
4 Archaeological stratigraphy *by Gordon Ewart*

4.1 Introduction

The results of the excavations are described in terms of historic periods reflecting the building, occupation and abandonment of structures towards the east end of the south range (*illus 5*), from the later 12th century to the present time. The extent of archaeological investigation was limited by available resources, and consequently relatively few of the deposits associated with the active use of the abbey in this part of the site were excavated. The majority of the deposits which were excavated reflected the impact of the construction of the post-Reformation manse and the landscaping of the heavily robbed abbey buildings during the 19th century. The evidence for the sequence of building and occupation from the late 12th century onwards lies primarily in the analysis of the standing building sequence, with specific detailed, stratified information emerging from certain key areas. These comprise:

- Foundation, levelling and infill deposits associated with room 8, the warming house (*illus 6*)
- Midden deposits over the re-aligned great drain outside the novice's day room (*illus 5 & illus 27*)
- The contents of the great drain at its junction with the latrine block (*illus 5 & illus 27*)

In total, five periods of building, occupation and abandonment of the structures at the south-east corner of the cloister were identified, and the archaeological account is presented in these terms. In addition, a period of activity spanning Periods IV and V was identified from the deposits within the great drain, and overlying it:

- Period I: *c* 1170–1230
- Period II: *c* 1230–1320
- Period III: *c* 1320–1450
- Period IV: *c* 1450–1520
- Period V: *c* 1520–1600
- Occupation over Periods IV–V: the midden and the great drain fills

The standard Cistercian abbey plan, as represented at Dundrennan, alongside the names of various abbey structures, is given in *illus 5*.

4.2 Period I: *c* 1170–1230

Period I covers the lengthy programme of construction involving the initial colonisation of the site and the establishment of the principal elements of the claustral circuit. Despite the duration of this initial

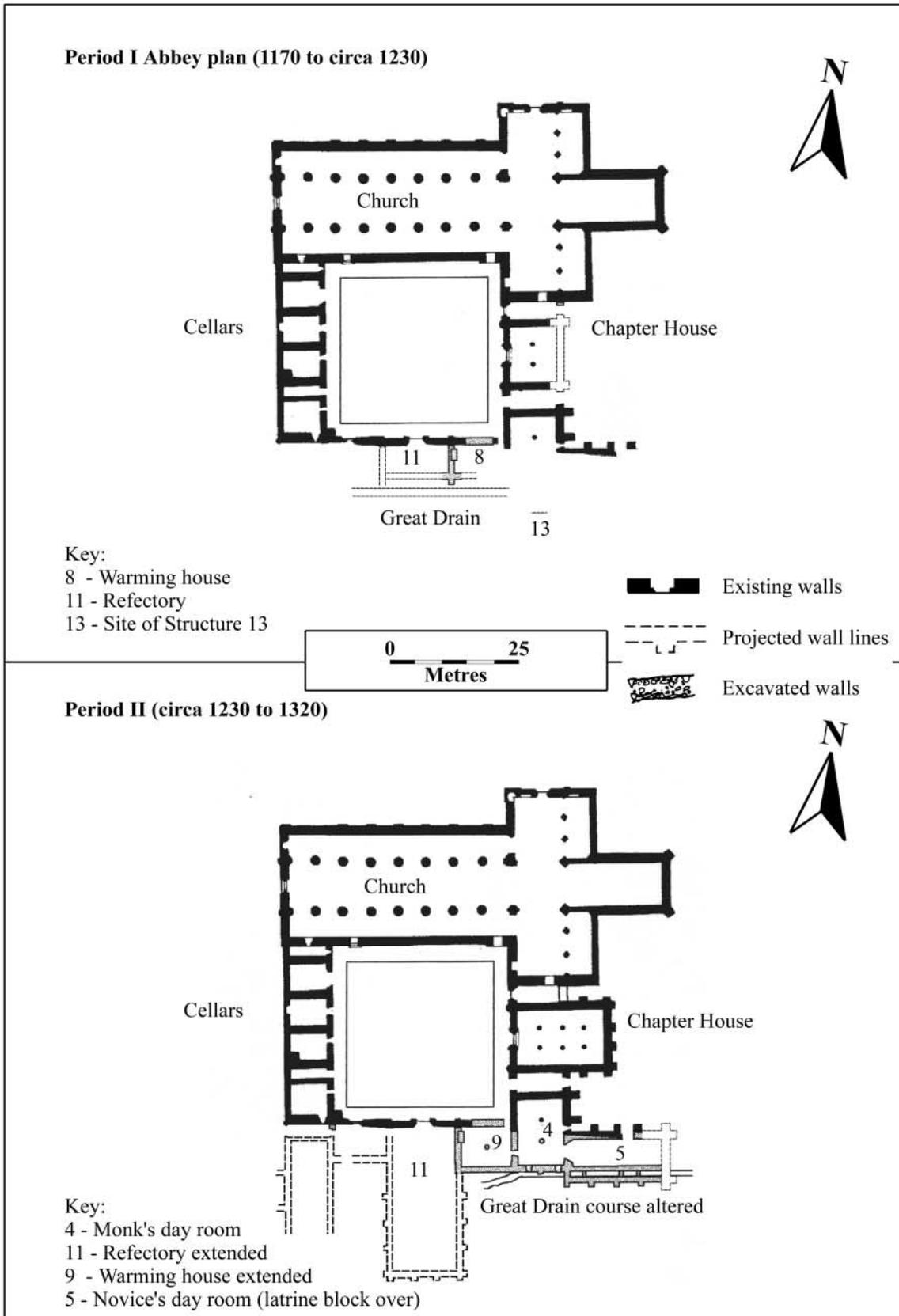
occupation phase, only fragmentary evidence was revealed pre-dating the more extensive building campaign of Period II. Evidence of Period I structures revealed by excavation (*illus 6*) comprised the refectory (room 11), the warming house (room 8) and a temporary wooden structure (structure 13). Evidence of crude, robbed walls suggested the presence of early, smaller versions in stone of the fully defined Period II south range. This confirmed the typical progression of building around the completed cloister, with the establishment of the key components to the north, then east and south – namely the church itself, the chapter house and the refectory, albeit in simpler forms.

Accommodation for the community and its guests, as well as for their stores and other basic requirements, was also presumably in place, although whether within temporary timber buildings or as part of the simpler stone buildings of Period I is not known.

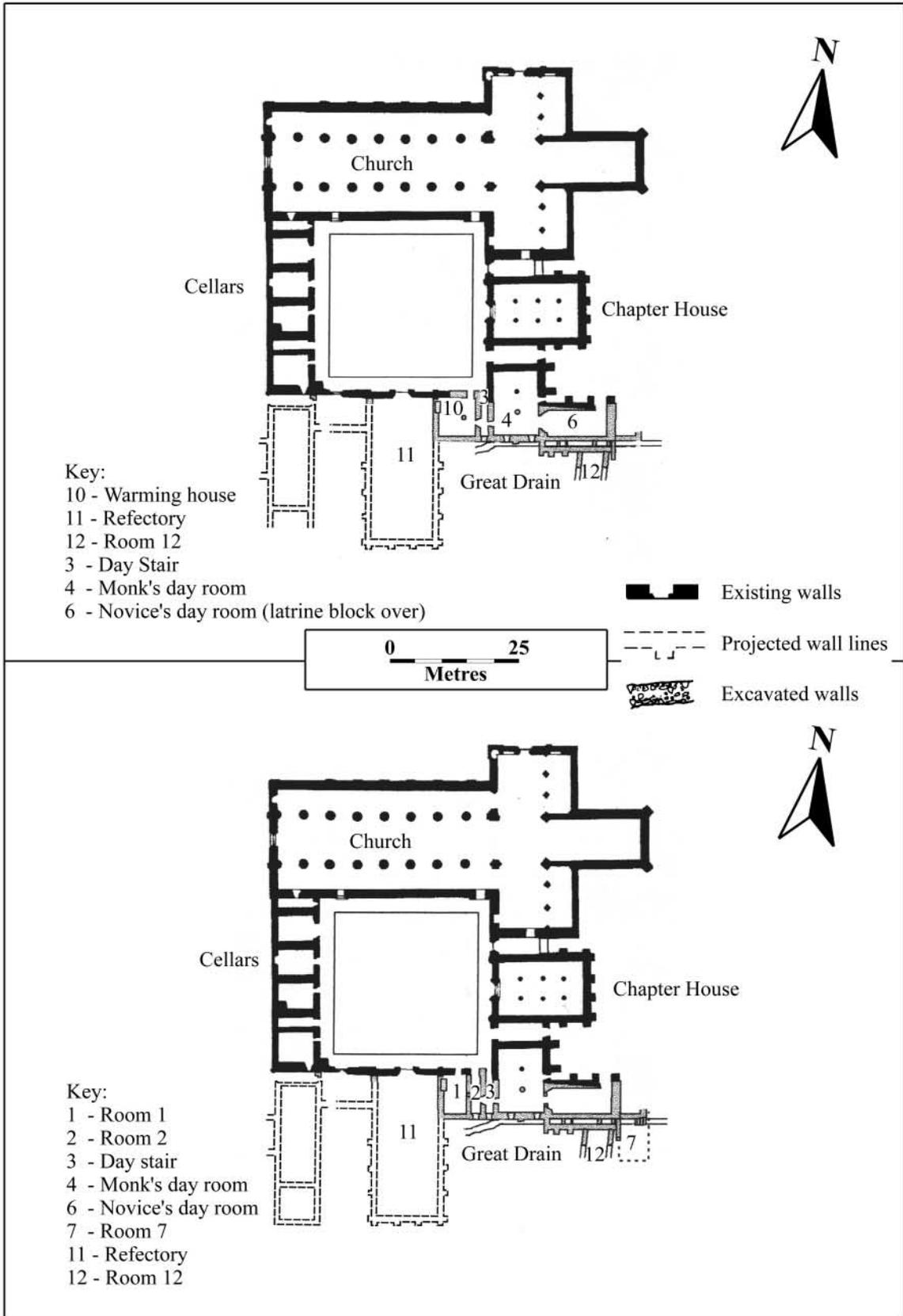
Evidence of the division between the refectory (room 11) and the warming house (room 8) was revealed, suggesting that separate structures were in place prior to the Period II remodelling. The south walls of room 8 and room 11 were further defined by the line of the monastery's great drain. This ran west/east immediately adjacent to the south range. The fragmentary evidence for a timber building, structure 13, confirms that some buildings of this sort were present at an early date. This was subsequently dismantled and the remains buried. Perhaps significantly, structure 13 lay outside the limits of the south range.

4.2.1 Structure 13 (*illus 6 & illus 10*)

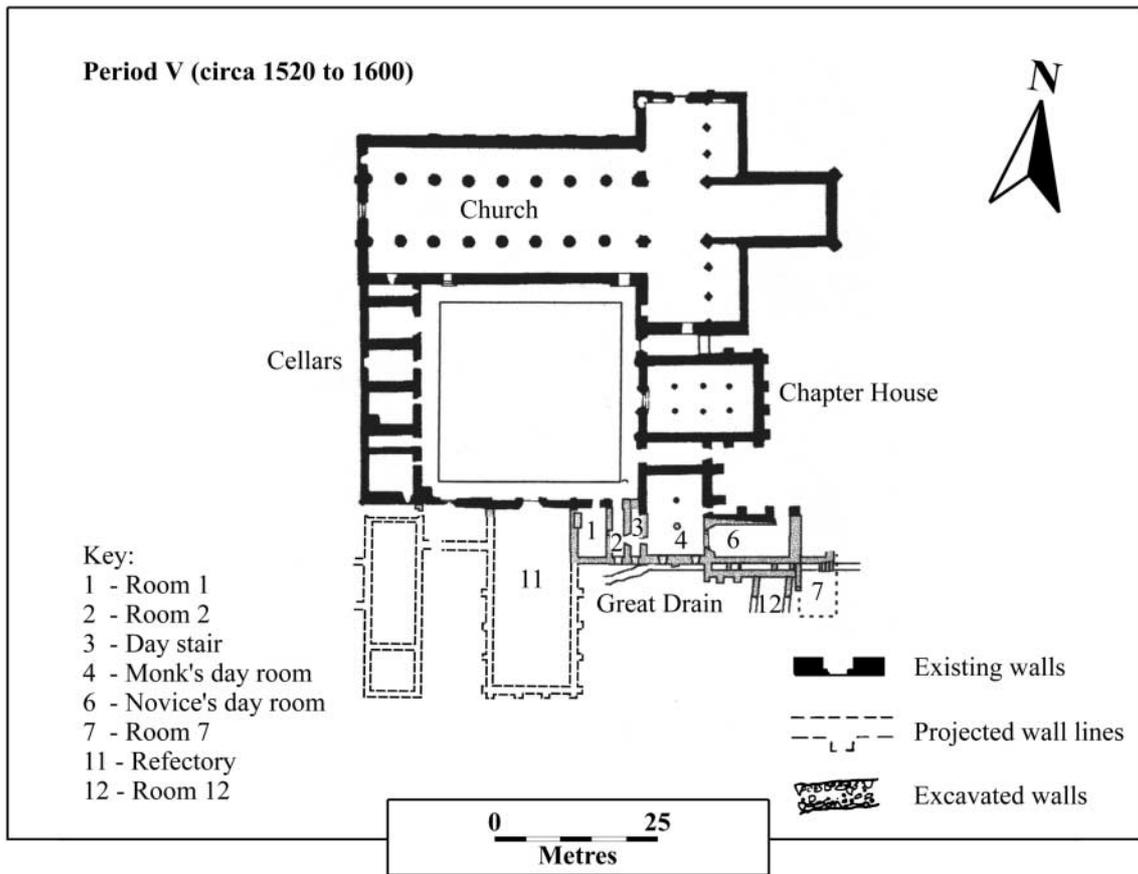
A trench measuring 3 m × 1 m was excavated immediately south of the remnant north wall of the 19th-century stables and steading (*illus 3*) to assess the extent of archaeological survival beneath the stable yard, prior to the consolidation of the steading complex. Part of a steep-sided, linear feature (context 100) with crudely pitched sandstone slabs at its base was found running east/west at the extreme south end of the trench. The presence of pitched stones with vertical sides within a shallow ditch was reminiscent of timber-beam and post-frame wall construction, the wall fabric being represented by the quantities of rubble and clay at the foot of the feature. The feature itself was up to 500 mm deep, and pottery from its fill (context 101) suggested that it had been backfilled by the mid 14th century (see 6. Ceramics). The fill of the linear feature indicated that water found its way along the defile left by the



Illus 6 Periods I and II



Illus 7 Periods III and IV



Illus 8 Period V

demolished structure. Unfortunately, little of the plan of the building from which structure 13 derives was recorded and its interpretation is therefore unresolved.

4.2.2 Room 8 (*illus 6, illus 9 & illus 10*)

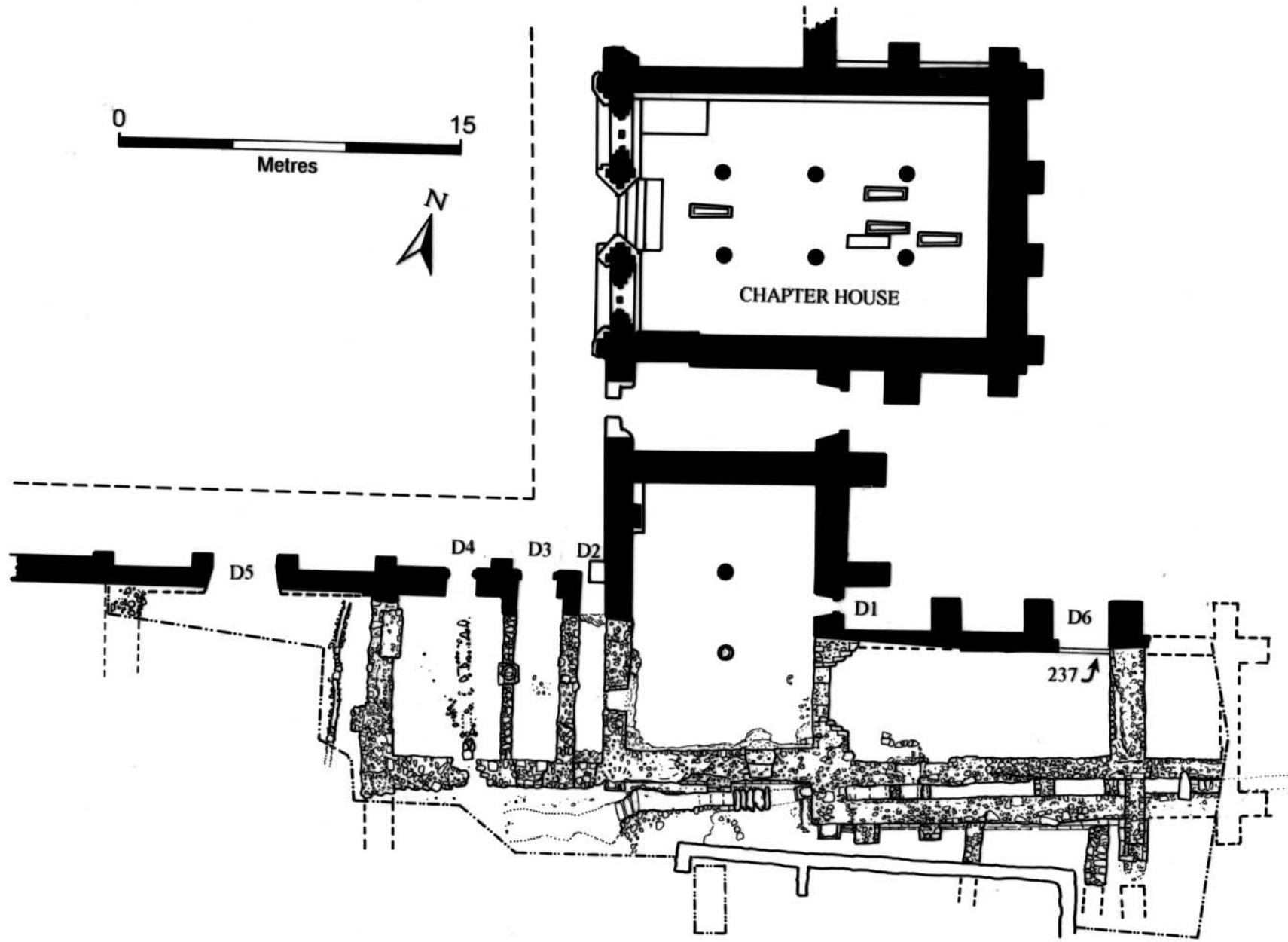
This chamber was interpreted as the warming house or *calefactory* on the evidence of a large fireplace (context 057) and hearth (context 043) located centrally in the west wall (context 004). The room measured 6.66 m north/south by 7.75 m east/west, internally, with likely access via a door (D2 on *illus 9*) lying towards the north-east corner, furthest from the fire itself, opening onto the cloister. The north side of the fireplace was plainly visible within the fabric of the 19th-century manse boundary wall (context 007). Only rough footings for the hearth were found and no trace of an original surface of fired stone flags or cobbles was revealed. The hearth kerb survived as a single row of pitched stones. The fireplace was 2.5 m wide and 600 mm deep, with the opening standing to a height of 2.9 m. The fireplace and west wall (context 004) were later incorporated into room 9 (Period II, below), but the south wall (context 050) was largely removed during later works. This wall was confirmed as an original 12th-

century feature by limited excavation over its assumed line exposing 2.2 m of its length. Only the lowest courses of the clay-bonded wall were revealed; these were 1.1 m wide, standing to a maximum surviving height of 260 mm (1–2 courses). The other walls of room 8 were comparable in size, being 1.06 m wide.

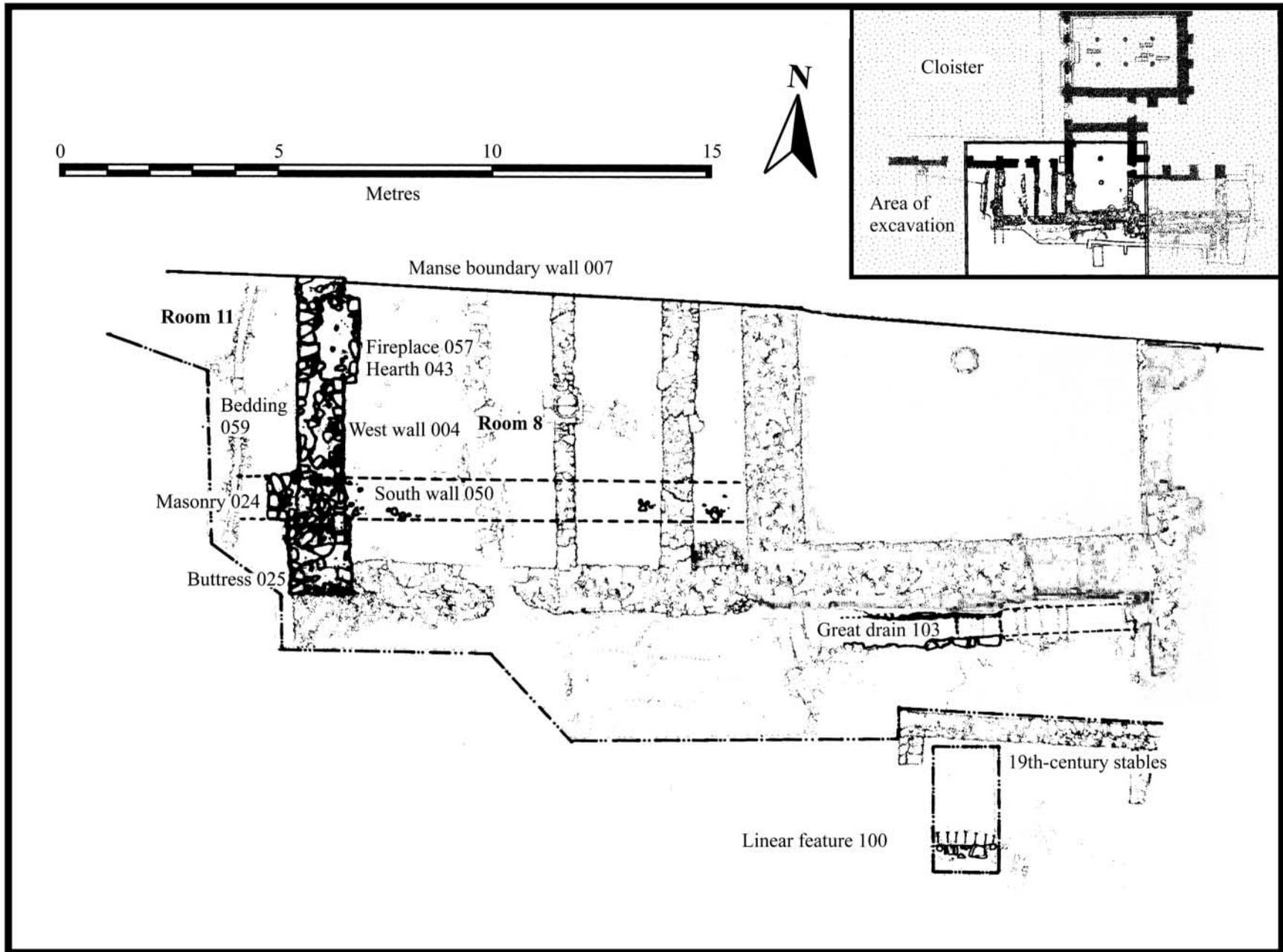
4.2.3 Room 11 (*illus 6 & illus 10*)

The probable site of the refectory, placed centrally in the south range and excavated by the Reverend Christie between 1911 and 1914, was only cursorily examined in the recent excavation. The interpretation of this Period I chamber as an early version of the refectory, extended in Period II, is inevitably conjectural due to the limited area actually excavated. There was sufficient evidence to show however that the Period 1 chamber was similar in plan to the contemporary room 8 and lay within the line of the early south range. The location of the refectory as discovered by the Rev. Christie is entirely typical of the Cistercian plan, where by projecting the enlarged room 11 southwards, access between the cloister and the buildings within the south range was maintained.

The west wall was comprehensively robbed, and



Illus 9 The excavation area, all periods, showing doorways mentioned in the text



Illus 10 Period I features



Illus 11 The great drain below a buttress (context 056), from east

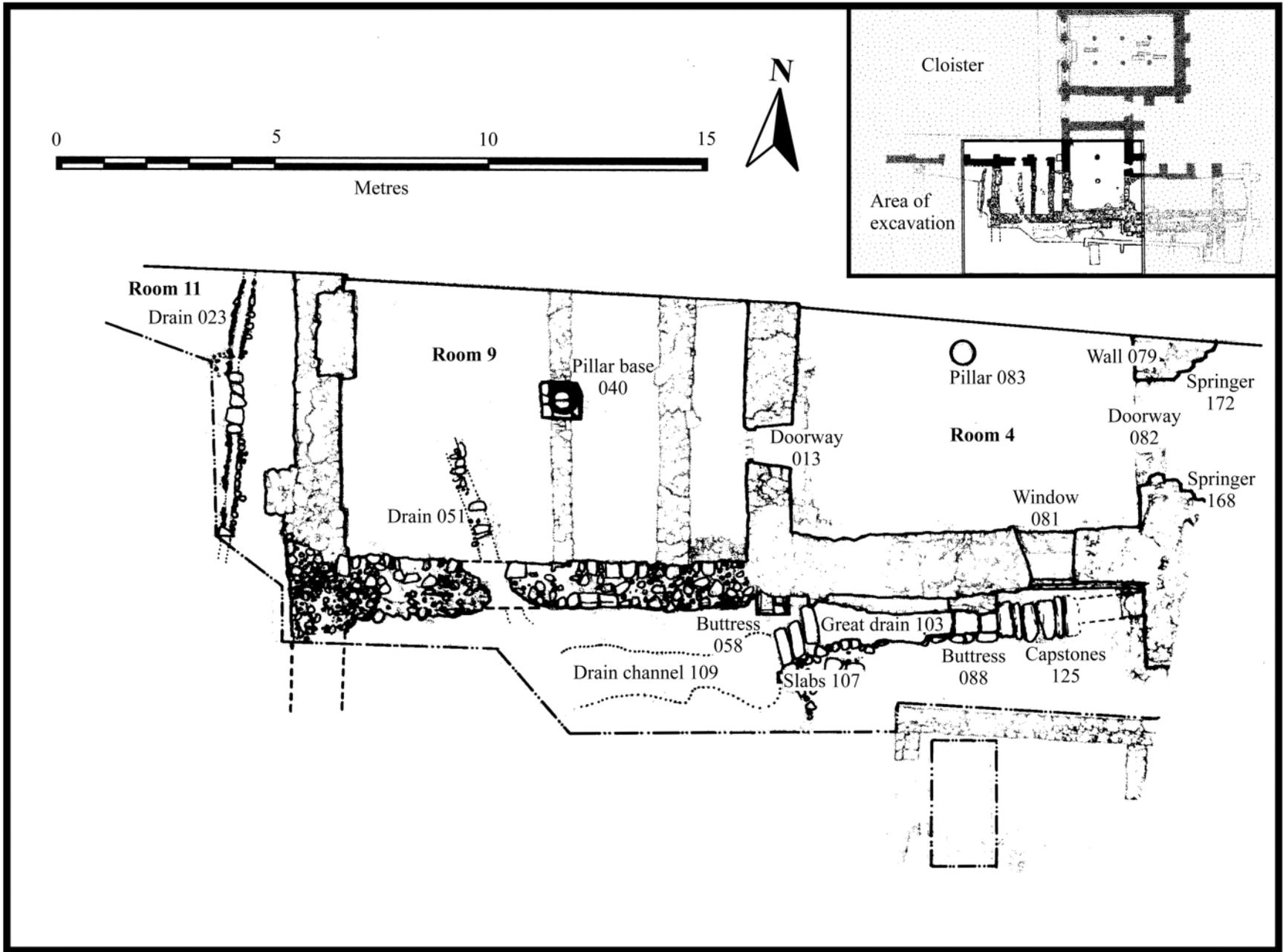
survived as a short section of wall-core, with no facing stones *in situ*. A short section of masonry (context 024) which projected from the west wall of room 8 probably represented the surviving element of the Period I south wall of the refectory, prior to its extension southwards in Period II. The bedding for a flagged floor (context 059) survived within the excavated area of room 11, confirming the artificially terraced nature of the sub-floor deposits from its earliest construction.

4.2.4 Great drain (*illus 6 & illus 10*)

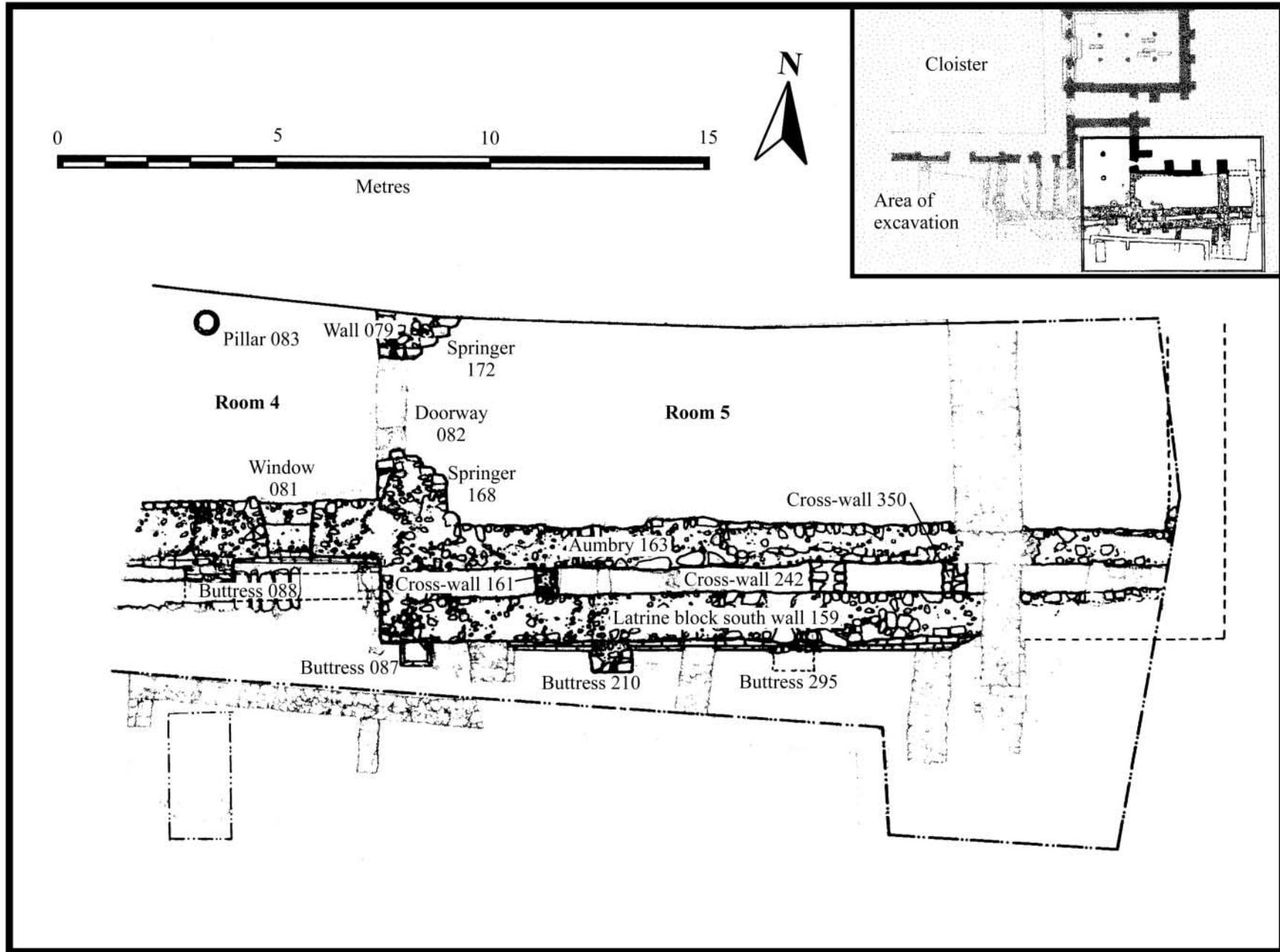
A finely built stone drain (context 103) lay along the south side of the buildings of the south range. As laid out during the 12th century (in Period I) it followed a straight west/east route some 2 m south of rooms 8 and 11. The channel was well-constructed, with a flagged floor and cut ashlar sides, but without capstones. The absence of capstones in this period is implied by the clearly secondary work during Period II, where caps were introduced over the re-routed drain channel west of the latrine block. Only 5 m of the original line of the drain channel survived west of room 5, but combined with its route below the first floor latrine block in Period II, a total of span of 30 m was cleared by excavation, exposing a drain with a width of 500 mm

4.3 Period II: c 1230–1320

The Period I arrangement of the abbey buildings was probably a staged development culminating, within the excavated area, with the room 4/5 complex. The layout of the buildings that evolved from this saw further development of two of the main claustral structures – the chapter house and refectory – as the wealth and prestige of the house developed in the 13th century. The evidence for the enlargement of the refectory, and its realignment on a north/south axis, is to a large extent derived from the excavations of the earlier 20th century, conducted by Reverend Christie (1914). In this period too room 8 was enlarged to form room 9. It is likely that rooms 4 and 5 were also part of the wholesale upgrading of the house from the mid 13th century, replacing earlier, simpler facilities. Within the cloister this period was most spectacularly demonstrated by the work on the chapter house, with the addition of a splendid new door and window in its west wall. All this work is seen as part of a progressive development of the embryonic layout of Period I during the 13th century, culminating in the fully formed Period II plan. The apparent prosperity of the house, with an increasingly complex organisation, is also implied by some of the faunal evidence from the site. In addition to the structural remains, Period II contexts provided evidence of fish remains (see 13. Fish and crustaceans), indicating access to deep sea fisheries and fishponds.



Illus 12 Period II features, west



Illus 13 Period II features, east

4.3.1 Room 11 (*illus 6 & illus 12*)

It is likely that a system of sub-floor drains in rooms 11, 9 and 5 were laid at this time, as they appear to carry rainwater from the completed claustral ranges and were cut through the Period I south wall in room 11 (context 024 on *illus 10*). In room 11 the drain comprised a crude gully (context 023) capped with dry stonework and presumably obscured by the now robbed floor. The drain ran north/south on the east side of the refectory, and probably emptied directly into the great drain on its new route, which traversed the room west/east. The drain, which was comparable to that found in room 9 (context 051) extended over a distance of *c* 12 m between the south cloister alley and the Period II great drain.

4.3.2 Room 4 (*illus 6 & illus 12*)

Room 4 is identified as the monks' day room. Before the programme of excavations, the manse garden wall (context 007 on *illus 10*; *illus 4*) traversed room 4; the remains of the northern half of the chamber, including one of its pillar bases, were already exposed.

Access from the warming house (room 9) to room 4 was via a doorway (context 013), slightly splayed in plan, and widening inwards towards the latter room (from 800 mm to 1.12 m in width). Distinctive diagonal tooling was recorded on the margins of the door, with evidence of the iron bolt-holes still clear in the south side.

Two octagonal pillar bases provided additional support for the six-bayed vaulted roof. Only one pillar was excavated (context 083), standing on the central north/south axis of the room at a point 4.9 m north of the south wall. The pillar itself comprised two elements: a circular pad, 700 mm in diameter and 90 mm high, formed the base for the single surviving basal column stone; this in turn was octagonal in plan, measuring 510 mm wide and 320 mm high. In addition to doorway 013, the only other point of access to room 4 was via a door (D1 on *illus 9*) leading directly out of the claustral buildings on the east side.

A single window embrasure (context 081; see also *illus 17*) survived in the south wall, possibly one of a pair, the western equivalent having been removed in the general robbing of that part of the wall. As excavated, window 081 had clearly been modified and ultimately blocked, but as laid out originally it formed a splayed opening, expanding inwards, varying from 1.03 m to 1.39 m in width. The primary work for the window could be distinguished from later blocking, being of superior construction, and featuring the same well-tooled sandstone details noted in door 013. The likely double-windowed plan for the south wall of room 4 was also implied by the position of buttress 088 (see also *illus 17*) which was located centrally along the south face of wall 080. The windows were likely to have been symmetrically

placed on either side of the buttress. The buttress was similar in scale and size to a further buttress outside room 5 (context 210 on *illus 13*), being 1.12 m wide and projecting southwards over the open great drain, spanning it with a finely constructed arch.

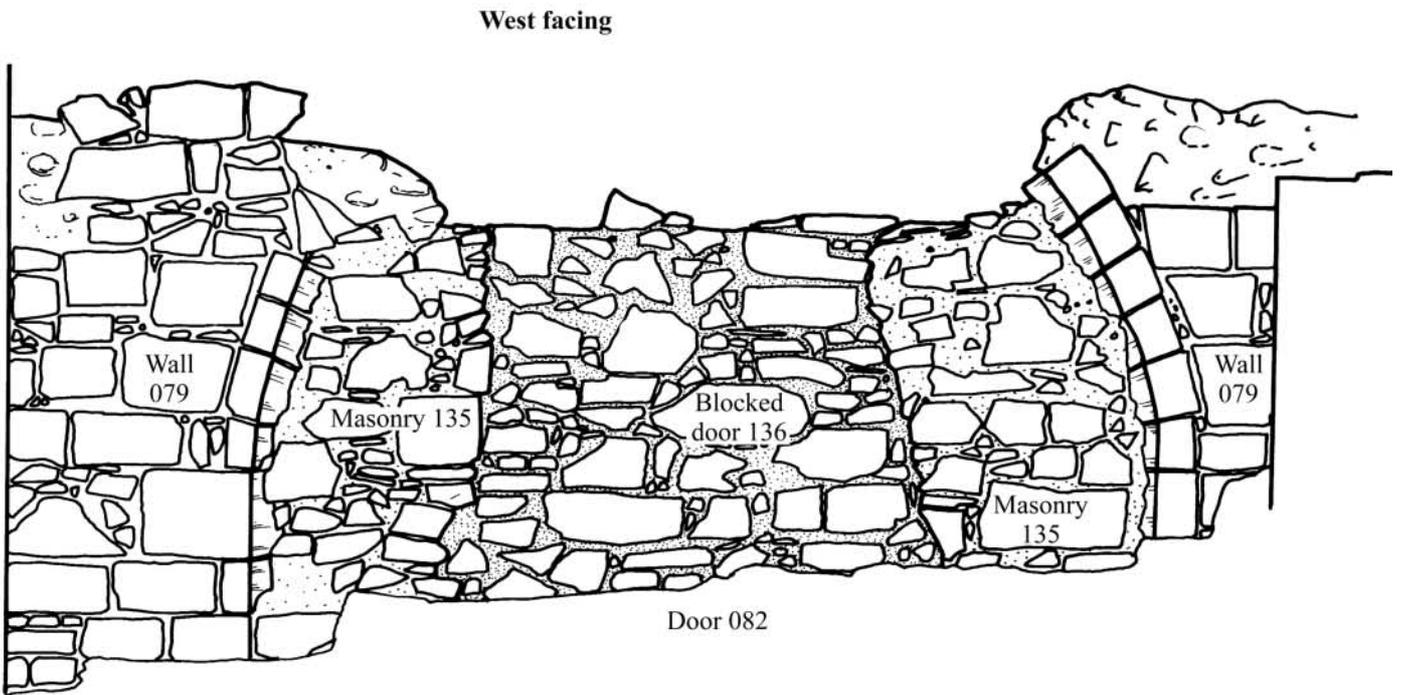
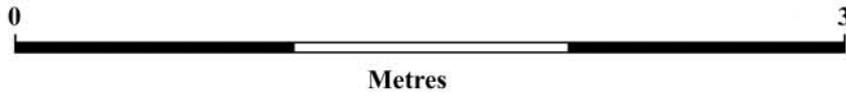
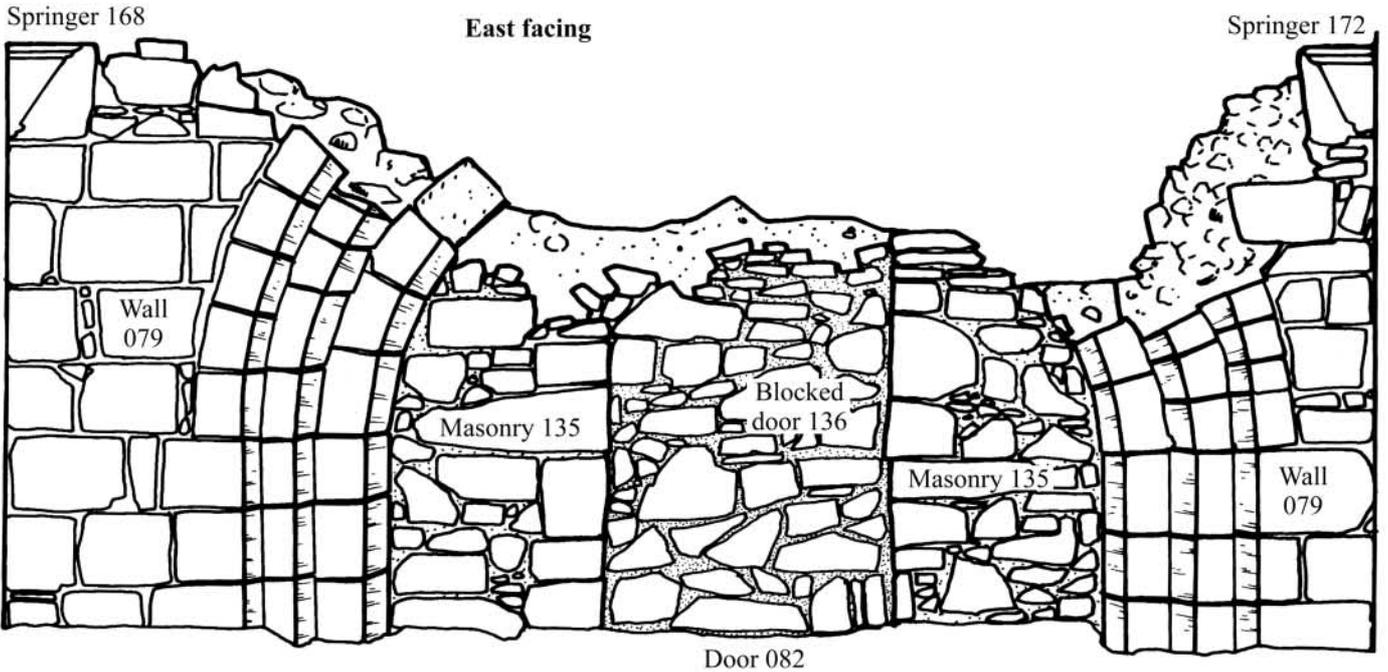
4.3.3 Room 5 (*illus 6 & illus 13*)

Room 5 is identified as the novices' day room. The room was rectangular on plan, with an area of 17.4 m by 4.76 m internally. The walls stood to a maximum height of 2.6 m, and were all of rubble build, bonded with a loose, sandy mortar, with sandstone mouldings for doorways and windows. In general, apart from the ribbed ceiling vault, the masonry was of rather rough character, suggesting that it had probably been rendered internally (see 10. Mortar and plaster). This was in contrast to the external faces of the walls of room 5, particularly on the south side, where the masonry was of generally better quality.

The ceiling comprised four rib-vaulted bays, springing from the corners of the room and wall faces. The majority of the rib vault fragments found during the excavation came from this room (see 9. Architectural fragments). Only two of the finely-carved springers located at the north-west and south-west interior corners of the room remained *in situ* (contexts 172 and 168 against west wall 079; see also *illus 14*).

Two window embrasures were evident in the north wall, with a doorway (D6 on *illus 9*) lying 2 m further east. The windows were at least 1.2 m wide, with the door being 1.9 m wide internally. All three of these features were later blocked. A further feature, surviving from the primary build of room 5, was a recess or aumbry (context 163) lying towards the west end of the room, within the thickness of the south wall. The recess later suffered structural collapse, and was subsequently reduced in size and blocked (Period III, below). Originally it comprised a well-formed, wide-arched niche, standing above floor level to a maximum height of 1.47 m, and being 1.2 m wide. It was built into the fabric of the south wall (context 169). There were indications that the recess had featured a door or shutter, in the form of a bolt-hole surviving in its west side. The modifications enacted on room 5 during Period III (below) obscured the general plan of the Period II building, but it is likely that the north windows and doorway were complemented in the earlier phase by a further window at the east end of the chamber. Thus, there would have been a symmetrical series of embrasures which were generously proportioned internally, offering good light within the room.

Only two of the Period II south buttresses were revealed in plan (contexts 087 and 210) and both would be replaced by larger structures during Period III (contexts 170 and 173, *illus 17*). The scar of a third buttress could also be seen in the south elevation (context 295 on *illus 17*) and probably belongs to Period II. These buttresses were relatively light,



Period II - Contexts 079, 082, 168, 172
Period IV - Context 135
Period V - Context 136

Illus 14 Elevations of the west door, room 5/6

extending only 0.75 m from the base of the south wall, a factor which may have contributed to the destabilising of room 5, prompting subsequent Period III repairs.

4.3.4 Room 9 (room 8 enlarged) (illus 6 & illus 12)

The original warming house (Period I, room 8) was extended southwards by a distance of 2.45 m internally, creating a new chamber measuring 9.83 m east/west by 6.66 m north/south (now room 9). This extension was achieved by raising the floor of the room by dumping clay-rich material over the remains of the Period I south wall (context 050). This material (context 175) contained 13th-century pottery (see 6. Ceramics), and served as levelling for the footings of the new south wall (context 005). The Period II masonry was generally of more massive build, with walls thickened to 1.63 m as compared to 1.06 m in Period I. The Period I buttress (context 025) was absorbed at the north end of the new extended west wall of room 9. It was also clear that the footings for the Period II masonry were of more careful construction, comprising wide, shallow, sequential rafts over which the standing masonry was raised.

The Period II roof was a quadripartite vaulted structure supported on one central pillar base (context 040). The pillar was octagonal in plan, measuring a maximum of 620 mm × 560 mm, and stood to a height of 350 mm above its basal plinth. The plinth itself was a rough square construction of mortared stone measuring 1 m × 1 m. Traces of a stone-lined and capped drainage channel (context 051), later re-routed in Period IV, were found towards the west end of room 9, exploiting the newly re-routed great drain now lying approximately 1.5 m to the south.

4.3.5 Great drain modified (illus 6, illus 12 & illus 13)

The large stone drain (context 103) running by the outer face of the buildings of the south range has been present in Period I but would now be adapted. A latrine block projected over the drain at first floor level, above room 5. The latrine block was supported over the drain by the south wall of room 5 and by an outer, buttressed wall (contexts 169 and 159 on illus 13). These walls effectively enclosed the drain, below, to form a continuous latrine slot, standing 2.8 m high above the floor of the channel. This deep slot was braced by three internal cross-walls (contexts 161, 242 and 350), each of which was of slightly different build. The westernmost cross-wall was also the most elaborate, with a finely constructed arch at its base, spanning the channel. The middle wall lay 5.2 m to the east and featured an angled base over the channel, dropping north to south. The easternmost wall had simply a straight-bottomed span.

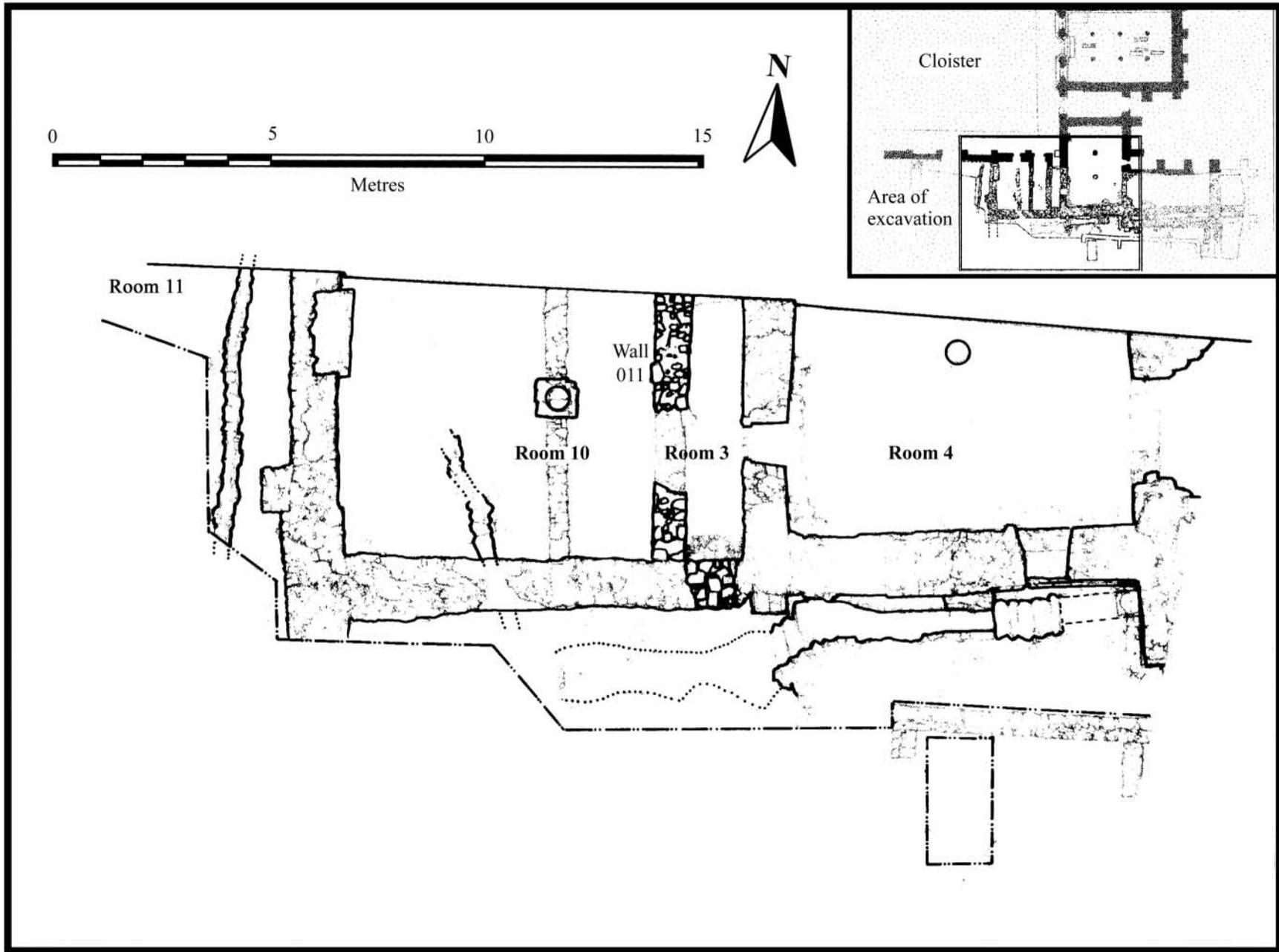
Each of these features incorporated the channel, varying from 1.2 m to 0.75 m in width. The variation in their build may betray the dual function of these cross-walls, in that they partitioned the drain as well as supporting it, creating at least four separate sectors within this part of the channel. It is possible that the first sector was a secluded latrine, with more communal use being reflected by the rather cruder works of the other three compartments. It may also be the case, however, that the first or westernmost sector was not a latrine but simply a drain, with latrine stalls being located instead at the extreme east end of the latrine block at first floor level, perhaps only exploiting the last 5 m or so of the channel.

The drain itself was gently inclined to assist the westward flow of effluent. Ultimately, it exited room 5 via an arched opening issuing into an uncapped, shallow, stone-lined channel. It is likely that it then proceeded across the open area beyond the claustral buildings and directly on towards Abbey Burn, some 100 m distant.

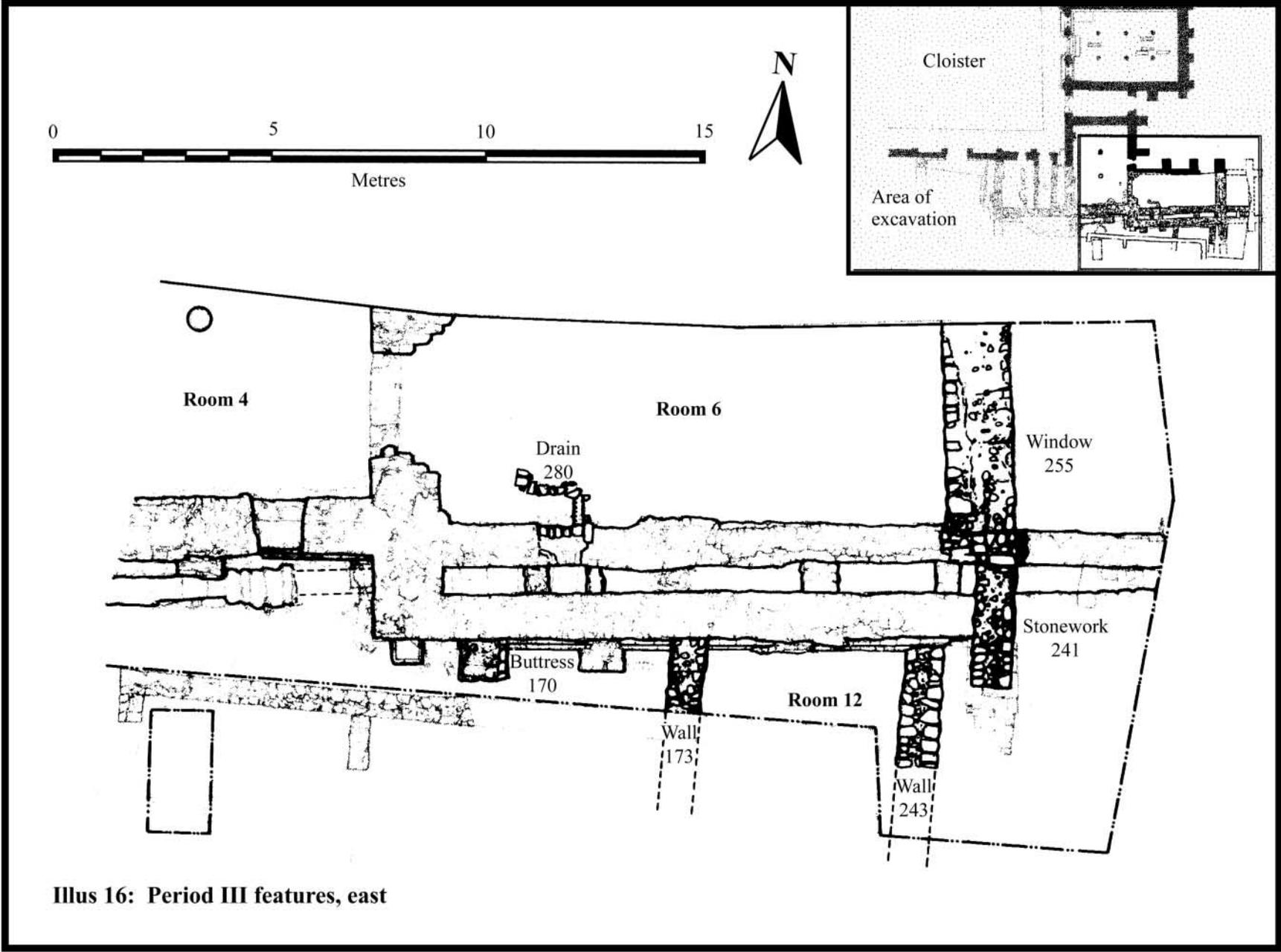
With the remodelling of rooms 11 and 9 the great drain was re-routed in order to avoid the destabilising of the new south wall of room 9. The buttress (context 058 on illus 12) at the external south-west corner of room 4 necessitated a sharp turn to the south-west for the drain channel, evinced by a few surviving floor-slabs (context 107) at this point. The route further west was indicated by a wide and rather irregular-sided channel (context 109), all former stonework (floors and sides) having been removed. This channel indicated that the finished drain may have been slightly wider than its Period I predecessor, being up to 750 mm wide compared with 500 mm wide in the earlier period. The new route followed a course 1 m south of the newly built south wall of room 9, and was characterised by the use of cruder rectangular stonework in its build. The stones at the base of the drain (context 107), and the caps (context 125) were supported on the south side of the drain by a raised terrace of dumped clay and stones. The need to cap the drain along its west line was probably a response to the use of this drain by the newly extended west ranges, for lay brothers' accommodation and waste disposal. This would necessitate the sealing of the channel before it entered the latrine block.

4.4 Period III: c 1320–1450

This period reflects the repairs and conversions to room 5 arising from war damage and structural collapse combined. Room 5 was truncated and stabilised – creating the shorter room 6 – with the addition of room 12 against its south wall; room 9 was also subdivided. The resources of the community were clearly adequate for the necessary work, and growing trade links with mainland Europe are suggested by the increased incidence of imported pottery from Period III contexts (see 6. Ceramics).

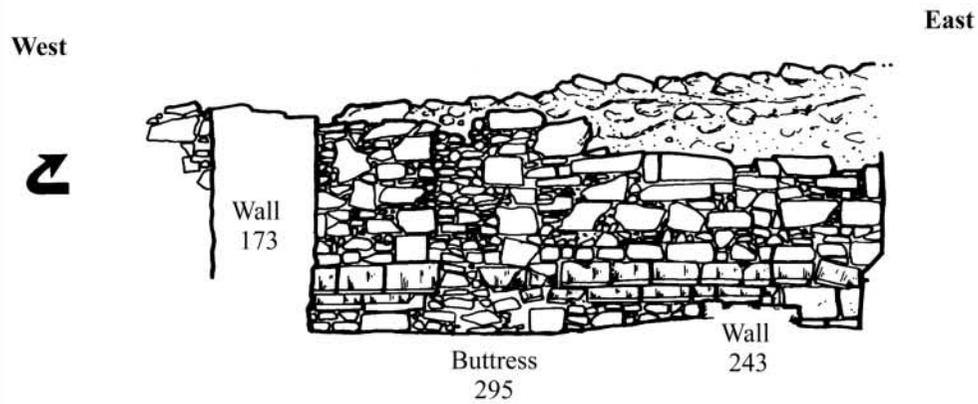
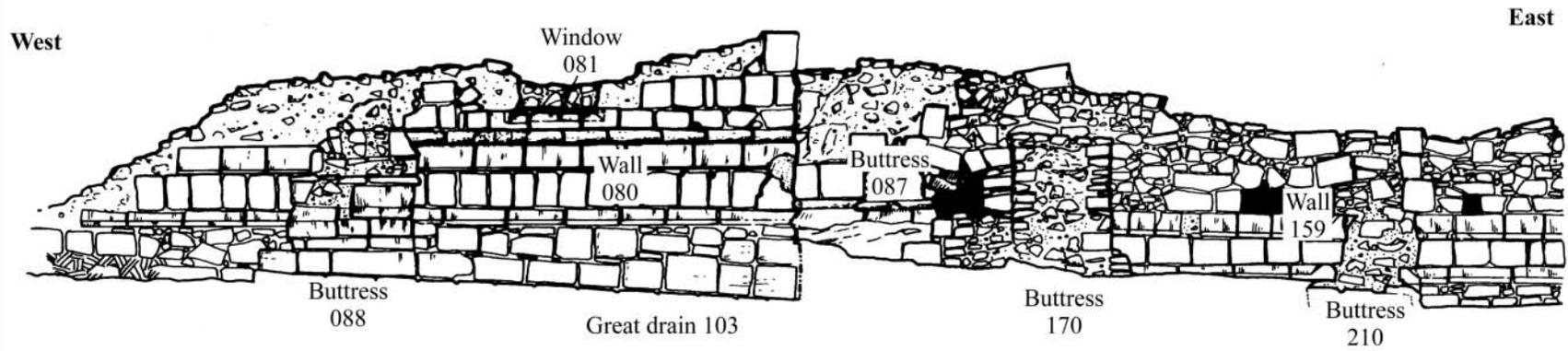


Illus 15 Period III features, west



Illus 16: Period III features, east

Illus 16 Period III features, east



Period I - Context 103
 Period II - Contexts 080, 081, 087, 088, 159, 210 & 295
 Period III - Contexts 170, 173 & 243

Illus 17 Elevation of the south façade of the room 4 and room 5/6 complex



Illus 18 The south wall of room 5/6, showing Period II and III buttresses

4.4.1 Rooms 10 and 3 (room 9 partitioned) (illus 7 & illus 15)

Two separate chambers were created by the subdivision of room 9, with the construction of a cross-wall (context 011) lying towards the east end of this former (Period II) chamber. Room 10, which formed the Period III warming house, measured 6.6 m by 6.6 m internally and occupied the west part of the former room 9, with room 3 being little more than a passage 1.3 m in width, to the east. Room 3 was accessed from the cloister via the Period I doorway into room 8, whereas room 10 saw the construction of a new north door (D2 and D3, respectively, on [illus 9](#)) towards the east end of the new room (and furthest from the fire, which remained in the west wall). A further door was provided between rooms 10 and 3 directly opposite the west door to room 4. The new door, later blocked by Period IV masonry (context 034, below), maintained a through-route from the warming house to rooms 4 and 6 beyond. It is likely that the day stair, providing access to the dormitories at first floor level, was now located within room 3, establishing a route from dormitory to cloister, without having to enter the new warming house.

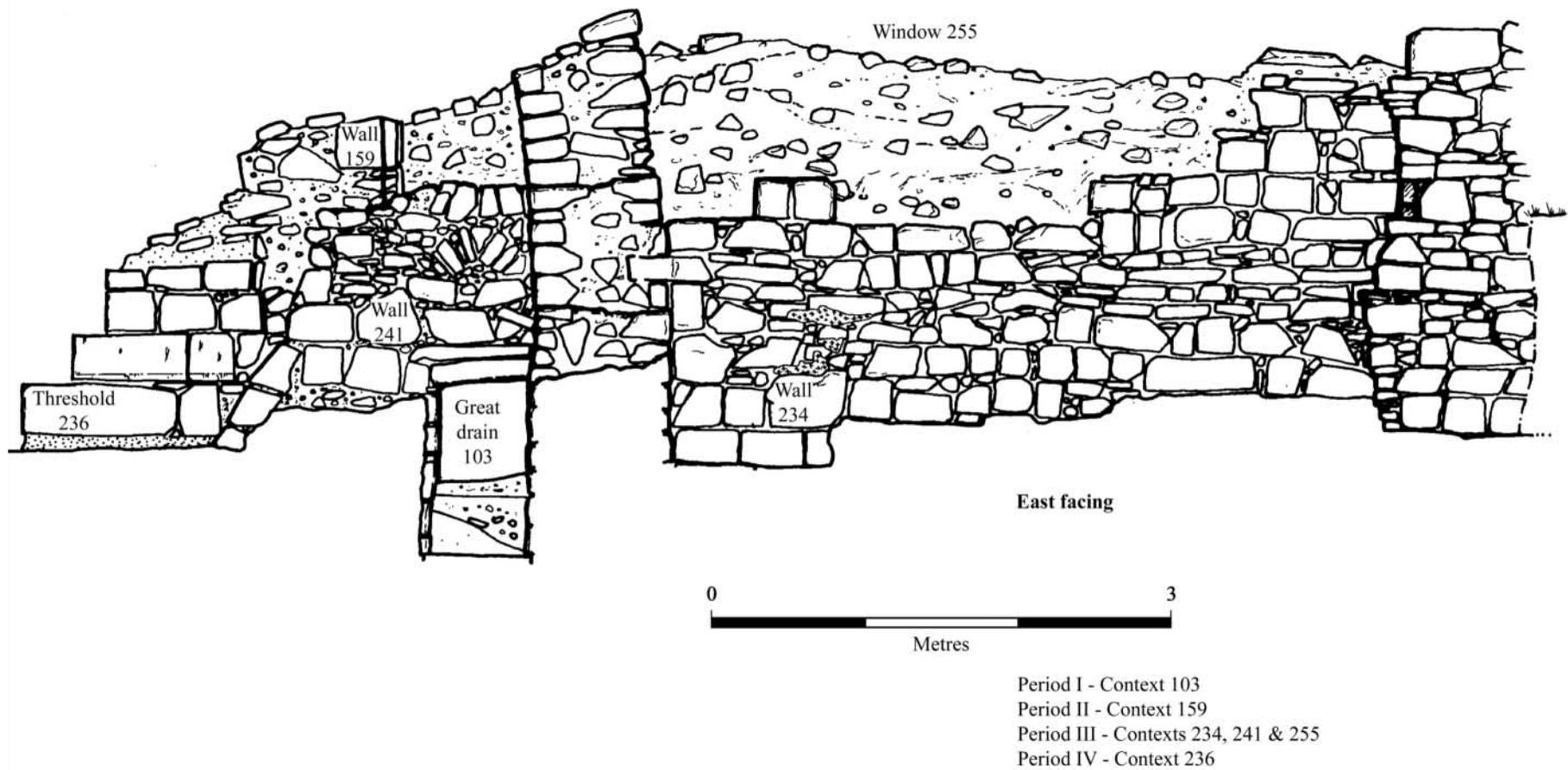
The Period III cross-wall (context 011) was of significantly lighter construction than the other walls of

rooms 10 and 3, being only 600 mm wide on average. The wall bore traces of plaster rendering over its rather crude rubble fabric on both its east and west faces, suggesting that rooms 10 and 3 were finished internally in this fashion. A small void was also introduced below the cross-wall; this seems to have acted as a flue or weeper for the cross-wall, although its precise function is not clear.

A new window (context 130) was opened to light room 3, occupying the full width of its south wall. Only the sill survived, the jambs and lintel having been completely robbed after the abandonment of the house.

4.4.2 Room 6 (room 5 truncated) and the great drain (illus 7 & illus 16)

The most dramatic modification of Period II occurred with the truncation of room 5 to form room 6. This was achieved by the demolition and wholesale robbing of the earlier east gable and the establishment of a new east wall 3.3 m further west (context 234 on [illus 16](#); see also [illus 19](#)). This exercise saw the removal of one of the vaulted bays in the Period II room 5, and a consequent truncation of the latrine block space at first floor level, reducing the undercroft to a three-bay layout. This created a room measuring 12.38 m by 4.76 m internally. There was no other major change aside from the blocking of the Period II south wall aumbry with crude masonry, which was in turn rendered over. A simple drain (context 280) was introduced, following an irregular route across the floor and emptying into the great drain below the blocking of the aumbry. The new east wall featured a large central window (context 255 on [illus 16](#); see also [illus 19](#)), no doubt a direct successor to an equivalent window in the Period I east wall. Externally, however, there was some evidence for the reasons behind the drastic Period III rebuilding of room 5, in that the Period II buttresses were replaced by two distinct measures for the consolidation of the south wall of the latrine block (with room 6 below). A massive buttress (context 170) was raised against the south face of the wall, towards its west end; and cross-wall 241 ([illus 19](#) & [illus 24](#)) was augmented to form a similar buttress at the now extreme south-east corner of the remodelled latrine block. The south wall was further stabilised by the addition of room 12 (below), abutting its outer face. Within the latrine shaft above the drain, already compartmentalised, the walls were braced by the addition of crude blocks of stone simply jammed into place, particularly towards the west end of the shaft, in the vicinity of the blocked Period II aumbry. The progress of the drain beyond the now truncated latrine block was characterised by crude repairs over Period II side walls. These repairs were intended to reinforce the collapsing sides of the Period II drainage channel by the addition of unbonded rubble patching, maintaining the channel depth of c 1 m before it emerged through the residual arched opening at its



Illus 19 Elevation of the east-facing end-wall of Room 6

east end. It is likely that the drain was not capped beyond the new latrine block east wall, capping only occurring when there was an attempt to create a crude building butted onto room 6, namely room 7 (Period IV, below).

4.4.3 Room 12 (*illus 7 & illus 16*)

This remains of this chamber was almost completely robbed and were also obscured by the building of the manse. The chamber was represented archaeologically by its west and east walls (contexts 173 & 243; see also *illus 17*), which were built against the outside face of room 6 and the latrine block. The walls were characterised by their crude build, and also by their distinctly oblique alignment when compared with the general plan of the Period II structures (they lay slightly north-east/south-west in alignment). The chamber was comprehensively damaged by the construction of the manse stable yard so that no internal floor deposits survived, nor was there any indication of access to the building. The surviving walls defined a structure less than 5 m wide, and it is possible that room 12 was intended to supplement the reduced space within the latrine block in some way.

4.5 Period IV: c 1450–1520

This period saw the addition of private accommodation, as well as service space, responding to the changing use of the house from its communal life to one of more individual pursuits. This was achieved by markedly cruder building works, identified by a tendency to recycle any redundant stones from other parts of the site, and the simplicity of the changes enacted on the south range of the cloister. The majority of faunal and environmental evidence also pertained to this phase of occupation and in broad terms confirmed a less formal, but far from impoverished regime. This is implied in the first instance by the very presence of dumped rubbish and drain-fill close by living quarters. Analysis of this material indicated that the community enjoyed a diverse diet, based primarily on agriculture and livestock husbandry, with some reliance in addition on local natural resources, such as freshwater fish, wild duck and berries (see 11. Plant remains, 12. Mammals and birds, and 13. Fish and crustaceans).

4.5.1 Rooms 1 and 2 (room 10 subdivided) (*illus 7 & illus 20*)

Two small rooms were created by the subdivision of room 10 (ie further subdivision of Period II room 9), and by the blocking of the Period III door to room 3 from the warming house. This resulted in a plan

comprising three separate chambers accessed only from the south cloister alley.

Room 1 was formed by a partition wall (context 003) within former room 10, incorporating the Period II pillar base (context 040), and creating a chamber measuring 4.76 m by 6.66 m. At this time the Period II drainage channel (context 051) was recut to form a stone-lined channel (context 022) measuring 380 mm wide by 280 mm deep, running straight out towards the new cloister doorway (D4 on *illus 9*).

Room 2 covered a smaller area, measuring 1.9 m by 6.66 m. This was augmented by a new south window (context 021), of which only the sill survived, the jambs and head having been entirely robbed. The new plan was completed by the closing of the Period III door between rooms 2 (formerly room 10) and 3, all doorway details being now obscured by the clay-bonded masonry blocking (context 034).

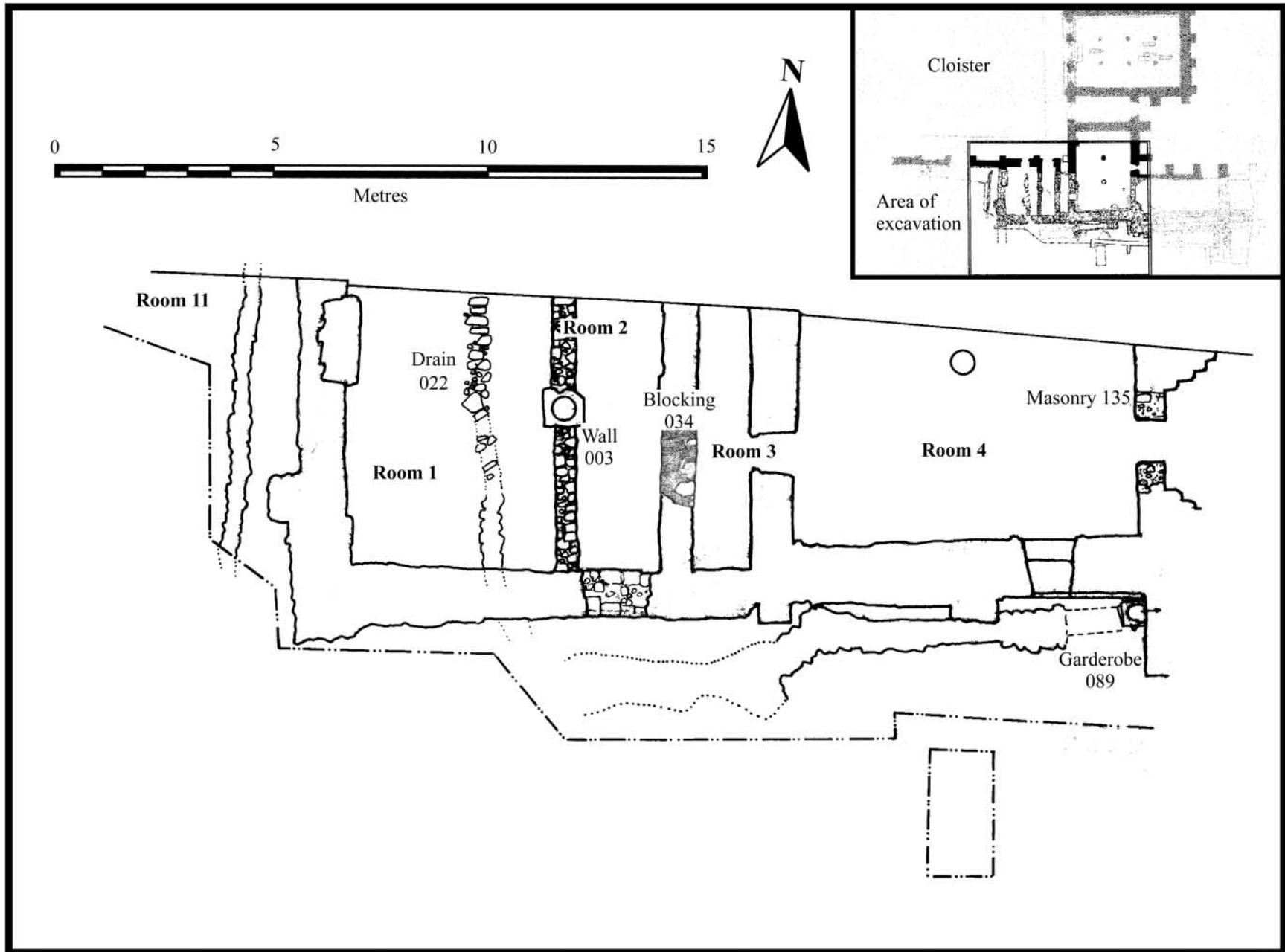
4.5.2 Room 7 and capping of the great drain (*illus 7 & illus 21*)

After the realignment of the east wall of the latrine block undercroft in Period III, the easternmost 4 m of the Period I great drain no longer featured as part of the latrine complex and was reduced to being a simple drainage channel. At this stage the capping of this section of the drain was introduced, partly laid over a spread of occupation deposits which lay to the south of the drain channel. Significantly, the capping for the drain was formed primarily by broken grave slabs, recycled from the adjacent monastic graveyard. One of these slabs, which was broken in two to form part of the drain capping, featured a finely-carved sword motif (*illus 24*). Evidently, high-status graves in the abbey were being robbed of their grave slabs as a convenient material for more basic uses elsewhere.

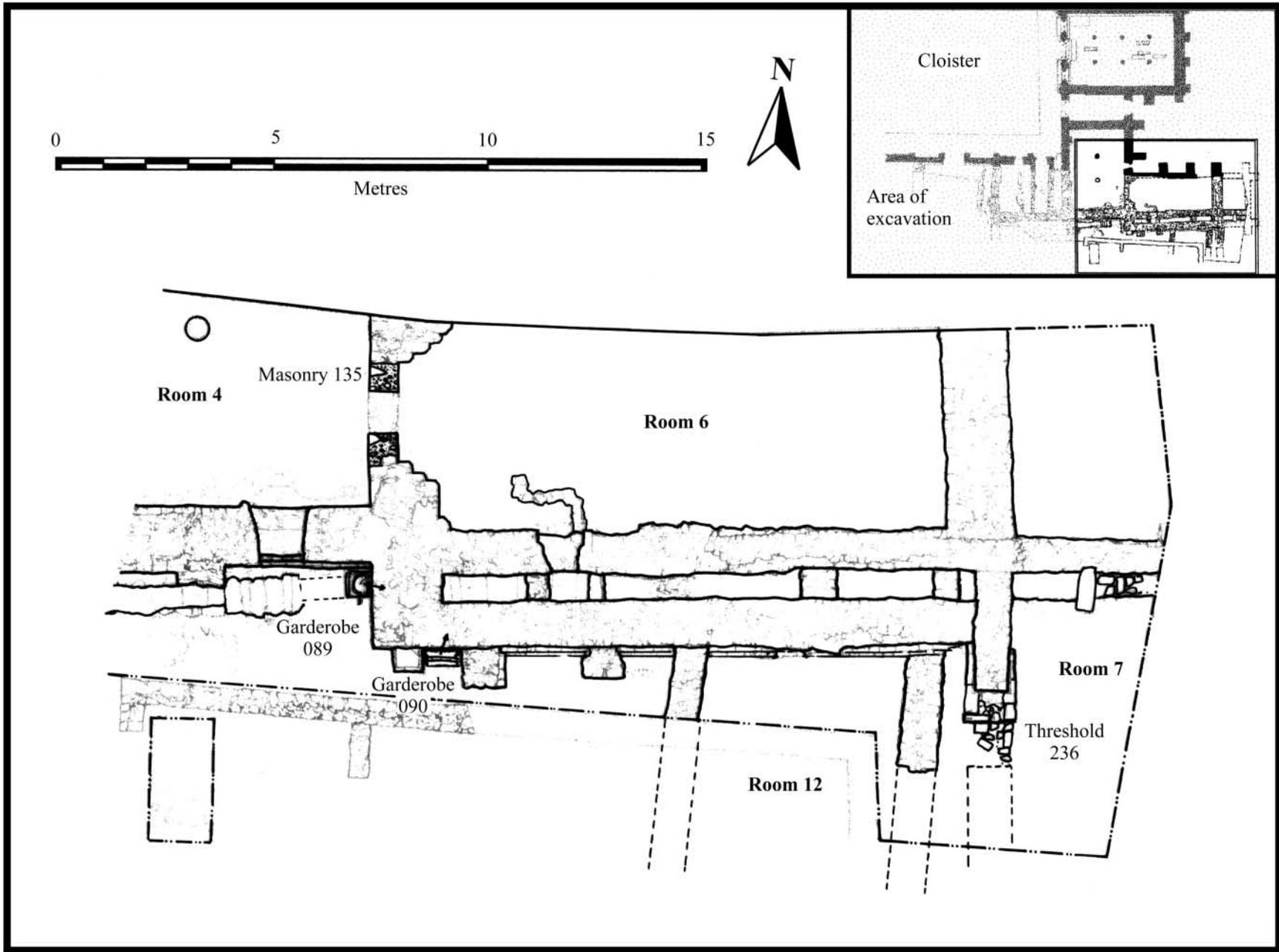
The need for capping, together with the remnants of a floor and threshold (context 236 on *illus 19*), are all probably best seen as evidence of a crude building (room 7) abutting the extreme south-east corner of the latrine block, possibly a timber lean-to structure. The presence of the threshold at least indicates that this was a roofed building and that access was from the west side, though the gap between this building and room 12 was very narrow, being only 1.1 m wide.

4.5.3 Room 6 (*illus 7 & illus 21*)

The west arch in room 6 was reduced in size by the addition of masonry (context 135 on *illus 14*). The remaining opening measured 1.1 m in width, an appropriate size to receive a door. This appears to demonstrate how, for the first time, the open access between rooms 4 and 6 was removed, suggesting that separate functions were now served by these once closely-linked chambers.



Illus 20 Period IV features, west



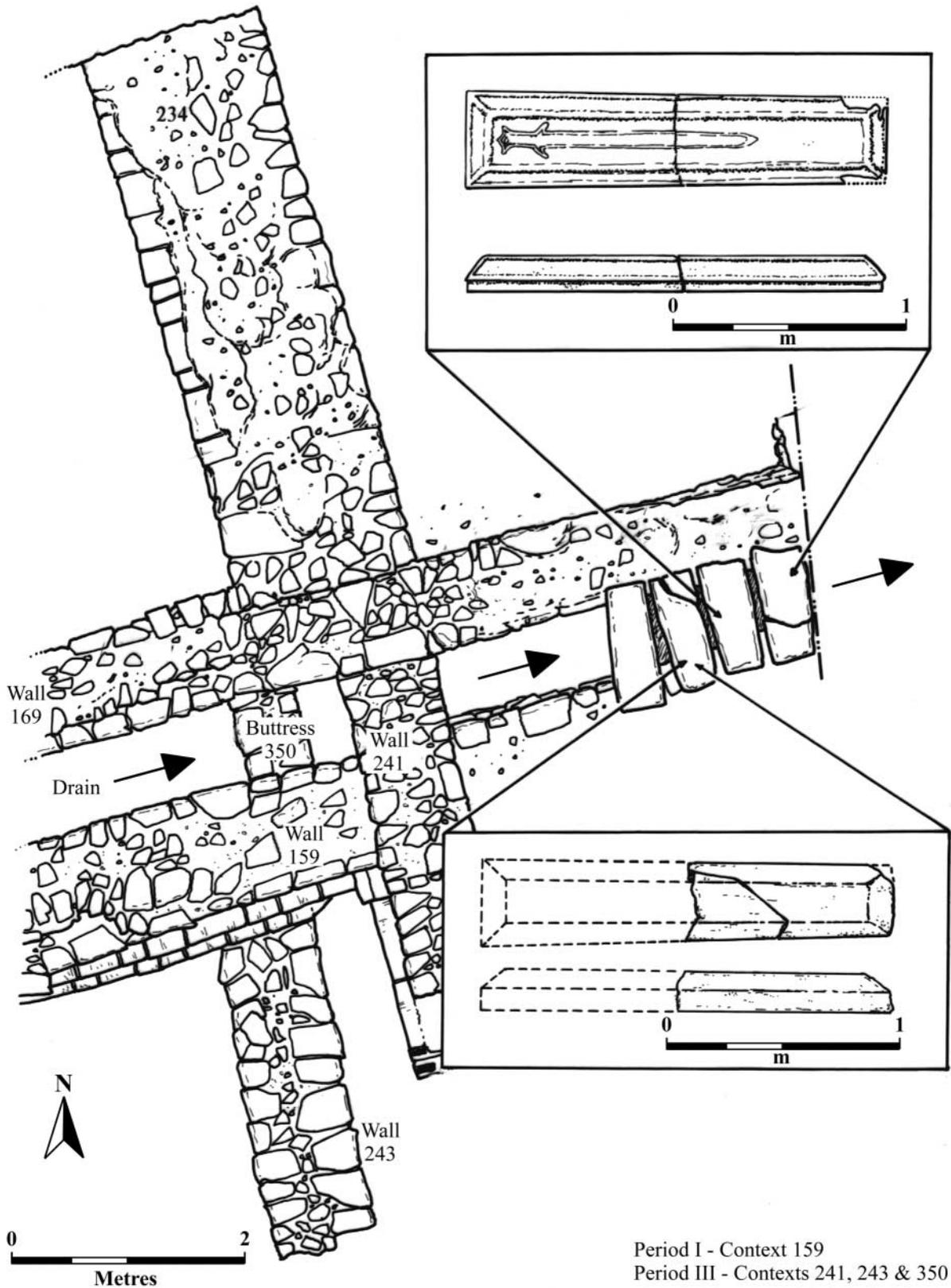
Illus 21 Period IV features, east



Illus 22 Period IV garderobe (context 089)



Illus 23 Period IV garderobe (context 090)



Illus 24 Re-used grave slabs over the great drain

4.5.4 The great drain and garderobes (illus 7 & illus 21)

Period IV saw the abandonment of the latrines at first floor level in favour of two separate external

garderobes with associated pits. Of the two garderobes, one (context 089) was located towards the external junction of the south wall of room 4 with the west wall of room 6. The feature comprised a circular hole cut through a single block, over an angled

base, emptying into the great drain from the west. Crude pitched slabs formed a simple drain into the pit from the south. The second garderobe pit (context 090) was located between two Period II buttresses 088. It comprised a single rectangular shaft over an angled base, emptying into the great drain from the south. Both garderobes were marked by the re-use of older masonry fragments in their construction, and both seem to have served the first floor chamber above room 6. This implies that two discrete privies were in use, located towards the south-west corner of the upper chamber, the communal latrine stalls of Periods II–III now having been sealed over. It is also likely from this point onwards, up to the abandonment of the abbey, that the flow of water into the great drain at the extreme south-east corner of the site was not necessarily constant, if indeed any water now flowed through the channel at all. Water-borne silts were in evidence in the drain fill, along with material washed from the demolished structures above. Thus, the infill of the drain in the vicinity of the garderobes was probably periodically dug-out, rather than being flushed out by water in the drain. The last *in situ* garderobe fill was localised and quite distinct from the general mass of water-borne material both above and below it. Some of this type of material may well have formed part of the primary dumping over the nearby drain covers.

4.6 Period V: c 1520–1600

During the final period of occupation of the abbey buildings the features revealed by excavation appear to have become increasingly used as service space, perhaps even as cellars, in association with the use of the room 4 and 6 structures at first-floor level. The role of the abbey buildings at this time, under the auspices of an increasingly secularised management, may well have been reorganised to a more typical domestic, residential, albeit lordly, function as the numbers of the community dwindled away. It is equally clear, however, that sustained occupation throughout the 16th century was maintained at some level, and it is likely that the buildings forming the south-east corner of the cloister retained some use as post-monastic accommodation, perhaps even for the commendator himself during the middle decades of the 16th century. Certainly a dynamic and wealthy household is suggested by the increased incidence of post medieval imported ceramics (see 6. Ceramics), attesting that the produce of northern France was available to the later occupants of the site.

4.6.1 Rooms 1 and 3 (*illus 8 & illus 25*)

In room 1 Period V was marked by the addition of a low earthen bank (context 026), laid over the

residual Period I hearth (context 043) and extending to run parallel with the south wall of the chamber. This feature stood only 150 mm in height and was probably designed to receive a sprung timber floor within a storage area, with the fireplace itself no longer in use.

Room 3 was augmented by the addition of two stretches of embanked material, one of which (context 032) effectively cut-off access to the cloister via door D2. This comprised a thick deposit of earth-bonded masonry built directly between the long walls of the room. At the south end of room 3 a similar construction of clay and stones (context 020) was built against the north face of the south wall. In combination, these features served to reinforce the existing walls, rather than raise the floor, unlike the case of room 1.

4.6.2 Rooms 4 and 6 (*illus 8, illus 25 & illus 26*)

A feature similar to that revealed in room 1 was laid along the south, east and west walls of room 4. This deposit (context 064) comprised a low bank revetted with simple stonework along its east sector. Again it appears to represent the raising of the floor, perhaps to receive timber joists, after the primary floor surfaces had been removed. The Period II window was also likely to have been partially blocked at this time by the addition of crude clay-bonded stonework.

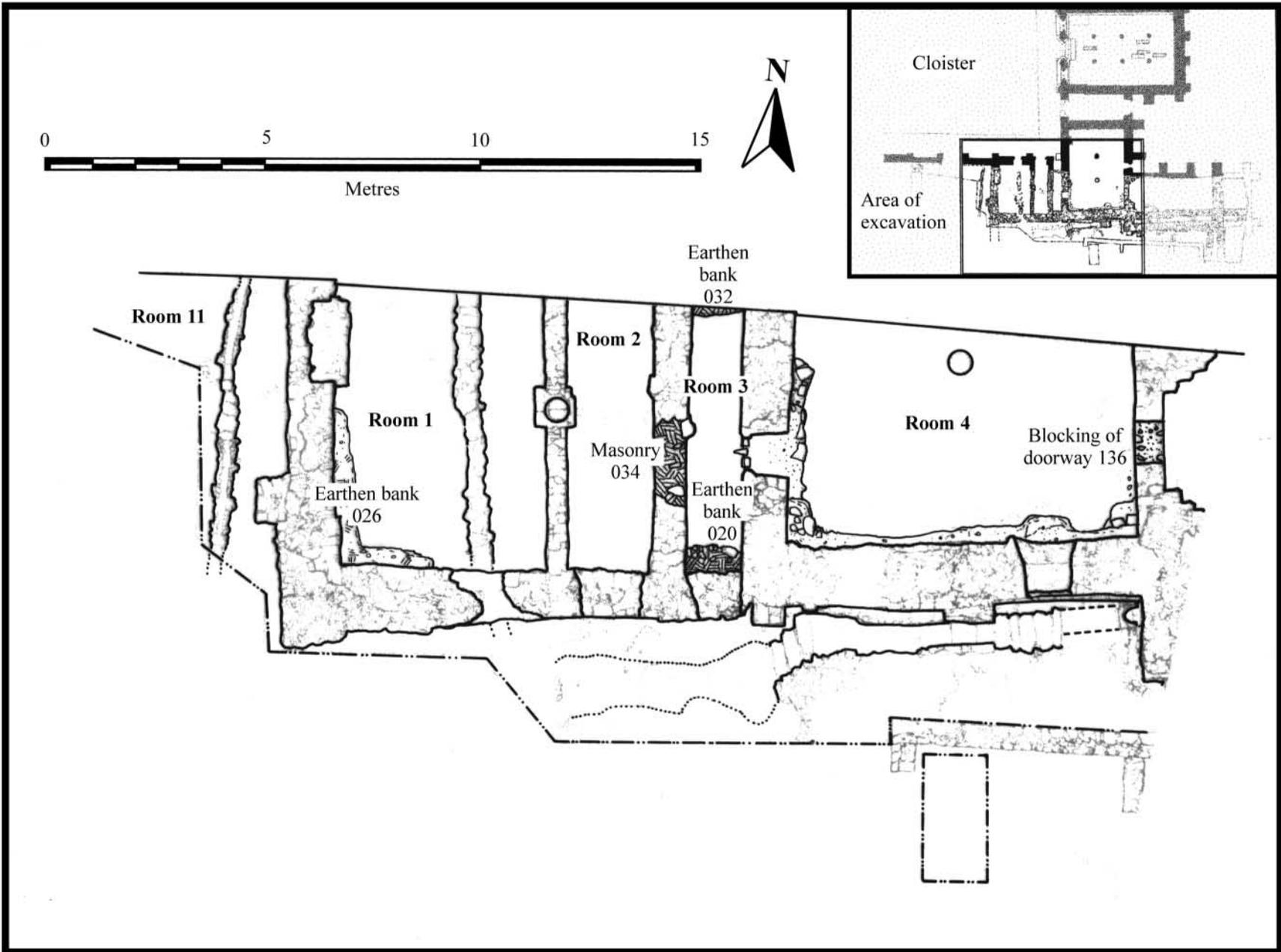
As part of this general blocking of doors and windows, it is likely that the reduced Period IV doorway (context 135 on *illus 14*) was sealed completely at this time by inserted masonry blocking (context 136), restricting access to room 6 to the Period II north door alone.

4.7 Occupation over Periods IV and V

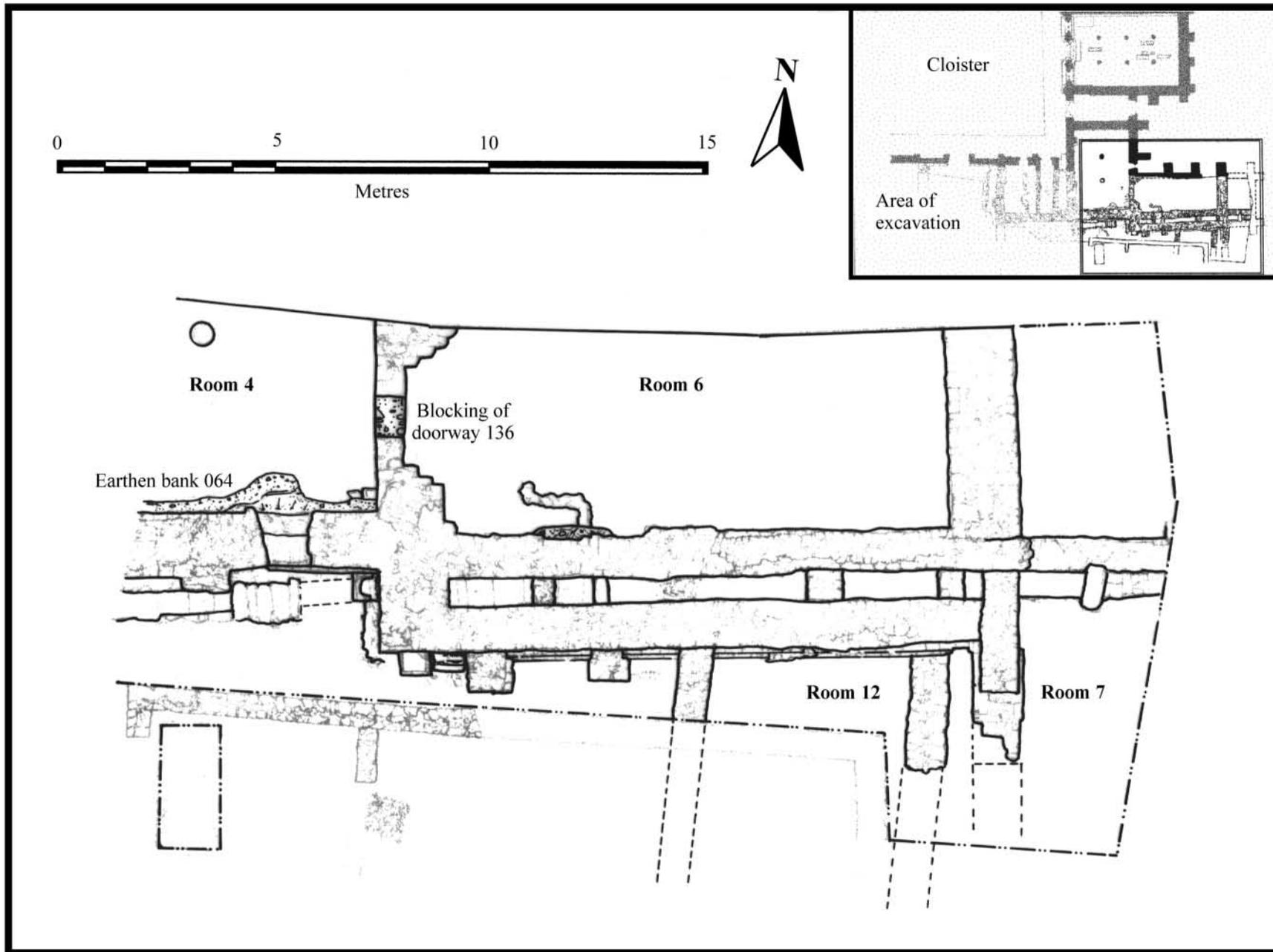
A series of midden deposits and the fills of the great drain provided an unusually detailed insight into the occupation of the house over the late 15th to late 16th centuries. Elsewhere, Period IV deposits from room 4 contained late 15th-century ceramics (context 093) and Period V deposits in room 1 (contexts 231 & 028) contained material dating to the late 16th and early 17th century. These deposits represent the last phases of occupation within these chambers, revealed at the upper limit of excavation.

4.7.1 Middens (*illus 27*)

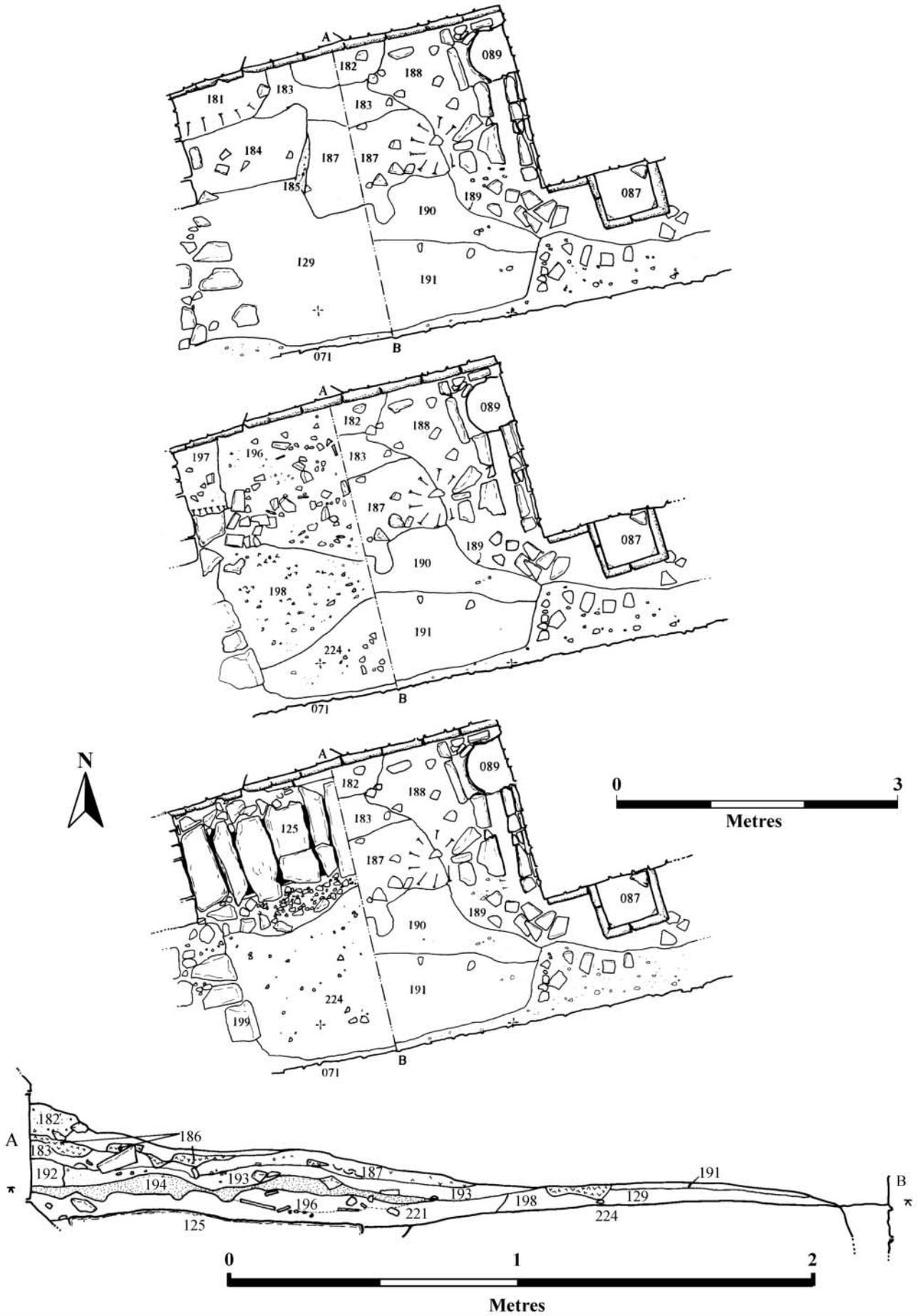
An area immediately south of room 4 and north of the manse stable yard wall (context 071) was excavated in order to reveal any further surviving capstones over the great drain immediately before it entered



Illus 25 Period V features, west



Illus 26 Period V features, east



Illus 27 Midden group, plans and section



Illus 28 (top left) Great drain fills

Illus 29 (top right) Great drain fills



Illus 30 (lower left) East end of the great drain, before excavation

the latrine block. During the excavation of deposits over the Period III drain caps it became clear that a series of shallow midden deposits had accumulated, deposits which emanated from the latter stages of occupation within the adjacent chambers (rooms 4 and 6). The presence of the Period IV garderobe pit (context 089), and the probability that the latter was cleared by hand, also suggested a source for this accumulation of midden material. The midden broadly represented a dated sequence of deposits, culminating with demolition debris from the collapse of the buildings.

The drain capstones were bedded in recycled drain fill (context 222) and were sealed by two main groups of deposits. The primary group (contexts 196, 197 & 198) all featured peat ash and animal bone mixed with increasingly clay- and mortar-rich spreads towards its upper surface. The primary series of dumps were in turn sealed with a spread of roof slates set in gravel (contexts 194 & 195). The later sequence of dumping featured increasing amounts of peat ash and charcoal as well as large

numbers of animal and fish bone. A billon penny of James IV (see 7. Small finds) was retrieved from the lowest deposit within this group (context 193), suggesting an early 16th-century date for deposition. With upper deposits (eg contexts 181 & 182), rubble and mortar increasingly sealed the midden sequence, and these represent the *terminus ante quem* for the occupation of the area prior to its active demolition.

This short sequence of deposits probably represents debris from domestic occupation of the ranges during Period IV and V at a time when the monastic community was first reduced in size, with this part of the site later converted to a series of cellars. Nonetheless, these deposits indicate a significant presence on the site at least during the first part of the 16th century, with access to imported goods and a wide range of local foodstuffs.

4.7.2 *Great drain fill*

Throughout the drain, the basal fills were generally similar sand- and gravel-rich water-borne deposits. These in turn were sealed directly at the east end of the drainage channel by rubble collapse. However, at the west end of the drain there was a distinct, almost peat-like sediment both overlying and sealed by more typical water-borne material. This sequence appeared to be the result of an accumulation of waste, probably associated with the use of the nearby garderobes (contexts 089 and 090), between intermittent periods of freely running water within the drain. The suggestion of periodic flooding is confirmed by the evidence of the detailed environmental analysis of drain fill samples, where soil conditions, plant species and insect remains suggest occasional inundation rather than consistent water flow.



Illus 31 The chapter house