The Buttery and Kitchen University College High Street Oxford

Phase 3 Excavation and Watching Brief

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The Buttery and Kitchen
University College, High Street, Oxford

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PHASE 3: ARCHAEOLOGICAL EXCAVATION AND WATCHING BRIEF

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SUMMARY

In September 2007, Oxford Archaeology (OA) carried out an archaeological excavation at University College, High Street, Oxford. The work was commissioned by Dr Roland B Harris (on behalf of University College) in advance of building works to redevelop the Kitchen, Buttery and Hall. This was followed by a watching brief undertaken from March - May 2008. The excavation showed that intact and deeply stratified archaeological levels survive as early as the 13th century. More importantly, remains of an earlier wall were found. It is not clear whether this wall could be part of an earlier building that predates the College or if it is just part of an external wall dividing two plots of land. Finally, but no less important, the construction trenches for the Chapel and the Buttery were identified. It is not completely clear whether the construction trench for the chapel relates to the original building or to possible re-construction works during the 17th century, prior to the construction of the kitchen. The watching brief revealed two walls that coincide with those depicted on James King's plan (1848) namely the west wall of the larders/scullery located on the south side of the kitchen and a wall defining the eastern extent of the Fellows Garden.

1 INTRODUCTION

1.1 Location and scope of work

1.1.1 University College proposes to redevelop the Kitchen, Buttery and Hall at University College, High Street, Oxford. This will comprise refurbishment of the Kitchen, expansion of the buttery, and associated remodelling of the access arrangements in the hall, Kitchen and buttery area.

1.1.2 In late August and September 2007, Oxford Archaeology (OA) carried out an archaeological excavation in advance of the refurbishment and building works in the above area.This was followed by a watching brief that was undertaken between March to mid May 2008 during groundwork associated with the new development. The archaeological work was designed to provide information on any archaeological deposits and structures that may be revealed during excavation and was undertaken in accordance with a brief (Roland Harris 2006) and a Written Scheme of Investigation (OA 2006).

1.1.3 University College is situated on High Street, Oxford, within a block formed by High Street to the North, Logic Lane to the East, Kybald Street to the South and Magpie Lane to the West (Fig. 1). The site is located in a small yard to the rear of the Buttery and Kitchen within to the rear of the Chapel on the south side of the main quadrangle.

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1.2 Geology and topography

1.2.1 The site is situated on the eastern side, and *c* 100m north, of the edge of a gravel promontory consisting of Quaternary River Gravels of the 2nd (Summertown-Radley) Terrace Deposits (British Geological Survey sheet 236). The promontory extends between the River Isis *c* 1 km to the west and the River Cherwell c 400m to the east. The gravels on this terrace are typically overlain by a 0.3m depth of red brown loessic loam. It is centred on NGR SP: 5174 0620.

1.2.2 Existing ground levels in the location of the trenches are recorded at between 61.80 and 62 m AOD. Note: Excavation at Post-Masters Hall, Merton College some 600 m to the south-west recorded natural gravel at *c* 59 m AOD (this was not overlain by loess and is assumed to have been truncated by an unknown amount).

1.3 Archaeological and historical background

1.3.1 A comprehensive archaeological background has been established in the Brief by Dr Roland B Harris (17th August 2006) - this is repeated below.

1.3.2 *Summary of the development of the site*

1.3.3 Oxford was an Anglo-Saxon burh founded as part of the system of 31 fortresses that the most recent analysis suggests were built between May 878 and August 879 as a crucial part of Alfred's successful military strategy to drive the Vikings from Mercia and London. If correct, this represents a revision of the conventional dating of the burh at Oxford to between 911 and 914-19, but is more consistent with the existence of a silver penny of King Alfred (871-99), with the mint-name Oxford (Ohsnaforda).

1.3.4 The location of a burh at Oxford was doubtless stimulated by the important mid Saxon crossing of the Thames in St Aldate's. The extent of the burh is not entirely certain, although it has long been accepted that the area between the later medieval Eastgate and Schools Street/Oriel Street (in which the proposed development lies) represents an extension, perhaps of the early 11th century. The evidence for this is largely topographic (the eastern part of the later medieval town wall is offset northwards by *c* 60m at this point). The case for a smaller burh has also relied on matching the length of the perimeter of the defences to the value of the hidage for Oxford (itself not entirely clear for this burh due to corrupted text) in the Burghal Hidage, despite the fact that a strict relationship between hides, manpower, and wall length demonstrably does not apply throughout the system of Alfredian fortresses. The importance of determining the extent of the Saxon burh can be over emphasised, however, since it is probable that it had suburbs from the outset (as seen, for example, at Lewes). Certainly, the archaeological evidence (such as the extent of Saxon metalled road surfaces, which includes Catte Street and the eastern part of the High Street, and evidence of domestic occupation pre-dating the late 10th or early 11th-century foundation of St Peter in the East) for the so-called eastern extension does not differentiate this area from the more certainly identifiable Saxon burh to the west.

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1.3.5 Indisputably, by the early to mid-11th century, the site lay within the town centre and to the south of the High Street, which led to the Eastgate and to a crossing of the Cherwell beyond (later Magdalen Bridge). Use of the area set well back from the High Street at this period is demonstrated by the discovery of 11th-century rubbish pits at Logic Lane, and 11th-century (or later) pits at Postmaster's Hall Yard, Merton Street. The excavations at Logic Lane also showed that Kybald Street was created *c* 1130, possibly along the line of an 11th-century boundary fence separating properties fronting the High Street from those fronting Merton Street (the latter appearing to predate Kybald Street). The excavators also conclude that Logic Lane (which dog-legs across Kybald Street) was built at the same time or later, but this assumes that the lengths north and south of Kybald Street are coeval.

1.3.6 Documentary evidence of the Kybald Street plots survives from the 13th century onwards, and records the location of the southern part of the proposed development within several properties. The easternmost property was in the possession of William Dosier *c* 1220, and in the rentals of 1317 and 1324 it was known as Hart Hall, an academic hall that appears to have ceased functioning shortly after 1349. Certainly, in 1353 it was leased to University College. To the west of this were several other small academic halls (probably from east to west, comprising White Hall, Rose Hall and Brend Hall), the exact location and extent of which is unclear: these too were absorbed by the expanding college. To the north of the Kybald Street properties, the proposed development overlies the rear of High Street plots that were combined to form the core of the University College site: Studley, Great University Hall and Ludlow Hall. The part of Kybald Street east of Logic Lane was closed in 1447, but that between Logic Lane and Magpie Lane remained open as late as 1578: it had been reduced to something like its present extent by 1675, doubtless due to the rebuilding and southwards expansion of the college in the 17th century (see below). At this date the development site comprised gardens to the south of the medieval quadrangle.

1.3.7 The rebuilding of University College in 1634-75 created most of the buildings that will be affected by the proposed development. During these works a more extensive quadrangle was created, with the south and west ranges built outside the footprint of the earlier quadrangle (which remained standing during the lengthy construction period, until 1668). A detailed structural history of the hall, kitchen, buttery and, to a lesser extent, the chapel will form part of the Archaeological Assessment (Roland Harris, in prep.), but the salient aspects of the history can be briefly summarised as follows:

- 1639-41: walls of south range completed (including hall undercroft), with chapel and buttery roofed and slated.
- 1656-7: hall roofed.
- 1660-6: internal fitting out of chapel.

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- 1668-9: new library and kitchen wing added (library fitting out continued until 1675).
- 1776: hall interior remodelled, with plaster vault covering hammer-beam roof.
- 1802: classic frontispiece between hall and chapel destroyed, and ogee cresting of south range removed. Timber roof of chapel replaced by one of plaster.
- 1859-61: new (present) buttery built; new (present) library built; old buttery (at east end of hall) removed and converted to passageway (other aspects of access to kitchen etc. modified at this time too).
- 1862: plaster ceiling of chapel (of 1802) replaced by present timber roof; east wall of chapel rebuilt.
- 1904: hall plaster ceiling removed, timber roof restored, and hall extended westwards by two bays.
- 1959-67: extensive replacement of external stonework of kitchen, hall and chapel ranges, and minor internal alterations (including formation of Alington Room).

1.3.8 *Previous archaeological investigations in the area*

1.3.9 A number of archaeological discoveries and excavations have occurred within and in the area of University College both in antiquity and in recent times

- University College kitchens – excavations (presumably during building works) in 1892 produced finds comprising medieval pottery, including jugs.
- University College Radcliffe Quadrangle – subsidence in 1940 revealed a stone-built chamber under the north-east corner of the southern half of the lawn, probably an 18th-century sump pit.
- Logic Lane – excavations were undertaken on the east side of the lane in 1960 in advance of building by University College. The excavations revealed parts of what appear to be two ring ditches, possibly representing ploughed out Bronze Age barrows (an interpretation supported by the find of a sherd of a collared urn in one of the ditches). Mesolithic/Neolithic flints were found in residual contexts, as were several sherds of Romano-British pottery. The site produced several 11th-century rubbish pits, and a beam-slot and posthole (possibly of a boundary fence). Later medieval evidence comprised further pits, the surfaces of Kybald Street (set out *c* 1130) and four sections of 13th-century walling.
- University College new Common Room (south of 17th-century kitchen) – during construction of this building in 1969, a large stone-lined chamber with a brick vault (probably a cess pit) was discovered lying across the line of Kybald Street. Evidently this must post-date the 17th-century partial closure of this part of Kybald Street. Post-medieval pottery was found.

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- 92-3 High Street – medieval rubbish pits (producing a substantial pottery group) exposed during construction of a new strong room for the bank in 1969.

- University College hall, kitchen and buttery – a brief assessment of the historic fabric was undertaken in 1998.

- Postmaster's Hall Yard, Merton College, Merton Street (north side) – excavations took place prior to building works in 2000-3, to the rear of 4a Merton Street (Merton stables – a stone townhouse of *c* 1200). This revealed 11th-century (or later) pits, an undercroft adjacent to 4a Merton Street (probably supporting a chamber rather than a hall), a second building to the north (on the Kybald Street frontage) and later medieval pits. These excavations lie *c* 65 m to the south-west of the proposed Test Pits.

- In August 2006 OA carried out an archaeological evaluation at University College (ATP1 and 2 - Fig. 2). The works showed that intact and deeply stratified archaeological levels survive pertaining to a possible 13th century structure (overlying an earlier and undated cut feature) and a pit associated with properties that once fronted Kybald Street or High Street. A second possible structure may have served as a mason's workshop during the re-construction of the University College between 1634-1668, prior to the construction of the kitchen. Good correlation was found with the archaeological evidence for the construction of the Kitchen during 1668-69.

- In April 2007 OA undertook the excavation of 2 engineering test pits at University College (ATP3 and 4 - Fig. 2). The test pits were designed to establish the nature and depth of the footings of the range of buildings to the south of the main kitchen block, and to assess any engineering or archaeological implications of proposals to redevelop the Kitchen, Buttery and Hall. Although both the eastern and western walls displayed evidence of an offset footing constructed of roughly hewn limestone blocks, the test pits revealed a significant variance in the depth of the foundations, which appeared to reflect the stability of the ground through which the foundations had been constructed. The test pit against the western wall revealed relatively shallow foundations built off a compacted gravel surface with later yard surfaces post-dating the construction of the footing. This test pit also revealed some evidence that the standing wall had been re-built over an earlier foundation. The foundation revealed within the test pit against the eastern wall was considerably deeper and had been constructed through the fills of a 17th century cess pit. Evidence for a possible construction horizon was recovered from both test pits and may equate to a deposit of similar composition which was observed during the previous evaluation phase.

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2 PROJECT AIMS

2.1.1 The archaeological works were carried out in order to assess and record archaeological deposits within the proposed development area.

2.1.2 The aim of the project was to further understand the archaeology of the research area, while reducing the impact of the works on any surviving archaeological remains.

2.1.3 The general aims were to establish the presence/absence of any archaeological remains within the target area and to determine the extent, condition, nature, character, quality and date of any archaeological remains that may affect further need for mitigation during the construction process.

2.1.4 In addition, it was necessary to establish the ecofactual and environmental potential of any archaeological deposits and features.

2.1.5 To make available the results of the archaeological investigation.

2.1.6 Site specific aims were:

- To mitigate the impact of the new building and to identify any significant subsurface archaeological remains in this part of the site;

- determine/confirm the character of any remains present, and ensure that deposits are removed (where appropriate and practicable) by proper controlled archaeological methods;

- ensure that archaeological data is recovered from the excavations and areas subject to archaeological watching briefs;

- determine or estimate the date range of any remains from artefacts or otherwise;

- determine the potential of the deposits for significant palaeo-ecological information;

- seek any evidence for medieval property boundaries (and their post-medieval survival): the boundary of the High Street properties of Ludlow Hall and Great University Hall runs approximately through the site;

- demonstrate the feasibility of discriminating between pits/quarries that may represent college use and any that may predate the college's presence on this site, including features relating to an important possibly pre-urban settlement phase indicated by Logic Lane investigations in 1960.

3 METHODOLOGY

3.1 Scope of fieldwork

Excavation

3.1.1 Two trenches, ATP5 and ATP6 (Fig. 2) were excavated.

3.1.2 Trench 5 (ATP5), in the kitchen/buttery cellar, measured c. 2.5m x 1.8m x 1.8m deep.

3.1.3 Trench 6 (ATP6) was located against the west wall of the Buttery building, within the Master's gardens and it measured c. 4.6m x 2.4m x 2.9m deep.

Watching Brief

3.1.4 The watching brief was focussed on groundwork that had the potential to impact on the buried archaeological resource - largely the excavation of service runs in the yard to the west side of the kitchen and the garden area to its east and with some limited observations during the refurbishment work within the existing structures. Only those observations where archaeological deposits were recorded are reported here.

3.2 Fieldwork methods and recording

3.2.1 The overburden within Trench 5 (ATP5) was removed by hand after removal of the floor, due to its location in the basement of the kitchen.

3.2.2 In Trench 6 (ATP6), the overburden was removed in spits of 0.2m under constant archaeological supervision by a 360° mini-excavator fitted with a toothless bucket to the first significant archaeological horizon. From this horizon the trench was excavated entirely by hand.

3.2.3 Trench 6 was shored and subject to further hand-excavation in order to ascertain the depth of archaeological deposits, down to the limit of excavation.

3.2.4 Hand excavation within both trenches proceeded stratigraphically using a 'single context recording' system. All significant archaeological features were planned at a scale of 1:20, excavated, and their sections drawn at scales of 1:20.

3.2.5 Excavated features were photographed using colour slide, black and white print film and a digital camera. A general photographic record of the work was made Recording followed procedures detailed in the *OAU Fieldwork Manual* (ed D Wilkinson, 1992).

3.3 Finds

3.3.1 Finds were recovered by hand during the course of the excavation and were bagged by context. Finds of special interest were given a unique small find number.

3.4 Palaeo-environmental evidence

3.4.1 There were no contexts suitable for Palaeo-environmental sampling.

3.5 Presentation of results

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3.5.1 The various deposits and structures encountered during the excavations and watching brief are described below in Section 4, (a context inventory and finds compendium can be found in Appendix 1 and 2). Each trench is described objectively from the earliest to the latest remains. The descriptive text in Section 4 is followed by the finds reports (Section 5) - a discussion and interpretation of this evidence can be found in Section 6.

3.5.2 Section 7 give a compendium of all stages of archaeological work and an assessment of the potential for further work and publication. Finally Section 8 gives a synopses and task list of the proposed publication.

4 RESULTS

4.1 Soils and ground conditions

4.1.1 Trench 6 was located on soft standings in an enclosed yard area and light conditions were predominately good throughout the day. On the other hand, Trench 5 was located within the kitchen cellar and the light conditions were not always ideal. The confined space within the deep excavation rendered archaeological recording difficult due to poor light and confined working conditions.

4.1.2 Due to Health and Safety procedures, Trench 6 was shored, making it difficult to get a satisfactory section of the longest eastern side of the trench. However, satisfactory sections were produced in areas were it was safe to remove the shoring and in the South section.

4.1.3 The ground conditions in Trench 5 were dry and the water table was not reached. In Trench 6, outside, the weather was at times very wet.

4.2 Distribution of archaeological deposits

4.2.1 Distinctive archaeological deposits survived in the form of deeply stratified horizontal soil horizons, cuts and structural features of medieval and post-medieval date. All these features were sealed below thick accumulations of post-medieval and modern garden soils and related deposits. These levels were not reached during the watching brief.

4.3 Description of deposits

Trench 5 (ATP 5 - Fig. 7)

4.3.1 Trench 5 measured 2.5m x 1.8m and it was dug to a maximum depth of 1.8m.

4.3.2 The earliest deposit found within Trench 5 was a firm orange gravel (500), this was considered natural and was found at a depth of 3.10m below ground level.

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4.3.3 To the west of the trench, stratigraphically above 500 and cutting through it was a semi-circular shape in plan pit (515). This was not completely excavated, as it extended beyond the edge of excavation. It had a sharp break of slope at top, with almost vertical sides and flattish to concave base. It measured 0.90m deep x 0.70m to west x 1.60m to north.

4.3.4 Filling 515 was a firm to friable, mid grey silt, with occasional sub-angular small stones and pebbles (515). Overlain by it was a thin layer of firm, orangy grey sandy silt, with occasional chalk flecks (526).

4.3.5 Finally, sealing Pit 515, and above 526, was a firm, mid to grey sandy silt, with occasional pebbles (516) and a small sherd of 15th century pottery.

4.3.6 To the West, and cutting through 515 was a sub-square pit (501). This was quite shallow, with vertical sides to the south, and 60 degrees slope to the north, ending in a flattish base. It measured c. 0.95m x 0.72m x 0.30m. Pit 515 had a well defined edge to the South, with a no so clear edge to the North. It continued beyond the edge of excavation to the West, and its East edge was truncated by Pit 503 (see below).

4.3.7 Filling 501 was a compact to firm, mid to dark grey silty sand, with occasional gravel inclusions (524). Above 524 and sealing Pit 501 was a mid grey brown clay silt, with occasional gravel (502) and mid 16th century pottery.

4.3.8 To the East of the trench, and cutting through Pit 501 was a pit (503) with not clear shape. It had vertical sides and almost flat base. It extended beyond the edge of excavation to the North and to the South, and it was truncated by wall foundation 514 (see below) to the East. This was possibly a gravel pit, due to the size and depth (+1.8m).

4.3.9 Filling Pit 503 was a firm, sticky, orange clay, with occasional gravel and sand inclusions (535). Overlain by it was a tenacious, mid brown grey silty clay, with occasional gravel (504). This was overlain by a layer of re-deposited gravel (505), almost certainly originated from the undercut /slumped edge of Pit 503.

4.3.10 Stratigraphically above it was a tenacious, mid bluish grey silty clay, with reddish brown mottling and occasional gravel (506).

4.3.11 Overlaying 506, and still filling Pit 503 was a mid bluish grey silty clay, with occasional gravel and charcoal (507=527). Above it was a tenacious, mid grey silty clay mixed with reddish brown mottling and occasional gravel (509).

4.3.12 Sealing Pit 503 and above 509 was a firm to loose, mixed but predominantly re-deposited gravel in a mid dark grey silty clay matrix (510).This contained mid 16th century pottery.

4.3.13 Almost to the centre of the trench, and cutting through Pit 503 was a small pit, most likely a post hole (511), although it was not completely clear during the excavation. This was square in shape with rounded corners. It had a sharp break of slope on top,

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vertical sides and irregular base. Each side measured 0.4m and it was 0.32m deep. This was filled by a friable, black silty clay, packed with medium size stones and with frequent charcoal inclusions (520).

4.3.14 To the North of the trench, and also cutting through Pit 503 was a circular pit (529). This was only seen in section, and it had a sharp break of slope on top, concave sides and concave base. Pit 529 was filled by a firm, orangy-grey gravel deposit (528). Most likely natural re-deposited, as it was really similar to 500.

4.3.15 To the East of the trench, and also cutting through pit 503, was a wall foundation (514) made of sandstone blocks. This was not completely excavated as it went beyond the depth limit of excavation, however at least 7 courses were visible. The sandstone blocks measured roughly 0.60m x 0.38m x 0.40m, and a hard white-grey mortar with small stone inclusions was used as bonding material.

4.3.16 Wall Foundation 514 was possibly trench-built, as no construction cut was observed neither during the excavation, nor visible in section. In addition, several random voids were observed between the blocks, also suggesting a trench-built construction.

4.3.17 Wall Foundation 514 seemed to end or turn to the East (see Fig. 6 and Plate 01), while the wall above continues to the South, suggesting an earlier use than just footing for the above walls. In addition the fabric was also different to the wall above.

4.3.18 It seems possible that Wall Foundation 514 was part of an earlier building that predates the College Buildings above.

4.3.19 Stratigraphically above Wall Foundation 514 and to the South of it, following the same alignment was another wall foundation (530). This was made of sandstone blocks, roughly hewn and only two courses high (see Fig. 6). A conglomerate of small stones, gravel and mortar was used as bonding material.

4.3.20 Wall Foundation 530 seemed to be trench built also, as no construction cut was observed during the excavation. The fabric was completely different to Wall Foundation 514, suggesting that both walls foundations were not contemporary. It seems that Wall Foundation 530 was just an extension to the South of Wall Foundation 514, previously and in direct relationship to the construction of the wall above.

4.3.21 Above Wall Foundation 530 was a construction cut (518) for a wall. This was linear in plan, with a sharp break of slope, straight, almost vertical sides and irregular base.

4.3.22 Housed by 518 was a stone wall foundation (517). This was three to four courses high, made of roughly hewn sandstone blocks of different sizes and bonded with a grey mortar. Wall Foundation 517 was possibly the stone footing for the brick wall above.

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4.3.23 Filling Construction Cut 518 was a compact, dark orangey brown sandy silt, mixed with mortar and occasional small stones (517).

4.3.24 Construction Cut 518 was truncated to the north by a cut (532) only seen in section. Cut 532 was dug against Wall Foundation 517. It had concave sides and used the top of Wall Foundation 514 as its bottom. This was possibly a trench or pit dug against the wall.

4.3.25 Filling 532 was a thin layer of friable, orange silty sandy gravel (533). This was overlain by a friable, dark grey to mid brown sandy silt, with frequent chalk fragments and flecks, and occasional small to medium size stones (534).

4.3.26 Sealing the trench were a series of modern levelling deposits, contemporary with the building of the cellar and kitchen building. Directly above 534 was a compacted mix of silt, sand and rubble, with occasional brick fragments and medium size stones (523=531).

4.3.27 This was overlain by a soft, quite loose yellow sand (521), possibly a bedding for the concrete slabs (522) above that covered the floor of the cellar.

Trench 6 (ATP 6 - Fig. 10)

4.3.28 Trench 6 was dug to a maximum depth of c. 2.9m below ground level and it measured 4.6m x 2.4m.

4.3.29 The earliest archaeological feature found within Trench 6 was an offset wall (672). This was made of limestone blocks, with only two courses visible, as it was only partially revealed. Wall 672 was aligned East to West, the limestone blocks were roughly squared, measured c. 0.45m x 0.25m and were bonded with white mortar.

4.3.30 Wall 672 was offset when compared with the chapel wall above (Wall 671, see below), suggesting the possibility that it could be an earlier wall in a similar alignment, although not exactly the same.

4.3.31 A series of deposits, consisting of alternate bands of re-deposited natural gravel and silty layers tipping steep down to West and South and butting against Wall 672, visible across the trench (see S.605 - Figure 9) suggest the existence of an hypothetical large cut (669). Although no sides or base were visible due to the extent of the trench, this was presumable at least 6 m long and at least 0.60 m deep, possibly a gravel quarry, and hence the size. Its presence explains the lack of visible natural gravel in Trench 6 and also the similarity of deposits across the trench.

4.3.32 Filling Cut 669 was a friable, mid grey brown sandy silt, with occasional gravel (668). This was overlain by a loose, yellow brown sandy gravel (667), possibly a re-deposited gravel that partially overlaid Wall Foundation 672.

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4.3.33 Above 667 was a friable, mid grey brown sandy silt, with occasional gravel inclusions (666). Within this layer a piece of 13th century pottery was found. Overlaying 666 was a loose, yellow brown sandy gravel (665).

4.3.34 Stratigraphically above 665, and still as part of the fills of Cut 669, was a friable, mid grey brown sandy silt, with occasional gravel (664). Above it was a compact, yellow brown sandy gravel (663), possibly another layer of re-deposited natural. It contained 13th century pottery.

4.3.35 Overlaying 663 was a friable, mid grey brown sandy loam, with a moderate amount of gravel (662), most likely the last of the fills of Cut 669. It also contained 13th century pottery.

4.3.36 To the centre of the trench, and cutting through 662 was the construction cut (660) for a small wall. This had a sharp break of slope on top, slightly concave sides and a flat base. It was aligned North to South and it measured 1.70m x 0.18m x 0.16m deep. Housed by it was a small wall (659) made of limestone blocks. The blocks measured roughly 0.15m x 0.10m x 0.1m and were roughly hewn. Only one single course was remaining with no apparent bond. Orange brown sandy clay was used as bonding material, although it was much degraded and not visible in some areas. This was possibly a garden feature dividing garden areas; however it was heavily truncated by modern features and partially robbed to the south.

4.3.37 Filling Construction Cut 660 to the South, where the wall was missing due to robbing, was a dark grey brown clay silt (677).

4.3.38 Stratigraphically above 677 was a firm, dark grey brown sandy loam, with occasional limestone fragments, gravel and charcoal (653). This was possibly a demolition layer related to Wall 659 and contained mid 16th century pottery.

4.3.39 Overlaying 653, and visible across the trench was a firm, grey brown mixed loam with limestone fragments, gravel and charcoal flecks (649). Possibly a trample layer associated with the construction of the overlaying yard floor above. This was overlain by a layer of compact, orange brown sandy gravel (646). This gravel surface was possibly a well compacted path or a yard within this area.

4.3.40 The next stratigraphical layer was most likely closely related to Surface 646. This was a loose, grey brown to orange brown sandy gravel mixed with loam (647) and mid 16th century pottery. Possibly a re-surfacing of the path or yard (646).

4.3.41 This was overlain by a soft, dark grey brown silty loam, with occasional limestone small fragments, charcoal and gravel (650). One of several post-medieval garden soils in this area. Above 650 was a friable, mid grey brown sandy clay silt, with a moderate amount of gravel and occasional charcoal, mortar lenses and limestone fragments (641). Possibly another garden soil.

4.3.42 To the South of the trench, cutting through 641 and only seen in section (Fig.9) was a small cut (675). It measured roughly 0.42m x 0.27 m and it was truncated by modern

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features. Cut 675 was filled by a mix of various limestone fragments within a matrix of loose, light grey to brown sandy silt (676).

4.3.43 Above 676, sealing most of the trench and truncated by modern features was a shallow layer of soft, dark grey brown silty loam, with occasional gravel, limestone small fragments and charcoal flecks (640), possibly another post-medieval garden soil. This was overlain by a firm, greenish grey with orange mottling clay loam, with occasional gravel and rounded small limestone fragments and charcoal (631). This very mixed deposit was probably a levelling layer that became much thicker to the west, to create a flat surface.

4.3.44 To the South of the trench, and cutting through 631 was a sub-rectangular pit (630), with sharp break of slope on top, steep sides and flat base. It measured 0.83m x 0.4m x 0.21m deep and it was filled by a firm, mottled grey brown clay loam, with occasional gravel and charcoal (629).

4.3.45 To the North of the trench and also cutting through 631 was a construction cut (632) aligned East to West and running parallel to the Chapel building. This was 1.80 m wide and 1.95 m deep, with concave side and flatish base. This feature was most likely related to some building works or the re-facing of the chapel more than to the original construction, since it did not go all the way down to the bottom of the wall (Fig. 8, Sect. 603). However, the possibility exists that this is the original construction cut and the deeper courses were trench built.

4.3.46 Filling construction cut 632 were a series of deposits (624, 628, 635-6, 645, 648, 651-2 and 657) described below. These contained a mix of pottery fragments ranging from the 13th century to the 17th century at the bottom, suggesting again that Cut 632 could be a more recent cut or re-cut, not necessarily the original construction of the Chapel.

4.3.47 The earliest fill of 632 was a friable, dark brown clay silt, with occasional gravel, charcoal and oyster shell inclusions (657). This deposit seemed to butt against the chapel wall and contained a sherd of Rhenish Stoneware (AD1480-1700). Above it was a friable, mid grey brown clay silt, with occasional gravel and charcoal fragments(652). This was overlain by a layer of compact, white mortar with a moderate amount of gravel inclusions (651). Overlaying 651 was a friable to loose, orange brown sandy gravel (648). Above it was a friable, mid grey-brown slightly clayey silt, with very occasional gravel inclusions (645).

4.3.48 Overlaying 645 was a friable, dark grey, almost black clay silt with occasional charcoal inclusions (636). This was overlain by a loose, dark brown grey clay silt with occasional charcoal and gravel inclusions (635).

4.3.49 Above 635 was a thin layer of friable, yellowish white mortar (628). Finally, above 628 and sealing Construction Cut 632 was a loose, dark grey clay-silt with occasional gravel and charcoal inclusions (624).

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4.3.50 Stratigraphically above 624 and 629, and sealing all across the East side of the trench was a layer of friable, mid white-yellow mortar (622). This surface-like was very degraded in some areas and appeared to butt the Chapel Wall (671), however it is important to notice that it was approximately 0.40m below the top of foundation (Figs. 8 and 9, Sections 603 and 605).

4.3.51 Mortar surface 622 was overlain by a tenacious, mid brown-orange sandy silt with frequent gravel and occasional charcoal and mortar flecks inclusions (621). This was a dump on top of the flat mortar surface, possibly to raise the level of the area.

4.3.52 Above 621 and also seen across the trench was a friable, mid grey brown clay silt, with occasional charcoal fragments and a moderate amount of gravel (619=620). This deposit seemed to dive towards the west, and it was possibly another layer of loam within the garden grounds.

4.3.53 Cutting through 619=620 and seen across the trench was the construction cut (642=644=656) for the Buttery Building. This was aligned North to South, and it was 1m wide and at least 6m long.

4.3.54 Stratigraphically above the Buttery Wall, the earliest deposit filling Construction Cut 642 was a friable, dark grey brown clay silt, with occasional gravel inclusions (655). This was overlain by a soft, dark grey, very sandy silt, with occasional limestone blocks fragments and mid 18th century pottery (673). Above it was a firm, orange brown sandy mortar, with frequent gravel inclusions (638). This mortar spread was possibly associated with the construction of the Buttery. Overlaying 638 and sealing the construction cut was a tenacious, mid grey brown clay loam with blue grey silt lenses and occasional limestone fragments, charcoal and gravel (637).

4.3.55 To the North West, cutting through 637 and butting the Buttery wall, was a small but deep pit (644). This had almost vertical sides and flat base. It measured 0.6m x 1m x 1m deep. Although it seemed to be a pit, it could also be just a tip-line in Construction Cut 656. Filling 644 was a friable, mid brown sandy silt, with occasional gravel inclusions (661).

4.3.56 Also to the North West and cutting through 661 was a semi-circular pit (617). It had concave base and sides, and it measured 0.2m x 0.4m x0.45m. Pit 617 was filled by a friable, grey-brown clay silt, with occasional gravel and charcoal (616). This was overlain by a thin layer of firm, mid brown orange clay silt, with occasional gravel and charcoal (615).

4.3.57 On the same area, and overlaying 615 and extending towards the middle of the trench, was a patch of friable, mid red brown clay silt, with a moderate amount of charcoal (618). This was overlain by a friable, yellow-orange sandy mortar (614=606). This could have been a possible surface associated with the chapel, however only fragmented patches were uncovered.

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4.3.58 Towards the centre of the trench, butted against the Buttery wall and cutting through 614 was a rectangular in plan cut (612). This housed a modern soakaway structure.

4.3.59 To the North of this was a sub-rectangular cut (602), with irregular sides. Cut 602 housed a modern coal chute (605). A brick structure butted to the Buttery wall. Filling pit 602 was a loose, dark brown-grey silty sand with occasional gravel and masonry fragments (603).

4.3.60 Sealing the trench was a thick layer of modern soft to friable, brown garden loam (601).

4.3.61 Cutting through 601 and in the South West corner was a sub-rectangular in plan pit (634). This had a sharp break of slope on top, steep-concave sides and flat base. It measured 0.6m x 0.63m x 0.7m deep. Possibly another 20th century feature, related with works in the Buttery wall.

4.3.62 Filling 634 was a tenacious, mid grey brown clay silt, with occasional gravel inclusions (613). This was overlain by a friable, mid brown yellow silty sand, with occasional gravel and frequent mortar inclusions (610). Above it was a tenacious, mid grey brown clay silt, with occasional charcoal (609). Overlaying 609 was a friable to loose, orange-yellow mortary gravel (608). Finally, above it was a layer of friable, mid brown to orange silty sand with frequent gravel inclusions (607).

The Watching Brief

4.3.63 Wall 701 was revealed during the excavation of a narrow service trench that cut through the paved area between the library and the kitchen (Fig. 2). It was constructed with faced limestone blocks, 0.10-0.30 in size with traces of yellow mortar - three courses of which were visible above the base of the trench. The wall was aligned approximately NW-SE and measured *c* 0.70 m in width.

4.3.64 Wall 708 was revealed within a contractors test pit excavated prior to piling within the kitchen extension (Fig. 2). The wall, aligned N-S, measured 0.60 in width and was constructed with stone rubble with no apparent facing. It foundation level was apparently not reached at the base of the trench -1.45 m below the surface of the existing kitchen floor.

4.3.65 Apparently abutting wall 708, was a homogeneous mid-grey brown 'garden soil' (707), at least 0.41 m thick, that continued below the base of the trench. This supported a thin mortar spread (706) that was in turn was overlain by a buried topsoil (705) that directly underlay the existing floor of the kitchen extension.

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5 FINDS

5.1 Pottery

By Paul Blinkhorn

5.1.1 The pottery assemblage comprised 163 sherds with a total weight of 3,008 g. The estimated vessel equivalent (EVE), by summation of surviving rimsherd circumference was 1.94 . The bulk of the material is of later medieval or early post-medieval date. One trait worthy of note is that the later medieval and early post-medieval assemblages are dominated by drinking pottery in the form of German Stonewares. It is a pattern that has been noted in recent years amongst the pottery from excavations at other medieval Oxford colleges.

Fabric

5.1.2 It was recorded utilizing the coding system and chronology of the Oxfordshire County type-series (Mellor 1984; 1994), as follows:

F100: OXR: St. Neots Ware type T1(1). AD850-1100. 7 sherds, 63 g, EVE = 0.13.
F200: OXAC: Cotswold-type ware. AD975-1350. 10 sherds, 116 g, EVE = 0.05.
F202: OXBF: North-East Wiltshire Ware. AD1050 – 1400. 2 sherds, 7 g, EVE = 0.
F300: OXY: Medieval Oxford ware. AD1075 – 1350. 11 sherds, 196 g, EVE = 0.23.
F355: OXBB: Minety-type ware. Early 13th – 16th century. 1 sherd, 71 g, EVE = 0.12.
F352: OXAM: Brill/Boarstall ware. AD1200 – 1600. 69 sherds, 1537 g, EVE = 0.42.
F356: OXBG: Surrey Whiteware. Mid 13th – mid 15th C. 1 sherd, 37 g, EVE = 0.
F403: OXBN: Tudor Green Ware. Late 14th century - c. 1500. 3 sherds, 7 g, EVE = 0.
F404: OXCL: Cistercian ware. AD1475-1700. 2 sherds, 11 g, EVE = 0.
F405: OXST: Rhenish Stoneware. AD1480 – 1700. 29 sherds, 603 g, EVE = 0.99.
F425: OXDR: Red Earthenwares. AD1550+. 15 sherds, 230 g.
F451: OXFH: Border wares. AD1550 - 1700. 3 sherds, 20 g.
F410: OXCE: Tin-glazed Earthenware. AD1613 – 1800. 4 sherds, 34 g.
F438: OXNOTTS: Nottingham Stonewares. c. AD1690-1800. 2 sherds, 39 g.

The following, not included in the Oxfordshire type-series, was also noted:

F401: **Late Medieval Oxidized ware**. Mid 15th – 16th century. Very hard orange sandy ware in a range of developed late medieval utilitarian forms, some with a dark green glaze. Numerous kiln sites throughout the south-east midlands, at places such as Glapthorn in Northamptonshire (Johnston 1997). 4 sherds, 37 g, EVE = 0.

5.1.3 The pottery occurrence by number and weight of sherds per context by fabric type is shown in Table 1. Each date should be regarded as a *terminus post quem*. The range of fabric types is typical of Oxford, other than the few sherds of late medieval Oxidized ware, which are more usually found in areas to the east and north of Oxfordshire.

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Chronology

5.1.4 Each stratified, context-specific pottery assemblage has been given a ceramic phase ('CP') date based on the range of ware and vessel types present, and adjusted according to the stratigraphic matrix. The chronology, defining wares and the amount of pottery per phase is shown in Table X1. The data shows that there is very little stratified late Saxon or Saxo-Norman pottery present, and that medieval activity is sparse before the mid – late 15th century. However, late Saxon and Saxo-Norman pottery does occur as residual material in later phases (see Table X2, below), so it seems probable that deposits of the 10th and 11th century were disturbed by later action, with the 13th century construction of the college being the most obvious cause.

5.1.5 The bulk of the assemblages date from that time to the middle of the 17th century. The dating of each group will need to be confirmed with reference to the stratigraphic matrix, and it is likely that there are some contexts that do not contain contemporary pottery. This will be carried out at the report stage.

Table X1: Ceramic Phase Chronology, Occurrence and Defining Wares

Phase	Defining wares	Date	No Sherds	Wt. Sherds	EVE	Mean Sherd Wt
CP1	OXR	10thC	1	15	0.08	15.0g
CP2	OXAC	E-L 11th C	1	6	0.09	8.0g
CP3	OXY	L11th -12th C	0	0	0	0
CP4	OXAM	13th – 14th C	38	979	0	25.8g
CP5	OXBN	15th – M 15th C	1	1	0	1g
CP6	OXCL, OXST, F401	M/L15th – M16thC	27	375	0.37	13.9g
CP7	OXDR, OXFH	M16th – 17thC	69	1098	1.10	15.9g
CP8	OXCE	17th C – M 18th C	13	258	0.30	19.8g
CP9	OXNOTTS	M 18th – 19th C	13	276	0	21.2g
		Total	**163**	**3008**	**1.94**	

Pottery Occurrence

5.1.6 The occurrence of the major fabrics per ceramic phase is shown in table X2. As before, the dating has not been confirmed by reference to the stratigraphic matrix. The 13th – 14th century phase, CP4, is typical of sites in Oxford, being dominated by Brill/Boarstall wares (fabric OXAM). The later medieval phases (CP6 and CP7) do however are dominated by German Stonewares (fabric OXST), which while unusual, is a trai which has been note before, particularly at late medieval and early post-medieval educational establishments in Oxford. Such pottery is nearly all in the form of drinking pottery, particularly mugs and bottles, and far larger numbers of these appear to occur at Oxford Colleges than at sites with domestic occupation in the city. For example, at Christchurch College (Blinkhorn in print a), this was the case for the

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assemblages dating to the mid 16th – late 17th century, and drinking pottery generally was common at Merton College between the late 14th and the mid 18th century (Blinkhorn in print b). A similar pattern was seen from the earlier excavations at this site (OXUNCB06) where around 15% of the pottery from the entire site was German Stonewares. This is a trait which will be analysed and discussed at the report stage. The 2006 excavations produced a generally similar assemblage, with the bulk of the assemblage dating to the late medieval and early post-medieval periods, along with smaller quantities of 13th century pottery, and a few, largely residual, late Saxon and Saxo-Norman wares.

Table X2: Pottery occurrence per ceramic phase by fabric type, expressed as a percentage of the total wt per phase

Fabric	CP4	CP5	CP6	CP7	CP8	CP9
OXR	2.7	0	4.3	0	2.3	0
OXAC	0.3	0	3.5	5.8	0	2.9
OXBF	0	0	1.9	0	0	0
OXY	2.5	0	7.7	13.0	0	0
OXBB	0	0	0	6.5	0	0
OXAM	91.7	0	15.7	20.2	93.8	39.9
OXBG	-	0	0	3.4	0	0
OXBN	-	100	0.5	0.4	0	0
OXST	-	-	56.5	28.2	3.5	26.1
OXCL	-	-	0	1.0	0	0
F401	-	-	9.9	0	0	0
OXDR	-	-	-	19.7	0	0
OXFH	-	-	-	1.8	0	5.1
OXCE	-	-	-	-	0.4	12.0
OXNOTTS	-	-	-	-	-	14.1
Total	979	1	375	1098	258	276

5.1.7 The post-medieval assemblages here are fairly typical, although the residuality is extremely large during CP8, with 93.8% of the pottery comprising Brill/Boarstall wares. This may be due to what was a period of extensive rebuilding at the college, but it is also possible that the single context which dates to this time may be contaminated by later material; just a single sherd of 17th century pottery, weighing 1 g, occurred amongst the apparently residual material. This will be checked with reference to the stratigraphic matrix at the report stage.

Assessment

5.1.8 This small group of pottery has several traits which suggest that it is worthy of further analysis and full publication. The earlier phase of excavations, OXUNCB06 produced a similar sized assemblage (158 sherds) with a similar range of fabrics, and the two groups will need to be combined for the report stage, and the dating of the context-specific assemblages adjusted with reference to the stratigraphic matrix. The 2006 assemblage also appears to show a similar ware occurrence pattern, with

German Stonewares unusually well-represented, confirming a tendency seen at excavations at other Oxford Colleges.

5.2 Ceramic building material

By John Cotter

5.2.1

Introduction and methodology

5.2.2 A total of 91 pieces of assorted building materials weighing 5338 g. were recovered. This was examined and spot-dated during the present assessment stage in accordance with standard OA procedure and the data recorded on an Excel spreadsheet. As usual, the dating of broken fragments of ceramic or other building materials is an imprecise art and spot-dates derived from them are necessarily broad and should therefore be regarded with caution. Most of the material appears to be broadly of medieval date with only a few fairly certain post-medieval pieces present.

Table 1: Ceramic building material

Context	Spot-date	No	Wgt	Comments
502	13-16C	4	383	Unglazed med roof tile. Incl edge frags. Fairly worn. 3 red, 1 brown/cream - latter prob VIIA type 13-14C
507	13-16C	1	80	Ridge tile lower edge frag. Unglz red sandy, grey core. Max 18mm thick. F fresh
509	13-14C?	2	125	Patially glazed med roof tile. 1 red. 1 VIIA off-cream 14mm thick. F fresh
510	16-19C?	12	342	3x small prob post-med red brick frags. 2x prob ridge tile frags, red, 1 v thick 21mm w traces glz. Scrappy med roof tiles incl some glazed, some v worn. 1-2 poss post-med scraps roof tile
513	16-19C?	2	167	1x med VIIA cream roof tile corner with circular nail hole varies 11-19mm thick. 1x shapeless, v worn, lump of red ?brick
528	13-16C?	2	192	Red roof tile incl corner frag w circ nailhole - overfired but poss med. 1 paler edge frag. Both fresh
620	13-14C?	11	602	Prob all med. Mostly red roof tile incl 1 glazed & 3 prob frags ridge tile incl 1corner frag (16mm thick) in VIIB-related fabric, 2 coarser glazed greenish-brown also 16mm thick. Fresh and worn. 1x scrap stone roof tile (53g)
624	16-17C?	1	54	Worn fine red brick frag preserving thickness 45mm, prob Tudor?
629	13-16C?	4	164	Red roof tile frags, mostly worn
631	13-16C	6	310	All med. Red roof tile frags incl VIIB, some v worn. Thick corner 16mm. 1 glazed
635	13-E14C	1	28	Edge frag Fabric IB ridge tile max 12mm thick. Oolitic tempered fabric
637	14-15C?	4	697	1x unusually thick decorated medieval floor tile, 35mm thick, preserving complete width 160mm. Sides sharply bevelled. Fine red brick-like fabric. Shallow inlaid white slip design partially surviving - some sort of leonine face - full on face view (upper part only survives) shield-shaped face with 2 lentoid eyes and copious 'mane' filling rest of tile - trace of ear possibly showing. Uncertain source - poss Flemish import? ILLUSTRATE. 2x scraps med roof tile, 1x edge frag ridge tile with trace of glaze
638	13-16C	8	529	Mix prob of red roof tile and ridge tile frags incl 2 glazed & 2 prob ridge edge frags. Some worn. Also 1x stone roof tile frag 9mm thick

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Context	Spot-date	No	Wgt	Comments
				(106g). Complete circ nailhole 11mm diam. Fairly weathered. Prob med?
640	16-18C?	2	51	Joining frags 1 soft red roof tile w traces circ nail hole. Poss post-med? Fairly fresh
641	13-16C?	1	10	Scrap ?med red roof tile
645	13-16C	2	44	Med red roof tile, fairly worn
647	16-19C?	1	35	Prob post-med soft red roof tile, unusually thin 10mm and worn on one side, mortared on reverse - poss used as flooring? Or an extremely worn floor tile?
648	13-16C	2	50	Scrap red roof tile. 1x frag prob red sandy ridge tile with allover greenish-brown glaze
649	13-14C?	4	224	1x v worn fine red floor tile frag - poss c30mm thick, prob medieval, poss Chiltern-type? 3x med red roof tile, fairly fresh
652	15-16C?	2	204	1x fresh edge frag plain red floor tile with bevelled edge, 33mm thick. No evid of glaze. Poss Flemish or Flemish-type. 1x glazed med red ?ridge tile edge frag
653	14-15C?	3	403	1x plain glazed reddish floor tile frag - cut diagonally, 24mm thick, greenish-yellow glaze, poss 14C? 1x corner frag thick red roof tile 15mm thick with 'blind' or ineffective circ nail hole 14mm across and another diagonal nailhole near it. 1x frag stone roof tile 88g with small nailhole 7mm diam
657	14-15C?	2	68	1x scrap red floor tile 27mm thick, v worn on one side, traces of glaze and mortar on underside. 1x scrap med red roof tile
663	13-14C?	12	505	Mostly 1 med red roof tile w glz specks. Fairly fresh or slightly worn. 2x glazed ridge tile edge frags in similar fabric. 1x scrap stone roof slate 35g
666	13-16C	2	71	Red roof tile frags incl 1 corner. 1 thin 8mm
Total		**91**	**5338**	

Date and nature of the assemblage

5.2.3 Most of the assemblage comprises ceramic building materials (CBM). In general the assemblage is fairly worn and fragmentary, although a few pieces are relatively fresh.

5.2.4 As usual the predominant type comprises plain red roof tiles with a pair of circular nail holes at one end. Several roof tiles have patches or areas of brownish-green glaze confirming their medieval date. A few pieces occur in more distinctive finer cream or pinkish-brown fabric. These types are thought to have a more limited 13th-14th century dating in Oxford (Fabrics VIIA and B respectively). One larger medieval tile fragment has an unsuccessfully pierced nailhole (653) and could be a reject. A very small number of soft post-medieval roof tile fragments were also identified.

5.2.5 In addition to roof tile there are quite a high number of glazed medieval ridge tile fragments (none decorated). These are mostly in the same reddish fabric as the roof tiles although one small piece is in the oolitic limestone-tempered Fabric IB and is probably of 13th century date.

5.2.6 Four or five mostly very worn fragments of medieval floor tile were identified, all in red fabrics and some with evidence of glaze. Their poor condition makes proper identification and sourcing problematic but they are all probably 14th century or later. Some may be late medieval Flemish imports - these include the most complete

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example (context 637). The latter is the only definite decorated piece in the assemblage and is the only piece of CBM in the assemblage possibly worthy of further research and publication. The tile is unusually thick (35 mm.) and 160 mm. wide and shows the upper part of a leonine or lion-like face full-on to the viewer. It is probably of 14th or 15th century date.

5.2.7 A few scraps of post-medieval red brick were also recovered. These are very worn and probably pre-19th century.

5.2.8 In addition to CBM there are three fragments of limestone roofing tiles (194 g.), two showing bored circular nailholes. These traditionally come from quarries in Stonesfield in north-west Oxfordshire and were commonly used locally between the late 12th and the early 19th century.

Summary and recommendations

5.2.9 Apart from the decorated medieval floor tile from context (637), which should be researched further, in general the building materials from this site add little to the dating evidence provided by other types of material and should be regarded as of secondary importance to these. In view of the small size and poor condition of the assemblage, no further work is recommended.

5.3 Stone building material

By Julian Munby

5.3.1 Nine fragments of architectural stone were recovered during refurbishment works within the kitchen. These were briefly assessed.

5.3.2 They include a group of limestone moulded elements from the same or similar doors or windows, possibly part of the demolished medieval college buildings. Also there is a tip-top Romanesque beak-head fragment, probably from a stone house on the site.

5.3.3 All the stonework is worthy of further study.

5.4 Glass

By Ian Scott

Composition of the glass assemblage

5.4.1 A small assemblage of glass comprising 9 sherds including one very weathered thin flat sherd of possible window glass (context 649) (Table 1).

5.4.2 The vessel glass includes 2 undiagnostic very weathered body sherds (contexts 619 and 620), but also two sherds from the flared stem of a goblet possibly in

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high lead glass (context 638), a fragment from the base of another goblet (context 652), and a decorated body sherd from a goblet (context 620). The remaining sherds comprise a small indented base (context 648) and a vertical rim sherd with diagonal fluting, possibly from a jug or flask (context 620).

Table 1: OXUNCB 07: Glass: Summary Quantification by Context and Glass Type

	Type		
Context	**Vessel**	**Window**	**Ctx Totals**
619	1		**1**
620	3		**3**
638	2		**2**
648	1		**1**
649		1	**1**
652	1		**1**
Type Totals	**8**	**1**	**9**

Dating of the glass

5.4.3 The goblet sherds (context 620, 638, 652) probably date to the 13th-14th-century. The sherds of a fluted flared goblet stem are comparable to a goblet from Old Sarum (Tyson 2000, 59 and fig. 6: g21). The other sherds are not closely dateable

Group value

5.4.4 Although only a very small assemblage it comprises high status glass, in particular the possible high lead glass goblet fragments (context 638). The material should be published and illustrated.

Further work

5.4.5 I would recommend that the glass is reported on by a medieval glass specialist who can confirm the identifications and dating.

5.5 Metal Finds

By Ian Scott

Composition of the metalwork assemblage

5.5.1 A small assemblage of metal finds comprising 18 copper alloy objects, 5 iron and 1 lead object (Table 1).

Table 1: OXUNCB 07: Metal finds: Summary Quantification by Context and Metal

Context	Cu alloy	Fe	Pb	Ctx Totals
513	1			**1**

620	10			**10**
624	3			**3**
631		1		**1**
635	2		1	**3**
638		2		**2**
645	1			**1**
650	1			**1**
657		2		**2**
Metal Totals	**18**	**5**	**1**	**24**

Table 2: OXUNCB 07: Copper alloy finds: Summary Quantification by Context and Function

	Cu alloy					
Contexts	**Coin**	**Personal**	**Binding**	**Misc**	**Nails**	**Ctx Totals**
513	1					**1**
620	1	7		1	1	**10**
624	1	2				**3**
635		2				**2**
645		1				**1**
650			1			**1**
Function Totals	**3**	**12**	**1**	**1**	**1**	**18**

5.5.2 The copper alloy objects include 3 jettons, 12 personal items - 7 lace tags, or points, 4 dress pins and single plain strap end. Most of the copper alloy is from Context 620 (Table 2). The jettons are probably of 16th-century date, and the lace tags are early post-medieval in date. The pins which have round wire wound heads (Caple 1991, 246: Type C) are also probably early post-medieval in date. The strap end is plain and not closely datable (Table 3: context 620). Other copper alloy finds include a two lengths of fine wire neatly twisted together and formed into an S-shape, a short incomplete length of binding or strapping with nail or rivet holes, and the stem of a small nail or tack (both context 620).

Table 3: OXUNCB 07: Copper alloy finds: Provenance of Jettons and Personal items

Context	**jetton**	**lace tags**	**pins**	**strap end**	**Ctx Totals**
513	1				**1**
620	1	4	2	1	**8**
624	1	1	1		**3**
635		1	1		**2**
645		1			**1**
Object Totals	**3**	**7**	**4**	**1**	**15**

5.5.3 The iron assemblage is remarkable for its small size (n = 5). One piece of iron is a tiny fragment. The remaining finds are all encrusted and the identification of some objects is uncertain. The ironwork assemblage requires x-rays to confirm some identifications. Two nails can be identified with certainty, the other objects are very probably groups of nails fused together and encrusted with concretions.

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Dating of the metalwork

5.5.4 The copper alloy finds are generally dated to the late Medieval period or more probably the early post-Medieval period (16th-17th centuries). The iron objects, which are probably all nails, are not closely dateable. Overall the assemblages are clearly of early post-medieval date.

Group value

5.5.5 The metalwork has limited group value. The small assemblage from context 620 should be noted.

Further work

5.5.6 X-rays of the material would facilitate identification of the ironwork. A brief note on the metalwork assemblage is probably all that is required. None of the objects requires illustration or detailed publication with catalogue.

5.6 Slag

By L Howarth

5.6.1 One fragment of slag was retained from this site from context (619).

5.6.2 The fragment is plano-convex in cross section, roughly spherical in plan and is about 10cm across at it's widest point. Based on the dimensions we can calculate an approximate value for the volume of ~ 131cm^3. The weight of the fragment is 806g, if we divide this by the volume we get a density of the fragment, ~ 6g per cubic cm. The upper surface has no sign of any runs or flow indicators at all. It does however have a number inclusions of flint and possibly a very corroded iron oxide impression of a small fragment of bone. The lower convex surface has several impressions and inclusions of charcoal.

5.6.3 Overall this fragment could be described as a smithying bottom produced during manufacture rather than refining (i.e. secondary smithying). This being the only occurrence of slag from this site would suggest that this represents a limited or occasional activity in the area excavated.

5.7 Animal bone

Lena Strid

Quantity of material and recording methodology

5.7.1 The animal bone consisted of 201 re-fitted fragments. A full record of the assessed assemblage can be found with the site archive. As of this time of writing the contexts have not been dated, but most are believed to derive from the Post-medieval

period. The animal bone was recovered exclusively through hand collection during excavation and it can therefore be expected that smaller fragments and species will be under-represented.

Methodology

5.7.2 The bones were identified to species using a comparative reference collection, as well as osteological books and articles. Sheep and goat were identified to species where possible, using Boessneck *et al.* (1964) and Prummel and Frisch (1986). They were otherwise classified as 'sheep/goat'. Ribs and vertebrae, with the exception for atlas and axis, were classified by size: 'large mammal' representing cattle, horse and deer, 'medium mammal' representing sheep/goat, pig and large dog, and 'small mammal' representing small dog, cat and hare.

5.7.3 The condition of the bone was graded on a 6-point system (0-5), grade 0 equating to very well preserved bone and grade 5 indicating that the bone had suffered such structural and attritional damage as to make it unrecognisable.

5.7.4 For ageing, fused and unfused epiphyses (Habermehl 1975) and mandibles with two or more recordable teeth (Grant 1982) were noted. Sex estimation was carried out on cattle and sheep pelves, pig canine teeth, and fowl tarsometatarsi, using data from Boessneck et al (1964), Prummel and Frisch (1986), Schmid (1972) and Vretemark (1997). Measurable bones were noted according to von den Driesch (1976).

The assemblage

5.7.5 The assessed assemblage consisted of 201 fragments, of which 86 (42.8%) could be determined to species (see Table 1). The animals present included cattle, sheep/goat, pig, rabbit, fowl, duck, ?turkey and cod. Some indeterminable bird bones were also found. The presence of dog and cat were only indicated by gnaw marks on bones.

5.7.6 Most bones were in a good condition, with 48.5% being grade 1 and 43.1% being grade 2 (see table 2). Traces of burning and animal gnawing were found on 2 and 8 bones respectively.

5.7.7 With the *caveat* that the duck humerus has not yet been identified to species, the assemblage seems to consist almost exclusively of domestic mammals and birds. Sheep/goat is by far the most frequent taxa in the assemblage, followed by cattle, domestic fowl and pig. The presence of meat poor elements, such as metapodials and phalanges, suggests that whole carcasses were brought to the college.

5.7.8 Age estimation could be carried out on 44 bones and two jaws. The majority of the cattle, sheep/goat, rabbit, fowl and duck were found to be sub-adult/adult, whereas the majority of the pigs were juvenile/sub-adult.

5.7.9 Sexing could be carried out on 9 bones, most of which belonged to male sheep. Female cattle and sheep and male fowl also occurred in the assemblage.

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5.7.10 Nineteen bones displayed butchering marks. These marks comprised skinning, sagittal butchering of vertebrae and skulls, as well as disarticulation, portioning and filleting of long bones and ribs. They occurred on cattle and sheep/goat as well as on large and medium mammals. The fowl bones only displayed marks from disarticulation and filleting.

5.7.11 Pathological conditions, relating to infection and/or muscle trauma, occurred on a cattle and a sheep/goat bone. Two sheep skulls displayed metopic sutures, a congenital non-metric trait.

Species	**Total number of fragments**
Cattle	15
Sheep/goat	45
Sheep	6
Pig	4
Rabbit	2
Fowl	11
Duck	1
Turkey?	1
Indeterminate bird	4
Cod	1
Small mammal	1
Medium mammal	42
Large mammal	53
Indeterminate	17
Total fragment count	**201**
Total weight (g)	2152

Table 1. Identified bones/species in the OXUNCB07 assemblage.

	N	**0**	**1**	**2**	**3**	**4**	**5**
OXUNCB07	202	2.0%	48.5%	43.1%	6.4%		

Table 2. Preservation level for bones from all phases of the OXUNCB07 assemblage.

	Cattle	**Sheep/goat**	**Pig**	**Rabbit**	**Fowl**	**Duck**
Ageable mandibles		2				
Ageable bones	7	24	3	2	7	1
Sexable bones	1	6			2	
Measureable bones		2				

Table 3. Mandibles and bones in the OXUNCB07 assemblage providing data for ageing, sexing and measuring data.

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Recommendation

5.7.12 This small bone assemblage, when combined with the similarly small but well preserved assemblage from the previous phase of work at the College Buttery (OXUNCB06, Strid undated) has features worthy of further analysis and reporting. Firstly, the assemblages are in general well preserved and, considering their small size, diverse. Secondly, the assemblage appears to indicate that whole animals were butchered at the College Buttery, and this aspect of the study should be considered further; it contrasts with the findings from Merton College, where the bone appeared to derive almost exclusively from consumption waste (Worley and Evans, forthcoming). Thirdly, the tentative identification of turkey needs to be followed up, since turkeys are thought to have been introduced to England in the middle of the sixteenth century, only becoming common fare after the second world war. The assemblage can then be compared with those recovered from other Oxford Colleges, including Lincoln College (Charles 2002, Ingrem 2002), Merton College (Worley and Evans forthcoming) and St John's College (Evans unpublished) as well as non-university Oxford sites.

6 DISCUSSION AND INTERPRETATION

6.1 Reliability of field investigation

6.1.1 The finds recovered during the excavation were from well-defined contexts. The dating provided was considered secure. There was very little residual material recovered from the earlier (medieval) deposits. Residual material within the later (post-medieval) deposits could easily be eliminated on the grounds of securely dated stratigraphic relationships.

6.2 Discussion

Excavation

6.2.1 In Trench 5, although limited due to size restriction, an important amount of archaeological information was produced.

6.2.2 Natural Gravel (500) was reached at a depth of 3.05m below ground level. Interestingly, some of the earlier pits suggest a quarry use, most likely related to the natural gravel and a possible industrial use (due to the size and depth of Pits 503 and 515).

6.2.3 The earliest dating by pottery is to the 15th century, although this could be contamination from later alterations, since no great volume of pottery finds were found within this trench.

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6.2.4 Perhaps the most relevant feature was Wall Foundation 514. This wall was at a depth of 3.6m below ground level and it was been re-used as a foundation for the walls above (530 and 517).

6.2.5 It is clear that Wall Foundation 514 does not form part of the kitchen building, but was an earlier structure. However due to its location on the East edge of the trench, we do not have enough information to affirm its use.

6.2.6 It may be possible that Wall Foundation 514 was once was part of an earlier building. It has been suggested, that due to its North to South alignment it could also be a boundary wall dividing to different plots of land from High Street or Kybald Street.

6.2.7 In any case, Wall Foundation 514 was re-used as footing for Wall Foundations 517 and 530. Both are possibly part of the same foundation for the brick wall above, related to the kitchen cellar.

6.2.8 The archaeological information suggests that Wall 514 was re-used as a foundation for Wall 517 and towards the middle of the east edge of the trench, as seen in Section 505 (Fig.6 and Plate 001), Wall 514 seems to turn to the East. At this point, Wall 530 was built, to continue the lay out of the above Wall 517.

6.2.9 However, there is also the possibility that we could be looking at three different entities, meaning Wall Foundation 530 could have been built with a different purpose and reused later on when building Wall Foundation 517. This is mostly due to the fact that, as seen in Section 502 (Fig. 3) Construction Cut 518 seems to stop just on top of Wall Foundation 530.

6.2.10 Trench 6 (Plate 002) was dug to a maximum depth of 2.9m below ground level. However, Natural Gravel was not visible anywhere across the Trench.

6.2.11 Due to the lay out of the deposits as seen in Section 603 (Fig. 8) and particularly to the South – East in Section 605 (Fig. 9) it is suggested that the trench was cutting through the fills of a very large pit. This could explain the lack of natural and also the way that the earlier deposits dip to the West (Section 605, Fig. 9), before being cut by modern features

6.2.12 Another possibility is that there is a natural depression / concavity in the ground, which was filled over of time

6.2.13 The pottery finds suggest a date of 13th century for the earlier deposits of this possible pit, towards the bottom of the trench. The finds indicated dates going all the way up to the 16th century in the later layers, with some residual 11th century fragments.

6.2.14 In addition, Trench 6 helped to identify the construction cuts related to the building of the Chapel and the more recent Buttery / kitchen building. The Buttery Construction Cut was clearly identified (656=642). The Construction Cut (632) for

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the Chapel is not entirely conclusive. It may be a later cut related to the repairing works during the 17th century.

6.2.15 Due to its depth, 2.60 m below ground level, it is plausible that it is the original foundation trench, particularly if we assumed that the later repairing works could have been related to the visible walls of the chapel and not necessarily to the foundations. Then we can assume that Construction Cut 632 is the original foundation trench, which will also explain why no other cut of this type is visible across the trench. It would also explain the similarity of deposits between Section 603 (North -East corner) and 605 (South of trench).

6.2.16 Also, possibly related to the Chapel and across the East side of the trench, was a layer of friable, mid white-yellow mortar (622). This was much degraded in some areas, and appeared to butt the Chapel Wall (671). However, it is important to note that it was approximately 0.40m below the top of foundation.

6.2.17 Another small, but interesting feature was the remains of a small limestone built wall (659), aligned North to South, and found at a depth of 59.85m AOD. This may suggest again the division of small plots of lands, or maybe a garden feature. Whatever the function of the structure it would appear to have been fairly short-lived since a thick accumulation of garden soils had developed over it later in the 16th century.

Watching Brief

6.2.18 Due to general shallow nature of groundwork associated with the new works further archaeological evidence very limited and thus was the impact of the works on the buried archaeological resource.

6.2.19 North-south aligned wall 701, located c 4.5 m from the west wall of the kitchen corresponds very closely with the wall that defines the eastern extent of the 'The Fellows Garden' depicted on the plan by James King (1848) which joined the south wall of the Dining Hall. It seems to have survived the major works of 1859-61 (which the new Library was constructed to its west) since it is shown on the Ordnance Survey of 1878.

6.2.20 North-south aligned wall 708 seemingly corresponds with the west wall of the larders/scullery depicted on James King's plan of 1848 located within the yard to the south of the kitchen. This range of ancillary structures are not shown on Taylor' plan (1750) which seemingly depicts the area to south of the kitchen as open.

6.2.21 It is tentatively suggested that mortar 'surface' 706 may correspond to similar spreads identified in ATP 3 (305) and ATP 4 (411) which in the 2007 report suggested that together with context 19 found in ATP 3 all form part of the same horizon, possibly pertaining to the construction of the kitchen during 1668-69. Although the level aOD of 706 was not recorded - comparison of if its depth below the existing floor with the architects surveys suggests the surface level is

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approximately 60.70 m aOD. This is close to the level recorded in ATP 3 - located immediately to the east. Its similarities in level and composition with 305 (recorded at 60.73 m aOD) would suggest that the two deposits are broadly contemporary if not the same. However surface 706 (and underlying garden soil 707) apparently abutted wall 708 implying that wall was already in existence by this time. If wall 708 has been correctly identified as forming part of the larders/scullery - then this suggests that mortar surfaces 706/305 must post-date its construction between 1750-1848 rather than pertaining to the construction of the kitchen during 1668-69.

6.3 Overall interpretation,

6.3.1 The archaeological evidence broadly concurs with the documentary sources (Harris 2006). Most of the significant phases (13th century and later) described in the Brief are present as well. In addition, some earlier pottery was found (11th century), however, this was residual within the fills of a later feature.

6.3.2 No firm evidence was found for the boundaries of medieval properties flanking Kybald/High Street – due mostly to the small scale of the excavation trenches. There is a possibility that features found within Trench 5 (Wall 514), and Trench 6 (Wall 659) could have been part at some point of structures dividing plots within this area.

6.3.3 Finally there was also a good correlation between the archaeological dating evidence for the construction of the Kitchen wing of the University College during 1668-1669 and the works of building or later restoration in The Chapel in 1634-1688.

6.4 Summary of results and Significance

6.4.1 The excavation has shown that archaeological deposits and structures were well preserved within the study area. Features were present from datable contexts spanning a period from the 13th century to the present day. The absence of earlier deposits was most likely due to the limited depth of the excavated area. The excavation provides good empirical evidence from which further mitigation strategies can be designed if necessary.

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7 COMBINED ASSESSMENT OF RESULTS

7.1 Stratigraphic archive

	Phase 1	Phase 2	Phase 3	Totals
B/W Films	1	1	3	**5**
C/S Films	1	1	3	**5**
Context add Sheets		1	39	**40**
Context Check lists	2	2	6	**10**
Context sheets	38	28	112	**178**
Daily Journal sheets	7		4	**11**
Digital register		1	4	**5**
Evaluation Sheets		2		**2**
Levels Register	1	2	8	**11**
Matrices	3		4	**7**
Mortar sample			2	**2**
Plan A1			1	**1**
Plan Register	1	1	3	**5**
Plans A4	5	4	26	**35**
Section Register	1	1	2	**4**
Sections A4	5	3	10	**18**
Small Finds Sheets	1		1	**2**
Stone Register sheet			1	**1**
WB sheets			6	**6**

7.2 Stratigraphic summary and potential

	Pre-college re-construction (1634-68)	College (1638+)
Phase 1 (ATP1-2)	Undefined 13C structure & pits associated with properties that once fronted Kybald Street or High Street	Possible structure (including surface of crushed Headington freestone)that may have served as a mason's workshop during the re-construction of the University College during between 1634-1668, prior to the construction of the kitchen. Good correlation was found with the archaeological evidence for the construction of the Kitchen during 1668-69.
Phase 2 (ATP3-4)	Evidence from pit fills excavated in Test Pit 3 suggests that they were in use until the early 17th century, and therefore pre-dates the re-construction of the college in the mid-late 17th century. Although Agas (1578) shows little or no development along the northern frontage of Kybald Street, it is possible that the pit is associated with the tenements fronting on to the street (Salter, 1960, Map SE IV, Plots 217-221) prior to the eastern end being blocked off and developed, as indicated on Loggan's plan of 1675. Alternatively, it may be associated with the earlier college buildings to the north, as University College held at	Mortar surface(s) possibly representing a construction horizon or yard surface associated with the construction of the kitchen building in 1668-9. Construction of boundary wall to south of kitchen (poss. as on Taylor's map of 1750) delineating garden to east and yard to the west. Western limit of yard possibly defined by shallow wall foundation - the area of which at some point between 1750 and Kings' plan of 1848, the larders and scullery have been constructed. A sequence of later surfaces probably relates to the use of this area as a yard, as indicated on King's plan.

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	Pre-college re-construction (1634-68)	College (1638+)
	least one of these tenements (219 - Brend Hall) by as early as 1390 (Salter, 1960, p. 255).	
Phase 3 (ATP5-6) and WB	North-south aligned walls found within ATP5-6 -if predating the reconstruction of the college- could represent boundary walls dividing to different plots of land from High Street or Kybald Street. Earlier deeply stratified levels dating from the 13C in ATP5 seemingly formed fills of earlier pits (some possibly gravel quarries) although small area excavated made interpretation difficult.	There is a good correlation between the archaeological dating evidence for the construction of the Kitchen wing of the University College during 1668-9 and the works of building or later restoration in The Chapel in 1634-1688. The watching brief appears to have confirmed the location of the west wall of the larders/scullery depicted on James King's plan of 1848 located within the yard located to the south of the kitchen. It also found a wall that defined the eastern extent of the 'The Fellows Garden' depicted on the plan by James King (1848) which joined on the south wall of the Dining Hall.
Overall potential for further study	The mitigation strategy limited the impact of the new development on significant archaeological remains. Thus the constraints and small-scale nature of the trenches rendered detailed interpretation difficult thus offering a low potential of enhancing our understanding of this period. Little or no information could be gleamed for the layout and function of the possible 13C structure identified in ATP2. Similarly the true function and extent of the pits identified could not be established although some information regarding the inhabitants could be gleamed from the small, but well-preserved animal bone assemblage. Only further and more extensive excavation can more closely establish the date and function of the north-south walls found within ATP5-6 - particular whether or not they predate the re-construction of the College. The fine (reused) architectural stone and glass goblets fragments (residual in post-mediaeval contexts) recovered do point to high status activity could be researched further - although unfortunately their providence is uncertain. However the trenches have shown that significant and deeply stratified levels predating the college are extant across the site - information that will in the future could inform future mitigation strategies. If more substantial archaeological interventions occur in the future then the site has a high potential of significant enhancing the early development of the site.	Overall there is good correlation of the archaeological evidence with the documentation sources concerning the construction of the Kitchen Wing in 1668-69 and the later development the yard area to its south. Most of the archaeological evidence is concerned with wall foundation and the methodology of their construction and other offers little insight beyond what is already known from other sources. Otherwise from the limited areas excavated there is little to be added to our current understanding of the layout and development of the college. Insights could be made into the inhabitants of the college by the study of the animal bone especially the high incidence of whole animals being butchered on site and possible identification of turkey in an early context.

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7.3 Finds assessments and potential

Table 1: Compendium of finds from all phases of work

Material	No Contexts	No Sherds	Weight (g)
Animal Bone	45	397	3,723
CBM	42	134	12,255
Clay Pipe	21	48	251
Coal	1	4	27
Copper Alloy	11	23	
Flint	3	4	38
Glass	16	29	108
Human Bone	1	1	30
Iron	7	9	
Lead	1	1	
Mortar	6	2	1,953
Plaster	1	1	25
Pottery	52	375	5,583
Shell	17	30	346
Slag	2	2	793
Stone	10	17	394
Stone (architectural)	N/A	9	

Animal Bone

7.3.1 This small (combined) bone assemblage has features worthy of further analysis and reporting. Firstly, the assemblages are in general well preserved and, considering their small size, diverse. Secondly, the assemblage appears to indicate that whole animals were butchered at the College Buttery, and this aspect of the study should be considered further; it contrasts with the findings from Merton College, where the bone appeared to derive almost exclusively from consumption waste (Worley and Evans, forthcoming). Thirdly, the tentative identification of turkey needs to be followed up, since turkeys are thought to have been introduced to England in the middle of the sixteenth century, only becoming common fare after the second world war. The assemblage can then be compared with those recovered from other Oxford Colleges, including Lincoln College (Charles 2002, Ingrem 2002), Merton College (Worley and Evans forthcoming) and St John's College (Evans unpublished) as well as non-university Oxford sites.

Ceramic Building Material

7.3.2 Apart from the decorated medieval floor tile from context (637), which should be researched further, in general the building materials from this site add little to the dating evidence provided by other types of material and should be regarded as of

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secondary importance to these. In view of the small size and poor condition of the assemblage, no further work is recommended.

Clay Pipe

7.3.3 The cohesion of this almost purely 17th-century group of pipes is of some note as is their fresh condition. However the pipes are otherwise plain and mostly easily paralleled in existing local publications. Also, the assemblage is quite small and provides no new information on local pipemakers. In view of these facts no further work is recommended

Flint

7.3.4 A single flint flake was recovered. The flint is not particularly diagnostic, but the narrow removals and edge abrasion is suggests a Mesolithic or Neolithic, rather than Bronze Age date. No further work is recommended

Glass

7.3.5 The vessel glass includes sherds from the flared stem of a goblet possibly in high lead glass, a fragment from the base of another goblet, and a decorated body sherd from a goblet. The remaining sherds comprise a small indented base and a vertical rim sherd with diagonal fluting, possibly from a jug or flask. The goblet sherds probably date to the 13th-14th-century. The sherds of a fluted flared goblet stem are comparable to a goblet from Old Sarum (Tyson 2000, 59 and fig. 6: g21). The other sherds are not closely dateable. Although only a very small assemblage it comprises high status glass, in particular the possible high lead glass goblet fragments. The (medieval) material should be published and illustrated.

Human Bone

7.3.6 A single fragment of human skull was recovered from L17-E18C garden soil. The bone, that of an adult of undetermined sex, bore tool marks that are consistent with those caused by an attempted trepanation with a drill. There was nothing on the bone to suggest what had prompted the attempted trepanation. Two possibilities include medical research and pathology. The modifications that have been identified on the skull fragment from University College represent a failed trepanation. This is a highly significant find that provides a vivid insight into 17th/18th century medical practice in Oxford. It may be related to medical training that was performed on a corpse, either donated or acquired for medical research. Alternatively, it may represent the remains of an individual who underwent surgery to treat a pathological condition and who did not survive.

7.3.7 There is considerable scope for further work on this human bone fragment. This would include the following:

7.3.8 1) Radiocarbon dating to establish a more conclusive date.

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7.3.9 2) Historical research into the procedure, the surgeons who were practising in and around Oxford at this time, medical training at the University and, in particular, connections between University College and the medical school.

7.3.10 3) Documentary research on comparative British examples to establish the uniqueness of the University College example.

7.3.11 4) Microscopic analysis to explore the timing of the intervention. The macroscopic analysis described in this report suggests that the modifications were created around the time of death. It is assumed that, if the procedure was performed to treat a pathological condition, the individual died during the operation. This would seem to be confirmed by the fact that there were no macroscopic signs of healing. However, this may not necessarily have been the case. Complete trepanation could quite feasibly have been undertaken on a different part of the skull. Further, microscopic signs of healing may be present and, if so, would indicate that the individual survived the procedure for a few days. Scanning electron microscopy would be required to explore this. This would also allow for a more detailed description and documentation of the modifications.

Metalwork

7.3.12 Overall the assemblages are clearly of early post-medieval date. X-rays of the material would facilitate identification of the ironwork. A brief note on the metalwork assemblage is probably all that is required. None of the objects requires illustration or detailed publication with catalogue.

Pottery

7.3.13 The bulk of the material is of later medieval or early post-medieval date. One trait worthy of note is that the later medieval and early post-medieval assemblages are dominated by drinking pottery in the form of German Stonewares. It is a pattern that has been noted in recent years amongst the pottery from excavations at other medieval Oxford colleges. A Ligurian maiolica dish sherd is of sufficient importance to be illustrated and recorded in more detail. This small group of pottery has several traits which suggest that it is worthy of further analysis and full publication.

7.3.14 *Shell*

7.3.15 No further work required.

7.3.16 *Slag*

7.3.17 No further work required.

Stone

7.3.18 Nine fragments of architectural stone were recovered during refurbishment works within the kitchen. They include a group of limestone moulded elements from same or similar doors or windows, possibly part of the demolished medieval college

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buildings. Also there is a tip-top Romanesque beak-head fragment, probably from a stone house on the site. All the stonework is worthy of further study.

7.3.19 The small amount of other stone was also recovered. None of these are worked or of interest. The assemblage has no potential. No further work is recommended.

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APPENDIX 1 ARCHAEOLOGICAL CONTEXT INVENTORY

Context	Trench	Type	Width (m)	Thick. (m)	Comment	Finds	No/Wt	Date
500	5	Layer			Natural Gravel			-
501	5	Cut	0.95	0.3	Cut/Pit			
502	5	Layer			Fill of 501			
503	5	Cut	1.2	1.5	Pit			Medieval (?)
504	5	Layer		0	Fill of 503			
505	5	Layer	0.3	0.4	Fill of 503			
506	5	Layer	0.12	0.24	Fill of 503			
507	5	Layer	1.2	0.3	Fill of 503	13th century pottery		Medieval
509	5	Layer	0.36	0.12	Fill of 503	13th-14th century roof tile		Medieval
510	5	Layer	0.37	0.6	Fill of 503	16th century pottery		Medieval
511	5	Cut	0.4	0.3	Posthole			Post-Medieval
514	5	Structure	0.6	0.4	Wall Foundation			Post-Medieval
515	5	Cut	1.6	0.9	Pit			Medieval
516	5	Layer			Fill of 515			
517	5	Structure			Wall Foundation			Post-Medieval/Modern
518	5	Cut	3.14	0.9	Construction Cut for 517			Post-Medieval/Modern
519	5	Layer			Fill of 518			Post-Medieval/Modern
520	5	Layer	0.2	0.3	Fill of 511			
521	5	Layer			Bedding for concrete floor			Modern
522	5	Structure			Concrete slabs floor			Modern
523	5	Layer			Leveling deposit			Modern
524	5	Layer			Fill of 501			
525	5	Layer			Fill of 515	15th century pottery		Post-Medieval
526	5	Layer			Fill of 515			
527	5	Layer			Fill of 503			
528	5	Layer			Fill of 529	13-16th century roof tile		
529	5	Cut	0.8	0.34	Pit			

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Context	Trench	Type	Width (m)	Thick. (m)	Comment	Finds	No/Wt	Date
530	5	Structure			Wall Foundation			Post-Medieval/Modern
531	5	Layer			Same as 523			
532	5	Cut			Modern Trench			Modern
533	5	Layer			Fill of 532			Modern
534	5	Layer			Fill of 532			Modern
535	5	Layer			Fill 503			Post-Medieval
601	6	Layer			Garden soil or make-up			Modern
602	6	Cut			Modern Cut related to Coal Chute			Modern
603	6	Layer			Fill of 602			Modern
604	6	Layer			Fill of 605			Modern
605	6	Layer			Coal Chute (19th century)			Modern
606	6	Layer			Compact Mortar layer			Modern
607	6	Layer			Gravel. Fill of 634			Modern
608	6	Layer			Mortary layer. Fill of 634			Modern
609	6	Layer			Brown clay silt. Fill of 634			Modern
610	6	Layer			Mortar Layer. Fill of 634			Modern
611	6	Structre			Brick Soakaway			Modern
612	6	Cut			Cut for 611			Modern
613	6	Layer			Brown clay silt layer			Modern
614	6	Layer	0.1	0.06	Mortar Layer			
615	6	Layer		0.04	Fill of 617			Modern
616	6	Layer	0.4	0.15	Fill of 617			Modern
617	6	Cut	0.4	0.2	Pit			Modern
618	6	Layer	0.1		Patch of charcoal			
619	6	Layer	0.2		Layer of mid brown silt	15th century pottery		
620	6	Layer	0.35	0.05	Loam layer	16th century pottery		
621	6	Layer	0.3	0.05	Dump of gravel			
622	6	Layer	0.1	0.05	Remains of mortar surface			
624	6	Layer	0.4	0.05	Leveling deposit	15th century pottery		
625	6	Layer			Brown clay			

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Context	Trench	Type	Width (m)	Thick. (m)	Comment	Finds	No/Wt	Date
628	6	Layer		0.01	Mortar			
629	6	Layer		0.21	Fill of 630	15th century pottery		
630	6	Cut	0.83	0.21	Pit	13th century pottery		
631	6	Layer	0.2	0.03	Spread	16th century pottery		
632	6	Cut			Construction Cut for 671			Post-Medieval
634	6	Cut	0.63	0.7	Pit			
635	6	Layer	0.1	0.05	Silty layer	15th century pottery		
636	6	Layer		0.2	Black-grey clay silt			
637	6	Layer		0.1	Fill of 656=642	13th century pottery		Modern
638	6	Layer		0.03	Fill of 656=642	18th century pottery		Modern
640	6	Layer		0.05	Garden soil			
641	6	Layer		0.04	Gravel and charcoal layer	11th century pottery		
642	6	Cut			Same as 656			Modern
644	6	Cut	0.6	1	Pit			
645	6	Layer		0.3	Garden soil	16th century pottery		
646	6	Layer		0.05	Gravel surface			
647	6	Layer		0.06	Layer related to 646	Post-med tile		
648	6	Layer		0.05	Brown sandy gravel	13th century pottery		
649	6	Layer		0.04	Leveling for 646	13th century pottery		
650	6	Layer		0.03	Garden soil			
651	6	Layer		0.01	Mortar layer butting chapel			
652	6	Layer		0.3	Garden soil	17th century pottery		
653	6	Layer			Gravelly deposit	16th century pottery		
655	6	Layer			Fill of 656			
656	6	Cut			Construction Cut for Buttery			Modern
657	6	Layer			Fill of 632	15th century pottery		
658	6	Layer			Part of/Same as 632			
659	6	Structure			Garden wall	16th century pottery		
660	6	Cut			Construction Cut for 659			
661	6	Layer		1	Fill of 644			

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Context	Trench	Type	Width (m)	Thick. (m)	Comment	Finds	No/Wt	Date
662	6	Layer			Gravelly soil	13th century pottery		
663	6	Layer		0.12	Fill of 669	13th century pottery		
664	6	Layer		0.12	Fill of 669			
665	6	Layer		0.12	Fill of 669			
666	6	Layer		0.30	Fill of 669	13th century pottery		
667	6	Layer		0.2	Fill of 669			
668	6	Layer		0.1	Fill of 669			
669	6	Cut			Pit			Medieval
670	6	Structure			Chapel Wall			
671	6	Structure			Chapel Wall foundations			
672	6	Structure			Off set wall below 671			
673	6	Layer	0.3	0.4	Backfill of 642			Modern
674	6	Layer		0.6	Fill of 669			
675	6	Cut	0.27	0.42	Pit			
676	6	Layer	0.05	0.42	Fill of 675			
677	6	Layer			Backfill of 659			
700	WB	Layer			Topsoil			
701	WB	Wall			Limestone Wall			
702	WB	Layer		0.35-0.4	Modern garden soil			
703	WB	Layer		>0.2	Garden soil?			
704	WB	Layer		0.1	Made ground - 19C?			
705	WB	Layer			Stony toposoil			
706	WB	Layer			Mortar layer			
707	WB	Layer			Post-medival garden soil			
708	WB	Wall			Wall			

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APPENDIX 2 SUMMARY OF SITE DETAILS

Site name: The Buttery and Kitchen, University College, High Street, Oxford
Site code: OXUNCB07
Grid Reference: NGR SP 5174 0620
Type of archaeological investigation: Excavation and Watching Brief
Date and duration of project: August 2007- May 2008
Summary of results: In September 2007, Oxford Archaeology (OA) carried out an archaeological excavation at University College, High Street, Oxford. The work was commissioned by Dr Roland B Harris (on behalf of University College) in advance of building works to redevelop the Kitchen, Buttery and Hall. This was followed by a watching brief undertaken from March - May 2008. The excavation showed that intact and deeply stratified archaeological levels survive as early as the 13th century. More importantly, remains of an earlier wall were found. It is not clear whether this wall could be part of an earlier building that predates the College or if it is just part of an external wall dividing two plots of land. Finally, but no less important, the construction trenches for the Chapel and the Buttery were identified. It is not completely clear whether the construction trench for the chapel relates to the original building or to possible re-construction works during the 17th century, prior to the construction of the kitchen. The watching brief revealed two walls that coincide with those depicted on James King's plan (1848) namely the west wall of the larders/scullery located on the south side of the kitchen and a wall defining the eastern extent of the Fellows Garden.

Location of archive: The archive is currently held at OA, Janus House, Osney Mead, Oxford, OX2 0ES, and will be deposited with Oxfordshire County Museums Service in due course, under the following accession number: **OXCMS:2006.112**

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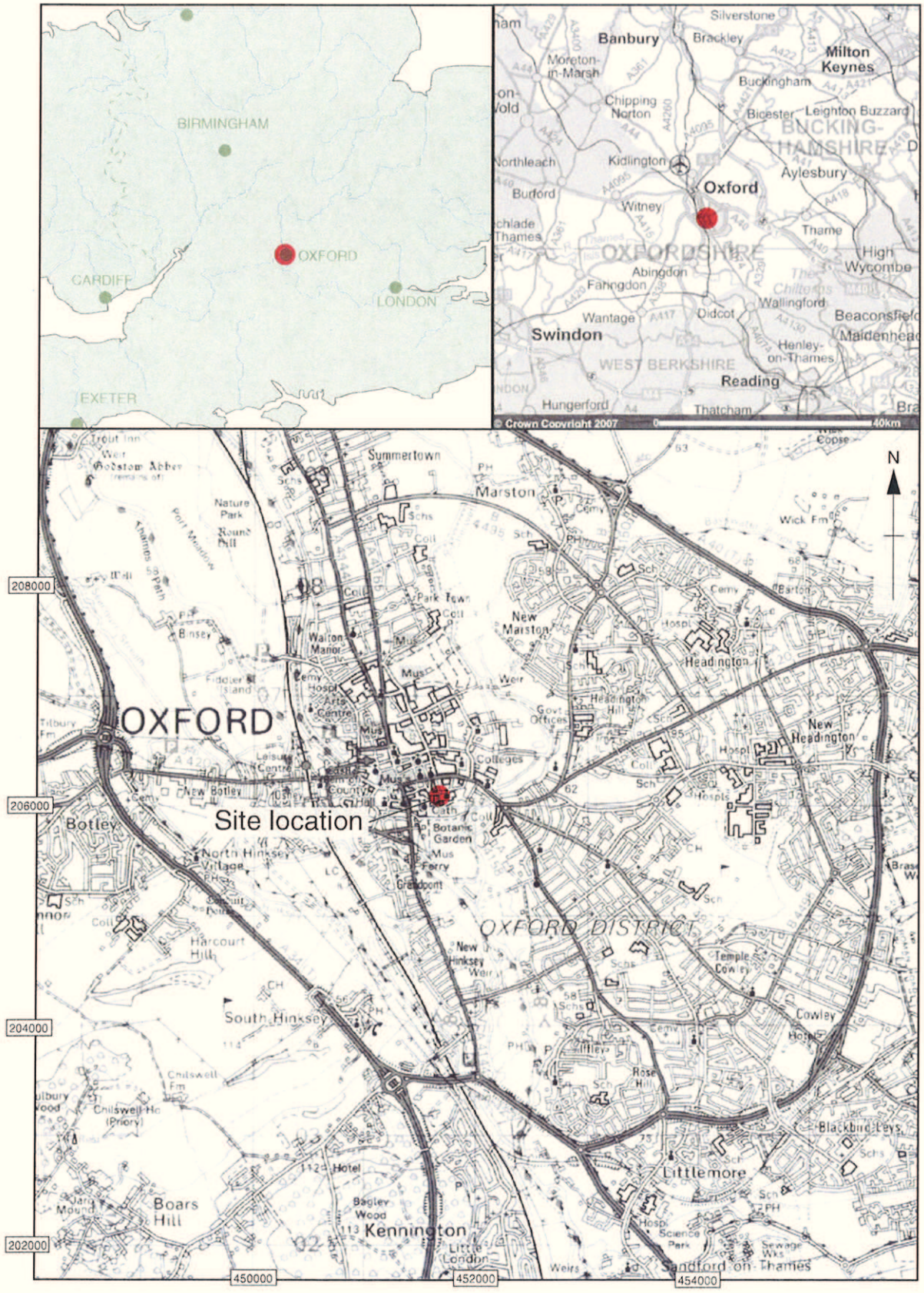

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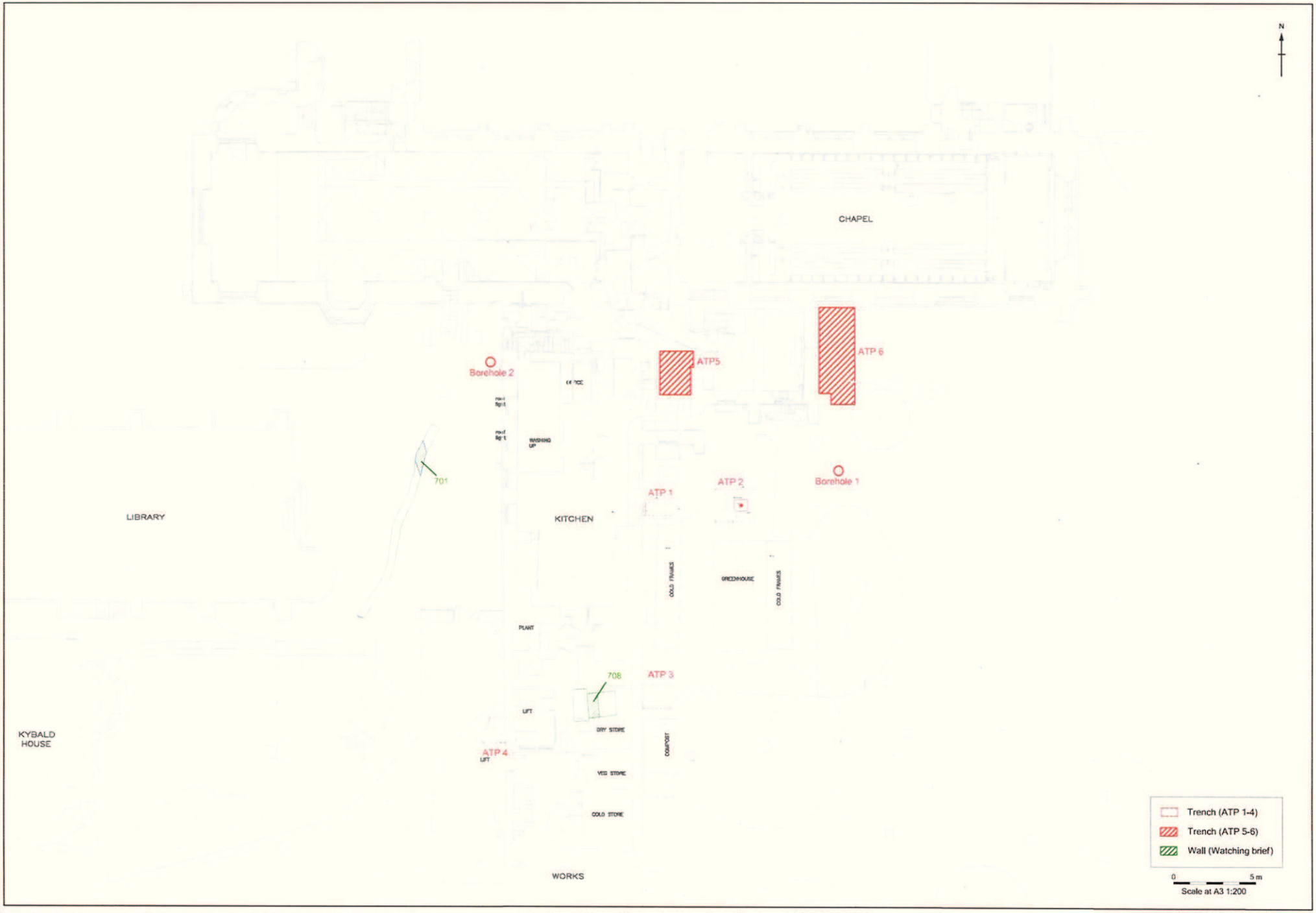
Figure 1: Site location



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Basemaps supplied by: Freeland Rees Roberts Architects. Site centres on NGR SP5174 0620

Figure 2: Trench location

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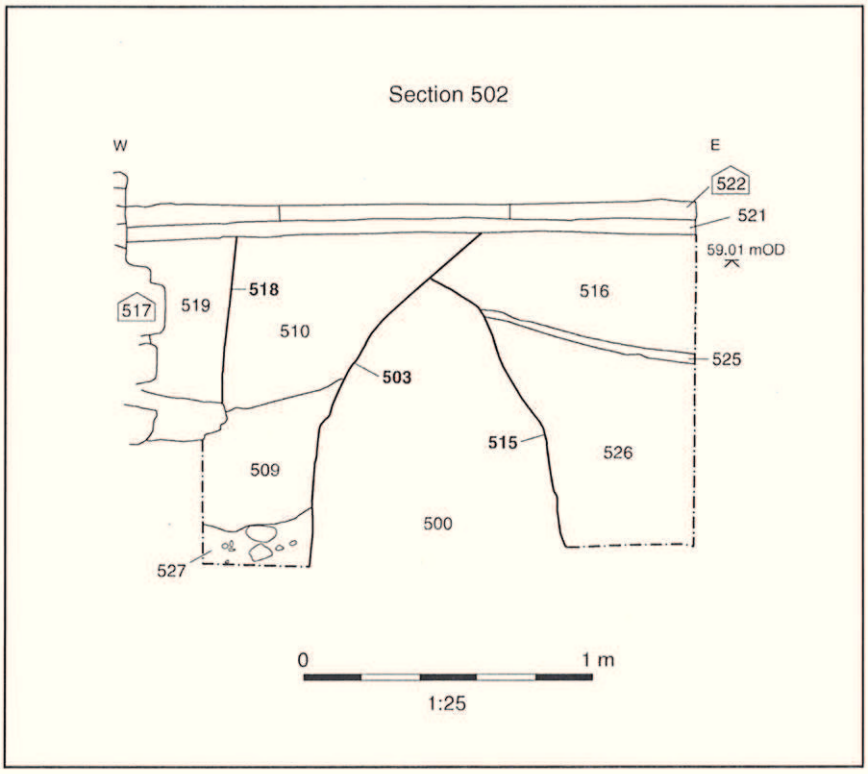

Figure 3: Section 502

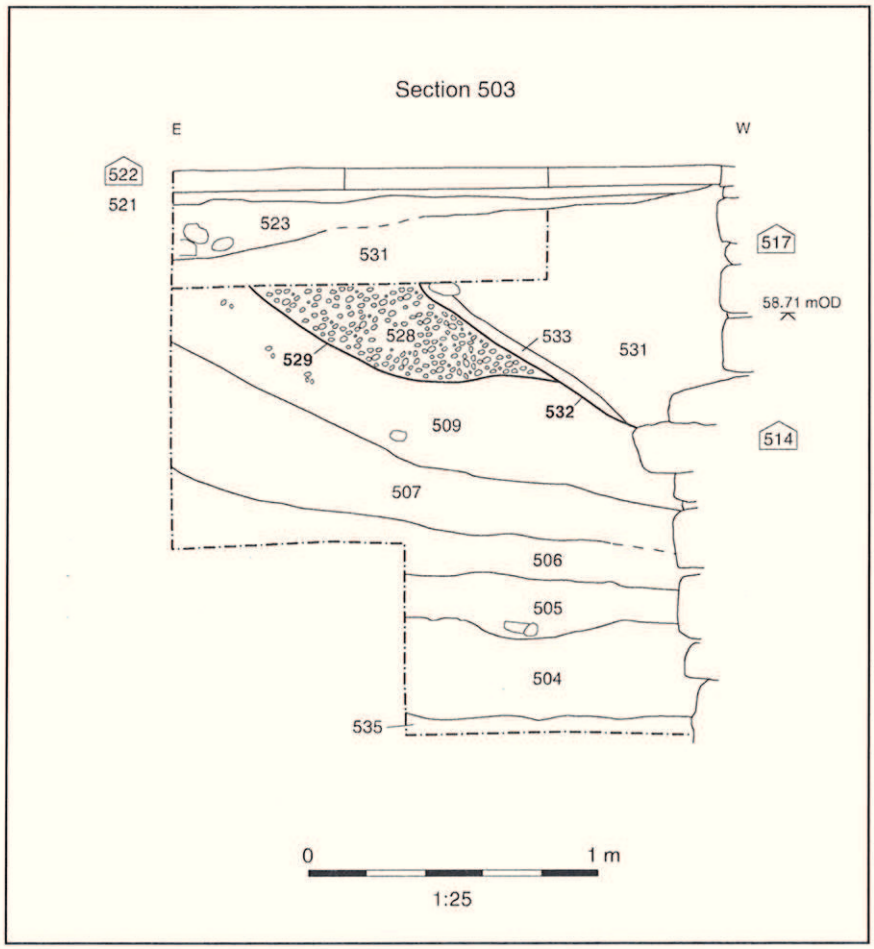

Figure 4: Section 503

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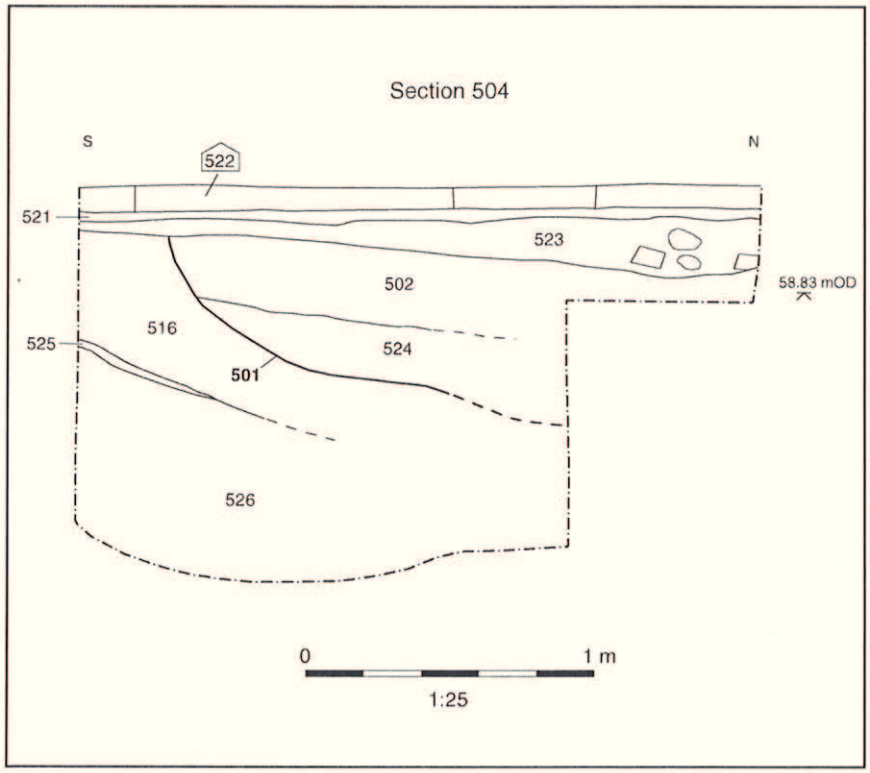

Figure 5: Section 504

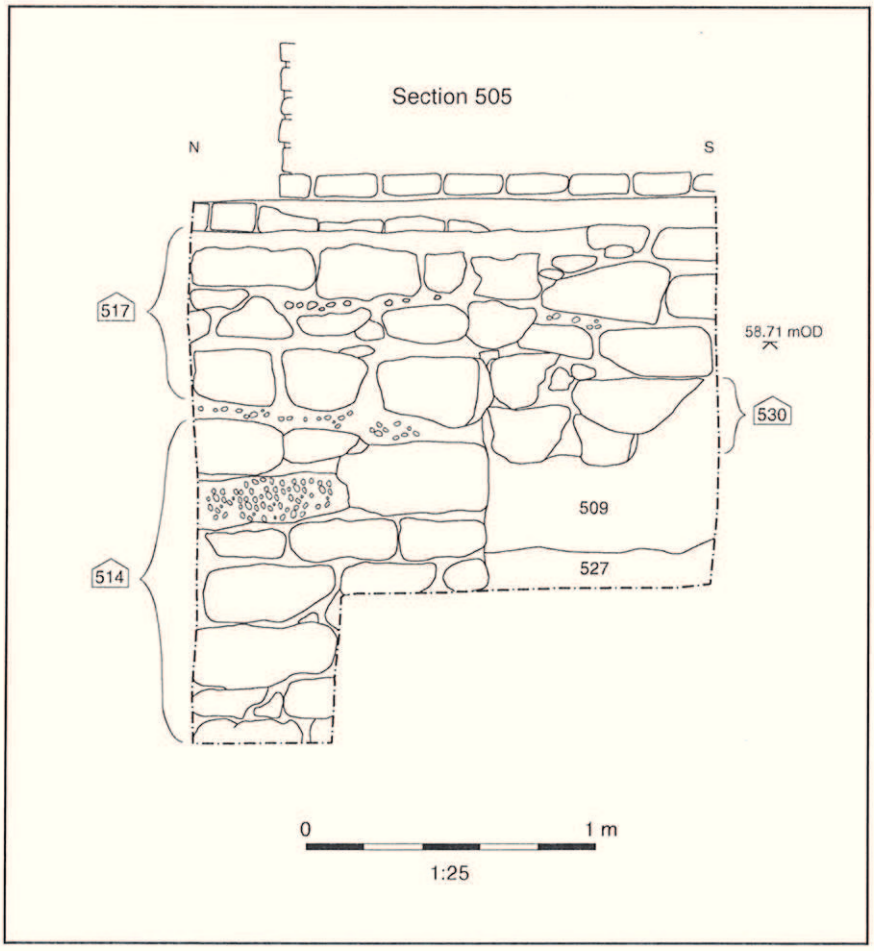

Figure 6: Section 505

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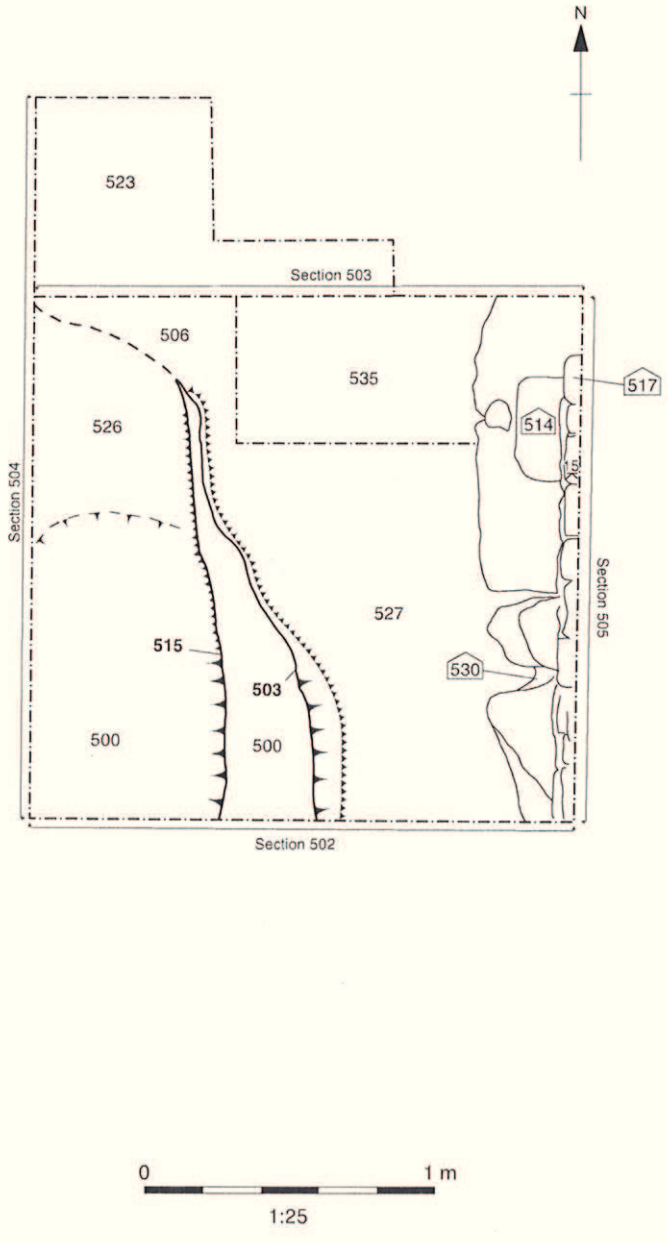

Figure 7: Plan of Trench 5 (ATP5)

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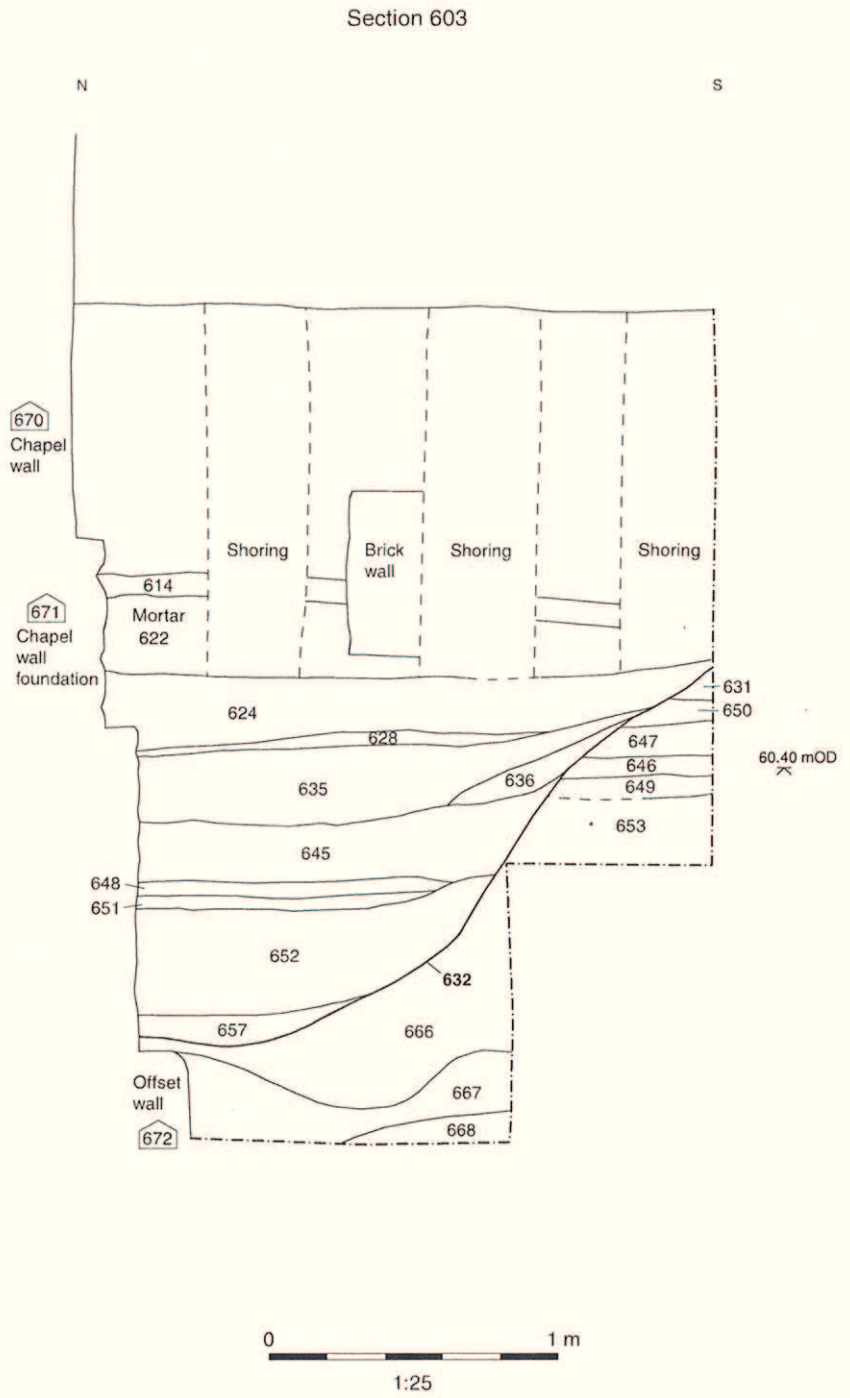

Figure 8: Section 603

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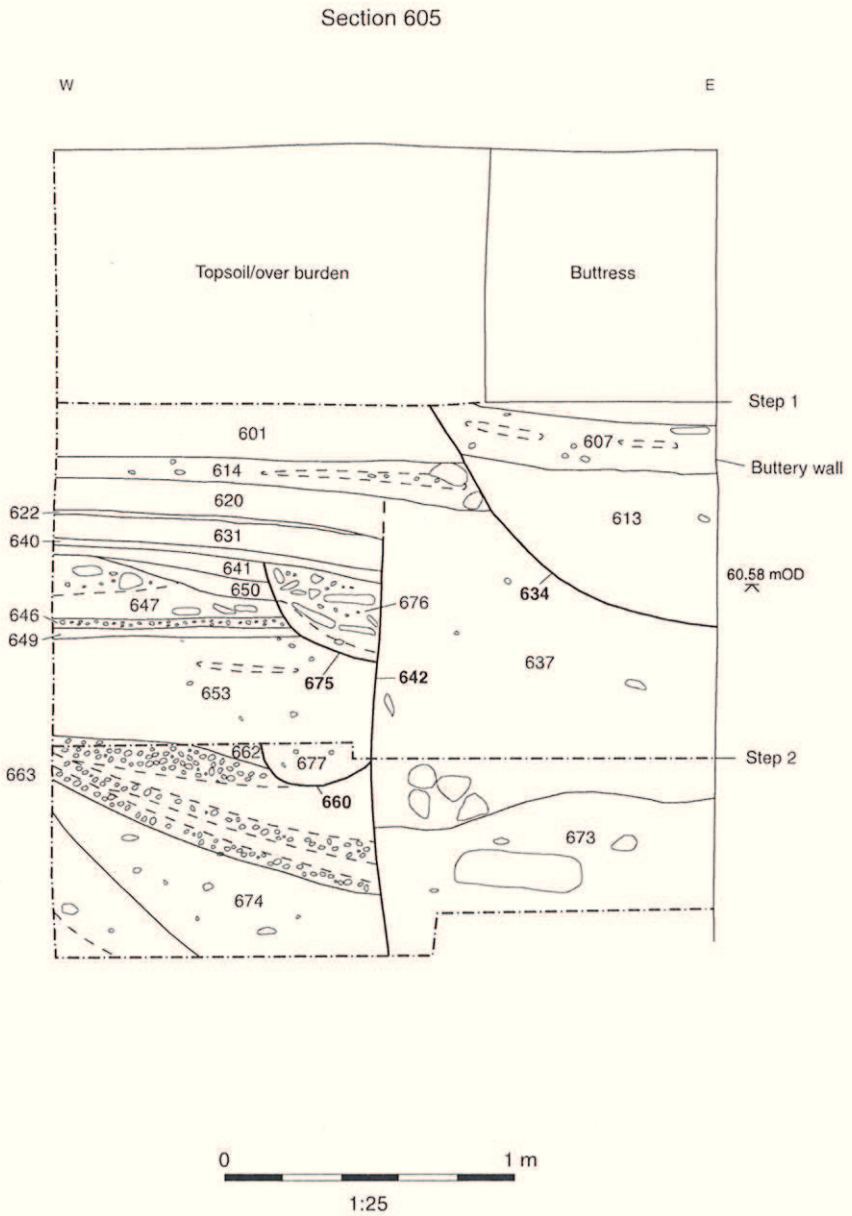

Figure 9: Section 605

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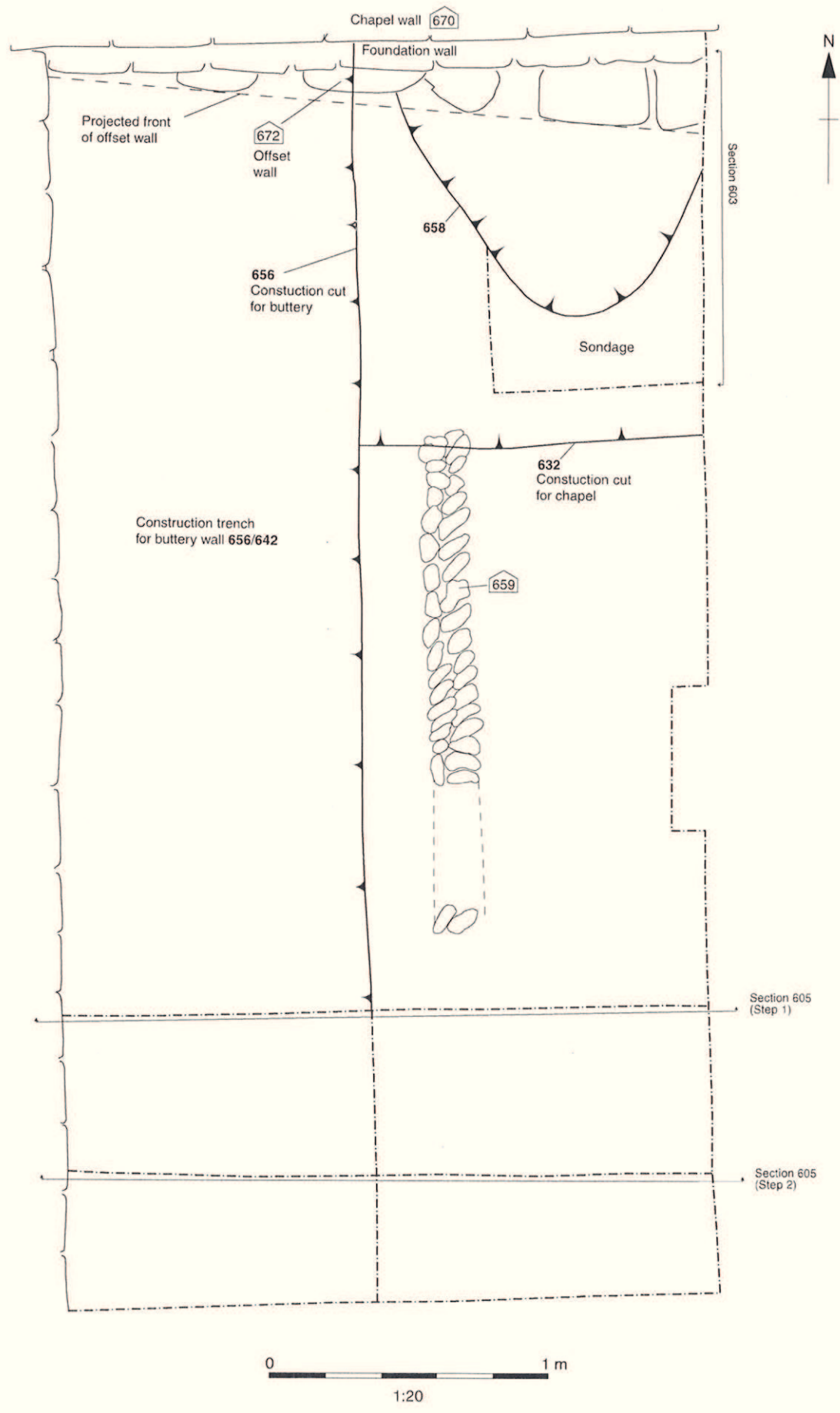

Figure 10: Plan of Trench 6 (ATP6)