Senior Common Room Extension
St John's College Oxford

Archaeological Excavation Report

Oxford Archaeology

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St John's College
Senior Common Room Extension
St Giles
Oxford

ARCHAEOLOGICAL EXCAVATION REPORT

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SUMMARY

Oxford Archaeology (OA) undertook an excavation and watching brief at St John's College, Oxford prior to the construction of a new Senior Common Room extension. The excavation identified a late medieval soil horizon and pits, post-medieval quarrying predating the Baylie Chapel and the foundations of the free-standing kitchen block built in 1643. Structural elements and internal features of the 19th-century replacement kitchen were also recorded.

1 INTRODUCTION

1.1 Location and scope of work

1.1.1 Between 19th May and 9th June 2003, Oxford Archaeology undertook an excavation at St John's College, Oxford prior to the construction of an extension to the existing Senior Common Room (SCR) (Fig. 1). The development site, centred on NGR SP 5128 0668, necessitated the demolition of a car port and the SCR extension built in 1954/5, to be replaced with a larger SCR extension. Due to the impact of the development, Oxford City Council (OCC) required an archaeological excavation of the area affected, based upon the results of an archaeological evaluation previously undertaken by OA (OA 2003a). The excavation was undertaken in accordance with a brief set by, and a Written Scheme of Investigation (WSI) agreed with Brian Durham, OCC's Archaeological Officer. In addition to this report, it was agreed to publish the results of the excavation as a note in *Oxoniensia.*

1.2 Topography and geology

1.2.1 St John's College lies north of the historic core of Oxford, on the east side of St Giles. Within the college precinct, the development site lies to the east of the north quadrangle, within the 1950s Senior Common Room extension and bounded to the east by the President's garden.

1.2.2 The underlying geology comprises the southern spur of the Summertown-Radley gravel terrace, to the east of the River Thames and to the west of the river Cherwell. The site lies at approximately 64 m OD.

1.3 Archaeological and historical background

1.3.1 The following background is summarised from the entries for St John's College in the Victoria County History of Oxfordshire: Vol. III (OUP, 1954), 'An Inventory of the Historical Monuments in the City of Oxford' (RCHME, 1939) and 'The Early History of St John's College, Oxford' (Stevenson and Salter, 1939).

The structural sequence and brief history of the college buildings

1.3.2 St John's College stands on the east side of St Giles on the site of the former St Bernard's College. In 1437 Archbishop Henry Chichele founded the College of St Bernard for students of the Cistercian order, and this eventually formed the front quadrangle of the existing building. The chapel, to the south of the Baylie chapel and excavation area, was consecrated in 1530 and the last of the medieval work was undertaken on the east range, although this was unfinished and roofless in a survey of 1546. Following the Dissolution, Cistercian scholars remained at the college, at least until 1539. Thereafter it was occupied as an ordinary hall retaining the name of St Bernard's College although its members could not be monks. In 1546 the dean and chapter of Christ Church were granted St Bernard's College by the king and subsequently let the buildings.

1.3.3 Sir Thomas White acquired the site and buildings from Christ Church in 1554, with the condition that within three years he establish a college there. Construction continued until 1557, during which time the chapel, hall and rooms were furnished, the east range completed and the kitchen added to the north of the hall.

1.3.4 The outer library, on the south side of the present Canterbury quadrangle was built between 1596 and 1601; much of the building material came from the demolished White Friars' buildings, which had stood on the west side of St. Giles. The remaining ranges of the Canterbury quadrangle were built by Archbishop Laud between 1631 and 1636, incorporating the earlier south range (the outer library) which was extended at both ends. An organ loft was added to the north side of the chapel in 1619-20. Construction of the Baylie Chapel which bounds the southern edge of the excavation area was started in the 1630s but halted through the Civil War and was not completed until 1662 following the re-appointment of Baylie as President of the college.

1.3.5 The hall and chapel (see above) also form the north quadrangle's southern range, of which the senior common room is a component part (see below). The remaining buildings flanking the north quadrangle are Cooks Building (1642-3), which lies immediately to the north of the Kitchen; New Building (1881-1900) which forms the west range and fronts onto St Giles; The Rawlinson Building (1909) which forms the northern range and was extended south, along the eastern side of the quadrangle, in 1933; and the Beehive Building (1963) which replaced a range of buildings which were of 15th/16th-century origin, but had been much altered during the 18th and 20th centuries (RCHME, 1939). The Beehive Building bounds the northern limit of the excavation area.

The Senior Common Room

1.3.6 The Senior Common Room (SCR) forms a wing extending northwards from the organ loft. It was built in 1676 and is clearly shown behind the free-standing kitchen block on the view of the College by Williams in 1733 (Pl. 1). Considerable alterations were made to the area of the SCR during the presidency of Philip Wynter (1828-71). The building was extended northwards in *c*1835. Shortly thereafter, a

kitchen was added to the eastern side of the building replacing the former free-standing kitchen building (see below). This was subsequently demolished in 1954 and rebuilt as an extension to the SCR. It was this building that was demolished prior to the start of the excavation to be replaced by a new SCR extension. The primary SCR building remains although the exterior of the east wall has been much affected by the history of extension, demolition and rebuilding undertaken against it. This wall bounded the western limit of the excavation area.

The free-standing kitchen block

1.3.7 Both Loggan's and Williams' views of the college depict a free-standing kitchen block to the immediate north of the President's Lodgings and east of the chapel (Pl. 1). The date of its construction has been established as 1643 by financial records, which state that £550 was spent on "*the raising of the new chambers by the Kitchen and the new building neere to the President's Lodging*" (quoted in VCH 1954, 262).

1.4 Archaeological background

1.4.1 The earliest published reference to archaeological records within the college refers to the discovery within the north quadrangle of a '*section of a considerable ditch. The ditch ran approximately E-W and was about 10-12 ft. wide. The bottom was not reached, but the filling contained 18th century rubbish and a considerable quantity of Stonesfield slates*' (*Oxoniensia* 1943-44, 203). This brief note does not give any further location or depth details although it does suggest the 'ditch' was possibly of a 17th century origin or earlier and continues to speculate that it may have been related in some way to the Civil War earthwork defences *'though it does not fit with any known portion of these'* (*ibid*).

1.4.2 Similar discoveries have been made more recently to the north-east of the SCR within the grounds of the college during the redevelopment of the former Department of Rural Economy (Bell and Durham 1993). Here deep pits or quarries were excavated into the gravel from the 17th century through to the 19th century. Again it was unclear if the mid 17th-century feature was related to an unknown Civil War defence or was a gravel quarry.

1.4.3 Much medieval material has also been recovered on occasion around the college precinct as a result of building work. Due to the nature of work undertaken, these instances have often only taken the form of roughly located finds or poorly recorded/located features. However, perhaps the most significant and certainly the most coherent assemblage of pottery was recovered from excavations undertaken during the construction of the Dolphin Quadrangle range of buildings on the southern side of the college (*Oxoniensia* 1946-47, 169 and Jope *et al* 1950). Of particular note was a 12th-century well which produced a large collection of pottery and two wooden vessels associated with a coin of Henry II (1154-89). A 13th-century pit was also excavated and a large collection of medieval sherds was recovered from the spoil created during the construction (*ibid*).

1.4.4 The only other piece of archaeological work undertaken at the college that has produced significant archaeological remains occurred prior to the construction of the

Beehive building in the mid 1950s. The record of this work and its discoveries is limited to a short note of the presence of a *'...12th century pit and five smaller pits or wells of the 13th or 14th centuries....Foundations of the stables and other College outbuildings of the 16th century were also seen.'* (Case and Sturdy 1959). No other publication of this work has been undertaken and no archive exists other than a previously unpublished hand-drawn sketch plan by David Sturdy, held by OA. Although the plan exists only as a sketch, it shows the archaeology in relation to existing buildings and the Beehive building. It has been included in the illustration of this site to place these medieval features in relation to this excavation (Fig. 4). Although no records or finds exist to characterise the archaeological deposits shown, the plan clearly does show a level of pre-college medieval occupation and activity in the immediate vicinity.

1.4.5 Most recently, the redevelopment plans for the SCR led to an evaluation undertaken by OA (OA 2003a). The location of the former kitchen block was suggested by the discovery of a wall, although the dating evidence left doubt over its identification. Combined with the regularly occurrence of medieval finds and features within the immediate surroundings of the college grounds, this evidence formed the basis of the excavation considered here.

2 EXCAVATION AIMS

2.1.1 The evaluation had previously identified a wall within the vicinity of the expected location of the free-standing kitchen block. This resulted in targeted aims for the excavation to identify the wall and associated structure to establish if it was the kitchen building depicted on Loggan's 1675 map and Williams' 1733 drawing (Pl.1). Associated features of the building and deposits predating and post-dating its use would also be targeted for excavation to establish a chronology and use-history for the structure.

2.1.2 Within the area of the demolished SCR building, which was not available for evaluation prior to the demolition and excavation of the site, the aims were to identify and investigate, within the scope of the impact level, any pre-SCR archaeological remains that may relate to the medieval history of the college. Additionally, across the whole area of the site, it was also intended to establish the presence/absence of any pre-college deposits or structures that may have related to the medieval occupation of tenements fronting St. Giles.

3 EXCAVATION METHODOLOGY

3.1 Scope of the Fieldwork

3.1.1 The excavation comprised a main area bounded to the west by the standing SCR building and partially bounded to the north by the beehive building and to the south by the Baylie Chapel. The excavation area measured 13 m x 14 m with a rectangular area 3.5 m x 7 m extending off the eastern side. The line of a water main re-routing

to the east of the main area, linking to existing mains to the south-east, was also observed and recorded. Additionally, the position of a lift shaft pit, 2.0 m x 1.3 m, to be constructed within the standing SCR building, was archaeologically excavated to the surface of the natural gravel.

3.2 Fieldwork Methods and Recording

3.2.1 Following the removal of overburden under close archaeological supervision by a 12 tonne 360° mechanical excavator to the highest archaeological horizon, the excavation area was cleaned by hand and the revealed features were excavated to determine their extent and nature and to retrieve finds. The archaeological features were planned at 1:20 and, where excavated, their sections drawn at scales of 1:20. The construction level of the development foundations, other than the piling, was set at 62.68 m OD. Once all features had been archaeologically examined, the main excavation area was further machine excavated to the specified impact level under close archaeological supervision. The area was again planned at a scale of 1:20 to clarify some details only partially evident from the features recorded at the higher level. No previously unidentified features were revealed at the lower machine excavation level.

3.2.2 All features were photographed using colour slide and black and white print film. Recording followed procedures laid down in the *OAU Fieldwork Manual* (ed. D Wilkinson, 1992).

4 RESULTS

4.1 Description *(Figs 2 and 3)*

4.1.1 Removal of the overlying rubble hardcore within the area of the former SCR building and the mixed topsoil exterior to the demolished building revealed a sequence of features and structures (Fig. 3). Clearly evident from the machine clearance of the site was that the structure of the former SCR building had afforded a degree of protection to the underlying deposits in contrast to the area to the immediate east, which was heavily truncated and disturbed by redundant and live services, affecting the clarity of the archaeological features here.

4.2 Phasing

4.2.1 The activity on the site can be phased by a combination of the known historical dates of the surrounding buildings, those structures encountered within the site boundaries, stratigraphic relationships between features and the stratified artefact dating. The phase headings and associated periods are outlined below:

Phase 1 Late medieval
Phase 2 Late 16th/17th century
Phase 3 17th century
Phase 4 Late 18th/19th century
Phase 5 19th century

4.3 General

4.3.1 The surface of the natural gravel terrace was revealed across the northern portion of the site at the impact level after the secondary machine removal of the soil layers. The surface of the gravel was undulating with irregular-shaped depressions infilled with a mid red-brown silty deposit (505), possibly the *supra* natural-style deposit identified across the Oxford area. The irregular soil marks may represent treeholes although this was not confirmed by excavation. This sterile red-brown silty soil sealed the gravel to a maximum depth of 0.25 m, and was present across the area formerly occupied by the demolished SCR building. Elsewhere the full depth of soil had been disturbed or reworked in more recent times.

Phase 1 Late medieval

4.3.2 At the surface of silt deposit 505, the sterile soil graded into a reworked soil layer (652) of similar composition and also 0.25 m thick (Fig. 3, sections 509 and 515). This was slightly greyer than the underlying layer with occasional inclusions of charcoal, small fragments of limestone and gravel. A small quantity of pottery was recovered which, with the exception of two early post-medieval Brill-type sherds, consisted entirely of pottery dating to the 13th and 14th centuries with three sherds of possible 12th-century origin also present. The later sherds encountered suggest that this soil had been regularly disturbed or reworked throughout its history. To the east this soil had been subject to continual reworking and, while it was still clearly of the same origin, it had become much more humic with more recent finds incorporated

into the soil. All of the archaeological features were cut through the surface of soil layer 652.

4.3.3 The earliest archaeological feature identified was a large pit (511/517) in the north-western corner of the site, cut through by several different phases of foundation trench (Fig. 3, section 503). This appeared to be rectangular or sub-oval in plan although it was only partially exposed within the site boundaries. With a maximum depth of 0.5 m, the pit just penetrated the surface of the gravel at the southern end of the feature. The fill (510/516) comprised a dark brown clayey silt containing frequent small fragments of limestone, gravel and occasional charcoal flecking throughout and a small quantity of 14th-century pottery.

4.3.4 A heavily truncated medieval pit (547) was located 4 m to the south-east of pit 511/517. A later gravel quarry 529/542 had removed its southern extent although the remainder suggested a circular-shaped pit 0.45 m deep (Fig. 3, section 509). Its definition against the silty supra natural and soil horizon was poor and the fill (543) of the pit differed little from the uppermost soil level through which it was cut. A small assemblage of 15th-century pottery was recovered from the fill.

Phase 2 Late 16th/17th century

4.3.5 The southern limit of the site bounded by the Baylie Chapel and SCR was occupied by a large quarry (529/542) (Fig. 3, sections 509 and 515). This extended 9.5 m eastward from the SCR wall and 4 m north beyond the Baylie Chapel foundation and was clearly cut into the natural gravel although the fills were not excavated beyond this depth as this lay below the impact level of the construction. The backfill sequence comprised steeply-inclined tip lines of gravely brown clay-silt soils interspersed with tip layers of small limestone rubble fragments (525) and sand and gravel fills (528). A large portion of the quarry backfills had been truncated by the demolished 1950s SCR building, where a lowered floor area already existed at the impact level, resulting in only a small portion of the fill sequence remaining for hand excavation. However, the investigated sections produced a moderate assemblage of post-medieval pottery with quantities of residual medieval sherds also present. The quarry was completely backfilled and levelled before a pit (599) was cut through the top of the fills. This did not contain any dating evidence and was rapidly backfilled by a single deposit, which was cut through by the foundation of the Baylie Chapel.

Phase 3 17th century

4.3.6 *The free-standing kitchen block.* The eastern limit of the site was occupied by the substantial stone foundations of a building. Part of this, in the SE corner, was clearly of a build and location consistent with the location of the free-standing kitchen block shown by the drawing of the college by Williams (1733) (Pl. 1). The north and west walls of the kitchen block (593 and 602 respectively) comprised a single build utilising roughly hewn limestone facing blocks with a mixed limestone rubble core bonded with a yellow sandy lime mortar. The west wall was much truncated by modern services and a later pit (644) and the north wall had been partially robbed of its upper ground level courses (Fig. 3, sections 514 and 515). However, it was clear from the excavated sections that the foundation was trench-built and cut from the

surface of the reworked soil layer 652, demonstrating a general lack of soil accumulation or deposition from the late medieval period through to the time of the kitchen block construction. Only in section 514 did this differ slightly with two additional soil layers present overlying the reworked soil horizon (611). These comprised a silty soil layer and a limestone rubble layer (609 and 610) and were cut through by the foundation trench of the kitchen.

4.3.7 Excavation to the development impact level did not reveal the full depth of the foundations although a minimum of five courses were shown to exist. The north and west foundations differed in size with the north being a maximum of 0.75 m wide while the west was a maximum of 1.10 m. The west wall was constructed on a stepped foundation with the interior of the wall flush with the foundation and the exterior face set back 0.4 m from the outer extent. The north wall was constructed flush with the foundation on both faces. A maximum of two wall courses remained of the west wall and a single remaining probable wall course of the north wall and the backfill (651) of the foundation trench butted up against these wall courses demonstrating that the contemporary surface existed above the primary level of wall construction.

4.3.8 A small portion of the interior area was revealed (Fig. 3, section 514). Interior surfaces and features associated with the kitchen were absent although a mixed mortar deposit with small limestone fragments (608) was identified sealing the construction mortar in the foundation trench and butting against the first course of the north wall. This deposit may be viewed either as a result of falling construction debris, as the remnants of a bedding layer for a floor surface or as demolition debris. If demolition, then any floor surface must have been carefully removed prior to this deposit accumulating. Such an approach would probably have left recognisable remains, therefore, it is more likely that the deposit was related to the construction phase rather than demolition. An additional narrow section excavated by machine to re-route a water main across the approximate centre of the building interior was also observed (not illustrated), which confirmed this sequence of deposits extended across the whole interior and that no clear floor surfaces were present.

4.3.9 *The stone-lined kitchen drain.* During the course of machine excavating a service diversion trench to the SE of the excavation boundary, a substantial stone-lined drain (584) was revealed (Fig. 3, section 518). The construction trench was cut into the reworked soil horizon 652 and a mixed silty soil and mortar deposit with small limestone fragments (616) levelled the trench sealing the drain itself. This was constructed of reused structural and architectural masonry comprising three main components: faced sawn slabs were used for the base and capping, large regular blocks for the majority of the drain walls and smaller, often architectural pieces such as window fragments, also within the walls and capping. These were bonded with a hard whitish lime mortar set within a construction trench 0.50 m deep x 0.65 m wide. A 3 m length of the drain was recorded in the service trench aligned SE-NW although the drain could clearly be seen to be aligned N-S at either end of the 3 m section with the northern extent aligned on the projected SW corner location of the kitchen block. An internal drainage channel of 0.20 m x 0.20 m sloped down towards the President's Lodgings on a steady gradient dropping 0.06 m over 3.00 m

presumably to connect to existing drainage facilities of the kitchen it replaced. A 0.05 m thick deposit of dark purple fine silt filled the base of the drain at its northern limit nearest the kitchen.

4.3.10 *Wall 587.* A limestone wall (587) was identified along the extreme eastern edge of the excavation extension area. Although its relationship with the kitchen wall 593 had largely been removed by a robber trench, it appeared to abut the existing kitchen wall. Construction comprised limestone blocks in a dry bond 0.35 m wide and 0.35 m deep. No construction trench was visible on the western side of this foundation, due to the impact of the later structure 589 (Fig. 3, section 513).

4.3.11 *Stone-lined pit 573.* It is likely that the construction and use of a large stone-lined pit (573) located 2 m to the north of the kitchen block west wall also dates to this phase. As with other deep features across the site, excavation of the feature was limited to the level of construction impact making certain identification of the primary use and date of the feature difficult to establish. Excavation revealed a rectangular pit 4.6 m x 3.4 m (Fig. 2) with its long axis north to south with a neatly constructed dry-coursed limestone lining constructed flush against the pit sides with a slightly sloping inner face within the pit. A gravel-filled drain (640) appeared to flow into a brick-lined sump south of the pit at surface level although it was unclear if this was an overflow drain or if this related to the subsequent phase and replacement kitchen building. The stone-lined pit was cut into a mixed dark grey humic silt soil (574) which produced 17th-century pottery equivalent to the soils into which the foundation of wall 204 was cut. The deposit backfilling pit 573 is described in the subsequent phase below.

4.3.12 *Pit 514.* The only other feature of probable 17th century date was a sub-rectangular pit (514) located to the NW of the kitchen block (Fig. 2). This steep-sided pit was only partially revealed within the site boundaries with its northern portion being truncated by the foundations of the 1950's building bounding the site limit. The pit had a width of 1.9 m containing a sequence of four sandy silt fills (512, 513, 515 and 649) containing mortar, gravel and charcoal flecking. A complete book clasp (SF 500) decorated with a neat incised pattern was recovered from the upper fill (513) associated with a substantial assemblage of post-medieval pottery, suggesting the pit was infilled in the early 17th century.

Phase 4 Late 18th/early 19th century

4.3.13 *Kitchen block extension.* Wall 204 was constructed of rough limestone blocks set in a hard whitish mortar, and abutted the NW corner of the kitchen block (Fig. 2). It was set back 1 m from the line of the kitchen west wall to avoid the stone-lined pit (573) immediately to the east. The foundation was trench built to a depth of 0.8 m with the interior face flush against the trench and rubble debris and silty deposits backfilling the construction trench against the exterior face. The north-south section of wall 204 was 3 m long turning to the east towards existing garden wall 587. Just before the junction with the garden wall the extension wall (589) jutted out 1.5 m to create a small bay. In the bay a construction cut was visible around the exterior of the wall but this was not evident within the structure where a thin layer of mortar was present across the interior at the base level of the foundation above soil layer 591 suggesting that the walls were set within a pit-like lowered 'floor' area (Fig. 3, section 513).

This was not evident on the interior of wall 204 suggesting a different arrangement occurred within the interior space between the excavated sections.

4.3.14 Within the bay created by wall 589 a further short length of wall 0.8 m long and of the same build as 589 was positioned to create an internal division. This terminated at its southern limit as a post socket (605) with an internal dimension of 0.25 m x 0.25 m x 0.50 m deep positioned in line with the east to west length of wall 204. The eastern portion between the post socket and wall 587 contained a stone-lined chute neatly constructed of a single course of sawn limestone slabs 0.1 m thick angled downwards from the north towards the main building (Fig. 3, section 512). The ending of the chute was not investigated but this was unlikely to have extend beyond the line of the post socket as the projected angle of the chute slope coincided with the base level of the interior at this point. No deposits suggestive of the function and use of the structure were present and the interior area was subsequently backfilled with a deposit discussed below (Phase 5).

Phase 5 19th century

4.3.15 *The demolition of the free-standing kitchen block.* No deposits relating to the demolition were present within the building although a dump of contemporary transfer-printed ware pottery and humic soil (585/586) levelled the northern extension of the former kitchen (Fig. 3, sections 512 and 513), suggesting a demolition date of the mid-19th century. The robber trench (597) partly removing the upper courses of the north wall appeared to be a much more recent event with modern plastic coated wire within the backfill. This was also cut through the infill deposits of the lowered area against the north face of the wall.

4.3.16 The stone-lined pit (573) may also have been infilled at the same time as the kitchen demolition. The only fill encountered within this feature comprised broken stone roofing tiles within a loose reddish silt (571) which extended slightly beyond the limit of the pit itself at the surface level. Several small fragments of limestone column or pilaster from a window moulding were also incorporated into the backfill.

4.3.17 *The 19th-century kitchen building.* A replacement kitchen building was added to the eastern side of the SCR. Standing remnants of this structure remained as part of the passageway attached to the exterior of the east wall of the chapel (see Fig. 2). Foundation remains from this structure, demolished in 1954 to make way for an extension of the SCR, were also present at the southern end of the site as two short remnants of limestone wall (530 and 582). The western portion of wall 582 remained only as a bedding layer of gravely mortar 0.05 m thick (561). A gravel and brick-lined drain (640) located immediately to the east of the wall may also relate to this structure and possibly functioned with a similar gravel-filled drain (535) to drain rain water off this building although, as commented above, this may equally have had a primary function related to the stone-lined pit 573.

4.3.18 Three additional limestone structures (553, 563 and 575) relating to the kitchen building were constructed against the east wall of the SCR flush against, and partly over its foundation. The largest (563) was a rectangular foundation pad 2.4 m x 1.3 m constructed with large roughly hewn facing blocks with a rubble core. Although of

drystone construction, it was a substantial structure extending in depth beyond the level of development impact and excavation. Extending 1 m off the northern end of 563 was a single course of limestone blocks 0.4 m wide bonded in a hard whitish mortar (575). This was set in a shallow trench down to the upper level of the SCR foundation. Further to the north again and aligned with foundation 563 was a smaller foundation pad (553). This differed from 563, being constructed entirely of large limestone blocks bonded with a yellow sandy mortar.

4.3.19 Between the foundation pad structures was a small brick-lined fireplace (568). This was constructed partly against the north-eastern corner of 563 with the rear (west side) of the brick lining projecting off the eastern face of 563. Two courses of brick defining a fireplace 1.0 m x 0.5 m were set within a shallow rectangular pit 1.2 m x 0.8 m. A loose sandy mortar deposit provided a fire-proof base and bedding for the brick lining and the internal area contained a loose charcoal and ash deposit.

4.3.20 *Pit 509.* This pit, to the north of 553, can also be assigned to this phase. No associated secure dating material was present, although its relationship with the foundation adjacent to it suggest that they are contemporary. The irregular-shaped pit was vertical-sided and in excess of 0.7 m deep. It contained two distinct loose fills (507 and 508). The primary fill (508) entirely consisted of coal and charcoal fragments in a loose ashy silt. The uppermost fill was a loose brown ashy silt levelling the pit.

4.3.21 *Brick-lined pit 624.* A small excavation was undertaken within the SCR building against the former organ loft exterior wall. This located a single large feature cut up against the foundation of the wall. Constructed of a mix of 18th and 19th-century bricks in a dry bond (620), this feature comprised a deep rectangular brick-lined pit 1.0 m x 0.6 m at the surface (624). This was only brick-lined on three sides of the pit with the southern side against the foundation remaining as exposed natural gravel. The brick lining extended to the base of the pit at 1.0 m deep. This was infilled by a single very mixed deposit of loose creamy white sand and silt with mortar, limestone and plaster fragments throughout. Late medieval and early post-medieval bricks were also incorporated into the backfill with mixed animal bone and transfer-printed wares demonstrating the feature was backfilled after 1830.

5 INTERPRETATION AND CONCLUSIONS

5.1.1 The earliest evidence for occupation or activity from the site predates the foundation of St Bernard's College in 1437, and is consistent with previous discoveries in the area. Medieval tenements began to appear to the north of the city walls along St Giles during the 12th century (e.g. Bruce-Mitford 1939, Jope 1950, Andrews and Mepham 1997). The evidence predominantly consists of pits and wells associated with properties fronting onto St Giles. The earliest pottery from the SCR excavation also dates to the 12th century. Although appearing only as residual finds, the proximity of the important 12th-century assemblage recovered from a well to the south within St John's grounds (Jope 1950) demonstrates consistent evidence of occupation in the general vicinity at this time.

5.1.2 The two securely-dated 14th and early 15th-century large shallow pits cut to the surface of underlying gravel represent the final period of medieval tenement occupation fronting St Giles prior to the foundation of St Bernard's College. The scatter of pits recorded by Sturdy can also be seen in this context.

5.1.3 Ownership records survive from the survey of Oxford made in 1279, printed in the *Hundred Rolls* and also from a survey of the northern suburb made in 1291 preserved in a roll at Christ Church (Stevenson and Salter 1939, 16-18). These include the history of the tenements acquired or purchased by Chichele. Such tenements to the north and south were maintained within their late medieval boundaries until being progressively purchased by the College through the 16th, 17th, 18th and 19th centuries by which time they had acquired the street frontage of St Giles north of Trinity College up to the Lamb and Flag (*ibid.* 501). The pottery assemblage relating to the period of medieval tenement occupation on the site comprises typical coarseware cooking pots, jugs and jars reflecting the relatively low-status domestic nature of the area at his time. This is supported by the animal bone assemblage with a variety of animals represented but with a predominance of cattle and sheep/goat reflecting the common meat products consumed.

5.1.4 Archaeological evidence for the later medieval period contemporary with the foundation and occupation of St Bernard's college is generally lacking from the site. This may reflect the contraction of the domestic settlement of the suburbs to the north of the town as evident at other sites which show a marked decline in occupation in the 15th century (Bruce-Mitford 1939, Roberts 1995, Andrews and Mepham 1997). However, this area was acquired by the college during this period and the negative evidence may reflect its use as an open yard or stable area, which it was known to be from the 16th century (Stevenson and Salter 1939). Interestingly two fragments from a glass urinal may date to this period although they appear in a reworked soil horizon with later post medieval pottery and are likely to be earlier residual finds. Urinals are particularly common on monastic sites and St Bernard's was founded as a monastic college.

5.1.5 Following the foundation of St John's College in 1557 a more continuous sequence of activities related to the college was identified. The earliest was a large gravel quarry, the backfills of which were cut through by the foundations of the Baylie Chapel and the 17th-century SCR. The moderate-sized quarry would have provided a convenient source of sand and gravel for the college suitable for the many small-scale structural additions and alterations undertaken prior to the mid 17th century.

5.1.6 Although its true extent remains unproven by excavation, the quarry itself was unlikely to have extended much further to the west, as the small trench investigated within the SCR against the organ loft exterior wall encountered undisturbed natural gravel. To the south, the quarry would also have been restricted by the late medieval Chapel. The pottery recovered from the backfill and the clear relationship with the surrounding buildings point to a latest backfilling date in the early 17th century although the feature may conceivably been in use from any date after 1550 to the early 17th century. The infilling of the quarry is unlikely to have occurred much after the end of its functional use and the fill sequence suggests a rapid backfill of dumped deposits. The material that was incorporated into the backfill shows an distinct

change from the characteristics of the earlier medieval domestic assemblage. A predominance of Frechen stoneware jars and Surrey Border wares indicate higher status consumption with the stoneware jars all likely to have derived from wine vessels. The increased affluence is also reflected by the animal remains which include almost all the identifiable fowl and bird bones from the site. These include duck which, as a controlled natural resource, was not commonly available to other than residences or establishments of some status. Such an assemblage of fine table wares, drink and food stuffs probably reflects waste from the college kitchens. The occurrence of a tapestry or drape ring within these deposits similarly suggests that the waste was likely to have derived from within the college grounds. Similarly a fine book clasp recovered from the 17th-century pit to the north may have derived from the college library although the reason for discarding it was not apparent as it was in very good condition.

5.1.7 College accounts document that the construction of the free-standing kitchen block was in 1643. The quarry was levelled by this time although the larger western foundation of the new kitchen building suggests this may have been considered at the time of the construction and built as a stronger foundation to avoid any potential subsidence. To the south of the kitchen, a sizeable stone-lined drain was constructed entirely of reused architectural and structural masonry. Such reuse of building materials was a common practice for the college buildings whose ownership of land and properties included the redundant and dilapidated medieval buildings of Whitefriars on the opposite side of St Giles from which permission was obtained in 1595 to recover materials for the construction of the library (VCH 1954). It remains possible that the drain was constructed with materials also recovered from this source, as possible medieval fragments were identified within the structure. The absence of significant internal surfaces or deposits relating to construction, use or demolition of the kitchen building must also reflect the careful removal of all useful materials to be reused elsewhere.

5.1.8 Apparently associated with the kitchen, the stone-line pit (573) to the immediate north of the kitchen remains enigmatic in its function. Its depth was not established by excavation although its large surface size (4.6 m x 3.4 m) suggests it was not a well. Very similar sunken stone structures have been recorded at the excavation to the rear of properties 35, 36 and 37 on Beaumont Street (Poore and Wilkinson 2001). Here they were of 19th-century construction and were interpreted as cellars for the storage of beer or coal, with others as water containers collecting run-off from drains. Similar examples have also recently been recorded in the context of stables at Merton College (OA 2003b) and at The Horse and Jockey public house (Munby pers. comm.). The example at Merton was clay-lined and positioned to collect water draining off an adjacent building, presumably to act as a water trough and supply the stable yard with a water source for the horses. It has been suggested that the example at The Horse and Jockey may have been a drainage sump for collection of horse urine (Munby *pers. comm.*).

5.1.9 The comparative examples appear to have a wide range of uses, although the examples associated with either a kitchen or stable yard are particularly interesting as the example here exists in a similar context. While it could have functioned as

drainage sump, the apparent absence of an impermeable lining means this interpretation should be taken with caution, given the limited depth of the excavation. Furthermore, had it originally been furnished with a lead lining, this would certainly have been removed when the pit went out of use, and before it was backfilled.

5.1.10 It is suggested therefore, that in the context of the pit's proximity to the kitchen, and postulating an original lining (whether of clay or of lead), the pit may have served as a small 'stew pond' common in monastic precincts, where fish were stored (alive) for days until they were needed by the kitchen.

5.1.11 An extension on the northern side of the kitchen block was added probably in the 19th century as it is absent from Faden's map of 1789 and had been positioned to avoid the stone-lined pit. By the time Hoggar produced his map in 1850 the free-standing kitchen, extension and garden wall had been demolished and replaced by President Wynter's new kitchen attached to the SCR. The deposits infilling the extension consisted largely of rubbish rather than building debris although the infill of the stone-lined pit (573) to the immediate north did include much Stonesfield roofing stone and some slate. The brick-lined pit inside the SCR was also backfilled at this time. It is from these backfill deposits that the largest assemblage of wine bottle fragments and fine tableware, some marked 'St John's College' and others with a painted crest, was recovered. Indeed, the quantity of kitchen or food related debris particularly within deposits 585 and 621 suggests these features were backfilled directly with rubbish from the free-standing kitchen block shortly before it was demolished.

5.1.12 Structural remains of the 19th-century kitchen building were well preserved. The limestone pad foundations and fireplace against the SCR wall could represent the placing of a boiler in the kitchen with a chimney stack extending up the face of the SCR wall. The larger pad foundation (563) would have held the boiler, formed a chimney stack and the support for an arch over the fireplace to the smaller foundation (553) which may also have supported a chimney stack. More recent fireplace and chimney recesses were evident above these structures at first floor level and probably relate to the 1950's SCR building.

6 CONCLUSION

6.1.1 Although limited in the extent and depth of investigation, the excavation has achieved its aims. The medieval pits and associated modest finds assemblage support the impression of fairly low-intensity late medieval occupation in the area. The college building programme is alluded to by the quarry pits, and the footings of the 17th-century kitchen have been identified. The re-use of architectural stone - indicated by historical records, has also been confirmed. Although all trace of the kitchen's internal structure has been removed, the contemporary finds assemblage reflects the elevated status of the new college environment. Finally, evidence of the demolition of the kitchen and the construction of its successor supports the documentary evidence.

7 ACKNOWLEDGEMENTS

7.1.1 The entire project, including this report, was funded by St John's College. The author would like to convey appreciation to the College for their co-operation and enthusiasm throughout. The archaeological project was managed for OA by Jon Hiller. Steve Lawrence ran the site, and would like to express his gratitude to the members of the archaeological team for their efforts. The text was written by Steve Lawrence and edited by Jon Hiller. The illustrations are by Julia Moxham.

8 THE ARCHIVE

8.1.1 The project archive is currently held by Oxford Archaeology, and will be deposited with Oxfordshire Museum Service under the Accession Code OXCMS 2002.224.

9 APPENDIX 1: POTTERY

by Duncan H. Brown

Introduction

A modest total of 313 sherds was recovered from 34 contexts. The pottery was sorted by context and ware type, then vessel type and vessel form, and the following attributes were recorded: sherd type, glaze colour and distribution (earthenwares only), decorative placement, decorative technique, decorative motif, rim diameter. The material was quantified by sherd percent, weight in grams, sherd count and maximum vessel count. The presence was also noted of sherds from the same vessel that were recovered from different contexts.

Provenance

Table 1: *Pottery quantities by context, with the terminus post quem (tpq) provided by the earliest date for the latest piece of pottery recovered.*

Feature Number	Feature Type	Context	TPQ	Rim Percent	Weight (g)	Sherd Count	Vessel Count
114	Made ground	114	1250	0	4	1	1
207	Made ground	207	1550	4	67	3	3
215	Pipe trench	214	1650	0	113	6	4
216	Made ground	216	1550	11	233	9	7
301	Made ground	301	1550	7	130	3	2
509	Pit	507	1550	0	10	2	2
514	Pit	512	1550	73	1539	15	4
514	Pit	513	1350	0	16	2	2
514	Pit	515	1550	0	1	1	1
520	Wall	519	1250	7	14	1	1
547	Pit	543	1400	14	126	21	19
548	Foundation trench	550	1400	0	8	1	1
564	Construction cut	563	1550	0	71	5	1
573	Pit	571	1750	0	7	1	1
574	Layer	574	1550	10	126	8	6
585	Layer	585	1800	299	1476	83	12
586	Layer	586	1600	0	23	1	1
608	Layer	608	1250	0	28	2	1
624	Pit	621	1800	72	271	24	5
652	Layer	504	1550	5	173	23	23
652	Layer	518	1250	0	127	7	3
652	Layer	534	1250	8	11	1	1
652	Layer	556	1500	0	155	12	10
652	Layer	611	1200	0	10	1	1
652	Layer	613	1250	0	11	2	2
511/517	Pit	510	1350	10	203	16	16
511/517	Pit	516	1300	0	147	16	16
529/542	Quarry pit	525	1550	0	83	9	7
529/542	Quarry pit	526	1550	0	32	5	4
529/542	Quarry pit	527	1550	0	43	2	1
529/542	Quarry pit	528	1550	0	37	5	5
529/542	Quarry pit	540	1550	0	35	5	5
529/542	Quarry pit	541	1400	7	115	13	13

Feature Number	Feature Type	Context	TPQ	Rim Percent	Weight (g)	Sherd Count	Vessel Count
529/542	Quarry pit	604	1550	28	356	7	5
Totals				**555**	**5801**	**313**	**186**

The five pottery-producing contexts in the evaluation trench (contexts 114 to 301) comprise mainly layers built up deliberately and are likely therefore to contain mainly residual material. Context 114 is the only one of the five that did not produce post-medieval pottery, but a single three-gram sherd is scarcely sufficient reason to date this deposit any earlier than 1550, which is the earliest possible date for the other contexts. A date after 1700 is actually more likely, and contexts 207 and 214 are linked by cross-fitting sherds of a post-medieval redware jar, which suggests that these layers are part of the same depositional process.

The excavation revealed 29 pottery-producing contexts and most of these are also likely to be post-medieval in date. Most of those deposits that have a *tpq* in the 13th century produced too small a quantity of material to ascertain a medieval date, and it may be safer to characterise these as residual finds. The jug handle in a high medieval sandy ware, recovered from layer 608, is a typical example, and this also applies to context 519 and also those layers classified as belonging in the 652 group, namely 518, 534, 611 and 613. Pit 511/517 did produce a meaningful quantity of medieval pottery, including a late sandy type, and this feature probably does date from the 14th-century. Context 543, the fill of a likely pit 547, also produced a relatively meaningful quantity of later medieval pottery, including a fragment of a late medieval sandy ware lid, which may date this deposit to the 15th century, or possibly earlier. The only sherd from context 550 gives a *tpq* in the 15th century but this is a residual piece within the foundation trench of the SCR building constructed in the 17th century.

Pit 514 produced relatively large quantities of pottery, including Surrey Border ware, post-medieval redware and Frechen stoneware, all of which provide a *tpq* of 1550. Pit 509 may also belong in the same period, but although Frechen stoneware and Surrey border ware are both chronologically diagnostic types, there is only a single small sherd of each, and these may well be residual. This may also be true of the sherds (all originally a single fragment, possibly broken in excavation) of Frechen stoneware recovered from context 563. This context is associated with a buttress built against the Senior Common Room, which itself was constructed in 1676, a date towards the end of the currency of Frechen stoneware in this country. Surrey Border ware and Frechen stoneware also provide the best dating evidence for the fills of the quarry pit 529/542, which consequently have a date-range of 1550 to 1700, although there is a moderate amount of residual medieval material also present. Sherds of the same Frechen stoneware vessel occur in contexts 525 and 527. Layer 574 also has a *tpq* of 1550. It produced Frechen stoneware, blue-painted English tinglazed ware and post-medieval redware, and a 17th century date is more likely.

The remaining two features, pits 573 and 624, are later. Pit 573 produced a single sherd of refined earthenware that must be later than 1750, while pit 624 produced large quantities of transfer-printed ware that provide a date after 1830. A similar date may be given to context 585, which also produced large quantities of transfer-printed ware, including fragments marked 'St John's College', and others with a painted crest.

The final group of contexts represent soil horizons, including the single group identified as 652 and layer 586. A wide range of material came from 652, and apart from two sherds of post-medieval Brill-type ware in context 504, and a sherd of post-medieval sandy ware in context 556, all the pottery is medieval in date. Layer 586 produced a single fragment of white tinglazed ware.

Wares

Table 2 gives quantities and date ranges of all the ware types identified. The medieval fabrics have not been characterised too closely but no unusual types are present amid the typical range of coarse and sandy wares, mostly from local sources. There are, similarly, no surprises among the post-medieval and post-industrial wares. Post-medieval redware is a common type, as it is everywhere in the south of England after c.1550 or 1600. Frechen stoneware is well represented, usually in the form of narrow-necked jugs that were often used as wine bottles. They were current from c.1550 to 1700 and these examples must relate to activities typically associated with high status sites such as Oxford colleges.

Table 2: Quantities and date ranges of all ware types identified

Ware type	Earliest date	Latest date	Rim %	Weight (g)	Sherd count	Vessel count
Cotswold shelly	1100	1350	0	21	2	2
Medieval coarseware	1100	1400	0	8	1	1
High medieval coarseware	1200	1350	0	30	3	3
High medieval coarseware	1250	1400	18	137	12	12
High Medieval coarse sandy ware	1250	1400	9	170	20	20
High medieval sandy ware	1250	1350	10	376	51	47
High medieval highly decorated	1250	1400	0	29	2	2
Brill-type ware	1250	1380	0	215	23	19
Late medieval sandy ware	1350	1500	14	166	13	12
Tudor Green	1400	1500	0	1	1	1
Brill Post-medieval	1500	1700	0	141	6	5
Post-medieval redware	1500	1700	57	1819	24	12
Post-medieval sandy ware	1500	1600	31	381	7	5
Surrey Border ware	1550	1700	15	137	10	9
Frechen stoneware	1550	1700	30	353	24	15
Tinglazed ware, blue painted	1550	1800	0	26	3	1
Tinglazed ware, plain white	1600	1800	0	23	1	1
Porcelain	1650	1800	0	62	9	2
Creamware	1740	1880	88	580	26	5
Refined earthenware	1750	1900	0	7	1	1
Garden pottery	1750	1900	9	12	1	1
Transfer printed refined earthenware	1800	1860	274	1107	73	10
Totals			**555**	**5801**	**313**	**186**

Table 3 shows the range of vessel types represented in each ware. The high quantity of unidentified sherds among the medieval wares illustrates the fragmentary nature of that material, and this is a further indicator that it is mainly residual. Although there is more medieval pottery than that of any other period, as represented by vessel count (see Table 2), the average sherd weight is nine grams, and this too is an indicator of how residual it is likely to be. Those pieces that can be identified are largely from jars or cooking pots and jugs. There is, as usual, greater variety among the post-medieval pottery, including large bowls or pancheons in post-medieval redware, a blue-painted ointment pot in English tinglazed ware, plates in refined earthenware and porcelain tea-bowls or cups. Vessel type for much of this material, however, cannot be identified.

Table3: Range of vessel types represented in each ware

Ware type / Vessel type	Bowl	Flower pot	Jar	Jug	Lid	Mug	Plate	Unidentified	Total
Medieval coarsewares			9					29	38
Medieval sandy wares	1			20				28	49
Brill-type ware				6				13	19
Late medieval sandy ware				1	1			10	12

Tudor Green								1	1
Brill Post-medieval				1				4	5
Post-medieval redware	2		4					6	12
Post-medieval sandy ware	2							3	5
Surrey Border ware			2					7	9
Frechen stoneware				11		1		3	15
Tinglazed ware, blue painted			1						1
Tinglazed ware, plain white								1	1
Porcelain	2								2
Creamware	2		1					2	5
Refined earthenware	1								1
Garden pottery		1							1
Transfer printed refined earthenware	2						8		10
Totals	12	1	17	39	1	1	8	107	186

Conclusion

This small assemblage cannot inform any very complex interpretations of material consumption at St. John's College. The post-medieval pottery doubtless relates to activities within the college, including storage, in the form of earthenware jars, food preparation, with pancheons, and dining, as represented by refined earthenware plates.

10 APPENDIX 2: GLASS

by Rachel Tyson

A total of 42 fragments of glass were recovered from excavation. These included three small fragments of medieval window glass; the remaining glass consisted of post-medieval vessel and window fragments, the majority being of the 19th and 20th century. A complete listing of the assemblage can be found in Table 1.

Three fragments of window glass (ctx. 574) displayed traces of red-brown painted lines, medieval in technique. Unfortunately the poor condition of the glass made the design and the original colour of the glass indistinguishable. Nor did any of these fragments retain any grozed edges to suggest the original shape of the quarries. Cleaning and further analysis at a conservation laboratory may give a clearer indication of the design, but the small size of the fragments makes it unlikely that any meaningful design will be revealed.

Nine fragments of pale greenish window glass were post-medieval in date. Three of these fragments fitted together to indicate a lozenge-shaped quarry with diamond-cut edges (ctx. 621), a technique which dates it to the 16th century onwards when diamond-pane glazing became the norm in glass windows.

A few fragments of early post-medieval vessels were found, including two rim fragments from a urinal (ctx. 216), possibly the earliest fragment of vessel glass found here. Urinals were introduced into England in the 13th century and were used until at least the end of the 16th century, disappearing in the 17th century. They were used to inspect urine for daily prognosis as well as to diagnose health (Tyson 2000, 149-53). The base of a pedestal flask (ctx. 527) dates to the 16th or early 17th century. This would have been a relatively large vessel, with a long neck and bulbous body and sitting on a folded pedestal base with a hollow base ring. The base of a small bottle or flask (ctx. 203) is also 16th or 17th century in date.

Four fragments came from early wine bottles of the late 17th or 18th centuries (ctx. 207, 214), but 22 fragments, over half the assemblage, were from 19th and 20th-century bottles. These encompassed wine bottles, a pale green-blue bottle with flattened sides used for a variety of contents, and an 'egg bottle', a 19th century type developed to withstand the pressure from carbonated drinks (Talbot 1974).

Table 1. Complete listing of glass

Context	Context date and description	Number of frags.	Glass description	Glass date
203	=207 Uppermost soil levels of ?redeposited soils cut through by construction of wall 204	1	Base fragment of badly weathered glass, now crystallised and covered by opaque and iridescent surface layers. Slightly kicked base. **Small flask or bottle**. Base diameter c. 50-60 mm.	?16th-17th C
207	=203 Uppermost soil levels of ?redeposited soils	2	Body fragments of thick glass, now covered by opaque brown weathering. Probably **bottles**.	?Late 17th C onwards
214	Fill of service trench =637	2	Olive green **wine bottle** body fragments with opaque surface weathering.	Late 17th-18th century
214	Fill of service trench =637	1	Pale green-blue shoulder fragment from **bottle** with flattened sides.	19th-20th C
216	Possibly lowest soil level over undisturbed gravel	2	Adjoining rim fragments of very pale greenish glass, from **urinal**. Everted rim, upturned at edge. Covered by opaque iridescent surface weathering. Rim diameter c. 85-90 mm.	16th C or earlier, possibly early 17th C
515	Fill of circular pit 514	5+	Small crumbly **window** glass fragments covered by yellow	Post-med: 16th C

Context	Context date and description	Number of frags.	Glass description	Glass date
			crystallised layers and iridescent surfaces. Originally pale greenish. Th. c. 1.1 mm.	onwards
527	Fill of quarry 529/542	1	Over half of kicked base of pale greenish glass with folded base ring. **Pedestal flask** or possibly jug. Broken at top of base ring where flares out to form body. Covered by iridescent weathering. Pontil mark on underside of pointed kick. Base diameter 88 mm.	16th-early 17th C
541	Fill of quarry 529/542	1	Fragment of flat pale greenish glass, either **window** (in which case could be Medieval), or from the flat wall of a vessel such as an 18th-C octagonal **wine bottle**. Covered by crystallised/ iridescent layers. Th. 4 mm.	?
571	Fill of stone-lined structure 573	2	Olive green fragments from **wine bottle** shoulder. Good condition.	19th-20th C
571	Fill of stone-lined structure 573	1	Amber fragment from **bottle** neck. Good condition.	19th-20th C
574	?Soil layer cut by the pit of 573	2	Adjoining fragments of pale green thick-walled '**egg bottle**' for carbonated drinks.	Second half of 19th-poss early 20th C
574	?Soil layer cut by the pit of 573	1	Olive green **bottle** body fragments.	19th-20th C
574	?Soil layer cut by the pit of 573	3 (and tiny flakes)	Fragments of **window** glass, now completely crystallised with opaque surfaces. Trace of red-brown painted pigment, not easily distinguishable below surface concretions and weathering. Th. 2 mm.	Medieval
585	Infill of stone-lined chute	4	Adjoining fragments of green **wine bottle** base and lower body. Base diameter c. 110 mm. Two tool marks on underside of high domed base. Slight constriction just above base.	Second half 19th, possibly early 20th C
585	Infill of stone-lined chute	7	Olive green **wine bottle** fragments including lower body and shoulder. Approx. 110 mm diameter, constricted just above base.	Second half 19th, possibly early 20th C
585	Infill of stone-lined chute	1	Amber shoulder/lower neck fragment of **bottle**.	19th-20th C
621	Mixed backfill of brick-lined feature within the standing SCR	3	Olive green **wine bottle** body fragments.	19th-20th C
621	Mixed backfill of brick-lined feature within the standing SCR	3	Three adjoining bubbly pale green **window** fragments, with 2 adjacent diamond-cut edges (at an angle of 60°) indicating lozenge-shaped quarry. Th. c. 1.5 mm.	Post-med: 16th C onwards

11 APPENDIX 3: CERAMIC BUILDING MATERIAL

by Terence Paul Smith

Introduction

The building materials recovered were mostly ceramic, but with some stone also present. The ceramic materials show various fabrics. These are considered under the various forms.

Building Material Forms

Bricks

Fabric *b1* is orange and sandy with some calcium carbonate. It is by far the most common of the brick fabrics and appears to have a wide date range, possibly from the Tudor period to the 19th century. Some of the material consists only of abraded fragments, and only one complete brick is present: this measures 228 x 109 x 71mm. The two other complete breadths are 106mm and 109mm. Thickness ranges from 47mm to 72mm (median 63mm). Probably the thinner ones are of early, perhaps Tudor, date. The thickest are probably of 19th century date. The latter include a brick with a longitudinal pressure-mark from where it was stacked (skintled) for secondary drying while still slightly too soft. Pressure marks of this form are usually of the 18th century or later. Another has a lateral kiss-mark, formed by contact with another brick during firing.

Fabric *b2* is pink and fine with off-white silty streaks and chalk lumps. Only four examples are present, none complete. Breadths range from 104mm to 110mm and thickness from 62mm to 69mm. Some have sharp arrises. All are probably of 19th century date.

Fabric *b3* is orange and fairly sandy with yellowish silty streaks. One fragment with a breadth of 107mm and a thickness of 58mm is present. A date between the Tudor period and the end of the 17th century is most likely, though not certain.

Fabric *b4* is orange and quite fine with very slight streaking. A single fragment with no complete dimensions was present. It is possibly residual Roman material.

Fabric *b5* is off-white and moderately sandy with some pink surfaces, probably due to slight over-firing. A single fragment has a thickness of 68mm. Its date is uncertain.

Fabric *b6* is orange, hard, and moderately sandy with calcium carbonate and black iron oxides. A single example was recovered, measuring 230 x 103 x 45mm. Almost certainly it was intended for use as a paviour and is probably of 18th or 19th century date.

It is likely that bricks in fabric *b1* are fairly local products: brick manufacture in Oxfordshire is known from the later middle ages onwards (bond et al 1980, 2–7). Some of the other bricks, especially any of 19th century date, may have come from further afield, although there was a flourishing Oxfordshire brickmaking industry in those later centuries (Bond *et al* 1980, 8–21 and map at 22).

Early roofing tiles

Three small fragments of early roofing tile were found in a distinctive coarse sandy fabric (here fabric *t2* but similar to museum of London fabric 2273: Betts 1990, 220–9, Smith 1998–9, 66–70). These fragments are 17–18mm thick and show a slight curve. They are probably from curved tiles which were used with flat flanged tiles something like roman *tegulae* and *imbrices*. The presence in Oxford of early roofing tiles of various forms in this same fabric is already known from excavations at All Souls College (Smith 2003). They were

used in the 12th and early 13th centuries and must be residual here. They were used on buildings of status, mostly ecclesiastical, sometimes secular. The fact that the fabrics of these tiles are similar over a very wide area of the country probably reflects deliberate choice of raw materials, possibly with the addition of coarse sand, rather than widespread distribution from a single manufacturing centre.

Plain (peg) tiles

Numerous fragments of plain tile (often called 'peg tile', though they might be fixed with nails or even with small bones as well as with pegs) were recovered. They are in fabrics *t1* (orange, sandy with some calcium carbonate: similar to *b1*), *t3* (orange, fairly sandy with yellowish silty streaks), *t4* (dark red, sandy), *t6* (light brown with some sand and abundant chalk inclusions), and *t7* (orange, fine with few inclusions); one fragment is underfired and its fabric unclear. No complete lengths or breadths are preserved. Thicknesses range from 11mm to 20mm (median 14mm; mode also 14mm). One example has greenish-brown cover-glaze and is probably of medieval date. It is impossible to date the other pieces. Only one peg/nail hole is present: it is circular and tapers from 18mm diameter at the upper face to 12mm at the lower face. One example shows what may be a child's fingerprints in the upper face. In a few cases the fragments are possibly from ridge tiles rather than plain tiles. Most fabrics are represented by a single fragment and fabric *t1* accounts for the majority (65 per cent by weight, 76 per cent by count) and this fact, together with the similarity of *t1* to *b1*, suggests that these tiles are fairly local products.

Ridge tiles

Ridge tile (or probable ridge tile) fragments are in fabrics *t1* and *t3* (see plain tiles, above) and in fabric *t5* (orange, fairly sandy with some calcium carbonate, possibly a variant of *t1*). No complete lengths or breadths are preserved; thicknesses range from 11mm to 20mm (median 13mm). Some show brown cover-glaze, and may be of medieval date, although they have a recent appearance.

Floor tiles

One decorated floor tile fragment is present. It is in fabric *f5* (orange, fine with very little quartz). It is decorated in dark brown on red with what appears to be a tendril pattern, although it is too damaged for certainty. Only its thickness of 22mm is preserved. It is probably an English product of 14th or 15th century date.

Several plain-glazed tiles are present, in fabrics *f1* (orange, sandy with some calcium carbonate, similar to *b1*), *f2* (orange, sandy with some silty streaks), and *f4* (orange, sandy with abundant calcium carbonate). Glazes, some badly worn, are buff or green; in some cases the top faces are completely worn but traces of glaze (brown or green) survive on the edges. One example has its green glaze over white slip; another has buff glaze and a small nail hole (1mm diameter) in one corner, reflecting its particular method of manufacture; both are probably imports from the low countries and of 14th to 16th century date. Other examples are probably of English manufacture and of similar date. No full dimensions are preserved; thicknesses range from 12mm to 32mm but the two thinnest (12mm and 15mm) are badly worn and more representative is the range of the less worn examples, 18–32mm with a median of 23mm.

Two fragments of unglazed tiles with vertical rather than bevelled edges were recovered in fabric *f3* (orange, sandy with abundant silty streaks). No full dimensions are preserved; they are 19mm and 24mm thick. The fabric suggests import from the Low Countries, while the absence of glaze indicates a post-medieval date. But the straight edges are unusual and these tiles may be English products using similar raw materials.

Stone roofing

Pieces of two grey limestone roofing 'slate' are present. They are 14mm and 15mm thick; no other dimensions are present. Each has a round nail hole, 7mm and 9mm in diameter. Such 'stone slates' were available from the quarries at Stonesfield, only 12 miles away, and were much used on Oxford buildings down to the early 20th century (Clifton-Taylor 1974, 407).

True slate is present in two types. There are two pieces of green (probably west country) slate, 7mm and 10mm thick; no other dimensions are preserved and there are no nail holes in the surviving portions. Also present is a small fragment of welsh slate, varying in thickness with a maximum of 8mm. All these may well have been used for roofing, although slate had other uses too, particularly the welsh slate, which might be used for shelving, sinks, and (from the 19th century) damp-proof courses.

Stone paving

Two fragments of paving flagstones are in oolitic limestone, perhaps from Taynton near Burford. One has a breadth of 180mm and a thickness of 30mm; the other, which is badly worn, has a thickness of 24mm. The sides are vertical, not bevelled.

Context	Fabric	Form	Wt (gm)	No.	Dimensions (mm)	Comments
107	?	Wall tile	60	1	T =18	Modern white-glazed bathroom tile; letters NT in back
203	?	?	20	2		Unidentifiable fragments
207	B1	Brick	100	1		
207	F4	Floor tile	80	1	T = 23	Plain green glaze over slip
207	?	?	100	4		Unidentifiable fragments - perhaps brick or peg tile
211	B1	Brick	1380	6		Fragments; mortar on broken edges
211	B2	Brick	1820	3	?x 104 x 62; ? x ? x 64	Mortar on broken edges
211	B5	Brick	260	1	T = 68	
211	T1	Peg tile	260	1	T = 18	Round hole; mortar on broken edges
212	B1	Brick	740	2	T = 63; T = 67	
212	B3	Brick	1000	1	? x 107 x 58	
212	S1	Roofing?	520	1	T = 8	8 mm is max. thickness
212	S2	Paving	750	2	? x 180 x 30; ? x ? x 24	1 sawn edge; edges not bevelled; thinner example badly worn
213	B1	Brick	580	2	T = 66	Sharp arrises
213	B2	Brick	740	2	? x 107 x 69; ? x 110 x 69	Sharp arrisses
213	T1	Peg tile	60	1	T = 13	
214	T3	Ridge tile	300	1	T = 16	Smooth curve
214	F1	Floor tile	50	1	T = 12	Top worn; buff glaze on bevelled edge
214	F2	Floor tile	430	1	T = 25	Plain buff glaze, badly worn; nail hole 1mm diam.
214	F3	Floor tile	600	2	T = 19; T = 24	Unglazed; non-bevelled edges
216	T2	Peg tile?	40	1	T = 15	
216	F1	Floor tile	140	1	T = 15	Top worn; brown glaze on bevelled edges and bottom
216	?	?	40	1		Burned ceramic fragment
301	B1	Brick	400	1	T = 55	Mortar on broken edges
301	T1	Peg tile	160	2	T = 14; T = 15	
500	F5	Floor tile	220	1	T = 22	Decorated dark brown on red; tendril design?
504	T1	Peg tile	30	1	T = 13	
504	?	?	30	3		Unidentifiable fragments
510	T1	Peg tile	210	6	T = 14 (x 4); T = 15 (x 2)	Some near T2
510	T2	Curved tile?	260	3	T = 17 (x2); T = 18	No glaze
512	?	?	40	1		Unidentifiable fragment

Context	Fabric	Form	Wt (gm)	No.	Dimensions (mm)	Comments
513	B1	Brick	50	1		Fragment
515	B1	Brick	40	1		Fragment
516	T1	Peg tile	80	2	T = 14; T = 15	
516	T2	Peg tile?	80	1	T = 15	Greenish brown cover-glaze
516	T6	Peg tile	100	1	T = 14	
516	T7	Peg tile	30	1	T = 14	
518	T1	Peg tile	60	1	T = 12	Abraded
525	B1	Brick	650	10	T = 47; T = 48; T = 49; T = 50; T = 53	Abraded fragments
525	T1	Peg tile	430	5	T = 11; T = 12; T = 15 (x2); T = 20	
525	?	?	450	29		Unidentifiable fragments
526	T3	Peg tile	380	2	T = 17; T = 18	
526	T5	Ridge tile?	140	2	T = 13 (x2)	1 with brown cover-glaze - but possibly fairly recent; both possibly peg tile
528	T3	Peg tile	60	1	T = 13	
543	?	Peg tile	40	1	T = 12	Overfired
568	B1	Brick	3040	1	228 x 109 x 71	Lateral kiss-mark on 1 stretcher face
571	B1	Brick	1620	3	? x 106 x 72; ? x ? x 70	1 with longitudinal pressure mark
571	T1	Peg tile?	80	1	T = 16	Or ridge tile?
571	S3	Roofing	740	2	T = 7; T = 10	
571	S4	Roofing	680	2	T = 14; T = 15	Round holes, 7 mm and 9 mm diam.
574	T3	Peg tile	60	1	T = 12	
585	S1	?	10	1		Thin sliver
604	B4	Brick	280	1		Fragment; possibly residual Roman
604	?	Peg tile?	60	1	T = 12	Underfired
604	T1	Ridge tile	700	3	T = 11 (x2); T = 20	1 with brown cover-glaze - but looks fairly recent
604	T4	Peg tile?	220	1	T = 18	Or ridge tile?
604	T4	Ridge tile	160	1	T = 16	
609	F1	Floor tile	120	1	T = 32	Plain green glaze, badly worn; edges only slightly bevelled
613	T1	Peg tile	20	1	T = 11	
620	B1	Brick	1430	1	? x 106 x 64	
620	B6	Brick	2150	1	230 x 103 x 45	Paviour
620	T1	Peg tile	160	1	T = 14	Possible child's fingerprints on top face
621	F1	Floor tile	140	2	T = 18 (x2)	Top faces worn; brown glaze (x1) and green glaze (x1) on bevelled edges

12 APPENDIX 4: ARCHITECTURAL STONE

by Edmund Simons

Introduction

A small quantity of worked masonry and architectural fragments were recovered from four redeposited contexts across the site. The earliest dated fill was the quarry infill deposit (525) from the late 16th to early 17th century. The most significant coherent group was represented by a collection masonry blocks and fragments reused for the construction of a large drain (584) serving the free-standing kitchen block. The construction date of the actual drain remains debatable although it is likely to date from the early history of the building in the mid 17th century. Demolition backfill and levelling deposit 571 dates from the mid 19th century levelling of the site prior to the construction of the 'new' president's kitchen against the SCR. The fragments recovered from fill 621 also date from the mid 19th century.

Descriptions

The fragments are recorded by context and, where relevant, by individual small find identification numbers.

Context 525

A sub-rectangular piece made from a low-grade brown shelly limestone containing numerous fragments of bivalve shells. The piece is rhomboidal in section with three unsymmetrical worked faces surviving. The rear face and much of the bottom of the stone have been damaged and the fragment clearly once belonged to a far larger piece (the surviving piece is 187 mm by 85 mm by 50 mm). No tooling marks remain. The piece may have formed part of a moulding but too little survives for detailed attribution or dating.

A small fragment of red (burnt?) low grade friable shelly oolitic limestone *c* 50 mm by 60 mm. This has one flat worked face all other faces are broken and heavily damaged.

Context 571

Three fragments of moulding made of a fine white shelly limestone. The pieces are all broken drums from a column or pilaster of a window moulding. The longest piece is *c* 180mm in length and retains parts of each worked end. It seems likely that the other components were once the same length. The diameter of the column shaft is *c* 70 mm on each piece. These are not plain shafts but support the mutilated remains of projecting stone extensions on one face. These extensions are at right angles to each other and are asymmetrical with one side being wider (at 40 mm) than the other (at 25 mm). The narrower of the projecting strips has a channel behind it, which runs parallel with it along the shaft. The wider strip is much mutilated on all examples but clearly extends further than its more narrow neighbour.

These fragments are clearly part of an elaborate moulding, perhaps a surround to either a window or door, or possibility from a fireplace or internal stone fitting such as a wall cupboard, or sedelia. The narrow channel between the projecting strips, however, appears to be made to secure glazing. The fragments are most likely to belong to a window. The narrower of the side strips runs around the window opening while the larger allows the window to project out from the wall. This increases the window's definition as well as giving the impression that the column shafts are free standing. The fragments are too small and undecorated to be diagnostic although the narrow shaft and projecting columns indicate a 13th or 14th century date.

Two fragments (the larger 70 mm by 90 mm, 30 mm in depth and the smaller 60 mm by 70 mm and 30 mm in depth). Both are almost rectangular although this is fortuitous as the fragments are broken on two sides. Made of a fine white nearly oolitic limestone, which is partially fossiliferous, the fragments have a worked front and back (no tool marks are visible) with a cut off edge forming a triangular profile along one edge. The pieces may have formed part of a moulding but too little survives for detailed attribution or dating.

Context 584

Small Find 512
A large slab of oolitic limestone 620 mm by 180 mm by 45 mm with a chamfered long edge. The opposite side has an irregular chiselled depression along half its length. A bent hand-made iron nail on the chamfered side may relate to a fitting. The irregular areas of chiselled work may relate to demolition removal of the object prior to its reuse.

Small Find 513
A trapezoidal block of fine white oolitic limestone 345 mm by 111 mm by 220 mm and broken at one end. This block was clearly originally a wedge shaped piece with smooth and very neatly dressed faces possibly forming the frame of a window or door (of unknown date). Although the block is broken the damaged end retains a small area of its end face showing the original length was 345 mm. The fragment has suffered somewhat (presumably during or after its removal from a building). A gouge has been roughly pecked into one face and an arch shaped scar on the underside is a roughly chiselled surface into the (then broken) block.

Small Find 514
A roughly square block of fine white oolitic limestone 100 mm by 140 mm by 120 mm. It is clearly broken on at least two faces and the damage on these faces appears to show that it has been chiselled out. One side is neatly smoothed with a small projecting strip of moulding (semi-circular in section and broken at one end). On the face opposite this the stone in one corner has been cut away and a channel has been cut into the corner (this side is much mutilated and difficult to interpret). The fragment is too small to be diagnostic but it would appear to be the jamb of a door or window of unknown (possibly medieval) date.

Small Find 515
A flat stone slab 300 mm by 320 mm surviving to a depth of 70 mm and made of a good quality white oolitic limestone. This stone has been heavily damaged on its rough sides and may have originally been far larger but has become split resulting in the slab. The treatment of the surface is unlike the other blocks from this context and has been sawn on all sides leaving ripples on the surface. It date and function are unknown.

Small Find 516
A large sub-triangular fragment of white oolitic limestone 160 mm by 270 mm by 390 mm. This has been heavily damaged and the triangular shape is the product of damage and wear, not the original design. A narrow plain square strip of moulding along one edge of the smoothed side (20mm wide) is all that remains of any decoration. The piece may have formed part of a moulding but too little survives for detailed attribution or dating.

Context 621

Two fragments of moulding each made from a white shelly limestone. The larger piece is clearly a much damaged section of the junction between the soffit and the hood of a shallow cusped arch. The high angle of the outer moulding compared with the lower of the soffit may suggest a trefoil cusped head, although the piece is too fragmentary to be certain of this. This is suggestive of a 15th- or early 16th-century origin.

The smaller piece is made of identical material and consists of a flattened strip backed by a shallow inverted dished face. Much of the back of the fragment has been destroyed although a little of the mirror side of the surviving face survives and the piece may have been symmetrical. If so it may have formed part of the shaft of a window mullion. This form of mullion may be seen from the 15th to 17th century (and, in Oxford, often on later buildings also).

Conclusions

The larger part of this assemblage was not architecturally diagnostic and all the fragments were recovered from re-used or redeposited contexts. Some of the items may actually have derived from medieval structures such as the fragments from fill 571, which were possibly part of an elaborate moulding, perhaps a surround to either a window or door. The significant assemblage recovered from the stone-lined drain serving the free-standing kitchen block was also not diagnostic to a certain period or structure although it was clearly derived from a moderately substantial stone building of good finish. Interestingly, the entire drain was constructed of re-used items demonstrating the demolition of and the recycling of building material. This was a common practice for the college buildings whose ownership of land and properties included the redundant and dilapidated Whitefriars on the opposite side of St Giles from which permission was obtained in 1595 to recover materials for the construction of the library (VCH 1954).

13 APPENDIX 5: METAL FINDS

by Leigh Allen

Introduction

A total of 19 metal objects were recovered from the excavation. These comprise 10 copper alloy objects and 9 iron objects, each of which have been x-rayed. The copper alloy objects are in a reasonable condition, but the ironwork is highly corroded and fragmentary. The assemblage dates from the late medieval/post-medieval period.

Description

The metalwork items have been described according to phase.

Phase 2

Three copper alloy lace tags were recovered from the backfill (contexts 525 and 528) of a gravel extraction quarry (529/542). Two of the lace tags are of the same form; cylindrical with the edges folding inwards to secure the lace. This form is common in the 16th and 17th centuries. The third tag only tapers slightly along its length and has a small perforation at the upper end for a transverse rivet. The edges abut and only overlap at the base. This form tends to date to the 15th century. A crude ring with a flattened hexagonal section also from the fill of the quarry pit is probably a drape ring used to hang tapestries or curtains. An iron nail together with three non-diagnostic fragments of sheet were also recovered from the quarry pit fills

Phase 3

A complete copper alloy book clasp (SF 500) was recovered from context 513, the fill of pit 514. The clasp comprises a decorated upper-plate secured by a single rivet to a plain back plate. The upper plate is hooked at one end and serrated and expanded at the other. The decoration is in the form of fine incised lines in a herring bone pattern at the serrated edge around three circular perforations. The hooked end has fine incised lines and a rocker arm pattern on it. The head of the rivet forms the centre of a concentric circle motif. Book clasps were riveted into position on the cover of the book to keep them closed and the hooked end of the clasp would hook over a bar which would have projected on a fitting from the edge of the opposing cover. They are fairly common objects and date to the later medieval/post-medieval period. A slender copper alloy sewing pin with a spherical head (SF 501) was also recovered from context 513. Two iron nails were also recovered from this pit from context 515.

Phase 5

Three iron objects, all highly corroded, were recovered from context 585/586, a dump layer used to level the northern extension of the former kitchen. The only identifiable objects are a whittle-tang implement with the remains of a wooden handle, a copper alloy shoulder plate and a flat, rectangular toothed plate in the same plane as the tang. The teeth are square cut with a depth of 0.5 mm. The implement resembles a carding comb but the handles are generally at an angle to the toothed-plate. The remaining two objects are both incomplete; one object has a circular section shank with the remains of a plate or blade at one end, and at the other end (also broken) the shank forks into two. This could be the broken stub of a sub-rectangular loop and traces remain of wood at the forked end. The other object is a slender rod with a loop at one end,

Five objects were recovered from context 571, the only fill excavated within the stone-lined pit 573. The objects comprise a nail, a knife and three copper alloy pins. The knife, which is highly corroded, has a scale-tang with traces of wood adhering to the tang and a long straight-sided blade. The pins are all slender pins with spherical heads, used either for fastening clothes and head-dress or in needlework.

Discussion

The assemblage from the excavation is small and rather unremarkable with the objects being very corroded and incomplete. Although the assemblage includes personal accessories, tools and structural items, the majority were recovered either from the gravel extraction quarry or the 19th-century levelling of the kitchen block and only provide information on the deposition of redundant items or 'rubbish' across the site. The only notable object was the book clasp (SF 500) recovered in good condition from a 17th-century pit (514) to the NW of the kitchen block.

14 APPENDIX 6: ANIMAL BONE

by Emma-Jayne Evans

Introduction

A total of 335 (3264 g) fragments of animal bone and teeth were excavated from the site; refitting the broken fragments reduced the number to 286 fragments.

Methodology

All the animal remains were counted and weighed, and where possible identified to species, element, side and zone (Serjeantson 1996). Also, fusion data, butchery marks, gnawing, burning and pathological changes were noted when present. Ribs and vertebrae were only recorded to species when they were substantially complete and could accurately be identified. Undiagnostic bones were recorded as small (small mammal size), medium (sheep size) or large (cattle size). The separation of sheep and goat bones was undertaken using the criteria of Boessneck (1969) and Prummel and Frisch (1986), in addition to the use of the reference material. Where distinctions could not be made, the bone was recorded as sheep/goat (s/g). The condition of the bone was graded using the criteria stipulated by Lyman (1996). Grade 0 being the best preserved bone and grade 5 indicating that the bone had suffered such structural and attritional damage as to make it unrecognisable.

The quantification of species was carried out using the total fragment count, in which the total number of fragments of bone and teeth was calculated, and this figure broken down to the total number of fragments identifiable to each species. In addition the minimum number of individuals (MNI) was calculated using the zoning method (Serjeantson, 1996). The elements used for working out MNI do not include ribs, vertebra, loose teeth, tarsals and carpals.

Tooth eruption and wear stages were measured using a combination of Halstead (1985) and Grant (1982), and fusion data was analysed according to Silver (1969). Measurements of adult, that is, fully fused bones were taken according to the methods of von den Driesch (1976), with asterisked (*) measurements indicating bones that were reconstructed or had slight abrasion of the surface. Withers heights were calculated using Teichert (1975).

Results

Condition

The condition of the bone was good, with the majority of the bone scoring 1 or 2 using Lyman's grading as shown in Table 1. The good condition of the bone has allowed for butchery marks, gnawing marks, burning and pathologies to be noted, and for measurements to be taken on many of the bones.

Table1: Condition of animal bone

	Condition				
Phase	1	2	3	4	Total
1	39.2%	60.0%	0.8%	-	100.0%
2	50.7%	48.0%	1.3%	-	100.0%
3	58.3%	37.5%	4.2%	-	100.0%
5	45.0%	50.0%	-	5.0%	100.0%
Unphased	53.8%	46.2%	-	-	100.0%
Overall condition	46.5%	51.7%	1.4%	0.4%	100.0%

Species Representation

Species identification was possible with 46.5% of the total number of fragments. As shown in Table 2 sheep/goat dominate the assemblage, making up 45% of the total identifiable fragments. As only three elements were positively identified as sheep, two from phase 1 and one from phase 2, they have been incorporated with the sheep/goat category, although it is likely that all the sheep/goat remains from the site are of sheep.

Cattle are the next most abundant species at 25.5% of the total identifiable fragments, with the remaining species present in relatively low numbers. The minimum number of individuals shown in Table 3 also indicates that sheep/goat are present in greater numbers than cattle, possibly a reflection of the importance of sheep/goat over cattle. The good preservation of bones from this site and the presence of smaller animals and birds indicates the good recovery of smaller bones, which may have increased the number of sheep/goat bones recovered.

Table 2: Total number of bones and teeth identified to species and phase

Phase	**1**	**2**	**3**	**5**	**Unphased**	**Total**
Sheep/goat	18	20	17	2	3	60
Cattle	10	4	5	11*	4	34
Pig	4	-	1	-	-	5
Horse	4	-	-	-	-	5
Dog	7	-	-	-	1	8
Cat	2	-	-	-	-	2
Domestic Fowl	3	4	-	-	-	7
Chicken	-	5	-	-	-	5
Domestic Goose	-	1	-	-	-	1
Duck	-	1	-	-	-	1
Mallard	-	1	-	-	-	1
Bird	-	3	1	-	-	4
Unid.	82	36	24	7	4	153
Total	**130**	**75**	**48**	**20**	**13**	**286**

* Six fragments likely to belong to one individual

Table 3: Minimum number of individuals

Phase	**1**	**2**	**3**	**5**	**Unphased**	**Overall MNI**
Sheep/goat	2	2	2	1	2	9
Cattle	1	1	1	2	1	6
Pig	1	-	1	-	-	2
Horse	1	-	-	-	1	2
Dog	2	-	-	-	1	3
Cat	1	-	-	-	-	1
Domestic Fowl	1	1	-	-	-	2
Chicken	-	2	-	-	-	2
Domestic Goose	-	1	-	-	-	1
Duck	-	1	-	-	-	1
Mallard	-	1	-	-	-	1

Phase 1

Phase 1 produced the largest number of bone fragments, with 36.9% of those fragments identifiable to species. All mammals present were represented in this phase, but only domestic fowl represented the birds.

The age at death using tooth eruption and wear stages provided very limited information, with the age at death only being ascertained for one sheep/goat mandible, giving an age of 5 - 8 years. Fusion data also provided very little ageing information, with all identifiable bones either missing their articular ends, or being fully fused. The only unfused bones were unidentifiable vertebra and an unidentifiable tibia.

Measurements were taken on a total of 14 bones, from all species represented except pig and horse. Fragmentation, and the small number of measurable bones present, has only allowed for wither heights to be calculated on one sheep metatarsal, giving a height of 0.54 m. This is relatively small for sheep from the medieval period (Bond and O'Connor, 1999), although as this information is based on just one measurement, it cannot be taken as representative of the entire population.

Butchery marks are present on 10 bones from this phase, with sheep/goat and cattle being the only identifiable bones with these marks. Other than 2 ribs, the butchered bones primarily consist of long bones that have been chopped, probably for marrow extraction. A cattle humerus and a sheep/goat humerus also have cut marks associated with dismemberment (Binford, 1981).

The only pathology noted from this phase was that of a horse sacrum which had slight porosity, eburnation and osteophytic lipping on the cranial articulation, characteristic of osteoarthritis.

Phase 2

The only mammals represented from this phase were sheep/goat and cattle. Bird bones account for 38.5% of the total identifiable bones from this phase, with all except three identifiable to species. At least one of the chickens present is a male, identified by the presence of a spur on the tarso-metatarsus.

There are no mandibles present from this phase, therefore no ageing data could be gained from tooth eruption and wear stages. Fusion data gives minimal information, due to the small sample size and limited number of bones with articular ends present. The presence of a fusing sheep metatarsal, suggests an age at death at around 20-24 months, and an unfused lumbar vertebra suggests an age at death before 4-5 years. An unfused domestic fowl humerus suggests that at least one bird died young, as did another unidentifiable bird. All other relevant bones present are fully fused.

Measurements were taken on a total of 17 bones, from all the species represented. No complete sheep/goat or cattle long bones were present from which to obtain withers heights.

Butchery marks were identified on 19 bones from this phase, on all species represented except the domestic fowl and mallard. As well as being chopped through probably for marrow extraction, a cattle humerus and a sheep/goat tibia had cut marks associated with dismemberment (Binford 1981). The cut marks on the chicken, domestic goose and duck occur around the articulations of the long bones, likely to have been caused by dismemberment.

Pathologies were noted on 2 bones from this phase, a cattle humerus with periostitis on the shaft and a sheep/goat metatarsal with a raised ridge of bone along anterior aspect of the shaft, likely to be caused by a non specific localised infection of the periosteum.

Phase 3

This phase produced less variety in the species represented, with sheep/goat, cattle and pig representing the mammals, and only one unidentifiable bird bone.

Age at death from tooth eruption and wear stages could only be ascertained for one pig mandible, giving an age of immature. As with the other phases from this site, fusion data can only give limited information as to the age at death of the animals due to the small sample number. Unfused sheep/goat vertebra suggest an age at death at before 4-5 years, a fusing distal femur gives an age of 3-3.5 years, as does an unfused proximal tibia.

Measurements were taken on one cattle metatarsal, and ten sheep/goat bones, although no complete long bones were present to determine withers heights.

Butchery marks were noted on a total of 21 bones, the majority being on sheep/goat. All the sheep/goat bones had been chopped, probably for marrow extraction, and one had cut marks likely to have occurred from filleting (Binford, 1981). A cattle lumbar vertebra had also been chopped and a rib had cut marks.

Pathological changes were noted on one sheep/goat radius, which had osteophytic lipping on the proximal articulation.

Phase 5

All the bones from Phase 5 came from one context (621) in a single pit. This phase had the least number of identifiable bones, and is the only phase in which the total number of cattle remains is more than sheep/goat. It may be suggested that the reduced number of sheep/goat bones from this phase is due to the lack of recovery of small bones from this context, as no other small animal or bird bones were recovered.

No mandibles were present in which to gain age at death from tooth eruption and wear stages, and fusion data was only available for cattle. One cattle scapula was fused, indicating an age at death at greater than 7-10 months, and six cattle bones are were deemed to be foetal/neonatal by their unfused state and size, and are likely to belong to the same animal. The foetal/neonatal mandible is partially burnt on one side. Measurements could only be taken on one cattle scapula

Butchery marks were notes on three cattle and two sheep/goat bones. Of the cuts on the cattle bones, one scapula had been cleanly cut/sawn through the neck, and the cervical vertebra from the neonatal had been chopped through the sagittal plane. One of the sheep/goat femurs had been chopped probably for marrow extraction, and along with the other femur had cut marks on the linea aspera.

Discussion

Unfortunately, even though the preservation of the animal bone from this site is good, the small sample size only allows very limited information to be gained from analysis. It would be unwise to try to determine specific animal husbandry regimes from any of the phases represented, so only general conclusions can be made.

The nature of the assemblage suggests that these remains are of general household domestic waste, although very little information can be gained as to consumption patterns for any of the phases. It may be feasible to say that sheep/goat were the more dominant species from all phases other than phase 5, which is even more limited in its information as all the bone came from only one context. The main domestic animals are represented, cut marks on which

suggest they were processed for consumption, and birds were also part of the general diet of the population.

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16 APPENDIX 8: SUMMARY OF SITE DETAILS

Site name: Senior Common Room Extension, St John's College, Oxford
Site code: OXJSCR03
Grid reference: NGR SP 5128 0668
Type of investigation: Area excavation
Date and duration of project: May/June 2003
Area of site: *c* 200sq m
Summary of results: medieval pits, post-medieval kitchen and associated features
Location of archive: The archive is currently held at OA, Janus House, Osney Mead, Oxford, OX2 0ES, and will be deposited with Oxfordshire County Museums Service in due course, under the following accession number: OXCMS 2002.224

0 500m

1:12500

Figure 1: Site location

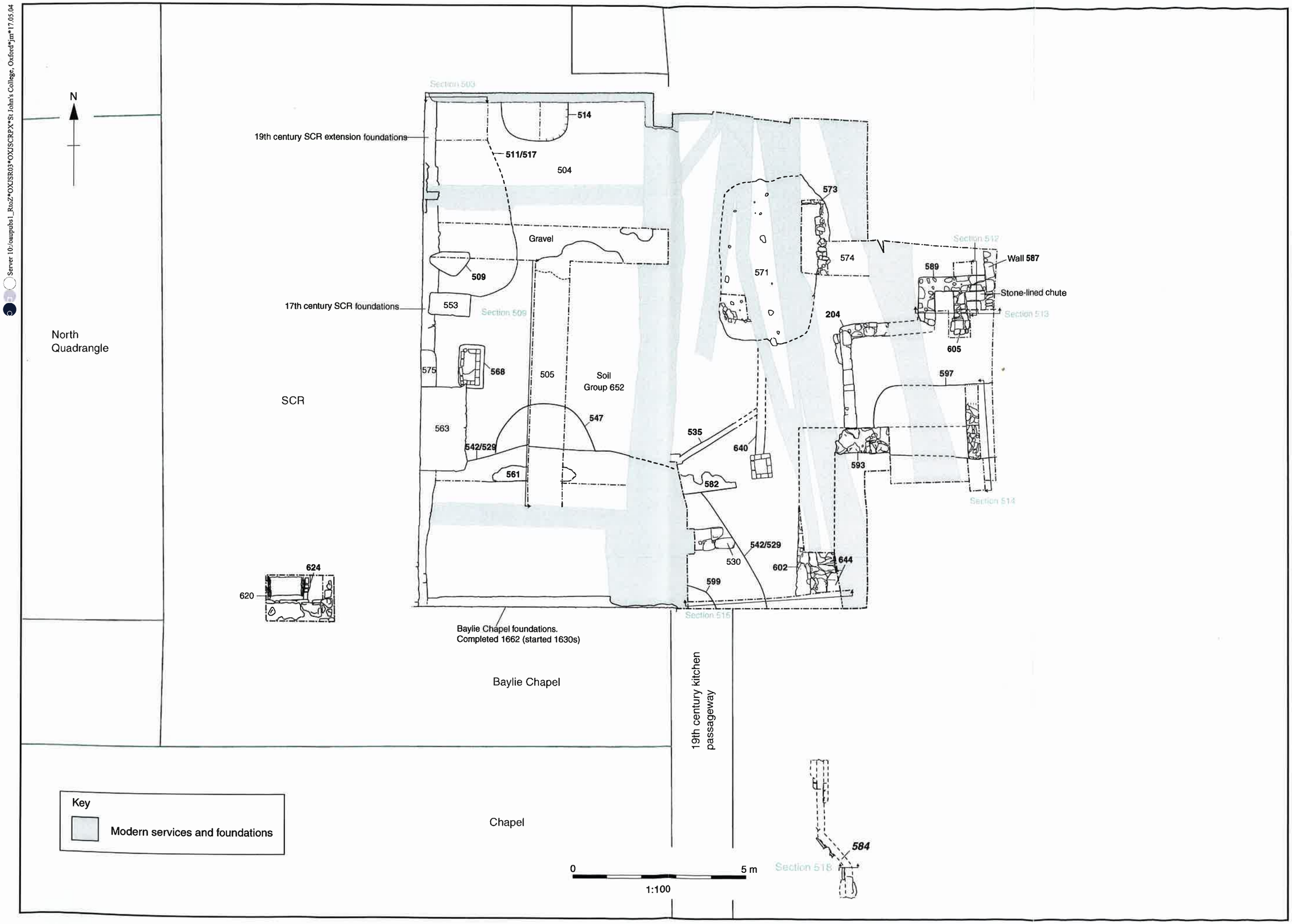

Figure 2: Detailed site plan

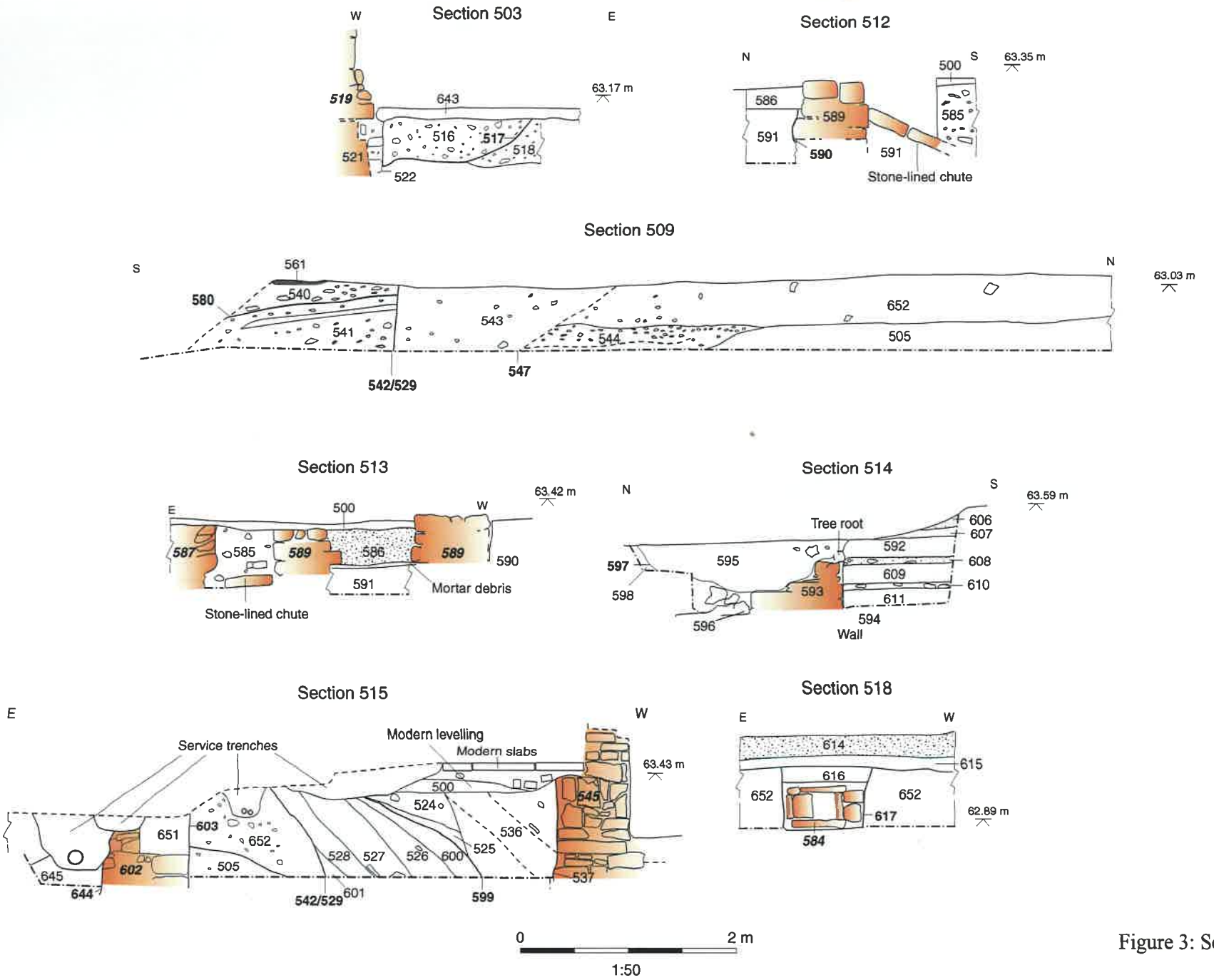

Figure 3: Sections

N

Undated pits

Disturbed

Disturbed

Late 12th century pit

18th century pit

Modern Pit

North Quadrangle

Beehive Building

Disturbed

Pit

Stone-lined pit

Disturbed

Pit

SCR

Stone-lined pit

Garden wall

19th century extension

Quarry

Baylie Chapel

The free-standing kitchen block

Chapel

Drain

Medieval

Post medieval

19th century

Walls

Features

recorded by Sturdy

Standing buildings

0 10 m

1:200

Figure 4: Interpretative plan

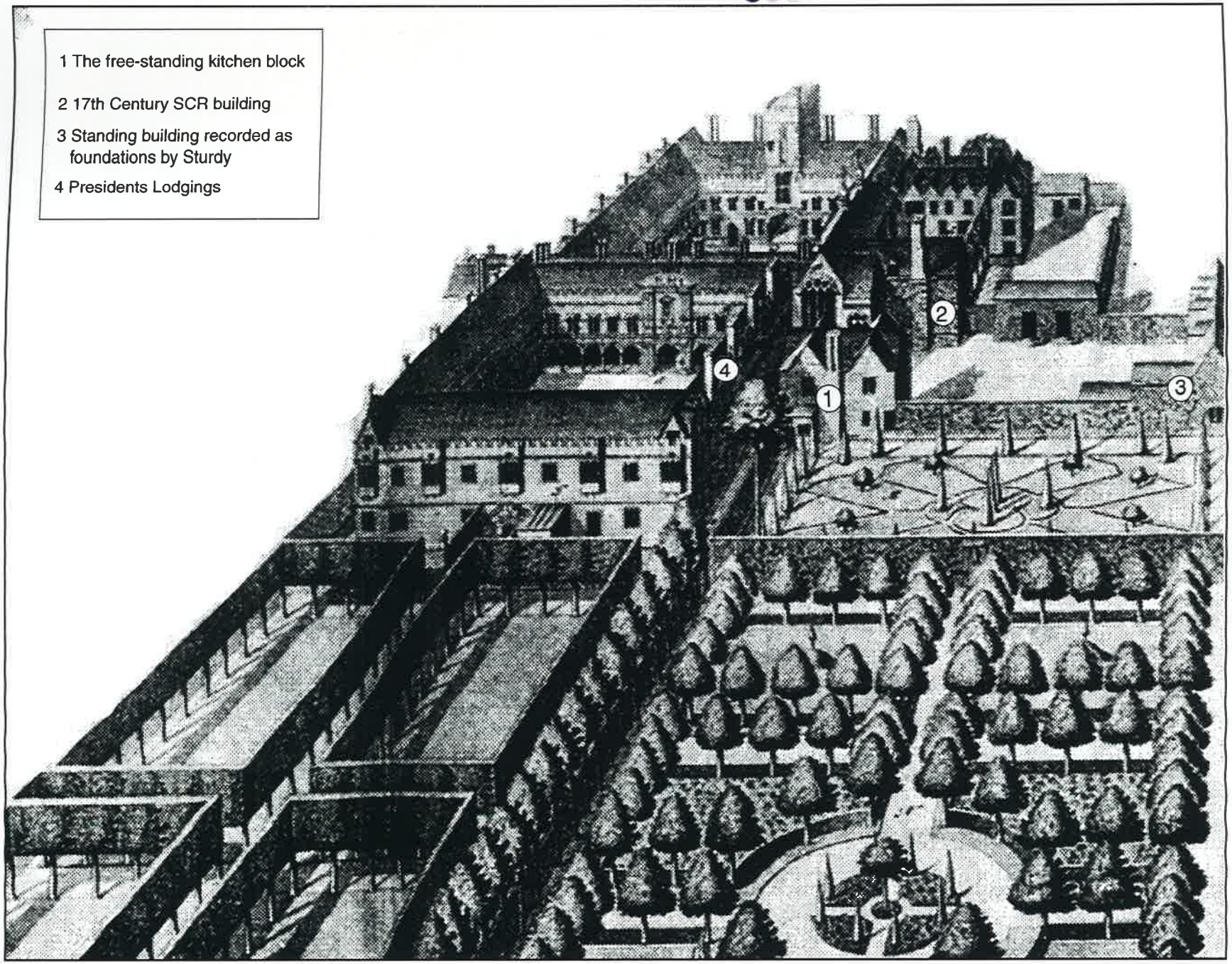

Plate 1: Williams 1733 view of the college from the east

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