



# Postmasters' Hall Yard Merton College Oxford

## Post Excavation Assessment and Updated Research Design



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## POSTMASTERS' HALL YARD MERTON COLLEGE, OXFORD

### POST-EXCAVATION ASSESSMENT AND UPDATED RESEARCH DESIGN

By David Score and Dan Poore

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## SUMMARY

*Between November 2000 and February 2003, Oxford Archaeology (OA) carried out archaeological investigations on behalf of Merton College on the site of a development to provide additional facilities for the college. The development is on land owned by the college to the north of Merton Street, Oxford, in the yard to the rear of No. 4a Merton Street (Merton Stables), which is itself a rare surviving example of a Norman stone house.*

*The excavation revealed the remains of two buildings. In the southern part of the site a cellar (or undercroft) was found, probably part of a hall set at a right-angle to No. 4a Merton Street. This is provisionally dated to c 1200 by its probable association with the standing building. Evidence for the medieval western boundary of the site was also recovered. A second building was identified in the northern part of the site and consisted of a substantial south wall with the start of a northward return at its east end. The other extents of this building are unknown. Both buildings had been heavily robbed and truncated by later activities but both had surviving stone lined garderobe or latrine pits butting external walls and these appear to be contemporary with the main constructions.*

*The excavation also recorded an extensive series of pits and a number of wells dating from the 11th to the 18th centuries. The early part of this sequence pre-dates the southern hall building and may be late Saxon. Other groups of later pits are likely to relate to the use of each of the buildings and others to the period after they had both been demolished. During this later period the college appears to have used the area to dig substantial pits for the disposal of refuse.*

*A number of surfaces, drainage features and pits were recorded, dating from the use of the area as the college stables in the post-medieval period.*

*Important groups of pottery, tile, metal, bone and glass small finds and animal bone were recovered during the excavations, and numerous environmental samples were taken.*

*The results of the post-excavation assessment suggest that this is an important site with good potential for further analysis. This should make a significant addition to archaeological understanding of the early development of the town of Oxford, the early use of the site by Merton College, and the everyday household life of the college in the later medieval period. Five main periods of interest have been identified:*

- *possible remains of late Saxon cellared buildings dating from the early 11th century*
- *the Norman stone townhouse and its occupants, before the site was acquired for the college in the 1270s*
- *the college's early use of the site in the 13th and 14th centuries*
- *the medieval college household, from the evidence of the waste discarded in numerous substantial pits*
- *the later use of the site as the college stable yard*

*Proposals for a programme of further analysis are set out, followed by a synopsis for publication of the results.*

## 1 PROJECT BACKGROUND

### 1.1 Location and scope of work

- 1.1.1 The excavation and other archaeological works that are the subject of this assessment were carried out on land known as Postmasters' Hall Yard, forming part of Merton College, Oxford, and located on the north side of Merton Street immediately opposite the main entrance to the college (NGR SP 5172 0614). The location of the site is shown on Figure 1; numbers refer to the gazetteer prepared for the Archaeological Desk-based Assessment (OAU 2000), which is reproduced as Appendix 3 to the present document. Figure 2 shows the site in the late 19th century, with individual buildings identified. The Merton Street frontage of the property is occupied by two buildings of note. No. 4a Merton Street (known as Merton Stables) is an important Grade II Listed Building of early origins, which is discussed further in section 1.3.4 below. The building now known as Postmasters' Hall (No. 5 Merton Street) occupies the frontage immediately to the east, and is a Grade II Listed Building of 16th- to 17th-century origins. Much of the north-eastern quarter of Postmasters' Hall Yard is occupied by the Real Tennis Court, rebuilt in 1798 following the destruction by fire of its predecessor, which dated from *c* 1595. Immediately behind Postmasters' Hall Yard, to the north-west, is Grove House (No. 2 Kybald St). This house is of 17th-century origins with substantial later additions, and is constructed across the line of a medieval road known as Kybald St, which had previously marked the northern boundary of Postmasters' Hall Yard. A detailed study of the known history and development of the site from documentary and cartographic sources can be found in the preliminary archaeological desk-based assessment (OAU 2000).
- 1.1.2 The archaeological works were undertaken in response to development plans put forward by Merton College in 2000. The college proposed to construct a new three-storied building with a basement across much of the western third of Postmasters' Hall Yard, to the rear of No. 4a Merton St (Merton Stables), in an area occupied by a row of modern garages. The excavation took place in the footprint of this new building, following the demolition of the garages. Additional proposals were for a two-storied bicycle shed, without a basement, in a narrow strip of garden to the north of the Real Tennis Court, and a small annexe for a new set of stairs on the eastern side of Grove House.
- 1.1.3 The proposals also included hard landscaping and the demolition of a brick wall running northwards from the north-west corner of No. 5 Merton St (Postmasters' Hall). Most of the stone walls forming the boundaries of the Yard were to be retained.

## 1.2 Geology and topography

- 1.2.1 The site slopes gently to the south from 62 m above Ordnance Datum (OD) at the northern end of the site to 60.1 m above OD at the southern end of the site (Milton Keynes Surveys July 2000/Job no. 6977).
- 1.2.2 Postmasters' Hall Yard is located on the edge of Quaternary 2nd (Summertown - Radley) Terrace Deposits comprising river gravels (BGS sheet 236). Immediately south and east of the site area is the 1st Gravel Terrace. The gravel terraces form an 'island' surrounded by the alluvial floodplains of the river Cherwell c 350 m to the east and the river Thames some 500 m to the south-west.

## 1.3 Archaeological and Historical Background

- 1.3.1 Archaeological evidence from the vicinity of the site was reviewed for the desk-based assessment, where preliminary results for test pits were also reported (OA 2000). Very little prehistoric or Roman archaeology has ever been found in the area, beyond the remains of two Bronze Age round barrows identified in excavations in Logic Lane in 1960. No prehistoric or Roman archaeology was found during the excavations at Postmasters' Hall Yard, and these periods will therefore not be considered further in the present assessment document.
- 1.3.2 *Early medieval period (AD 410 - 1066):* The town of Oxford is first recorded in documentary sources in the Anglo-Saxon Chronicle, under the year 911-12. The town was developed as one of a series of *burhs* (centres of defence against the Vikings) during the reign of King Alfred (871-99) or his son Edward the Elder (899-925). Merton College lies immediately east and outside of what is believed to be the first fortification of the Saxon *burh*, following the line of Schools Street and Oriel (earlier Shidyerd) Street (Fig. 1). Opportunities for excavation have always been very rare in the eastern half of the city centre, and comparatively little is known about the extent of late Saxon occupation here. The eastern part of the town had certainly been incorporated within an extended defensive circuit before the Norman Conquest, although the date of its construction remains a matter of conjecture. The High Street was extensively built-up in the early 11th century, but little is currently known about the area to the south. The only excavated evidence for early medieval occupation here came from work carried in 1960 at Logic Lane, some 70 m east of the present site, where features and pottery of the early 11th century were found, and interpreted as suburban development (Radcliffe 1961/2; Fig. 1 No. 8).
- 1.3.3 *Later medieval period (AD 1066-1550):* A few excavations and observations in the vicinity cast some light on the area prior to the foundation of Merton College in the 1260s. The excavations at Logic Lane revealed that Kybald St was probably laid out c 1130, truncating many properties that were subsequently subdivided to form tenements fronting the new street (Radcliffe 1961/2). Kybald St formed the northern boundary of the Postmasters' Hall site throughout the medieval period. Important assemblages of

12th- to 14th-century pottery were recovered from medieval pits at Logic Lane, together with small quantities of other finds of the same date. There was some evidence for the construction of stone-walled or stone-founded buildings in the 13th century. Tom Hassall's excavation in Merton College Grove in 1970 was primarily designed to investigate the town wall, but pottery assemblages were recovered that relate to activity both before and after the foundation of the college (Hassall 1971). An excavation carried out by H W Garrod in the north-east corner of Mob Quad in 1922 (Fig. 1 No. 20) found a small building apparently pre-dating the Mob Quad buildings of 1309. A small collection of pottery and a mica schist honestone from this excavation were subsequently published by Jope (1943-4).

- 1.3.4 The only previous investigation at the Postmasters' Hall site has been the observation of some 3 m of medieval rubbish pits beneath the Real Tennis Court extension in 1997 (OAU 2000; Fig. 1 No. 24). However, the standing building at No. 4a Merton St (Merton Stables) is in itself a remarkable and very significant survival from the medieval period. It is a plain stone building of ragstone, with two blocked windows on the ground floor and a broad gateway. The first floor has small rectangular stone windows and some modern openings. None of this would excite attention were it not for a drawing of c 1750 by James Green in the Gough collection which depicts the stables with two late Norman or early gothic windows (Fig. 3; Bodleian MS Gough Oxon 50. 27, reproduced by Skelton in *Oxonia Antiqua Restaurata*, 1823). The windows may be dated around 1200. With its plain lower storey and upper chamber with decorative windows it would seem likely to be a house of the 'cellar and solar' type, so frequent in early 13th-century Oxford deeds. The ground floor may have been a workshop or merchant's store, with living accommodation above. Houses of this type often had a hall lying behind the street front, typically set at a right-angle to the street. Merton Stables has never been fully investigated, and while it may not have its original roof, it has a first floor of large lodged timbers which may be original (RCHM 1939 no. 80).
- 1.3.5 This house is of considerable importance as one of the oldest surviving in Oxford. It is a rare example of a Norman stone house of a type that appeared in Oxford and other towns in the late 12th century. About eight examples are known from Oxford (many more in written sources), but the only survivals are this and Frewin Hall.
- 1.3.6 The written history of the Postmasters' Hall site can be traced back to the 13th century. The property was originally four separate medieval tenements. The likely layout of the tenements is illustrated in Figure 4, following the interpretation suggested by Robert Peberdy (Bott 2001, plate 5). The eastern tenement (Coleshill Hall) was not acquired by the college until 1513 and its medieval documentary history will not be further considered here. Numbers 4a and 5 Merton St are on the site of three 13th-century tenements: on the east a piece of land belonging to Oseney Abbey, the house of Alexander Knight (belonging to St John's Hospital), and the house of John Edrich on the west (*Early Rolls of Merton College* 71, 370-1; Salter, *Survey* SE(186)). The last of these, which was on the site of No. 4a Merton St (Merton Stables), belonged to Matilda Edrich in 1228 and was inherited by John son of Nicholas son of Robert Edrich, who

gave it to his wife Emma for her dowry in 1268/9. The property extended as far back as Kybald St (*Early Rolls*, 409). Between 1270 and 1273 all three of these tenements were acquired by Master Peter of Abingdon alias de Laking (Lockinge) (*cf* Emden 1957 and Highfield 1990), the first Warden of Merton College and a trusted colleague of the founder, Walter de Merton. The property was leased as an academic schools for three years around 1276 to a Master Thomas of Colebrigg. Peter of Abingdon ceased to be Warden in 1286, and in 1290 the college sought a licence under the Statute of Mortmain to acquire the properties (now treated as one). In the event, the property was granted to three named Masters of the college in 1291/2, and continued to be held by named Masters of the college until 1317/18, when a licence in Mortmain granted by Edward II allowed its formal acquisition by the Warden and Scholars of the House of Merton in Oxford.

#### 1.4 Fieldwork methodology

- 1.4.1 Preliminary investigations at the site were carried out during 2000. A watching brief on test pits has been reported on in the desk-based assessment (OAU 2000).
- 1.4.2 In October/November 2001, Oxford Archaeology carried out a further extended watching brief at the site (OA 2001). The work involved the monitoring of geo-technical test pits excavated to inform the development plans. A further series of watching brief observations were made, and two archaeologically excavated test pits were undertaken, prior to the start of the main excavation. The preliminary works indicated the likely presence of significant medieval archaeological remains on the site, including the possible existence of a well-constructed stone-built cellar or undercroft. Features and deposits were associated with pottery of medieval date. Structural remains relating to the stable block known from 19th-century maps were also recorded.
- 1.4.3 The main excavation began in June 2002. The excavated area covered the entire footprint of the proposed new three-storied building in the west part of the site. It was contained by sheet piles with the exception of the area bordering the southern half of the western boundary wall and the area adjacent to the Real Tennis Court to the east. In these locations the site extended up to the walls themselves.
- 1.4.4 The site was machined to the first significant archaeological horizon. It was then hand excavated stratigraphically using a single context planning and recording system with features located using an EDM. A running matrix was compiled on site.
- 1.4.5 Baulks were retained around the site edges and at certain points across the excavation for reference purposes and removed as the excavation progressed.
- 1.4.6 Excavation of a small number of large features was suspended at an archaeologically arbitrary level due to practical and health and safety considerations and the presence of the water table. The basal deposits of these features were excavated at the end of the work using a combination of machine and hand digging.

## 1.5 Assessment methodology

- 1.5.1 The excavation was carried out in accordance with a series of research aims agreed with the City Council's archaeological adviser. These are set out in section 8 of this report. The purpose of the present assessment has been to review the results of the excavation, the potential of the data recovered to address the research aims of the project, and the potential for additional research aims to be identified. The following work has been carried out in order to achieve this.
- 1.5.2 The site archive has been checked for completeness, accuracy and cross-referencing, and the site stratigraphic matrices have been drawn. Preliminary subdivision of the matrices into context groups and phases has been undertaken, on the basis of the stratigraphic relationships and pottery spot-dating. The stratigraphic data have been assessed in terms of their potential to address both the original aims of the project, and new research questions that can be posed. A summary of the stratigraphy of the site, and its provisional phasing, dating and interpretation, is set out in section 2, below. Figure 5 shows the main structural features identified; Figures 6-14 are preliminary printouts of the digital survey data, showing the extent of features provisionally allocated to each phase.
- 1.5.3 The context information and results of the preliminary phasing were made available to specialists for the finds and environmental assessments. Specialists were asked to assess the potential of each assemblage to contribute towards the research aims of the project, the dating and interpretation of the site, and to comment on its intrinsic value as a collection of material meriting further study and publication. A summary of the finds and environmental assessments can be found in sections 3 and 4, below; the full specialist assessments are presented as appendices to this document. The documentary resource is considered in section 5, below. A quantification of the project archive is given in section 6.
- 1.5.4 Section 7 reviews the potential of the different data sources to address the original research aims of the project. This section identifies original aims for which the excavations have revealed no significant information, those original aims for which useful data have been recovered, and results that were not foreseen prior to the excavation that would merit further study. The statements of potential incorporate assemblage-specific potential identified by the specialists, and the potential of the material when combined with other elements of the data resource, which has been identified by the project manager.
- 1.5.5 The original research aims of the project are set out in section 8, followed by a statement of revised and updated research aims that could be addressed in post-excavation analysis. Section 9 sets out the methods to be employed in order to achieve the post-excavation analysis. A proposed synopsis for publication of the results is set out in section 10.

- 1.5.6 The report concludes with a proposed task list (section 11), a list of proposed project personnel (section 12) and a bibliography of sources referred to in the present document. References for specialist assessments are set out at the end of each specialist assessment report in the appendices.

## 2 PROVISIONAL PHASING AND ASSESSMENT OF STRATIGRAPHIC EVIDENCE

### 2.1 Excavation summary

- 2.1.1 The excavation revealed the remains of two buildings (Fig. 5). In the southern part of the site a cellar (or undercroft) was found, probably part of a hall set at a right-angle to No. 4a Merton Street (Merton Stables). This is provisionally dated to c 1200 by its probable association with the standing building. The western wall of the hall had been used to form the foundations for the present boundary wall although a wall continuing north from the corner of the hall indicated that a boundary had probably existed on this line from the time of the construction of the building. A second building was identified in the northern part of the site and consisted of a substantial south wall with the start of a northward return at its east end. The other extents of this building are unknown. Both buildings had been heavily robbed and truncated by later activities but both had surviving stone lined garderobe or latrine pits butting external walls and these appear to be contemporary with the main constructions.
- 2.1.2 The excavation also recorded an extensive series of pits and a number of wells dating from the 11th to the 18th centuries (Figs 6-14). The early part of this sequence pre-dates the southern hall building and may be late Saxon (Fig. 6). Other groups of later pits are likely to date from the period when the buildings were in use, and others to the period after they had both been demolished. During this later period the college appears to have used the area to dig substantial pits for the disposal of refuse.
- 2.1.3 Later features recorded in the excavation include a large stone soakaway and drain probably serving the stables at No. 4a Merton Street, and a well and other structural features related to the use of the area as the college stables in the 18th / 19th centuries.

### 2.2 Phasing methodology

- 2.2.1 The stratigraphic sequences for the majority of features are reasonably well understood. There are some unresolved issues regarding the exact relationships of some of the pits to the two potential structures on the site mainly caused by the removal of original relationships by later robbing.
- 2.2.2 The initial phasing has been accomplished by applying the pottery spot-dating to the stratigraphic matrix and adding further phases which group contexts relating to the buildings identified on the site. This has been done in fairly broad ranges and as the pottery spot-dates are derived from the 'earliest date for the latest fabric' in each context there is clearly a lot of scope for refinement. The aim of further analysis would be to re-phase or subdivide the existing phases to relate them more precisely to the structural

evidence.

- 2.2.3 In addition to the broad grouping of pits which means that pits within a phase can have different relationships with the buildings on site it should also be noted that Phase 4 (demolition and robbing of the southern hall building) is 'floating' in respect of Phase 5 (13th + century pits) and Phase 6 (Construction of northern building). It is not yet clear whether these two buildings ever stood on the site together.

## 2.3 Phase 1. Natural deposits

- 2.3.1 The earliest layers encountered comprised natural gravel overlying Oxford clay. The clay was only seen in the north-west corner of the excavation and the gravel was heavily truncated over most of the site.

## 2.4 Phase 2. 11th + century pits

- 2.4.1 This phase represents the earliest surviving evidence of human activity on the site. It consists of pits provisionally dating from the 11th century at the earliest (Fig. 6). The cellar floor of the southern hall building sealed a group of rectangular, vertical sided, flat-bottomed pits, which appear to be similar in nature. These are different in character from the sub-rounded, curved-sided pits in the northern part of the site. A proportion of the sub-rounded pits may have been contemporary with the southern building, rather than earlier, but further work is needed to refine their dating. The base of a pit in the extreme NW corner of the site may be an early well and was the only feature observed to penetrate the natural clay.

## 2.5 Phase 3. Construction of southern hall building

- 2.5.1 A building interpreted as a hall with undercroft was built at a right-angle to No. 4a Merton Street (Figs 5 and 7 and Plate 3). The present boundary wall between the Merton and Corpus Christi properties on the west side of the site retains part of the original structure below ground level (while the upper portion consists of later boundary related rebuilds).
- 2.5.2 The structure is heavily truncated but other elements recorded include the start of an east-west return keyed into the north-west corner of the boundary wall element and a north-south stub of wall near the southern end of the presumed eastern wall of the hall. A stone lined latrine or garderobe pit butts the outside of the northern wall and contained lower fills probably deriving from the period of use of the building.
- 2.5.3 The walls of the hall sit on natural gravel but also span earlier pit fills. A 'beaten' gravel floor with a possible occupation horizon survived in the north-west corner at the same level as the base of the walls. The surviving elements are thought to be part of a cellar or undercroft constructed initially by stone lining a large rectangular pit.
- 2.5.4 The north-west corner of the hall is butted by a wall which contains an arch to mitigate

the soft fills of pits and forms a continuation of the Merton / Corpus Christi boundary line. The lower part of this wall is also likely to be contemporary with the construction of the hall and forms the earliest evidence for a property division on this alignment.

## 2.6 Phase 4. Demolition and robbing of southern hall building.

- 2.6.1 The building constructed in Phase 3 was demolished (Fig. 8). Reusable material was removed ('robbed') and the cellar/undercroft void was backfilled. Later pits dug in this area (Phases 5 and 8) have removed much of the evidence for this process, and may also have removed further structural remains of the building itself.
- 2.6.2 The date when the southern hall fell out of use and was demolished is a key question. In stratigraphic terms, a separate phase number has been assigned for these events. However, the relative and absolute dating of Phases 4, 5 and 6 has not yet been established. It is not yet clear whether the southern building was demolished before the construction of the northern building, or whether the two buildings ever stood on the site together. As with the pits in Phase 2, the pits in Phase 5 are grouped very broadly by spot-dating and will probably need to be further sub-divided to clarify their relationships with the buildings on the site when the dating is refined.

## 2.7 Phase 5. 13th + century pits

- 2.7.1 A number of pits were excavated, provisionally thought to date from the 13th century at the earliest (Fig. 9). These appear to occur predominantly in the northern half of the site which may argue for them being contemporary with the southern hall building, although the severe later truncations in the southern part of the site may have removed evidence of similar features in that area. Two probable wells were identified in the north-east part of the site near to the Real Tennis Court.

## 2.8 Phase 6. Construction of northern building

- 2.8.1 A building was constructed in the northern half of the site fronting onto Kybald Street (Figs 5 and 10). The remains of this building that were accessible within the excavated area consisted of an east-west wall foundation. The wall foundation extended beyond the site limit to the west (where its relationship with the west boundary wall was inaccessible) and crossed the site to return northwards in front of the Real Tennis Court. The wall had been systematically robbed but at the south-east corner the wall itself had survived to a higher level, possibly because it had been used as a foundation for the later north-south running eastern boundary wall to the 4a Merton Street property. (Alternatively the wall may have survived the robbing episode specifically because the boundary wall had been constructed over this corner by the time the below-ground foundations to the west were removed.)
- 2.8.2 This building appears to have been of substantial construction, and the foundations were dug through earlier pit fills down to the natural gravel. This contrasts with the method of construction of the southern building, whose foundations had been laid over earlier pit

fills in places.

- 2.8.3 A stone-lined latrine pit or garderobe structure, which appears contemporary with the northern building, butts it on the east side of the south-east corner. A further stone-lined pit was constructed adjacent to the wall on the south side further to the west. The stratigraphic relationship of this feature to the building is not clear but it may be related.

## 2.9 Phase 7. Robbing of northern building and Merton College pit digging

- 2.9.1 The northern building was demolished (Fig. 11). Reusable materials were removed ('robbed') and the wall trench was backfilled with dumped gravel and rubble deposits.
- 2.9.2 In the southern part of the excavation a number of large pits were dug. These may represent the importation of Merton College waste onto the site from elsewhere in the college.
- 2.9.3 Also provisionally included in this phase is a piece of wall foundation /consolidation subsiding into the upper fill of a large pit in the north-west corner. This is possibly part of another early building on the Kyball Street frontage postdating the northern building.

## 2.10 Phase 8. 15th + century pits and stone features

- 2.10.1 Very large pits were dug in the southern half of site and truncated by a stone-lined pit with an associated stone drain, which seems to originate from the north-west corner of No. 4a Merton Street (Fig. 12 and Plate 2).
- 2.10.2 In the northern half of the site were further pits and a series of general dump /make-up layers. These layers also extended into the southern part of the site, sealing and slumping into the pits.
- 2.10.3 Also provisionally in this phase is the eastern boundary wall to the No. 4a Merton Street property, which for part of its length utilises the northern return of the earlier northern building as a foundation.

## 2.11 Phase 9. 16th + century features

- 2.11.1 A series of layers and possible surface and structural elements probably relating to the use of the area as a stable yard were identified in the south-east corner of the site (Fig. 13).
- 2.11.2 At this stage the deposits relating to the Real Tennis Court 'rebuild' have been allocated to this phase. Documentary evidence dates this event to 1798 (when the original court built c 1600 burnt down). No evidence of the earlier structure was identified.
- 2.11.3 The remains of a timber-framed building of probable 17th- to 18th-century date were recorded during survey of the standing boundary walls in the north-west corner of the site, including windows in the north wall.

## 2.12 Phase 10. 19th century 'stable' features

- 2.12.1 The excavations revealed a rectangular feature lined with clay and then stone walls in the south-west corner of the site, possibly a trough or cistern.
- 2.12.2 In the centre of the site was a stone well (Fig. 14 and Plate 2), later truncated by and incorporated into a rectangular stone 'soakaway' with a brick vaulted roof.

### 3 ARTEFACTUAL ASSESSMENT

#### 3.1 Pottery by Paul Blinkhorn (Plates 4 and 5)

- 3.1.1 The pottery assemblage comprised 6,102 sherds with a total weight of 121,880 g. The estimated vessel equivalent (EVE), by summation of surviving rimsherd circumference was 70.21. There are significant quantities of pottery dating from the period from the late 11th/12th century to the 13th/14th century, and a further large group from the 15th century. These have a relatively large mean sherd size, suggesting that the pottery has suffered relatively little disturbance. The assemblage is important in a number of ways, and is one of the most significant excavated in the city of Oxford in recent years. It included two sherds of decorated early Saxon pottery, only the second find of such material in Oxford, and the small assemblage of late Saxon material included unusual regional and continental imports. The medieval assemblage, particularly that dating to the later part of the period, is truly remarkable. It has produced a large assemblage of pottery associated with the preparation and consumption of food and drink, with vessels such as dripping dishes, mugs, cups and drinking jugs present in what appear to be unusually large quantities. Pottery associated with lighting, specifically lamps, is also present in large quantities. In addition, a number of unusual decorated sherds are present, not least of which is a vessel with a fragment of an inscription which appears to be the name of the college. The fact that it was made while the clay was still wet indicates that the potters of Brill in Buckinghamshire were making pots to order specifically for the college. This is one of the very few pieces of archaeological evidence that we have for this practice, and it has major implications for our understanding of the manufacture and marketing of medieval pottery.

#### 3.2 Building Materials by Terence Smith

- 3.2.1 At this stage, the building material, most of it unprocessed, has been examined and recorded with a view to establishing how much of it should be taken through to further processing, bearing in mind what is likely to contribute to greater understanding of the site, for which the stratigraphic sequence is already well understood. The material has been classified by form and has been quantified by count but not by weight (Table 1).

Table 1 Quantification of building materials

FORM	QUANTITY
Uncertain	45
Brick	24
Brick?	11
Curved tile	4
Drainpipe	2
Early roof tile	4
Flints	2
Floor tile	61
Floor tile?	2
Gutter tile	2
Painted plaster	2
Paving	1
Peg tile	1176
Ridge tile	113
Ridge tile?	9
Roman brick	1
Roman tegula mammata	1
Shouldered peg tile	6
Slate	4
Stone rubble	8
Stone slate	48

- 3.2.2 Two fragments of Roman building material (one of *tegula mammata* and the other of brick) were noted; both are clearly residual.
- 3.2.3 The roof tile assemblage contains a number of early types. The glazed curved and shouldered tiles, although only present in small numbers, are particularly indicative. These types of tile were in use in London and elsewhere from around 1100 to the 1220s. They seem to have been limited to buildings of high status, often monastic, although they have been found in association with secular buildings, for example in Cheapside in London. A few fragments of other thick, glazed roof tiles were present, with a distinct taper from bottom to top. Tiles of this type were probably in use in the late 12th and early 13th century. They seem also to have been limited to buildings of high status.
- 3.2.4 From the later 12th century, standard peg tiles superseded the earlier types, all of which had various disadvantages. Peg tile fragments were recovered from a very large number of contexts at the present site. This type of roof tile remained in use until the 19th century, but glazed examples (numerous of which are present in this assemblage) seem to have been limited to the medieval period. The roof tile assemblage also contained quite a large group of ridge tiles, of numerous different types. Some of these have decorative features such as cresting of the typical 'coxcomb' variety, and some examples have green, brown or black glazing. Two tiles have holes to take a finial, and two possible gutter tiles were noted.

- 3.2.5 Stone 'slate' (in fact an attractive yellowish limestone, possibly Stonesfield slate) is present in very much smaller quantities than ceramic roof tile, although examples were recovered from contexts of Phases 2, 4, 5, 7, 8 and 9.
- 3.2.6 A reasonably large group of floor tiles is also present. Most of these are decorated in yellow on brown, and some are very badly worn. No attempt has been made at present to identify individual designs. Several plain tiles of various colours are made of a silty fabric that suggests they may have been imported from the Low Countries during the 14th or 15th century.
- 3.2.7 A small quantity of brick was recovered, all of it from contexts of Phases 8 and 9 (15th to 18th century). The bricks are all relatively thin, which generally suggests a late medieval or Tudor date. Two particularly thin examples were paving bricks. A fragment of possible stone paving was present in the fill of a pit.

### 3.3 Stonework by Julian Munby (Plate 1)

- 3.3.1 The small amount of decorated stonework recovered from the site is of some significance. All is of fine limestone. Three pieces come from the upper parts of windows similar to those shown in Green's mid 18th-century view of No. 4a Merton St (and may indeed be the very same windows). Sufficient survives of these to be able to reconstruct a round outer arch and label with a pointed inner arch or window light. A small number of decorated fragments were recovered which come from a stone screen or monument with moulded and cusped arches. These may come from a domestic context, but quite possibly derive from rebuilding works in the College chapel, for example (and all are from contexts of Phase 9, 16th to 18th century). A couple of post-medieval fragments are of minor significance.

### 3.4 Metalwork and worked bone by Leigh Allen (Plate 6)

- 3.4.1 A total of 310 metal objects and 9 of worked bone were recovered from the excavations. The copper alloy assemblage includes 58 identifiable objects, with a further 5 that may be identifiable after further analysis. The remainder comprises miscellaneous fragments, much of it thin copper alloy sheet. The iron assemblage consists of 192 objects, of which 114 are nails. Of the remainder, 36 items have been identified at this stage, and 5 may be identifiable after further analysis. The remainder are fragmentary or unidentifiable. Of the small lead group, 4 out of 11 are identifiable objects: a weight, a possible seal or weight, and two possible writing leads. Of the bone objects, 6 are styli; the remainder are a toggle or buzz bone, a possible bead and an implement of unknown function.
- 3.4.2 Despite being in poor condition the assemblage contains a relatively large number of identifiable objects from a wide variety of functional categories. Particularly well represented are tools, domestic items and horse-gear. As one would expect from a place of learning there are a number of objects associated with writing and books: writing leads, bone styli, a book clasp and a page holder. There are also objects that reflect the nature of daily life: knives, keys, tools, vessel fragments and sewing equipment. The

presence of horseshoes, spurs and the remains of a curry-comb used for grooming horses may reflect the use of the southern part of the site as a stables. There are remarkably few personal items, predominantly lace tags with a few fragments from buckles, mounts and buttons. There are no ornate or valuable objects. Only two items of structural ironwork other than nails were recovered. These were a hinge pivot and a looped staple, both from Phase 8 (15th-century) contexts.

- 3.4.3 A considerable proportion of the assemblage came from large pits, dump deposits and make-up layers of Phase 8 (15th century). Smaller assemblages were recovered from Phase 7 (demolition of the northern building, and pit digging) and Phase 9 (16th- to 18th-century) contexts. Domestic items and writing/book equipment are particularly well represented in Phase 7. In Phase 9 the number of personal items increases with the appearance of lace tags. All the objects from this phase were recovered from construction cut 881.

### 3.5 Coins by Nicholas Mayhew and Tokens by Edmund Simons

- 3.5.1 Five coins were recovered from the excavations all are corroded to some degree and difficult to identify in their present condition. Preliminary identifications have been made by Nicolas Mayhew of the Ashmolean Museum with the aid of X-ray plates. Unfortunately all coins appear at present to be from unstratified contexts, or redeposited in later contexts. However, the distribution of the coins will be reconsidered during the main phase of analysis.
- 3.5.2 The earliest coin SF 235 from context 1389 is a silver short-cross penny of Henry III in circulation up to 1247. This coin is badly damaged with a hole through it.
- 3.5.3 SF 65 from context 891 is a silver penny of one of the first two Edwards, struck before 1330 and probably in circulation into the 15th century.
- 3.5.4 SF 21 from context 861 is a London Groat dating from 1350-1500.
- 3.5.5 SF 141 from context 1054 is a continental imitation of a coin of Edward I likely to have been struck around 1300 and in circulation until 1400.
- 3.5.6 SF 221 from context 1254 is very corroded with very little detail showing, but its size and weight indicate that it probably dates to the 18th century.
- 3.5.7 Provisional identification and dating of the tokens retrieved from the site has been carried out. Of the 15 tokens recorded, 10 are of French origin, 4 are German and one is English. The tokens range in date from the late 14th century to the mid 16th century, but they often remained in use for long periods after their initial manufacture. The main interest in the assemblage is in its association with the college where it is likely that they were used as part of the accounting process.

### 3.6 Glass by Rachel Tyson

- 3.6.1 Over 300 fragments of vessel and window glass were recovered from contexts dating between the 13th and 19th century. The medieval glass is the most important of the assemblage, with points of interest raised by its rarity, status and function.
- 3.6.2 Fragments of a green high-lead glass (a 13th- to 14th-century type, currently believed to have been manufactured in Germany) from context 1371 (SF 233) are of considerable interest not only because they are the first known example of medieval glass tableware from Oxford, but also because they are the first example of green high-lead glass to be found in Britain.
- 3.6.3 Medieval glass is always found on sites with some degree of wealth and status and this is particularly true of the 13th and 14th centuries while it starts to become more common at the end of the 15th century (Tyson 2000).
- 3.6.4 The high-lead glass fragments probably come from a beaker while other pieces derive from medieval tableware, urinals (which were mainly used for the medieval medical practice of uroscopy, the examination of urine to monitor and diagnose health), and tubing, that probably came from an alembic, part of the distilling set. Small-scale domestic distilling was usual in relatively wealthy households to make medicines, liqueurs, and other household preparations. Glass and ceramic distilling equipment was often combined. Window glass was also found and included five probable medieval fragments.
- 3.6.5 The early post-medieval glass contains a few fragments of fine tablewares. Later post-medieval glass consists mainly of English wine bottles and window fragments of unexceptional character.

## 4 ECOFACTUAL ASSESSMENT AND ANALYSIS

### 4.1 Animal Bone by Emma-Jayne Evans

- 4.1.1 A total of 7096 (108926 g) animal bones were excavated from the site. Of this material a total of 796 (12354g) bone and teeth fragments have been fully recorded to assess the potential of the assemblage. The assessed material originates from all the phases identified at the site, dating from the 11th century to the 19th century.
- 4.1.2 The majority of the animal remains excavated were in good condition allowing for the identification of 433 fragments, 54.4% of the bone assessed, and the identification of butchery marks and pathologies. A list of all the species identified is shown in Table 2.

Table 2: Total number of bones identifiable to species and phase

	Phase										
Species	2	3	4	5	6	7	8	9	10	Total	
Sheep/goat	14			21		4	11	132	11	193	
Cattle	19			26		10	28	66	6	155	
Pig	2			5	1	3	3	3		17	
Domestic fowl	1	1				1	2	4	4	13	
Domestic goose				5	1	1	1	2		10	
Chicken				1		1		6		8	
Bird				4				1	2	7	
Sheep	3			1						4	
Horse	2			2						4	
Swan		3								3	
Wood pigeon									3	3	
Dog								2		2	
Rabbit								1	1	2	
Roe deer	1			1						2	
Fallow deer				1				1		2	
Cat								2		2	
Crow								1		1	
Duck	1									1	
Goat				1						1	
Grey heron				1						1	
Hare										1	
Total										432	

- 4.1.3 The above table indicates that sheep/goat and cattle provided the majority of meat, which is supported by the fact that butchery marks were found on many of the bones from these species. Butchery marks were also found on many of the other species identified, indicating that many were used to some extent for consumption. The bones of many small mammals and fish were noted in the sieved samples, although these have not yet been identified to species. The presence of swan in an assemblage of this kind is exceptional, and may reflect the high social status of the college and those with whom it had connections.

#### 4.2 Charred and waterlogged plant remains by Ruth Pelling

- 4.2.1 During the excavations 85 samples were taken in order to recover palaeoenvironmental information. For this assessment 20 of the samples were processed. These samples were selected from a range of different features distributed across the site to provide an indication of the potential for extracting palaeoenvironmental data. The bulk samples were processed for charred plant remains and in addition two samples were processed for waterlogged plant remains.

- 4.2.2 Three samples were examined from the early flat-bottomed and vertical-sided pits of

Phase 2, which pre-date the construction of the southern building and may be of late Saxon date. These contained moderate quantities of charred cereals, occasional pulses and hazelnut fragments. Mineralised and/or dried waterlogged remains were also present, including elder and fig seeds. Fish bones and scales, and charcoal, were also present in two of the samples.

- 4.2.3 Two samples from Phase 3 produced only small quantities of environmental remains. Two samples were examined from pits of Phase 5 (pits possibly contemporary with the use of the southern building): one of these produced a large flot with abundant cereal remains, charcoal, chaff, weeds and pulses. Fish bone was also present.
- 4.2.4 Four samples were examined from three pits and a feature of Phase 7 (demolition of the northern building, and probable importation of Merton College waste onto the site). Limited cereal grain was present, along with pea, fig and elder. Occasional mineralised sewage-type fly pupae were also noted.
- 4.2.5 Seven samples were assessed from features and pits of Phase 8 (probable 15th-century Merton College rubbish pits). These contained large quantities of charcoal, some grain and weed seeds, a grape seed, and mineralised remains of fig and apple or pear seeds. A waterlogged sample comprised largely degraded peaty material, along with fragments of wood and seeds of buttercup, dock, hemlock and *brassica/sinapis* (brassica/mustard family).
- 4.2.6 The range of material present in the medieval samples is fairly limited, but does provide some evidence for cereal use and diet at the site and for the immediate environment. The cereal remains do not appear to include any evidence for cereal processing although grain itself is present so must have been brought into the site during all phases of occupation. The species noted are all characteristic of the medieval period. Additional food evidence is present in the form of calcium phosphate mineralised seeds, which are likely to derive from sewage waste, and some waterlogged seeds. The mixed nature of the deposits with charred remains, charcoal and mineralised or waterlogged material would indicate that they include a range of mixed refuse. The waterlogged material provides only limited evidence of the immediate surrounding environment, and generally points to ruderal habitats, with docks, nettles and elder trees dominating.
- 4.2.7 A single sample was processed for waterlogged remains from the 19th-century well. This was dominated by wood and charcoal, with some coal present. There were limited waterlogged seeds and insects. The nature of the sample suggests that the contents of the well were dumped rather than gradually accumulating.

## 5 DOCUMENTARY HISTORY

- 5.1.1 There is extensive documentation in the college archives for the domestic economy of Merton College, some of which has been examined already. Given the size of this resource, use will be made initially of the published material in Alan Bott's article in *Postmaster* for 2001, Roger Highfield's *Early Rolls of Merton College*, and his recent

work on horses and stabling at the college (2003). The later property history of the site will be examined, with the use of college leases and accounts, and any more modern records of college works on the site. It will not be possible to undertake a complete search through unindexed records (eg post-medieval college accounts).

- 5.1.2 The early drawings and any photographs of the No. 4a Merton St will be re-examined, and compared with records of other lost early medieval houses in Oxford. Julian Munby has comprehensive records of known medieval stone houses in Oxford, and has previously compiled a draft gazetteer. This information can be used to consider the chronology of stone domestic buildings in Oxford and the gazetteer could be made available for inclusion in the final published report.

## 6 ARCHIVE QUANTIFICATION

NB: OXMEPH 00 / OXMEPH 01 Watching brief works already reported on are not included.

### Contexts

Context numbers used: 701-1688

Checklists: 30

Number of void contexts: 18

Context sheets: 970

Additional sheets: 457

### Plans

Plan numbers used: 700-927

Checklists: 7

A1 Paper: 1

A1 Permatrace: 7

A3 Permatrace: 22

A4 Permatrace: 181

### Sections

Section numbers used: 701-790

Checklists: 4

A1 Permatrace: 5

A3 Permatrace: 2

A4 Permatrace: 46

### Small finds

Small find numbers used: 13-259

Checklists: 8

### Environmental samples

Environmental sample numbers used: 1-85

Checklists: 15

### Levels

Checklists: 39

### Photographs

Colour slide film numbers used: 1-49 and 51  
Black and white print film numbers used: 1-51  
Colour print film number used: 50  
Checklists: 102

Individual digital photographs: 544  
Checklists: 12

**EDM Survey**

Survey record sheets: 64  
Station record sheets: 3  
Rectified / geo-reference photography survey sheets: 33

**Additional**

Various unnumbered working plans, sketches, matrices, site notes and journal sheets.

## 7 STATEMENT OF POTENTIAL

### 7.1 Stratigraphic potential

- 7.1.1 The site was excavated using a single context system and a running matrix was compiled on site. It was possible to exercise a high level of control over the excavation process and preliminary checks and organisation of the matrix indicate that the information collected is reliable and that it will be possible to achieve a high degree of understanding of the stratigraphic sequence and its related artefactual and environmental assemblages.
- 7.1.2 There is therefore good potential to address the research aims relating to characterisation of the archaeological evidence and the range and types of medieval structures and activity present on the site. Further analysis of the stratigraphy, in conjunction with the evidence of pottery and other finds, should allow the dating of the structures and activity to be further refined. It will be particularly important to attempt to distinguish between activity that pre-dates the college's acquisition of the site, and activity contemporary with the medieval college. Where this can be achieved, there is good potential to relate features, and the finds and environmental remains they contained, to the different types of occupation and use of the site. The ownership of the site by Merton College, and the good documentary resources available, provide an unusually precise historical context for this study. The potential of the stratigraphic information is considered in more detail by phase, below.
- 7.1.3 *Phase 1 (natural deposits)*: Heavy truncation by archaeological features means that the potential of the natural deposits to provide useful information is very low.
- 7.1.4 *Phase 2 (11th-century and later pits)*: The features attributed to Phase 2 pre-date the known history of the site, and provide good evidence to address the first specific research aim identified for the excavation. The stratigraphy is well understood and further work on pottery dating and fabrics combined with spatial analysis should lead to refinement of the pit sequence. Analysis of the finds and a search for comparable examples may aid interpretation of the vertical-sided features, which could be late Saxon cellar pits. If these features can be securely dated to the late Saxon period, they will provide rare and important evidence for occupation of this period in this area of the town. While late Saxon occupation at this site might be anticipated by analogy with evidence from elsewhere in the town, it has so far only been certainly proved at the Logic Lane excavations of 1960.
- 7.1.5 *Phase 3 (Construction of the southern building)*: The building constructed in Phase 3 was tentatively identified during preliminary investigations on the site and confirmation of its presence and nature was a major research aim of the excavation. Further analysis of the stratigraphic record should add to our knowledge of its nature and construction. The relationship with the standing building at No. 4a Merton St is not clear and it is unlikely that documentary evidence will be instructive in this respect. However, the dating of No. 4a Merton St from the architectural evidence of the Green drawing implies

that the two buildings must have stood on the site together. The likely 13th-century form of the standing building should be considered along with the evidence for the excavated hall. Comparison with other known examples of buildings of this type should help to clarify the interpretation of their nature and use.

- 7.1.6 While the southern building was comprehensively robbed upon demolition, a significant quantity of roofing and floor tiles were discarded, presumably because they were broken and could not be re-used. Analysis of the distribution of this material is likely to help with the dating of the building, and with reconstruction of its appearance and status. Consideration should be given to the dating of the roof of the standing building at No. 4a Merton St, and how it may have been roofed in the medieval period. It is possible that some of the tile found in the excavations could have come from an earlier roof on this building.
- 7.1.7 The stratigraphic evidence for surviving floor deposits, and for the existence of a garderobe pit on the north of the building, will provide valuable contextual information for further analysis of environmental evidence from these features. This may cast light on the use of the hall building, and the diet and standard of living of its inhabitants.
- 7.1.8 *Phase 4 (Demolition and robbing of southern building):* As noted above, the dating and interpretation of this building was identified as a major research aim of the project. Clearly at some point the building was no longer of use to the college and it was demolished. The date at which this occurred may reflect the changing circumstances and priorities of the college, and perhaps wider changes in the pattern of settlement in the town itself. Analysis of the pottery from the backfill deposits and the sequence of pits postdating the hall may clarify the date of its disuse and demolition. However, the destruction of evidence by later pits may make it difficult to establish a close dating. It remains possible that these pits are significantly later, and being substantial in nature they may have largely removed the relevant evidence.
- 7.1.9 *Phase 5 (13th-century and later pits):* These pits have reasonably high levels of finds and environmental data and are stratigraphically well understood. The finds and environmental remains they contain will have been discarded by the occupants of the site (both before its acquisition by the college, and during the college's early years of ownership). A good degree of refinement regarding their phasing and dating should be possible. This should provide the opportunity to consider some of the issues identified in the research aims of the project, including the nature of activity and occupation at the site and the use of local and non-local resources.
- 7.1.10 *Phase 6 (Construction of northern building):* The existence of this building fronting onto Kybald Street was unknown prior to the excavation. Its discovery enhances the potential to address a number of the original research aims of the project, particularly those concerning the development of street frontages, the recovery of information about medieval settlement in Oxford, and the economy of the site. It is likely that this building (with what appears to be its own attached garderobe) represents development of the Kybald St frontage of the property. When and why this was undertaken, and by whom,

can be identified as a major research question for the post-excavation analysis. Detailed analysis of the northern building's relationships with the pits in this area will help to establish the chronological relationship of the two excavated buildings on the site, although extensive robbing activity may limit this.

- 7.1.11 Analysis of the building materials, particularly the ridge, roofing and floor tiles has the potential to aid in dating the structure and can provide evidence regarding construction and status.
- 7.1.12 Documentary evidence will be re-examined for material that may relate to this building, although it is by no means certain that it will be identifiable.
- 7.1.13 *Phase 7 (Robbing of the northern building, and Merton College pit-digging):* The evidence from the northern building robber trench will help to clarify when the building went out of use, although the robbing recorded in the excavation is below ground level and could have taken place much later than the original demolition.
- 7.1.14 The large pits of this phase may have been dug to bury the college's rubbish. If this can be demonstrated, the finds and environmental remains they contain will be of high value as indicators of the everyday material culture of an Oxford college at this date.
- 7.1.15 *Phase 8 (15th-century and later pits and stone features):* The potential for the large pits is similar to Phase 7 with the addition that there are a relatively large number of metalwork finds from this phase, including personal items and implements associated with writing. Many of the tokens were also retrieved from these features.
- 7.1.16 Combining stratigraphic, dating and spatial information may enable some of the features such as the stone lined pit and drain to be related to periods of occupation of No. 4a Merton Street which have already been identified in the desktop study. Finds from these features would then have increased potential to add to our knowledge of the history of the site at an everyday, domestic level. Documentary sources may have the potential to add to the information already gathered for the desk based assessment regarding the later history of No. 4a Merton Street.
- 7.1.17 Analysis of the stratigraphy and the dating of deposits associated with the eastern boundary wall has the potential to clarify when this boundary was instigated as initial impressions from the excavation imply a later date than was previously thought.
- 7.1.18 *Phase 9 (16th-century and later features):* The stable yard features are fragmentary and truncated and have a low potential to add much detail to our knowledge of this phase of activity, but the use of maps and plans of the site may assist in resolving this later sequence of activity. The remains of the building noted in the north-west corner of the site may provide further information about the use of the site in the post-medieval period.
- 7.1.19 *Phase 10 (19th-century stable features):* The information collected regarding these features has a low potential to add significantly to existing knowledge of this phase of

activity.

## 7.2 Artefactual potential

### *Pottery*

- 7.2.1 The pottery assemblage has a number of significant traits, and is one of the most important excavated in the medieval city of Oxford in recent years. It is the primary dating evidence for the different phases of construction and demolition of the buildings on the site, and further work, particularly on intercutting features, should help to refine the dating sequences for the site, and the chronology of the pottery itself. Some cross-fits were noted during spot-dating and a full investigation of the assemblage, concentrating primarily on decorated or distinctive vessels, has the potential to provide valuable information with respect to site formation processes. In addition, the nature of the deposits, particularly some of the pit groups, indicates that a significant use-change at the site can be identified by characteristics of feature-specific assemblages, particularly the deposition of kitchen equipment. Detailed analysis of individual groups can address project research aims relating to pottery chronology and typology, the nature and use of the site and the exploitation of local and non-local resources. The assemblage can be compared with others from Oxford and nearby, including Beaumont Palace, Eynsham Abbey and Lincoln College.

### *Building materials*

- 7.2.2 The ridge tiles are of particular interest in that they present a number of different types, which it may be possible to relate more fully to the chronology of the site. Also of interest are the various early roofing tile types and floor tiles, indicative of high status building in the 12th and 13th centuries.
- 7.2.3 Peg tiles constitute the bulk of the material recovered – 77 per cent by count. Despite the bulk, however, it is doubtful whether there is much potential to add to knowledge of the site by cleaning and examining them piece by piece.

### *Worked stone*

- 7.2.4 The worked stone pieces have some potential to contribute to our knowledge of the early buildings on the site. Three of the pieces may be from the windows shown on the Green drawing of No. 4a Merton St, and four other medieval pieces may have come from the college chapel. It would be worth obtaining expert comment on their dating and significance.

### *Metalwork and worked bone*

- 7.2.5 The metal and bone objects will help with the dating of some features especially refining the pit sequences. They can contribute little to the understanding of the earliest phases of activity but the tools, domestic items and horse-gear particularly prevalent in Phases 7 and 8 reflect both the academic and ordinary daily life of the college. These assemblages

are of considerable significance since there have been very few opportunities for archaeological study of the material culture of a college. The fact that these groups can be securely associated with a known medieval establishment enhances their value as a comparative group.

### ***Coins and tokens***

- 7.2.6 Further cleaning of the coins may enable more precise identifications to be made, which may assist with more precise dating of the contexts in which they originated. There is limited potential for further work on the token assemblage, although such items may have been used in the college as part of the accounting process and would merit publication as a catalogue with a brief discussion.

### ***Glass***

- 7.2.7 The green high-lead beaker fragment is the first find of this kind of glass in Britain, and should certainly be reported at an appropriate level of detail. Other elements of the medieval and early post-medieval glass assemblage are also of interest. No medieval glass tableware has previously been identified from excavations in the city of Oxford, and the Postmasters' Hall Yard group contains at least two certain examples. Other medieval glass from the site may have been associated with uroscopy, or distilling, perhaps for the purposes of manufacturing herbal or medicinal recipes. Some fragments of medieval window glass were also identified. The glass thus has considerable potential as an indicator of the status of the site, its sources of traded goods, and a pointer to some of the less obvious activities that may have been carried on within its medieval household. The glass also has some potential to assist with refining the dating of certain contexts. A limited amount of further work is proposed, leading to a brief publication report with catalogue and illustrations.

## **7.3 Environmental potential**

### ***Animal bone***

- 7.3.1 From the assessment it is clear that the condition of the bone will allow for a detailed study of the material from the site, which can address a number of the research aims of the project relating to the economy of the site and the use of local and non-local resources. This is a substantial animal bone group, from a well-understood context, and a high proportion of the material is likely to be identifiable to species. The material from Phase 2 contexts suggests that there will be potential to consider evidence from the earliest occupation of the site. There are numerous published animal bone groups from the late Saxon town with which the present material could be compared.
- 7.3.2 For the later medieval period, the connection with Merton College, and the potential for a well-dated stratigraphic sequence at the site, considerably enhances the research value of the assemblage. The animal, bird and fish bone provides direct evidence of the food consumed at the college during the medieval period. This is likely to reflect the everyday diet and standard of living of the college's fellows and scholars, and the range of

resources to which they had access. The assessment suggests that there are clear indicators of a high-status diet in the assemblage, including swan and venison, and further evidence of the exploitation of high-status resources may be present in the fish bone assemblages. A large number and variety of fish bones were recovered from kitchen floor deposits at Lincoln College (Ingrem 2003), and the remains from the present site are likely to provide comparable evidence.

- 7.3.3 The recording of the age at death of the animals is significant at a wider level for understanding of kill-off patterns and change in agricultural practice over time. Consumption of young animals can also be an indicator of a high-status diet. A significant proportion of the assemblage is datable to Phase 9 (16th-18th century). It is widely believed that this period saw major advances in the improvement of economic breeds, and this assemblage offers an opportunity to compare medieval and post-medieval animal bones from a single site.

#### ***Charred and waterlogged plant remains***

- 7.3.4 The evidence from the environmental samples will add little to the understanding of the general environment on the site but does have the potential to inform on diet and site activities in the main phases of occupation. The charred evidence will provide evidence of the use of cereals. It will be particularly interesting to consider the form in which cereals were brought onto the site and what this might imply about the way in which they were being used by the college. The waterlogged and mineralised material will provide useful evidence for diet and includes species which are not normally represented by charring alone. The possibility that plant remains from some later contexts (Phase 7 onwards) derived from the stables rather than the college itself will be investigated.

#### **7.4 Documentary resource potential**

- 7.4.1 Merton College holds extensive documentary resources, and the examination of these would be beyond the scope of the present project. However, there is considerable potential for further focused research to address specific questions raised during post-excavation analysis. An obvious example of this would be to try to identify the excavated northern building.

### **8 RESEARCH AIMS**

#### **8.1 Original research aims**

- 8.1.1 The original aims of the excavation were set out in the Written Scheme of Investigation for the project (OA 2002) and are reproduced below.

### ***General aims***

#### 8.1.2 The excavation aimed to:

- Investigate, characterise and record the archaeological evidence which will be destroyed during development, and to make available the results of the investigation through full publication.
- Identify the range and types of medieval structures and activity with particular attention to the development and layout of known buildings and street frontages.
- Establish dates of sites and associated activities.
- Recover ceramic evidence to help to develop pottery chronology and typology.
- Seek to recover evidence for the economy of the site.
- Identify local and non-local resources, eg pottery, for indications of exploitation of those resources.
- Recover artefactual information, to clarify the nature of industrial and other activities, or domestic occupation.
- Compare and contrast the evidence from the site with evidence for contemporary activity found locally and regionally.
- Seek to recover palaeoenvironmental data to provide evidence for the utilisation of resources, and to establish the pattern of local environmental conditions.

### ***Specific aims***

- To establish the presence/absence of activity pre-dating the known history of the site.
- To recover important information about the medieval and post-medieval settlement of Oxford.
- To investigate elements of the great stone townsman's house, in particular a possible hall, which may be present (as evidenced by the possible basement observed in the Watching Brief).
- If the presence of a hall building is established, to characterise, date and interpret the changing layout and function of this structure.

## 8.2 Revised research aims

- 8.2.1 The data collected from the excavation will enable all the original research aims to be addressed to some extent. In most cases a fairly full discussion will be possible. It is proposed that the post-excavation analysis should combine the different elements of the data resource to consider the development and significance of the site at different stages of its history. The following revised research aims are proposed.

### ***Anglo- Saxon***

- 8.2.2 The presence of early Saxon pottery, including two decorated sherds, is of some significance, since very little material of this date is currently known from the city of Oxford. Although no further analysis is proposed, it is recommended that this group of material is included and discussed in the final publication.
- 8.2.3 A number of possible late Saxon cellar pits were identified in the southern half of the site, which do not respect the later property boundaries. Further work at post-excavation stage will aim to date and characterise this and other early activity pre-dating the known

history of the site, taking into account the stratigraphic, finds and environmental evidence available. The results will be considered in the light of their contribution to knowledge of the overall development of the town during the late Saxon and early post-Conquest periods.

### ***The Norman town house***

- 8.2.4 Further analysis will be carried out to date the construction of the southern hall building revealed in the excavations. The relationship of this building to No. 4a Merton St will be considered. The likely form and appearance of these buildings in the 13th century will be reviewed, combining stratigraphic and finds evidence (especially the tile), and information available about other known buildings of this type. Early drawings and any photographs of No. 4a Merton St will be re-examined for information about its original form.
- 8.2.5 Understanding of the buildings will be enhanced by further analysis to characterise the status, diet, occupation and lifestyle of the buildings' inhabitants. Further analysis of the pit sequences will be carried out in order to identify those contemporary with the occupation of the southern hall building. Finds and environmental remains from these pits will be considered and brief biographical information relating to the Edrich family and Alexander Knight in numerous early Oxford property deeds will be assembled. Information relating to their occupations, family connections and other property holdings is readily available and would provide some insight into the kinds of people who occupied these buildings prior to the college's acquisition of them.
- 8.2.6 Further analysis will be carried out to date the construction of the northern building. The relationship of this building to the others on the site will be investigated, and an attempt will be made to establish when, why and by whom the Kybald St frontage of the site was developed. Evidence for the likely form and appearance of the building will be considered.

### ***Master Peter of Abingdon and the college's early use of the property***

- 8.2.7 Further consideration will be given to the nature of Merton College's early use of the site following the acquisition of it in the early 1270s by Peter of Abingdon alias de Laking (Lockinge) (cf Emden 1957 and Highfield 1990). There are numerous research questions that it may be possible to address. Was the northern building constructed by the college? Were members of the college, possibly Peter of Abingdon himself, living on the site, and is it possible to identify the point at which the college began to use No. 4a Merton St for stabling? Were the excavated buildings demolished by the college, and if so when and why? Was it used as the college's refuse yard, and if so from what point?

### ***The economy of the medieval college***

- 8.2.8 Finds and environmental remains from the large pits of Phases 7 and 8 have very high research value as a sample of the remains of the college's everyday household life during the later medieval period. Small finds from these phases provide a sample of objects in

use at the college at this time that will represent a useful comparative group for finds studies. The results of the assessment suggest that the assemblages are unusual in a number of ways, and this may reflect the special nature of the site as the refuse yard of a high-status academic community. The pottery assemblages, for example, suggest high levels of meat consumption and large-scale catering; the unusually high number of lamps present may also reflect an academic community that needed (and could afford) lighting for reading and study. The animal bone is suggestive of a high-status diet, with luxury items such as swan. Environmental remains will add to our understanding of diet and provisioning, and it is possible that stable waste will also be identifiable. Comparisons can be undertaken with the recently published evidence from excavations in the kitchens of Lincoln College (Kamash *et al* 2003). However, the environmental evidence has limited or no potential to inform on local environmental conditions as any conclusions regarding these would be unreliable given the nature of the site.

### ***The stable yard***

- 8.2.9 A number of surfaces, drains, pits and layers were revealed that are likely to be associated with the use of the area as a stable yard from the 16th to the 20th centuries, and the remains of a post-medieval building were recorded in the north-west corner of the site. These will be discussed in the light of the cartographic and documentary evidence, to review the evidence for change and development during the post-medieval period.
- 8.2.10 The deposits relating to the rebuild of the Real Tennis Court in 1798 will be reported.
- 8.2.11 There is generally rather less finds and environmental evidence available for this period, except in the case of the animal bone where it seems likely that the yard continued to be used for the disposal of kitchen waste, at least for a time. Animal bone of this period can usefully be compared with medieval animal bone for evidence of improvement in economic breeds. Consideration should also be given to the provenance of objects of medieval date found in late contexts, since they may have been discarded as a result of documented campaigns of rebuilding or alterations within the college.

## **9 METHOD STATEMENT**

### **9.1 Dating and phasing**

- 9.1.1 Further specialist analysis will be carried out where necessary to refine dating obtained during the assessment stage of the project. The site matrix will be adjusted to take account of the refined dating and problematic relationships will be checked against site records, discussed with specialists where appropriate and resolved. The digitised plans will be 'cleaned up' and problems resolved. Spatial patterning will be analysed. The phasing will be refined and adjusted as appropriate.

## 9.2 Site narrative and illustrations

- 9.2.1 The final results of the above process will be described in a site narrative, by phase, from the earliest phase to the latest. Description of buildings and features will incorporate evidence for their probable appearance and function where this is available from finds and environmental assemblages. The narrative will be accompanied by appropriate illustrations which will be drawn to publication standard.

## 9.3 Pottery

- 9.3.1 Information provided by the stratigraphic matrix will be used to refine the dating of context-specific pottery groups and data tables adjusted accordingly.
- 9.3.2 Individual feature groups and sequences will be analysed. Some cross-fits were noted during spot dating and a full investigation of the assemblage, concentrating primarily on decorated or distinctive vessels will be carried out. Suitable statistical techniques, such as the Chi-Squared test, will be used to aid comparison of the finds with other sites in the area. The implications for our understanding of the manufacture and marketing of medieval pottery on both a local and national level will be considered.
- 9.3.3 The assemblage will be analysed, researched and discussed with regard to its significance in the city of Oxford and the surrounding region.
- 9.3.4 A selection of sherds will be made for illustration and a catalogue prepared.

## 9.4 Building materials

- 9.4.1 No further examination of the peg tiles will be undertaken
- 9.4.2 The ridge tiles will be cleaned and subjected to further specialist study, including examination of the fabrics.
- 9.4.3 The floor tiles will be cleaned and subjected to further specialist study with a view to identifying the designs. The fabrics will also be examined.
- 9.4.4 For publication, further comparison of the building materials assemblage with the final stratigraphic sequence established for the site will be undertaken. A report on the building materials will be prepared for all the materials but concentrating on the ridge and floor tiles.
- 9.4.5 Appropriate pieces will be illustrated for publication.

## 9.5 Stonework

- 9.5.1 The stonework will be submitted for expert comment on its date and significance. Appropriate pieces of stonework will be drawn for inclusion in the publication.

## 9.6 Metalwork and worked bone

- 9.6.1 Additional radiography of the unidentified objects will be completed and selected objects will be conserved and cleaned for illustration.
- 9.6.2 A catalogue will be completed and a report produced for publication concentrating on the analysis of the assemblages in the light of the final phasing.
- 9.6.3 Appropriate pieces will be drawn for inclusion in the publication.

## 9.7 Coins and Tokens

- 9.7.1 Further cleaning of the coins will be undertaken in order to allow them to be more precisely identified. A catalogue of the coins will be prepared for publication. Further work on the tokens is unlikely to provide additional information on dating. A report will be produced cataloguing the tokens and discussing their probable role in college activities.

## 9.8 Glass

- 9.8.1 A brief archive catalogue will be prepared of all the glass. A more detailed report on the medieval and early post-medieval glass will be prepared for publication. This will consider the glass in terms of its rarity and function, and as an indicator of status and of the economy of the medieval household of Merton College. Approximately seven pieces will be illustrated.

## 9.9 Animal bone

- 9.9.1 The recording of the assemblage will be completed. Material not securely stratified or from contexts which cannot contribute directly to the research aims will be excluded from the analysis. Further analysis of the bone will be undertaken including recording of tooth wear stages and fusion data. Fish bone will be submitted for expert identification at Southampton University. A report will be produced which discusses the results in the light of the final phasing.

## 9.10 Charred and waterlogged plant remains

- 9.10.1 Further samples will be selected for processing when the refined phasing has been completed. This will be done bearing in mind the results of the assessment and the research aims. The degree of further detailed analysis and how this will be targeted will be reviewed when it is possible to take an overview of all the material recovered. However, it is envisaged that this will involve sorting residues, identification of seeds and chaff, sorting and identification of mineralised seeds and sorting and identification of waterlogged seeds. A report will be produced which discusses the environmental evidence in the light of the refined phases.

## 9.11 Documentary history

- 9.11.1 There is extensive documentation in the college archives for the domestic economy of Merton College, some of which has been examined already. Use will be made of the published material in Alan Bott's study of Postmasters' Hall (*Postmaster and The Merton Record* 2001), Roger Highfield's *Early Rolls of Merton College*, and his recent work on horses and stabling at the college (2003). Further research into college records will only be undertaken where it can be focused on specific research questions arising during post-excavation analysis.
- 9.11.2 The early drawings and any photographs of No. 4a Merton St will be re-examined, and compared with records of other lost early medieval houses in Oxford. The chronology of stone domestic buildings in Oxford will be considered, and an existing draft gazetteer of Oxford's Norman stone houses will be prepared for inclusion in the final publication.

## 9.12 Comparative research

- 9.12.1 Relevant published material will be consulted to allow comparisons with other sites to be made, both in terms of the features and activities recorded on site and the finds assemblages collected.

## 9.13 Report

- 9.13.1 A report will be prepared for publication which describes the archaeological deposits by phase. A discussion of the interpretation of the evidence and of appropriate comparanda will follow. This will be supplemented by relevant illustrations.
- 9.13.2 In addition to the main body of the report a summary, introduction and statement of methodology, and a full list of references will be produced. A synopsis of the publication is set out below.

## 10 PUBLICATION SYNOPSIS

10.1.1 It is intended that the report be published in *Oxoniensia*.

### **Excavations at Postmasters' Hall Yard, Merton College, Oxford: the archaeology of a Norman stone townhouse, and the evolution of a medieval tenement and early college property**

by Daniel Poore and David Score

Estimated length 40,000 words with 25 figures, 10 plates and 20 tables

#### *Summary*

*Introduction: (approx 2000 words, mostly historical background and description of No. 4a Merton St))*

#### *Project background*

Archaeological and historical background

Evaluation and watching brief phase

Excavation methodology

*Description: (approx 8000 words: tables will be used to avoid lengthy description of numerous pits)*

Phase 1: Natural deposits

Phase 2: 11th + century pits

Phase 3: Construction of southern hall building

Phase 4: Demolition and robbing of southern hall building

Phase 5: 13th + century pits

Phase 6: Construction of northern building

Phase 7: Robbing of northern building and Merton College pit digging

Phase 8: 15th + century pits and stone features

Phase 9: 16 + century features

Phase 10: 19th century 'stable' features

*Finds reports: (16000 words, including catalogues)*

Pottery (4500 words)

Building Materials (3000 words)

Stonework (1000 words)

Metalwork and worked bone (4000 words)

Coins and Tokens (1500 words)

Glass (2000 words)

*Environmental reports: (7000 words)*

Animal bone (4000 words)

Charred and waterlogged plant remains (3000 words)

*Discussion: (6000 words)*

Late Saxon occupation

The Norman townhouse

Master Peter of Abingdon and the college's early use of the property

The economy of the medieval college

The stable yard

#### *Bibliography*

*Gazetteer of medieval stone town houses in Oxford*

*Figures and plates (approximate)**Introduction*

Figure 1 Site location with previous archaeological sites

Figure 2 Medieval tenements (after Salter and Peberdy)

Plate 1 The Green drawing of No. 4a Merton St

Figure 3 The development and trench locations

*Description*

Figure 4 Plan of phase 2: late Saxon features

Figure 5 Plan of phase 3: the southern building and associated pits

Plate 2 The southern building

Figure 6 Plan of phase 6: the northern building added

Plate 3 The northern building

Figure 7 Plan of phase 7: the north and south buildings demolished? and college refuse pits

Figure 8 Plan of phase 8: college refuse pits; boundary wall; large stone-lined pit and drain (stable drainage?)

Figure 9 Plan of phase 9: post-medieval stable yard features

Figures 10 and 11 Sections illustrating key stratigraphic relationships; late Saxon cellar profiles; varying pit profiles etc

*Finds reports*

Figure 12 Early and late Saxon pottery including decorated sherds, and regional and continental imports; pre-college 12th- and 13th-century pottery including possible strainers, miniature jug in Medieval Oxford Ware

Figures 13, 14 (15?) Pottery associated with Merton College: lamps, dripping dishes, lids, drinking jugs, inscribed vessels, vessels with unusual decoration

Plate 4 Pottery

Figures 16 (?17) Tile: ridge tile, ?other roof tile, decorated floor tile, gutter tiles?

Figures 18 (19?) Architectural stone: possible window fragments from No. 4a Merton St shown with proposed reconstruction; other medieval pieces?

Figures 20, 21 Metal and bone finds: writing equipment; other finds - with horse equipment presented as a group

Figure 22 Glass

Plate 5 Writing equipment

*Environmental reports*

Figures 23, 24 Graphs to accompany environmental report showing proportions of species

*Discussion*

Figure 25 Reconstruction of the appearance of the Norman stone townhouse in the 13th century

Plate 6 The seal of Peter of Abingdon (Merton MS 1767; Bott 2001 plate 3)

Plate 7 The petition for a licence in mortmain (Merton MS 2791; Bott 2001 plate 4)

Plate 8 Loggan's 1675 bird's eye view of the site

Plate 9 Ordnance Survey 1878-80 map of the site

Plate 10 Merton Estates Office plan of the site c 1930

*Tables (approximate)*

Tables 1, 2, 3 (?4) Pit fills and dimensions

Tables 5, 6, 7 (?8, 9) Pottery

Tables 10, 11 Tile

Tables 13, 14, 15, 16, 17 (?18) Animal bone

Tables 19, 20 Environmental

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## 14 APPENDIX 1- ARTEFACTUAL SPECIALIST REPORTS

### 14.1 Pottery by Paul Blinkhorn

- 14.1.1 The pottery assemblage comprised 6,102 sherds with a total weight of 121,880 g. The estimated vessel equivalent (EVE), by summation of surviving rimsherd circumference was 70.21. The assemblage is important in a number of ways, and is one of the most significant excavated in the city of Oxford in recent years. It included two sherds of decorated early Saxon pottery, only the second find of such material in Oxford, and the small assemblage of late Saxon material included unusual regional and continental imports. The medieval assemblage, particularly that dating to the later part of the period, is truly remarkable. It has produced a large assemblage of pottery associated with the preparation and consumption of food and drink, with vessels such as dripping dishes, mugs, cups and drinking jugs present in what appear to be unusually large quantities. Pottery associated with lighting, specifically lamps, is also present in large quantities. In addition, a number of unusual decorated sherds are present, not least of which is a vessel with a fragment of an inscription which appears to be the name of the college. The fact that it was made while the clay was still wet indicates that the potters of Brill in Buckinghamshire were making pots to order specifically for the college. This is one of the very few pieces of archaeological evidence that we have for this practice, and it has major implications for our understanding of the manufacture and marketing of medieval pottery.

#### *Analytical Methodology*

- 14.1.2 The pottery was initially bulk-sorted and recorded on a computer using DBase IV software. The material from each context was recorded by number and weight of sherds per fabric type, with featureless body sherds of the same fabric counted, weighed and recorded as one database entry. Feature sherds such as rims, bases and lugs were individually recorded, with individual codes used for the various types. Decorated sherds were similarly treated. In the case of the rimsherds, the form, diameter in mm and the percentage remaining of the original complete circumference was all recorded. This figure was summed for each fabric type to obtain the estimated vessel equivalent (EVE).
- 14.1.3 The terminology used is that defined by the Medieval Pottery Research Group's Guide to the Classification of Medieval Ceramic Forms (MPRG 1998) and assessment has followed the minimum standards laid out in the Minimum Standards for the Processing, Recording, Analysis and Publication of post-Roman ceramics (MPRG 2001). All the statistical analyses were carried out using a Dbase package written by the author, which interrogated the original or subsidiary databases, with some of the final calculations made with an electronic calculator. All statistical analyses were carried out to the minimum standards suggested by Orton (1998-9, 135-7).

*Fabric*

14.1.4 The pottery was recorded utilising the coding system and chronology of the Oxfordshire County type-series (Mellor 1984; 1994). The 'F' prefixed numerical codes are those used in the database, as follows:

- F100. OXR: St. Neots Ware type T1(1), AD850-1100. 90 sherds, 1,013g, EVE = 1.09.  
 F205. OXZ: Stamford ware, 850-1150. 6 sherds, 51g, EVE = 0.24.  
 F102. OXBQ: Flemish Greyware, 10th - 11th C. 1 sherd, 58g, EVE = 0.09.  
 F200. OXAC: Cotswold-type ware, AD975-1350. 928 sherds, 15,100 g, EVE = 9.68.  
 F202. OXBF: North-East Wiltshire Ware, AD1050 - 1400. 518 sherds, 7,457g, EVE = 2.96.  
 F300. OXY: Medieval Oxford ware, AD1075 - 1350. 1703 sherds, 24,923g, EVE = 16.18.  
 F330. OXBK: Medieval Shelly Coarseware, AD1100-1350. 2 sherds, 99g, EVE = 0.24.  
 F352. OXAM: Brill/Boarstall ware, AD1200 - 1600. 2,318 sherds, 63,236g, EVE = 33.33.  
 F456. OXBG: Surrey Whiteware. Mid 13th - mid 15th C. 47 sherds, 1,343g, EVE = 0.47.  
 F329. OX68: Potterspury ware, Late 13th - 17th C. 2 sherds, 55g, EVE = 0.11.  
 F403. OXBN: Tudor Green Ware, late 14th C - c.1500. 146 sherds, 1,267g, EVE = 2.81.  
 F404. OXCL: Cistercian ware, 1475-1700. 14 sherds, 156g, EVE = 0.09.  
 F410. OXAM: Brill/Boarstall 'Tudor Green' wares, 1475-1600. 52 sherds, 403g, EVE = 1.56.  
 F405. OXST: Rhenish Stoneware, AD1480 - 1700. 122 sherds, 2,121g, EVE = 1.37.  
 F451. OXFH: Border wares, 1550 - 1700. 1 sherd, 20g.  
 F425. OXDR: Red Earthenwares, 1550+. 41 sherds, 1,869g.  
 F412. OXRESWL: Polychrome Slipware, 17th C. 2 sherds, 106g.  
 F417. OXCE: Tin-glazed Earthenware, 1613 - 1800. 6 sherds, 123g.  
 F443. OXFM: Staffordshire White-glazed English Stoneware, 1730 - 1800. 1 sherd, 11g.  
 F418 CRM: Creamware, mid 18th - early 19th C. 3 sherds, 13g.  
 F1000. WHEW: mass-produced white earthenwares, 19th - 20th C. 90 sherds, 1,509g.

14.1.5 In addition, the following wares, not included in the Oxford type-series, were also noted:

- F104. Thetford-type ware, 1 sherd, 23g, EVE = 0.11.  
 F348. Low Countries Redware, 2 sherds, 833g, EVE = 0.07

14.1.6 In addition, a small assemblage of early/middle Saxon handmade wares was noted. This included two decorated sherds, one stamped, the other incised, which indicates an early Saxon date, probably 6th century. A single sherd (5 g) of Romano-British material was also present.

*Chronology*

14.1.7 At this stage, all the pottery assemblages have been given spot-dates based solely on the range of ware and vessel types present, with no account taken of the stratigraphy. This requires further refinement during the analysis stage, allowing the dating to be adjusted accordingly.

14.1.8 Each context was given a seriated ceramic phase date, based on the wares present, as shown in Table A1.1.

Table A1.1: Ceramic Phase Chronology and Defining Wares

Phase	Date	Defining Fabric
LS	10 <sup>th</sup> – 11 <sup>th</sup> C	OXR
1	?11 <sup>th</sup> C	OXAC
1a	M-L 11 <sup>th</sup> C	OXBF
2	L11 <sup>th</sup> -12 <sup>th</sup> C	OXY
3	13 <sup>th</sup> – 14 <sup>th</sup> C	OXAM
3a	M13 <sup>th</sup> – 14 <sup>th</sup> C	OXBG
3b	L13 <sup>th</sup> – 14 <sup>th</sup> C	OX68
4	14 <sup>th</sup> C	OXBN
5	15 <sup>th</sup> – late 15 <sup>th</sup> C	OXBN
6	L 15 <sup>th</sup> – M16 <sup>th</sup>	OXCL, OXAM, OXST
6a	E-M 16 <sup>th</sup> C	Decorated OXST
7	M16 <sup>th</sup> – 17 <sup>th</sup> C	OXDR, OXFH
8	17 <sup>th</sup> – M 18 <sup>th</sup> C	OXREWSL, OXCE
9	M – L 18 <sup>th</sup> C	OXFM, CRM
10	19 <sup>th</sup> C	WHEW

The pottery occurrence per ceramic phase is shown in Table A1.2:

Table A1.2: Ceramic phasing, pottery occurrence per phase by number and weight of sherds and EVE, all fabrics (including residual material)

Phase	Date	No Sherds	Wt. Sherds	EVE
LS	10 <sup>th</sup> – 11 <sup>th</sup> C	8	130 g	0.31
1	?11 <sup>th</sup> C	78	1,232 g	1.10
1a	M-L 11 <sup>th</sup> C	6	68 g	0.05
2	L11 <sup>th</sup> -12 <sup>th</sup> C	1209	19,034 g	11.66
3	13 <sup>th</sup> – 14 <sup>th</sup> C	2187	31,481 g	22.34
3a	M13 <sup>th</sup> – 14 <sup>th</sup> C	142	3,043 g	1.78
3b	L13 <sup>th</sup> – 14 <sup>th</sup> C	19	324 g	0.21
4	14 <sup>th</sup> C	453	11,922 g	6.70
5	15 <sup>th</sup> – late 15 <sup>th</sup> C	936	29,052 g	17.58
6	L 15 <sup>th</sup> – M16 <sup>th</sup>	592	10,690 g	8.36
6a	E-M 16 <sup>th</sup> C	87	1,142 g	0.22
7	M16 <sup>th</sup> – 17 <sup>th</sup> C	120	2,157 g	0
8	17 <sup>th</sup> – M 18 <sup>th</sup> C	162	3,163 g	0.10
9	M – L 18 <sup>th</sup> C	0	0	0
10	19 <sup>th</sup> C	102	2438g	0
Total		6101	115,876 g	70.41

14.1.9 The data in Table A1.2 show the amount of pottery deposited in each ceramic phase. Some late Saxon activity is evidenced, although in most cases each context which has been given a pre-11th century date produced very few sherds, and they maybe later contexts which did not contain contemporary pottery. The data for the medieval phases show that pottery was deposited at the site in large quantities throughout the period, until the 16th century, when there was relatively little material deposited. This is quite unusual for sites in central Oxford, as there are often large amounts of ceramic associated with archaeological features of the 16th and 17th centuries, while at the same

time, very large quantities of 15th century material are rare.

### Reliability of Deposits

Table A1.3: Pottery occurrence per ceramic phase by fabric type, expressed as a percentage of the weight per phase, major fabrics only

	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
F100	0.3%	2.9%	0.5%	0.6%	0.2%	0.4%	0	0.2%
F200	91.4%	25.8%	18.0%	9.2%	1.9%	2.6%	1.0%	3.5%
F202	5.1%	6.0%	10.8%	7.4%	1.6%	4.4%	0	0.6%
F300	-	64.8%	23.2%	11.5%	3.8%	3.1%	5.8%	3.3%
F352	-	-	47.3%	70.5%	81.4%	74.9%	45.7%	55.8%
F403	-	-	-	-	3.7%	1.3%	0.2%	0.7%
F405	-	-	-	-	1.0%	7.3%	15.1%	14.5%
F410	-	-	-	-	-	3.7%	0.1%	0
All post-med	-	-	-	-	-	-	31.0%	21.1%
Phase Total	1232g	19034g	37481g	11922g	29052g	10690g	2157g	3163g

14.1.10 The data in Table A1.3 show that in the main, it is only during the later 16th and 17th century that earlier pottery makes up a significant proportion of the assemblages, showing that there is relatively little redeposition of earlier material, particularly in the medieval phases. This suggests that most of the pottery has suffered very little disturbance, and accounts for the relatively large mean sherd size of the medieval material (see below).

### Vessel Types

Table A1.4: Vessel occurrence per phase, expressed as a percentage of the EVE per phase, including all sub-phases. \*DD = Dripping Dish. These vessels are asymmetrical and cannot be recorded by EVE. The entries in Table A1.3 refer to the number of vessels noted. Handles from at least 5 other vessels were noted in phase 5 contexts.

	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6
Jars	86.6%	88.3%	48.7%	39.1%	18.5%	12.6%
Bowls	5.2%	6.4%	4.6%	6.7%	10.0%	18.9%
Jugs	7.8%	5.3%	43.4%	41.6%	56.6%	27.3%
Lids	0	0	0	6.0%	1.5%	2.0%
Cups	0	0	0	0	9.8%	17.7%
Lamps	0	0	2.4%	6.6%	0.6%	7.4%
Mugs	0	0	0	0	13%	14.3%
Bottle	0	0	0	0	1.8%	0
Other*				4 DD	6 DD	3DD
Phase Total	1.15	11.66	24.33	6.70	17.34	8.66

14.1.11 The data in A1.4 show that the earlier medieval assemblages at the site are fairly typical of the period in that they are dominated by jar sherds, with small quantities of bowls and

pitchers making up the rest. The later medieval period, particularly phases 4 – 6, shows what may be significant differences from the norm. The later medieval period in England saw a large expansion in the range of vessel types manufactured by medieval potters, and this site shows the same general pattern, although the proportions of the lesser vessels (lamps, cups, lids, mugs and dripping dishes) appear unusually high. This is likely to be a reflection of the nature of the site, an Oxford college, with the mugs, cups, lids and dripping dishes the result of catering on a far larger scale than would be found in a purely domestic dwelling, and the lamps being the source of light for the population. The data could be statistically tested at report stage by comparison with other sites in the region of differing status, and any significance discussed.

### Fragmentation Analysis

Table A1.5: Mean sherd weight per phase, major fabrics

Phase	Date	OXR	OXAC	OXBF	OXY	OXAM	OXBN	OXST
LS	10 <sup>th</sup> – 11 <sup>th</sup> C	10.3 g	-	-	-	-	-	-
1	11 <sup>th</sup> C	4.0 g	16.3 g	12.6 g	-	-	-	-
2	L11 <sup>th</sup> -12 <sup>th</sup> C	14.4 g	13.9 g	19.9 g	16.4 g	-	-	-
3	13 <sup>th</sup> – 14 <sup>th</sup> C	7.1 g	17.6 g	13.2 g	13.1 g	22.1 g	-	-
4	14 <sup>th</sup> C	11.2 g	22.0 g	17.4 g	11.5 g	38.4 g	-	-
5	15 <sup>th</sup> – L 15 <sup>th</sup> C	15.3 g	17.8 g	10.9 g	15.8 g	37.1 g	10.8 g	14.7 g
6	L15 <sup>th</sup> – M16 <sup>th</sup> C	23.0 g	17.5 g	14.6 g	11.7 g	21.3 g	4.1 g	22.9 g
7	M 16 <sup>th</sup> – 17 <sup>th</sup> C	0	21.0 g	0	18.0 g	15.5 g	1.7 g	15.5 g
8	17 <sup>th</sup> C	5.0 g	15.7 g	19.0 g	14.9 g	19.8 g	5.2 g	16.3 g

14.1.12 The data in Table A1.5 show the mean sherd weight per phase, and indicate that the pottery from this site is, on the whole, in good condition, with sherds reasonably large. This again shows that there has been very little redeposition or transportation of the material prior to its final deposition.

### Cross-fits

14.1.13 The following cross-fits were noted:

- 965, L15thC = 1217, 14thC, OXAM jug.
- 1024, L15thC = 1027, L15thC, OXAM.
- 1024, L15thC = 1035, L15thC, OXAM.
- 1039, 14thC = 1045, L11thC, OXBF jug.
- 1039, 14thC = 1045, L11thC, OXBF jar.
- 1071, 15thC = 1072, 15thC = 1073, 15thC, OXAM bowl.
- 1071, 15thC = 1073, 15thC, OXAM jar.
- 1071, 15thC = 1073, 15thC, OXAM jar.
- 1222, 15thC = 1225, 15thC, OXAM dripping dish.
- 1222, 15thC = 1225, 15thC, OXAM dripping dish.
- 1430, 13thC = 1431, 13thC, OXAM.
- 1682, L11thC = 1687, L11thC, OXY tripod pitcher.

14.1.14 These cross-fits were noted during the initial processing of the material, and suggest that it is likely that other cross-fits can be made. This could be carried out at the report stage.

### *The Assemblage*

14.1.15 This assemblage is generally one of large sherds with little contamination or redeposition. There are also a number of factors which can be regarded as significant, as follows:

#### *Early Saxon*

14.1.16 The presence of decorated early Saxon pottery is of some significance, despite the small assemblage size. Such material is a rare find in central Oxford. The first group of pottery of this period in the city came from a ditch at St. Ebbe's (Mellor 1989, 198), and included three stamped sherds. The site also produced small groups of other redeposited hand-built early/middle Saxon material, (ibid. 201). A small number of organic tempered early/middle Saxon sherds were noted during the excavations in the cloister of St. Frideswide's church (Mellor 1988, 34).

#### *Late Saxon*

14.1.17 The presence of the ? Flemish storage jar rim is worthy of comment. Although such pottery is well known in the ports of Eastern England, such as Norwich, Ipswich and London, it is a rare find in Oxford. Rims from smaller jars of this type were noted at St. Ebbe's and Cornmarket (Mellor 1989, 201).

14.1.18 A rimsherd from a Thetford ware jar was also present. This material is also a rare find in Oxford. Two sherds were noted at the Lincoln College site (Blinkhorn 2003b), but otherwise very little pottery of this type has been noted in Oxford, and the city may represent the western edge of its distribution.

#### *Medieval*

14.1.19 The medieval assemblage is remarkable on a number of levels, with the most striking feature being the occurrence of a range of domestic vessels, particularly dripping dishes, lamps/candlesticks, lids and cups/mugs in a range of fabrics. While such vessels are often occasional finds on most sites in the city, the sheer number of the pots is highly unusual, and is a fascinating reflection of pottery use in an Oxford college in the 13th – early 16th centuries. The number of dripping dishes is particularly worthy of comment. Such vessels were used to catch the fat dripping from spit-roasted meat, and fragments of at least 12 vessels were noted, along with handles from at least 7 similar vessels. This is an exceptional assemblage, and indicates that a considerable quantity of meat was consumed at the college, perhaps at odds with the majority of the population of the city at that time. It is unfortunate that due to the asymmetrical form of dripping dishes, it is not possible to calculate the EVE of the vessels, although they give the impression of being over-represented compared with other sites in the city or region. At least one of the vessels is a Dutch Redware type; it appears to be the first recognised example of such an import from Oxford, and is likely to have come up the Thames from London, where such vessels are relatively common. Dutch dripping dishes appear to be the most widely distributed of medieval imported vessels from the Lowlands (D Brown pers. comm.).

14.1.20 Fragments of 24 lamps were noted; this is again an apparently high number of such vessels from a site in Oxford, and indicates that these, rather than candles, were the

preferred method of lighting.

- 14.1.21 The large number of lids is also unusual. These may have been used for a number of different vessel types. Fragments of at least 8 such vessels (EVE = 0.83) were noted, including an example with a single drilled hole in the centre. The diameters of the objects ranged between 140 and 200 mm, indicating that they were used to cover both jugs and jars, and were not related to a single specific functional type.
- 14.1.22 Another unusual but by no means unknown vessel type, which may be present in significant numbers, is the drinking-jug. Two whole OXAM examples, from contexts 1209 and 1262 (15thC and? 13thC respectively) were noted. Such vessels are basically miniature versions of the medieval baluster jug, and were presumably yet another option for drinking along with the cup and mugs of the later medieval period. Analysis of the rim diameters of the OXAM jugs at the site should allow separation of the drinking jugs from the larger serving variety, and enable a more accurate assessment of the range of pottery vessel types in use.
- 14.1.23 An inscribed sherd, from a medieval Brill/Boarstall jug, was also present in a 15th-century context. The inscription was incomplete, but the letters "...rton" survived, suggesting strongly that the original inscription read 'Merton'. The inscription was covered by green glaze, indicating that it had been incised whilst the clay was still wet. In terms of medieval ceramics, this is a highly significant find, for it suggests that the potters at Brill were making batches of pots to order for the college. Mellor (1994, 121-2) has suggested that some of the more highly decorated Brill vessels in Oxford were the subject of special commissions from the potters; the presence of this inscribed sherd suggests that at least one of the colleges was ordering pots directly, rather than simply buying them from a market when needed.
- 14.1.24 Another inscribed vessel was noted; a jug from a 15th-century context with a capital 'N' or perhaps a Roman numeral 'IV' incised deeply into the fabric post-firing. A Brill jug with a Roman numeral 'II' incised in the neck before firing is known from Oxford (ibid. fig 64 no. 1), and a Brill vessel with an incised pattern executed post-firing and said to represent a key is known from Northampton Castle (ibid. 131-2). A further vessel with graffiti incised post-firing around the bottom of the jug occurred at Eynsham Abbey (Blinkhorn 2003a).
- 14.1.25 Other sherds are worthy of comment. A large number of pierced sherds were noted, particularly in fabric OXY, although OXAM sherds were also noted. This includes a near-complete miniature OXY jar from context 1126 (L11th C). These finds may relate to industrial or domestic activity at the site prior to the founding of the college.
- 14.1.26 Two vessels with unusual decoration were noted. A 'Tudor Green' vessel, probably a cup or mug from context 1020 (late 15th century) had a fragment of a modelled face. This is an extremely rare find. A fragment of a vessel with such decoration was noted at Ludgershall in Buckinghamshire (Blinkhorn in press), but that was a Brill/Boarstall type whereas the sherd from this site is a Surrey/Hampshire type with white fabric. An

extremely rare Kingston-type drinking-horn with a modelled face is known from London (Pearce and Vince 1988, Fig 100.87 and pl.29) and 'Tudor Green' baluster jugs with anthropomorphic decoration are known (ibid. pl. 37), but such vessels are generally rare. Similarly, a fragment of a OXAM jug neck (context 1141, 15thC) has a modelled, near-life size eye and eyebrow. This appears to be unique, and may be an example of a special commission as high-lighted by Mellor (op. cit.).

### **Potential**

14.1.27 This assemblage has a number of significant traits, and is one of the most important assemblages of pottery excavated in the medieval city of Oxford in recent years. In addition, the nature of the deposits, particularly some of the pit groups, indicates that a significant use-change at the site can be identified by characteristics of feature-specific assemblages, particularly the deposition of the kitchen equipment. Detailed analysis of individual groups can address project research aims relating to pottery chronology and typology, the nature and use of the site and the local and non-local resource exploitation. Many of the features are intercut, and thus offer the opportunity to examine a long stratigraphic sequence. The specific features to undergo such analysis should be identified on the basis of the stratigraphic assessment and the presence of complementary assemblages of other material.

### **Recommendations for further work**

#### 14.1.28 General

Adjustment of the dating of context-specific pottery groups from the evidence provided by the stratigraphic matrix, and appropriate adjustment of data tables. **2 days**

General analysis, research and discussion of the significance of the assemblage in the context of the city of Oxford and the surrounding region. **3 days**

Selection of sherds for illustration, catalogue, and preparation of drawing briefs. **1 day**

Cross-fits. Some cross-fits were noted during spot dating. A full investigation of the assemblage, concentrating primarily on decorated or distinctive vessels, has the potential to provide valuable information with respect to site formation processes. **1 day**

Analysis of individual feature groups and sequences **4 days**

Editing, proofing, illustration checking etc **0.5 day**

#### 14.1.29 Specific

##### *Early Saxon:*

Discussion of the finds in the context of archaeology in the city of Oxford. **0.5 day**

##### *Medieval:*

The range of pottery types is, as noted, somewhat unusual, and has the potential to provide an insight into the use of the material at a medieval Oxford college.

As noted, the range of pottery types appears to indicate that there was large-scale catering on the site. Recent excavations in and around Oxford offer the opportunity to compare the finds from this site to others in the area, such as the Beaumont Palace, Eynsham Abbey, Lincoln College and domestic settlements. Suitable statistical analyses, such as the Chi-Squared test, will be used to this end. Analysis: **2 days**

Analysis of Brill/Boarstall jug rim diameters to enable identification of drinking jugs, and adjustment of relevant data tables. **0.5 day**

The sherd inscribed with what appears to be the name 'Merton' indicates that pots were being made to order for the college. This is a highly significant and extremely unusual find, and has major implications for our understanding of the manufacture and marketing of medieval pottery on both a local and national level. Time required for analysis and discussion. **0.5 day**

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## 14.2 Building materials by Terence Paul Smith

### Introduction

- 14.2.1 At this stage, the building material, most of it unprocessed, has been examined and recorded with a view to establishing how much of it should be taken through to further processing, bearing in mind what is likely to contribute to greater understanding of the site, for which the stratigraphic sequence is already well understood. The material has been classified by form and has been quantified by count but not by weight (Table A1.6)– at this stage, the latter would include a good deal of attached dirt. All the material has been returned to its original context bags or in a few cases rebagged by context; none has been discarded. Material which should *certainly* be kept for further investigation has been marked *KEEP* on the finds labels and/or bags.

Table A1.6. Quantification of Building materials

FORM	QUANTITY
Uncertain	45
Brick	24
Brick?	11
Curved tile	4
Drainpipe	2
Early roof tile	4
Flints	2
Floor tile	61
Floor tile?	2
Gutter tile	2
Painted plaster	2
Paving	1
Peg tile	1176
Ridge tile	113
Ridge tile?	9
Roman brick	1
Roman tegula mammata	1
Shouldered peg tile	6
Slate	4
Stone rubble	8
Stone slate	48

### The Materials

#### Roman building ceramic materials

- 14.2.2 A fragment of *tegula mammata* was recovered from backfill 878 and a fragment of Roman brick from backfill 909; both are clearly residual.

#### Early shouldered tiles and curved tiles

- 14.2.3 A number of probable early roofing tile types were recovered, none with their full

dimensions. They include probable or possible shouldered tiles from contexts 901, 916, 943, 975, 1130, 1190, and 1479; probable curved tiles from contexts 919, 949, 1097, and 1450; and a further fragment of indeterminate form from context 901. Most of these contexts are fills, including robber cut fills. The tiles are mostly in sandy fabrics, sometimes similar to Museum of London fabrics 2272 and 2273. This is commonly the case with such early roofing tiles from quite widely distributed sites, including All Souls College, Oxford. It suggests either that there was central manufacture or, more probably, that the tilemakers sought out clays with which they were familiar or, where necessary, created them by adding sand. The tiles show glaze, usually cover-glaze, less frequently splash-glaze.

- 14.2.4 The shouldered tiles are large and heavy and are distinguished by a constriction at the top, forming a neck in which the nail/peg holes were placed – usually just one, sometimes two. The curved tiles were typically used in conjunction with flat flanged tiles somewhat in the manner of Roman *tegulae* and *imbrices*. However, at Merton, as also at All Souls, no definite flanged tile fragments were associated with these curved tiles, and it is possible that they were used in a different way.
- 14.2.5 One possibility is that they were used in the manner of Spanish tiles – alternate ways up and with the convex curves covering the junctions of the concave curves beneath them. Such arrangements are shown in 12th-century and earlier manuscript illustrations (*e.g.* Wood 1965, 294). They were much used in the Netherlands, where a few are still *in situ* on churches and houses. They were also used elsewhere on the Continent and remain a common form of roof covering in southern Europe. Alternatively, the curved tiles may have been used simply as ridge tiles at the apex of a roof.
- 14.2.6 In London, shouldered tiles date from the 1130s down to the 1220s whilst the curved (and flanged) tiles probably began a little earlier, perhaps around 1100; similar date-ranges seems applicable elsewhere in England where such tiles have been found. They were limited to buildings of high status, often monastic, although they do sometimes occur in association with secular buildings, for example in Cheapside, London.

#### *Other early roofing tiles*

- 14.2.7 Within contexts 931 and 1206 were found examples of thick, glazed roofing tiles which show a distinct taper from bottom to top, their lower angles less than and their upper angles greater than 90°. That from context 1206 shows the paw print of an animal, probably a dog. No full dimensions are preserved. Amongst the quantities of peg tiles from several other contexts are thick, often glazed, fragments, which may well be from similar tiles. Such tiles were probably used from the mid- or late 12th century down to the early 13th century. Like the other early tile types they were probably limited to buildings of status.

#### *Peg tiles*

- 14.2.8 From the later 12th century, standard peg tiles superseded the earlier types, all of which had various disadvantages (Smith 1998–9, 66–71). Once their form was established, peg

tiles changed little down to the 19th century, although glazed examples seem to be limited to the medieval period. A number from Merton show either splash-glaze or cover-glaze; sometimes it is unclear whether uncleaned examples are glazed or not. Peg tile fragments, some of them very small, were recovered from a large number of contexts. They are entered into the Excel database, and are therefore not listed here. Most of the tiles are in red fabric, showing various quantities of sand, although none has been examined microscopically. A number of tiles are in a distinctive yellow fabric.

- 14.2.9 Peg tiles could be fixed to the roof using peg/nail holes, nibs, or a combination of these. Amongst the Merton assemblage there are no nibs: where evidence for the fixing method survives it is invariably in the form of circular peg/nail holes, and this seems indeed to have been the standard Oxford form in both the medieval and post-medieval periods, as also in London and Kent, for example.

- 14.2.10 No full lengths are preserved and only two full widths, of 170mm and 193mm. Thicknesses vary and, as mentioned above, some thick examples (16mm or more) *may* be of early date – say 12th- to 13th-century.

#### *Ridge tiles*

- 14.2.11 A quite large number of ridge tiles or probable ridge tiles were recovered; details are entered in the Excel database. Some may have been the simple curved and uncrested form, either glazed or unglazed. But a number show crestring of the typical 'coxcomb' variety and some are of other forms.
- 14.2.12 No *definite* examples of Atherton and Mitchell's type A (Atherton and Mitchell 2001, 70–71) have been observed: these have the crestring formed moulded with the fingers. *Possible* examples were, however, present in pit fills 1138 and 1166.
- 14.2.13 Most, possibly all, the crests from Merton have been knife-trimmed. A number do, however, show the finger or thumb impressions on either side of the triangular crests (characteristic of Atherton and Mitchell's type A), sometimes pushed in quite deeply and occasionally quite long. These types appear to be unglazed or glazed on the portion of the tile below the crestring itself. One example, from dump deposit 927, has an incomplete circular hole to take a finial, perhaps of the common 'spinning top' form. These tiles may represent a transitional type, perhaps of around the turn of the 13th and 14th centuries.
- 14.2.14 Other examples show knife-trimmed crests without the finger/thumb impressions and these are most commonly glazed on the crests as well as on the lower portions. In one case, a finger has been run along the length of the tile at the base of the crestring. One, from backfill 891, has an incomplete circular hole for a finial. The glazed knife-cut type corresponds to Atherton and Mitchell's type B. They are probably not earlier than the late 13th century and in most instances are probably of 14th- or 15th-century date.
- 14.2.15 One example (pit fill 1205) throws light on Atherton and Mitchell's conjectured type C, since the Merton example is more complete and shows that the trapezoidal 'spur' does

indeed form part of a ridge tile: presumably it was of crenellated appearance. It is glazed in green. It is probably of later medieval date, like the knife-trimmed and glazed coxcomb type.

14.2.16 The assemblage also contains several fragments of a further type of ridge tile, which may be called the *angled type*: at the apex the tile is formed into a quite sharp angle rather than being a smooth curve; there is no cresting; all examples are well glazed in brown, green, or black. Where the end of the tile is present, the glaze is applied to that too. Apart from one (intrusive?) example from layer 1132, which is of phase 4, all examples are from contexts belonging to phases 7, 8, or 9. They may, therefore, date from the late medieval/early post-medieval period.

14.2.17 One ridge tile, from recut pit fill 1039, has a quite large, but incomplete, circular hole, presumably for a finial, though this must have been larger than the normal 'spinning top' type. The tile may be of the simple curved type without cresting. It has brown/black cover-glaze and is perhaps of the later Middle Ages. (Its context is dated to phase 7.)

14.2.18 None of the ridge tiles, of whatever form, preserves its full dimensions.

#### *Gutter tiles (?)*

14.2.19 Possible gutter tiles were recovered from pit fills 1225 and 1479. the former is 12mm thick and has brown cover-glaze on its concave face; but it is possible that this is no more than a warped peg tile. The other example certainly is not that: it resembles the angled form of ridge tile (above) but with the green cover-glaze applied to the *inner* face.

#### *Floor tiles*

14.2.20 A quite large number of floor tiles, some complete or near complete, were recovered, together with two fragments possibly from floor tiles. Most are decorated in yellow on brown, although some are so badly worn that they have lost their glaze whilst retaining their slip. Two of the decorated tiles have been snapped to a triangular form along a pre-firing score-line. They were probably used as border tiles to a floor in which the square tiles were set diagonally to the major axis of the building. One tile, from spread 1035, has small circular depressions stabbed into its underside, and is akin therefore to the 'stabbed Wessex' floor tiles, already attested in Oxford (Atherton and Mitchell 2001, 70, 71). At this stage, no attempt has been made to identify individual designs of the decorated tiles.

14.2.21 Amongst the floor tile assemblage are several plain tiles, in black, buff, green, or mottled brown/green. Some, to judge from their silty fabrics, may be imported from the Low Countries and of 14th- or 15th-century date. Of some interest is the tile from spread 1035, which has been cut along pre-firing score-lines to a very small square, only 53 × 53mm. Possibly it was intended as a border tile. Dr J R L Highfield has kindly pointed out that black floor tiles are still to be found *in situ* in the 13th-century Muniment Room, and these should certainly be compared with the excavated examples.

14.2.22 Only seven of the floor tiles preserve at least one complete side. They are shown in table

## A1.7.

Table A1.7 Floor tile dimensions

Context	Dimensions in mm			Comments
	L	B	T	
981	?	137	21	Decorated, triangular <161>
981	?	140	32	Decorated <162>
1035	53	53	32	Plain. Low Countries import? <135>
1053	180	172	16	Decorated, small triangular <136>
1177	112	110	20	Decorated, very worn <198>
1179	112	107	21	Decorated, very worn <209>
1225	110	110	22	Plain, very worn

## Bricks

14.2.23 Only one complete – and very small – brick was recovered; others were all fragments.

Preserved dimensions are shown in Table A1.8

Table A1.8: Brick dimensions

Context	Dimensions in mm			Comments
	L	B	T	
878	?	103	50	Red; some further fragments in same context
938	?	?	46	Red (pinkish orange)
939	?	113	50	Red
939	?	112	49	Red
939	?	?	50	Red
939	?	?	48	Red
956	?	?	50	Red (orange)
956	?	?	48	Red (orange)
972	?	?	53	Red (orange)
972	?	?	50	Light brown/buff
1008	?	?	34	Red, paving brick
1071	?	?	45	Red
1071	80	52	25	Red
1222	?	?	33	Red, paving brick
<b>Median</b>	–	–	<b>48.5</b>	–

14.2.24 Although Oxford, at least before the Victorian period, was a predominantly stone city, brick is known to have been used there even in Tudor times, for example at New College in 1532, when two London brickmakers, Richard Whytby and Clement Peake of St Giles without Cripplegate, were engaged to make bricks on the College manors at Stanton St John, Oxon. and Tingewick, Bucks. (Harvey 1975, 143, 197–8). All the bricks from Merton belong to either phase 8 or phase 9. Dating from sizes alone can be hazardous, although it is true that in general bricks increased in thickness over the centuries. The thinness of those from the site suggests a late medieval or Tudor date: the median thickness is 48.5mm and the mode 50mm, the latter also being the median if the three

'rogue' thicknesses of 23mm, 33mm, and 34mm are ignored.

- 14.2.25 Those 'rogue' figures result from special purpose products. Those with a thickness of 33mm and 34mm are almost certainly paviours. The thickness of only 25mm belongs to a brick which is small in its other dimensions too: 80 × 50mm (3½ × 2 inches with a thickness of 1 inch). The purpose of this diminutive brick is not clear.

#### *Drainpipe*

- 14.2.26 Two fragments of modern drainpipe, presumably intrusive, were present in layer 921, otherwise assigned to phase 8.

#### *Painted plaster*

- 14.2.27 A fragment of white-painted plaster was recovered from structure 910 (phase 9).

#### *Stone slate*

- 14.2.28 A total of 48 stone slates were recovered, eleven (23 per cent) of them within levelling 1003. They are in an attractive yellowish limestone (Stonesfield slate?), generally quite roughly hewn. No full dimensions are preserved, although one from pit fill 1460 was not less than 260mm long. It is likely that, as with many stone slates, they were of different sizes and were graded from larger to smaller up the roof slope. They were fixed to the roof using nails, and a number of the stone slates preserve the circular holes for this purpose: all are around 10mm in diameter. In two cases there are two holes placed 23mm and 145mm apart centre-to-centre. In the first case, it may be that a hole was knocked through in the wrong position and the error was corrected; in the second case, there can be little doubt that the slate was indeed provided with two fixing holes. They are a traditional Oxfordshire roof covering and this seems to be reflected in the fact that they were recovered from contexts belonging to phases 2, 4, 5, 7, 8, and 9. Despite this traditional nature, however, and despite the preponderance of stone over brick buildings in (pre-Victorian) Oxford, the stone slates account for only 4 per cent and peg tiles for a full 96 per cent (by count) of the combined total for the two roofing material types at the site.

#### *Slate*

- 14.2.29 Stone slates are not, of course *slate* in the geological sense. Small fragments of actual slate were recovered from three contexts. It may have been used for roofing, in one case perhaps in connection with the 19th-century 'stable'. But slate had other uses too, as shelving for example, and its use for roofing cannot therefore be presumed.

#### *Stone paving (?)*

- 14.2.30 A fragment of possible stone paving (flagstone) was present in pit fill 1098.

#### *Stone rubble*

- 14.2.31 A few pieces of stone rubble, including possible flints, were recovered.

#### *Potential*

- 14.2.32 The ridge tiles are of particular interest in that they present a number of different types, which it may be possible to relate more fully to the chronology of the site.
- 14.2.33 Also of interest are the various early roofing tile types, indicative of high status building in the 12th and 13th centuries.
- 14.2.34 The floor tiles are again indicative of high status building.
- 14.2.35 The peg tiles indicate the predominant roofing material at the site, although the local stone slates are also well represented.
- 14.2.36 The meagreness of the bricks is a reflection of the dominance of stone as a building material in Oxford during the medieval and post-medieval periods.
- 14.2.37 Peg tiles constitute the bulk of the material recovered – 77 per cent by count. They include examples in a distinctive yellow fabric, although the majority are in red fabrics. Despite the bulk, however, it is doubtful whether a great deal could be added to knowledge of the site by cleaning and examining them piece by piece. This would involve considerable time, first in the cleaning process, and secondly in the examination of the tiles by a specialist. The rewards in terms of knowledge from all this may not be worth the effort involved. A decision needs, therefore to be made, bearing in mind the likely paucity of the knowledge gained, between:
1. Carrying out a full investigation of the peg tiles, involving (i) cleaning all the material (time to be estimated by OA) and (ii) specialist investigation, including examination of fabric types (estimated time: 5 days minimum); and
  2. Taking the examination of the peg tiles no further than at present
- My own recommendation in this respect would be for procedure 2.

14.2.38 Other work which *should* be carried out includes:

1. Further examination of the ridge tiles. This will involve (i) cleaning of the relevant material (time to be estimated by OA, but not involving a great deal of work) and (ii) further specialist study, including examination of fabrics (estimated time: 3 days).
2. Further examination of the floor tiles, with a view to identifying the designs and also to look at the fabrics. This will involve (i) cleaning of the relevant material (time to be estimated by OA, but not involving a great deal of work) and (ii) further specialist study (estimated time: 6 days).
3. For publication, further comparison of the building materials assemblage with the final stratigraphic sequence established for the site and preparation of a specialist appendix on the building materials, concentrating on the ridge tiles and the floor tiles although also including the other materials. (Estimated time: 5 days)

## References

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### 14.3 Stonework by Julian Munby

14.3.1 The small amount of decorated stonework recovered from the site is of some significance (see table A1.9 below). Three pieces come from the upper parts of windows similar to those shown in the mid 18th-century view of the building (and may indeed be the very same windows). Sufficient survives of these to be able to reconstruct a round outer arch and label with a pointed inner arch or window light. A small number of decorated fragments were recovered which come from a stone screen or monument with moulded and cusped arches. These may come from a domestic context, but quite possibly derive from rebuilding works in the College chapel, for example (and all are from a late context). A couple of post-medieval fragments are of minor significance. The stonework should be drawn and submitted for expert comment on its date and significance.

Table A1.9: Worked stone

<i>Merton College: worked stone (all of fine limestone)</i>				
<i>Number</i>	<i>Context</i>	<i>Phase</i>	<i>Object</i>	<i>Date</i>
<i>Large stone pieces on shelves</i>				
13	non-strat		Large window fragment	c.1200
15	non-strat		Hoodmould	c.1200?
125	914 well	10	Smaller window fragment	c.1200
<i>Small stone pieces in box</i>				
40	902 backfilling	9	Moulded and cusped window or monument fragments	Medieval prob. 13th/14th century
39	903 backfilling	9		
44, 46, 73	910 backfilling	9		
80	938 backfilling	9		
	1154 pit fill	8	Moulding	Post-med
	1042 pit	5	Facetted finial	Post-med

### 14.4 Metalwork and worked bone by Leigh Allen

14.4.1 A total of 310 metal objects and 9 worked bone objects were recovered from the excavations at Merton College, Oxford. The metalwork assemblage comprises 107 copper alloy objects, 192 iron objects and 11 lead objects. The metalwork has been x-rayed and a conservator has assessed the condition of the objects. In general the metalwork is extremely corroded; much of the copper alloy is in the form of thin metal sheet and this has become very brittle, and the iron work assemblage of which the

majority comprises nails and miscellaneous fragments is thickly corroded and fragmentary. The objects range in date from the 11th century to the post-medieval period.

### **Methodology**

- 14.4.2 The objects have been visually examined and identified with the aid of x-radiographic plates. This preliminary identification together with other basic details including contextual information, dimensions and a description have been recorded on the finds assessment database. Further x-radiography will be necessary for more detailed identification of a selection of the metalwork together with some cleaning and scientific analysis i.e. XRF analysis to complete the next stage of work.
- 14.4.3 The objects have been grouped according to the following functional categories; personal objects, domestic items, writing equipment, horsegear, tools, structural objects (including nails) and miscellaneous fragments. The miscellaneous category includes fragments of sheet, strips and unidentifiable fragments. There are a further 10 objects that are categorised under the heading 'query'. These are the objects that require further x-radiography /investigation before they can be identified.
- 14.4.4 The assemblage will be discussed by material and by function and then briefly summarised by phase.

### **Copper alloy objects**

- 14.4.5 The copper alloy assemblage comprises 107 objects, 44 of which are miscellaneous/unidentifiable objects and a further 5 are from the 'query' category. The 58 identifiable objects fall into the following four functional categories; personal objects (48), domestic items (7), writing equipment/books (2) and structural objects (1).

### **Personal objects**

- 14.4.6 The personal objects identified from the excavation comprise buckles, a button, a finger ring, a hooked tag, lace tags, mounts, pins, a spoon, tweezers and wire loop fasteners.
- 14.4.7 There are 3 buckles. None is of a diagnostic form since they are either too fragmentary or of a utilitarian type that changes little through time. SF 248 came from context 1431 (phase 5) and is a fragment of the buckle plate from a very small buckle. SF 126 from 1035 (phase 8) is a double oval buckle frame of probably a shoe buckle with the pin missing. SF 240 from context 1054 (unphased) is an oval buckle frame with a very narrow bar with a knob at either end. The pin is an interesting shape in that it expands towards the centre.
- 14.4.8 A possible fragment from a domed two piece button (SF 175) was recovered from unphased context 1054. There are possible traces of solder inside where the two parts of the button would have been joined together.
- 14.4.9 An elaborate finger ring SF 242 was recovered from context 1470 (phase 5) with a large circular dished bezel and the remains of four claws. There is no trace of the original

setting and the loop is incomplete.

14.4.10 A circular hooked tag SF 172 was recovered from context 1099 (phase 8). It is decorated with incised concentric grooves and 3 perforations. Neither the hook nor the holes look as if they were designed to take a great deal of strain and it is believed they were used to secure light clothing. At Southampton they date from the 7th century and at Winchester to the 11th century (although not into the 12th). There was a revival in their use in the medieval period but they tended to have a slot through them rather than circular holes. This was probably for a ribbon or straps.

14.4.11 A total of 29 lace tags were recovered from phase 8 and 9 contexts. There appear to be 2 types present, those that have a perforation at the upper end for a transverse rivet and those that do not. These have been classified as type 1 and type 2 respectively based on the typology devised by Oakley (1979). At Merton College there were 13 examples of type 1 laces, 13 examples of type 2 and 3 unclassified fragments. At Norwich the type 1 laces were recovered from contexts mainly dating to the 15th century, with some from contexts dating to the 16th and 17th century. Type 2 laces mainly occurred in contexts dating to the 16th and 17th century.

Type 1 laces were recovered from the following contexts: 878, 891, 910, 1000, 1035, 1073.

Type 2 laces were recovered from the following contexts: 878, 910, 926, 938, 1000, 1035, 1050, 1141, 1190, and 1414.

Lace tag fragments were recovered from the following contexts: 891, 910, 1000.

14.4.12 Three mounts were recovered from the excavation. SF 20 from context 864 (unphased) is a large oval ornate mount with decorative lobes around the outside. At the base of each lobe there are 2 small circular perforations. On the back there is a copper alloy plate and a mass of iron corrosion, which is probably all that is left of the attachment mechanism. SF 49 from context 910 (phase 9) is a star shaped mount with 4 arms and a central perforation, each of the arms being decorated with lines and triangles of incised dots. SF 186 is a domed circular disc of thin sheet metal with a circular central perforation; the conservator noted that the mount had a white metal coating.

14.4.13 A total of six pins were recovered from phase 8 and 9 contexts. There are 3 types of pin present. SF 36 and 107 are examples of drawn pins with wire wound heads generally found in large quantities in the 16th and 17th centuries and used to secure clothing and head-dress. SF 42 and 62 are larger pins with globular heads that are made from strips that have been wrapped around the top of the shaft and shaped. Each one has a fine incised groove running around the circumference of the head. SF 95 and 83 are examples of small sewing pins with cap like heads.

14.4.14 Toiletry equipment is represented by a cosmetic spoon/earscoop and a fragment from a pair of tweezers. The spoon or scoop SF 228 with an elongated bowl was recovered from

context 1364 (phase 7). The x-radiographic plate indicates that it is formed from a sheet that is rolled in on itself to make the shank. Half way along the shank there is a decorative moulding with angled incised grooves all the way round. The top end is broken but the metal appears to split to form a fork which could either be the beginning of a loop for suspension or the base of a pair of tweezers. Double-ended earscoops/tweezers of a similar construction and with a decorative moulding at the centre have been recovered from a late 14th century context at Billingsgate Lorry Park, London (Egan and Pritchard 1993, 380-383, Fig. 253, No 1773). A possible arm from a pair of tweezers (SF 229) was recovered from context 1054 (unphased). The top of the simple loop is decorated with transverse grooves, the section of the arms at the top is D-shaped and gradually flattening out and expanding towards the ends of the arms.

- 14.4.15 Two wire loop fasteners (SF 63 and 97) were recovered from contexts 878 and 956. These simple circlets of copper alloy wire with the ends twisted around each other tend to be found in great quantities in later medieval and post-medieval contexts often in assemblages of lace tags and pins. It is believed that they were used to fasten light clothing (Margeson, 1993, 20, fig.10, no98-101).

#### *Domestic items*

- 14.4.16 The domestic items recovered from the excavations comprise a bell, a needle, a thimble, a strainer and fragments from vessels.
- 14.4.17 The lower half of a sheet metal bell (SF 66) was recovered from context 891 (phase 9). The hemisphere has two circular perforations through it and a flared rim where it joined the upper half. There are faint traces of decoration but this needs further analysis. Sheet metal bells such as these could be used for dress but also on animals.
- 14.4.18 Two items of sewing equipment were recovered from the site. A near complete needle SF 144 (the upper part of the eye is missing) was recovered from context 1056 (phase 7) and a thimble SF 37 from context 901 (phase 8). The thimble is incomplete and is decorated with irregularly spaced hand applied indentations and 2 grooves at the base.
- 14.4.19 The remaining 4 objects are all from vessels. There are 2 fragments from cast vessels probably platters; SF 237 from context 1177 (phase 8) and the other from context 877 (phase 10). SF 131 from context 1035 (phase 8) is a fragment from a sheet metal vessel, the edge/rim has been folded over and beaten, and there is a single rather ragged perforation through the sheet. The remaining object that may be from a vessel is SF 35 from context 901 (phase 8), a circular slightly dished sheet with a circle of smaller perforations around the centre, which looks very much like a watering can rose but may be a strainer. A very similar fragment from London, with the same roughly pierced holes is believed to be some kind of drain filter (Egan 1998, 158, fig 127, no.440).

#### *Writing equipment/books*

- 14.4.20 Two objects associated with books were recovered from the excavation: a book clasp SF 118 from context 1017 (phase 8) and a page holder SF 245 from context 1474 (phase 7).

The book clasp comprises a hinged double-sided plate (to which the strap was riveted) and a cast loop. The loop has a central hole and the reverse is flat: it terminates in a small loop which looks like an animal head with a hole at right angles to the rest of the clasp (Egan and Pritchard 1998, 277-280, fig 214). In London similar examples were recovered from 14th-15th century contexts.

- 14.4.21 The page holder or clip is complete. It is made from a single sheet of copper alloy folded over and cut to shape. The wide rectangular terminals are decorated with incised grooves and along the edge with punched triangles. The arms are held together by a sliding loop. These clips or holders were used to keep documents together or to hold down pages. Examples have been found from 13th-14th century contexts on secular and ecclesiastical sites (Ottaway and Rogers 2002, 2936).

#### *Structural objects*

- 14.4.22 A hinge plate SF 81 was recovered from context 938 (phase 9). The plate is rectangular with a circular section bar at the end. The plate has two small perforations for attachment.

#### *Query*

- 14.4.23 There are 5 objects that have not yet been identified. They either require further x-radiography or research.

#### *Iron objects*

- 14.4.24 The iron assemblage comprises 192 objects, 37 of which are miscellaneous/unidentifiable objects and a further 5 are from the 'query' category. Of the identifiable objects, 114 are nails, which will not be discussed. The remaining 36 objects fall into the following four functional categories; domestic items (7), tools (18), horsegear and hunting equipment (9) and structural objects (2 excluding nails).

#### *Domestic items*

- 14.4.25 The 7 objects classified as domestic items are all keys of various forms.
- 14.4.26 The earliest type of key in the assemblage is represented by the remains of a padlock key recovered from context 1429 (phase 2). Only the expanded bit with its cross-shaped perforation and a short section of the stem survives. At Winchester this type of padlock key (type C) was recovered from contexts dating from the late 11th-13th century (Goodall 1990, type C, 1022-1024, fig 324). The conservator has noted that the key would originally have had a white metal coating.
- 14.4.27 The remaining 6 keys are designed for use with mounted locks. SF 117 from context 1012 (phase 8) and the key from context 981 (phase 8) are identical and both have oval bows and slender solid stems that project beyond the bit. In both examples the bit is damaged but would originally have been symmetrical. At Winchester this type of key (type 8) continued in use into the post-medieval period. A third key from context 1368 (phase 7) also has a stem that projects beyond the bit. It is of the same general form but

with a circular bow and a different pattern to the wards. A second key from context 1368 and another from context 1168 (phase 8) have circular bows, and stems that are hollow at the tip and solid above. The end of the stem and the bit are in line. This type of key appears sporadically in medieval and later contexts, but iron examples tend to be post-medieval in date (Goodall 1990, 1007). The final key SF 155 from context 1073 (phase 8) has a circular bow, a moulded stem and an elaborate rectangular bit in line with the stem. A similar style of key from Battle Abbey (Geddes 1985, 166, Fig 55, No.11) was recovered from a 14th-15th century context.

### *Tools*

- 14.4.28 The tools recovered from the excavation comprise knives, scissors, a pair of dividers, a hammerhead, an awl, a possible hoe and a sack hook.
- 14.4.29 A total of 9 knives were recovered from the site; whittle tang and scale tang knives are both represented. All the knives are in very poor condition. There are no complete examples and in most cases the blade types are too corroded and fragmentary to identify and date. There are 5 whittle tang knives. The most complete examples from context 960 (phase 9) and 1035 (phase 8) appear to have blades with the back and the edge running parallel although in both cases the blade tip is missing. The tang is centrally placed. Context 1027 (phase 8) produced a fragment from a very damaged blade where only a short section of the tang survives. The conservator notes that the blade appears to be welded and that there is a cutler's mark in the shape of a 5 pointed star on the blade. The remaining two fragments from context 1254 (phase 5) and 878 (phase 9) are short sections of blade only.
- 14.4.30 The three fragments from scale tang knives are in the same poor fragmentary condition. SF 108 from context 980 (phase 9) is a fragment from the end of a scale tang knife handle with a single copper rivet through it and a copper end plate. Four fragments recovered from context 1222 (phase 8) are from an extremely corroded scale tang knife handle with 4 copper alloy rivets that would have secured the scales to the handle, a copper alloy shoulder plate and rows of tiny copper alloy pins/dots decorating the handle. The third fragment from context 1071 (phase 8) has a short section of the blade surviving and a single perforation through the tang to secure the scales. Scale tang knives were not introduced until the 13th century.
- 14.4.31 The final knife recovered from the site from context 902 (phase 9) has a bolster where the tang meets the blade; the bolster appears to be elaborately decorated. Bolsters were first introduced in the 16th century.
- 14.4.32 Two further blade fragments not from knives were recovered from two phase 8 contexts. A long curved strip from context 1020 appears to be tapering to a point at one end and could be a section from a scythe or sickle. The section of the strip is triangular, tapering from the solid outside edge to a thin blade like edge. The second fragment from context 1035 is possibly the arm from a pair of scissors. The short section of corroded blade has

a narrow flat rectangular tang with a single circular perforation through it where the tang joins the blade.

14.4.33 The remains of 2 pairs of scissors were recovered from two phase 7 contexts

14.4.34 A pair of scissors (SF 225) from context 130 has circular bows and long tapering blades very similar to a pair recovered from Battle Abbey (Geddes 1985, 170, Fig 57, No 30). The second pair (SF 231) from context 1364 is extremely corroded and damaged. Only one arm remains with a tiny section of the ring bow attached. Scissors were introduced in the medieval period but initially they were less popular than shears; they became more popular in the 16th and 17th centuries (Goodall 1993, 135-136).

14.4.35 A pair of dividers were recovered from context 1225 (phase 8). Their design is identical to modern dividers and a similar pair were recovered from Battle Abbey (Geddes 1985, 171, fig 57, no.37). A small, corroded hammer head was recovered from context 1168 (phase 8). A possible awl was recovered from context 950. A fragment from a possible hoe (SF 257) was recovered from context 1541 (phase 2). The object has a rectangular sectioned tang with a large fragment of flat iron sheet attached. A similar fragment was recovered from St Ebbes, Oxford (Goodall 1984 224-229, fig. 36, no.33). This was from a later context but the form of the object is similar and would not necessarily have changed over time.

14.4.36 A hook with an incomplete loop, possibly a bag hook, was recovered from context 977. This type of hook could have been used to move sacks and bales around (Margeson, 1993, 140, fig. 105, no.949).

#### *Horse gear and hunting equipment*

14.4.37 There were 8 items classified as horsegear recovered from the excavations. These comprise horseshoes, horseshoe nails, spurs and a curry comb. There is also a possible arrowhead.

14.4.38 Two fragments from horseshoes and two horseshoe nails were recovered from the excavation. SF 218 from context 1225 (phase 8) is the tip from the arm of a horseshoe. The second example SF 1213 from context 1027 (phase 8) is a larger horseshoe. The nail holes are not countersunk and every hole except one still has a nail in it. Two rather corroded horseshoe nails were recovered from contexts 1086 (phase 8) and 1208 (phase 5). The horseshoe fragments are late medieval/post-medieval in date.

14.4.39 Three rowel spurs were recovered from phase 8 and 9 contexts. None of the sets is complete and they are all heavily corroded. Rowel spurs first appear in the 13th century, following the general form of the contemporary prick spurs, which they were soon to replace. By the second quarter of the 14th century most spurs had rowels. SF 184 from context 1141 is the most complete of the three; the rowel and rowel box are still intact and the neck is long. The terminals at the end of the arms have broken off but one associated fragment may be from a figure-of-eight shaped terminal. The lengthening of the spur necks in the 15th century spur complemented the fashionable trend towards

lengthening and pointing in shoes and boots. A second extremely corroded set of spurs from context 1053 (phase 8) also has an intact rowel and rowel box, but the neck is short. Only part of one curved arm survives. SF 41 from context 909 (phase 9) has an incomplete rowel box and the rowel itself is missing. The arms appear to be fairly straight, and the terminal at the end of the surviving arm is figure-of-eight shaped. Through the terminal there are two hooked plates each with a rivet through them which would have been attached to straps to secure the spur to the foot. The later part of the 15th century saw the arms of the spurs becoming less strongly curved, so that by the last quarter of the century many of them were horizontally fairly straight.

14.4.40 SF 140 from context 1053 (phase 8) is the main body section from a curry comb. Very corroded and very damaged it consists of a sheet of iron curved longitudinally with teeth along one edge. The handle is missing but there are traces of the rivets that would have attached the handle to the comb. Curry combs were used to groom horses, and this semi-cylindrical form is probably 15th-16th century in date (Clarke 1998, 162).

14.4.41 A possible arrowhead was recovered from context 886 (phase 7). It is very corroded but appears to be pointed and blade-like at one end and possibly socketed at the other.

#### *Structural objects*

14.4.42 In addition to the 114 structural nails recovered from the excavation there were 2 further items classified as structural both from phase 8 contexts; a hinge pivot from context 1071 and a looped staple from context 1017.

#### *Query*

14.4.43 There are 5 objects that have not been identified yet and either require further x-radiography or research.

#### *Lead objects*

14.4.44 There were 11 lead objects recovered from the excavations, the majority of which were irregularly shaped fragments of sheet and strip. There were 4 identifiable objects the most notable of which was a circular disc weight (SF 33) which was recovered from context 885 (phase 8), a layer of made ground. The weight has a punch mark in the shape of a stylised 6-petal flower in the centre of the upper face and a smaller flower inside trapezoidal indentations just off centre. There are various other peck marks over the surface. These marks were probably made to produce the lead to an exact weight, in this case 8oz. The stylised flowers may also be an identification mark (see Egan 1998, 311-319 fig. 234). Two objects that may be writing leads were recovered from contexts 901 (phase 8) and 1118 (phase 4); they are pointed at one end and spatulate at the other. At Winchester similar leads have been categorised as Class II and are dated to the 13th-14th century (Biddle and Brown 1990, 735-738, fig 212). The final lead object SF 236 from context 1479 is a circular disc with a slight flange around the edge; one face of the disc is covered with a fine mesh of cross-hatched lines. It seems unlikely that it is a token but it may be a seal or possibly a weight.

**Bone objects**

14.4.45 There were 9 bone objects recovered from the excavations. Six of these objects are styli, the remaining three being a toggle, a possible bead and a possible implement. The styli (SF's 148, 211, 238, 212, 210 and 188) came from phase 7 and phase 8 contexts. Formerly identified as parchment prickers these neatly turned objects are now believed to be writing implements for use with wax tablets. They are frequently found in scholastic and ecclesiastical establishments, such as The Greyfriars Oxford (Egan 1984, 231 fig 66), Eynsham Abbey (Allen 2003, 263-265, fig 266), and a large number from Battle Abbey (Gedes 1985, 149-151, fig.45). The 6 styli from Merton College all have spherical heads with varying numbers of collars below; in the case of SF 238 one of the collars is decorated with regularly spaced notches. The circular sectioned shanks taper to a rounded end in which is inserted a copper alloy point. In 3 examples (SF 210, 188 and 238) this point still survives but it is missing from the other styli. Styli are late medieval in date and possibly continue in use into the post-medieval period. The bone toggle from context 1168 (phase 8) is a pig metapodial with a circular perforation through the centre; there is a slight indication of wear/polish around the perforation. It is possible that this object is a buzz bone. Cord would have been threaded through the perforation forming a figure-of-eight shape, then twisted until tight. As the cord is released it untwists causing the bone to rotate and emit a low humming noise. Examples are often found on medieval sites, for example Eynsham Abbey, Oxon (Allen 2003, 262-263, fig.9.5, no. 49) and Winchester (Brown and Lawson 1990, 589, fig 158). The possible implement recovered from context 1254 (phase 5) is a highly polished section from a tibia (probably sheep), which tapers along its length but is incomplete, and the lower part of the shank is missing. The upper end has an angled perforation through one side and a deep groove around the top edge as if it has been suspended from a cord. The final bone object (SF 246) from context 1498 (phase 5) is a short section of bone sawn at either end and highly polished all over.

**Finds by Phase**

14.4.46 The following section summarises the identifiable artefacts by phase.

*Phase 2 (11th + century pits)*

Context	Fill of	Function	Object	SF No	Material	Date
951	1418	Personal	Earscoop/ ligula		Copper	-
1429	1477	Domestic	Key		Iron	11th-13th
1541	1551	Tools	Hoe		Iron	-

14.4.47 Other finds recovered from phase 2 context are 4 nails and 4 miscellaneous fragments of sheet/strip.

*Phase 4 Demolition and robbing of southern hall building*

14.4.48 Only one identifiable object was recovered from a phase 4 context, the possible writing

lead from context 1118, robber cut fill of 1106. At Winchester similar leads have been categorised as Class II and are dated to the 13th-14th century.

14.4.49 The only other find was a fragment of copper wire.

*Phase 5 (13th + century pits)*

Context	Fill of	Function	Object	SF No	Material	Date
1089	1104	Query	Rod pointed at both ends	-	Iron	-
1208	1173	Horse gear	Horseshoe nail	-	Iron	-
1254	1253	Tools	Whittle tang knife	-	Iron	-
1254	1253	Tools	Implement	-	Bone	-
1431	1213	Personal	Buckle plate	248	Copper	-
1470	1381	Personal	Finger Ring	242	Copper	-
1498	1497	Misc	Sawn object	246	Bone	-

Other finds recovered from phase 5 contexts are 9 nails, 6 unidentifiable fragments and 6 fragments of sheet/strip.

*Phase 7 (Robbing of northern building and Merton College pit digging)*

Context	Fill of	Function	Object	SF No	Material	Date
886	886	Hunting	Arrowhead	-	Iron	-
1056	1055	Domestic	Needle	144	Copper	-
1217	-	Writing equipment and books	Styli (x3)	210,211 and 212	Bone	Late Med /Post Med
1302	1530	Domestic	Scissors	225	Iron	Post Med
1364	1418	Domestic	Scissors	231	Iron	Post Med
1364	1418	Personal	Spoon/double ended toiletry implement	-	Copper	14th century
1368	1418	Domestic	Key	-	Iron	Med/Post Med
1368	1418	Domestic	Key	-	Iron	Med/Post Med
1474	1135	Writing equipment/books	Page holder	245	Copper	13th-14th century

14.4.50 Other finds recovered from phase 7 contexts are 10 nails, 2 unidentifiable fragments and 4 fragments of strip/sheet.

*Phase 8 (15th century pits and stone features)*

Context	Fill of	Function	Object	Material	SF No	Date
885	885	Domestic	Weight	Lead	33	-
901	901	Personal	Pin	Copper	36	16th-17th century

901	901	Domestic	Strainer	Copper	35	-
901	901	Domestic	Thimble	Copper	37	-
901	901	Writing equipment and books	Writing lead	Lead		13th-14th century
926	926	Personal	Lace tags (x2)	Copper	94 and 96	16th-17th century
926	926	Personal	Pin	Copper	95	Post Med
956	926	Personal	Loop fastener	Copper	97	-
977	977	Structural	Hook	Iron		-
980	985	Tools	Scale tang knife	Iron	108	Post Med
981	985	Domestic	Key	Iron		Med/post Med
1000	998	Personal	Lace tag (x3)	Copper	113	16th-17th century
1017	1016	Writing equipment	Book clasp	Copper	118	14th-15th century
1017	1016	Structural	Staple	Iron		-
1017	1016	Domestic	Key	Iron	117	Med/post Med
1020	1016	Tools	Blade	Iron		-
1027	1016	Tools	Knife	Iron		-
1027	1016	Horsegear	Horseshoe	Iron	123	Late Med/ Post Med
1035	1035	Personal	Buckle	Copper	126	-
1035	1035	Personal	Lace tag (x 2)	Copper	128	16th-17th century
1035	1035	Tools	Knife	iron		-
1035	1035	Domestic	vessel	copper	131	-
1050	1308	Personal	Lace tag	Copper	202	16th-17th century
1053	1053	Horsegear	Spurs	Iron		14th-15th century
1053	1053	Horsegear	Curry comb	Iron	140	15th-16th century
1071	1155	Structural	Hinge pivot	Iron		-
1071	1155	Tools	Knife	Iron		-
1071	1155	Writing equipment and books	Stylus	Bone	148	Late Med/ Post Med
1073	1155	Personal	Lace tag	Copper	170	15th-16th century
1073	1155	Domestic	Key	Iron	155	14th-15th century

1094	1094	Misc	Perforated disc	Copper	157	-
1099	1107	Personal	Hooked tag	Copper	172	Medieval
1141	1142	Personal	Lace tag	Copper		16th-17th century
1141	1142	Personal	Mount	Copper	186	-
1141	1142	Horsegear	Spurs	Iron	183	15th-16th century
1147	1162	Writing equipment and books	Stylus	Bone	188	Late Med/ Post Med
1168	1155	Tools	Hammer	Iron		-
1168	1155	Domestic	Key	Iron		Post Med
1168	1155	Musical instrument	Buzz bone	Bone	-	Med
1177	12221	Domestic	vessel	copper	237	-
1190	1308	Personal	Lace tag	copper	200	16th-17th century
1222	1197	Domestic	Knife	Iron		-
1225	1197	Tools	dividers	Iron		-
1225	1197	Horsegear	Horseshoe	Iron	218	Late Med/ Post Med
1414	1414	Personal	Lace tag	Copper	241	16th-17th century
1416	1415	Writing equipment and books	Stylus	Bone	238	Late Med/ Post Med

14.4.51 Other finds recovered from phase 8 context are 67 nails, 8 unidentifiable fragments and 28 fragments of strip/sheet.

*Phase 9 16th + century features*

Context	Fill of	Function	Object	Material	SF No	Date
878	881	Personal	Lace tag (x4)	Copper	26, 54 and 55	15th-17th century
878	881	Personal	Pin	Copper	62	-
878	881	Personal	Loop fastener	Copper	63	-
878	881	Domestic	Knife	Iron		-
891	881	Personal	Lace tag (x3)	Copper	76, 78 and 79	15th-16th century
891	881	Domestic	bell	Copper	66	-
902	881	Tools	knife	Iron		Post Med
909	881	Horsegear	Spurs	Iron	41	Late 15th century
910	881	Personal	Lace tag (x7)	Copper	47,50,52,69,70,71 and 74	15th-17th century
910	881	Personal	pin (x2)	Copper	42 and 107	-
910	881	Personal	Mount	Copper	49	-
938	881	Personal	Lace tag	Copper	82	16th-17th century
938	881	Personal	pin	Copper	83	-

938	881	Structural	Hinge plate	Copper	81	-
950	881	Tools	awl	Iron		-
960	-	Tools	Knife	Iron		-

14.4.52 Other finds from phase 9 contexts are 21 nails, 2 identifiable fragments and 15 fragments of strip/sheet.

*Phase 10 19th century 'stable' features*

14.4.53 A single rim fragment from a large metal vessel was recovered from context 887. The only other object from this phase was an unidentifiable fragment of iron.

**Potential**

14.4.54 Despite being in poor condition the assemblage contains a large number of identifiable objects from a wide variety of functional categories. Particularly well represented are tools, domestic items and horse-gear. As one would expect from a place of learning there are a number of objects associated with writing and books: writing leads, bone styli, a book clasp and a page holder. There are also objects that reflect the nature of daily life: knives, keys, tools, vessel fragments and sewing equipment. The presence of horseshoes, spurs and the remains of a curry-comb used for grooming horses may reflect the use of the southern part of the site as a stables. There are remarkably few personal items, predominantly lace tags with a few fragments from buckles, mounts and buttons. There are no ornate or valuable objects. There is also a marked absence of structural items (with the exception of nails). There does not appear to be any window or door furniture nor any lighting equipment or internal fittings such as hooks or brackets.

14.4.55 A considerable proportion of the assemblage came from large pits, dump deposits and make-up layers of phase 8. Smaller assemblages were recovered from phase 7 and phase 9 contexts. Domestic items and writing /book equipment are particularly well represented in phase 7. In phase 9 the number of personal items increases with the appearance of lace tags. All the objects from this phase were recovered from construction cut 881. It is notable that there appear to be very few items associated with the construction or fabric of buildings present in the assemblage and this is curious given the demolished structures revealed on the site.

14.4.56 A detailed examination of the distribution of the finds across the site will need to take place at the publication report stage. The assemblage will help with the dating of some features especially refining the pit sequences. It contributes little to the understanding of the earliest phases of activity. The assemblages dating to the later medieval use of the site by Merton College are of considerable significance since there have been very few opportunities for archaeological study of the material culture of a college. The fact that these groups can be securely associated with a known medieval establishment enhances their value as a comparative group and would justify their publication.

**Resources and timings**

- ♦ Additional radiography of the unidentified objects (Esther Cameron - 2 days)
- ♦ Conservation/cleaning of objects for illustration (Esther Cameron- 3 days)

- ◆ Completion of the catalogue (1 day)
- ◆ Distribution plots (2 day)
- ◆ Library research (2 days)
- ◆ Report writing (4 days)
- ◆ Drawing briefs/checking illustrations (1.5 days)

14.4.57 It is recommended that the following 18 objects are illustrated in the publication report:

SF 172 hooked tag (CA)  
SF 228 spoon/earscoop (CA)  
SF 118 book clasp (CA)  
SF 245 page holder (CA)  
SF 155 key (FE)  
Ctx 1027 knife with cutlers mark (FE)  
SF 255 scissors (FE)  
SF 184 spurs (FE)  
SF 140 curry Comb (FE)  
SF 33 weight (PB)  
Ctx 901 writing lead (PB)  
SF 148 stylus (Bone)  
SF 211 stylus (Bone)  
SF 238 stylus (Bone)  
SF 212 stylus (Bone)  
SF 210 stylus (Bone)  
SF 188 stylus (Bone)  
Ctx 1168 buzz bone

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#### 14.5 Coins by Nicholas Mayhew and Tokens by Edmund Simons

- 14.5.1 Five coins were recovered from the excavations all are corroded to some degree and difficult to identify in their present condition. Preliminary identifications have been made by Nicolas Mayhew of the Ashmolean museum with the aid of x-ray plates.
- 14.5.2 The earliest coin SF 235 from context 1389 is a silver short-cross penny of Henry III in circulation up to 1247. This coin is badly damaged with a hole through it.
- 14.5.3 SF 65 from context 891 is a silver penny of one of the first two Edwards, struck before 1330 and probably in circulation into the 15th century.
- 14.5.4 SF 21 from context 861 is a London Groat dating from 1350-1500.

- 14.5.5 SF 141 from context 1054 is a continental imitation of a coin of Edward I likely to have been struck around 1300 and in circulation until 1400.
- 14.5.6 SF 221 from context 1254 is very corroded with very little detail showing, but its size and weight indicate that it probably dates to the 18th century.
- 14.5.7 It is recommended that the coins are cleaned by a conservator in order that more detailed identifications may be made at the report stage.
- 14.5.8 Provisional identification and dating of the tokens retrieved from the site is presented below. Cleaning and further analysis might allow some refinement of the dating but it should be remembered that tokens often remained in use for long periods after their initial manufacture. The main interest in the assemblage is in its association with the college where it is likely that they were used as part of the accounting process.

SF Number	Context Number	Identification	Date range
192	1141	Nuremberg 'Venus Penny'	1540 s-60 s
178	1092	Nuremberg 'Venus Penny'	1540 s-60 s
27	878	Anonymous issue Nuremberg Rose and Orb jetton	1500-1550?
24	872	Anonymous issue Nuremberg Rose and Orb jetton	1500-1550?
196	1154	French (Tournai?) stock jetton	1380-1490
189	1134	French (Tournai?) stock jetton	1380-1490
158	1073	French (Tournai?) stock jetton	1380-1490
195	1158	French (Tournai?) stock jetton	1380-1490
152	919	French (Tournai?) stock jetton	1380-1490
193	1141	French (Tournai?) stock jetton	1380-1490
187	1141	French (Tournai?) stock jetton	1380-1490
147	1020	Louis XII Possibly Tournai?	1497-1521
91	950	Louis XII Possibly Tournai?	1497-1521
<b>Uncleaned</b>			
236	1479	English single sided lead jetton	Mid 14th Cent
16	786	Savoy Jetton with arms of France Modern quartered with bar	Late 14th ?

#### 14.6 Glass by Rachel Tyson

##### *Background*

- 14.6.1 Over 300 fragments of vessel and window glass were recovered from contexts dating between the 13th and 19th century (Phases 5 to 10) (Table A1.10).

##### *Context dating*

- 14.6.2 The dates of the glass from Phases 5 and 7 are consistent with the provisional phase dating, being 13th century or later. The green high-lead glass vessel from Phase 7 (ctx. 1371) can be dated to the 13th to early 14th century, giving that phase a more precise date.

- 14.6.3 The glass from Phase 8, while containing some medieval glass consistent with a 15th-century date, was contaminated by some late 17th- to 18th-century wine bottles.
- 14.6.4 Likewise, Phase 9 while containing some medieval and 16th to 17th century glass produced some 18th century wine bottle fragments and post-medieval/modern window glass.
- 14.6.5 The glass from Phase 10 dated from the late 17th century onwards, consistent with its 19th-century spot date.

#### *Condition of the glass*

- 14.6.6 The glass is fragile and very fragmentary, with some of the medieval fragments in a crumbling state which can be helped by careful packing but not prevented completely. The remaining glass is relatively stable.

#### *Results*

- 14.6.7 The medieval glass is the most important of the assemblage, with points of interest raised by its rarity, status and function.

#### *Rarity*

- 14.6.8 Fragments of a green high-lead glass decorated beaker from context 1371 (SF 233) are of considerable interest not only because they are the first known example of medieval glass tableware from Oxford, but also because they are the first example of green high-lead glass to be found in Britain. High-lead glass, a 13th- to 14th-century type, is currently believed to have been manufactured in Germany, and green examples are known from Germany and the Low Countries (Baumgartner and Krueger 1988), but the relatively small number of vessels found in Britain to date are all yellow with the exception of two red vessels (Tyson 2000).

#### *Status*

- 14.6.9 Medieval glass, even urinals (see below) is always found on sites with some degree of wealth and status, particularly true of the 13th and 14th centuries while it starts to become more common at the end of the 15th century (Tyson 2000). High-lead glass vessels have been found at wealthy urban sites as well as castles such as Old Sarum in Wiltshire, Knaresborough in Yorkshire and Launceston in Cornwall.

#### *Function*

- 14.6.10 The high-lead glass fragments probably come from a beaker; another possible fragment of medieval tableware is a colourless fragment with a blue trail from ctx. 1168 (SF 207), although this could date to either the 13th to 14th or the 15th century. Up to six urinals were recovered from Phases 5, 7 and 8, mainly used for the medieval medical practice of uroscopy, the examination of urine to monitor and diagnose health. They were made in the same form certainly by the 13th century up to at least the end of the 16th century, so they cannot be dated any more precisely than their context date. Fragments of tubing were found in Phase 8 (ctx. 1082, SF 149) that probably came from an alembic, part of the distilling set. This is of interest particularly as late medieval ceramics associated with distilling were also found on the site. Small-scale domestic distilling was usual in

relatively wealthy households to make medicines, liqueurs, and other household preparations. Glass and ceramic distilling equipment was often combined. Glass equipment becomes more common archaeologically from the 15th century, and assumes the same form until the mid 17th century. The urinal was also used in the preparation of herbal and medical recipes (Tyson 2000, 152), and given the presence of other distilling equipment, it is possible that the 15th-century urinals found here were used for this purpose.

- 14.6.11 Window glass included five probable medieval fragments from Phases 8 and 9, although it was probably first installed in earlier phases. Two of the thicker medieval fragments have grozed edges indicating a rectangular (ctx. 1177) and a triangular-ended (ctx. 910) quarry shape. Although heavily weathered, they all appear to be pale greenish, and none have any indications of painted decoration.

#### Source

- 14.6.12 The medieval phases are represented by imported and local glass: the high-lead glass from Germany, the urinals and window glass from English forest glasshouses, and the fragment with blue trailing from Mediterranean Europe – southern France or Italy.
- 14.6.13 The early post-medieval glass contains a few fragments of fine tablewares. A late 16th/early 17th-century *vetro a fili* fragment with opaque white and blue bands (ctx. 945, SF 87), although possibly from Venice itself, is perhaps more likely to come from a northern European *façon de venise* workshop such as the southern Netherlands. Later post-medieval glass consists mainly of English wine bottles and window fragments of unexceptional character. The post-medieval window glass is very fragmentary with no evidence for glazing schemes.

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Table A1.10: Glass

Context no.	Context description	Context phase	SF no.	Glass description	No. frags.	Glass date
873	Stone structure, fill of 874	10		1 colourless window fragment; mixed olive green wine bottle fragments	19	Late 17th C onwards
876	Backfilling of structure, fill of 874	10		Olive green wine bottle fragments	3	18th century or later
878	Backfilling of structure 881	9		Three blue body fragments with vertical fluting	3	?16th-17th C, possibly late 15th C
878	Backfilling of structure 881	9		Weathered opaque brown, orig. green, bottle neck, slightly everted and crudely cut	1	16th-17th C, poss. 15th C
878	Backfilling of structure 881	9	56	Colourless window fragment with weathered surfaces, 1 grozed edge	1	Post-Medieval/Modern
882	Layer	9		Olive green wine bottle fragments	3	18th century or later
884	Layer	8		Olive green bottle fragment	1	Late 17th century or later
891	Backfilling of structure, fill of 881	9	75	Small crudely finished bottle/phial neck, weathered	1	16th-17th C
891	Backfilling of structure 881	9		2 thin colourless window fragment – unusually with grozed edges, and 1 pale green-blue window fragment	3	Post-Medieval?
893	Construction cut fill of 881	8		Olive green wine bottle fragment	1	Late 17th C or later
902	Backfilling of structure 881	9		Thick window fragment, weathered, no obvious edges	1	Medieval
903	Backfilling of structure 881	9		Small pale green flat window fragment	1	Post-Medieval/Modern
910	Backfilling of structure 881	9	48	Flat greenish window fragments	2	Post-Medieval/Modern
910	Backfilling of structure 881	9	72	Flat greenish window fragment	1	Post-Medieval/Modern
910	Backfilling of structure 881	9		*Thick window fragment, weathered with greenish centre, ?2 grozed edges, triangular corner	1	Medieval
926	Layer	8	98	Flat window fragments, heavily weathered, no diagnostic features	3	?Prob. Medieval
942	Stone surface	8		Olive green weathered bottle fragment	1	Late 17th century or later
945	Backfilling of structure 881	9	87	*Colourless body fragment with <i>vetro a fili</i> decoration –	1	Late 16th/early

				opaque white and blue bands.		17th C
945	Backfilling of structure 881	9		Fragment of kicked base, green centre, weathered surfaces	1	Undiagnostic: Medieval or Post-Medieval
949	Fill of robber cut 933	7		Convex base fragment of urinal, weathered with greenish core, faint trace of pontil mark	5	c. 13th C onwards
950	Backfilling of structure 881	9		Colourless window fragments with weathered surfaces	2	Post-Medieval
950	Backfilling of structure 881	9		Weathered body fragment	1	Undiagnostic
981	Pit fill of 985	8		Olive green body fragments, 1 from wine bottle neck	2	17th C or later
981	Pit fill of 985	8		Thick olive green convex base with pontil scar from probable urinal	1	15th-end 16th C
981	Pit fill of 985	8		Thin colourless tubing section	1	Late Med/early Post-Medieval?
987	Pit fill of 1095	9		Pale greenish kicked base, weathered surfaces, pontil scar	2	Early Post-Medieval
1038	Fill of well 976	10		Colourless glass vessel fragment, ?wine glass goblet base	1	18th-20th C
1044	Construction cut fill of 1043	8		Olive green wine bottle body fragment	1	Late 17th/early 18th C
1050	Fill of structure 1308	8		Thick olive green wine bottle fragment	1	Late 17th C or later
1082	Pit fill of 1081	8	149	*Pale green ?alembic tubing	55	15th-first half 17th C
1082	Pit fill of 1081	8		Neck/body of onion wine bottle, short neck	2	c. 1690-1730
1082	Pit fill of 1081	8	150	Almost complete onion wine bottle, slightly straight sided, bevelled string-rim	7	c 1690-1730
1133	Fill of well 976	10		Colourless window fragments	3	Post-Med/Modern
1133	Fill of well 976	10		Pale greenish body fragment	1	Undiagnostic
1133	Fill of well 976	10		Small colourless/greenish window fragment	1	Post-Med/Modern
1141	Fill of pit 1142	8		Kicked base fragments of thick glass bottle. Pontil scar.	2	Late 17th C or later
1168	Fill of pit 1155	8	207	Colourless body fragment with concentric blue trail	1	Poss. 13th/14th C
1168	Fill of pit 1155	8		Adjoining pale greenish window fragments with fire-rounded edge	2	Post-Medieval
1177	Fill of pit 1221	8		*Thick pale green window fragment with 3 grozed edges, rectangular quarry	1	Medieval
1196	Pit fill of 1173	5	199	*Everted rim and body fragments, prob.urinal, weathered glass	31	c. 13th C onwards
1204	Pit fill of 1198	5		*Convex base of prob. urinal with pontil mark on underside,	8	c. 13th C onwards

				poor condition and crumbling. <u>Originally greenish</u>		
1371	Fill of structure 1418	7	233	*Green high-lead glass beaker or possibly jug, with concentric trailing below everted rim, and tooled trails around base and 2 around body	94	13th/early 14th C
1371	Fill of structure 1418	7	233	Convex base from urinal of badly weathered, crumbly glass, now opaque beige, and numerous <u>tiny body fragments</u>	Many	c. 13th C onwards
1417	Pit fill of 1415	8		Denatured, possibly burnt base, <u>pontil scar, from urinal?</u>	1	?Medieval
1489	Fill of well 976	10		Olive green bottle fragment	1	Late 17th C or later
1489	Fill of well 976	10		Pale green-blue/colourless thin window <u>fragments</u>	3	Post-Med/Modern
1544	Fill of pit 1107	8	252	Adjoining fragments of opaque brown weathered (orig green?) window fragments <u>with grozed edge.</u>	2	Medieval

\*Recommended for illustration

## 15 APPENDIX 2- ECOFACTUAL SPECIALIST REPORTS

### 15.1 Animal Bone by Emma-Jayne Evans

#### *Introduction*

- 15.1.1 A total of 7096 (108926g) bones were excavated from the site. Of this material a total of 796 (12354g) bone and teeth fragments have been fully recorded to assess the potential of the site. The assessed material originates from all the phases identified at the site, dating from the 11th century to the 19th century.

#### *Methodology*

- 15.1.2 Identification of the bone was undertaken at Oxford Archaeology with access to the reference collection and published guides. All the animal bones were counted, and where possible the bones were identified to species, element, side and zone (Serjeantson 1996). Also, fusion data, butchery marks, gnawing and burning were noted. Undiagnostic bones were recorded as small (small mammal size), medium (sheep size) or large (cattle size). The separation of sheep and goat bones was done using the criteria of Boessneck (1969) and Prummel and Frisch (1986), in addition to the use of the reference material housed at OA. Where distinctions could not be made, the bone was recorded as sheep/goat.
- 15.1.3 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.
- 15.1.4 Tooth eruption and wear stages were measured using a combination of Halstead (1985) and Grant (1982). Loose 3rd molars were aged using this method, but are not included in the final age structure due to minimum number considerations. Measurements were taken according to the methods of Von Den Driesch (1976).

#### *Results*

- 15.1.5 The majority of the animal remains excavated were in good condition, with an average score according to Lyman's grading being 1, allowing for the identification of 433 fragments, 54.4% of the bone assessed, and the identification of butchery marks and pathologies. A list of all the species identified is shown in Table A2.1

Table A2.1 Total number of bones identifiable to species and phase

Species	Phase									Total
	2	3	4	5	6	7	8	9	10	
Sheep/goat	14			21		4	11	132	11	193
Cattle	19			26		10	28	66	6	155
Pig	2			5	1	3	3	3		17
Domestic fowl	1	1				1	2	4	4	13
Domestic goose				5	1	1	1	2		10
Chicken				1		1		6		8
Bird				4				1	2	7
Sheep	3			1						4
Horse	2			2						4
Swan		3								3
Wood pigeon									3	3
Dog								2		2
Rabbit								1	1	2
Roe deer	1			1						2
Fallow deer				1				1		2
Cat								2		2
Crow								1		1
Duck	1									1
Goat				1						1
Grey heron				1						1
Hare										1
Total										432

- 15.1.6 The above table indicates that sheep/goat and cattle provided the majority of meat, which is supported by the fact that butchery marks were found on many of the bones from these species. Butchery marks were also found on many of the other species identified, indicating that many species were used to some extent for consumption. The bones of many small mammals and fish were noted in the sieved samples, which may be analysed to identify species of fish that were contributing to the diet of people associated with the site.

### Conclusions and Recommendations

- 15.1.7 From the brief assessment of the material it appears clear that the condition of the bone will allow for a detailed study of the animal bone from this site. From the assessment it is clear that sheep/goat and cattle would have contributed the most to the meat diet of the inhabitants. It is important that the recording of the assemblage is done in more detail to enable a more accurate identification of the material including the recording and discussion of tooth wear stages and fusion data for ageing the animals. This will add to our understanding of the use of the animals at the site, and allow us to see if this pattern of animal consumption continues, and if there are any major changes in animal

consumption during the different phases. Measurements from the bones will increase our understanding of changes in stature of the animals possibly due to improved farming techniques or variations in breeds.

- 15.1.8 As part of the assessment an inspection of the flots from the processing of the environmental samples from the site was undertaken and fish bones were identified. It is recommended that a proportion of these flots could be sorted and analysed and relevant contexts could be selected by the Project Managers. This will enable us to determine the quantity and species of fish. The fish remains would require further analysis by external specialists.

Task	Time (in days)
Analysis of the bone	15
Manipulation of the data	1.5
Library work and writing of Report	2
Total	18.5

### References

- Boessneck, J, 1969 Osteological Differences in Sheep (*Ovis aries* Linné) and Goat (*Capra hircus* Linné), in D Brothwell and E Higgs (eds), *Science in Archaeology*, Thames and Hudson, 331-358
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- Lyman, R L, 1996 *Vertebrate Taphonomy*, Cambridge Manuals in Archaeology, Cambridge University Press, Cambridge
- Prummel, W and Frisch, H-J, 1986 A Guide for the distinction of species, sex and body size in bones of sheep and goat, *Journal of Archaeological Science* **XIII.**, 567-77
- Serjeantson, D, 1996 The Animal Bones, in *Refuse and Disposal at Area 16, East Runnymede: Runnymede Bridge Research Excavations*, Vol. 2, (eds) E S Needham and T Spence, British Museum Press, London
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## 15.2 Charred and waterlogged plant remains by Ruth Pelling

### Introduction

15.2.1 During the excavations 85 samples were taken in order to recover palaeoenvironmental information. For this assessment 20 of the samples were processed. These samples were selected from a range of different features distributed across the site to provide an indication of the potential for extracting palaeoenvironmental data from the remaining samples. The bulk samples were processed for charred plant remains and in addition two samples were processed for waterlogged plant remains: one from a phase 8 pit and one from a phase 10 (19th century) well fill. Bulk samples were processed by water flotation. Flots were collected onto 0.5mm mesh and allowed to air dry. The waterlogged samples were washed over on to a 0.25 mesh and kept wet. Sample size ranged from 5 to 40 litres.

15.2.2 The original project aims as they relate to the plant remains were to

- Seek to recover evidence for the economy of the site
- Seek to recover palaeoenvironmental data to provide evidence for the utilisation of resources, and to establish the pattern of local environmental conditions.

### Assessment methods

15.2.3 Each flot was first put through a stack of sieves to break it into manageable fractions. Each fraction was then scanned under a binocular microscope at x10 magnification. Provisional identification of plant remains was made and the abundance estimated. For waterlogged samples a fraction only of each flot was scanned to provide an indication of the range of species present and the quality of preservation. The results were entered into an Access database, a summary of which is displayed in Table A2.2. Estimates of abundance are recorded on a four point scale (equivalent to 1-10, 11-50, 51-100 and 100+ seeds or chaff, or present, frequent, common or abundant for charcoal).

### Assessment Results

#### Phase 2

15.2.4 Three samples were examined from flat bottomed, vertical sided pits. Moderate quantities of charred remains were present in two samples and occasional indeterminate cereal grain in the third. Identifiable cereal grains and chaff included *Triticum aestivum* type (bread wheat), *Secale cereale* (rye), hulled *Hordeum vulgare* (barley) and *Avena* sp. (oats). Arable weeds were noted in two samples. Non-cereal remains included occasional pulses and *Corylus avellana* (hazel) nutshell fragments. In addition to the charred remains, mineralised and/or dried waterlogged material was present, particularly in sample <75>, which was dominated by *Sambucus nigra* (elder) seeds. Mineralised seeds of *Ficus carica* (fig) were noted in sample <73>. Moderate quantities of charcoal were noted in samples <73> and <75>. Fish bone and scales were also present in these two samples.

#### Phase 3

- 15.2.5 Two samples were examined; both of which produced only small flots with few charred remains. Occasional indeterminate cereal grain was noted in sample <57>. A *Prunus spinosa* (sloe) stone and an indeterminate nut shell fragment were in sample <61>.

#### Phase 5

- 15.2.6 Two samples were examined from pit fills. Sample <67> produced only rare charred cereal grain and occasional non-charred remains including a mineralised *Prunus* stone and *Sambucus nigra* (elder) seeds. Sample <33> produced a much larger flot with abundant charcoal and a large number of cereal grains. Some chaff, weeds and pulses were also noted. The cereal species present included *Triticum aestivum* type (bread wheat), *Secale cereale* (rye) and hulled *Hordeum vulgare* (barley). Fish bone was also present in this sample.

#### Phase 7

- 15.2.7 Four samples were examined from phase 7; three from pits and one from a feature fill. Limited charred cereal grain was noted in all four flots, while occasional weeds were noted in two and a single *Pisum sativum* (pea) in one. Cereal species noted included free-threshing *Triticum* sp. (wheat) and *Hordeum vulgare* (barley). Charcoal was infrequent in the samples. Non-charred plant remains were noted in three samples, including *Ficus carica* (fig) in two samples and *Sambucus nigra* (elder) in all three. Occasional mineralised sewage type fly pupae were also noted.

#### Phase 8

- 15.2.8 Seven samples were examined for charred remains from phase 8 pits, feature fills and spread. One waterlogged sample was assessed from a pit. Charred remains other than charcoal were limited. Grain was present in five samples and weeds in two. A single seed of *Vitis vinifera* (grape) was noted in sample <29>. Cereal species noted were free-threshing *Triticum* sp. and *Hordeum vulgare* (barley). Charcoal was present in all seven of the charred samples and in large quantities in four of those samples. Mineralised remains of *Malus/Pyrus* (apple/pear) seeds and *Ficus carica* (fig) were noted in sample <42> while further, although limited, non-charred remains were noted in four additional samples, most of which appears to be dried waterlogged material. The waterlogged sample (sample <49> consisted largely of degraded peaty material and fragments of wood with frequent seeds of *Ranunculus acris/repens/bulbosus* (buttercup) and occasional seeds of *Rumex* sp. (docks), *Conium maculatum* (hemlock) and *Brassica/Sinapis* sp. The range of species present was limited and the preservation moderate. No insect remains were noted.

#### Phase 10

- 15.2.9 A single sample was processed for waterlogged remains from the 19th-century well. The sample contains both charred and waterlogged remains. Wood and charcoal fragments with some coal formed the dominant fraction of the sample. Waterlogged seeds were limited but did contain well preserved stones of *Prunus domestica* (plum/bullace) and *Corylus avellana* (hazel) with occasional poorly preserved wild species. Limited insects

were noted, although preservation was poor. This sample would suggest that the contents of the well were dumped rather than gradually accumulating.

### ***Implications and Recommendations for further work***

- 15.2.10 The range of material present in the samples is fairly limited, but does provide some evidence for cereal use and diet at the site and for the immediate environment. The cereal remains do not appear to include any evidence for cereal processing although grain itself is present so must have been brought into the site during all phases of occupation. The species noted are all characteristic of the medieval period. Additional food evidence is present in the form of calcium phosphate mineralised seeds, which are likely to derive from sewage waste, and some waterlogged seeds. The mixed nature of the deposits with charred remains, charcoal and mineralised or waterlogged material would indicate that they include a range of mixed refuse. The waterlogged material provides only limited evidence of the immediate surrounding environment, and generally points to ruderal habitats, with docks, nettles and elder trees dominating. The well deposit examined has little potential for providing information about the environment at the time, but may provide some indication of the range of fruits and nuts consumed locally.
- 15.2.11 While the range of material present in the samples is limited, it is important to catalogue plant remains in such a way that they contribute to the overall picture of life in medieval towns. The charred evidence will provide evidence of the use of cereals, while the waterlogged and mineralised material will provide useful evidence for diet and includes species which are not normally represented by charring alone. It is therefore recommended that samples with good numbers of charred remains such as <73> and <33> are sorted and the seeds and chaff identified. Mineralised material such as that present in samples <67>, <47><62> and <42> should also be extracted and retained where encountered. The waterlogged samples could also be sorted fully for waterlogged plant remains given that they do have some potential to provide evidence for the immediate environment and for diet.
- 15.2.12 Given the material extracted from the samples processed for the assessment the processing of further samples from specific contexts would be worthwhile and these should be selected by the Project Managers. Following initial processing flots should be further assessed to determine which ones should proceed to full analysis and whether any further processing of the remaining samples will be required. As some of the samples are from similar contexts and others are from contexts which are poorly understood or contribute little to the main research aims it is unlikely that all the samples will need to be processed.
- 15.2.13 The following updated project aims can be identified, for the late Saxon and medieval periods.
- Refine understanding of cereal use within the site and recover any evidence relating to cereal processing and consumption
  - Seek to recover additional evidence for other elements of the diet

- Recover waterlogged plant remains to provide evidence for the local environmental conditions.

Indicative times are given below for the further processing of the most promising samples identified at assessment stage. Similar timings would be required for additional samples to be selected during the process of site analysis.

Task	Staff	Days
Sorting of samples 73 and 33 for charred seeds/chaff	Technician	2
Identification of charred seeds/chaff	Specialist	1.5
Sorting of samples 67>, <47><62> and <42> for mineralised seeds	Technician	1.5
Identification of mineralised seeds	Specialist	1
Sorting of waterlogged samples 49 and 51	Technician	2
Identification of waterlogged seeds	Specialist	1.5
Production of a report	Specialist	2

Table A2.2 Summary Assessment Results of the Plant Remains

Sample	Context	Phase	Preservation	Grain	Chaff	Weeds	Other	uncharred	Charcoal	Notes
9	1061	7	chrd	++		+		+	++	Mineral sewage fly, fish bone
16	1092	8	chrd	+		+			++++	large flot, freq Quercus, fish/mammal bone
25	1092	8	chrd						++++	large flot, all charcoal and occ fish bone.
29	1141	8	chrd	+			+		++++	large flot. Fish bone/scale
33	1176	5	chrd	100+	++	++	+		++++	fish bone
42	1262	8	chrd				+	+	+	small bone
47	1361	7	chrd	+			++	++	+	fish bone
49	1434	8	wtlg					+++		degraded peat/wood
51	1489	10	wtlg		+		+	++	++	charcoal + wood, coal, some seeds
54	1609	2	chrd/wtlgd	+				+	*	
57	1442	3	chrd	+						
61	1442	3	chrd				+		+	small flot
62	1542	7	chrd	+		+	+	++	+	
64	1544	8	chrd	+				++	++	fish bone
65	1426	8	chrd	+				+	++++	fish bone/scale, other bone
67	1500	5	chrd	+			+	+	+	
70	1529	7	chrd	+			+		++	fish bone
73	1557	2	chrd	+++		++	+	+	++	fish scales+
75	1587	2	chrd	++	+	++	+	1000+	++	many Sambucus. Small bone/fish bone
80	1225	8	chrd	++		+		+	++	

## 16 APPENDIX 3-GAZETTEER OF ARCHAEOLOGY WITHIN 100 M STUDY AREA (REFER TO FIGURE 1).

**Abbreviations:**

OAU = Oxford Archaeological Unit

SMR = Oxfordshire County Council Sites and Monuments Record

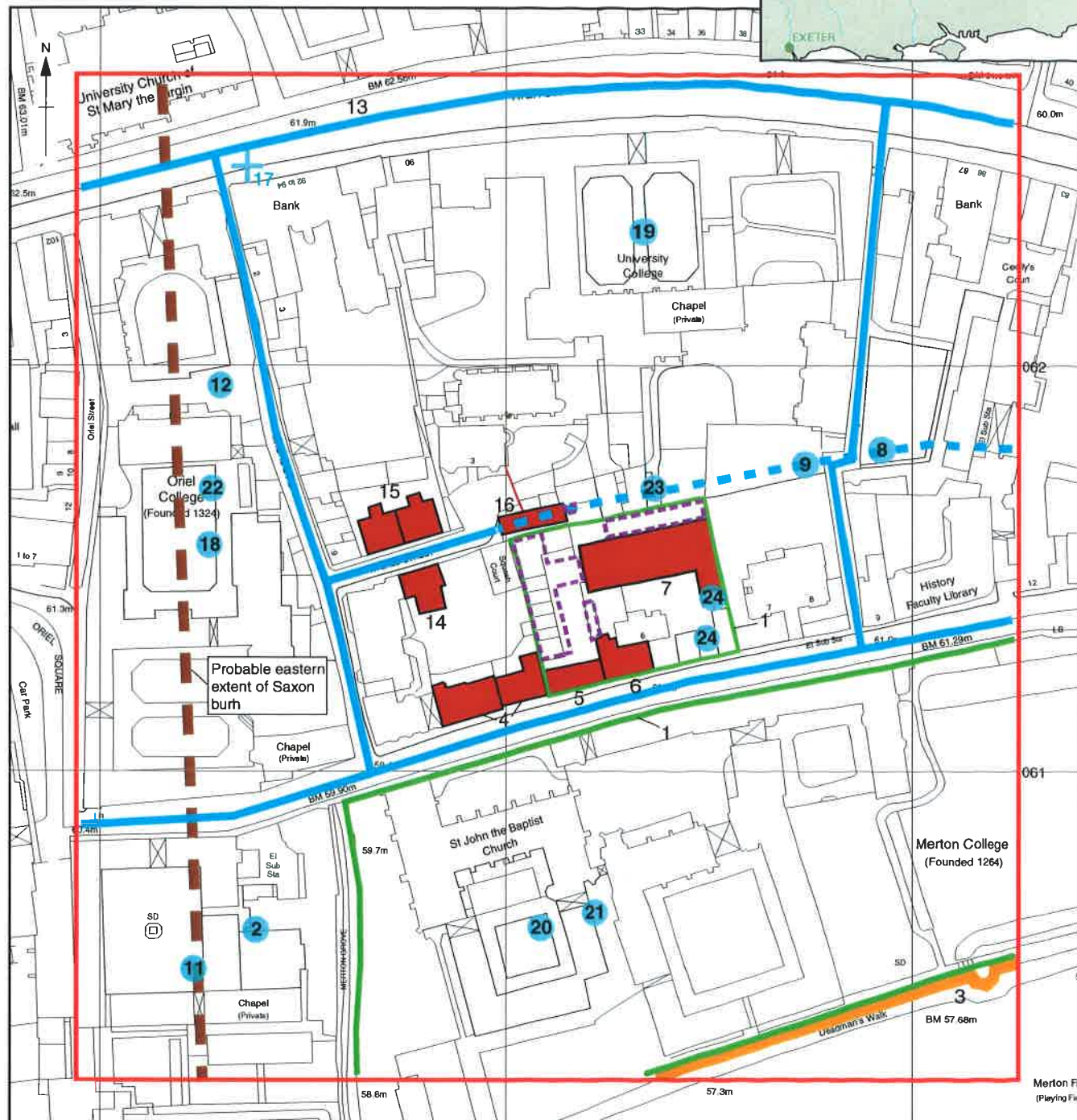
NMR = National Monuments Record

UID = Unique Identifier

OAU No.	DESCRIPTION	NMR UID/ SMR No.
1	Merton College. Founded by Walter de Merton, later Bishop of Rochester, in 1264, moving to Oxford 1274. Some of the present buildings date from this year. The pre-existing church of St John the Baptist on the site was subsequently incorporated in the college chapel. The college's buildings form the earliest example of collegiate planning in Oxford. Hall and chapel begun late 13th century. Wardens' lodging built 1299-1300. Mob quad, Treasury and Old Library 13 <sup>th</sup> -14 <sup>th</sup> century. Gatehouse 1418. Fitzjames Gateway c. 1500, restored 1905.	NMR UID 338330  SMR 3472
2	Corpus Christi College. Founded in 1516 by Richard Fox, Bishop of Winchester	SMR 3598
3	Oxford City Wall. <b>Scheduled Ancient Monument no 26.</b> The line of the medieval defences followed the late Saxon defences. The Scheduled section is well-preserved, elsewhere it is fragmentary or non-extant. The section which falls within the study area contains a medieval bastion (extensively repaired and rebuilt) and a blocked doorway or postern of possible 14 <sup>th</sup> or 15 <sup>th</sup> century date immediately to the west of the bastion.	SMR 3459 3460 6275
4	Beam Hall ( <i>Biham Hall</i> ) and No. 3 Merton Street. Listed Building grade II*. Built in two sections; Beam Hall on the east in the 15 <sup>th</sup> century and the western block in 1600. Alterations and additions made to the west wing in 18 <sup>th</sup> and 19 <sup>th</sup> centuries. Major alterations 1964.	NMR UID 338370  SMR L/3549
5	Merton College Stables, 4a Merton Street. Listed Building Grade II. Part medieval 2 storeys rubble with Welsh slate roof. Internal roof timbers are late medieval.	NMR UID 1092591  SMR L/6382
6	Postmaster's Hall (Portionist's Hall). Grade II Listed. Dated to 16 <sup>th</sup> -17 <sup>th</sup> century with modern additions on north. Interior includes original panelling, fireplace, roof. In 1290 Peter of Abingdon had acquired three houses which constituted the property now known as Postmaster's Hall. He was the first warden of Merton and the houses were probably used to house the scholars for whom there was no room in the college.	SMR L/3550
7	Real Tennis Court. Grade II Listed. Site of court dating from 1600, burnt down and rebuilt 1798.	NMR UID 1310771  SMR 6610
8	Logic Lane excavations in 1960 revealed that Kybald Street, which was closed in 1447, was probably laid out c. 1130 (not earlier than 1120) and that its construction truncated many properties which were subsequently subdivided to form tenements fronting the new street. The excavation also revealed: <ul style="list-style-type: none"> <li>two prehistoric ring ditches interpreted as the remains of ploughed out Bronze Age round barrows. One of the ditches contained a sherd of Bronze Age pottery;</li> <li>early medieval occupation in the form of three pits (probable rubbish</li> </ul>	NMR Event UID 632553  SMR 6195 6465

	<p>pits) and a beam-slot and posthole (possible boundary fence);</p> <ul style="list-style-type: none"> <li>• later medieval occupation in the form of 16 pits and four distinct sections of 13<sup>th</sup> century walls.</li> </ul> <p>A number of residual finds (outside the context in which they were originally deposited) were also found, including struck flints of Neolithic or Mesolithic date, a probable Bronze Age arrowhead and several sherds of Romano-British pottery.</p>	
9	Three possible late Saxon gravel road surfaces beneath 2 ft of later deposit were seen in contractor's excavations in Logic Lane. The surfaces appeared similar to those found in Kybald Street cutting (see OAU 8).	SMR 6466
10	Corpus Christi College. Founded in 1516 by Richard Fox, Bishop of Winchester.	NMR UID 1003239 1092907  SMR 3598
11	OAU excavation in 1972 revealed large ditch cut through loam, believed to be part of 10 <sup>th</sup> century defences. No natural gravel was seen. Auguring in nearby beer cellar in 1979 revealed clay to a dept of 1.70m and to 0.80m to the west and east of the cellar. No trace of ditched defences were identified.	NMR Event UID 632554  SMR 6201
12	OAU carried out a watching brief in 1994, revealing a medieval pit. No trace of the Saxon defences were found, which may lie to the west.	NMR Event UID 1053255
13	The High Street. The western half of the road was laid out as part of Saxon burh, the curved eastern part may have followed a cart track to the river. High Street is first mentioned in 13 <sup>th</sup> century and was previously named East Street (c.1195). A watching brief by OAU during drainage operations on High Street in 1982 revealed 12 <sup>th</sup> century pits and a central kennel or gutter possibly of late Saxon date.	SMR 6516
14	No.1 Kybald Street. Grade II Listed Building. House, once 'The Black House Inn', probably built c. 1600.	---
15	Nos. 4 and 5 Kybald Street. Grade II Listed. Built in 1816 as an Almshouse.	NMR UID 1013332
16	No. 2 Kybald Street. Grade II Listed house. Main part in the centre is 17 <sup>th</sup> century with later additions on the east and west. 3-storeyed roughcast timber-framed with cellars and a Welsh slate roof.	---
17	Possible prehistoric clay net sinker or loom weight and numerous animal bones found by chance c. 12 feet from the surface during drainage works in 1912.	NMR UID 338258
18	Oriel College. Founded in 1324. Whole college was rebuilt in 1620-42 although some 15 <sup>th</sup> century parts remain in St Mary's quadrangle.	NMR UID 338331
19	University College. Grade I Listed Building. The foundation of the college is ascribed to King Alfred but the earliest historical endowment dates from 1249. The foundation stone of the existing building dates to 1634. OAU carried out an assessment of the historic fabric of the hall, kitchen and buttery in 1998.	NMR UID 338333  NMR Event UID 1224239
20	Mob Quad. An excavation here in 1922 uncovered a small building predating the Mob buildings of 1309 along with medieval pottery. This was supervised by the librarian, H W Garrod.	NMR Event UID 632433
21	D Sturdy carried out an archaeological watching brief at this location in the 1963 and revealed undisturbed natural gravel at a depth of 2.5 feet..	NMR Event UID 654392
22	Oxford Archaeological Excavation Committee carried out a watching brief during the construction of a new strong room in 1969 revealing a medieval rubbish pit.	NMR Event UID 654997
23	Oxford Archaeological Excavation Committee carried out a watching brief prior to the construction of a new common room for University College in 1969 and revealed a large stone-lined chamber with a brick vault, almost certainly a post-medieval cess pit. The site lay across the line of medieval Kybald Street..	NMR Event UID 655015
24	Approximately 3 m of medieval deposits (probable rubbish pits) above	---

natural ground were revealed during development in 1997 (Mr Jeffs of the Merton College Estates Office <i>pers. comm.</i> ). There is no record of this at SMR.	
---	--



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- Areas of development
- Merton College historic (medieval) property
- Scheduled Ancient Monument (medieval city wall)
- 14 Archaeological site
- 14+ Archaeological findspot
- Listed Building (within c. 25 m of development)
- Historic road shown on Agas' map of 1578

Figure 1: Site location and archaeological features within the study area.

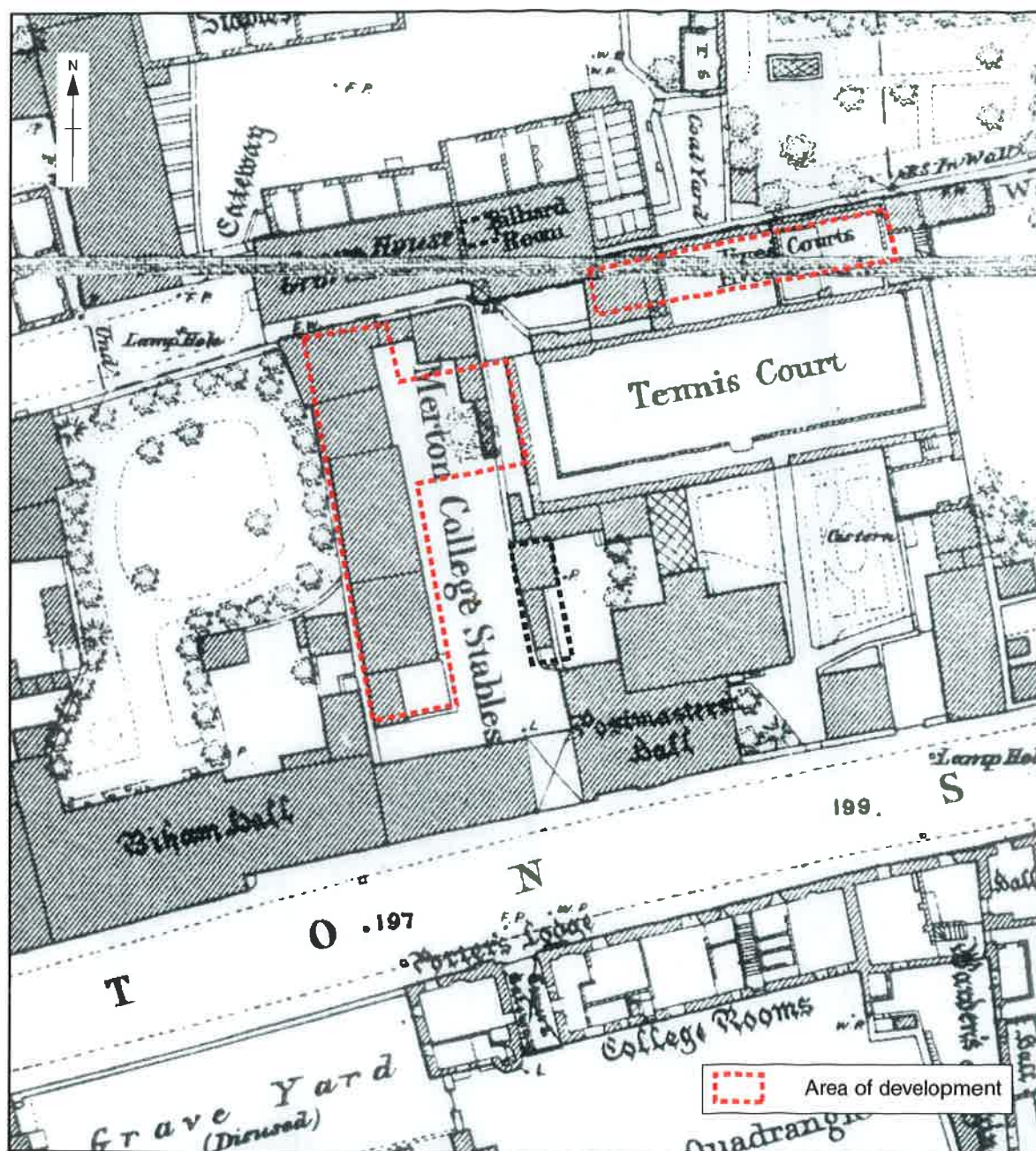


Figure 2: Ordnance Survey 1:500 scale map (c. 1878-80).  
Dashed lines indicate approximate location of development

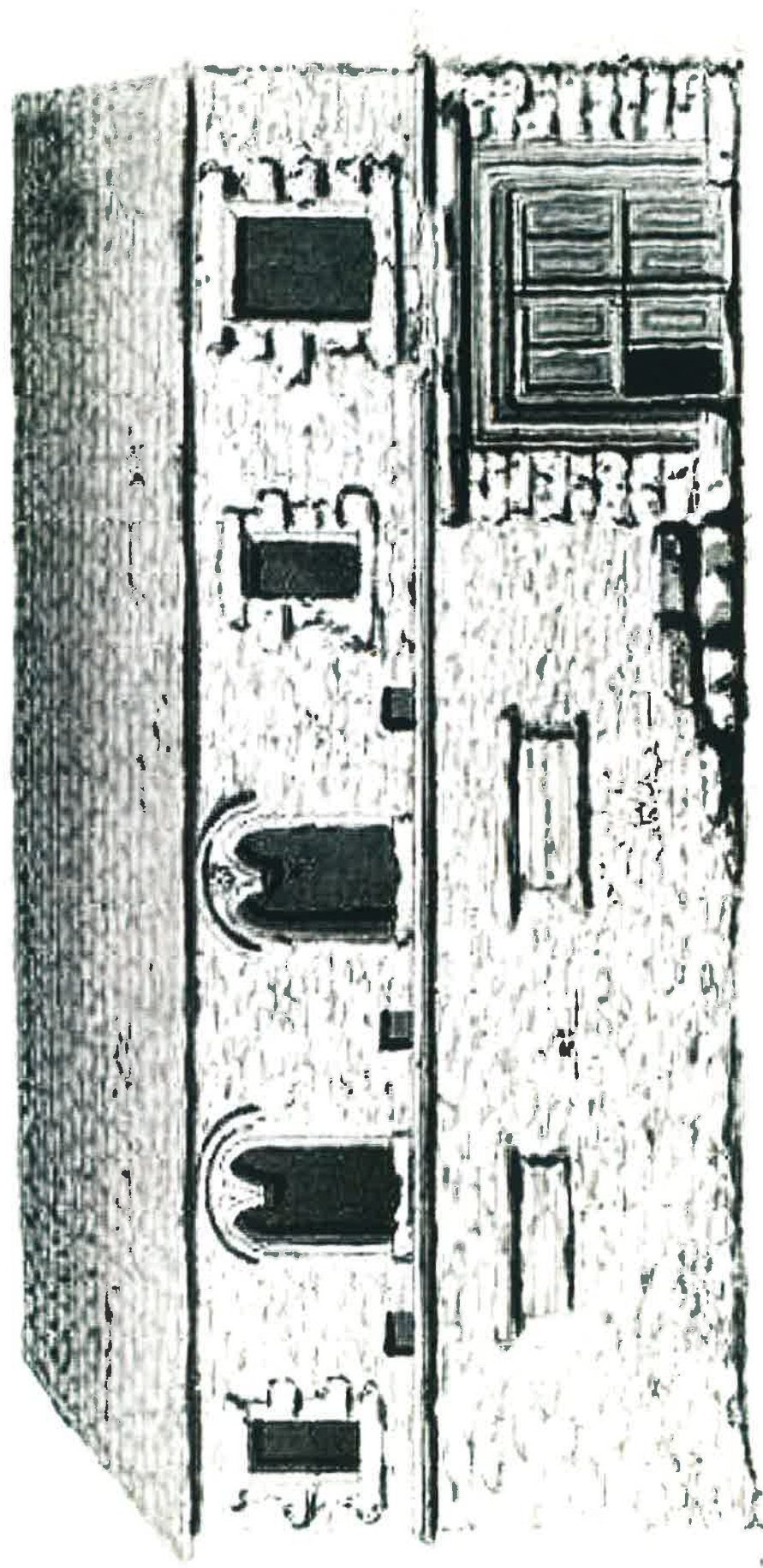


Figure 3: Merton Stables (4a Merton Street) by James Green (c.1750)

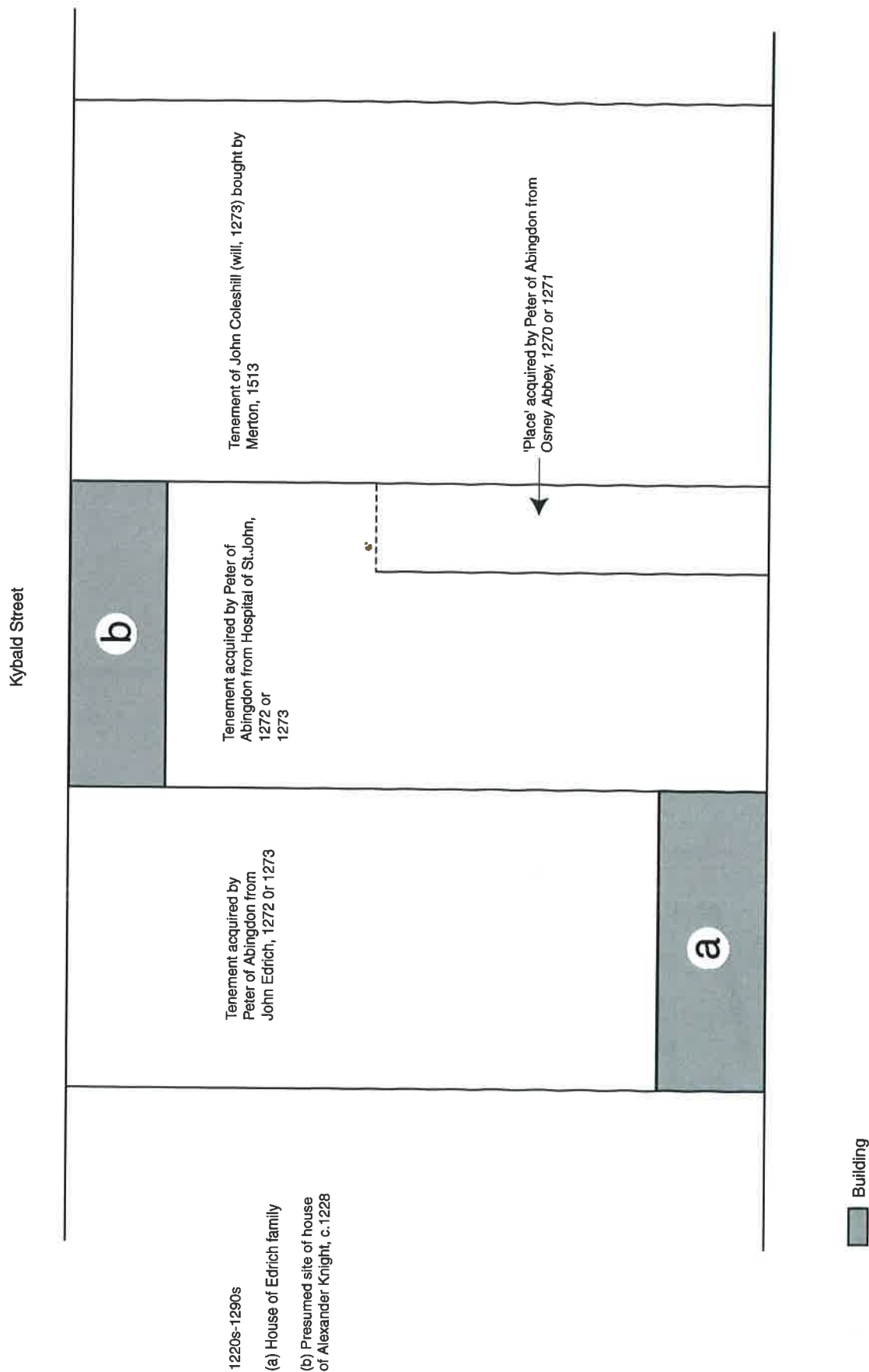


Figure 4 : Postmasters' Hall Tenements (after Robert Peberdy in 'Postmasters and the Merton Record 2001)

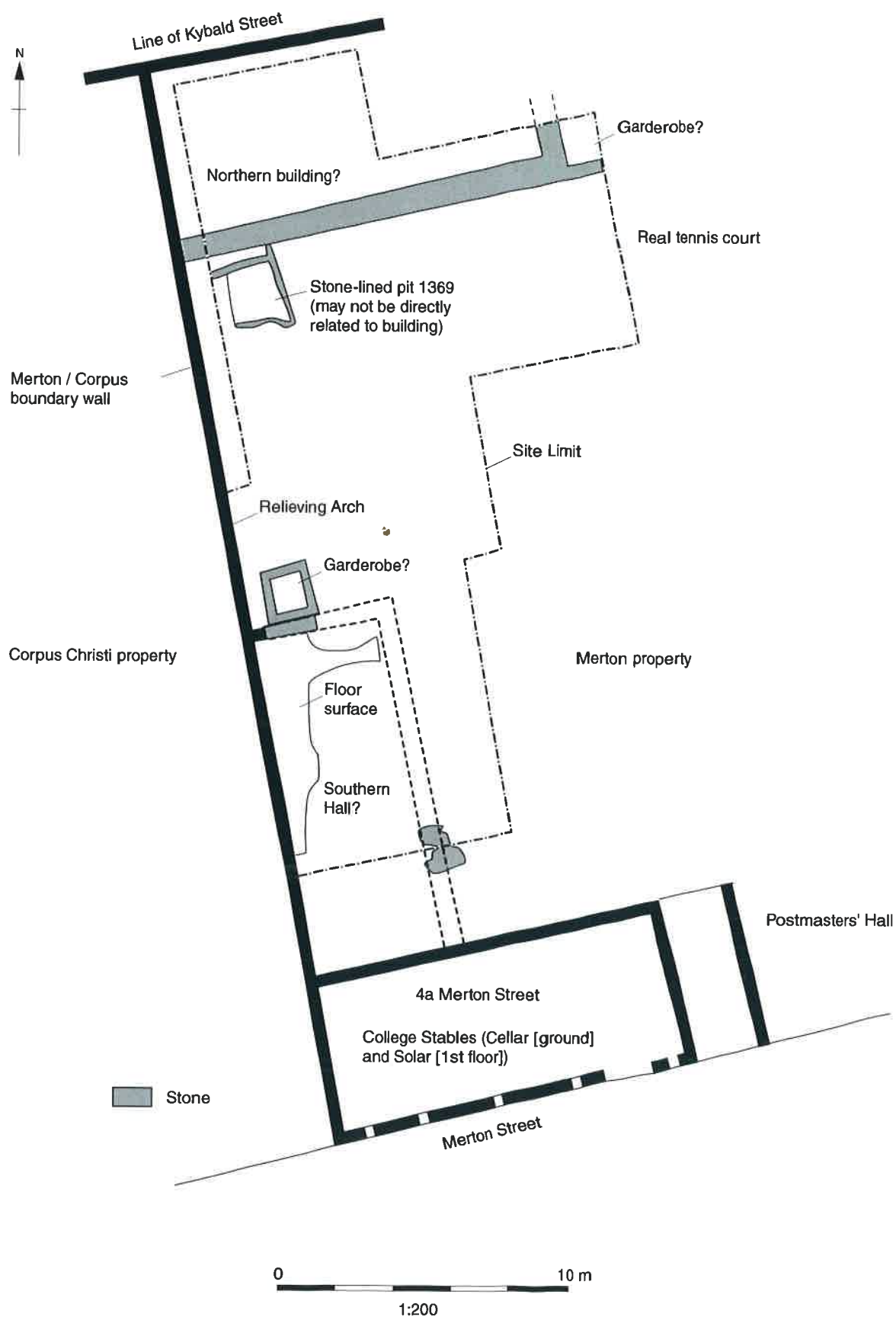
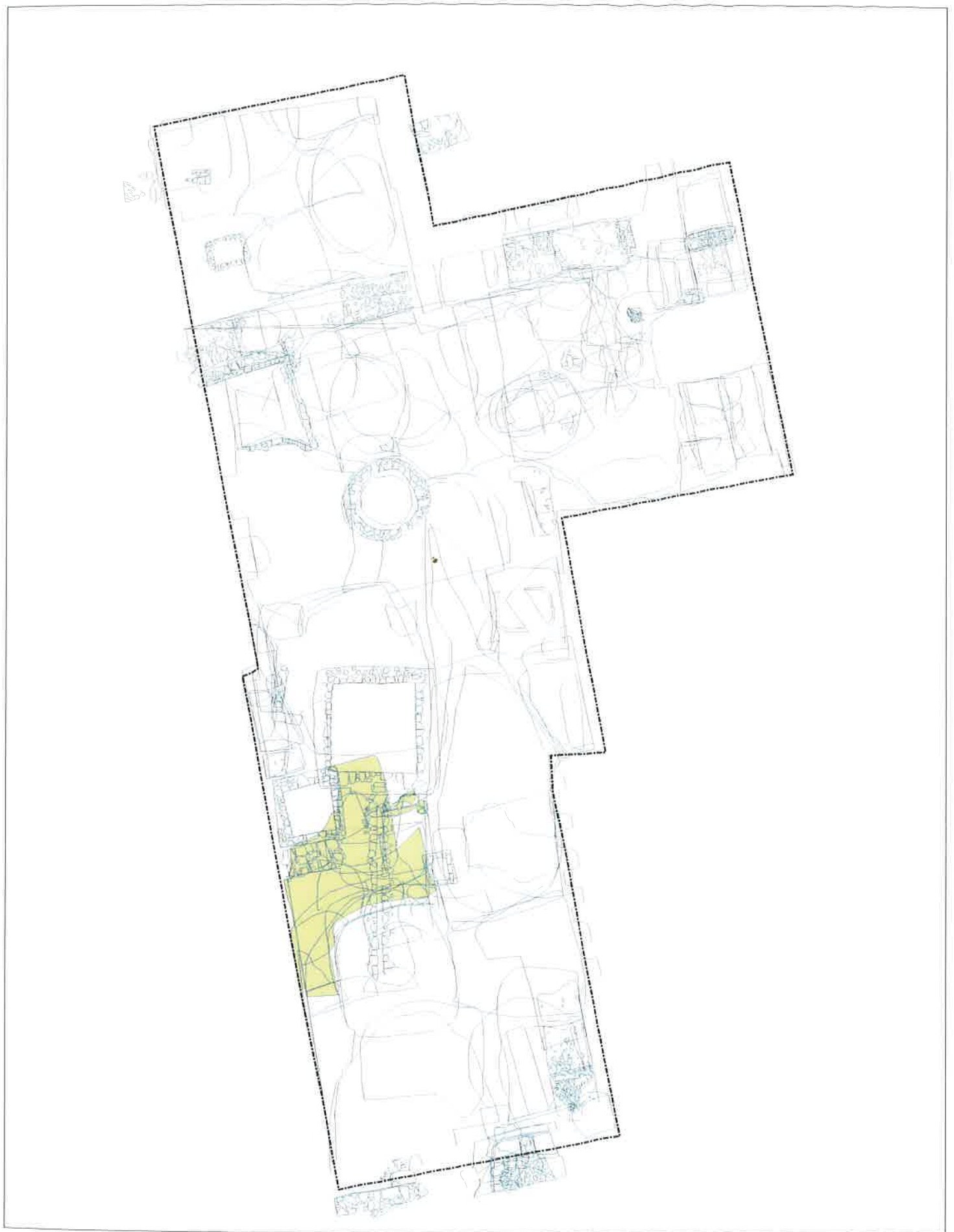


Figure 5: Site layout with location of early structures





**Figure 7**  
 Raw Data Survey Plan  
 Assessment phase 3:  
 Construction of southern  
 hall building



Oxford Archaeology

Service Manager  
 Oxford Archaeology  
 100-102  
 100-102  
 Tel: 01865 203600  
 Fax: 01865 723496



email: [mail@oxfordarch.co.uk](mailto:mail@oxfordarch.co.uk)  
 web: [www.oxfordarch.co.uk](http://www.oxfordarch.co.uk)

0 2 4 6 8 Metres

N

--- Edge of Excavation      Assessment phase 4: Demolition and robbing of southern hall building

**Figure 8**  
**Raw Data Survey Plan**  
**Assessment phase 4:**  
**Demolition and robbing of**  
**southern hall building**



**Figure 9**  
**Raw Data Survey Plan**  
**Assessment phase 5:**  
**13th Century pits**



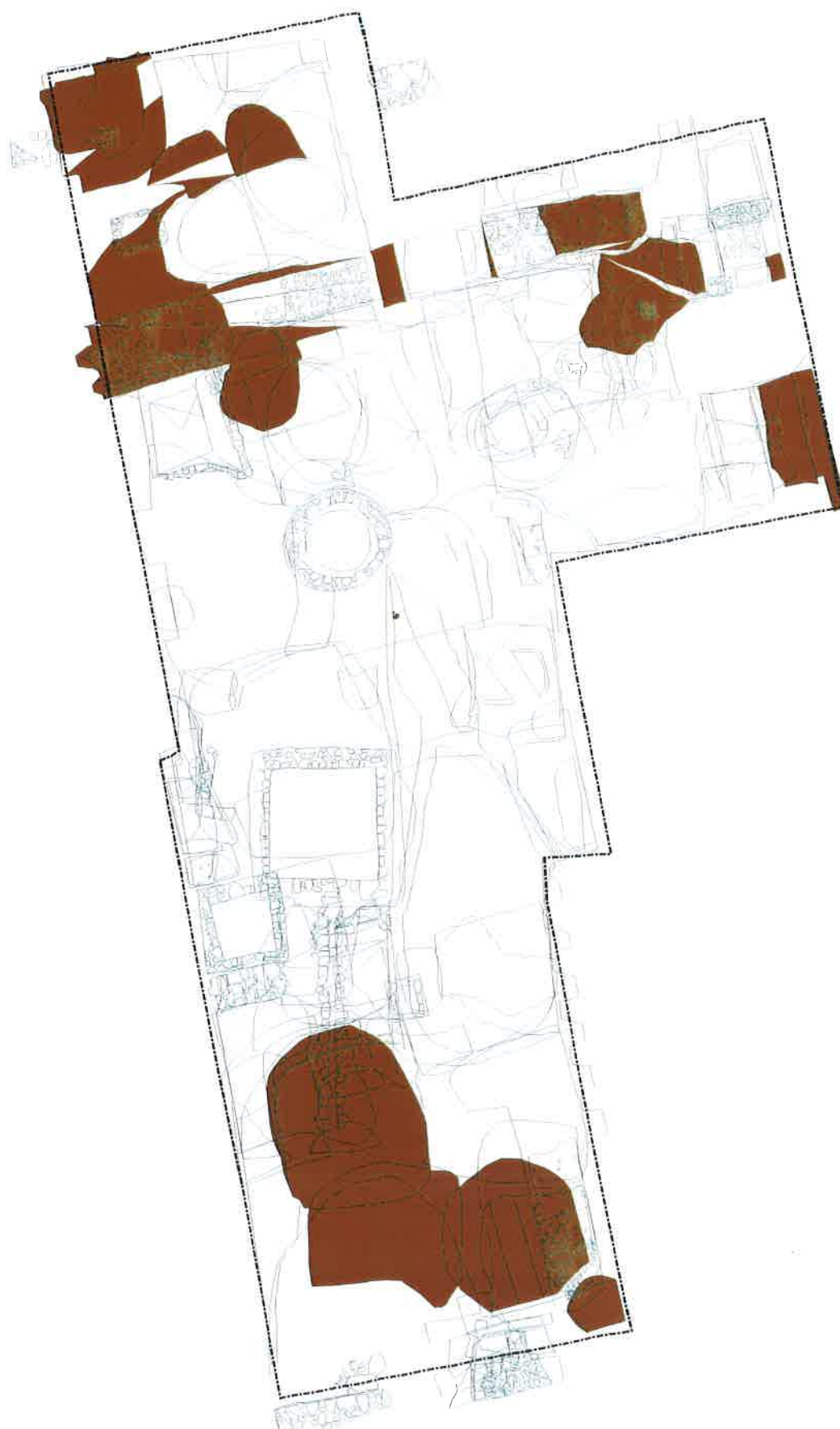
0 2 4 6 8 Metres

N

Edge of Excavation

Assessment phase 6: Construction of northern building

**Figure 10**  
**Raw Data Survey Plan**  
**Assessment phase 6:**  
**Construction of Northern**  
**building**





0 2 4 6 8 Metres

N

----- Edge of Excavation      Assessment phase 8: 15th C+ pits and stone features

Oxford Archaeology

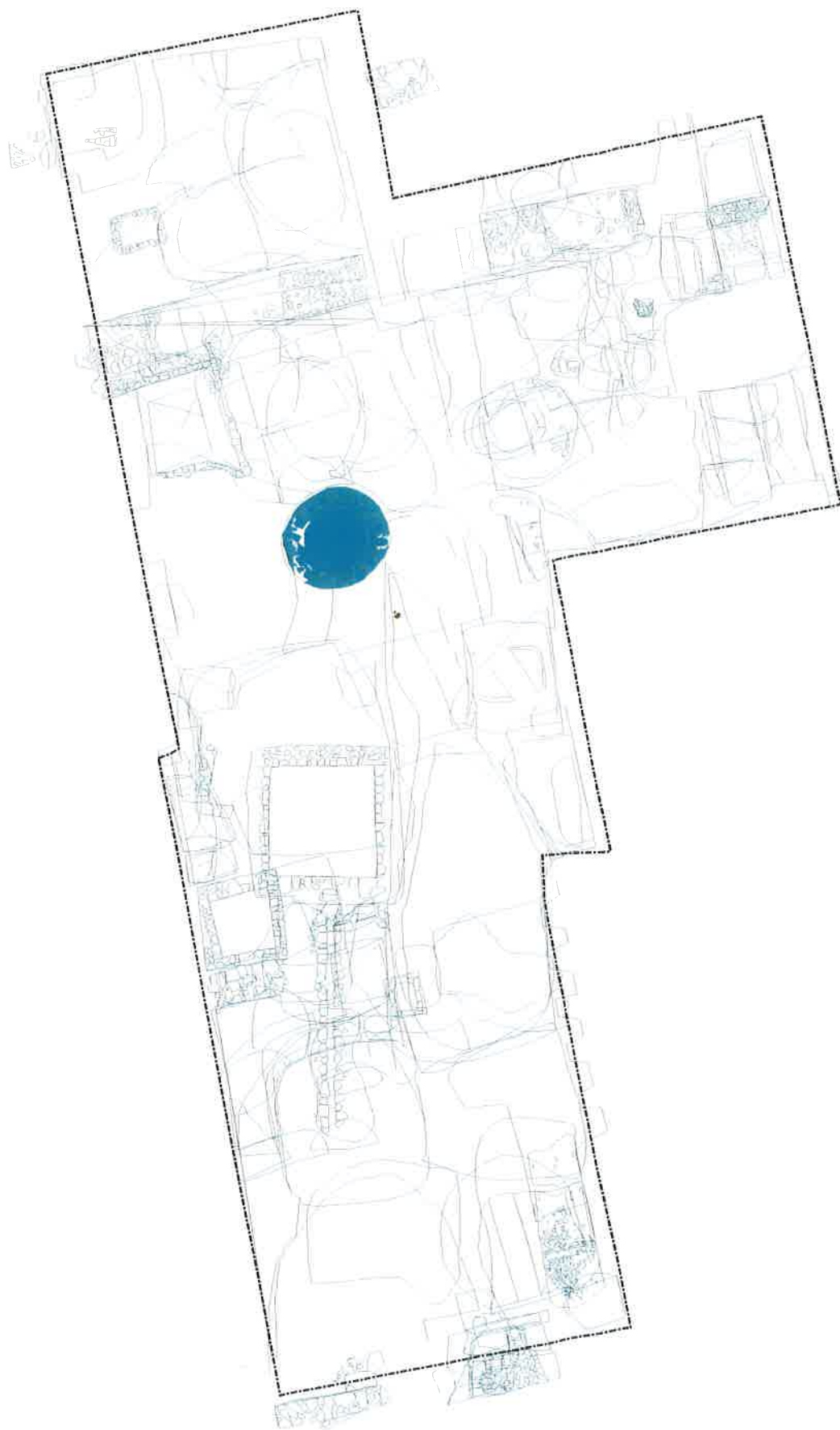
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Tel: 01235 260000  
Fax: 01235 260001



email: [mail@oxfordarch.co.uk](mailto:mail@oxfordarch.co.uk)  
web: [www.oxfordarch.co.uk](http://www.oxfordarch.co.uk)

**Figure 12**  
**Raw Data Survey Plan**  
**Assessment phase 8:**  
**15th Century pits and**  
**stone features**





0 2 4 6 8 Metres



Edge of Excavation Assessment phase 10: 19th C stable deposits

**Figure 14**  
**Raw Data Survey Plan**  
**Assessment phase 10:**  
**19th Century stable**  
**deposits**



Plate 1: Fragments of stone windows similar to those depicted in the Green illustration, recovered from unstratified contexts on the site



Plate 2: Stone well (phase 10) and square, stone-lined pit with stone drain (phase 8) running from the corner of 4a Merton Street. Looking south.



Plate 3: Cleaning the cellar floor of the southern hall building (phase 3). Looking west. Note the return wall and garderobe pit to the right and the truncation by later college rubbish pits to the left



Plates 4 and 5: Two medieval drinking jugs and a sherd of pottery which may be inscribed with the name of the college, recovered from the northern building Garderobe pit (structure 1309 - phase 6)



Plate 6: Bone styli recovered from college rubbish pits



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