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#### Perrodo Project, St Peter's College, Oxford

#### **Archaeological Investigation Report**

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#### **Contents**

Summ	ary	ix
Ackno	wledgements	х
1	INTRODUCTION	1
1.1	Scope of work	1
1.2	Location, geology and topography	1
1.3	Archaeological and historical background	1
2	EVALUATION AIMS AND METHODOLOGY	4
2.1	Aims	4
2.2	Methodology	4
3	RESULTS	6
3.1	Linton Quad test pit (Figs 5 and 6; Plate 1)	6
3.2	Linton Quad watching brief (Figs 7–9; Plates 2–7)	6
3.3	Chavasse Quad test pit and borehole survey (Figs 10–13; Plate 8)	8
3.4	Chavasse Quad strip and record excavation and watching brief (Figs 10 and 14; Plates 9–15)	9
4	DISCUSSION	. 12
4.2	The possible primary burh defences	12
4.3	Medieval tenements	12
4.4	New Inn Hall	13
APPE	NDIX A FINDS REPORTS	. 15
A.1	Pottery	15
A.2	Clay tobacco pipes	20
A.3	Ceramic building material	25
A.4	Stone	27



A.5	Metal finds		.28
Δ6	Glass		29
APPE	NDIX B	ENVIRONMENTAL REPORTS	30
B.1	Environment	al Samples	.30
B.2	Animal Bone		.31
В.3	Fish bones ar	nd marine shell	.37
APPE	NDIX C	CHAVASSE QUAD BOREHOLE LOGS AND PHOTOGRAPHS	39
APPE	NDIX D	BIBLIOGRAPHY	40
APPE	NDIX E	SITE SUMMARY DETAILS	43



# **List of Figures**

Fig. 1	Site location
Fig. 2	Location of trenches
Fig. 3	Detail of New Inn Hall on Ralph Agas's 1588 map of Oxford
Fig. 4	Linton Quad watching brief, plan of trenches
Fig. 5	Linton Quad test pit
Fig. 6	Linton Quad test pit, composite section
Fig. 7	Linton Quad watching brief, sections of the quad surface and soakaway
Fig. 8	Linton Quad watching brief, plan of wall 100 in the service trench on the New Inn Hall Street frontage
Fig. 9	Linton Quad watching brief, sections of the service trench on the New Inn Hall
	Street frontage
Fig. 10	Chavasse Quad, plan of investigations
Fig. 11	Chavasse Quad test pit
Fig. 12	Chavasse Quad, section of test pit
Fig. 13	Chavasse Quad, photo-transect of boreholes with spot-dates and contexts
Fig. 14	Chavasse Quad, sections of strip and record excavation and watching brief
Fig. 15	Medallion from the front of a Bellarmine bottle or jug bearing the 'PVA'
	monogram of Dutch merchant Pieter van den Ancker, from Chavasse Quad strip
	and record excavation and watching brief
Fig. 16	Clay tobacco pipes from Chavasse Quad strip and record excavation and
F: 47	watching brief (drawings by David Higgins)
Fig. 17	Decorated floor tile from Chavasse Quad strip and record excavation and watching brief

# **List of Plates**

Plate 1 Linton Quad test pit, facing north  Plate 2 Linton Quad, section through deposits uncovered during removal of quad surface, facing west  Plate 3 Linton Quad, soakaway and service run general shot, facing east  Plate 4 Linton Quad watching brief, soakaway section, facing north  Plate 5 Linton Quad watching brief, new water pipe and previous services in the settench on the New Inn Hall Street frontage, facing north  Plate 6 Linton Quad watching brief, wall 100 and cellar void in the service trench of
surface, facing west  Plate 3 Linton Quad, soakaway and service run general shot, facing east  Plate 4 Linton Quad watching brief, soakaway section, facing north  Plate 5 Linton Quad watching brief, new water pipe and previous services in the set trench on the New Inn Hall Street frontage, facing north  Plate 6 Linton Quad watching brief, wall 100 and cellar void in the service trench o
Plate 4 Linton Quad watching brief, soakaway section, facing north Plate 5 Linton Quad watching brief, new water pipe and previous services in the se trench on the New Inn Hall Street frontage, facing north Plate 6 Linton Quad watching brief, wall 100 and cellar void in the service trench o
Plate 5 Linton Quad watching brief, new water pipe and previous services in the set trench on the New Inn Hall Street frontage, facing north  Plate 6 Linton Quad watching brief, wall 100 and cellar void in the service trench o
trench on the New Inn Hall Street frontage, facing north Plate 6 Linton Quad watching brief, wall 100 and cellar void in the service trench o
New Inn Hall Street frontage, facing south-west
Plate 7 Linton Quad watching brief, detail of wall 100 and cellar void in the service trench on the New Inn Hall Street frontage, facing couth-west
Plate 8 Chavasse Quad test pit, facing north-west
Plate 9 Layers built up against the west side of Building 292, section 212, facing so
Plate 10 Wall of Building 292, section 215, facing east
Plate 11 Building 292, facing north
Plate 12 Building 295, facing south
Plate 13 Chavasse Quad, section of test pit to investigate the foundations of the not wall of New Road Baptist Church, facing north-east



#### **Summary**

Oxford Archaeology undertook a programme of archaeological investigations at St Peter's College, Oxford as a part of the Perrodo Project, a scheme to improve the college's public spaces. The investigations were situated at two locations, in Linton Quad and Chavasse Quad. The work in Linton Quad comprised a test pit followed by a watching brief during excavation of a soakaway and related service trenches and drainage works adjacent to the New Inn Hall Street frontage, while in Chavasse Quad a test pit was dug and a borehole survey carried out, after which a strip and record excavation was undertaken on the footprint of a proposed attenuation tank and a watching brief on the excavation of ground beams and services.

An augur hole and borehole recorded evidence for a large negative feature (or features) that lie on the projected alignment of one possible projection of the western defences of Oxford's original burh. Evidence was also found for medieval tenements that occupied this part of New Inn Hall Street before the eponymous academic hall was built, and the western range of the medieval hall itself was exposed.



## **Acknowledgements**

Oxford Archaeology would like to thank Waterman Project Management for commissioning this project on behalf of St Peter's College. Thanks are also extended to David Radford, who monitored the work on behalf of Oxford City Council, for his advice and guidance.

The project was managed for Oxford Archaeology by Gerry Thacker. The Linton Quad test pit was directed by Robin Bashford, the following watching brief by Lee Grana. The test pit and borehole survey in Chavasse Quad was directed by Robin Bashford and Mike Sims and the strip and record excavation and watching brief by Vix Hughes and Mike Sims. Thanks are also extended to the teams of OA staff that cleaned and packaged the finds under the management of Leigh Allen, processed the environmental remains under the management of Rebeca Nicholson and prepared the archive under the management of Nicola Scott.



#### 1 INTRODUCTION

#### 1.1 Scope of work

- 1.1.1 Oxford Archaeology undertook a programme of archaeological investigations at St Peter's College, Oxford. The work was commissioned by Waterman Project Management on behalf of the college as a part of the Perrodo Project, a scheme to make the college a better place to study, teach and live by improving its public spaces. The investigations took place in Linton Quad and Chavasse Quad and were required in advance of any intrusive groundworks as a result of conditions attached to two planning permissions (planning refs 14/01106/FUL and 16/01457/FUL).
- 1.1.2 Within Linton Quad the investigations comprised the digging of a test pit at the proposed location of a soakaway pit followed by a watching brief that monitored the groundworks ahead of construction, including the reduction of the existing quad surface by c 0.50m, the excavation of a soakaway and associated drainage trenches, and drainage works adjacent to the New Inn Hall Street frontage. In Chavasse Quad a test pit was dug and a borehole survey carried out, after which a strip and record excavation was undertaken on the footprint of a proposed attenuation tank and a watching brief on the excavation of ground beams and services, as well as a test pit to investigate the foundation design of the existing New Road Baptist Church, which forms the southern side of the quad.
- 1.1.3 The investigations were carried out in accordance with Written Schemes of Investigation that were agreed with David Radford, Archaeological Officer for Oxford City Council (OA 2014; 2016).

#### 1.2 Location, geology and topography

- 1.2.1 St Peter's College lies towards the western edge of the historic core of Oxford, c 250m west of Carfax and c 100m inside the line of the medieval city walls (Fig. 1). It is centred on NGR SP 511 062 and is bounded to the west by Bulwarks Lane and to the east by New Inn Hall Street. Linton Quad lies within the northern part of the college grounds and Chavasse Quad to the south (Fig. 2). The development in both quads included level areas of grassed surface, paving and hard standing.
- 1.2.2 The geology of the area is the Summertown-Radley Sand and Gravel Member overlying the Oxford Clay Formation (Geological Survey of Great Britain, sheet no. 236).
- 1.2.3 The ground surface within the college lies at *c* 64.0m aOD.

#### 1.3 Archaeological and historical background

- 1.3.1 The archaeological and historical background to the site has been compiled in a desk based assessment (OA 2015a), the results of which are summarised below.
- 1.3.2 The site has been subject to little development since the medieval period and archaeological excavations nearby have recorded well preserved archaeology beneath the foundations of existing buildings, suggesting that despite the development of the college, preserved archaeological remains are likely to be present throughout the site.



- 1.3.3 The immediate area demonstrates a level of activity during the prehistoric period, most notably from the Bronze Age and Iron Age. A Bronze Age brooch and early Iron Age pottery were found in deposits thought to have come from the Twinings Building in George Street, c 175m to the north. A Bronze Age barrow ditch was excavated at 24a St Michael's Street in 1985, 150m north-east of the site, and two more were identified during the building of the Sackler Library 350m to the north.
- 1.3.4 A Roman urn was uncovered when the Wesleyan Methodist Church was built in 1870. Further evidence of Romano-British activity has come from the nearby area in St Michaels Street and Queen Street, including a figurine, a patera, a quern and pottery.
- 1.3.5 Oxford had long been an important river crossing. In the early 10th century it was added to the West Saxon system of defensive burhs and the town was laid out inside the walls with a regular street pattern centred on Carfax, 280m to the east. Evidence for settlement has been recovered from many archaeological investigations. An earthwork bank and ditch were constructed around the town, some remains of which have been found in archaeological investigations. These results suggest that the later medieval city wall was for the most part constructed over the late Saxon defences. The turf rampart was found in the centre of St Michael's Street, north-east of the site, during drainage work in 1976 and at No. 24 St Michael's Street in 1985. During excavations at 40 George Street in 1977-8, 150m to the north, a large N-S aligned ditch was found, which pre-dated the line of the medieval stone wall and which first appeared in the documentary record in 1226. It is thought that this ditch was the Saxon defensive ditch around the western extent of the primary burh. New Inn Hall Street formed part of the original street system and part of the earliest cobbled road surface found outside 22 and 24 New Inn Hall Street produced a coin of Edward the Elder.
- The land to the west of New Inn Hall Street (formerly Little Bailey) was occupied by a 1.3.6 number of tenements and their gardens by at least the late 13th century. Linton Quad lies within a property identified by Salter as Rose Hall, which is likely to have originated as one of the many academic halls that were the precursors to the university colleges, while the southern part of the area now occupied by the college formerly comprised Trillock's Inn. This was an academic hall that possibly originated as the private house of the brothers John Trillek (Bishop of Hereford 1344-60) and Thomas Trillek (Bishop of Rochester 1364-72), who obtained a licence for a private oratory there in 1340 and 1348. It passed in 1361 to the Bishop of Winchester, William of Wykeham, and thence to New College in 1392. It was used as an academic hall from the late 14th century and became 'The New Inn' when it was rebuilt in c 1426; it closed in 1887. Agas's map of Oxford (1588) shows the hall as a building arranged along the street frontage, with a smaller western range to the rear and a central yard (Fig. 3). By the time of Loggan's map (1675), the western range had been extended to the south and this arrangement appears on subsequent maps until Faden's map of 1789, but is not on King's 1848 plan of the college.
- 1.3.7 In 1874, St Peter's Church (now the College Chapel) was constructed to replace the 18th-century church of St Peter-Le-Bailey which was then demolished, and in 1900 the Central Girls' School was built on the southern part of the site.
- 1.3.8 St Peter's College was founded in 1928 as a permanent hall of the University.



## Previous Archaeological Work

- 1.3.9 An excavation for St Peter's College at the south end of Bulwarks Lane in 1980, *c* 100m south-west of the site, found an area of turf stripping which was attributed to the Saxon rampart, and suggested a continuation of the north-south alignment of the defensive ditch.
- 1.3.10 During 2003 a watching brief undertaken by OA during the construction of a new seminar room 100m north-west of the site recorded post-medieval garden soils cut and sealed by 19th century constructions and modern services.
- 1.3.11 In June 2010 OA carried out a single trench evaluation against the south side of the city wall at the rear of the Wesley Memorial Church, north of the site. The evaluation revealed a 17th-century garden soil and a robber trench for the 13th-century city wall. The construction deposits were overlain by two thick soil horizons deposited prior to the 19th-century redevelopment of the site.



#### 2 EVALUATION AIMS AND METHODOLOGY

#### **2.1** Aims

- 2.1.1 The project aims and objectives were as follows:
  - To determine the presence or absence of any archaeological remains which may survive;
  - To determine or confirm the approximate extent of any surviving remains;
  - To determine the date range of any surviving remains by artefactual or other means;
  - To determine the condition and state of preservation of any remains;
  - To determine the degree of complexity of any surviving horizontal or vertical stratigraphy;
  - To assess the associations and implications of any remains encountered with reference to the historic landscape;
  - To determine the potential of the site to provide palaeoenvironmental and/or economic evidence, and the forms in which such evidence may survive;
  - To determine the implications of any remains with reference to economy, status, utility and social activity;
  - To determine or confirm the likely range, quality and quantity of the artefactual evidence present.
  - To identify any evidence for an early defensive boundary of the 'primary burh', thought to run along the break in slope running north-south and parallel with New Inn Hall Street;
  - To investigate the potential for multi-period tenement occupation activity within this location;
  - To determine if there are burials within the vicinity of the 19th-century Methodist Chapel garden.

#### 2.2 Methodology

- 2.2.1 The test pit in Linton Quad was excavated by hand following standard methodologies. It measured 1.5 x 1.5m and was excavated to a depth of 2m, with a  $0.4 \times 0.4$ m sondage excavated to 2.25m below ground level. A hand-augered borehole in the base of the sondage penetrated to c 4.1m below ground level.
- 2.2.2 The watching brief within Linton Quad comprised the monitoring of three main excavations within and around the quad (Fig. 4):
  - The removal of the quad surface, prior to replacement;
  - The excavation of the soakaway and related service trenches;
  - The excavation of a new service run adjacent to and parallel with New Inn Hall Street.
- 2.2.3 The test pit and borehole survey in Chavasse Quad comprised the excavation of a test pit within the grassed area of the quad to investigate the location of a proposed soakaway, and a borehole survey comprising four boreholes within the footprint of the proposed new building, immediately adjacent to potential pile locations. The test pit



measured 2 x 2m and was machine excavated to the depth of the first significant archaeological horizon, with the remainder of the test pit hand excavated to a maximum depth of 2m. Following the recording of the test pit a hand auger sample was taken to a depth of 6.1m below ground level in order to examine the underlying deposits.

2.2.4 The area of the strip and record excavation on the attenuation tank was stripped under archaeological supervision using a mechanical excavator fitted with a toothless bucket, with archaeological recording being undertaken when required. A watching brief was carried out during excavation of associated service trenches and a test pit 1.3 x 1.2m and 1.5m deep was dug to investigate the foundation of the existing New Road Baptist Church, which forms the southern side of the quad.

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#### 3 RESULTS

#### 3.1 Linton Quad test pit (Figs 5 and 6; Plate 1)

- 3.1.1 The earliest deposits encountered were only seen along the northern edge of the trench, as they had been truncated elsewhere by later pit 15 (Fig. 5; Plate 1). These comprised what appeared to be a fairly homogeneous silty clay deposit (22) which was not fully characterised as it was only seen in the free section created by the excavation of a sondage through the fills of the possible pit; consequently, the origin of this deposit is uncertain (Fig. 6). Deposit 22 was overlain by a fairly compacted, c 0.2m thick mixed layer of limestone rubble in a mid reddish brown silty clay matrix with concentrations of lime mortar throughout (16). There was an irregularity in the interface between this layer and the overlying deposit (17), which may have represented a shallow linear feature (18), although it was relatively ephemeral and may have merely been an undulation in the top of layer 16 (additionally, deposit 19, the fill of feature 18, was identical in composition to the overlying layer). Layer 16 was overlain by a 0.28m thick silty clay deposit (17). No artefactual material was recovered from this sequence of deposits.
- 3.1.2 The layers had been truncated by the northern edge of pit 15. The shape of the pit was uncertain, although the curvature of the edge possibly indicated a sub-circular feature. The pit was excavated by hand to a depth of 0.68m. Hand-auguring penetrated for a further 1.88m before reaching an obstruction, possibly the natural gravel, at *c* 4.1m below ground level (60.93m OD). It is not possible to be certain whether this represents the base of the pit or that of some earlier feature beneath the pit. The hand-excavated part of the pit was filled by two deposits of clayey silt fill (13 and 14) from which 16th-17th century artefactual material was recovered.
- 3.1.3 The pit was overlain by 0.48m of fairly homogeneous clay silt (12) which was interpreted as a garden soil and was in turn overlain by a series of deposits (11, 10, 9, 8, 5, 4) which probably represent phases of landscaping.
- 3.1.4 Layer 4 was overlain by fairly compacted layers 2 and 3, which may have formed a rudimentary surface pre-dating the deposition of the existing topsoil of the Linton Quad lawn.

# 3.2 Linton Quad watching brief (Figs 7–9; Plates 2–7)

#### The quad surface

- 3.2.1 The paved quad surface was reduced throughout by 500mm (Fig. 7, sections 104 and 105; Plate 2), prior to its replacement with a new concrete foundation. The excavation revealed a series of layers, all of recent date. The lowest deposit encountered was a crushed concrete layer which was sealed by a layer of gravel topped with tarmac, potentially an earlier service, but certainly of 20th century date. The tarmac was sealed by sand and then the current paving of the quadrangle path surface.
- 3.2.2 During this work the top of the wall footings of the chapel were revealed (Fig. 7, section 104). The footing was constructed of red bricks, of which two courses were revealed, each brick having dimensions as revealed of 230mm long by 70mm deep. These were overlain by the ashlar limestone of the chapel wall, 0.32m in depth.



#### The soakaway and service trenches

- 3.2.3 The soakaway excavation measured 4.2 x 3.1m and was excavated to a depth of 1.5m below the grass surface (Fig. 7, sections 101–103; Plates 3 and 4). The earliest deposit encountered was a brown sandy silt (123), thought to represent a levelling deposit, possibly of imported garden soil, and may be equivalent to layer 12 from the previous test pit. Pottery recovered during the evaluation dated to 1780–1840, although no additional finds were recovered during this phase of work. Layer 123 was sealed by 122, a fairly thick mid brownish-grey gravelly silt deposit from which a single sherd of transfer printed pottery dating to 1800–40 was recovered. This layer may be equivalent to deposits 9, 10, and 11 from the previous test pit.
- 3.2.4 Layer 122 was partially overlain by a gravel deposit (121) which may either represent a further episode of levelling, or perhaps the surface of a path, running in a west-east direction. This deposit was also identified in the service trench that extended from the eastern side of the soakaway. If 121 does represent a path then this would suggest that the quad surface at this time was level with the top of deposit 122, with a hiatus in activity prior to the deposition of overlying layer 120, which sealed both 122 and 121.
- 3.2.5 Layer 120, interpreted as a levelling deposit, and perhaps equivalent to 4 from the evaluation, was a mid to dark grey-brown silty clay. No datable material was recovered from this layer in either the evaluation or watching brief works. This was sealed by layer 119, a compact yellow brown sandy silt, which was in turn sealed by topsoil and grass (118).
- 3.2.6 The service trenches, which connected the soakaway to existing drainage, were sited to the west and east of the soakaway trench. The sequence of deposits was essentially the same as that described above.

#### Service trench on the New Inn Hall Street frontage

- 3.2.7 A service trench was excavated parallel and adjacent to New Inn Hall Street, in the grassed area adjacent to the College entrance (Plate 5). The trench measured up to 2.2m wide and 16m long. The trench was around 0.4m deep, with a narrow deeper central section reduced to a maximum of 1.85m. The majority of the deposits encountered had been partially disturbed by existing services (Plate 7).
- 3.2.8 The earliest deposit encountered was a mid orange-brown clay silt (112) the top of which was uncovered at around 1.35m below the current ground surface. This was overlain by a mid yellow-brown sandy silt with frequent degraded mortar inclusions (102). Layer 102 had been cut by a service trench filled with gravel (110) and was overlain at the southern end of the trench by a layer of crushed brick and limestone rubble (109). At the northern end of the trench layer 102 was sealed by topsoil (101/124).
- 3.2.9 At the southern limit of the trench a wall (100) was constructed of limestone bonded in a sandy mortar 107 (Figs 8 and 9: Plates 6 and 7). The wall, which was orientated broadly WSW-ENE, was perpendicular to the line of New Inn Hall Street, and measured 0.6m wide. The stones that formed the wall did not appear to have been laid in courses, and averaged 250mm on a side. The revealed section of the wall measured



1.1m in height, and a length of c 1.9m was present within the excavated area. To the south of the wall a void allowed a glimpse into a cellar (106), which would have been contemporary with the wall. The roof of the cellar was only briefly observed, but was constructed of slightly smaller limestone blocks than the wall, and was bonded with what appeared to be the same mortar (105). Only around 500mm in depth of the cellar was observed, the remainder appearing to have been backfilled with rubble.

- 3.2.10 Following a site visit and advice from David Radford, The Oxford City Archaeologist, the cellar void was infilled with fine gravel, and not further impacted upon.
- 3.2.11 Wall 100 was abutted by deposit 104, a dark greyish-brown sandy silt with frequent inclusions of limestone fragments. The wall and cellar were overlain by deposit 105 (not shown on section), which appeared to relate to the demolition phase of the building, and was composed of around 30% limestone rubble in a brownish red sandy soil matrix. This was sealed by layer 103, a thin peaty layer, potentially the remnants of a possible former wood-chip surface, and layer 102 in turn sealed by topsoil and turf 101.

# 3.3 Chavasse Quad test pit and borehole survey (Figs 10–13; Plate 8) Test pit

- 3.3.1 At a depth of between 3.25m and 6.1m below ground level a roughly uniform deposit of grey sandy clay (214) was recorded within the auger hole (Fig. 11). Overlying this was a 0.3m deep deposit of rounded gravel and flints within a mid to dark brownish grey sandy clay matrix (215).
- 3.3.2 Above layer 215 was a 0.8m thick layer of dull yellow-brown clayey silt (208), which was observed both within the auger hole and the base of the hand-excavated part of the trench. This deposit produced charcoal flecking together with fragments of pottery and tile dating from 1250-1400. An environmental sample contained cereal grains including barley, wheat and oats, in addition to charcoal and fish and mammal bones.
- 3.3.3 Cut into the surface of layer 208 was a vertical-sided foundation trench (213) containing the footings of a stone wall (212), which measured 0.7m wide and 0.25m deep and was orientated N-S (Figs 11 and 12; Plate 8). The wall was built using local ragstone and bonded with an orange-yellow lime mortar. A sherd of pottery recovered from the wall dated from 1250–1400. Although wall 212 was cut into Layer 208, it is probable that following the partial robbing out of the upper courses, 208 collapsed into the robber trench overlying the western edge and core of the wall. A possible occupation layer comprising a dark grey-brown clay silt (211) butted up to the eastern edge of wall 212, and a sherd of pottery recovered from this dated from 1225–1450.
- 3.3.4 Sealing both layer 208 and wall 212 was a 0.42m deep layer of grey-brown clayey silt (207) which produced charcoal, pottery and fragments of clay pipe dating from 1660–1725.
- 3.3.5 In the south-west corner of the test pit the edge of a roughly circular feature *c* 1.8m in diameter (210) was observed cutting layer 207, interpreted as a cesspit or rubbish pit. The pit appeared to be vertical sided and was filled by a dark grey clayey silt (209) containing numerous medium to large sized irregular limestone blocks. Pottery



- recovered from fill 209 dated from 1660–1725. An environmental sample contained cereal grains, nut shells and the bones of fish and mammals.
- 3.3.6 Overlying fill 209 and layer 207 was a 0.22m thick layer of dark grey-brown clayey silt (206). This contained high levels of charcoal and mortar flecking, together with pottery and fragments of clay pipe dating from 1680–1750. Above this was a similar deposit, 205, a 0.3m thick layer of yellowish grey-brown loamy silt, which produced charcoal flecks, pottery and fragments of clay pipe dating from 1830–80.
- 3.3.7 This context was covered by a patchy layer of very dark grey-brown loamy silt, 204, which was up to 0.12m in depth. This was sealed by 203, a thin layer of orange yellow decomposed mortar. Sealing 203 was a layer of loose made ground composed of a mid grey clayey silt up to 0.16m in depth (202). Overlying this was a second 0.28m deep layer of made ground, a yellowish grey-brown clayey silt which produced pieces of tarmac (201).
- 3.3.8 The area had been landscaped using a 0.3m deep layer of yellow-brown silty clay (200) and a layer of turf.

#### **Boreholes**

- 3.3.9 The natural Pleistocene strata of the Summertown Radley terrace were identified at the base of three of the boreholes (BH2, BH3 and BH4) between 4.15m and 4.68m BGL (Fig. 13; Appendix C). This was variously described as a pale yellowish brown bedded and laminated sand and silt probably deposited in a fluvial environment. The generally fine-grained nature of the deposits suggests in-channel sedimentation, but of lower flow velocity than the coarser grained gravels that normally characterise cold-climate braided stream systems.
- 3.3.10 The contact between the Pleistocene strata and overlying deposits was very sharp, suggesting some truncation has occurred and no weathered land-surface was identified. The overlying sequences can be characterised by a series of variable and mixed dump/disturbed deposits of medieval date; no natural silting deposits were encountered that would suggest the primary natural silting of a large feature. The elevation of the surface revealed the lowest depths occur towards the western end of the transect in BH1, which extended to 59.23m aOD but did not reach Pleistocene strata. Whether this represents the fill of a discrete or linear feature is unclear.

# 3.4 Chavasse Quad strip and record excavation and watching brief (Figs 10 and 14; Plates 9–15)

## The strip and record excavation and service trenches

3.4.1 Exposed in the base of the strip and record excavation (294; Fig. 14, sections 212 and 215; Plate 9) and in the service trench to the east (270, 274; Fig. 14, sections 209 and 210; Plate 10) was a layer of very dark grey clayey silt. Visible within this deposit were lenses of demolition material and burnt material. Layer 270 contained pottery and fragments of clay pipe dating to the late 17th century. Overlying these deposits along the western and northern edges of the excavation was a 0.35m deep layer of dark grey-brown clayey silt loam (269=290, Fig. 14, sections 209 and 212). This also produced



pottery and clay pipe suggestive of a late 17th century date, as well as quantities of domestic refuse including charcoal flecks and butchered bone.

- 3.4.2 Cut into the surface of these layers was the foundation for a rectangular building measuring 5.5m wide and at least 9m long N-S (292, Fig. 10 and Fig. 14, sections 212 and 215; Plate 11). The foundation was constructed using local ragstone and a yellowish orange lime mortar. Filling the space between the wall and the sides of the construction trench was a light reddish brown sandy clay mixed with stone fragments (305). Observed within a service trench east of the building was a cobbled surface (271, Fig. 14, section 210). This appears to be associated with the building and may represent an external courtyard or path surface.
- 3.4.3 Along the western, exterior side of the building, a sequence of deposits had built up against the wall. Directly overlying the foundation trench for the building was a 0.07m-thick layer of very dark grey silty loam containing much charcoal (268=269=304). Above this was a 0.25m layer of grey-brown clayey silt (267=303). Within the strip and record excavation this material was sealed by a 0.2m deep layer of mid brown clay silt (266=302). Above 302 was a 0.08m deep layer of mixed soils, stone fragments and charcoal (301), which was in turn overlain by a 0.05m thick deposit of pinkish-brown sandy silt (300). A 0.07m deep layer of light brown silty loam (299) had accumulated above 300. Above 299 was a 0.1m layer of construction debris, a compacted mix of stone fragments and a yellowish white lime mortar (298) which was identified with layer 265 in the service trench to the west. The only dating evidence for this sequence was provided by four 17th century pipe stems from layer 269.
- 3.4.4 Demolition of the building was represented by a vertical-sided robber trench (306) that cut layer 298. At the southern and north-eastern edges of the strip and record trench this robbing had left three courses of stone *in situ*, but elsewhere the robbing had reduced the wall down to one course. The remnants of the wall were overlaid by a deep deposit of demolition material, consisting of stone fragments, including stone roof tile, brick and clay tiles (291), which was also seen in the services trenches. Some of this material may relate to flooring material associated with the building. Cobbled surface 271 was overlain by a layer (272) composed of a loose yellow-brown silty sand with fragments of stone, which may be a continuation of demolition debris 291. Similarly, layers 275, 276 and 277 (Fig. 14, section 210) may be also be part of this spread of demolition debris.
- 3.4.5 These deposits were cut by the concrete foundations supporting the brick walls of a rectangular building measuring in excess of 13 x 10m in size (295; Plate 12). This is the Central Girls' School of 1900.
- 3.4.6 Overlying these truncated walls was a deep deposit of dark grey silty clay measuring between 0.2m and 0.4m in depth (247=253=264=297), which contained fragments of brick and tile, pottery and clay pipes suggesting a 19th or early 20th century date. These contexts were below modern landscaping layers and features. The base for the modern grassed area was levelled using an imported clean grey silty clay (246=296). Associated with this phase of landscaping were a brick-built flowerbed (244), sand bedding for paving slabs (250) and a tarmac path (251). The ground below the paving slabs had been levelled using tips of made ground (254, 255 and 256).



#### Test pit

3.4.7 At the base of the test pit was a layer of mid grey-brown silty sand containing subangular stone (288) in excess of 0.9m deep (Fig. 14, Section 211; Plate 13). The boundary of this deposit sloped to the south suggesting it may be a tip line, although no conclusive edge of a feature could be observed. Overlying this context on the western and northern edges of the test pit was a grey-brown silty sand containing gravel, mortar flecking and angular brick fragments (287), again tipping down to the south. Sealing layers 287 and 288 was a wedge-shaped layer of pale grey silty sand with mortar flecks (286). Along the western side of the pit this was overlaid by a thin 0.05m band of dark grey silty sand (285). Above this was a levelling layer of pale yellow silty sand with mortar flecks (284). Overlying all these deposits was a 0.6m deep layer of the modern made ground (296), consisting of sterile green-grey silty clay.



#### 4 DISCUSSION

4.1.1 The investigation, although limited in extent, uncovered evidence for activity spanning the occupation of Oxford. The most significant discoveries are a large negative feature that may represent part of the original western boundary of the late Saxon burh, evidence for medieval tenements that occupied this part of New Inn Hall Street before the academic hall was founded, and the western range of the medieval hall.

#### 4.2 The possible primary burh defences

- 4.2.1 The Pleistocene strata that underlay the site were recorded at 60.93m OD by handauguring within the test pit in Linton Quad and 59.62–60.15m OD in boreholes BH2-4 in Chavasse Quad, the difference between the two areas reflecting the topography of the site, which slopes down toward the River Thames to the south. They were buried beneath a considerable thickness of build-up, which amounted to 4.1m in Linton Quad and 4.15-4.68m in the boreholes. There were, however, two locations where the gravel was significantly deeper; in Chavasse Quad, auguring in the test pit extended to 6.1m below ground level (58.00m OD) and Borehole BH1 reached 59.23m OD without encountering gravel. This may be a product of the undulating profile of the gravel, but could alternatively indicate the presence of negative features that truncated the gravel at these locations. There is insufficient evidence to establish the character of any such features, but it is worth noting that the site lies on one possible projected alignment of the western defences of Oxford's original burh (Dodd 2003, fig. 2.4).
- 4.2.2 The line of the defences on this side of the town is highly problematic, but the current understanding is that a square primary burh enclosing a roughly symmetrical on either side of the central crossroads at Carfax, constructed around the turn of the 10th century, was subsequently extended to east and west to form the circuit that was later followed by the line of the medieval town wall (Dodd 2003, 21-5; Haslam 2010). The only previous evidence for the western side of the putative primary burh comes from an excavation at 40 George Street in 1977–8 that found evidence for a very large ditch aligned N-S (Durham et al. 1983, 18-19). The ditch was at least 12m wide, suggesting proportions appropriate to a defensive feature, and pottery from the fill indicated that it was filled in during the early 13th century, not long before the town wall was constructed over the top. If the ditch was indeed part of the burh defences, the projected alignment parallel to New Inn Hall Street would encompass the negative features in Chavasse Quad, an interpretation that is not inconsistent with the single sherd of pottery dating from 1050–1300 from the lowest layer (243) in borehole BH1. However, no evidence was found for the southern part of this alignment during extensive excavations at St Ebbe's during the 1960s and 1970s, and some doubt has been cast on the existence of the primary burh by the apparent absence of evidence for the eastern side from a borehole survey on its projected alignment at Oriel College (Hassall et al. 1989; OA 2017). The issue of the primary burh, and the interpretation of the negative feature in borehole BH1, is therefore currently open to question.

#### 4.3 Medieval tenements

4.3.1 Stone wall 212, which was recorded in the test pit in Chavasse Quad, produced a sherd of Minety-type ware probably dating to the thirteenth or fourteenth century and was



associated with a soil layer (208) that contained a joining sherd, as well as others of similar date. These deposits are therefore likely to be associated with either Trillock's Inn, which was the precursor of New Inn Hall, or earlier domestic tenements fronting onto New Inn Hall Street. Within the limited exposure provided by the test pit, it was not possible to ascertain whether the wall represented part of a building or a tenement boundary, possibly dividing tenements fronting onto New Inn Hall Street from those to the west associated with Bulwarks Lane. The poor condition of the charred plant remains recovered from a soil sample from layer 208 would be consistent with an occupation layer close to a kitchen area, and the sample also produced remains from both freshwater and saltwater fish, the former probably caught locally in the Thames and Cherwell but the latter indicating that the diet of the occupants was supplemented by fish imported from the coast.

4.3.2 The wall (100) and cellar uncovered during the drainage works on the New Inn Hall Street frontage at Linton Quad represent the remains of a building that fronted onto the street. No dating evidence was recovered and the building may therefore be of either medieval or post-medieval date. This area was occupied by Rose Hall during the medieval period, but Agas shows it as a vacant plot, suggesting that it experienced a period of abandonment during the sixteenth century before construction of the large properties shown on Loggan's map. It is surprising, therefore, that pit 15, which was recorded in the Linton Quad test pit, dated from precisely this period, producing pottery dated *c* 1550–1625.

#### 4.4 New Inn Hall

4.4.1 Building 292 corresponds with the west range of the former New Inn Hall, as depicted on Agas's 1588 map of Oxford (Fig. 3) and subsequent historic maps. Identification of the structure as a medieval building is somewhat at odds with the dating evidence from the excavation, since soil layers into which the foundations were cut produced pottery and clay tobacco pipes dating from the late seventeenth century, but this might indicate no more than that the layers continued to be reworked (and artefactual material incorporated into them) during this period. Nothing of the range survives above ground, since the hall was largely demolished during the 19th and 20th centuries, and the layout of the hall is mainly known from a study by Pantin (1964, 31-100), which was based on cartographic depictions, specifically a 1675 view of the front of the hall by Loggan in Oxonia Illustrata, William Williams' 1733 plan in Oxonia Depicta and King's 1848 plan of the college. The hall appears to have originally been a private house that was converted to use as an academic hall (originally Trillock's Inn) during the fourteenth century, and Pantin reconstructed it as comprising a main range that extended along the road frontage, separated from the rear, western range by a small quadrangle. The part that was exposed by the excavation comprised the north end of the western range. It is uncertain whether the structure revealed in the excavation was part of the original house or a fifteenth-century construction. The New College accounts show that when they took possession of the hall in 1392 it had a hall, solar, chapel, and various chambers, which Pantin places on the street frontage (Ibid., 74). Whether the western range existed at this time is unknown, but there was certainly significant building work in 1420-1 and 1476-9. Wood suggested that the hall was entirely rebuilt during this time, and that it was for this reason that it gained



the name 'New Inn', and it is possible that the western range was added then (Wood 1786, 676). Its recorded width of 5.5m corresponds well with Pantin's estimated dimension of 20 feet (6m) wide (Pantin 1964, 75). His reconstruction of the hall indicates that the part of the western range that was exposed within the excavation comprised a kitchen and buttery, with chambers to the south (Ibid., figs 10 and 11).

- 4.4.2 Demolition layer 291 yielded two large, fresh end-pieces of 'Tudor' red brick and a large fragment from a thirteenth- or fourteenth-century crested ridge tile, which provide some indication of the appearance of the building. A decorated floor tile bearing a white slip design, including fleur-de-lys and fabulous beasts, may also have adorned the hall, although its date of *c* 1330–1400 may indicate that it originated from the buildings of Trillock's Inn. The yard between the western range and the buildings on the road frontage had a cobbled surface (271), although it is uncertain whether the underlying layer (274) represented a make-up layer for the surface or an earlier soil layer. To the rear of the western range, garden soil 290 corresponds with the gardens and orchards depicted here by Agas and Loggan. The immediately adjacent part of the layer was overlain by a sequence of deposits built up against the wall of the range, which may represent surfaces and occupation soils. Pit 210, dated by pottery to *c* 1660-1725, was also situated here.
- 4.4.3 The latest depiction of the western range appears on Faden's map of 1789, and it is absent from King's 1848 plan of the college. This suggests that the most likely context for the demolition of the building is the programme of rebuilding undertaken by principal John Cramer (1831-47), during which the building now known as Hannington Hall was constructed (Salter and Lobel (eds) 1954, 338).
- 4.4.4 When New Inn Hall was handed to Balliol College in 1887, the Principal's Lodging (the older part of the hall) was sold to the city and demolished, and its site used to build the Central Girls' School (Building 295).
- 4.4.5 The finds assemblage was unremarkable and produced little insight into the occupation of the hall. The pottery assemblage from the investigations in Chavasse Quad was very small, the most interesting piece being part of a Bellarmine bottle or jug with an applied medallion depicting an anchor and the monogram 'PVA' for Pieter van den Ancker a Dutch merchant who settled in London in the middle of the seventeenth century. This is only the second example of this monogram to be found in Oxford. The animal bone represents table waste and was dominated by caprines, with some cattle also present. Interestingly, ageing of the caprines suggests that they were of an age to be considered mutton, indicating that the diet of the residents did not comprise prime cuts.



#### APPENDIX A FINDS REPORTS

#### A.1 Pottery

A.1.1 Pottery was recovered from all four stages of the investigation. Medieval pottery fabrics are those of the Oxfordshire County type series (Mellor 1994). Post-medieval pottery fabric codes are those of the Museum of London which can be applied to most post-medieval types in south-east England (MoLA 2014).

#### Linton Quad test pit

#### by John Cotter

- A.1.2 A total of 139 sherds of post-Roman pottery weighing 1417g was recovered from seven contexts (Table 1). Most of this is of post-medieval date with a few (mainly residual) sherds of definite medieval date also present. The assemblage is mostly in a very fragmentary condition with no complete profiles present. However most of the late medieval and post-medieval sherds are fairly fresh and occasionally fairly large. Ordinary domestic pottery types are represented and all typical of the wares commonly found in Oxford. In terms of dating there is a strong presence of late medieval/early post-medieval pottery (mainly 16th to early 17th century) and also a strong presence of later post-medieval pottery types (18th to 19th century). Although no pottery as late as the 20th century was identified the ceramic building material includes a few pieces that are almost certainly of this date (see below; context 1). A small number of residual medieval sherds as early as the late 11th or 12th century were also noted.
- A.1.3 The ten or so sherds of medieval pottery are mostly small and worn and all residual in late 18th- or 19th-century contexts (1, 10 and 12). The earliest pieces are two sherds of Cotswold-type ware (OXAC, c 1050-1250) and a sherd of medieval Oxford ware (OXY, c 1075–1300). A fairly fresh sherd from the body of jug in Olney Hyde-type shelly ware (OXCG, c 1150–1400), from north Buckinghamshire or Northamptonshire is one of the rarer medieval fabrics from the city and the only piece of note. The site assemblage is dominated by late Brill/Boarstall ware (OXBX, c 1400–1625) and most of this occurs as fresh sherds of jugs and jars which are clearly not residual in their contexts (13,14, 20 and 21). The fabric can be difficult to date very closely when it occurs in isolation (as it does in 14, 20 and 21) but most of this occurs in a very similar smooth pink-buff fabric often with minimal glaze and this (and the rim forms) probably place it in the final phase of the Brill/Boarstall industry c 1550-1625. The largest assemblage of this fabric (36 sherds from 13) also occurs with a squat German Frechen stoneware drinking jug with form and decoration confirming the latter dating and possibly even as late as c 1570–1625.
- A.1.4 The later post-medieval contexts (1, 10 and 12) comprise a range of commonplace post-medieval wares with an emphasis on 18th- and 19th-century Staffordshire-type products such as refined creamwares and whitewares mainly in the form of tablewares. London stonewares and tin-glazed wares also occur. Local post-medieval red earthenwares (PMR) including storage jars and flowerpots are also fairly common. The only item of note is a inturned rim from an unusual small globular vessel in mid



18th century Staffordshire slipware (STSL) which may be from something like an 'owl' or 'bear' jug (10). No further work on the assemblage is recommended.

Table 1: Pottery from Linton Quad test pit

Context	Spot-	Sherds	Weight	Comments
1	c 1820– 1900	19	(g) 155	Fresh and scrappy sherds. 1x transfer-printed ware (TPW). 1x blue-bodied stoneware (BLUE) teapot rim. 1x English porcelain (ENPO). 2x developed Creamware (CREA DEV). 4x post-med red earthenware flowerpot (PMR FLP, probably 19C) 2x glazed post-med red earthenware (PMR) incl prob 18C jar rim and jug rim. 1x footring base Staffs white salt-glazed stoneware (SWSG). 1x prob 18C London stoneware bottle/jar sherd (LONS). 1x piecrust-dec dish rim Staffs combed slipware 18C (STSL). 1x worn bo (body sherd) prob Cheam ware (CHEA). 2x early Brill/Boarstall ware (OXAW) glazed jug and cookpot bos 13/14/C. 1x Med Oxford ware (OXY) cpot bo. 1x worn bo Cotswold-type ware (OXAC c 1050–1250)
10	c 1720– 1780	7	99	2x fresh bases from 2 different vess in SWSG (1 flat, 1 footring). 1x dish rim in green-glazed post-med Brill slipware (BRSL, c 1650–1800). 1x rim from very unusual small globular pot/jar with plain inturned rim (diam c 40mm) in Staffs slipware (SWSG) with dark red-brown slip allover ext and horiz row of white slip blobs under clear glaze, maybe top of an owl or zoomorphic jug? Wide dish/charger rim in green-glazed border ware (BORDG). Squared cooking pot rim in oxidised OXAW. Sagging cpot base OXAC
12	c 1780– 1840	57	707	Mixed assemblage fresh and worn. Mainly post-med. Latest = small bo painted Pearlware dish (PEAR) and 1 other plain PEAR bo. 2x CREA DEV (c 1760–1830). 4x tin-glazed ware (TGW) all 18C incl chamberpot rim and bos from 2 blue dec dishes. 3x Westerwald stoneware (WEST) incl tankard bo and joining sherds highly dec jug with purple and blue glaze and applied rosette pads and lentoids. 1x bo Frechen stoneware (FREC). 2x Raeren stoneware (RAER, c 1480–1550) incl Aachen-style collared jug rim. 4x BORDG incl dish rim and porringer bo/handle. 1x Brown border ware (BORDB) cup/jug bo.10x PMR incl bowl rim and jar rim. 1x BRSL bowl/dish rim. 1x bo black-glazed PMR conical mug/tyg (PMBL). 1x bo CHEA prob biconical jug (c 1350–1500). 21x mainly late med Brill/Boarstall ware (OXBX) incl drinking jug rim, thickened rim from jug/pitcher, drinking jug flat base, green-glazed jug bos and plain bos (1 is prob 13/14C Brill strip jug OXAM). 2x East Wilts ware (OXAQ c 1150–1400) incl sag cpot base. 1x Olney Hyde-type shelly ware (OXCG, c 1150-1400 = fresh bo from



Context	Spot-	Sherds	Weight	Comments
	date		(g)	
				wheel-turned jug with deeply thumbed handle base
13	c 1550–	39	349	All fresh but fragmentary. 1x Frechen stoneware
	1625			(FREC) squat globe and shaft jug rim (diam 70mm)
				with applied 5-petal rosette or daisy on ext rim shaft
				( <i>c</i> 1550–1625, or poss <i>c</i> 1570–1625?). 1x borderline
				early PMR or late Brill OXBX fine redware storage
				jar/cistern rim with horizontal applied and thumbed
				strip under rim and large splash clear brown glaze. 1x
				small flat base sherd (diam 50mm) prob from a cup in
				dark brown/black-glazed redware - poss Brill
				Cistercian type (CSTN c 1500–1650) or early black-
				glazed redware (PMBL c 1580–1750) but probably
				L16/E17C at latest. 36x v late smooth late med Brill
				(OXBX) all probably c 1550–1625 pale pink to orange-
				buff to nearly orange, incl plain everted jar rim,
				drinking jug rim and prob drink jug bases, drink jug
				bos, jar handle frags; mostly unglazed, some with
				splashes green or clear glaze
14	c 1550-	8	32	Fresh bos - all v similar v late smooth OXBX from 2–3
	1625			vess. Only 1 clear glazed. Possibly JOINS (13)
20	c 1450–	8	73	Fresh bos All OXBX incl 1x bo unglazed small ?drinking
	1625			jug in smooth late pink-buff fabric. 4 sherds prob
				from the same glossy green-glazed ?drinking jug (poss
				copying Tudor Green ware?). 2 bos from a sandier
				OXBX green-glazed jug with band of horiz combed
				dec. 1 unglazed coarser jug/jar lower wall sherd
21	c 1450–	1	2	Small fresh basal/wall sherd probably sandy OXBX
	1625?			cooking vessel with clear v fresh greenish-brown
				glaze int and poss traces of sooting ext
Total		139	1417	

#### Linton Quad watching brief

by John Cotter

A.1.5 The watching brief produced a single sherd (3g) of transfer printed Pearl ware (PEAR TR) teacup with houses on external surface and foliage border on internal surface from context 22, *c* 1800–40.

#### Chavasse Quad test pit and borehole survey

by John Cotter

A.1.6 A total of 58 sherds weighing 832g was recovered from nine contexts including sieved samples but excluding borehole samples (Table 2). The assemblage is mostly in a very fragmentary condition with no complete profiles present, though some of the medieval and post-medieval sherds are fairly fresh and occasionally fairly large. Ordinary domestic pottery types are represented and all are typical of the wares commonly found in central Oxford. In terms of dating there is a fairly strong presence



- of medieval pottery (mainly 13th-14th century) and early post-medieval pottery (mainly 17th to early 18th century) and two or three pieces of later post-medieval date (late 18th-to 19th-century) but nothing definitely later than this. A small number of residual late Saxon and Saxo-Norman sherds were also noted.
- A.1.7 The three earliest pieces are small and worn and all residual in a 13th- or 14th-century context (208). These include a cooking pot sherd in late Saxon Oxford shelly ware (Fabric OXB, *c* 775–1050), a sherd of St Neots-type ware (OXB, *c* 900–1100) and a sherd of Kennet Valley A ware (OXBF, *c* 900–1250). There is also a small sherd of Cotswold-type ware (OXAC, normally dating *c* 1050–1250 in Oxford, but can be as early as *c* 875). A few sherds of medieval Oxford ware (OXY, *c* 1075–1300), including a cooking pot rim, are also present (208 and in borehole sample 229). As usual in Oxford, the dominant medieval type comprises sherds of glazed Brill/Boarstall ware jugs (OXAM, *c* 1225–1625) including decorated pieces typical of the 13th-14th centuries. A few (largely unglazed) pieces of late medieval Brill/Boarstall ware probably date to the 16th or early 17th century. Joining sherds probably from a large storage jar in Minety-type ware (OXBB) were noted from Contexts 208 and 212 and probably date to the 13th or 14th century. This is a regional import from north-west Wiltshire and is a relatively uncommon type from Oxford sites.
- A.1.8 The post-medieval assemblage (after c 1480) is fairly unremarkable and mostly comprises fragments of London tin-glazed ware dishes and drinking vessels (TGW) and glazed local redwares (PMR) of the 17th and early 18th centuries. The clay pipe assemblage has a similar dating emphasis (see below). A sherd of transfer-printed whiteware (TPW) dating to c 1830–80 is the latest piece present.

Table 2: Pottery from Chavasse Quad test pit and borehole survey

Context	Spot-	Sherds	Weight	Comments
	date		(g)	
205	c 1830– 1880	9	90	1x Transfer-printed whiteware (TPW). 1x Creaware bowl rim (CREA DEV). 1x deep cup rim prob E19C Chinese porcelain (CHPO). 1x bo (body sherd) London stoneware mug (LONS). 3x tin-glazed ware (TGW) incl footring bases of 2 'charger' dishes <i>c</i> 1650–1700. 1x bo post-med redware (PMR). 1x jug bo ?late Brill/Boarstall ware (OXAM or OXBX)
206	<i>c</i> 1680– 1750	3	184	1x pedestal base from white TGW ointment pot with globular body (L17/E18C). 1x heavily potted deep bowl in PMR with heavy beaded rim and int dark brown glaze. 1x rim yellow-glazed Border ware (BORDY) Type 1 chamberpot rim - M17C?
207	<i>c</i> 1660– 1725	8	169	1x smallish bo black-glazed post-med redware (PMBL) with v glossy Jackfield-type glaze. 1x bo BORDY. 3x Frechen stoneware (FREC) incl jug neck. 3x late Brill (OXBX) incl flanged bowl rim c 1525–1625, other 2 probably 16-17C as well
208	<i>c</i> 1250– 1400	7	155	3x Brill/Boarstall ware (OXAM) jugs (3 vess) incl fresh jug rim with ribbed neck and splashes green glaze; sag base (worn) and small bo from strip jug with rouletted red and white horiz strips under green glz. 1x large bo (65g) from



Context	Spot- date	Sherds	Weight (g)	Comments
				unusual vertical-walled large ?storage jar in Minety ware (OXBB, JOINS (212)) latter with a traces of horiz applied strip - poss on the girth/mid-point of the vess (form probably as Mellor 1994, fig. 40.1). 3x worn residual Saxo-Norman sherds incl 1x cook pot shoulder/neck Late Saxon Oxford shelly ware (OXB c 775–1050); 1x bo St Neots-type ware (OXR, c 900–1100); 1x bo Kennet Valley A ware (OXBF, c 900–1250)
208	<i>c</i> 1250– 1400	10	50	Sieved Sample <221>. 4x fresh bos OXAM jugs from 3 vess incl 2 strip jugs. 3x smallish bos East Wiltshire ware (Kennet Valley B ware <i>c</i> 1150–1350). 2x small worn bos Medieval Oxford ware (OXY). 1x small worn bo Cotswold-type ware (OXAC, <i>c</i> 875–1250, mainly <i>c</i> 1050–1250)
209	<i>c</i> 1480– 1550	2	16	Fresh bos Raeren stoneware mugs (RAER) from 2 separate vess
209	<i>c</i> 1660– 1725	17	125	Sieved Sample <220>. 2x glossy black glazed PMBL (as in (207)). 4x PMR bos. 4x unglazed OXBX. 1x rim from globular cup in purple-speckle glazed TGW (c 1630–80). 1x rim scrap FREC jug. 1x unglazed BORD rim – poss from a lid or a chicken-feeder? 1x brown-glazed BORDB. 1x scrap BORDY. 1x OXAM flat base from Tudor Green-style flaring cup (c 1380–1500). 2x scraps OXY
211	<i>c</i> 1225–1450	1	15	OXAM stump from green-glazed jug handle, fairly worn
212	<i>c</i> 1250– 1400	1	28	Body sherd from OXBB jar (joins 208) limestone dissolved from int surface both sherds
216	14C+	1	1	CBM: Scrap orange sandy brick or tile – indeterminate but sugary fabric similar to both 14C Penn tiles and postmed brick
217	<i>c</i> 1225– 1500	2	6	POT: Sherds probably from the same flat jug base in Brill/Boarstall ware (OXAM). Green glaze speckles underside
217	<i>c</i> 1250– 1450	3	14	POT: 1x small sherd (1g) jug in Brill/Boarstall ware (OXAM). Yellow glazed with trace of red decoration. CBM: Joining scraps from med pegtile in early cream fabric 13-14C
217	<i>c</i> 1050– 1250	1	13	POT: cpot rim in OXAC (or OXBB?)
217	13-14C	1	33	CBM: Pegtile edge in med pinkish fabric
217	<i>c</i> 1075–1300	1	4	POT: cpot bo in OXY
219	13-14C	1	11	CBM: Scrap v worn med red pegtile
220	13-15C	1	17	CBM: Scrap v worn med/late med red pegtile
228	<i>c</i> 1225–1450	1	5	POT: Body sherd OXAM jug with traces of red slip dec. worn
229	<i>c</i> 1075–1300	1	31	POT: Fresh cooking pot rim in Med Oxford ware (OXY), with thumbed dec on top



Context	Spot-	Sherds	Weight	Comments
	date		(g)	
237	<i>c</i> 1225– 1500	1	5	POT: v worn body/base sherd green-glazed ?OXAM, poss from thick flat base of jug? Cream sandy fabric. Otherwise possibly green-glazed Border ware (BORDG, c 1550–1700)?
Total		72	973	

#### Chavasse Quad strip and record excavation and watching brief

by Paul Blinkhorn and John Cotter

- A.1.9 The pottery assemblage comprised 31 sherds with a total weight of 734g (Table 3). All the sherds were post-medieval in date. The range of fabric types is typical of sites in the region and consists of a mixture of utilitarian and display vessels.
- A.1.10 The sherd of TGW from context 270 has sponged purple manganese decoration on the exterior of what was almost certainly a mug. Such vessels with this finish were a staple product of the London tin-glazed industry in and around the third quarter of the 17th century (Orton 1988, 321). The sherd of LONS from context 248 is the neck of a late 19th or early 20th century 'rum jar'.
- A.1.11 The most interesting item in the assemblage is a sherd of decorated Frechen stoneware (FREC) from the test pit (Fig. 15). This has the upper part of an applied medallion from the front of a Bellarmine bottle or jug bearing the monogram 'PVA' for Pieter van den Ancker a Dutch merchant who settled in London in the middle of the 17th century. Pieter traded in French and German wine and also imported stoneware bottles from Frechen some of them marked with his monogram (showing an anchor in the lower half of the medallion). The mark is closely datable to *c* 1655-65. Several examples of this mark are known from London but this is only the second example identified from Oxford (Gaimster 1997, cat. no. 70).

Table 3: Pottery from Chavasse Quad strip and record excavation and watching brief

	RA	ER	ВО	RDG	FF	REC	PI	MR	PΝ	/IBL	TG	W	LO	NS	
Context	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	Date
Test Pit					1	18					1	7			U/S
248					1	4	1	5					1	69	MOD
270			1	8			2	10	2	30	1	4			M17thC
290			3	109	4	70	2	35	2	142	1	5			17thC
291			1	37											M16thC
294	1	26	1	2	1	15	3	95			1	43			M16thC
Total	1	26	6	156	7	107	8	145	4	172	4	59	1	69	

#### A.2 Clay tobacco pipes

A.2.1 Clay tobacco pipes were recovered from Linton Quad test pit and both phases of work at Chavasse Quad.

#### Linton Quad test pit



#### by John Cotter

A.2.2 Sixteen pieces of clay pipe weighing 52g were recovered from two contexts. These have not been separately catalogued but are fully described here. Most of the pieces are likely to be residual in their contexts.

Context 10, spot-date: late 18th or 19th century

A.2.3 Five pieces (11g): All stem fragments. Latest is a fresh slender stem (50mm long) with a narrow stem bore diameter of *c* 1.5mm suggesting a late 18th or 19th century dating. The four other stems are shorter and worn. These include two 18th century stems and two 17th-century stems – one with an unusually wide stem bore (4mm diameter).

Context 12, spot-date: late 18th or 19th century

A.2.4 Eleven pieces (41g): Comprises ten stems and one bowl fragment. The stems include a fresh slender stem (35mm long) with a narrow stem bore diameter of c 1.3mm suggesting a late 18th or 19th century dating. Seven stems are probably of 18th century date and two of 17th-century date – all fairly worn. The remaining fragment is from the damaged base of a pipe bowl probably of late 17th-century or early 18th century date with a very damaged heel or stubby spur and with a stem bore diameter of c 2.5mm.

#### Chavasse Quad test pit and borehole survey

by John Cotter

A.2.5 A total of 67 pieces of clay pipe weighing 413g were recovered from four contexts (including one sieved sample). The assemblage comprises 18 pipe bowl fragments (from a minimum of 18 bowls), 46 pieces of stem and three mouthpieces. Though fragmentary, the condition of the material is quite fresh and includes ten complete bowls and some stem pieces up to 80mm long. A mixture of fairly fresh and fairly worn material is present. Most of the bowls are local types (though showing London influences) of the later 17th and early 18th century types, all plain and unmarked. These have been classified by comparison to the published local typology (Oswald 1984) or the London type series (Atkinson and Oswald 1969). There is probably nothing later than *c* 1720. Two smaller bowls of *c* 1630–50 are also present but slightly residual (207).

#### Chavasse Quad strip and record excavation and watching brief

by John Cotter and David Higgins

*Introduction and methodology* 

A.2.6 A total of 175 pieces of clay pipe weighing 1175g were recovered from 8 contexts (including finds from a test pit counted as unstratified). These have been catalogued and recorded on an Excel spreadsheet. The catalogue records, per context, the spotdate, the quantity of stem, bowl and mouth fragments, the overall fragment count, weight, and comments on condition and any makers' marks or decoration present. The minimum number of bowls per context was also recorded. Full catalogue details



remain in the archive. Most of the pipe bowls can be paralleled with the local Oxford typology based on pipes from St Ebbe's (Oswald 1984), although this has been updated where necessary. Other bowls are identified in the catalogue by codes based on Atkinson and Oswald's (1969) London pipes typology, with bowl types assigned to an abbreviated code (eg. AO22).

#### Summary of the assemblage

A.2.7 The pipes are mostly in good condition, generally fresh and unstained, with a high proportion of complete bowls present and many quite long pieces of stem – in two instances up to 120mm long. Only a moderate degree of residuality was noted in a few contexts. In total there are 33 pieces of pipe bowl (from the same number of pipes), 6 mouthpieces and 136 stem fragments. Only one pipe bears a maker's mark, and only one piece (a stem) shows any decoration. Evidence for smoking on most of the bowls demonstrates that they represent occupation debris. The assemblage has a strong late 17th-century dating emphasis, with slighter evidence of activity into the early 18th century. A summary of context details and spot-dates is provided in Table 4 while a breakdown of bowl types is provided in Table 5.

Table 4: Summary of clay pipes

Cxt	No. pieces	Spot-date	Comments	Ctx Description
269	4	17thC	Four 17thC stems.	Occupation Layer
270	91	c 1670–90	Large group including 19 bowls (many complete) and 5 mouthpieces. Bowls generally range from c 1660–90 with a deposition date during the 1670s most likely. The group includes one notable stem decorated with red ochre lines (Fig. 16.1). Most of the bowls are typical local spur types with a barrel shaped form (Oxford Type B), but there is one example with more pronounced curves in a local style (Developed Ox Type B, Fig. 16.2). A damaged bowl of c 1680–1710 may be intrusive?	Occupation Layer
275	1	17thC	One stem.	Demolition?
287	4	<i>c</i> 1690–1750	Three stems and a bowl of c 1690–1750.	Test Pit
290	48	c 1660–90	Eleven bowls (mostly complete). These range from c 1640–90 in date, with the majority being c 1660–80. The stems are 17thC and probably contemporary.	Garden Soil
291	10	Early 18thC?	All stems. Mostly 17thC, but 2 probably early 18thC in date.	Demolition?
294	5	<i>c</i> 1670–90	Four 17thC style stems and a bowl of <i>c</i> 1670–90.	Occupation Layer (= 270)



Cxt	No. pieces	Spot-date	Comments	Ctx Description
U/S	12	c 1660–90	Eleven stems and a bowl of c 1660–90, from a test pit, with a Thomas Hunt stamp on the heel (Fig. 16.3).	Test Pit
Total	175			

Table 5: Quantification of pipe bowls by type and date

Bowl Type	Date	No. Bowls
Oxford: A (overlaps	1630-55/60	6
with London AO13)	1660-80	
West Country style	1660–90	1
(Thomas Hunt I,		
maker)		
Oxford: B	1650–90	23
	(here mostly	
	1670-90)	
Oxford: B	1670-1730	1
(developed)		
London: AO20	1680-1710	1
Oxford: C/D hybrid	1690-1790	1
(similar London	(here 1690-	
AO25)	1750)	
Total Bowls		33

- A.2.8 The largest and most significant group is from context 270, which produced 91 fragments of pipes, including 19 bowls. One of these is a burnished body fragment, most likely from a spur bowl, but the other types can be divided into two groups; those with heels and those with spurs.
- A.2.9 There are four heel pipes represented, two of which have complete bowls of *c* 1660–80 (AO13, Atkinson and Oswald's London type 13). These two also match forms of *c* 1660–70 from a pit group at Queen's College Provost's Garden, Oxford (Higgins forthcoming). These bowls are not burnished and they are made of a fine fabric without any obvious inclusions. There is a damaged heel of the same type. The fourth heeled example (also damaged) is of a later form, similar to a London type 20 of *c* 1680–1710, but certainly of local manufacture, since it is made of a fine sandy fabric, probably from the Shotover Hill area. It is also the only heel bowl with a burnished surface in this group. While it could be an intrusive piece and date from as late as *c* 1710–20, it could equally be an early example of a new form dating from around 1680.
- A.2.10 In contrast to the heel bowls, the 14 spur bowls are all burnished, marking them out as a better quality style of pipe. There is one spur fragment that could be a little earlier (perhaps residual) but the others are nearly all Oxford Type B (c 1650–90: local versions of the London AO15 bowl, which dates from c 1660–80). Some of the forms are quite large, perhaps suggesting that they are as late as c 1690, and they typically have thick,



chunky stems with barrel-shaped bowl profiles. They are of later types to the spur bowls found in the Queen's College pit group of c 1660–70 and so most likely to fall into a c 1670–90 bracket, with deposition during the 1670s being most likely. Most of the bowls have fine fabrics without obvious inclusions, but some have fine sandy inclusions visible with a 10x lens, showing that they are made of a local clay (probably from the Shotover Hill area). One bowl (Fig. 16.2) has a rather different form, with much more pronounced curves to the bowl. This piece represents the introduction of new stylistic characteristics, which went on to become typical of the spur forms produced in the Oxford area during the next few decades ('Developed' Oxford Type B, c 1670–1730, see also Higgins 2007, fig. 21.34–5).

- A.2.11 The bowl forms from context 270 all cluster around the *c* 1660–90 period, with almost all falling within a *c* 1670–90 bracket. A deposition date during the 1670s seems most likely for this group, and all the stems appear to be of contemporary types. This dating and consistency is important, since one of the stems belongs to a very rare category that has been decorated with coloured lines on its surface. This piece (Fig. 16.1) can therefore be dated by association to *c* 1670–90, and has lines of reddish brown ochre running along it. These 'rust-coloured' lines often fade out rather at the edges and there is a general background 'tone' of colour in other areas. The colouring seems rather ephemeral and could well have been subject to smearing or loss due to handling during use, burial or subsequent washing. Applied colouring like this is extremely rare and only a handful of other examples have ever been noted also from Oxford. It appears, therefore, that this was a decorative method peculiar to Oxford, but one that was used regularly enough for a few examples to have survived.
- A.2.12 The only other piece of note is an unstratified bowl from a test pit (Fig. 16.3). This dates from *c* 1660–90 and is the only marked pipe in this assemblage. The heel has the incuse stamp THO/MAS/HVNT for one of the Thomas Hunts from Marlborough in Wiltshire, some 35 miles to the south-west of Oxford. Thomas senior was born into a famous pipe-making family at Norton St Philip, Somerset, in 1639. He was working in Marlborough by the 1660s and left the pipe-making business there to his son, also Thomas, when he died in 1692 (Lewcun 1985, 18–20). His son continued the business into the early 18th century but this bowl form and style of mark dates from *c* 1660–90, when his father would have been running the business. Thomas Hunt pipes are very common in the Marlborough area, showing that they ran a prolific workshop, and examples were traded a considerable distance, as witnessed by this piece. Examples of this type of Thomas Hunt mark have been recorded previously from excavations in both Abingdon and Oxford, showing that they were regularly traded into this region.

#### Catalogue of illustrated pieces (Fig. 16)

1 A stem fragment decorated with reddish-brown coloured stripes that look like some type of 'rust-coloured' ochre. The stem comes from a context group containing bowls clustering in the c 1670–90 bracket and with deposition in the 1670s being most likely. The stem itself is not burnished, nor does it contain any obvious sandy inclusions. The stem bore measures 8/64" (c 3.5mm). A couple of other stems decorated with similar reddish stripes are known from Oxford, suggesting that it was a particular decorative technique that was occasionally used in the city during the 17th century. Context 270.



2 A spur bowl from a context group containing bowls clustering in the c 1670–90 bracket and with deposition in the 1670s being most likely. The other bowls are all barrel-shaped and this stands out as a new style that was probably starting to be introduced at the time ('Developed' Oxford Type B, c 1670–1730). The fabric has fine sandy particles visible with a 10x lens showing that it was obtained locally, probably from the Shotover Hill area. The rim is bottered and half-milled. There is a poor burnish on the bowl and stem, but only on the upper surfaces so that the underside of the stem and front right hand side of the bowl have been missed. This is an unusually poor finish. Stem bore 8/64" (c 3.5mm). Context 270.

3 A West Country style bowl dating from c 1660–90, with a bottered rim and a fine burnish. There is no rim milling. The heel has an incuse stamp for the first Thomas Hunt of Marlborough, who was a prolific maker during this period and exported widely, with examples of his pipes having been found on previous excavations in Abingdon and Oxford, which is about 35 miles north-east of Marlborough. Good quality imports from the Wiltshire/Hampshire region formed a small but regular part of the pipe supply to the Oxford area throughout the 17th and early 18th centuries. Stem bore 7/64" (c 3mm). Unstratified find from a test pit (Cast 745.6; Die 1121).

#### A.3 Ceramic building material

by John Cotter

A.3.1 Ceramic building material (CBM) was recovered from Linton Quad test pit and both phases of work at Chavasse Quad.

#### Linton Quad test pit

A.3.2 A total of 27 pieces of CBM weighing 1170g were recovered from five contexts. This comprises a mixture of medieval, post-medieval and modern CBM, mostly in a poor and fragmentary condition. The dating broadly agrees with the pottery spot-dating. The assemblage has not been separately catalogued but is described and quantified below.

Context 1, spot-date: 20th century

A.3.3 Four pieces (193g). Poor/very fragmentary condition. Three pieces of very hard granular machine-made orange-brown brick – probably (?mid) 20th century. One piece of corduroy-textured (ribbed) drainpipe or service-pipe in fine white fabric – late 19th/20th century. One small piece of curved orange terracotta ?drainpipe of similar date?

Context 12, spot-date: 18th-19th century

A.3.4 Eight pieces (519g). Poor/fragmentary condition. Includes six pieces of orange sandy flat roof tile. Three of these (from two tiles) are in a very hard sandy fabric and fresh condition — probably 18th or early 19th century. The three other very small worn fragments of roof tile probably include tiles of medieval and early post-medieval date. There is a single fairly large lower edge fragment from a ridge tile in a similar fabric to Oxford 'St Giles-type' tiles (15th-17th century) but in a light brown fabric with a broad grey core and a broad patch of greyish ash glaze along the edge. A 16th- or 17th-



century date is likely for the latter. Also a single edge fragment from a very hard orange sandy brick – possibly of 18th-19th century date?

Context 13, spot-date: 16th century

A.3.5 Eleven pieces (360g). Poor/fragmentary condition. Includes three fairly large joining fragments (246g) from a curved ridge tile (including one lower corner/edge fragment) in a smooth light orange fabric with a pale grey core and traces of a brown medieval-style external splash-glaze from higher up the tile near the (missing) apex. The fabric resembles medieval Oxford Fabric IIIB orange sandy roof/ridge tiles but the fabric is lighter in colour and unusually smooth and almost sand-free. An early post-medieval date, probably 16th-century, is therefore suggested. A sample of this fabric has been added to the Oxford medieval tile fabric reference collection. The nine remaining much smaller fragments (114g) come from several indeterminate orange roof or ridge tiles of late medieval or early post-medieval date. These may include a few small scraps from the ridge tile just described plus tiles in a coarser sandier fabric.

Context 20, spot-date: 15th-17th century?

A.3.6 Two pieces (94g). Poor/fragmentary condition. Includes a larger/fresher edge fragment (87g) probably from a ridge tile 17mm thick. This is in a paler orange-buff fabric variant of the Oxford 'St Giles-type' tiles (15th-17th century). It has specks of clear glaze externally. The other piece (7g) is a scrap from a medieval roof or ridge tile in an orange sandy fabric with a grey core and brown external glaze (13th-16th century).

Context 21, spot-date: 15th-17th century?

A.3.7 One piece (4g). Poor/very fragmentary condition. Scrap from plain roof tile in orange sandy Oxford 'St Giles-type' fabric.

#### Chavasse Quad test pit and borehole survey

- A.3.8 A total of 20 pieces of CBM weighing 1.75kg were recovered from seven contexts (including sieved samples). The assemblage dates from the 13th or 14th century until perhaps the 17th or 18th century. Nothing definitely later than this was noted.
- A.3.9 As is usual in Oxford, fragments of plain flat roofing tile (peg tile) predominate, some with circular nail holes. Quite a few pieces in 13th-14th century fabrics were identified. One piece is in a smoother red fabric typical of the later 16th century onwards (206). The most significant pieces comprise worn corner fragments from two separate medieval decorated floor tiles, residual in a later context (209). These have traces of decoration in 'printed' white slip: the larger piece may show part of a heraldic beast (perhaps a gryphon?) within a roundel or a shield, although the design cannot be closely matched with local published typologies of medieval tiles. The smaller corner piece, although in worse condition, may show part of a stylised floral/geometric radial design which might perhaps match a known local design (Haberly 1937, no. CCXLVI). Both tiles are in a sandy orange-red fabric and can be broadly related to late medieval 'printed' tiles in the Penn/Chiltern tradition; they probably date to the period *c* 1330–1400.



A.3.10 The only other notable item is part of a thick curved ridge tile in the coarse sandy 'St Giles' type fabric typical of the 15th to the 17th century (209). A large but damaged piece of red 'Tudor' brick came from the same context as these last few pieces.

#### Chavasse Quad strip and record excavation and watching brief

- A.3.11 Ten pieces of CBM weighing 4.8kg were recovered from seven contexts. It dates from the 13th or 14th century up to the late 19th or 20th century. All but one of these contexts, however, also contained 17th- or 18th-century pottery and clay pipes. The range of material recovered is all typical of Oxford sites.
- A.3.12 A couple of very worn pieces of medieval peg tile were present. Three large fresh endpieces of 'Tudor' red brick were recorded from contexts 287 and 291; these are very similar to a brick noted from the Chavasse Quad test pit (context 209) and probably all originate from a late 15th- or 16th-century building on or near the site. A large fragment of 13th-14th century crested ridge tile (from the apex of a building) was also recovered from context 291.
- A.3.13 Undoubtedly the most interesting item is a complete medieval decorated floor tile from context 290, although this is redeposited in a post-medieval context. The tile is fairly worn from use but clearly recognisable as a late medieval 'printed' tile belonging to the Penn/Chiltern tradition and probably datable to the period *c* 1330–1400 (Fig. 17). The white slip design shows it to have been one quadrant (quarter) of a four-part design with a large roundel extending over four adjacent tiles all symmetrical in most details. Within the roundel is a frieze of poorly-impressed decorative motifs including fleur-de-lys and fabulous beasts. The design can be matched in the published typology for the Oxford region (Haberly 1937, no. CCXXI) and is also known from Godstow Nunnery near Oxford, Eynsham Abbey, and from recent excavations at Pembroke College/Brewer Street. It is useful to add another definite example to the growing list of findspots of this particular design. The two fragments of Penn/Chiltern floor tiles from the Chavasse Quad test pit (context 209) may also originate from the same tiled floor perhaps from an ecclesiastical building, or certainly a building of some significance.

#### A.4 Stone

by Ruth Shaffrey

A.4.1 Worked stone was recovered from Linton Quad test pit and Chavasse Quad strip and record excavation and watching brief.

#### Linton Quad test pit

A.4.2 A total of nine pieces of stone were retained. None of these is worked although four pieces of slate from context 1 could be pieces of roofing. If so, these are likely to be post-medieval in date.



#### Chavasse Quad strip and record excavation and watching brief

A.4.3 A single piece of stone was retained. This is a burnt piece of slightly shelly hard compact limestone weighing 1128g (209). It does not retain any original edges but one of the faces has been worked and it seems likely to have been used structurally.

#### A.5 Metal finds

#### by Ian Scott

A.5.1 Metal objects were recovered from the Linton Quad test pit and the Chavasse Quad test pit and borehole survey.

#### Linton Quad test pit

A.5.2 Eight metal finds were recovered from three contexts. None of the finds was closely datable and none need date earlier than the later 19th century.

#### Context 1

- 1 **Wire**. Deliberately folded and rolled 3 twist copper wire, with 6 bent and folded lengths of Fe wire bundled with it. Probably modern. L: 148mm; W: 68mm.
- 2 **Wire**. 3 x lengths of thick cu alloy wire, 2 lengths with rolled over loops threaded onto the third piece. Modern drawn wire. L: 75mm; W: 64mm.
- 3 **Lead sheet**, small rectangular offcut. L: 53mm; W: 24mm; Th: 2mm.

#### Context 12

- 4 Tang and bolster from a tool, possibly a gouge or chisel. Fe. L: 71mm.
- 5 **Nail** with slightly domed sub-square head, bent but complete. Fe. Overall L: c 85mm.

#### Context 13

- 6 Nail, small with flat thick square head, incomplete. Fe. Not measured.
- 7 Nail, small cut nail. Fe. L: 45mm.
- 8 Bar, short length bent at one end. Fe. L: 37mm.

#### Chavasse Quad test pit and borehole survey

A.5.3 There are 26 metal fragments from five contexts. Most finds are from context 209 and a number of small encrusted fragments of iron from context 209, some undiagnostic (no 4), others may be pin or nail fragments (nos 2–3, 5). There is a dress or sewing pin from context 208 (no. 1), and a complete pin and two fragments from context 209 (nos 6–7). The pins are late medieval or early post medieval in date. The other finds are not datable.

#### Context 208

1 Sewing or dress pin with crimped wound wire head. Cu alloy. L: 32mm. SF 200

#### Context 209

- 2 Wire fragments or nail stem fragments (N=6). Fe. Sample 220.
- 3 Possible pins or nails (N=4). Small, all encrusted. Fe. Sample 220.
- 4 Undiagnostic fragments, encrusted (N=4). Fe. Sample 220.
- 5 Undiagnostic fragments, encrusted (N=5). Fe, only just magnetic. Sample 220.



6 **Sewing or dress pin** with small crimped wire wound head complete. Cu alloy. L: 24mm. Sample 220.

#### Context 216

7 **Undiagnostic fragment** heavily encrusted. Fe? Little or no magnetic response, could be encrusted non-ferrous object. BH1.

#### Context 236

8 Wire fragment. Fe. L: 27mm. BH4

#### Context 238

9 Nail, encrusted. Fe. BH4

#### A.6 Glass

#### by Ian Scott

A.6.1 The only glass was a small group of just four sherds from Linton Quad test pit. Three sherds were from wine bottles from context 12 and one sherd of window glass came from context 13.

#### Context 12

- 1 **Wine bottle**. Two refitting sherds forming most of the upper body of a squat thick-walled early 18th-century wine bottle. Light green metal with heavy iridescent weathering. 130mm x 100mm. Early 18th-century bottle.
- 2 **Wine bottle**. Small body sherd from cylindrical wine bottle. Light green glass. Not measured. Mid 18th-century or later. Not more closely datable.

#### Context 13

3 **Window glass**. Small sherd, probably centre of bullseye from crown glass, or less likely part of the pushup of a free blown wine bottle. De-vitrified and now opaque. 30mm x 20mm, Th: 6mm. Probably late medieval or post medieval.



#### APPENDIX B ENVIRONMENTAL REPORTS

# **B.1** Environmental Samples

By Sharon Cook

#### Introduction

B.1.1 Two samples were taken from the Chavasse Quad test pit: sample 220 from fill 209 of pit 210, dated to 1660–1725, and sample 221 from an occupation layer of medieval date (208) below the pit. The samples were taken for the retrieval of artefacts and charred plant remains.

## Methodology

B.1.2 Sample 220 was a greyish brown (10YR 5/2) sandy clay loam with gravel and 40 litres in volume of which 100% was processed. Sample 221 was a brown (10YR 4/3) sandy silt loam with gravel and also 40 litres in volume of which 100% was processed. Both samples were processed using a modified Siraf style water flotation machine. The flot was collected on a 250 $\mu$ m mesh and the heavy residues sieved to 500 $\mu$ m and dried in a heated room. The dried residues were scanned for artefacts.

# Results

- B.1.3 Sample 220 produced 150ml of flot material of which 50% was scanned using a binocular microscope at approximately x10 magnification. The presence of charcoal in good condition was noted, some of which were of a suitable size for species identification. Clinker and small slag-like fragments were common. A small quantity of charred grain was also noted although this was in fairly poor condition which may indicate that it was residual within the deposit. One well preserved grain of barley (Hordeum vulgare) was positively identified as well as three fragments of nut shell, which are probably hazel (Corylus avellana). This sample produced large numbers of finds including decorated floor tile, oyster shell, clay pipe fragments and fish and mammal bone as well as three copper alloy pins.
- B.1.4 Sample 221 produced 25ml of flot material of which 100% was scanned using a binocular microscope at approximately x10 magnification. The presence of charcoal in good condition was noted, although the fragments were too small to identify to species. Grain was common within this sample, but the majority was not identifiable. Two grains were, however, identified as barley (Hordeum vulgare), and five could be identified as wheat (Triticum sp.). Eight badly degraded grains are likely to be oat (Avena sativa) or grass seed. In addition, three fragments of legume larger than 2mm and one legume smaller than 2mm are present with four fragments of hazelnut shell (Corylus avellana). This sample produced some fish and mammal bone as well as pottery, although it is much less rich in artefactual evidence.

#### Conclusions

B.1.5 The material recovered from sample 220 is consistent with its identification as a rubbish/cess pit, rich in artefactual evidence although with poorer material within the



flot. Sample 221, while promising in terms of the number of charred plant remains, is unfortunately in poor condition, consistent with an occupation layer close to a kitchen area.

#### **B.2** Animal Bone

# Linton Quad test pit

By Lena Strid

- B.2.1 A total of 175 hand-collected animal bone fragments were recovered from this site. The majority of the assemblage came from pit (15), dated to the 16th-17th century; the remaining bones were recovered from 18th-19th century landscaping layers and topsoil.
- B.2.2 The bones were in a very good condition, 96% being well or very well preserved. A small number of bones had traces of gnawing by carnivores, probably dogs. Burnt bones were absent.
- B.2.3 The assemblage contains bones from cattle, sheep/goat, pig, rabbit, domestic fowl and goose (Table 6). The early post-medieval cattle assemblage is dominated by fragments of metapodials, possibly deriving from small-scale oil or fat processing. The rest of the early post-medieval assemblage and the entire late post-medieval assemblage represent kitchen waste with a minor inclusion of butchery waste. It is not possible to ascertain to what extent cattle, sheep/goat, pig and poultry formed part of the diet, due to the small sample size. However, the bulk of medieval and post-medieval urban meat diet usually came from beef or mutton. Poultry, rabbit and other game were only occasionally on the table (Sykes 2007; Wilson 1984a).
- B.2.4 A small number of bones could be attributed to minimum age at death (Table 7). Most bones from livestock were fused or fusing, indicating sub-adult and adult animals. A preference for veal, which has been observed in other post-medieval assemblages from Oxford (Wilson 1994b, 107), was not indicated by the small assemblage. All poultry bones were from skeletally mature animals. The single rabbit humerus was fusing proximally, suggesting slaughter of a sub-adult rabbit.
- B.2.5 Butchery marks in the early post-medieval assemblage were noted on bones from cattle, sheep/goat, goose, medium and large mammal. Five medium and four large mammal vertebrae had been split sagitally during the primary butchery stage. Portioning of the carcass into smaller parts suitable for cooking was evidenced on four large mammal ribs, one cattle femoral head and one sheep/goat pelvis. Cut marks from filleting occurred on one sheep/goat femur shaft and on one goose coracoid.
- B.2.6 The late post-medieval assemblage included two bones with indication of filleting: one sheep/goat scapula with cut marks at the neck and one medium mammal rib with cut marks. It also contained a cattle mandible where the articulate process had been chopped off from below, probably as a way to disarticulate the head for cheek meat and tongue removal.
- B.2.7 Pathologies were noted on two cattle metapodials, both from the early post-medieval assemblage. A metatarsal had osteophytes at its proximal end, suggesting muscle



strain or high age. One distal metacarpal had an extended medial condyle, a trait which has been connected to the use of cattle as draught animals (Bartosiewicz *et al.* 1997).

Table 6: Animal bone assemblage from Linton Quad test pit

	16th-17th	18th-19th
	century	century
Cattle	24	5
Sheep/goat	8	10
Sheep	6	1
Pig	4	
Rabbit	1	
Domestic fowl	5	
Goose	2	
Medium mammal	14	4
Large mammal	29	10
Indeterminate	45	7
Total	138	37
Weight (g)	2030	507

Table 7: Epiphyseal fusion of cattle, sheep/goat, pig and horse in all phases following Habermehl (1975). Fusion stages follows Serjeantson (1996)

		Unfused	Fusing	Fused
16th-17th century				
Cattle	Early fusion			
	Mid fusion			6
	Late fusion	1		1
Sheep/goat	Early fusion			3
	Mid fusion			1
	Late fusion		2	
Pig	Early fusion			
	Mid fusion			1
	Late fusion			
18th-19th century				
Cattle	Early fusion	1		1
	Mid fusion			
	Late fusion			
Sheep/goat	Early fusion			2
	Mid fusion	1		2
	Late fusion	1		

# Chevasse Quad test pit and borehole survey

By Lena Strid

B.2.8 All bones are fragmentary unless stated otherwise (Table 8). BGL indicates depth below ground level of finds from borehole samples



Table 8: Animal bone from Chevasse Quad test pit and borehole survey

Context	Description
206	2 sheep/goat metacarpals, 1 sheep femur, 152g
207	1 sheep tibia, 15g
208	<221> 1 pig tooth, 1 sheep tooth, 1 small bird vertebra, 1 bird claw, 50g
209	1 cattle ulna, 1 sheep/goat radius, 2 sheep/goat astragalus, 2 sheep/goat tibia, 1 pig skull, 1 chicken carpometacarpus, 1 chicken humerus, 1 sheep/goat metatarsal, 2 sheep/goat mandible - 1 with DP4 wear stage F, 2 sheep/goat pelvis, 1 sheep/goat scapula, 1 sheep/goat metapodial, 1 calf tibia, 1 bird tibiotarsus, 330g
209	<220> 1 bird toe, 1 mouse/vole ulna, 1 frog tibiofibula, 1 frog/toad femur, 1 bird vertebra, 1 small mammal vertebra, 1 bird claw, 1 bird toe, 1 sheep tooth, 27g
216	2 fragments 1.30m BGL
217	1 fragment 2.9m BGL; 2 fragments 4.3m BGL
218	2 fragments 1.4m BGL
219	1 fragment 3.3m BGL
220	5 fragments 3.65m BGL
223	1 fragment 4.2m BGL
229	1 tooth 3.15m BGL
237	6 fragments 2.4m BGL
239	2 fragments 3.4m BGL

# Chevasse Quad strip and record excavation and watching brief

# By Lee Broderick

B.2.9 A total of 94 animal bones were recovered from the site, almost all associated with the post-medieval and modern periods (Table 9). Given the small sample size, NISP figures are used throughout this report as providing the most likely reflection of living animal demographics on the site. The assemblage is in moderate condition and was recovered by hand.

#### Results

- B.2.10 By far the most common taxon identified in the assemblage, by NISP, was caprine (sheep, *Ovis aries*, and/or goat, *Capra hircus*), with domestic cattle (*Bos taurus taurus*) and domestic fowl (*Gallus gallus*) also present. It is worth noting, however, that the domestic fowl came from unstratified material as did all of that included as 'undated' in Table 9.
- B.2.11 The absence of teeth from the assemblage, which are normally present, is interesting. As particularly durable elements they are less likely to suffer from post-depositional taphonomic destruction and their absence may indicate that they were not deposited. No other head elements were recovered either, suggesting that the remains are primarily table waste. The high proportion of metapodials might caution us against this, however, and the absence of small, dense, post-cranial elements such as astragali and calcanea particularly when the neighbouring skeletal elements (tibiae and metatarsals) are so common suggests an alternative explanation whereby these smaller elements were simply missed by the excavator.



- B.2.12 Although teeth were absent it was possible to obtain limited data for the age at death of some animals in the assemblage based on epiphyseal fusion data (Table 11). This suggests that caprines on the site were surviving until at least two years of age. Also notable was the presence of a domestic cattle metacarpal which was unfused at both ends. Proximal metapodials usually fuse before birth, so this suggests that the animals may have been bred nearby. Alternatively, viewed through the lens of the kitchenwaste hypothesis, this may represent the consumption of very young yeal.
- B.2.13 It was possible to take a number of measurements from bones in the assemblage, particularly from distal caprine tibiae (Table 12), these fit well within the range for 18th century sheep recorded elsewhere in the country (Davis 1997, 413–28). Several caprine specimens also exhibited pathologies (Table 10); these were mostly lesions consistent with osteochondrosis, which is unlikely to have affected the animal visibly (Sewell 2010), although one tibia from a 17th-19th century AD context (290) had spicules, or tiny holes, on the medial edge of the lateral malleolus. It is not known what would cause this. The epiphysis itself was recorded as fusing, as similar spicules were present between the epiphysis and diaphysis.
- B.2.14 Butchery evidence in the assemblage was relatively common, with four specimens having a cutmark, nine having a chopmark and two having both (Table 10). Cutmarks occurred on the lateral side of both large and medium mammal ribs, which were sometimes additionally or alternatively chopped through from the lateral side. Oblique cutmarks were also present near the articular ends of a caprine humerus and tibia and on the lateral side of the neck of a scapula. Although two caprine tibiae had been chopped through at the distal end, chopmarks were far more commonly observed on the otherwise scarce domestic cattle specimens – a metacarpal and tibia had both been chopped through mid-shaft and a scapula had been chopped through the blade. Additionally, three large mammal vertebrae (out of five recorded) had been chopped through axially. Taken together, this suggests a fairly standardised butchery practice, whereby caprines were butchered following the anatomy, with meat sold as whole joints on the bone, and domestic cattle were broken down into smaller chunks of meat than would otherwise be created by anatomical units. The butchered vertebrae, furthermore, suggest that butchery of these larger animals began by splitting the carcass into two (left and right) halves by hanging it and cutting down the centre line.
- B.2.15 Gnawing of the bones was also a relatively common feature of the assemblage, suggesting that some of it, at least, may have been left exposed for some time before burial. Nine specimens had been gnawed by canids, probably dogs (*Canis familiaris*), suggesting that these animals were present on the site at that time. Additionally, the domestic fowl specimen from the unstratified material had been gnawed by a cat (*Felis cattus*) and a medium mammal rib from the same material had been gnawed by a rodent, probably a rat (*Rattus* sp.).

#### Comparison with other phases of work

B.2.16 The Chavasse Quad test pit and borehole survey recovered some bird and mammal bone from medieval contexts (Strid, above). In many respects this material was similar, being dominated by caprine (including sheep) leg bones, although head elements



were also present. Also identified from that phase were pig (Sus scrofa domesticus), frog/toad and mouse/vole bones as well as domestic cattle and domestic fowl.

B.2.17 The assemblage from Linton Quad was largely dated the 16th-17th century AD, with some material from contexts dated to the 18th-19th century (Strid, above). Although there were suggestions of some industrial waste on the site in the earliest phases, the material from the latest period was considered as most likely being representative of table waste, as here.

#### Conclusions

B.2.18 This is a very small assemblage, from which it is difficult to draw meaningful conclusions. That said, it is possible to hint at some interesting possibilities regarding the supply of caprines to this part of the city during the 19th century, specifically that these were of an age to be considered mutton and that they were larger than their medieval counterparts.

Table 9: Total NISP (Number of Identified SPecimens) and NSP (Number of SPecimens) figures per period from the site for sieved and unsieved samples. Three most common species for each phase highlighted

	C17th-19th	C19th-20th	Undated
Domestic cattle	4		1
Domestic cattle?	1		
Caprine	13	10	3
Medium mammal	6		2
Large mammal	35	5	2
Total Mammal	59	15	8
Domestic fowl			1
Total Bird	0	0	1
Total NISP	59	15	9
Total NSP	70	15	9

Table 10: NSP with observed taphonomic and pathology indices

	Butchery marks	Pathologies	Gnawed
Domestic cattle	2		2
Domestic cattle?	1		
Caprine	6	6	6
Medium mammal	2		1
Large mammal	5		1
Total Mammal	16	6	10
Domestic fowl			1
Total Bird	0	0	1
Indet.			
Total	16	6	11



Table 11: Fusion stages recorded from the assemblage, months following Silver (1969, 283–302), except \* following Popkin et al. (2012, 1775–1792), and stages following O'Connor (1989)

(/							
			Fusion		#	#	#
Species	Element	End	(months)	Fusion (stage)	Unfused	Fusing	Fused
Domestic cattle	metacarpal	proximal	<0		1		
Domestic cattle	metacarpal	distal	24-30	Intermediate	2		
Domestic							
cattle?	tibia	distal	24-30	Intermediate	1		
Domestic cattle	metatarsal	distal	27-36	Intermediate			1
Caprine	radius	distal	16-43*	Late	1		2
Caprine	metacarpal	proximal	<0				5
Caprine	femur	proximal	16-43*	Intermediate II	1		
Caprine	tibia	proximal	19-52*	Late		1	
Caprine	tibia	distal	7-28*	Intermediate II		1	5
Caprine	metatarsal	proximal	<0				3
Caprine	metatarsal	distal	7-31*	Intermediate II			1

Table 12: Measurements taken from specimens in the assemblage, following von Den Driesch (1976)

Diresen (137)	-,	1	1		1	1	_
Phase	Taxon	Element	Side	GL	Вр	Bd	SD/SC
C17th-19th	Domestic Cattle	metatarsal	right			59.3	
C17th-19th	Caprine	metatarsal	right	47.2	22.3	25.7	13.3
C17th-19th	Caprine	radius	left			32.6	
C17th-19th	Caprine	tibia	right			27.1	
C17th-19th	Caprine	tibia	left			26.8	
C19th-20th	Caprine	tibia	right			29.2	
undated	Caprine	tibia	left			31.8	
undated	Domestic Fowl	tibiotarsus	left	111.6		11.6	

Table 13: NSP and total mass per context

Context	NSP	Mass (g)
0	9	153
270	15	212
274	1	14
290	64	1147
291	2	9
294	3	42



## B.3 Fish bones and marine shell

By Rebecca Nicholson

# Chevasse Quad test pit and borehole survey

- B.3.1 Small numbers of fish bones were recovered from the dried residues of two bulk samples: sample 220 from post-medieval pit fill 209 and sample 221 from possibly medieval occupation deposit 208 (Table 14). Fish bone preservation was generally good, although the bones were not abundant. The bones were identified to species or other taxonomic level where appropriate using the author's personal comparative collection. Fish size is noted subjectively, by visual comparison with reference specimens of known length.
- B.3.2 The entire assemblage comprised 70 small and tiny fragments, of which 14 bones were identifiable. The residue from sample 221 included a large gadid (probably cod, *Gadus morhua*) vertebral fragment from a fish of in excess of 0.6m as well as a precaudal vertebra from a flatfish of 0.25-0.40m (plaice, flounder or dab: Pleuronectidae), two eel (*Anguilla anguilla*) vertebrae, five herring (*Clupea harengus*) vertebrae and a supramaxilla, a gurnard spine (Triglidae), and a small gadid precaudal vertebra (probably whiting: *Merlangius merlangus*). Fish remains from sample 220 include single eel vertebrae and two lower pharyngeal bones, one a small fragment and the other from a tench (*Tinca tinca*) of about 0.25m long. Two cyprinid scale fragments were also recovered from 220.
- B.3.3 Post-medieval pit fill 209 also contained three valves (two left, one right) from the European flat oyster *Ostrea edulis*. Borehole samples also contained small fragments of oyster from contexts 218 (three fragments from 1.45m and 1.8m BGL) and 237 (two fragments from 1.8m BGL).
- B.3.4 The remains come from both freshwater and saltwater fish and shellfish, representing local fisheries and coastal trade. The scarcity of small fish bones in the post-medieval sample is perhaps surprising if it is a cesspit, but otherwise the remains are typical for medieval and post-medieval sites in Oxford

Table 14: Fish bone from Chevasse Quad test pit and borehole survey

	·	
Species	Sample 220	Sample 221
Eel (Anguilla anguilla)	1	2
Herring (Clupea harengus)		6
Tench ( <i>Tinca tinca</i> )	1	
Cyprinid (Cyprinidae)	1	
Small gadid (Gadidae)		1
Large gadid (Gadidae)		1
Gurnard (Triglidae)		1
Right-eyed flatfish (Pleuronectidae)		1
Tiny unidentified fragments	27	28
Total	30	40



# Chevasse Quad strip and record excavation and watching brief

B.3.5 A single right valve from a fairly small flat oyster *Ostrea edulis* L. was recovered by hand from layer 274. The shell is in fair condition but as a single item is of little interpretative vale and can be discarded.



# APPENDIX C CHAVASSE QUAD BOREHOLE LOGS AND PHOTOGRAPHS

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Borehole 1



Borehole 2



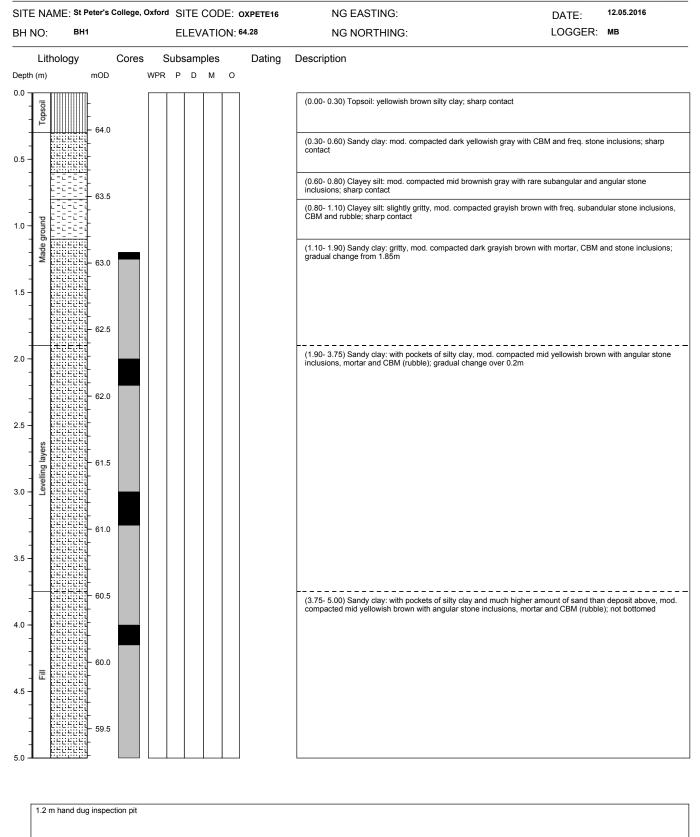
Borehole 3



Borehole 4



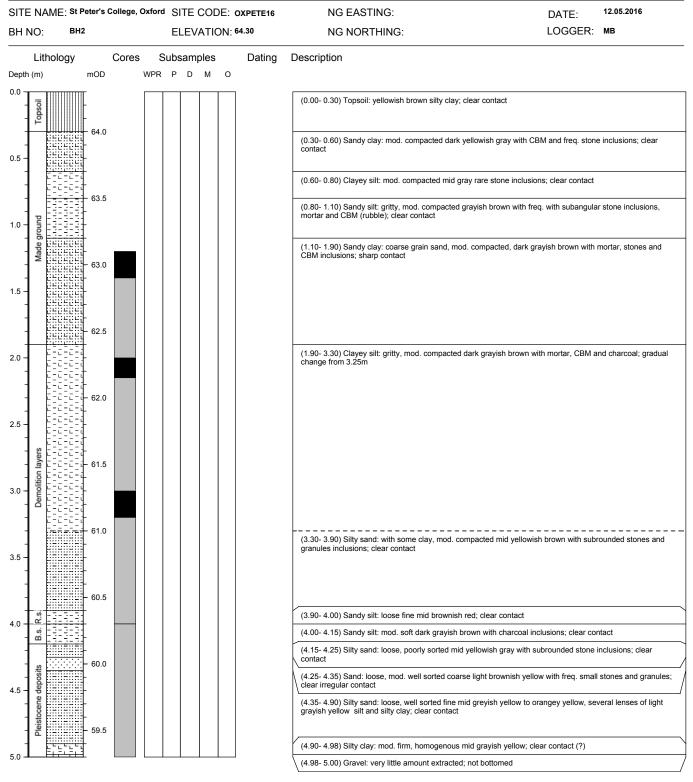
# **SUMMARY BOREHOLE RECORD**



Oxford Archaeology, Janus House, Osney Mead, Oxford OX2 0ES



# **SUMMARY BOREHOLE RECORD**



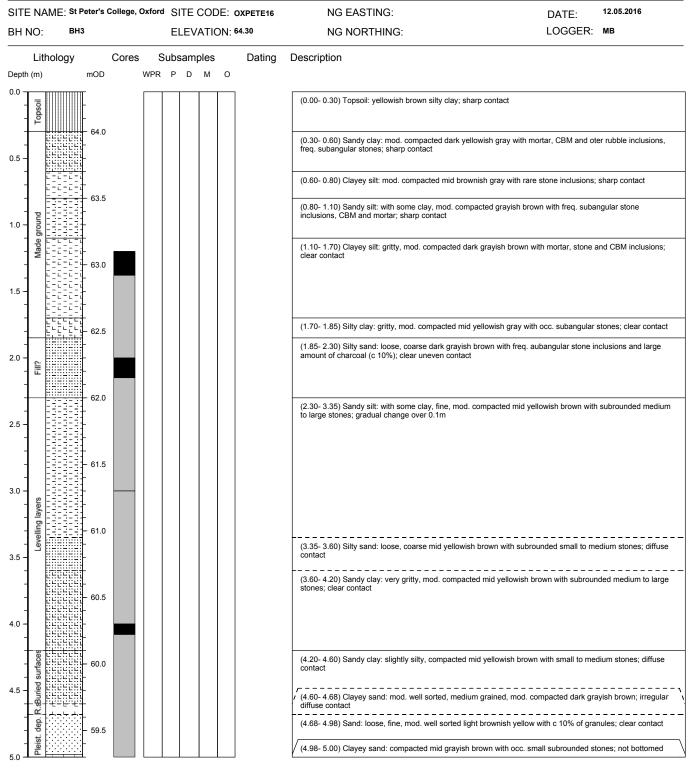
1.2 m hand dug inspection pit;

R. s. - redeposited sand B. s. - buried surface

Oxford Archaeology, Janus House, Osney Mead, Oxford OX2 0ES



# **SUMMARY BOREHOLE RECORD**

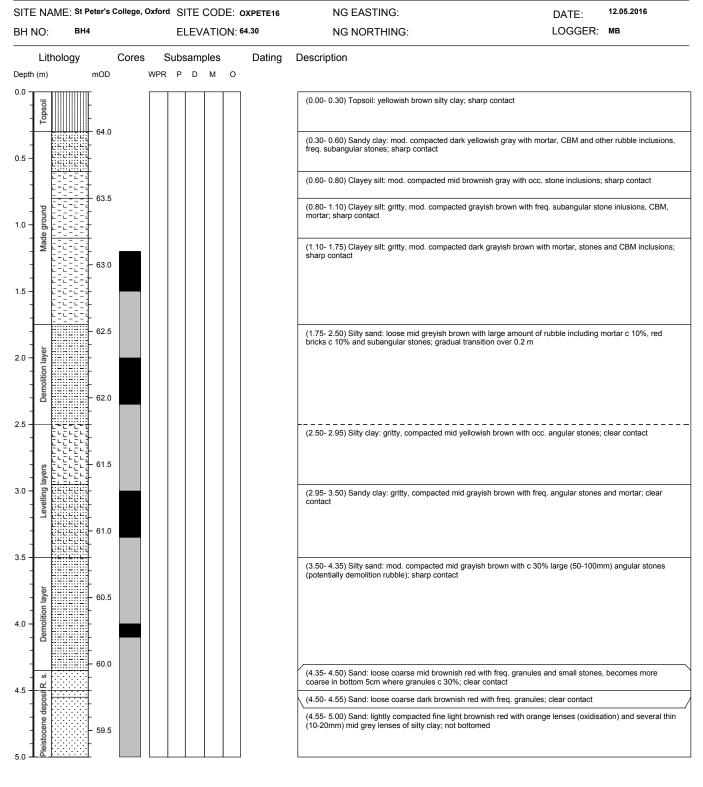


1.2 m hand dug inspection pit R.s. - redeposited sand Pleist. dep. - Pleistocene deposits

Oxford Archaeology, Janus House, Osney Mead, Oxford OX2 0ES



# **SUMMARY BOREHOLE RECORD**



Oxford Archaeology, Janus House, Osney Mead, Oxford OX2 0ES

1.2 m hand dug inspection pit R. s. - Redeposited sand



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#### **APPENDIX E SITE SUMMARY DETAILS**

Site name: Perrodo Project, St Peter's College, Oxford

Site code: OXPETE14, OXPETE16

**Grid Reference** SP 511 062

Type: Evaluation and watching brief

2014-2017

**Date and duration:** 

**Area of Site** 

**Location of archive:** The archive is currently held at OA, Janus House, Osney Mead,

Oxford, OX2 0ES, and will be deposited with Oxfordshire County

Museum Service in due course, under accession number

OXCMS:2014.183

**Summary of Results:** The investigations were situated at two locations, in Linton Quad

and Chavasse Quad. The work in Linton Quad comprised a test pit followed by a watching brief during excavation of a soakaway and related service trenches and drainage works adjacent to the New Inn Hall Street frontage, while in Chavasse Quad a test pit was dug and a borehole survey carried out, after which a strip and record excavation was undertaken on the footprint of a proposed attenuation tank and a watching brief on the

excavation of ground beams and services.

An augur hole in Chavasse Quad and one of the boreholes recorded evidence for a large negative feature (or features) that lie on the projected alignment of one possible projection of the western defences of Oxford's original burh. Evidence was also found for medieval tenements that occupied this part of New Inn Hall Street before the eponymous academic hall was built, and the western range of the medieval hall itself was exposed.

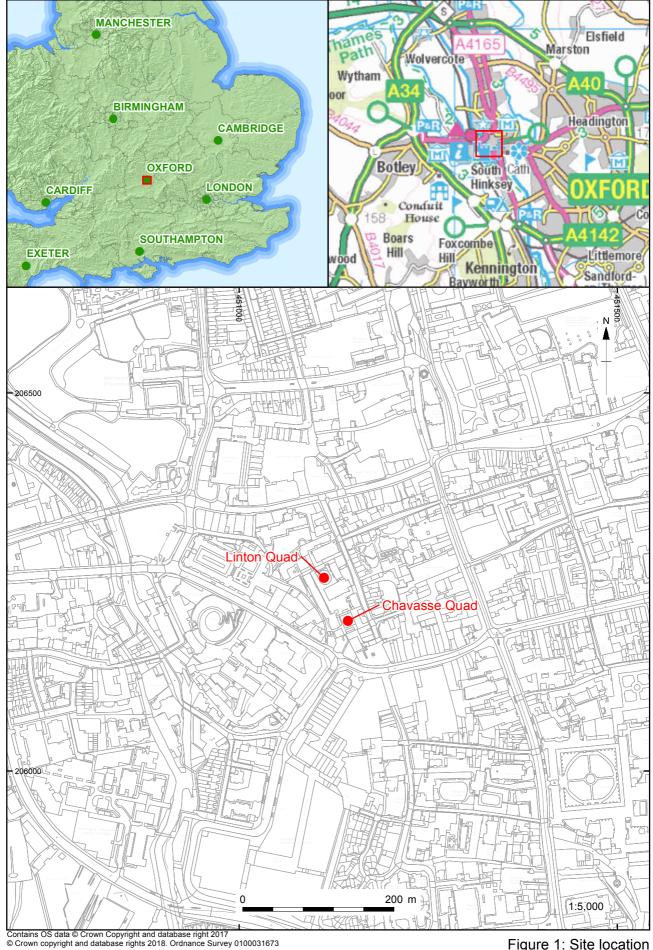


Figure 1: Site location

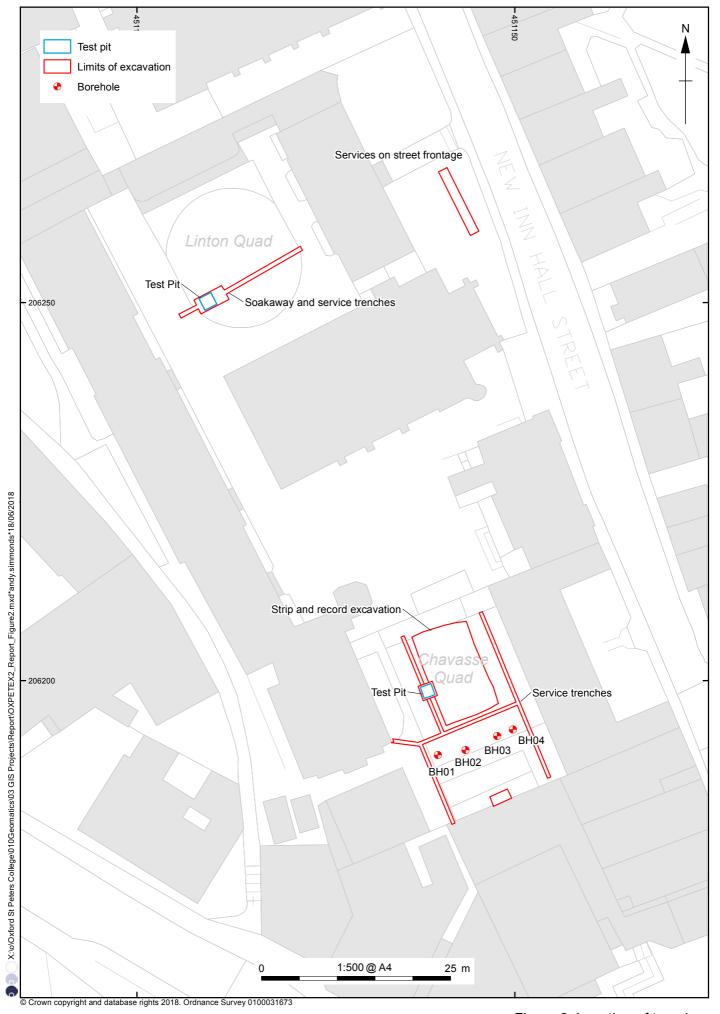


Figure 2: Location of trenches

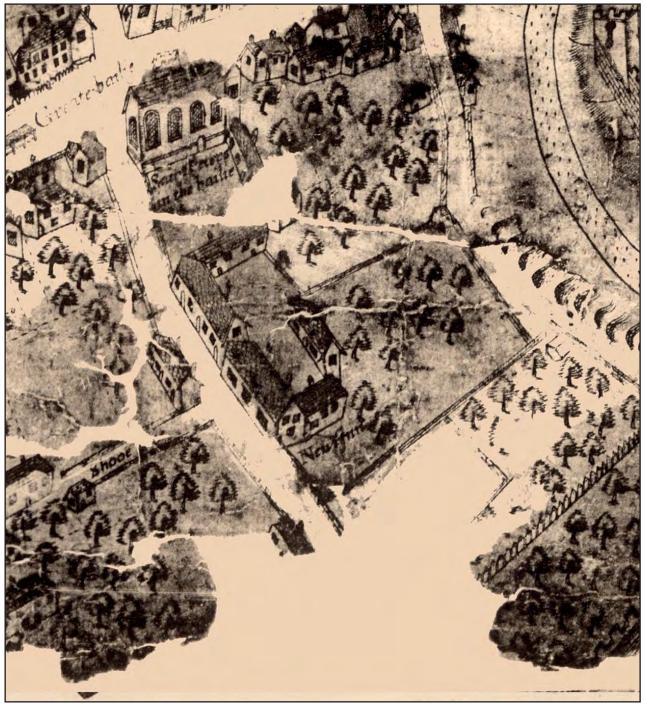


Figure 3: Detail of New Inn Hall on Ralph Agas's 1588 map of Oxford



Figure 4: Linton Quad watching brief, plan of trenches

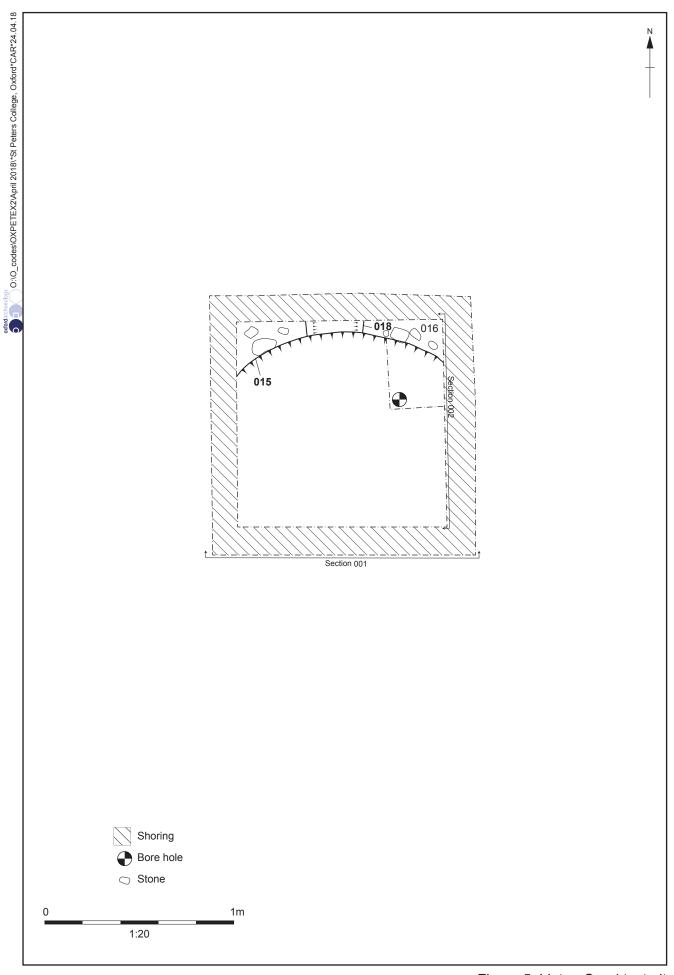
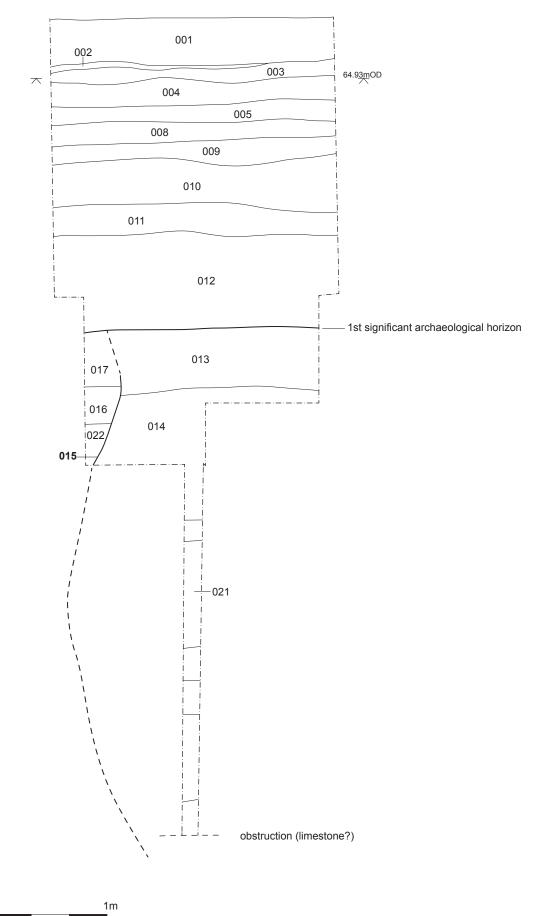


Figure 5: Linton Quad test pit

# Section 003, composite of sections 001 and 002



1:20
Figure 6: Linton Quad test pit, composite section

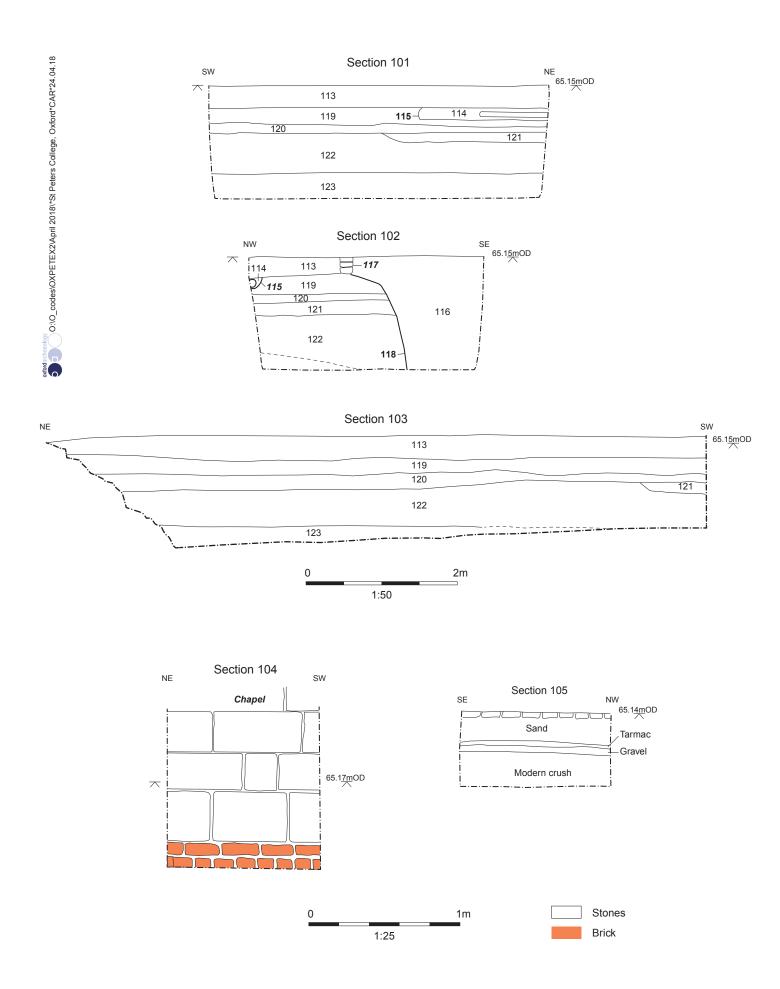


Figure 7: Linton Quad watching brief, sections of the quad surface and soakaway

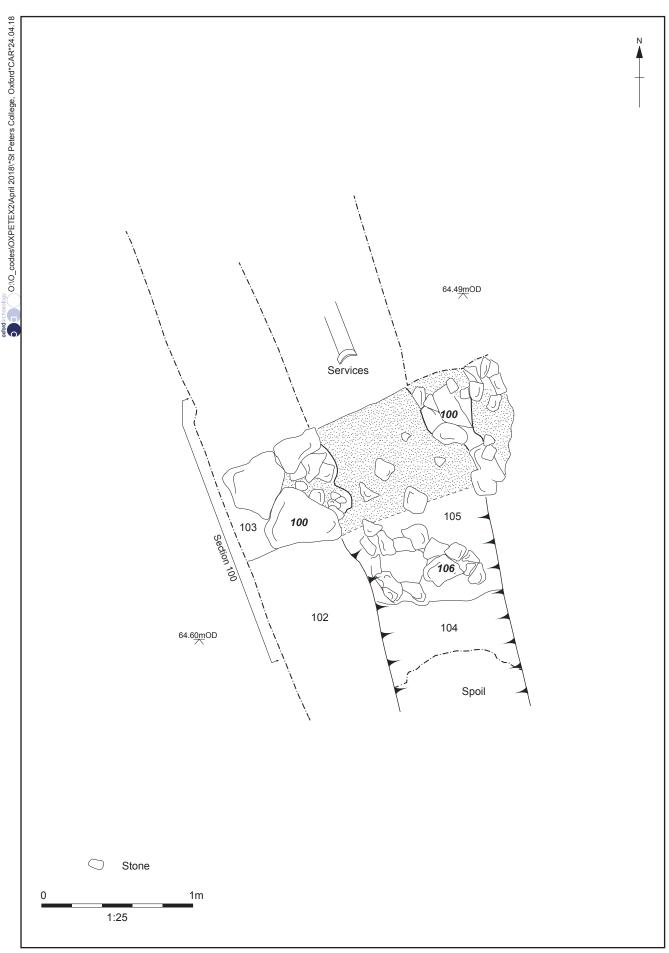
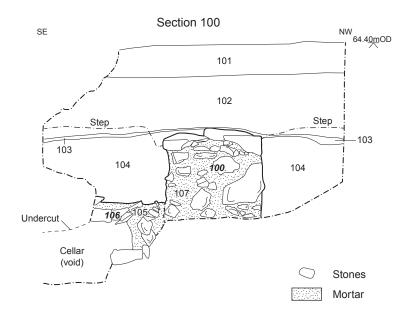


Figure 8: Linton Quad watching brief, plan of wall 100 in the service trench on the New Inn Hall Street frontage



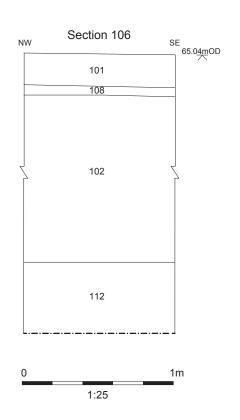


Figure 9: Linton Quad watching brief, sections of the service trench on the New Inn Hall Street frontage

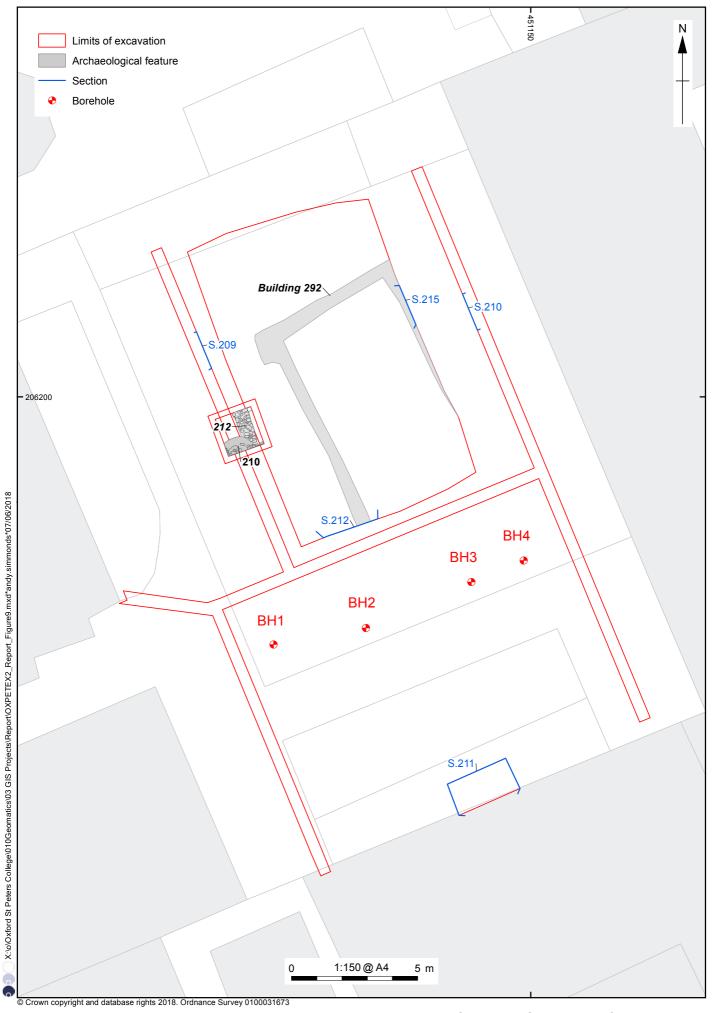


Figure 10: Chavasse Quad, plan of investigations

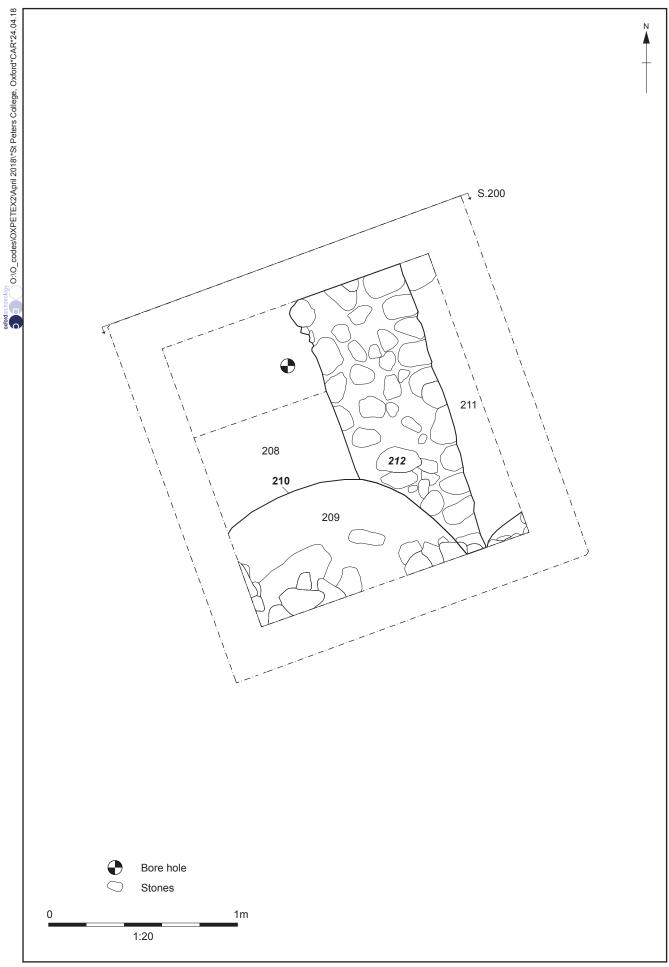


Figure 11: Chavasse Quad test pit

1:25

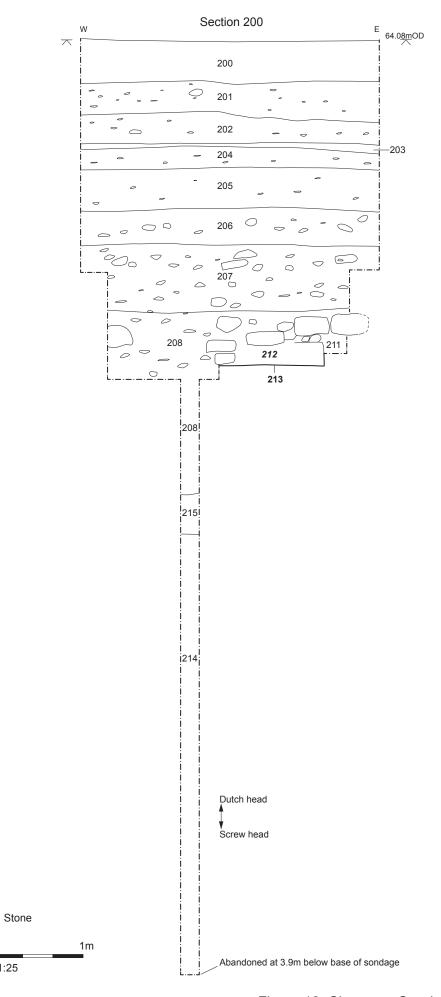


Figure 12: Chavasse Quad, section of test pit

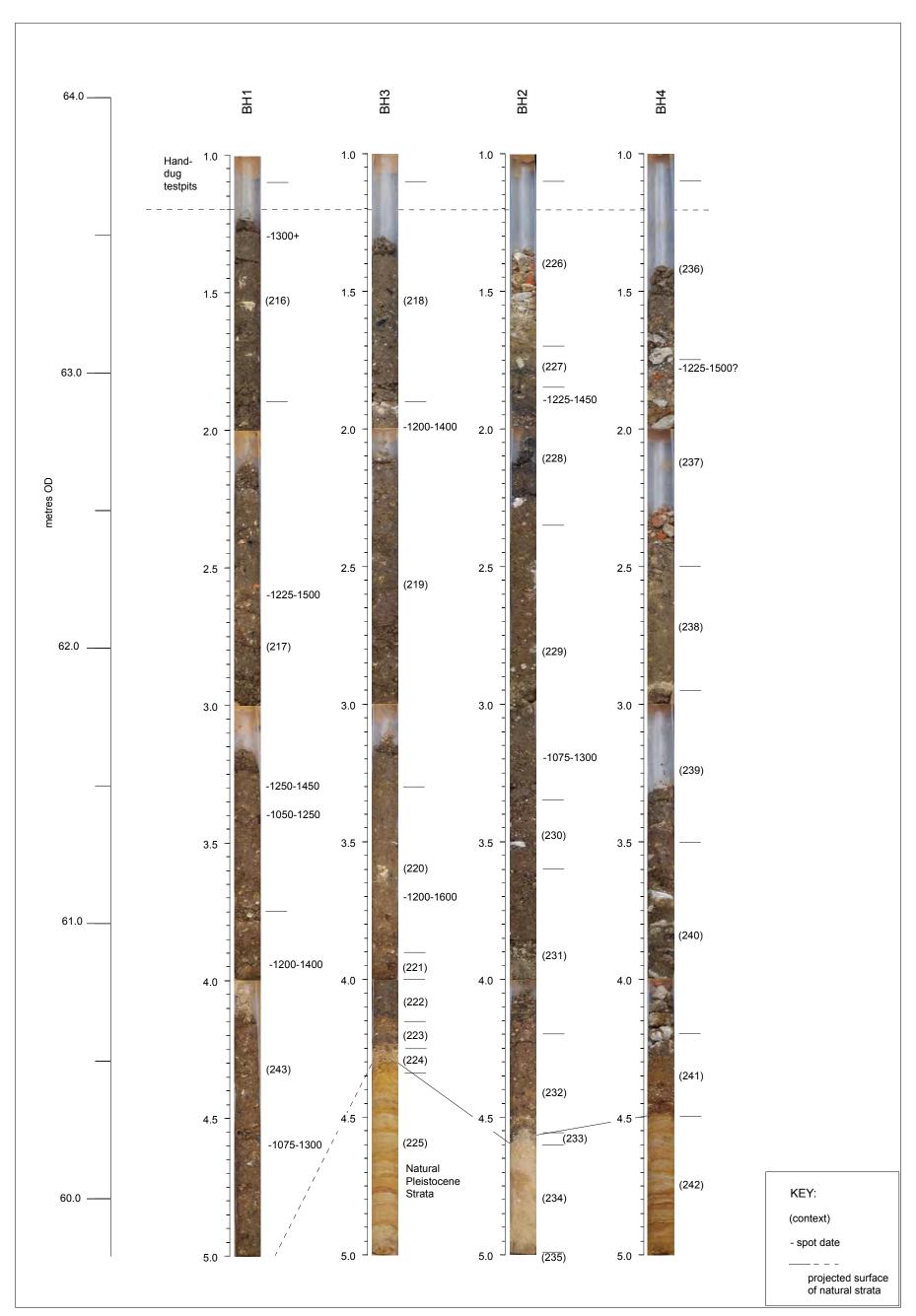
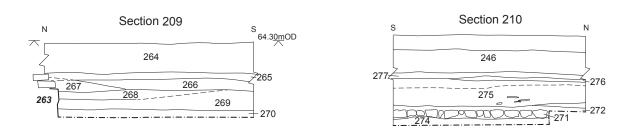
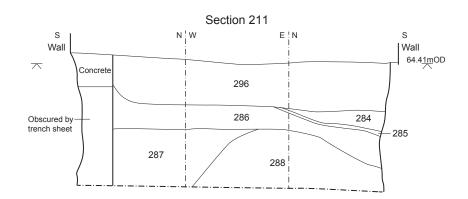


Figure 13: Chavasse Quad, photo-transect of boreholes with spot-dates and context





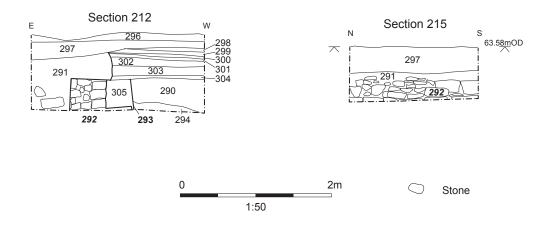


Figure 14: Chavasse Quad. sections of strip and record excavation and watching brief



Figure 15: Medallion from the front of a Bellarmine bottle or jug bearing the 'PVA' monogram of Dutch merchant Pieter van den Ancker, from Chavasse Quad strip and record excavation and watching brief

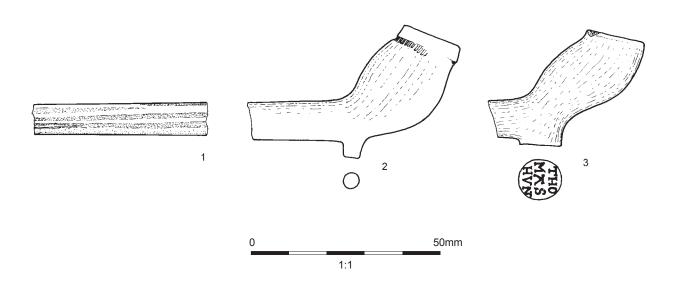


Figure 16: Clay tobacco pipes from Chavasse Quad strip and record excavation and watching brief

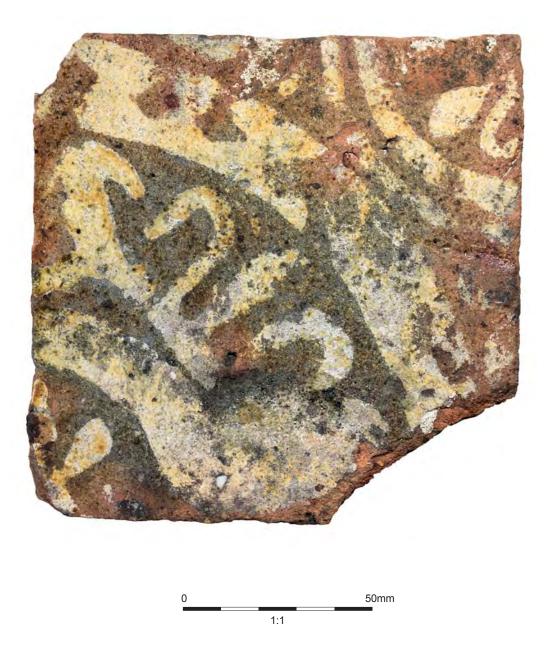


Figure 17: Decorated floor tile from Chavasse Quad strip and record excavation from Chavasse Quad strip and record excavation and watching brief

Plate 1: Linton Quad test pit, facing north



Plate 2: Linton Quad watching brief, section through deposits uncovered during removal of quad surface, facing west



Plate 3: Linton Quad watching brief, soakaway and service run general shot, facing east



Plate 4: Linton Quad watching brief, soakaway section, facing north



Plate 5: Linton Quad watching brief, new water pipe and previous services in the service trench on the New Inn Hall Street frontage, facing north



Plate 6: Linton Quad watching brief, wall 100 and cellar void in the service trench on the New Inn Hall Street frontage, facing south-west



Plate 7: Linton Quad watching brief, detail of wall 100 and cellar void in the service trench on the New Inn Hall Street frontage, facing south-west



Plate 8: Chavasse Quad test pit, facing north-west

Plate 9: Layers built up against the west side of Building 292, section 212, facing south



Plate 10: Wall of Building 292, section 215, facing east



Plate 11: Building 292, facing north



Plate 12: Builing 295, facing north



Plate 13: Chavasse Quad, section of test pit to investigate the foundations of the north wall of New Road Baptist Church, facing north-east





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