edge of the canal about 20 m south-east of the excavation (Clarke 1853). This was of similar width to Building 5009, with

a floor of encaustic tiles. It had a drain associated with it, which might support interpretation as the reredorter, but the drain as illustrated was not large (Hughes and Rhodes 2003, Ill. 22). Main drains are usually substantial: 1.2 m wide at Melrose abbey (Roxburghs.) (Greene 1992, 121), over 1 m at Rievaulx abbey (NR Yorks.) (Coppack 1990, fig. 63); the drain crossing the Inner Great Court at Llanthony itself was 0.7 m wide and 0.8 m deep (Atkin 1987). If Building 5009 was a dormitory and Clarke's building the reredorter, it must have been nearly 35 m long. On balance, therefore, this was probably not the reredorter. Norton priory had the reredorter orientated north–south rather than east–west, but in the absence of a drain, and considering its size and upper storey, Building 5009 was not one either.

Following the bull of Pope Benedict XII in 1336 legitimizing the consumption of meat on four days of the week in Benedictine houses, some built a second refectory or misericord where meat could be eaten. The construction of misericords was not restricted to Benedictine houses, a number of Cistercian monasteries doing the same (Bond 2004, 78). It is therefore possible that Building 5009 represents a first-floor misericord. If so, however, the insertion of a garderobe in the 15th century would imply a change of use of at least part of this building at that time.

The east–west dimension of Building 5009 is very similar to that of the infirmary hall at Kirkham, which also lay adjacent to a cemetery. Other infirmary halls were also of similar width, while that at Christchurch, Canterbury, was considerably larger (Miller and Saxby 2007, fig. 152). The infirmary at the Augustinian priory of St Mary Merton (Surrey) was oriented north–south, as was that at Waltham abbey (Essex), and both of these had double aisles like those of Building 5009, though they were only 12–13 m wide (Miller and Saxby 2007, figs 143 and 152).

The infirmary was almost always placed as far as possible from interaction with the outside world, usually south-east of the church, as at Kirkham (Coppack *et al*. 1995, fig. 14). Building 5009, however, lay at the edge of the Inner Great Court. If the existing east wall of the Inner Great Court is medieval, then Building 5009 may have lain within a separate, eastern court, but its position close to the north gate of the Inner Great Court (see below) would still make use as an infirmary unlikely. A more likely candidate for the infirmary hall at Llanthony is the east–west range observed by Clarke, south of the cemetery and east of the Inner Great Court. The recorded cemetery burials were very few, and thus generalizations about the character of the cemetery must be very tentative, but the relatively high incidence of disease is consistent with an infirmary cemetery.

Other suggestions for Building 5009 might include a guesthouse, of which surviving late medieval examples include Abingdon, Cerne (Dorset), Coverham (NR Yorks.) and Ely abbeys. These are commonly of two storeys, often over a vaulted undercroft (Friends of Abingdon 1993). The excavated guesthouses at Kirkstall and at Tintern are both aisled structures of similar width to Building 5009, although these were ground-floor halls (Courtney 1989, 124–5). This suggestion suffers from the same objection in terms of position as interpretation as a kitchen. The passage between 5009 and 5015 might have provided access to the south-east corner of the cloister, and thence to the church, but this is the route normally reserved for monks, not for lay visitors. At Norton priory and at Kirkham, for example, the guest hall lay adjacent to the kitchen near to the south-west corner of the cloister (Brown and Howard-Davis 2008, fig. 6).

A second dorter is probably the most likely interpretation of this building, though not proven by this excavation. Fortunately the southern half of this building still survives within the Scheduled Area, allowing the possibility of future excavation to clarify its function.

Wall 5015

Wall 5015 was constructed east of Building 5009 and parallel to it, overlying the backfilled malting kiln 5006. Worn Wessex-type decorated floor tile fragments came from a repair at the north end,

and at the south layers east of the wall of Building 5009 ran up to, but not beyond, the robbing of wall 5015, suggesting that both 5009 and 5015 were built at much the same time, i.e. in the mid to late 14th century.

Wall 5015 may have provided a covered passage or slype alongside Building 5009, perhaps part of a series linking the cloister to the north to the infirmary to the south. There were similar passageways linking the infirmary to the cloister at St Mary Merton and at Tilty abbey (Essex) (Miller and Saxby 2007; Hall and Strachan 2001).

At the north end, wall 5015 appears to have ended at the edge of the deeper part of evaluation trench C1a, as it was not observed continuing across this, although a possible western return was seen. The frequent modifications found just south of this strengthen the likelihood that this was the end of the wall, and that there was an entrance or gateway between this and the return, giving access from the north-east corner of the Inner Great Court to the east. The return may have continued as robber trench 3020, as the evaluation trench did not record either the west end of the malting kiln or the north wall of Building 5009, and so its exact position is slightly uncertain. Whether 3020 was a continuation of wall 3292 is however speculative (see Fig. 4), as they do not appear to be in alignment.

Building 5007

Other than wall fragment 3336, all of the walls described north of Building 5009 were of late medieval or later date. Both walls 3292 and 3027 were later than oven 3262, whose backfill included a sherd of late 13th- to mid 14th-century date (Fig. 4). They were both likely to have abutted Building 5009, but wall 3374 also appeared to abut the garderobe added to it in the 15th century. Wall 3292 closely surrounded pit or well 3148, whose excavated fills were 15th-century or later and 16th-century. It seems likely that this was a well or cess pit outside building 5009, not fully backfilled until the 16th century. Perhaps, therefore, wall 3292 was constructed in the later 14th or early 15th century, and was succeeded by walls 3374 and 3027 after the garderobe was added, when a new wall enclosing this was needed further to the west. It is even possible that pit 3148 was an external cess pit superseded by the garderobe built into the north wall, although later medieval cess pits are often rectangular, and the only deposit sampled for environmental remains was close to the top, and probably backfill.

The robber trenches of the walls included a collection of 13th- or 14th-century architectural fragments, which, if derived from the walls themselves, support a late medieval or later date for their construction. These fragments may, however, have been discarded from buildings elsewhere in the priory during demolition at the Dissolution, so that the structure is of post-medieval date.

It is just possible that the possible return of wall 5015 found in trench C1a continued west to join 5007, so that 5007 and 5015 between them created an enclosed space around Building 5009. If so, then both could belong to the late 14th or 15th century.

Hardy (2008, fig. 2) described the walls grouped under structure 5007 as workshops, and some of these might have been dwarf walls for a lean-to against Building 5009. Within this area, however, there were no contemporary internal features surviving other than pit 3148. The fills of 3148 did contain a concentration of lead slag, perhaps suggesting that lead-working took place in this area, but since these were upper pit fills, they could represent deliberate backfilling with material from elsewhere. If lead-working was carried out here, it is likely to have been during the construction of, or alteration to, Building 5009, and the insertion of the first floor garderobe might well have been the occasion for this.

Culverts 3246 and 3461

The lower fills of ditch 3242 were removed to insert a covered stone culvert or drain 3246=3288. Substantial pottery and animal bone assemblages of later 14th- or early 15th-century date were incorporated in the infilling of the ditch around the stone culvert, together with some residual material from the ditch and a few later fragments that were probably intrusive.

Stratigraphically, culvert 3461 was later than 3246=3288, but its fill (3121) contained large sherds of late 13th- or earlier 14th-century pottery and a ridge tile fragment of similar date. The layer overlying both drains after the removal of some of the capstones from 3461 included 16th-century finds, and the very similar line taken by both drains strongly suggests that they performed a common function. As the date of the earlier drain 3242 is clearly monastic, it seems likely that drain 3461 was as well.

Neither drain was large enough to represent main drains of Llanthony. The drain crossing the Inner Great Court to the south, for example, was much wider (see above), as were the main drains at Norton priory (Brown and Howard-Davis 2008). This culvert, which appears to have been draining from the north-east, may have been attached to the kitchen, or may instead have been draining water from the lavatorium in the cloister, or from the roofs of the cloister buildings themselves.

A single grave was found cut into layer 3413, so was clearly post-medieval (Fig. 6). Part of the priory church was retained as the parish church, but this grave is at some distance from the church, and there were no other burials to suggest that it belonged to a parish cemetery. It most probably dated to the Civil War period, when the priory was used by the Parliamentarian army attacking the city. A number of unlicensed cemeteries were in use during this time, for example at Abingdon (Allen 1989; Allen 1997), and in the course of fighting many more instances of individual unlicensed burials are likely to have occurred.

Building 5019

The robber trenches of Building 5019, like those of Building 5001 to the east, were wide and deep, suggesting a massive building of at least two storeys, which was probably subdivided by wall 4145. The longer east room, adjoining the trackway between buildings 5001 and 5019, was of very similar length to the west room in 5001, making the two buildings approximate mirror-images of one another. Unlike Building 5001, however, Building 5019 continued further westwards beyond cross-wall 4021 (see Fig. 4), so was part of a longer range.

The east robber trench of Building 5019 sat over an earlier feature, as did the western wall of Building 5001, and the fills of both earlier features were very similar, but were undated. They were probably quarry pits infilled before this area was built over, like those found south of 5019. The platform abutting the foundations of cross-wall 4145 may have been laid down to stabilize the area of former quarrying before the wall proper was built, and may also help explain the greater width of wall 4145 (1.6 m) compared to wall 4012 further west (around 1 m). This may have largely been due to functional differences (see below).

Both platforms were overlain by a thick levelling layer, but on the east this was followed by a series of floors and occupation spreads. Unfortunately, no diagnostic dating evidence was recovered from the levelling layers or from any of the floors in the east room.

Charcoal upon the successive floors, thickest close to the south wall of the building, suggested the presence of a hearth against this wall. Alternatively, the great width of wall 4145, and the very large blocks of masonry forming the lowest levels of the wall proper, perhaps indicate that this included a fireplace, from which the charcoal was derived. In either case, the eastern room may

have had a domestic function, unlike the smaller room to the west. Here the planned stonework may indicate that it contained a stair to the upper floor. In its original form there was a garderobe at the north side of the western room at first-floor level, perhaps suggesting that the rooms above were lodgings.

The addition of kitchen 5020 to the north (see Building 5020 below) put this garderobe out of use, and a desire for less restricted access to its entrance may have been why (according to the plan) the north wall of Building 5019 east of the garderobe was not straight, but was angled south-eastwards, creating a room tapering in width. If the plan is correct, this may not have been the original form of Building 5019, but a modification made when the kitchen was constructed. It has been tentatively suggested that the robbed foundation 4178 seen north-east of the planned line of robber trench 4027 might have been part of the building (see Fig. 4), and that Building 5019 was originally rectangular, with a buttress or projecting wall at the north-east corner, which was demolished and a wall constructed on a more south-easterly alignment when 5020 was built.

However, there is some inconsistency in the recording of this part of the building. The floors within the eastern room inside Building 5019 were cut by a large pit 4148, containing 13th-century pottery except for one 15th-century scrap at the top. This pit extended right to the edge of the east wall of the building, and the planned limits of this feature overlap with the angled line of the northern robber trench 4027. This contradiction was not resolved on site, as no excavation was carried out along the north-east side of the building. The planned edge of the pit is, however, roughly parallel to the line of the southern robber trench, and the northern pit edge is also in line with the north end of the surviving masonry of wall 4145. It is possible that this marks the true southern edge of the line of the north wall, but this remains speculative.

Later 15th- and Early 16th-Century Developments (Fig. 5)

Building 5001

The date of construction of Building 5001 remains uncertain, but the balance of probability is that drain 3246 was put out of use by the construction of the building, and that drain 3461 was built a little further east to replace it. Building 5001 was therefore later than culvert 3246, but the construction of a parallel replacement suggests that the same functions were required after Building 5001 was built, i.e. that the claustral buildings were still in use. This suggests a date in the 15th or early 16th century, rather than after the Dissolution.

Building 5001 was a small but very massive building of two rooms, the larger room being on the west. The line of its southern side lay slightly north of that of the north wall of Building 5009, and slightly south of the south wall of Building 5019. It was broadly in line with the north wall of the barn to the west, which is also dated to the 15th century (Historic England Listed Building 1271698; Vince and Rhodes 2014).

A small square structure projecting from the south side at the south-west corner has been interpreted as a stair tower. A structure of similar size and position of the later 14th century at Thornholme gatehouse (Lincs.) was a garderobe (Coppack pers. comm.), but excavation of the robber trenches of Structure 5002 showed that the walls of this were no deeper than those of Building 5001, and were massive. The interior showed no evidence of cess or similar material, and pre-building soil was found here at relatively shallow depth.

The massive construction suggests that this building was of at least two storeys, and stair tower 5002 clearly supports this suggestion. The wall between the two ground-floor rooms had a very wide foundation, like that in Building 5019, but although layers relating to the floor of the larger, west room survived, they did not give any indication of a hearth or fireplace.

An arrangement of stakeholes in the north-east corner suggested some internal furniture here.

Buildings 5001 and 5019 – The Gatehouse (Figs 4 and 7)

Together Buildings 5001 and 5019, which lay either side of a trackway running south–north, are believed to have formed a gatehouse, or gatehouse range, between the Great Court and the church and cloister to the north-east (see Fig. 7). On the north side, 4063 represents a pier base supporting arches of unequal width between the buildings. The cut on the east side of this pier that was dug through all of the trackway surfaces, including some of 16th-century date, was originally interpreted by CAT as a construction cut, but is here considered to be a robber cut. The uppermost course of this pier was of Pennant sandstone, perhaps indicating the material in which the whole gateway was built.

The wider opening, and the one through which the trackway 4080 passed, lay on the east, and at 2.5–2.8 m wide was presumably intended for vehicles. The bulge in the east side of 4063 is matched by one in the west side of Building 5001, presumably indicating the position of the columns supporting the arch. Unfortunately, evaluation trench C6 had removed part of the north-west corner of the robber trench of this building, so the exact arrangement here is conjectural.

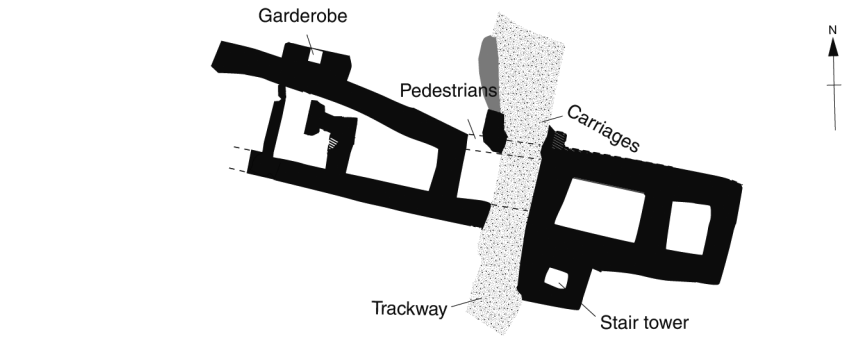
West of 4063 was a narrower opening, possibly only 1 m wide. Uncertainties about the shape of the north-east corner of 5019 have already been mentioned. It is likely that the building extended somewhat further north than planned, or that the wall was thicker, including a pier corresponding to 4063 on the west side of the narrow arch.

A double-arched gatehouse comprising one wider vehicular archway and a narrower archway for pedestrians was a very common form in late medieval monasteries and granges, as at Battle abbey and Beaulieu (Hants.), Waltham, Peterborough and Tisbury (Wilts.) (Emery 2006, 307–8; Bond 2004, 119, fig. 49 and colour plate 26; Aston 2000, fig. 76). The ruined west gate at Llanthony itself, dating to the late 15th century, is of this form, as the 1818 drawing by Buckler shows (Hughes and Rhodes 2003, Ill. 3).

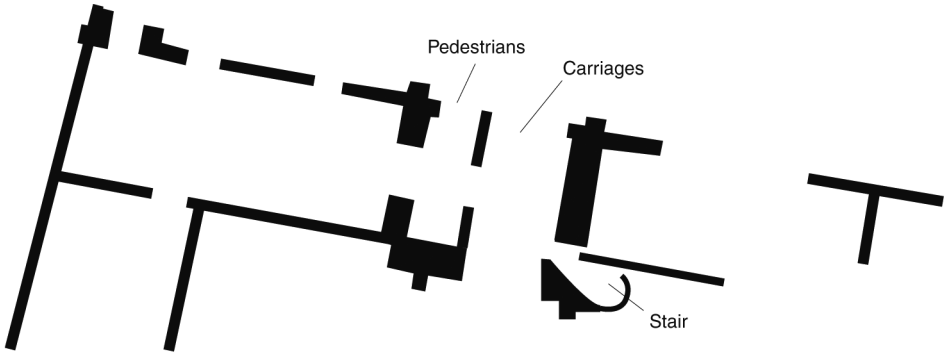
In his study of monastic gatehouses, Morant (1995, 72) comments that 'from the 14th century onwards, gatehouses generally became broader, incorporating such additional accommodation as they needed within large wings placed either on one side or both sides of the gate-hall and under the same roof. These wings were thus an integral part of the main structure of the gatehouse, rather than attached buildings'. This fits the proposed late medieval date of the Llanthony gatehouse.

There are, however, slightly unusual features about this example. Most gatehouses were built either as a single monumental structure, as at Wetheral priory (Cumb.) or Tewkesbury abbey, or as openings within ranges that shared a common alignment and line. At Llanthony, however, Buildings 5019 and 5001 were slightly offset from one another. The plan is, of course, largely of robber trenches, and medieval foundations and the walls built upon them do not always coincide exactly, but the offset is such that it is unlikely that the buildings were in line above ground. This may indicate that the gatehouse was not planned and constructed in one phase, but may have evolved from an arrangement with rooms on one side only, as at Thornholme priory (Lincs.) (Coppack 1990, 121 fig. 82).

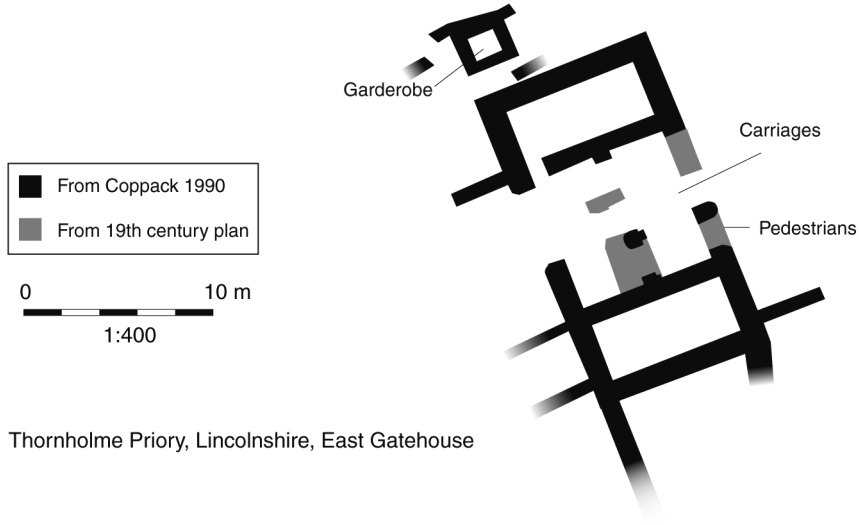
Against this, Morant (1995, 73) notes that there is considerable variation in the wings of surviving late medieval examples. The massive construction of the buildings on both sides of the gateway at Llanthony, and the very similar size of the rooms to either side, suggests a deliberate intention to create a symmetrical arrangement, or at the least a degree of common planning. Nevertheless, this did not extend to having a flanking stair tower on both sides of the gateway, as was the case at the Great Gate of St John of Jerusalem, London, and indeed in most Tudor gatehouses (Sloane



Llanthony Secunda Priory, Gloucester, North Gatehouse of Great Court



St Saviour's Priory, Bermondsey, Inner North Gatehouse



Thornholme Priory, Lincolnshire, East Gatehouse

Fig. 7 The priory gatehouse 5001–5019 with other comparative gatehouse plans.

and Malcolm 2004). This is another reason for dating this gatehouse at Llanthony to the later medieval, rather than the Tudor, period. Single stair towers attached to late medieval gatehouses are relatively common, as for example at Wetheral and Mount Grace priories.

The excavated gatehouse at Llanthony is one of several variants of the double-entry gatehouse. As Morant (1995, chapter 5) explains, the gate-hall was often divided by a cross-wall (on which the gates were hung) into an outer lobby and inner gate passage. The double arches were most commonly found in this cross-wall, with only single large arches to the front and rear, as at the mid 14th-century gatehouse at Thornholme priory (plan of AD 1819 kindly supplied by G. Coppack) and at Tewkesbury (Morant 1995, 100). In 36 of the 148 gateways examined by Morant, however, the vehicular and pedestrians' archways were inserted in the front (exterior) wall (Morant 1995, 102–3), where the gates were hung. These usually led into a common gate-hall, at the rear of which there could be one or two archways. Examples of the latter include Abingdon abbey and Polesworth abbey (Warwicks.) (Palmer 2012), but at Llanthony it seems probable that there was only a pedestrian arch on one side, the other side having only one large arch.

The inner north gatehouse at St Saviour, Bermondsey (Surrey) shares the double archway on the north and a single archway on the south. As at Llanthony, there is a solid wall footing across the pedestrian access on the west side, and an external projecting staircase on the opposite, east side, the whole being built into a range of buildings between the outer and inner court (Dyson *et al.* 2011, fig. 70).

As the plan at Llanthony is based only on robber trenches, it is not known whether there was a doorway in the walls of either or both of Buildings 5001 and 5019 next to the gateway. The rooms closest to the gate in both buildings were approaching 5 m by 3 m internally. The porter's lodge appears normally to have been on the side nearest the pedestrian arch (Morant 1995, 101), in this case the east room of Building 5019. This might explain the fireplace or hearth in this room, in contrast to the corresponding room in Building 5001.

The other unusual aspect of the Llanthony gatehouse is that such structures are normally attached either to long walls or to extensive ranges forming a barrier to entry. Here, there may have been such a range on the west side, perhaps attached to the back of the barn, but on the east the gatehouse was a freestanding structure, and a gap 6 m wide existed between it and Building 5009 at the north-east corner of the Great Court. Building 5010 did not exist at this time, nor were there any other clearly-defined structures closing the gap. It is possible that the north-east corner of Building 5001 was linked to a larger building removed by the digging for a canal basin, or even to wall 3427, whose date remains unknown, thus enclosing the area to which the gatehouse gave access. The alignment of this wall is not at right angles to those of the main medieval excavated buildings. It seems probable that this gatehouse was built as much for show, and to symbolize the passage from secular to religious enclave, as for practical purposes.

Whatever the sequence of construction, together Buildings 5001 and 5019 would have provided a range of rooms, particularly at first-floor level. Gatehouses often included a number of rooms for accommodation, as at Thornton abbey (Lincs.), or lay adjacent to a guest range, as at Mount Grace priory (Coppack 1990, 99, 107–8, figs 70–1). Only a single garderobe was identified within the excavated part of the gatehouse range at Llanthony, but one garderobe was all that was provided for the guest range at Mount Grace priory, and for that at Thornholme (Coppack 1990, 107–11, fig. 72).

It is possible that the eastern room in Building 5019, which included a large fireplace and possibly another hearth, acted as a kitchen serving the rooms above, as was also the case in the cross-wing of the Inner Court at Mount Grace priory. This part of the range may have changed function when Building 5020 was added, as it put the garderobe out of use. Coppack has commented that the first floors of gatehouses in the inner courts of monasteries normally had a legal function as

courts and rent office, which is why so many inner gatehouses survive (Coppack pers. comm.), but at Llanthony there was also a west gate into the Great Court and a south gate (Hughes and Rhodes 2003, Appendix II.3.4). It is the west range that survived here, so these functions may well have been performed over the west, rather than the north, gate.

Building 5020 (Fig. 4)

It has already been argued (see Phase 4) that Building 5020 was added to Building 5019, putting its garderobe out of use. The blackened areas of floor within Building 5020, and the evidence of burning along the north wall, may indicate that this building served as a kitchen. The doorway at the south-east would therefore have allowed access either to Building 5019 or, via a pentice constructed along the east side, to buildings further north. Building 5020 was either part of a larger range extending further west, perhaps including a bakehouse, or had external ovens built against its west side, as the outer (western) face of the west wall was also heavily burnt.

Its late date precludes it having been the main monastic kitchen for most of the priory's life. The building, which measures 11×9 m, is also not as large as many monastic kitchens, such as those at Kirkham priory (13 m square), Eynsham abbey (Oxon.) (16×13 m) or Norton priory (18×15 m), or the 16 m-square kitchen at Christchurch priory, Canterbury (Blockley 1997, fig. 2). A second meat kitchen, often smaller than the first, was sometimes added from the 14th century onwards, as meat became acceptable with the relaxation of the monastic diet in the later medieval period (Coppack 1990, 75). This was usually constructed near the infirmary.

Kitchens were also built to serve the abbot or prior and his private guests, as the surviving abbot's kitchen at Glastonbury abbey (Somerset) shows. The prior's lodging was usually located in or adjacent to the west range of the cloister, and it is likely that this kitchen was built to serve this and the guest range adjacent, an arrangement similar to that at Thornholme and many other monasteries.

Of comparable size are the 15th-century guesthouse kitchen at Kirkstall, and the late 14th- or early 15th-century Canterbury kitchens at 'Meister Omers', a guesthouse within Christchurch cathedral priory, and at St Gregory's priory (Coppack 1990, fig. 67; Driver *et al.* 1990, 68 fig. 16; Hicks and Hicks 2001, fig. 114). The first two are 10 m square, that at St Gregory's only 9×8 m; the Kirkstall and St Gregory's examples had a central hearth, not evident at Llanthony, and both of the Canterbury examples had two massive corners, built either for fireplaces or ovens. The north-west and north-east corners of Building 5020 were destroyed, so we do not know whether these had similar ovens or fireplaces or were buttressed. The major disturbances at these corners may not be coincidental, and may support the idea that there was particularly massive masonry here, hence their complete robbing and destruction.

The surviving wall fragment is only 0.75 m wide, and it is alternatively possible that this building was constructed using stone dwarf walls and a partly timber superstructure. A mixture of masonry and timber framing was also used in the surviving west range of the Great Court.

A significant amount of building was carried out in the later 15th century at Llanthony, and continued to the end of the century in preparation for the visits of Henry VII in 1500 and 1501 (Rhodes 1989, 27; Watts and Hughes 2004, 19). This might well have been the catalyst for the construction of another kitchen to serve either the king or some of his retinue.

CONCLUDING DISCUSSION OF THE GREAT COURT by Tim Allen

The arrangement of buildings around the Great Court by the end of the 15th century is now much clearer. The west and south-west sides were taken up by continuous ranges of buildings, including accommodation, stabling and possibly a malthouse, much as at Mount Grace priory at this time (Allen *et al.* 2014). The north side of the court was occupied by the great barn, east of which was a gatehouse with accommodation on either side. East of the gatehouse there appears to have been a working area between it and a north–south aisled building (Building 5009) returning southwards down the east side. This was used at ground level for storage and above possibly for accommodation as a second dorter. If not, it may perhaps have been a granary.

Gateways

There were at least three gateways leading into the Great Court (Fig. 8). One, of which part still survives in the middle of the west range, was connected across the Outer Court to the main Outer West Gate on Llanthony Road (Fig. 2). A second gate, revealed by the 2005 excavations, lay two thirds of the way along the north side of the court, and gave access to the church and the prior's lodgings, usually in the west range of the cloister. A south gate, also suggested by documentary evidence, may be the structure partly revealed by the CAT excavations in this area (Figs 2 and 8). In the post-medieval period it was described as giving access to 'the churchyard' (Hughes and Rhodes 2003, 18–20), but was presumably originally approached from the south-east, linking the court to the mill, and eventually to the road from Bristol.

The excavated gatehouse is probably the Great Gate described in 1717 as 'formerly standing just beyond the Dove house which faced ye City' (Hughes and Rhodes 2003, 2). The same description placed the Dove house west of the barn, and Hughes and Rhodes (2003, 8) accordingly suggested that this gate lay on the north side of the Outer Court, but this description might also have fitted the excavated gatehouse, depending upon where the viewer was when describing a gate 'beyond the Dove house'. Visitors to the prior would normally have entered the Great Court first, to stable their horses and, if staying, deposit their belongings, before entering the heart of the priory. During the medieval period it is unlikely that the excavated north gate would have had any view of Gloucester. By the time that 'the Great Gate facing ye city' was described, however, the church and the Porter's mansion had probably been demolished, giving a clear view between the gate and the city.

There may have been northern gates both within the Outer Court to the west and in the Great Court, the first providing direct access for local people to the west end of the church, the second for visitors to the prior or other members of the fraternity. At St Saviour, Bermondsey, the outer west gate faced directly onto the west end of the church, and the great court was entered by a second gateway at right angles on the south (Dyson *et al.* 2011, fig. 70; Fig. 7). If separate gates were intended at Llanthony, however, it seems odd that the outer gate should have given access to the Outer Court, rather than to the west end of the church. A further gate north-west of the church and nearer to the city, leading to a porch on the north aisle, as at Bridlington (ER Yorks.) and Christchurch, Canterbury, would also have been more convenient, (Morant 1995, 37).

If there were two gatehouses leading north, then there were at least five gateways or gatehouses in total at Llanthony. Although there are few priories or abbeys with more than three surviving gatehouses or gateways, most of the larger abbeys would have had four or five (Morant 1995, 51–5). Canterbury cathedral still has eight.

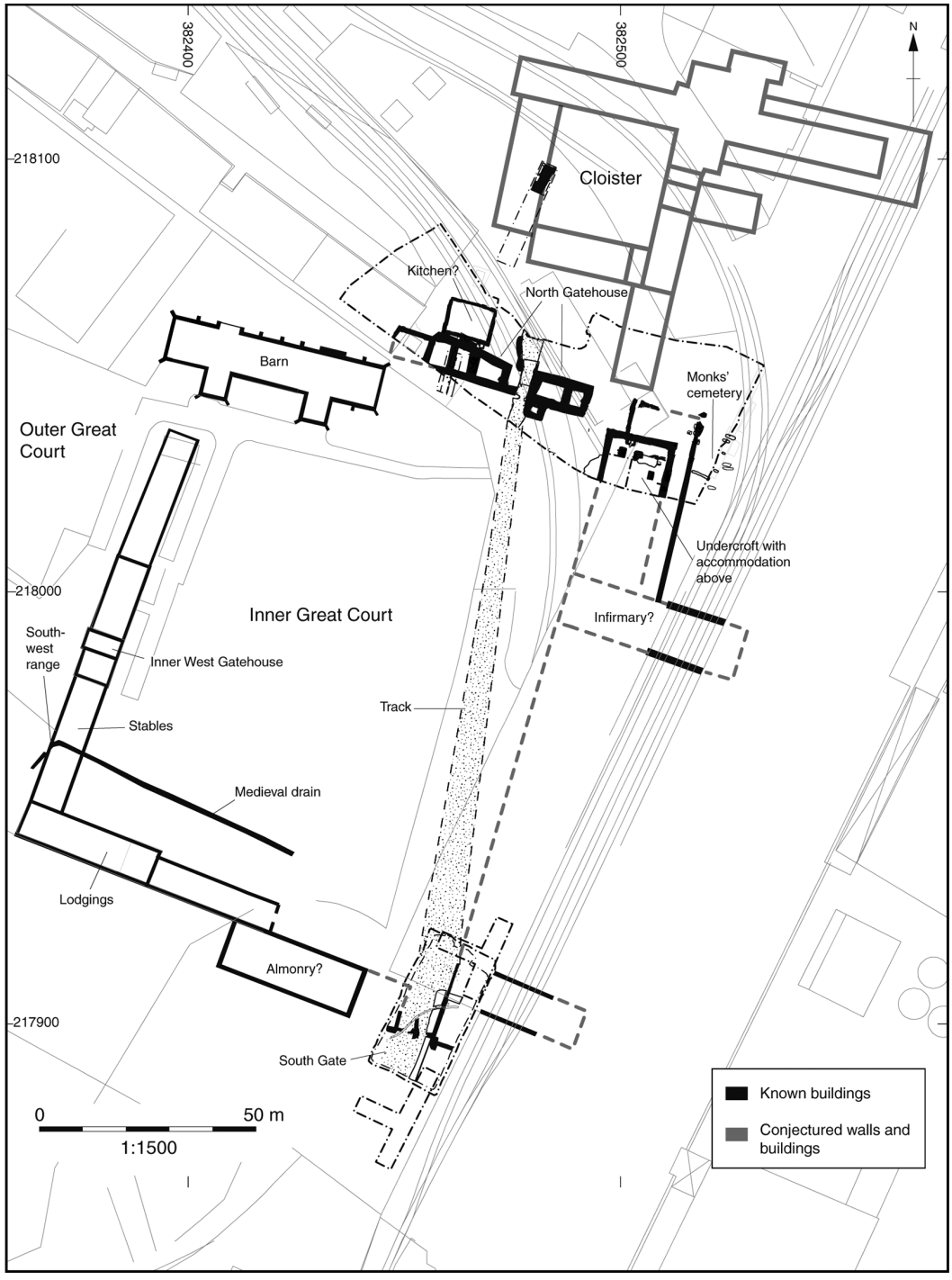


Fig. 8 Late medieval Llanthony by Gloucester.

Implications of the Discoveries for the Location of the Church and Cloister

The excavations did not find anything resembling the refectory, but the existence of a gatehouse with both a pedestrian and vehicular arch in the north side of the Great Court is even stronger evidence that the cloister must have lain some way to the north, to allow room for vehicles to enter, turn and unload. A distance of at least 12 m north to south is likely to have been needed for wagons pulled by oxen or horses to manoeuvre, and in reality the distance was probably greater.

The existence of such a turning area removes any need for a direct link between the gatehouse and either side of the cloister, which also solves a conundrum posed by the gatehouse itself. If the cloister and prior's lodgings had been directly to the north of the Great Court, then logically the outer side of the gateway should have been to the south, i.e. facing into the Great Court. In all of Morant's examples with a double opening on one side, and a single arch on the other, the double opening was on the outer side of the gatehouse (Morant 1995, chapter 6). At Llanthony, however, the double opening was on the north side. In addition, Morant's survey indicates that the stair towers of medieval gatehouses (as opposed to Tudor examples) were usually single, and were almost always at the back (i.e. inner side) of the gatehouse. A further example is the priory of St Saviour, Bermondsey, where the stair tower was on the inner (southern) side of the gatehouse, and the double arches on the outer, northern side (Dyson *et al.* 2011, figs 70 and 81).

It is possible that the church and cloister both lay further east than this gatehouse, so that the situation was analogous to that at St Saviour. The position of the excavated cemetery, whether it represents part of the canons' cemetery or an infirmary cemetery, would strongly suggest that the cloister lay to the north-west of this, rather than to the north or north-east (Fig. 8). Even though the cloister was almost certainly smaller than that suggested by Watts and Hughes (2004, fig. 6) – indeed the cloister at Llanthony Monmouthshire was only 23 m square – it would hardly be possible to fit the cloister between the gatehouse arch and the cemetery. It is likely that the cloister at Llanthony was larger than this, especially as it had to accommodate monks from its sister priory in the late medieval period. Other comparable priory cloisters might be Norton priory (27×28 m in its enlarged form) or Kirkham priory (32×36 m) (Brown and Howard-Davis 2008).

Other indicators of the position of the cloister might be the line of Building 5009, possibly a continuation of the dorter range, and perhaps the covered walkway along the east side of the late kitchen, which might have led to the west end of the refectory. The kitchen itself might have been in line with the west range of the cloister. This arrangement, which is illustrated in Figure 8, would have provided a plan similar to those at Norton and Kirkham priories, both of which had a second court of sorts south of the cloister, bounded on the north by the refectory, on the east by a second dorter range and on the west by the kitchen and guest house. The space thus enclosed at Kirkham was around 30 m square, that at Norton priory just under 20×20–5 m, though neither had a gatehouse on the south side.

There are still some uncertainties about this suggested position for the church and cloister. A substantial wall and robber trench were found in CAT trench C4 north of the 2005 excavation area, on an alignment that approximated to north-east, and with another probable robber trench to the west. These have been incorporated into Figure 8 at the south-east corner of the west cloister range, although their alignment does not match that of the suggested cloister very well. In addition, the graves found at the east end of the excavation would lie at least 60 m south of the church, an unusually great distance for the monastic graveyard, though a separate Infirmary graveyard might explain this. The piece of land known in post-medieval documents as The Churchyard was supposedly bordered on the north by the wall running east from the barn, so that the excavated burials lay at its northern limit. Part of the abbey church was used as the parish church between the Dissolution and the Civil War (Hughes and Rhodes 2003, 7–8) and burials would normally have been made relatively close to the church, rather than at such a distance.

No proven post-medieval burials were amongst those excavated, though, as only two were radiocarbon-dated, this possibility cannot be ruled out. If this was purely a medieval cemetery, it seems odd that the name should have survived in relation to medieval burials, but not to the burial ground of the local congregation that presumably lay adjacent to the church.

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ARCHIVE

The paper, finds and environmental archive have been deposited with Gloucester Museum and Art Gallery, under accession number GLRCM: 2005.5.

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