

**Investigations within the Halls and Kitchen,
Jesus College, Cambridge
1995**

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Recording occurred during refurbishment of the College's Halls and Kitchen in July and August of 1995. The work arose as a result of planning conditions relating to the listed buildings' fabric and, therefore, was largely architectural. However, the opportunity was taken to record a contractor's service pit and a small sondage was excavated within the Outer Court. Part of a continuing campaign of College investigation, for background researches and recording techniques see Evans 1992 and 1995a. Full photographic archives of this work are housed with the CAU and the College.

The Hall

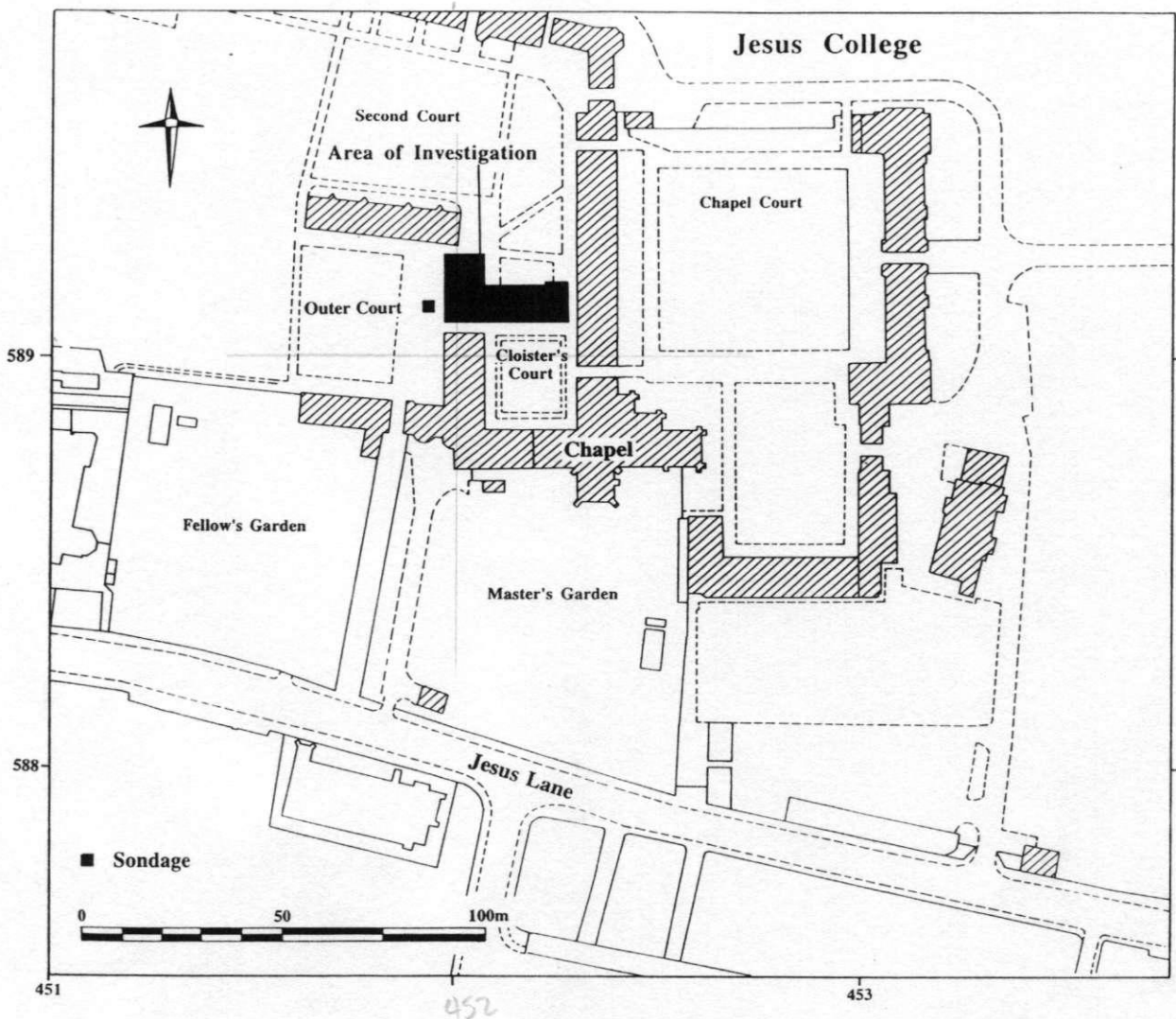
During refurbishment, the wooden panels which surround the lower walls of the Hall were removed for cleaning and painting. Although specifically commissioned to record a large fireplace exposed within the north wall, whilst on-site the opportunity arose for more 'casual' recording of the behind-panel fabric.

The Fireplace

The fireplace is situated within the eastern end of the north wall of the Hall, immediately beside the oriel window (fig. 2). Built of clunch, where undamaged this consisted of large dressed blocks, closely set within the fireplace frame, rather more roughly to either side ([230] see below). It is therefore quite possible that the surrounding plaster is associated with the original fireplace; both the wall and its frame bear traces of the same burnt ochre paint (see below). Measuring 4.00m wide externally (3.50m internally), as observed the fireplace was 1.20m high. The floor level, however, is now significantly higher than it was originally. Despite considerable damage, it was clear that the clunch frame had been ornately decorated. The sides showed the remains of vertical spines, whilst the triangular panels in the corners between the mantel and the sides bore deeply incised carving (A and B on the figure). Panel A was an abstract rosette design in whose deepest recesses were traces of bright mid-green paint. Carving B was much damaged and difficult to identify. Enough survived, however, to determine that although related the pattern was different to that of A.

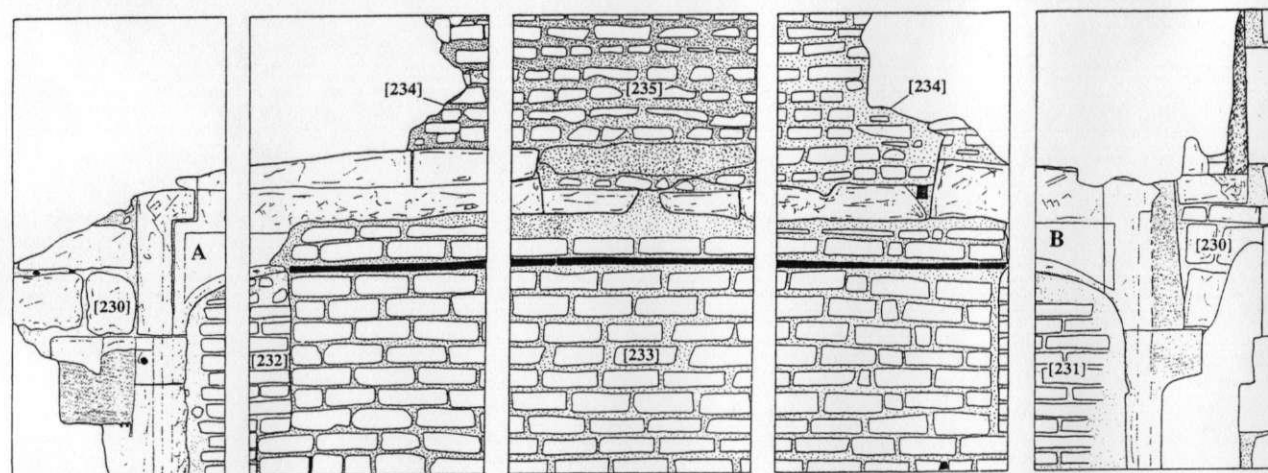
Whilst there was no evidence of a relief arch in the wall above the fireplace, much brick was evident within the seemingly original fabric (handmade red and occasion yellow buff bricks, 55mm thick; laid on bed in off-white mortar). With double chimney stacks extending up on either side and a window directly above the mantel, such a structural feature may have been unnecessary. It is, however, possible that one may survive masked beneath the undisturbed plaster.

Both sides of the fireplace were infilled for about 0.50m with handmade red bricks (220mm x 50mm thick), set in a fine mortar ([231] & [232]). Towards the base the bricking stepped inwards, the purpose of this negative step is not



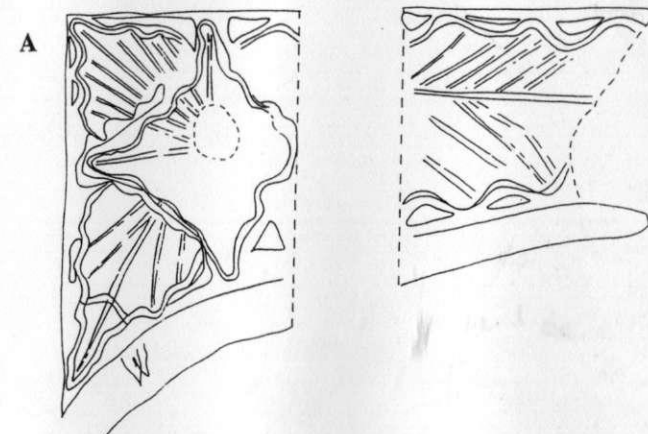
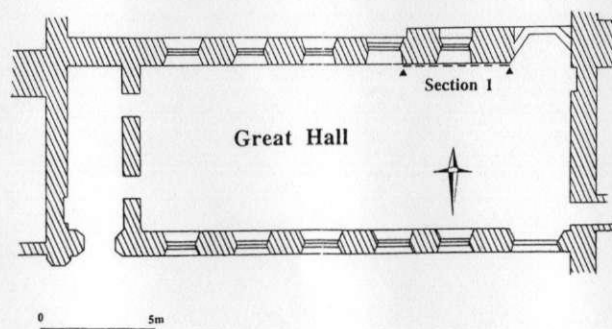
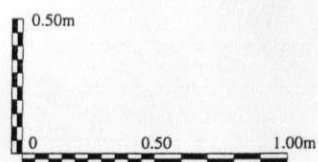
immediately clear. The two 'stacks' appear to be related to a re-routing of lower storey chimneys up through the interior of the fireplace itself (i.e. ground floor fireplaces retained). Although only partial, this infilling must mark the decommissioning of the fireplace. It would have been 'unpresentable' in this manner and there was no evidence of sooting/blackening of the chimney brick-stacks. Therefore, it is logical to infer that it was at this time that the mantel carving was trimmed flush to facilitate the fitting of the wooden panels.

The main body of the fireplace was infilled with poor quality red and yellow bricks (average size 220mm long x 70mm high; [233]). A wooden strut was set in at the level of the bottom of the mantel; two brick courses above this filled an area carved out from the central fireplace frame (the mantel stones only 'tokenly' re-laid). The poor quality of the bricks tends to suggest that they do not serve any structural role, only blocking the still open, though inoperative, fireplace. Whilst this may have been contemporary with the re-routing of the chimney stacks (the difference in the firing quality of the [231]/[232] & [233] bricks relating to function), the [233] bricks appeared to be of a later type (late 18th-19th century).



Section 1

Painted surface
wood



B

H1511

A Details of carving on the western side of the fireplace

B Graffiti below the eastern carving

Figure 2 Jesus College Hall: the north wall fireplace

Above the fireplace was an area of irregular brickwork, the bricks appearing re-used ([235]). Roughly coursed in a coarse mortar, they had been laid within a cut through the original fabric ([234] cut). The mortar was squeezed out on the room side, giving the impression that building was from the exterior. Certainly the brickwork was never intended to be seen. It is unlikely that they directly relate to the decommissioning of the fireplace and rather probably attest to an alteration of the window above. Evidently a major structural change (i.e. with load-bearing ramifications), one with which the [233] blocking was probably associated. In other words, there was no absolute need to brick-in the fireplace upon its disuse/panel-masking and, instead, this relates to more extensive window-related alterations which had engineering implications (e.g. carving out of mantel).

The only published references to the fireplace so far noted occur in Willis and Clark (1886: 161), and in Gray and Brittain (1960: 67-68). "A large original fireplace, much mutilated, remains in the north wall behind the panel work" may suggest that Willis and Clark considered it to be an original feature of the nunnery phase but, as their main concern is with the form and fabric of the College, it is perhaps more probable that they considered it an original *College* feature. Gray and Brittain do not consider the origins of the fireplace, but rather its position at the centre of Hall life. The hearth was

"a place of much importance, if we may judge from the frequent references to it in the accounts For this fireplace the College set up a 'mantil-tree' and made 'doggs of our own stuffe' in 1574. 'A pare of fyre-irons to burn sea-cole for ye hall' was got in 1572 and bellows in 1600."

(1960: 67-68)

Two other fireplaces have been exposed in recent investigations, dated to the period of Alcock's adaptation and re-building (Evans 1995a). Both are much smaller than that in the Hall, and not so highly decorated, being designed to heat individual rooms. They are, however, constructed from dressed clunch blocks, one showing extensive traces of red and ?blue paint (*ibid*: 18). The similarity between the construction of these fireplaces and that in the Hall suggests that they are contemporary, although it is possible that, if the larger structure is earlier, it may have influenced the style of fireplaces elsewhere in the College.

One of the most significant elements in assessing the fireplace's period of use is the surrounding plaster, none of which was spread over the infilling brickwork. This would tend to support the argument that the infilling was not a narrowing followed by a further period of use - bare brickwork in the Hall would have been unacceptable - but was related to the decommissioning when the Hall was first panelled in 1703 (RCHM 1959: 94). This probably provides the date for the suggested chimney diversion and removal of the protruding fireplace decoration. In 1801-2 the sills of the Hall's 15th century windows were lowered (*ibid*: 93). Although it was not possible to assess the evidence of this activity below any of the other windows, it seems probable

that the rough inset brickwork above the fireplace, if it is not related to the decommissioning, is associated with this later work (and the [233] blocking). In 1875 a new wooden floor was laid 12" above the existing Ketton stone slabs and the 1703 panels were shortened (Willis & Clark 1886: 162). This would suggest that the original height of the fireplace was in the region of 2.00 - 2.10m (to the top of the mantel).

Fabric and furnishings

Removal of the wood panels along the southern and northern walls of the Hall also permitted occasional observation of its interior fabric. Although plastered, sufficient 'holes'/flaked faces were present within the lower face to allow limited examination. Largely built of coursed clunch blocks (c. 0.18-.20 x 0.20-.40m; [230]), red bricks were also seen to have been sporadically incorporated throughout (as in [230] above fireplace). This suggests that much of the construction is later than recently thought and, contrary to the opinion expressed by the RCHM (1959: 83 & 92), Alcock's College conversion did not just entail a facing and re-roofing of the Nun's refectory but substantial rebuilding.

Beside, extending onto the frame of the fireplace (fig.), and running along both the northern and southern walls, was a orange/ochre-brown painted band 0.43m wide, whose base lies some 1.15m above the present floor level. Below this, behind the panels but not attached, large timber pegs had been hammered into the wall and subsequently cut off. These were clearly for the attachment of some extensive timber element which only stood below the line of the painting, possibly lower level panelling or wainscoting or, more likely, a series of wall-flanking benches.

During the removal of the panelling a large red brick arch, evidently of 18/19th century date, was observed set into the western end of the southern wall. Willis and Clark discuss a landed entry into the Hall at this point through a square-headed door arch (1886: 162, fig. 19 'a'). This brickwork presumable must either have been its relief arch, which would therefore indicate a post-Alcock construction (it was inserted through the wall plaster), or relate to an elaborate infilling upon the door's blocking in 1875 (possibly compensating for structural subsidence).

The Kitchen and Upper Hall

As part of the basic work done to fulfil the listed building condition, recordings were made of two elevations of the ground storey Kitchen block (one internal and one external) and two in the Upper Hall (the internal and external elevations of the same northern wall). Also observed, in the corner between the Hall and Kitchen, was a substantial early footing.

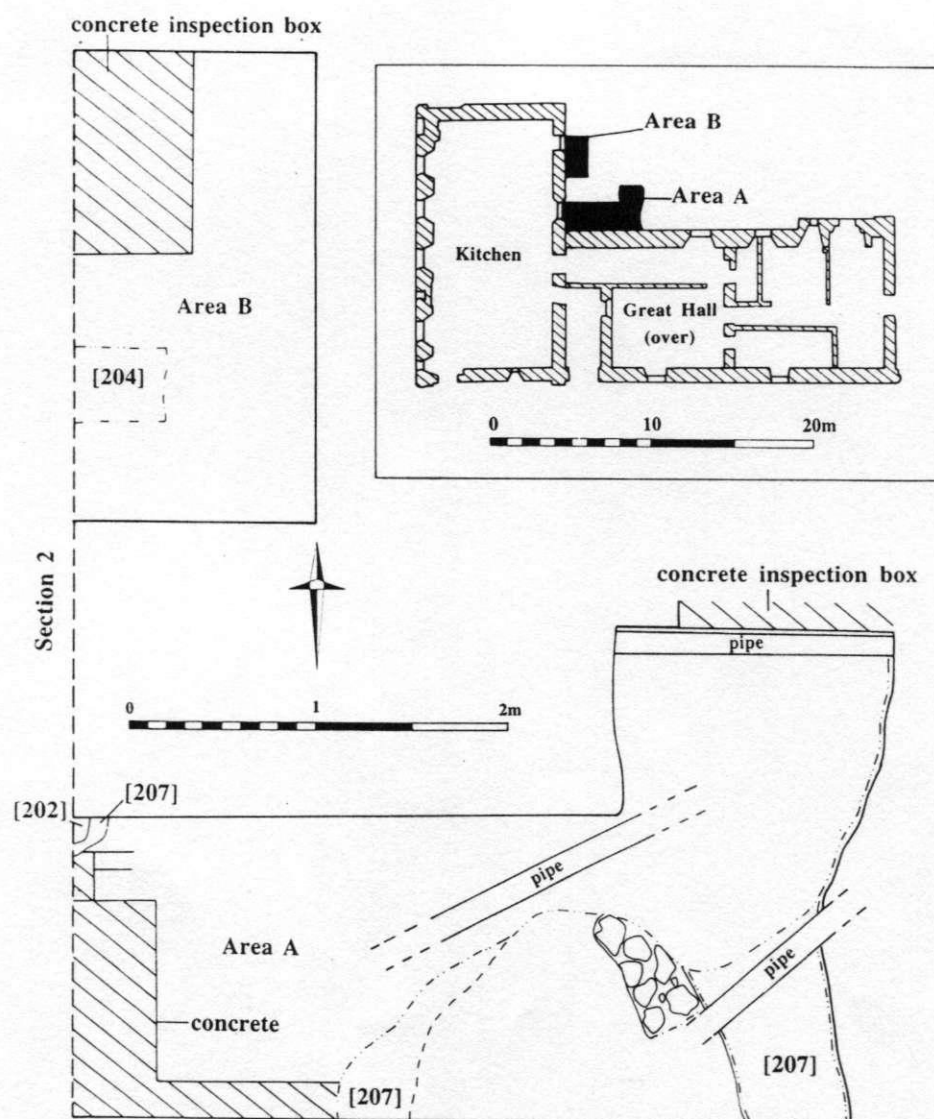


Figure 3 Drain cuttings showing early footing outside the kitchen block

The Early Footing

A major clunch and mortar footing was exposed in trenches cut for drain pipes in the exterior northwest corner between the Hall and the Kitchen (fig. 3: [207], [208]). The lower part was constructed from small to medium lumps of unworked clunch set in a loose yellow mortar ([207]). Evidently trench-built, alternating horizontal bands of a dark brown silt clay were present throughout. Further excavation by the contractor revealed that [207] extended southwards below the northern wall of the Hall. However, it did not continue beyond the thickness of the wall into the building interior. This was overlain by [208], another footing-build of clunch/chalk blocks set in a hard white mortar (no soil banding evident).

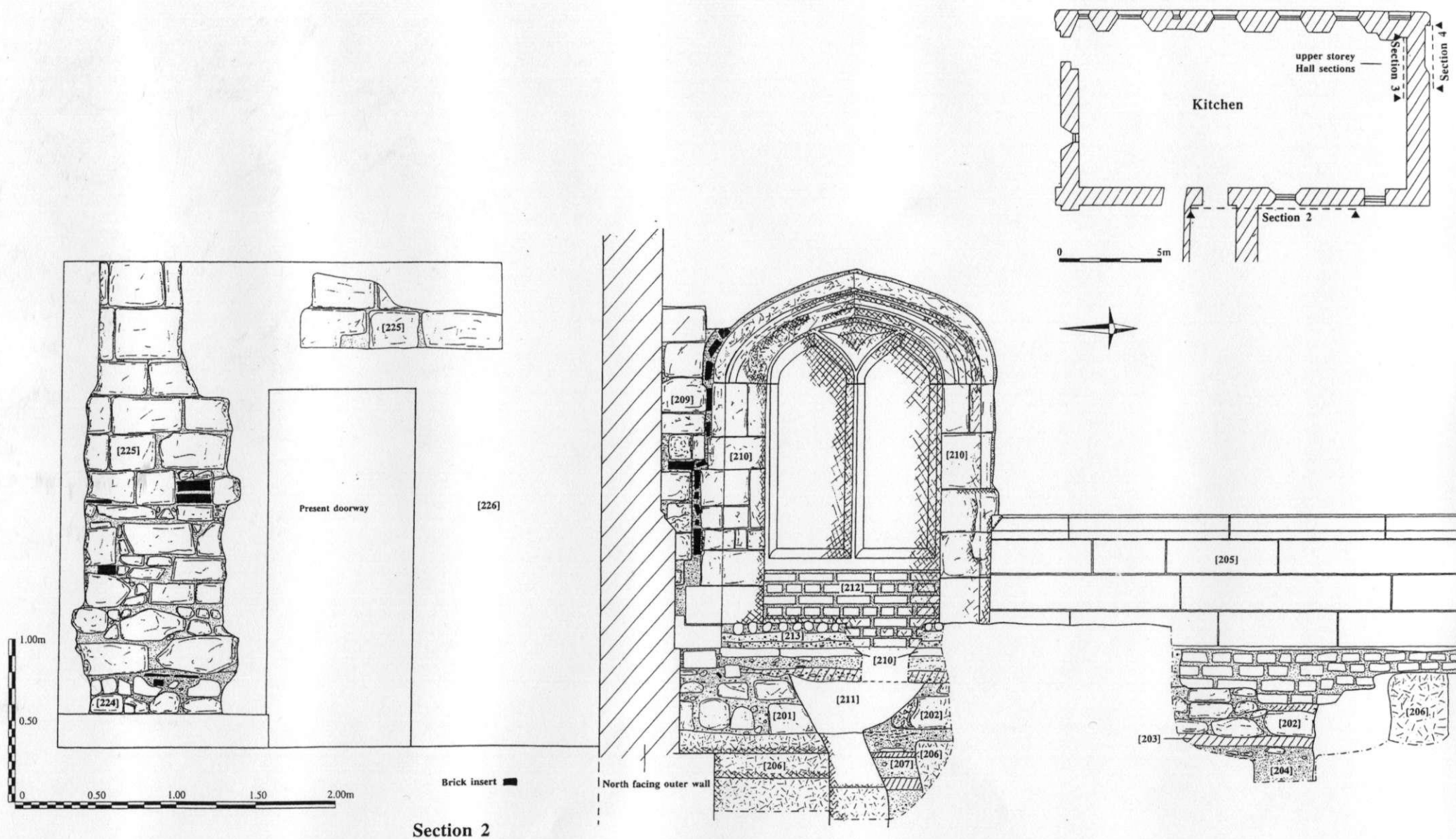


Figure 4 Kitchen block elevation

Although extensively truncated, the footing was clearly very substantial extending over an area of more than 2.60 x 2.90 (1.20m+ deep). Its position and size suggest that it was the base of a heavy structure such as a staircase or a tower. Willis and Clark refer to a staircase entrance to the Hall at this point prior to 1875, for which they record a blocked doorway in the northern wall (1886: 161). This was replaced by a internal stairway which was dismantled in the course of the recent demolition of the servants quarters which contained it. The earlier stairway is described as 'ancient' by Willis and Clark. Although elsewhere this phrase is used in relation to early College features, in this instance it seems to suggest the survival of original Nunnery architecture. Access to this staircase was through a doorway in the north wall of the Hall landing, which apparently replaced a smaller doorway slightly to the east (Willis & Clark 1886: fig. 19 'c'). The exit to "the ancient circular staircase or 'vice'" was through a door into

"..... a lateral appendage vaulted with a rich lierne vault, possibly part of the staircase to the refectory-pulpit of the Nuns."

(*ibid*: 162)

On demolition this vault was preserved and placed over the vestibule within the western range of the Cloister Court.

The absence of brick/tile in the exposed footing supports the Willis and Clark assertion that the staircase carried by the footing was a Nunnery rather than an early College feature. To the north was a further small exposure of a footing with similar soil banding as [207] ([203] & [204]). [203] was a 30mm thick layer of soft brown clay silt upon [204], a moderately compact build of small to medium lumps of clunch set in a very slightly pinky yellow buff mortar. No brick or tile was observed within either. 0.20m+ deep, the masonry was truncated to the north, and possibly the south, giving it the appearance of a footing at right angles to the north-south wall (east wall of Kitchen range). Not enough could be exposed to confirm this, however, and it is equally possible that this either represents the northward continuation of the main stairway footing or indicates that the earlier north-south footing was originally wider (passageway base?). The pattern of alternating stone and soil layers within these foundations are reminiscent of 13th/14th century footings of a Dominican Priory building uncovered in excavations at Emmanuel College (Dickens 1994).

Kitchen and Upper Hall Exposures

Two elevations were recorded of the east face of the eastern wall of the Kitchen range (fig 4): the northernmost, external, and the southern, internal. Between the two the original build/fabric was found to be continuous. The footing consisting of roughly coursed clunch, limestone, brick and tile set in a loose pale buff mortar with few small inclusions (0.40m depth; [201], [202] & [224]). Resting above this, and in places the distinction between the two mortars was very clear, was a slightly more formally, though still quite roughly coursed wall ([209] & [225]). The lower 1.20m of this build consisted of

clunch blocks (0.10-0.20 x 0.15-0.40m) with brick and tile set in a fine pale buff mortar. The upper wall was more formally coursed and constructed from rather larger squared clunch blocks (0.20-0.30 x 0.30-0.50m) in which no brick or tile was evident. Within the southern interior elevation the wall was capped by the Ketton slab flooring of the second storey Hall.

A doorway was cut through the fabric just north of its corner with the Hall range and a frame, apparently rather older than the date of the work itself (i.e. re-used masonry), inserted ([210]). The frame was lengthened with two courses of limestone blocks below the original clunch; brick and tile filled the gap between the frame and the doorway cut. Later still, the doorway was converted to a window by the insertion of a 'two-light' frame within the arch and the area below was infilled with a red brick-built panel ([212]). Following probable deliberate dumping of soil over the door sill, the modern cobbled surface was laid ([213]). This raising of the exterior ground level evidently occurred upon the cladding of the lower exterior wall in fine ashlar limestone blocks (0.85m high) and, above which, a red brick 'veneer'.

The widespread presence of brick and tile within the build of the footing and wall, suggests that it dates to the Alcock phase of the College's construction. It is curious that it is the *upper* part of the wall that is lacking brick and is constructed from much larger blocks. There are two possible implications. Firstly, that the upper build is older, perhaps original Nunnery period, and that the lower build has been inserted below it. Whilst this is possible it seems unlikely given the brick and tile evident in the walls of the Hall above indicating an Alcock date for this phase of building. It is more likely that the entire construction belongs to the Alcock period.

Within the second storey Upper Hall both the internal and external elevations of the former north end wall Kitchen range were recorded. As indicated by the interior face (previously masked by a false timber wall; fig. 5), it displays the same large clunch block-build as the eastern Kitchen wall. The clunch blocks were faced and squared-off (0.20-0.30 x 0.30-0.48m), although somewhat roughly. The infilling and levelling brickwork appeared integral to the build and contrasted with the patches of later brick inserted as repairs. The blocks were crudely coursed in a moderately fine white mortar. Occasional traces of horse hair suggested that the plaster, which survived only in a patch at the very top, originally covered the entire wall. In the lower part of the surviving wall, the crown of a crude brick arch was visible ([218]). Although its full size and form cannot be determined because of its truncation by a later doorway, the arch most probably mirrors a surviving window on the eastern side of the wall. Again, the inclusion of brick and tile within the predominantly clunch-build indicates that the construction dates to the Bishop Alcock phase of the College.

Along the top of the wall lay a substantial wooden beam ([214]) which carries the roof beams (e.g. [219]). However, [214] was clearly cut to take a purlin of a different shape and dimension than that present. Similarly, an empty/voided wall plate mortise at the west end of the rafter would also attest to a the recent

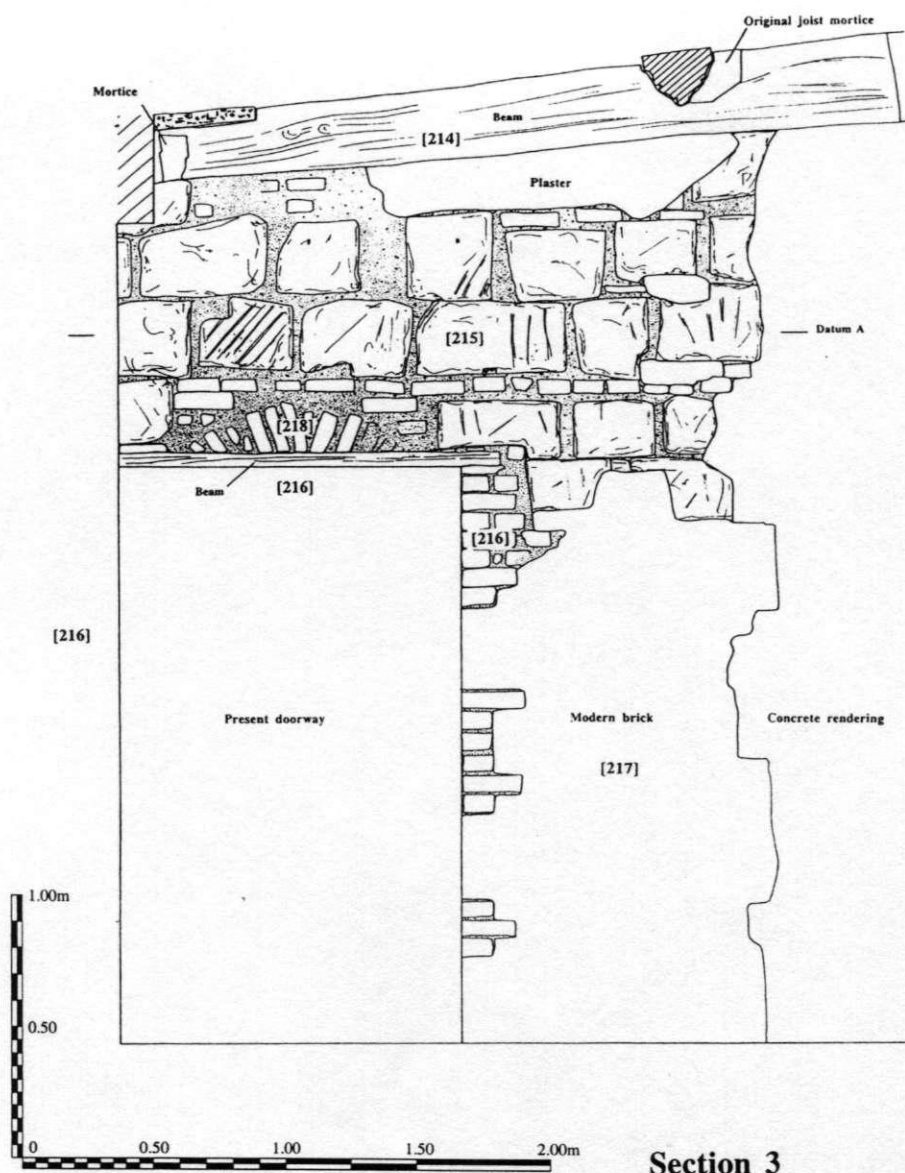


Figure 5 Upper Hall, internal elevation of north wall

re-setting of the roof ([219] re-build). In the centre of its span/the room [214] was laterally trimmed over a distance of 3.90m. Corresponding with an area of ragged wall masonry, this presumably marks the location of fireplace stack.

The north-facing elevation revealed the brick gable ([221]) and stone moulding ([220]) of the previously external face (fig. 6). The rolled moulding was carved in fine grained sandstone blocks up to 0.70m in length. This sat over [221] (constructed from orange-brown bricks average size 230 x 110 x 50mm) and appeared integral with it. Immediately above was [223], olive-yellow to grey brickwork (average size 220 x 100 x 60mm) which bedded at the same gable angle as the moulding. To the west a levelling course formed a bed for six courses topped by a sandstone capping. [223] was locally capped by concrete (and truncated), over which brickwork was later added to form a parapet (yellow bricks, average size 230 x 100 x 60mm; [222]).

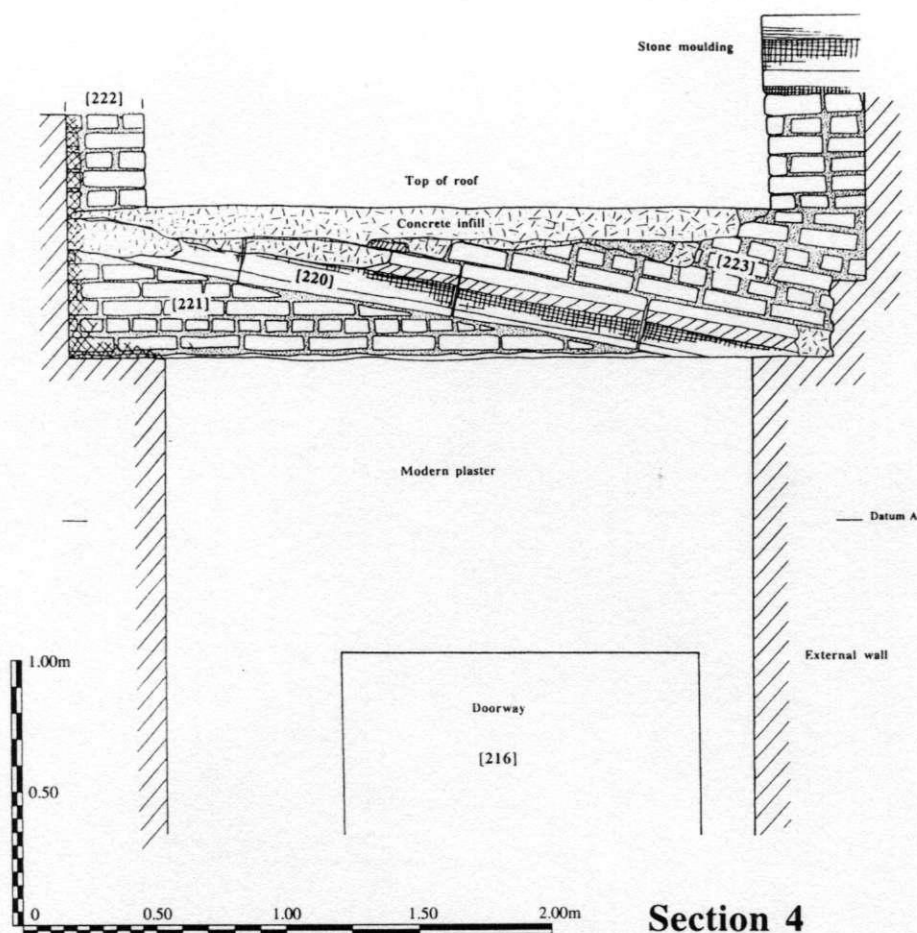


Figure 6 Upper Hall, external elevation of north wall

The external features of this part of the Upper Hall roof were eventually incorporated within and hidden by the short extension constructed to join it to the 1638 building to the northwest. At this time a square-headed doorway ([216]) was inserted, cutting out the earlier window frame. The brickwork visible around the opening suggests that these alterations date to the late 18th or 19th century.

The Outer Court Sondage

Great quantities of finds were noticed within the spoil from shallow service trenches cut by workmen across the eastern side of Outer Court during the current renovation programme. In the light of their situation beside the College Kitchens, it was thought that this material could mark the location of the College's, and potentially the Nunnery's, kitchen middens. Therefore, application was made to dig an exploratory 0.50 x .50m sondage through these deposits (fig. 1). Unfortunately, truncation by a pipe trench reduced the area of the archaeological coverage/sequence *per se* by c. 50%. The sequence proved to be 0.98m deep above the level of the sub-soil, a mid brown sandy gravel.

Beneath the level of the present cobbled surface ('A', 50-70mm thick), the sequence was (in reverse order of deposition; all [227]):

- B - Light brown 'gritty' sands with brick fragments (make-up for 'A').
- C - c. 0.30m depth of dark brownish grey/black sandy loam with oyster shell and charcoal fragments. Basically topsoil dumps such as found elsewhere across the College grounds (see Evans 1992 & 1995b). It is from this horizon that the vast majority of the recovered artefacts derived.
- D - A c. 50mm thick layer of crushed clunch and small fragments - probably an earlier courtyard surface.
- E - A 0.10-.12m thick layer of light brown sands - probably make-up for 'D'.
- F - Lying at a total depth of 0.51m, a 50mm thick layer of off-white sandy mortar with a smooth even surface.
- G - 0.16m depth of light yellow-brown 'gritty' sand - make-up for 'F'.
- H - A 50mm thick layer of sandy off-white mortar. Although its top was somewhat uneven, this was probably also a surface (total depth 0.70m).
- I - A layer of yellow-brown gritty sand - make-up for 'H' (40mm thick).
- J - A layer of mid brownish yellow sand - make-up? (50-60mm thick).
- K - A 40-50mm thick layer of grey sandy silt - weathering?
- L - A burnt surface 20-30mm thick of orange-brown sandy silt with extensive charcoal flecks and small fragments (total depth 0.85-.88m).
- M - A layer of greyish brown sandy loam 70-90mm thick. This must be a buried soil developed directly upon the natural.

As a measure of whether the sondage fell within an area of College-derived middening (as opposed to dumped material from an off-site source), its densities should be compared against those recovered from the 1m² test pit sampling programme undertaken during the 1992 Library evaluation (TP 1 - 8; falling itself within the area of a midden on that site, TP 7 is not included):

	<u>Range</u>	<u>Average #</u>
Pottery	10-35 pieces	21.3
Bone	1-25	8.8
Glass	0-13	5.3
Clay tobacco pipe	4-9	5

The following material was recovered from the topsoil dump layer ('C') within the Outer Court sondage. For the purposes of comparison these figures must be adjusted by a factor of eight to account for difference in sample size:

	<u>Range</u>	<u>Adjusted #</u>
Pottery	47 pieces	376
Bone	46	368
Glass	5	40
Clay tobacco pipe	17	136

As can be readily seen the sondage densities are far higher, especially if one bears in mind that this comparison includes all the material from the test pits as opposed to just Layer 'C' from the sondage. Whilst more comparable, the adjusted sondage densities are approximately five times greater than those of the 1992 test pit within the Library Site College-phase midden (TP 3): 73 sherds of pottery, 77 bones, 11 and 3 pieces of glass and tobacco pipe respectively (see Evans 1992: 14-16; fig. 2; and also 1995b: 16-22).

Also recovered from the sondage horizon were 18 pieces of oyster shell. Given this, the fact that the pottery largely consists of quality tablewares of 17/18th century date, and the overall extraordinary density of artefacts present, it does appear that this material derives from the College's kitchen middens (probably raked-out upon the laying of the cobbled surface; much material was also informally collected from the contractor's trench spoil, including a Jetton token of 15/16th century date).

The sondage equally demonstrated that this was not the site of the Nunnery middens. The sequence would seem to divide at 'F', the upper mortar surface; above which would seem to be College-related deposits (two pieces of bone and a 17-18th century orange/brown glazed ware sherd were recovered from horizon 'E'). Remarkably enough, only one find was made from the lower sequence, a plain body sherd, probably of 13-14th century date (from 'L'). While that horizon probably represents exterior trample upon the buried soil, the other two mortar horizons may well have been interior surfaces. Not only is this attribution based upon their character/matrix, but the cleanliness of the deposits could reflect regular sweeping/room maintenance. However, there are also strong arguments against such an interpretation. No buildings have been postulated/known within this area of the Nunnery and, more telling, no building rubble sealed the upper mortar surface 'F' which could have been expected had large-scale demolition occurred in the immediate area.

The only other plausible explanation for the sequence is that the division between the College and Nunnery falls lower (between 'H' and 'I'/'J' or 'J' and 'K'), which could be supported by the late date of the pottery in Layer 'E'. If so, the mortar spreads ('F' & 'H') could have been laid in association with early/primary College construction.

Discussion

Two opposing views exist as to the origins of the College buildings. One is that of near contemporary chroniclers such as Bishop West, and historians Sherman in the 17th and Willis and Clark in the 19th centuries. The indication within early College records (and confirmed to Willis and Clark by the ground plan) is that Bishop Alcock had his new foundation constructed directly on the skeleton of the Nunnery following the latter's substantial demolition. The Hall, Willis and Clark suggest, was built on the foundations of the Nun's thatched refectory to form the north side of the new Cloister Court (1886: 119-22). Nicholas West, Bishop of Ely 1515 - 1533, writing in the preamble of statutes drawn up some twenty years after Alcock's death in 1500, stated that:

"We find the College established and founded for one Master, 11 fellows and 6 boys, or, to speak more correctly, begun to be founded, and built and constructed afresh almost from the foundations upwards by the same Reverend Father."

(*ibid*: 117)

In 1959, however, the RCHME stated that the earlier commentators were incorrect in this interpretation and that most of the early College buildings were adaptations of those of the Nunnery, with little in the way of demolition.

".. the preservation of the Benedictine plans after change of use in 1496 and the survival of most of the buildings to the present day show Bishop West's and Sherman's statements to be incorrect."

(1959: 82)

The current phase of recording sheds light on this question, at least in relation to the Hall. Whilst the stairway footings were constructed only from rubble and mortar, the Hall and Kitchen range footings and main wall builds were characterised by the inclusion of brick and tile, elsewhere established as belonging to the Alcock period (Evans 1995a). This supports the apparently discredited view of the raising up of the new College buildings on the foundations of those of the Nunnery. Clearly there was a substantial re-use of Nunnery masonry, and some of this, for example the circular staircase, may indeed have been retained *in situ*. The main construction of the Hall, however, seems of 'College' attribution.

Whether or not it is right to extend the apparent confirmation of a recently unfashionable view can only be determined by further examination of buildings within the College. Recent investigations in the Chapterhouse have shown that elements of Nunnery structures do survive within the College fabric (Evans 1995a). The view that the College is merely an adaptation of the Nunnery rather than a re-build on the same ground plan, however, cannot on the presently available information be upheld.

The fabric of the Kitchen/Upper Hall range generally corresponds with instances of primary College construction recently exposed elsewhere in Cloister Court inasmuch as it reflects a massive 'shell-type' masonry

construction in contrast to interior timber-frame walls (e.g. the post-Chapterhouse rooms; see Evans 1995a). What distinguishes this specific range is a lack of re-used moulded stone and its relatively uniform large clunch block construction, which suggests 'fresh' derivation from a quarry source. This is somewhat surprising given the inferred demolition of the Nun's Refectory range. Yet this itself could reflect the expediency of Alcock's building - demolishing the Nunnery where necessary and re-using material to initially establish a range to house the fledging College (possible the eastern). Once operational, further construction could occur at a more relaxed pace which would then require 'site-imported' building materials.

The results of the Outer Court sondage also question established views of the site's development. What are mortar surfaces doing in the supposedly open-area of the Court? Diverse fragmentary observations - none of which are of sufficient scale to generate a 'new story' - they nevertheless challenge a number of accepted tenets of the College's history.

Acknowledgements

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