Former Boswells Dept. Store, 1-4 Broad Street, Oxford.

Archaeological Evaluation Report

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Former Boswells Dept. Store, 1-4 Broad Street, Oxford, Archaeological Evaluation Report

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Contents

List of Figures

List of Plates

Summary

Oxford Archaeology (OA) was commissioned by R Blue Regen Ox Ltd on behalf of Reef Group to excavate ten geotechnical test pits using archaeological evaluation methods and monitor and log three boreholes at the former Boswells Department Store, 1-4 Broad St, Oxford (site centre SP 5129 0640). The works are linked to a redevelopment of the site, Oxford City Council Planning Ref: 20/02480/FUL.

The work clearly demonstrated that significant archaeological deposits relating to successive phases of defensive ditch, probably Anglo-Saxon and certainly Medieval and their sequences of infilling during the medieval and Tudor periods, as well as later occupation encroachment in the 17th/18th centuries survive within the site despite the existence of extensive basements. Both ditches appear to have a similar, size and form c 27m wide and c 5m deep – neither appeared to reach the Oxford Clay bedrock.

The presence of waterlogged deposits in both defensive ditches shows that there is very good potential for highly significant organic remains which would contain information on the nature of the ditch environment and hydrology, as well as otherwise artefacts and ecofacts relating to diet and life that would otherwise have decayed.

The presence and position of a probable part of the Medieval Town Wall supports the position and alignment of this structure as first indicated on the First Edition 1:500 OS map and then in later archaeological excavations in the churchyard of St Michael at the Northgate during 1971-2.

Acknowledgements

Oxford Archaeology would like to thank William Bedford at Landgage Heritage and Ellen Armsby at Cube LLP for commissioning this project for R Blue Regen Ox Ltd on behalf of Reef Group. Thanks, are also extended to David Radford, who monitored the work on behalf of Oxford City Council.

The project was managed for Oxford Archaeology by Ben Ford, MCIFA (Senior Project Manager). The fieldwork was directed by Adam Fellingham (Supervisor), who was supported by Robin Bashford. The geoarchaeological work was overseen by Elizabeth Stafford and undertaken by Christof Heistermann. Digitising was carried out by Anne Kilgour and Charles Rousseaux. Thanks, are also extended to the teams of OA staff that cleaned and packaged the finds under the supervision of Leigh Allen, processed the environmental remains under the supervision of Rebecca Nicholson, and prepared the archive under the supervision of Nicola Scott.

1 INTRODUCTION

1.1 Scope of work

1.1.1 Oxford Archaeology (OA) was commissioned by R Blue Regen Ox Ltd on behalf of Reef Group to undertake archaeological Test Pits at the former Boswells Department Store, 1-4 Broad St, Oxford, henceforth known as 'the site'. The site is centred on SP 5129 0640 and its location is shown on Figure 1.

1.1.1 Planning consent for the redevelopment of former Oxford Dept. Store Boswells into a hotel was granted by Oxford City Council (Planning Ref.: 20/02480/FUL). The scope of the archaeological works was informed by an assessment of the impact of the proposals upon potential archaeological deposits at the site that were identified in a Desk Based Assessment (Bedford, 2020). The approach was agreed between Oxford City Archaeologist, David Radford and William Bedford of Landgage Heritage (LH).

1.1.2 The archaeological approach was detailed in a project WSI (LH, 2021) and consisted of a staged programme of works, comprising an initial stage of test pitting and borehole/window sample recording (*ibid.* Figs 2 and 3), followed by a later programme of archaeological investigation (*ibid.* Fig 4) and post-excavation. The results of the initial archaeological works will inform the final detailed scope and archaeological methodology of the later mitigation and will be subject to a further agreement with OCC.

1.1.3 Oxford Archaeology responded to the Landgage WSI (*ibid.*) and developed a detailed methodology (WSI Addendum) for the initial stage of archaeological investigations (OA, 2021).

1.1.4 A total of ten test pits were completed, with six located in the basement and four on the ground floor. All the test pits measured approx. 1.0m by 1.0m and were archaeologically hand-excavated to *c* 1.0m deep across their entire footprint (where ground conditions and structural obstructions allowed). Deeper excavation utilising smaller sondages was undertaken in a number of the test pits and four hand-auger cores were extracted and recorded from the base of the excavated test pits.

1.1.5 In addition to the test pits and hand-auger cores, three boreholes/ window samples (two at the basement level and one from ground level) completed by a geotechnical contractor were monitored and examined by Oxford Archaeology.

1.1.6 This document reports on the archaeological and geoarchaeological results of that initial stage of work.

1.2 Location, topography and geology

1.2.1 The Site, which lies in the centre of modern Oxford and is solely comprised of the former Boswells Department Store whose reverse L-shaped buildings wrap around the southern and eastern sides of William Baker House (currently Waterstones Book Shop, which occupies the corner formed by Broad Street and Cornmarket Street). Immediately to the south lies 30 Cornmarket Street and a length of the northern boundary of the curtilage of St Michael at the North Gate Church and Tower. To the east is No. 6 Broad Street, and the remains of Bastion 4.

1.2.2 The topography of the site is relatively level with an average ground floor height in the former Boswells Dept. Store of approx. 63.77m OD. Below the ground floor there are extensive basements at 60.79m OD, and below that a smaller deeper basement at 58.20m OD in the south-east corner. Only the eastern side and a short length of the southern side (from the south-east corner) of the site are not basemented.

1.2.3 The underlying geology of the site comprises Mudstone of the Oxford Clay Formation and the West Walton Formation with superficial Second Terrace deposits of Sand and Gravel of the Summertown-Radley Sand and Gravel Member.

1.3 Archaeological and historical background

1.3.1 The archaeological and historical background of the site has been described in detail in a Written Scheme of Investigation (LH, 2021) and will not be reproduced here.

2 AIMS AND METHODOLOGY

2.1 General Aims

2.1.1 The project engineers required details of the existing buildings foundations along with the underlying soil and geological stratigraphy to finalise their foundation designs. Ten locations were chosen for the Test Pits and three locations for Boreholes/Window Samples (LH, 2021 Figs 2 and 3).

2.1.2 After the removal of the modern flooring by other contractors the test pits were entirely hand-excavated by archaeologists to gather sufficient information for the project engineer as well as the maximum amount of archaeological information to generate a reliable predictive model of the extent, character, date, state of preservation and depth of archaeological remains within the Site which could then inform the proposal and a detailed approach to later stages of work.

2.1.3 The project takes account of pertinent elements of the city and regional resource assessments and research agendas available on the web:

- http://thehumanjourney.net/index.php?option=com_content&task=view&id=553&Itemid=277
- http://www.oxford.gov.uk/PageRender/decP/OxfordArchaeologicalPlan.htm

2.1.1 The general project aims, and objectives of the test pit and borehole/window sample extraction work were:

I. To determine the nature and extent of any archaeological remains present.
II. To determine the date or date-range of any remains, by means of artefactual or other evidence, such as scientific dating.
III. To determine the nature and state of preservation of any ecofactual remains.
IV. To avoid excavation in areas where there are known existing services.
V. To produce a client report, and/or publish in a local journal, significant archaeological remains.

2.2 Specific aims and objectives

2.2.1 The specific aims and objectives of the evaluation were:

I. To determine and record the nature and extent of existing foundations within the test pits.
II. To recover borehole and window sample extractions for archaeological deposit logging and sub-sampling.
III. To establish whether similar archaeological sequences to that revealed during previous investigations of the city ditch are present.
IV. Can the profile of the town ditch/fishponds in this area be further established?
V. Are waterlogged remains present at the base of the ditch? If so, can these be further assessed/dated?

VI. Have any Norman deposits survived later re-cutting activities? Can the date of the outshot enclosure around St Michael at the Northgate be further refined?

VII. Can the suspected phase/phases of infilling, thought to have occurred in the 17th century, be further characterised, and more closely dated?

VIII. What can the material dumped in the ditch tell us about contemporary life in the town?

IX. What can any remains of structures built over the infilled ditch and any related deposits tell us about later urban expansion

2.3 Methodology

2.3.1 The locations of the TPs and BHs was determined by geotechnical requirements of the structural engineer.

2.3.2 Stratigraphic archaeological hand-excavation, down to c 1.0m b.g.l followed the removal of the modern floors and surfaces by a groundworks contractor. In a number of the test pits smaller archaeologically hand-excavated sondages were extended to deeper levels, max. 1.4m b.g.l. Archaeological hand-auger holes were undertaken within the base of four test pits, these were located to give a good coverage of deeper archaeological deposits across the test pit array.

2.3.3 All archaeological artefacts and appropriate environmental samples were retrieved by context. Trench plans and sections were hand drawn at 1:20. All trenches were located to the existing building survey, and then tied to the Ordnance Survey National Grid. All levels were taken relative to Ordnance Datum. Digital photos were taken of modern foundations, archaeological features, deposits, test pits.

2.3.4 Sealed geotechnical borehole cores were retrieved from site and logged at Janus House.

3 RESULTS

3.1 Introduction and presentation of results

3.1.1 The results of the evaluation are presented below and include a stratigraphic description of the test pits. The full details of all trenches with dimensions and depths of all deposits can be found in Appendix A. Finds data and spot dates are tabulated in Appendix B. Environmental data and reports can be found in Appendix C. Descriptive logs from the borehole work are included in the geoarchaeological report in Appendix D.

3.2 General soils and ground conditions

3.2.1 The test pits on the ground floor recorded similar sequences of post-Medieval occupation deposits and structures (with one Medieval wall as the exception) immediately below the modern floor and base. These were quite different from the similar sequences in the basement test pits, where deposits of late Medieval ditch fills gained in moisture content with increasing depth (with indications of waterlogging).

3.2.2 Oxford Clay encountered at depths between 7-8m below ground-floor level, and the overlying Second Terrace Gravels, whose truncated upper horizon was encountered at between 5.5 – 6m below ground-floor level were only encountered in each of the three boreholes/window samples.

3.2.3 All works were located within standing buildings (except TP9) so ground conditions throughout the evaluation were generally good. Existing modern foundations occupied a proportion of most of the test pits, and this combined with the lack of natural lighting and the small size of the test pits was not ideal, however archaeological features and deposits, where present, were easy to identify.

3.3 Test Pit 1 and 4 (Figs. 2, 4, 5 and Plate 1)

3.3.1 Test Pits 1 and 4 were located in the Upper Basement close to each other (separated by a large concrete foundation pad for an existing steel column) and revealed similar archaeological deposit sequences that were entirely cut through by the construction cuts 104 and 106 for the later concrete foundations 103 and 105 respectively.

3.3.2 The earliest archaeological deposits were 110 underlying 109, and 400 underlying 401. Both 110 and 401 consisted of compacted gravel and may represent a temporary surface within the ditch. Deposit 110 was damp and showed signs of waterlogging. Subsequent deposits were either mid browny-grey or mid greeny-grey silty clays or clayey silts, the greenish colour indicating cessy inputs. Between them they contained a broad array of artefacts, including metal objects (a Cu lace tag, a Fe scale arm, a Cu pin fragment and Fe nails), as well as CBM (including glazed floor tile fragments). Larger animal bones as well as fish bones, charcoal from both wood and grain, and oyster shells were recovered.

3.3.3 These deposits indicate a rich mixture of domestic waste apparently dumped into the City Ditch, with the pottery recovered indicating this occurred between c 1400 – 1550 AD.

3.4 Test Pit 2 and AH200 (Figs. 2, 4, 5 and Plate 2)

3.4.1 Test Pit 2 was located in the Upper Basement and revealed an archaeological deposit sequence that was entirely cut through by the construction cut 204 for the existing brick basement wall and its concrete foundation 203.

3.4.2 The earliest archaeological deposits 209, overlain by 208 were only recovered in the hand-auger, these were dark and moist indicating waterlogging. These were overlain in succession by 207, 206 and 205 a series of firm mid-browny, and greenish silty clays to clayey silts, that contained similar domestic waste contemporary with the deposits in Test Pits 1 and 4. These are likely to be filling the City Ditch.

3.5 Test Pit 3 and AH300 (Figs. 2, 4, 5 and Plate 3)

3.5.1 Test Pit 3 with AH 300 in its base was located in the Upper Basement and revealed a series of deposits probably infilling the city ditch(es). AH300 hit an obstruction, possibly natural gravel and therefore the base of a cut. Above this the deposits in the auger were in sequence 308, 307, 306, 305 and 301, these were moist and dark in colour and organic - indicating waterlogging. No artefacts were recovered from these deposits. Above these the fills dried out, a greenish colour in 303 indicated cess, and mottling in 304 indicated redeposited brickearth. These drier fills dated broadly to the 15th/16th century with redeposited earlier 13th/14th century material.

3.6 Test Pit 4 (Figs. 2, 4, 5 and Plate 1)

3.6.1 See Test Pit 1 description above.

3.7 Test Pit 5 (Figs. 2, 4, 5 and Plate 4)

3.7.2 Test Pit 5 was located in the Upper Basement and was almost entirely occupied by the remains of a NE-SW orientated 0.8m wide limestone rubble foundation or retaining wall to a stone-lined pit, 501. This was encountered at *c* 0.4m b.g.l. Pottery, clay pipe and glass were recovered from associated deposits, all of which suggest the wall dates to the 17th/18th century and was demolished in the 19th century. Small exposures of probable City Ditch infill (or stone-lined pit fill) were seen either side of this structure but no deeper excavation of these was possible in the space available whilst retaining the historic structure.

3.8 Test Pit 6 and AH600 (Figs. 2, 3, 5 and Plate 5)

3.8.1 Test Pit 6 with AH600 were located at Ground Floor level. The test pit was entirely occupied by a well-constructed limestone surface 600, which was overlain by a probable occupation layer 601 which was greenish in appearance and may indicate stabling use. The 13-14th century date from a fragment of CBM is not reliable, and the later deposits with early post-medieval material indicate a more probable date.

3.8.2 Sitting on top of surface 600, and possibly cut into occupation 601 was the NE corner of a free-standing limestone wall, 603 (this is probably the end of the N-S arm of structure 803 to the south). Together these may represent a structure that is open sided to the north (possibly a stable?). A subsequent garden-like soil was overlain by demolition or construction deposits.

3.8.3 The deposits within AH600, were archaeological in origin and not natural, they are possibly fills of the Medieval City Ditch or a discrete feature. The auger hit an unknown limestone obstruction at a much shallower depth than in AH700.

3.9 Test Pit 7 and AH700 (Figs. 2, 3, 5 and Plate 6)

3.9.1 Test Pit 7 with AH700 were located at Ground Floor level, and recorded a series of horizontal layers, including garden soils? not dissimilar to those described for TP6/AH600 except without the surface and occupation episodes. A possible N-S linear 701 was only partially revealed. These deposits dated almost exclusively to the 17th century.

3.9.2 The deposits within AH700, were archaeological in origin and not natural, and are possibly fills of the Medieval City Ditch, but could equally attest to a discrete feature (perhaps 701?). The auger hit an unknown limestone obstruction, at approximately the level at which the base of the town wall had been identified in excavations in St Michael's Churchyard to the north (Durham, 1983), this may indicate a raking foundation on the ditch-ward side of the wall.

3.10 Test Pit 8 (Figs. 2, 3, 5 and Plate 7)

3.10.1 Located at Ground Floor level the earliest remains in Test Pit 8 were the partially exposed rubble core of a large limestone structure, this was directly built over by a later L-shaped limestone wall 803. Both structures were overlain/abutted by loose limestone and mortar rubble 802. The southern element of 803 was directly built over by the existing brick wall 800.

3.11 Test Pit 9 (Figs. 2, 3, 5 and Plate 8)

3.11.1 Test Pit 9 in the Upper Basement did not reveal any archaeological deposits as excavation was hampered by multiple concrete structures and a service pipe. The brick wall and underlying concrete foundation on the east side of the test pit formed the boundary between the former Boswells Dept. Store and the neighbouring property on Broad Street to the east

3.12 Test Pit 10 (Figs. 2, 4, 5 and Plate 9)

3.12.1 Located in the Upper Basement Test Pit 10 was nearly entirely occupied by the concrete foundation for the brick footing and overlying wall of the existing basement (collectively 1003). It was only possible to excavate a small area to a maximum of 0.60m b.g.l, this revealed the top of a possible fill of the city ditch 1005.

4 DISCUSSION

4.1 Reliability of field investigation

4.1.1 Although the positions of the test pits and boreholes/window samples were dictated by the requirements of the structural engineer and concentrate mainly on the southern side of the site they have offered a reasonable sample of the archaeological remains that are preserved in the central part of the site at basement level, and in the south-eastern part of the site at ground level. Their distribution, when taken together, does provide a good north-south cross section showing the levels at which different periods of archaeological events are preserved, and a fairly reliable model of the potential profiles of two phases of defensive city ditches.

4.1.2 Within the test pits archaeological deposits and structures were clear, and the stratigraphic sequences were well understood. The auger-holes were small and lacked artefactual recovery, but the sequences were relatively clear given the constraints. The bore-holes and window samples were taken for geotechnical information and were not as coherent as would be possible if taken for geoarchaeological purposes.

4.1.3 The evaluation has shown that significant archaeological features relating to the Late Saxon and Medieval defence of the urban centre are preserved at the site. Some interesting details of the Tudor period of infilling have been noted, as well as waterlogged deposits below these. Some evidence for later post-Medieval occupation and structures were also recovered.

4.2 Evaluation objectives and results

4.2.1 Sufficient data on the nature, position and depth of the modern foundations to inform the structural engineer were revealed. These details have already been passed to the design team and are not repeated in detail in this report.

4.2.2 The specific archaeological aims and objectives of the evaluation work, as set out in the Written Scheme of Investigation (OA 2020), have been addressed by this phase of work, and these initial results will contribute to the wider project aims.

4.2.3 The condition, date, nature and state of preservation of the revealed remains has been assessed, as has the site's potential to preserve environmental remains.

4.3 Interpretation and discussion (Figure 5)

Natural/Geological Deposits

4.3.1 Oxford Clay bedrock was only reached in the base of the three boreholes (BH1, 2 and 3) at elevations ranging from 55.97m to 56.84m OD. This is consistent with known heights for the surface of the Oxford Clay in the vicinity (e.g. the Ship Street/Cornmarket Street junction, 56.6m OD). The differing levels at which the clay was encountered suggest an undulating upper surface to the clay interface with the underside of the terrace gravels, this is likely to be a natural phenomenon.

4.3.2 The Oxford clay was overlain by thick deposits of Pleistocene gravel of the Summertown-Radley Terrace, the surface of which occurred at 57.57m to 58.39m OD. The lowest elevation occurred in boreholes BH3 and the highest in BH2. In boreholes BH1 and BH3 the upper part of the gravel was recorded as possibly redeposited to 58.11m OD and 57.97m

OD respectively. This is significantly lower than the expected untruncated horizon at c. 62.5mOD (as seen in excavations in St Michaels Churchyard to south) and is due to the presence of large negative archaeological features, very probably defensive ditches dating from the later Anglo-Saxon and Medieval periods (see below).

4.3.3 Groundwater was recorded by the Geotech contractors in the BHs within the terrace gravel deposits at 57.8mOD, this is lower than indications of waterlogging were noted in archaeological deposits, this may relate to seasonal precipitation fluctuations affecting the sub-ground hydrological landscape. It is probable that the different consistency of the fills within the linear archaeological features compared to the adjacent Pleistocene gravels will influence sub-surface hydrological pathways, water flow and level.

Anglo-Saxon

4.3.4 If the slope of the Late Anglo-Saxon east-west orientated defensive ditch is projected northwards from its location in excavations to the south of the site in St Michaels Churchyard (Durham *et al.*, 1983, Fig. 2) then this feature will extend under the full length of the southern edge of the site.

4.3.5 It is probable that the truncated level of the natural terrace gravels encountered in BHs 2 and 3 and possibly the obstruction at the base of Auger Hole 300 (AH300 in TP3) represents the base of the Anglo-Saxon ditch cut. It should be noted that no artefactual remains were recovered to corroborate this hypothesis. The base levels from N-S are 58.4mOD (AH300), 58.3mOD (BH2) and 58mOD (BH3) and shows the cut sloping up towards the north. If this slope is projected northwards, then the Anglo-Saxon Ditch would originally have been approx. 27m wide and approx. 4.5 – 5m deep.

4.3.6 The basal fills in BH3 and AH300 (TP3) record dark organic silts with evidence of waterlogging and good organic preservation. No such organic layers were seen in BH2. No artefacts were recovered from any of these deposits, but charcoal and organics may be of a quality and type suitable for radio-carbon dating. Between c 59mOD and 60mOD the sequences recorded in BH2 and TP3/AH300 perhaps show that the Anglo-Saxon ditch is cut by the later Medieval defensive ditch. In BH2 this could be represented by the upper horizon of the cess-like lower deposits (in the Anglo-Saxon ditch). In TP3/AH300 at the interface between (301) and (302), all deposits above (301) contain artefacts dating after 1400 (and include redeposited 13th and 14th century pottery (this is consistent with dating evidence from the Medieval ditch fills in TP1, TP4 and TP2). However, a different projection of the slope of the Medieval ditch could also suggest that these cess-like and organic deposits represent the earliest fills of this later ditch.

4.3.7 Either way it is highly likely that the Anglo-Saxon ditch extends into the footprint of the site for approx. 15m from its southern boundary. It is very likely to be preserved under the modern floor surfaces of the Upper Basement, much less likely under the Ground Floor (due to later truncation from the Medieval defensive ditch), and very unlikely under the deeper Lower Basement floor.

Medieval / Probably Medieval

4.3.8 It is probable that the limestone and mortar core to the Medieval Town Wall was encountered at the base of TP8 at c 63mOD. This is only c1m to the north of the southern face

of this same defensive wall identified in excavations in St Michaels Churchyard (Durham et al., 1983, Fig. 2, labelled [6]). At St Michaels this structure extended down to c 61m OD, and the foundations to Bastion 4, to the east, were also seen to extend to 61m OD (Dodd, 2003, Fig. 4.18). It would not be unreasonable to expect this wall to be approx. 1.75 - 2m wide (as per other observations along the northern defensive line). It is possible that the obstruction at c 61m OD in AH700 is a raking foundation. The alignment of the 'City Wall' shown on the 1st edition OS 1:500, and on the plan of Fig. 2 in (Durham, 1983) is likely to be accurate.

4.3.9 To the north of the wall are the infilled remains of the towns medieval defensive ditch. Levels at the base of the ditch were seen in BH1 (57.85 – 58.1mOD), and possibly AH300 (58.5mOD). Dirty gravels at the base of BH1 may represent initial erosional infilling, but this gives way to waterlogged organic silts upto 59.4mOD (-1.4m below SSL), and this is the same approximate level at which similar deposits were encountered in TP1 and TP2. No artefacts were recovered from these layers, but they are likely to date to the late 12-14th centuries.

4.3.10 These waterlogged deposits were overlain by silty loams (some with cess-like qualities) containing significant amounts of 15th – mid 16th century pottery and ceramic building material (CBM). Similar deposits were also seen in TP3, and in TP1, 2, 3 and 4 these extended up to immediately under the existing floor slab of the Upper Basement. This evidence suggests that the city ditch was still a significantly deep negative feature up to the 15th/16th century, afterwhich there appears to be concentrated period of city ditch infilling starting in the Tudor period.

4.3.11 It is unlikely that the top of the ditch starts at the observed base of the city wall (61mOD), as this would lead to instability in this structure (although the piers between the previously observed relieving arches may extend deeper). Therefore, it is more likely that the ditch starts at approx. 62mOD, or above, and probably from the north face of the city wall. Fig 4.11 (Dodd, 2003) suggests the ditch starts at c 6-7m from the face of the defensive wall, however this does not fit the evidence when we consider the depth of the Tudor fills observed in TP3, and there is no reason why it should not extend up to the face of the stretch of wall that encloses St Michaels.

Post Medieval (exclusively identified in the interventions at Ground Floor level)

4.3.12 The SE corner of a limestone building in TP 8 and extending into TP 6 the northern extent of a limestone wall (probably an earth-set post-pad or dwarf wall to carry a timber frame) are likely to relate to the structures that lined the southern side of Tredwells Yard as shown on John Gwynnes "Plan of Bocardo and Parts adjacent" of 1771, (https://www.flickr.com/photos/britishlibrary/50264357568/in/photostream/).

4.3.13 On Gwynnes plan some structures along the south of Tredwells Yard are shown as enclosed buildings but at the eastern end of the yard these are roofed with an open N side. On the later 1870's OS 1:500 the former eastern extent of Tredwells Yard appears to form the rear of a tenement property fronting onto Broad Street.

4.3.14 The limestone surface underlying the northern extent of the limestone wall in TP6 is a yard surface (possibly Tredwells Yard) and was overlain by organic rich deposits perhaps derived from horse-dung and general trample, and contained pottery dating from the mid-16th century. This in turn was overlain by garden-like humic soil deposits.

4.3.15 To the east garden-like soil deposits were also noted in TP7, these were cut by a pit whose fills were observed to extend down to c 61mOD. These could relate to back yard features for a property fronting onto Broad Street.

4.3.16 An anomalous SE-NW aligned wall foundation in TP5 (at approx. 60.5mOD) is associated with 17th-18th century pottery – its lower level suggests perhaps a stone-lined pit or soakaway but is also reminiscent of a similarly aligned existing structure to the NNE, perhaps these are related in some way.

4.3.17 No archaeological remains were encountered in TP 9

4.4 Significance

4.4.1 The archaeological excavation of geotechnical test pits in the Upper Basement level of the site has clearly demonstrated that significant archaeological deposits relating to successive phases of defensive ditch, probably Anglo-Saxon and certainly Medieval and their sequence of infilling survive within the site despite the extensive area which that basement covers. It is likely that the northern edge of both phases of defensive ditch, and the southern edge of the Medieval ditch are preserved, if somewhat truncated within the site.

4.4.2 By default, these features and their associated fill sequences are also likely to underlie the area of the Ground Floor which has no basement below (along the entire eastern side of the site, and a length along the southern side extending from the SE corner of the site).

4.4.3 In addition, the test pits excavated from the ground floor level have revealed preserved structural and occupation details of the later use of this area as the town expanded in the 17th and 18th centuries, these perhaps relate to Tredwells Yard (probably a stabling facility immediately outside the North Gate), as well as tenements that developed on the south side of Broad Street.

4.4.4 The evidence suggests, however that the Lower Basement levels will have removed all archaeological deposits.

4.4.5 The probable survival of the truncated remains of the infilled Anglo-Saxon ditch is very significant and this site presents a rare chance to collect further evidence of its position, size, form and nature of infill.

4.4.6 The likelihood that some infill deposits from both the principal phases of defensive ditch are waterlogged and therefore would contain preserved organic remains from pre-Conquest and post-Conquest Oxford is highly significant both for the details of occupation, activity and diet from discarded waste, but also on the environment and hydrology of these features.

APPENDIX A TRENCH DESCRIPTIONS AND CONTEXT INVENTORY

Test Pit 1 – Upper Basement						
General description					**Orientation**	N-S
Test Pit 1 revealed City Ditch fills cut by a large concrete foundation. The sequence was similar to the adjacent Test Pit 4.					**Length (m)**	1.30
					Width (m)	1.0
					Avg. depth (m)	1.6m
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
100	Structure		0.24	Current concrete floor		
101	Layer		0.10	Rubble base to 100		
102	void					
103	Structure		1.24+	Concrete foundation base		
104	Cut			Construction cut for 102		
105	Structure		1.24+	Concrete foundation base		
106	Cut			Construction cut for 105		
107	Deposit		0.25	Fill of Ditch. Firm mid-brown-grey silty clay. Probably = 403	Pottery Animal Bone Sample 2: no anaerobic or waterlogging. Wood and grain charcoal (poorly preserved), fishborne, oyster shell	c1420-1525
108	Deposit		0.4	Fill of Ditch. Firm, mid green-gey silty clay. Probably = 402	Pottery CBM Cu Alloy wire pin shank Fe nail frags Fe + Cu frags Animal Bone Sample 3: no anaerobic or waterlogging. Wood and grain charcoal (well preserved), fishborne, oyster shell, animal bone	c1400-1525 13-14C? Late Med/Post-med
109	Deposit		0.6	Fill of Ditch. Firm, mid green-gey clayey-silt.	Pottery	c1350-1550?

					CBM Fe nail frags Animal Bone Sample 4: poor preservation clinker-like charcoal, fish bone	13-14C?
110	Deposit			Fill of Ditch. Firm-compact, mid brown-grey clayey-silt gravel.		

Test Pit 2 and AH 200 – Upper Basement						
General description					**Orientation**	E-W
Test Pit 2 with AH 200 in its base revealed a sequence of ditch fills. In the AH these were darker in colour and very damp – indicating waterlogging. The auger hit an obstruction, poss. natural gravel? Shallower deposits had a greenish tinge indicating cess content. This sequence was cut by the construction cut for the existing basement brick wall and concrete foundation.					**Length (m)**	1.0
					Width (m)	0.8
					Avg. depth (m)	1.6
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
200	Structure		0.20	Current concrete floor		
201	Layer		0.10	Rubble base to 200		
202	Deposit			Fill of Construction cut 204 against Structure 203	Pottery Clay Pipe CBM Animal Bone	c1620-1700? c1650-1690 15-17C
203	Structure			Current Concrete foundation, brick footing and brick wall to current basement		
204	Cut			Construction Cut for 203		
205	Deposit		0.30	Fill of Ditch. Firm-compact, mid brown-grey clayey-silt.	Pottery Fe nail frags Animal Bone	c1450-1600?
206	Deposit		0.30	Fill of Ditch. Firm-compact, mid greenish brown silty-clay.	CBM Fe nail frags Animal Bone	15-17C?
207	Deposit		0.80	Fill of Ditch. Firm-compact, mid greenish grey silty-clay.	Pottery CBM Animal Bone	c1450-1600? 15-17C?
208	Deposit		0.10	AH200. Fill of Ditch. Firm-compact, dark greenish grey silty-clay. Waterlogged appearance		

209	Deposit		0.60	AH 200. Fill of Ditch. Firm-compact, dark greenish grey silty-clay. Waterlogged appearance		

Test Pit 3 – Upper Basement						
General description					**Orientation**	n/a
Test Pit 3 recorded a sequence of layers related to the infilling of the Town Ditch(es). From 301 down through all the AH deposits there were indications of waterlogging. The auger hit an obstruction, poss. natural gravel? And base of cut?					**Length (m)**	1.0
					Width (m)	1.0
					Avg. depth (m)	
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
300	Structure			Concrete Floor,		
301	Deposit		0.60	AH300. Fill of Ditch. Tenacious mid blue-grey sandy clay. Waterlogged aroma		
302	Deposit		0.35	Fill of Ditch. Friable mid brownish-grey silty clay	Pottery CBM Animal Bone	c1450-1600? 13-14C?
303	Deposit		0.20	Fill of Ditch. Friable, Mid greenish-grey silty clay	Animal Bone	
304	Deposit		0.40	Fill of Ditch. Friable, mid brownish grey with reddish brown mottling, silty clay	Pottery CBM Animal Bone	c1225-1450 13-14C?
305	Deposit		0.45	AH300. Fill of Ditch. Dark blueish grey/black silty clay, organic, waterlogged appearance	Pottery	c1250-1450?
306	Deposit		0.05	AH300. Fill of Ditch. Mid blueish grey gravel. Waterlogged appearance		
307	Deposit		0.10	AH300. Fill of Ditch. Dark blueish black silty clay, organic, waterlogged appearance		
308	Deposit		0.10	AH300. Fill of Ditch. Dark blackish silty clay, organic, waterlogged appearance		

Test Pit 4 – Upper Basement		
General description	**Orientation**	E-W
Test Pit 4 revealed City Ditch fills cut by a large concrete foundation. The sequence was similar to the adjacent Test Pit 1.	**Length (m)**	1.0
	Width (m)	0.48
	Avg. depth (m)	

Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
400	Deposit		0.05	Fill of Ditch. Friable mid-brown-grey silty clay.		
401	Deposit		0.02	Fill of Ditch. Compacted greyish brown sandy gravel		
402	Deposit		0.35	Fill of Ditch. Friable mid green-grey silty-clay.	Pottery Animal Bone	c1450-1525?
403	Deposit		0.60	Fill of Ditch. Firm mid-brown-grey silty clay.	Pottery CBM Cu alloy lace tag Fe equal-arm balance? Animal Bone	c1480-1550? 15-17C Late Med/Post-med Med/Post-med

Test Pit 5 – Upper Basement						
General description					**Orientation**	n/a
Test Pit 5 was almost entirely occupied by the remains of a NE-SW orientated limestone rubble foundation? 501 which was encountered at c 0.4m b.s.s.l. Small exposures of probable City Ditch infill was seen either side of this structure but no deeper excavation of these was possible whilst retaining the historic structure.					**Length (m)**	1.0
					Width (m)	1.0
					Avg. depth (m)	
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
500	Cut	0.85	?	Construction Cut for stone foundation 501		
501	Structure	0.80	?	NW-SE aligned limestone with mid light brown sand and reddish mottled degraded lime mortar - linear structure - foundation? / stone-lined pit wall?	Pottery	c1600-1700
502	Deposit			Fill of Ditch. Firm mid brownish-grey silty clay		
503	Deposit		0.22	Layer of mixed limestone and brick fragments. Poss associated with demolition of 501	Pottery Clay Pipe Glass	c1650-1725? c1852-1880 L19/E20th C
504	Cut			Poss Construction Cut for existing structural		

				element beyond limits of excavation		
505	Deposit			Fill of 504.	Pottery	c1840-1900

Test Pit 6 and AH600 – Ground Floor						
General description					**Orientation**	n/a
Test Pit 6 was entirely occupied by a well-constructed limestone surface 600, which was overlain by occupation? 601 and the NE corner of a free-standing limestone wall, 603 (poss. the end of 803). A subsequent garden soil and demolition or construction deposits followed. The deposits within AH600, were archaeological in origin and not natural, are poss. fills of the Medieval City Ditch or a discrete feature. The auger hit an unknown limestone obstruction.					**Length (m)**	1.0
					Width (m)	1.0
					Avg. depth (m)	
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
600	Structure			Cobbled surface – limestone cobbles in an off-white sandy lime mortar		
601	Deposit		0.12	Initial occupation? on surface 600. Poss. Cut by 602. Loose mid greenish-brown silty sand	CBM Animal Bone Sample 1: wood and grain charcoal	13-14C?
602	Cut			Poss Construction Cut for 603 or interface between 601 and 604		
603	Structure			Limestone block Wall (NE corner only – north and east faces exposed)		
604	Deposit		0.10	Backfill of 602? Or occupation over 601/602. Friable mid dark grey sandy silt		
605	Deposit		0.15	Poss. Garden Soil or fill of 602? Friable mid brownish-grey clay silt	Pottery Animal Bone	c1580-1700
606	Deposit		0.40	Layer of construction debris, limestone pieces, brick, mortar - associated with existing buildings	Pottery Clay Pipe Glass Animal Bone	c1550-1700 c1660-1700 Later Post-med
607	Deposit		0.20	Layer of limestone and mortar rubble derived from 603?		

608	Deposit			AH600. Layer, fill of Ditch? Fill of discrete feature? mid greenish-grey sandy silt		
609	Deposit			AH600. Layer, fill of Ditch? Fill of discrete feature?Pale grey ashy silt		
610	Deposit			AH600. Layer, fill of Ditch? Fill of discrete feature? mid greenish-grey clayey silt		
611	Deposit			AH600. Layer, fill of Ditch? Fill of discrete feature? Mid-dark greyish brown clay silt		

Test Pit 7 and AH700 – Ground Floor						
General description					**Orientation**	n/a
Test Pit 7 recorded a series of horizontal layers, including garden soils? not dissimilar to TP6 except without the surface and occupation. Plus a possible N-S linear 701. The deposits within AH700, were archaeological in origin and not natural, are poss. fills of the Medieval City Ditch or a discrete feature. The auger hit an unknown limestone obstruction.					**Length (m)**	1.0
					Width (m)	0.9
					Avg. depth (m)	
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
700	Deposit		0.10+	Layer – poss Garden Soil?		
701	Cut			Negative feature – poss N-S linear?		
702	Deposit		0.20+	Fill of 701 mid brown compacted sandy clay		
703	Deposit		0.02	Layer = lens of mortar	Clay Pipe	17C
704	Deposit		0.12	Layer – mid-dark brownish grey friable clay silt poss Garden Soil?	Pottery Clay Pipe CBM Animal Bone	c1680-1750? 17C 16-17C?
705	Deposit		0.10	Layer of loose limestone pieces in mortar Demolition rubble	Pottery Clay Pipe	c1630-1700? 17C
706	Deposit			Layer of Poss. Construction debris	Pottery Clay Pipe CBM Animal Bone	c1600-1650? 17C 16-17C?
707	Deposit		0.65	AH700. Layer, fill of Ditch? Fill of discrete feature? mid greenish-grey clayey silt		

708	Deposit		0.40	AH700. Layer, fill of Ditch? Fill of discrete feature? Mid/dark brownish grey silty clay		
709	Deposit		0.25	AH700. Layer, fill of Ditch? Fill of discrete feature? Dirty sand and gravel - redeposited		
710	Deposit		0.50	AH700. Layer, fill of Ditch? Fill of discrete feature? Tenacious mid grey-brown silty clay		

Test Pit 8 – Ground Floor

General description					**Orientation**	N-S
The earliest remains were the partially exposed rubble core of a large limestone structure, this was directly built over by a later L-shaped limestone wall 803 (poss. equivalent to 603). Both structures were overlain/abutted by rubble 802. The southern element of 803 was directly built over by the existing brick wall 800.					**Length (m)**	1.2
					Width (m)	0.98
					Avg. depth (m)	
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
800	Structure		0.18	Existing brick wall and concrete foundation		
801	Structure		0.24	Existing concrete floor		
802	Deposit		0.50	Loose limestone fragments and light yellowish-brown mortar rubble	Clay Pipe Animal Bone	c1690-1720
803	Structure			L-shaped limestone and mortar wall built on top of truncated remains of 804		
804	Structure			Limestone and lime mortar rubble core of medieval? City wall		
805	Cut			Construction cut for 803		

Test Pit 9 – Ground Floor

General description					**Orientation**	n/a
Test Pit 9 did not reveal any archaeological deposits as excavation was hampered by multiple concrete structures and a service pipe.					**Length (m)**	1.0
					Width (m)	1.0
					Avg. depth (m)	0.7
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
900	Structure			Existing brick wall and concrete foundation forming boundary with property east of former Boswells		

901	Structure			Paving slabs in alleyway		
902	Structure			Concrete foundation base to above ground concrete pillar		
903	Deposit			Rubble fill above cast iron pipe	-	
904	Structure			Concrete (Victorian?)		

Test Pit 10 – Upper basement						
General description					**Orientation**	n/a
Test Pit 9 was nearly entirely occupied by the concrete foundation for the brick footing and wall of the existing basement (collectively 1003). A small area was excavated to 0.60m bgl and revealed the top of a possible fill of the city ditch 1005.					**Length (m)**	1.0
					Width (m)	1.0
					Avg. depth (m)	0.6m max.
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
1000	Struct		0.02	Existing 'wood' floor	-	
1001	Struct		0.20	Existing concrete floor slab	-	
1002	Dep		0.16	Make-up for concrete floor	-	
1003	Struct			Existing brick wall, brick off-set and concrete foundation		
1004	Cut			Construction Cut for 1003		
1005	Deposit			Poss fill of city ditch	-	

APPENDIX B FINDS REPORTS

B.1 Pottery by John Cotter

Introduction and methodology

B.1.1 A total of 154 sherds (2258g) of pottery were recovered from 22 contexts. A range of medieval wares (up to c 1480), and post-medieval wares (c 1480+) as late as the 19th century, are represented.

B.1.2 All the pottery was scanned during the present assessment and spot-dates were provided for each context. Each context group was quantified by sherd count and weight and recorded on a spot-dating spreadsheet. The pottery is in a fragmentary condition but many large fresh sherds are present.

B.1.3 The context spot-date is the date-bracket during which the latest pottery types or fabrics are estimated to have been produced or were in general circulation. Comments on the range of fabrics were recorded, usually with mention of vessel form (jugs, bowls etc.) and any other attributes worthy of note (eg. decoration etc.). Fabric codes referred to for the medieval wares are those of the Oxfordshire type series (Mellor 1994) whereas post-medieval fabric codes are those of the Museum of London (MoLA 2014). The range of pottery is described in some detail in the spreadsheet (Table 1) and therefore only summarised below.

Description

Context	Spot-date	No.	Weight	Comments
107	c1420-1525	34	604	Large fresh sherds - some joining. 2x Tudor Green ware (TUDG) incl jug rim. 1 fresh rim & handle unglazed Cheam whiteware (CHEA) small barrel-shaped drinking jug (c1420-1500; probably the best eg of this type known from Oxford). Mostly late Brill/Boarstall ware (OXBX) incl c10 joining sherds from base of large storage jar. OXBX base from large tripod pipkin with int yellow glz. Jugs. 1x bo (body sherd) OXAM strip jug. 1x bo Minety ware OXBB. 1x OXBC jug neck with wavy line dec
108	c1400-1525	4	72	1x oxbx ?drink jug base. Fresh Minety jar base oxbb. 1x oxam detached anthropomorphic 'owl face' pad from a jug rim c1250-1350 [Nb. Additional 7x sieved sherds incl rim from TUDG lobed cup & more oxbx]
109	c1350-1550?	6	134	1x oxam/oxbx large jug/pitcher handle base with late med-style vertical slashing. 1x bo green-glazed (gg) CBW or local copy (c1350+). Fresh oxam baluster jug rim. Oxbb
202	c1620-1700?	13	164	2x white TGW cup/bowl with handle. Early PMR. BORDY. OXBX. CSTN cup rim
205	c1450-1600?	1	17	OXBX late-looking furrowed jug handle
207	c1450-1600?	9	126	OXBX late-looking jug. Jar base PMRE/oxbx
302	c1450-1600?	4	35	OXBX. PMRE. 2x fresh Coarse Border ware (CBW)
303	c1225-1450	3	28	OXAM. OXAW?

Context	Spot-date	No.	Weight	Comments
305	c1250-1450?	1	4	Bo (body sherd) gg oxam or poss KINGS/CBW? [Label says 0.6m - 0.8m, in AH300]
402	c1450-1525?	26	288	2x bos PMRE (or v late oxag??). 3x TUDG. Lots fresh late oxbx. Oxbc jug. ?CBW thumbed jug base
403	c1480-1550?	16	269	1x bo PMRE. 2x TUDG incl bo wide cup?. Lots fresh late oxbx incl late-style flanged rim bowl. Oxap. 1x small neck bo poss brown-glz ?CSTN/OXBX cup/jug?
501	c1600-1700	1	14	BORDB dish rim
503	c1650-1725?	2	22	1 vess. Jug/cup with handle in PMBL blackware with high quality glossy glaze (cf George Street-type PMBL)
505	c1840-1900	15	68	1x TPW willow pattern dish rim. Frags from 2 x mugs in CREA BAND
605	c1580-1700	2	42	1x FREC jug bo with trace heraldic medallion showing part of lion shield bearer c1580-1630. 1x pad base PMR cup or drink jug
606	c1550-1700	4	46	1x BORDY v small dish (or salt?). BORDG dish? Oxbx
704	c1680-1750?	5	112	4 joining sherds Brill pmed marbled slipware dish rim (BRSL) white slip on red background. 1x fresh bo high quality PMBL
705	c1630-1700?	1	108	Complete pad base from small conical PMBL mug/tyg with lower stubs of 2 handles. Good quality black glaze - poss Staffs/Midlands (BLACK)? Centre of thin base has detached cleanly. On underside are 3 kiln scars showing that white clay kiln props were used - unusual - more likely to indicate Staffs source?
706	c1600-1650?	4	96	2x FREC incl narrow-necked drink jug rim (17C). PMR jug/jar base. Oxbx
2002	c1400-1625	1	1	Fresh scrap oxbx - jug? [Label says BH01, 0.23m BGL]
2004	c1270-1500	1	2	Probably Coarse Border ware (CBW, commoner after c1350). Small fresh scrap probably from base of small tripod pipkin/skillet with trace of applied ?foot. Green glaze int. Heavily sooted/scorched ext from use. Gritty white fabric. [Label says BH01, 1.12m BGL]
2201	c1400-1625	1	6	OXBX. Odd rim. Tapering upwards, roughly sickle-shaped. Light orange-brown glaze allover int. Roughly finished & unglazed ext. From a straight-sided vessel - poss a dripping dish? Or an edge frag from a tongue-like skillet/pipkin handle??
TOTAL		**154**	**2258**	

Discussion

B.1.4 The pottery mostly comprises ordinary domestic pottery typical of the Oxford area. There is a strong late medieval to early post-medieval presence here - mainly from the second half of the 14th century through to the 17th or early 18th century. The 15th and 16th centuries appear to be particularly well represented (in terms of sherd count). Major local wares such as Brill/Boarstall ware (OXAM, c 1225-1625) and, particularly, late medieval Brill/Boarstall ware (OXBX, c 1400-1625) predominate. These include a higher than usual presence of

cooking vessels and large storage jars than usual – evidence perhaps of a nearby kitchen/cooking range? The usual glazed and unglazed jugs in these fabrics also occur.

B.1.5 There seems to be little or no pottery earlier than c 1250 – the usual residual 11th- to 13th-century wares common in Oxford are entirely absent (eg. OXY and OXAQ), although a few sherds of decorated Brill/Boarstall ware (OXAM) jugs dating from c 1250-1350 do occur. These include part of a jug with a small applied anthropomorphic 'face pad' typical of this period (Context 108).

B.1.6 Context (107) produced the largest collection of pottery (34 sherds) including typical late medieval regional imports from the Surrey/Hampshire whiteware potteries. The presence of a Cheam whiteware (CHEA) barrel-shaped jug – a rare form in Oxford – allows this context to be dated c 1420-1525. Other Surrey/Hampshire whitewares include fineware jug and lobed cup sherds in Tudor Green ware (TUDG, c 1380-1500), and jug and cooking vessel sherds in Coarse Border ware (CBW, mainly c 1350-1525). The absence of Raeren stoneware drinking jugs (RAER, c 1480-1550) from these contexts might suggest a 15th-century rather than a 16th-century dating for some of these larger late medieval contexts?

B.1.7 The range of early post-medieval pottery (mainly 17th-century) is fairly typical of Oxford sites. Some may date as late as the early 18th century. Context (505) produced the only 19th-century pottery including a dish rim in transfer-printed whiteware (TPW, mainly after c 1830), and two very crushed mugs/tankards in slip-banded Creamware (CREA BAND, c 1790-1830).

Recommendations regarding the conservation, discard and retention of material

B.1 The pottery here has the potential to inform research through re-analysis - particularly when reviewed alongside further assemblages from any future excavations in the area of the present evaluation. Given the reasonable size, and predominantly late medieval to early post-medieval dating of the assemblage, it recommended that it should all be retained and fully catalogued at some point in the future.

B.2 Clay Tobacco Pipes by John Cotter

Introduction and methodology

B.2.1 A total of 18 pieces of clay pipe weighing 120g were recovered from 8 contexts. These have been catalogued and recorded on an Excel spreadsheet. The catalogue records, per context, the spot-date, 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. Most of the pipe bowls can be paralleled with the local Oxford typology based on pipes from St Ebbe's church (Oswald 1984), although this has been updated where necessary. Other bowls are identified, where possible, by codes based on Atkinson and Oswald's (1969) London pipes typology with bowl types assigned to an abbreviated code (eg. AO22). The catalogue is presented in the table below.

Description

Context	Spot-date	Stem	Bowl	Mouth	Tot sherds	Weight	Comments	MNV Bowls	Maker's Mark
202	c1650-1690	1	1		2	20	Near- complete bowl Oxford Type B	1	
503	c1852-1880		1		1	8	Complete 19C AO28 bowl with pointed spur. Spur marked SH probably for S Huggins of Banbury c1852. Form/maker as St Ebbes No. 33 (Oswald 1984). Moulded foliage seam on front only. Smoked	1	1
606	c1660-1700	4	2		6	44	All covered in rusty cessy deposits. 1x broken bowl (rim missing) heeled type, probably c1660-1680 but slight poss = Ox Type C (c1690-1720)? 17C stems. 1x residual complete Ox Type A bowl (c1630-1650)	2	
703	17C	1			1	6	Fresh chunky stem		
704	17C	2			2	12	Fresh chunky stems		
705	17C	1			1	6	Fresh chunky stem. Stem bore c4mm. Poss early/mid 17C?		
706	17C	2			2	4	Fresh chunky stems. Stem bore c4mm. Poss early/mid 17C?		
802	c1690-1720	2	1		3	20	1x fresh complete Ox Type C bowl. 2x chunky L17/E18C stems	1	
		13	**5**		**18**	**120**		**5**	**1**

Discussion

B.2.2 The range of clay pipes here is fairly typical of Oxford sites. The condition is variable, but generally fairly good. Four of the five bowls present are complete but most of the stem fragments are fairly short. With only 18 pieces of pipe present there is a limited amount that can be deduced. The assemblage, however, has a strong 17th-century dating emphasis (mainly stems). There is one bowl as early as c 1630-1650, but this is residual in a slightly later 17th-century context (606). One of the later bowls dates to c 1690-1720. After this there is a gap of a century, or so, until the second half of the 19th century. The latter period is represented by a single item – a complete bowl of c 1852-1880 by the local pipemaker S. Huggins of Banbury (503).

Recommendations regarding the conservation, discard and retention of material

B.2.3 The clay pipe assemblage here has some, albeit slight, potential for further research and should be retained.

B.3 Ceramic Building Material by John Cotter

Introduction and methodology

B.3.1 A total of 55 pieces (3438g) of CBM were recovered from 17 contexts. A range of material from the 13th or 14th century to the early post-medieval period is represented. The assemblage is in a fragmentary and mostly abraded condition, but some quite large and fairly fresh pieces are also present.

B.3.2 All the CBM was scanned during the present assessment, in a similar way to the pottery, and spot-dates were provided for each context. Each context group was quantified by fragment count and weight and recorded on a spot-dating spreadsheet. Medieval tile fabrics and CBM types from Oxford have been described in some detail in previous reports (Cotter 2006; 2008). The material is described in some detail in the spreadsheet and is therefore only summarised in the table below.

Description

Context	Spot-date	No.	Weight	Comments
108	13-14C?	1	35	Frag Fabric 3B (F3B) pegtile
109	13-14C?	5	246	2x F3B pegtile frag - 1 glazed. 2x worn pink F7B pegtiles. 1x very worn-down corner frag F3B Stabbed Wessex floor tile (c1280-1350), only the underside with survives and shows typical stabbed keying
202	15-17C	6	304	1x worn edge frag from 15/16C quarry/hearth tile in pale orange-brown fine sandy fabric (see 706 below), base missing, top worn - no evidence of glaze. Fresh frags late med St Giles-type red pegtiles incl circular nailholes
206	15-17C	3	364	2x St Giles pegtiles. 1x large frag (258g) from a 13-14C crested ridge tile apex in oolitic limestone-tempered F1A - very abraded but with 2 triangular crests surviving
207	15-17C	13	996	Mainly large fresh frags St Giles pegtiles incl 2 corner frags with circular nailholes, ash glaze on edge of 1. Some worn F3B peg frags. 1x small frag F1A ridge tile. 3x v worn frags thick Penn/Chiltern-style late med floor tiles (c1330-1400+), incl 2 smaller frags with traces of white slip decoration (1 with diagonal white line/saltire), larger corner frag with upper surface worn-off, specks of glaze on sides of 2 frags.
302	13-14C?	2	98	Abraded pegtile frags. 1x F3B edge, 1x F7B?
303	13-14C?	2	124	F3B tiles. 1x peg. 1x v thick edge frag - poss ridge tile (18mm thick)
304	13-14C?	1	17	Fresh flake F3B tile with glaze specks

Context	Spot-date	No.	Weight	Comments
403	15-17C	3	156	1x fresh edge frag St Giles pegtile. 1x worn ?F3B peg corner with nailhole. 1x v worn edge frag thick Penn/Chiltern-style late med floor tile with traces of white slip dec & glaze on the underside
601	13-14C	1	40	Worn body frag from curved Brill-type F3A ridge tile with mottled green glaze
704	16-17C?	2	90	Fairly fine sandy red pegtile frags - post-med. 1 with trace circular nailhole
705	15-17C?	4	104	3x worn scraps early post-med red brick incl edge frag. 1x corner frag burnt/blackened red sandy quarry/hearth tile
706	16-17C?	5	388	Fresh corner frag red sandy early post-med pegtile with nailhole. Scrap of similar ?pegtile. 1x small scrap floor/quarry tile with trace of yellow glaze on white slip. 1x fairly fresh edge frag Tudor hearth brick 50mm thick in v fine light brown sandy fabric with evidence of black scorching on very worn 'upper' surface and traces of grey ash glaze on other 2 surfaces. 1x v worn corner frag Tudor red ?quarry tile or ?brick
2201	16-17C?	3	462	2x small frags pegtile including fresh frag in very oxidised orange St-Giles-type tile with prominent streaks of cream clay in fabric (poss 16/17C?). The other pegtile = F7B with glaze specks. 1x large abraded corner frag (416g) Tudor hearth brick/quarry tile as in (706), 50mm thick and with bevelled sides. Latter scorched greyish-white and roughened on upper surface - possibly scorched? No evidence of glaze
2203	13-15C?	1	4	Fresh scrap orange-pink F3B/F7B pegtile with grey core. No chalk
2205	13-15C?	2	7	Fresh joining flakes from orange F3B pegtile with grey core. Rare chalk
2206	13-15C?	1	3	Abraded scrap from orange F3B pegtile with grey core
TOTAL		**55**	**3438**	

Discussion

B.3.3 The range of CBM present is fairly typical of sites in the centre of Oxford. The functional types and fabrics represented range in date from the 13th or 14th century through to the 16th or 17th century. Nothing obviously later was noted. Given the modest quantity of CBM, there is a quite a high proportion of medieval decorated floor tile present – a total of 5 pieces – some with faint traces of white slip decoration. These, however, are all small and very abraded pieces and probably residual in their contexts. They include a piece of 'Stabbed Wessex' floor tile (c 1280-1350) and 4 or 5 pieces in the late medieval Penn/Chiltern tradition (c 1330-1400+). There are also at least a couple of pieces of medieval ridge tile – including a very abraded crested ridge tile – again probably residual in their contexts.

B.3.4 As usual, fragments of flat roof tile (peg tile) predominate. These occur in the usual reddish or pinkish fabrics typical of the 13th and 14th centuries, but there are also quite a few large fresh fragments of late medieval St Giles-type peg tiles (15th to early 17th century?), including examples with circular nailholes. These have a sandier and more streaky orange-red, or brown, fabric than the earlier tiles. A few redder, more uniform, tiles (eg in Ctx 704) have a more post-medieval looking fabric – and might be of 16th-17th century date?

B.3.5 A very few pieces of soft red 'Tudor' brick were noted. Of more interest are at least 4 pieces of light orange-brown 'Tudor' brick-like quarry tiles, which were probably used as hearth or oven tiles (202, 705, 706, 2201). These are often heavily scorched/sooted on the 'upper' surface where they were exposed to the fire. They have been noted from several other Oxford sites. Like the pottery from this site, the CBM here also shows a fairly strong late medieval to early post-medieval dating emphasis.

Recommendations regarding the conservation, discard and retention of material

B.3.6 The CBM has some, limited, potential to inform research through re-analysis. It is therefore recommended that it should all be retained and properly catalogued at some point in the future.

B.4 Metalwork by Leigh Allen

Introduction

B.4.1 A small assemblage of metalwork was recovered from the evaluation it comprises two copper alloy objects and twenty-one iron fragments. The ironwork is very corroded and many of the fragments are unidentifiable miscellaneous scraps recovered during environmental processing. The assemblage was recovered from Late Medieval/Post Medieval contexts dated by the pottery to the 14th-16th centuries.

B.4.2 The copper alloy objects are a lace tag from context 403 and a shank fragment from a wire pin from context 108. Lace tags and pins are commonly found in Late Medieval/Post Medieval contexts, often in large numbers. Lace tags were used to prevent the ends of laces from fraying and to ease threading. They were used to lace up doublet and hose, girdles, and bodices as well as shoes. Wire pins were commonly used for fixing head-dress and veils or for fastening light clothing.

B.4.3 The iron objects comprise two fragments from a possible equal-arm balance from context 403, ten nail fragments from contexts 108, 109, 205 and 206 and nine unidentifiable fragments. The balance beam with its central U-shaped mount is very corroded and both arms of the beam are broken and misshapen. This type of balance is a common form of household weighing instrument in the Medieval/Post Medieval period (I H Goodall, 2011, 301, fig 11.14, J181).

Recommendations regarding the conservation, discard and retention of material

B.4.4 The metalwork is in poor condition and would benefit from x-radiography. Once this has been done the miscellaneous fragments and the nail fragments could be discarded.

B.5 Glass by Anni Byard

Introduction

B.5.1 The glass was scanned during the present assessment and where possible century or broad period dates were assigned. Objects were quantified by type and weight by context and recorded on a spreadsheet.

B.5.2 A total of two glass fragments weighing 32.2g were recovered from two contexts. Both sherds are from vessels of later post-medieval to 19th or early 20th century date.

Description

Context	Material	Type	Date	Notes
503	Glass	Bottle rim and neck	L19/E20th C	c. 1880-1920. Applied rim. No seam visible.
606	Glass	Body shard	Later PM?	Probable bottle fragment.

Discussion

B.5.3 The bottle rim and partial neck sherd from context 503 is light aqua in colour. It has an applied rim and no visible seam which was probably removed by tooling (a 19th century innovation). It is likely the remains of a medicine or perfume bottle of late 19th or early 20th century date.

B.5.4 The heavily weathered body sherd from context 606 has iridescent surfaces which obscures the glass's original colour. There are no discerning elements to the shard however it is likely to be from a (wine?) bottle and is probably of later post-medieval date.

Recommendations regarding the conservation, discard, and retention of material

B.5.5 While no further work is suggested for this small assemblage, both fragments should be retained as part of the site archive.

B.6 Stone by Ruth Shaffrey

Introduction

B.6.1 A total of 29 pieces of stone weighing 4378g were retained and submitted for analysis. These were examined with a x10 magnification hand lens for signs of use. None of the stone has been worked and all are types of stone that could have been sourced from the Oxfordshire region including micaceous sandstone, oolitic and shelly oolitic Jurassic limestone and Lower Calcareous Grit (see table below).

Ctx	No	Wt	Lithology
302	2	303	Oolitic limestone
501	5	392	Shelly oolitic limestone
606	1	13	Slate
804	1	2500	Lower calcareous grit
2002	2	10	Sandstone
2007	1	330	Oolitic limestone
2101	4	42	Micaceous sandstone
2203	3	122	Shelly oolitic limestone
2205	2	210	Shelly oolitic limestone
2206	4	243	Shelly oolitic limestone
2207	4	213	Shelly oolitic limestone

B.6.2 All the stone can be discarded.

APPENDIX C ENVIRONMENTAL REPORTS

C.1 Environmental Samples by Richard Palmer

Introduction

C.1.1 Four 10L bulk samples were taken as part of a test pitting evaluation at Boswells Former Department Store, Oxford to investigate the potential for the recovery of ecofacts and artefacts. Given the size of the test pits and limited access, taking larger samples was impractical. One of the main aims of the evaluation was to determine whether waterlogged (anaerobic) deposits were present, particularly in Test Pit 1 which was thought to be situated within the city ditch.

Method

C.1.2 The samples were processed in their entirety at Oxford Archaeology using a modified Siraf-type water flotation machine. The flots were collected in a 250µm mesh and residues in a 500µm mesh and, after a quick scan to determine whether waterlogged material was present, dried. The residue fractions were sorted by eye and with the aid of a magnet while the flot material was sorted using a low power (x10) binocular microscope to extract cereal grains and chaff, smaller seeds and other quantifiable remains.

Results

C.1.3 Table 1 provides a summary of the sample details and abundance data from the flot assessment. Finds from the heavy residues will be considered separately, together with the relevant hand collected material.

Test Pit 1

C.1.4 Sample 2 was extracted from fill 107 and produced a modest flot with no evidence of anaerobic preservation. Charcoal is abundant with some fragments being ring porous type. Charred grain is in poor condition and could not be identified further. A range of artefacts were recovered from the sample including mammal bone, fish bone and scales, pottery, marine shell and iron.

C.1.5 Sample 3 was extracted from fill 108 and produced a large flot again with no evidence of waterlogging. Charcoal is abundant with both ring porous and diffuse porous types present; 30-50% of the material is roundwood. Identified taxa include beech (*Fagus sylvatica*), ash (*Fraxinus excelsior*), oak (*Quercus* sp.) and hazel (*Corylus avellana*). Charred cereal grains are present in the flot in poor condition but are likely to be wheat (cf *Triticum* sp.). As with sample 2 a range of artefacts were recovered including bone, pottery, copper alloy and iron.

C.1.6 Sample 4 was extracted from fill 109 and produced a poor flot with no clear evidence of anaerobic preservation. All charcoal is <4mm in size and there are fragments of clinker like material. A range of artefacts were recovered including animal bone including fish, pottery and iron.

C.1.7 Spot dating for the fills from Test Pit 1 suggests that these deposits accumulated in the medieval – post medieval period (AD 1350-1550).

Test Pit 6

C.1.8 Sample 1, from context 601 which is described as an occupation layer and is probably Post-medieval, and produced a limited flot. Charcoal includes ring porous type and roundwood and there are also two charred wheat grains, one in very poor condition. Bone and iron were recovered from the residue.

Sample no.	Context no.	Area/Trench	Feature/Deposit	Date	Sample vol. (L)	Flot vol. (ml)	Charcoal >2mm	Grain	Chaff	Weeds	Other Charred	Molluscs	Notes
1	601	TP 6	-	P-med?	10	10	+++	+				+	10YR 5/8 sandy/silty clay.
2	107	TP 1	-	Med	10	40	++++	+					10YR 4/4 silty sand.
3	108	TP 1	-	Med	10	200	++++	+					10YR 3/3 sandy silt loam. Charcoal identifications: *Fagus* x3 cf *Fagus* x1 *Quercus* x2 *Fraxinus* x1 *Corylus* x1
4	109	TP 1	-	Med	10	3	++						10YR 3/3 sandy silt loam.

Key: +=present (up to 5 items), ++=frequent (5-25), +++=common (25-100), ++++=abundant (100+).
Table: Assessment of bulk samples.

Discussion

C.1.9 Sampling indicates good potential for the recovery of charred material and bone. Terrestrial and freshwater molluscs are absent from the potential ditch fills in Test Pit 1. Charcoal was recovered in useful quantities from several samples and further identification of the material, particularly from sample 3 would be possible. Preservation of charred seeds in these samples is poor but these are small samples from a very limited excavation area.

C.1.10 Although the sediment in the lower two of the sampled deposits in Test Pit 1 comprised a dark brown sandy silt, there is no evidence of waterlogging. There is, however, a possibility that waterlogged deposits could survive in lower deposits particularly since even fragile fish scales survived in sample 3 from fill 108 and this should be borne in mind for any future excavation.

Recommendations for retention/dispersal

C.1.11 The flots warrant retention until all works onsite are complete but are not expected to require further work during this phase.

C.2 Animal Bone by Rebecca Nicholson

Introduction

C.2.1 An assemblage of 214 fragments weighing 2524g was recovered from 18 contexts by hand collection during the excavation and from the sorted heavy residues of 4 bulk samples,

sieved to 0.5mm and sorted to 2mm. The assemblage can be broadly dated as medieval to post-medieval based on ceramic spot dates.

Methodology

C.2.2 The hand collected animal bone assemblage was recorded in full with the aid of the Oxford Archaeology skeletal reference collection and standard identification guides, using a diagnostic zone system for the major limb bones (Serjeantson 1996). Indeterminate fragments, typically comprising <50% of a zone, have been counted as such. The assemblage has been counted by the number of individual specimens (NISP) with each fragment identified to species or assigned a size category where possible (e.g. large mammal – cattle-size, medium mammal - sheep-size). If modern breaks were apparent bones were refitted where possible and counted as 1.

C.2.3 Bone condition was recorded on a semi-quantitative scale of 1 (as fresh) to 5 (extremely poor, corroded and crumbly). Where condition was difficult to score using these criteria (eg burnt bone and teeth) condition was recorded as 0.

C.2.4 Bones from the residues of sieved samples were identified and recorded where possible, but otherwise counted as indeterminate fragments. A small number of items, mainly fish bones, were extracted from the flot of sample 3 from context 108 but these have only been scanned.

C.2.5 Few bones were complete enough to permit measurement, but where this was possible measurements follow von den Driesch (1976). Tooth wear stages follow Grant (1982). Full records will be available in the site archive.

The assemblage

C.2.6 Generally, the bone is in fair condition (Table 1), bearing in mind the fact that poorly preserved bone tends to break into large numbers of fragments and for this report all fragments were recorded. Bone from contexts 2004 and 2206 was poorly preserved and the bone in the best condition came from contexts 107, 108 and 109 and 802. At least 9 bones (contexts 202, 205, 302, 303, 304, 605, 802) had been gnawed, with evidence both of canine and rodent gnawing. Only one bone, a large mammal pelvis fragment from 605, exhibited any evidence of burning.

C.2.7 Species identified in the hand collected assemblage include cattle, caprine (sheep/goat), pig, rabbit and cat (Table 2). The bone from the sieved sample residues from contexts 107, 108 and 109, broadly dated to AD 1350-1550, also included fish (herring, eel, cyprinid) and bird (goose) as well as small mammal, neonate and butchered bones, items missing or scarce in the hand collected assemblage. Items recovered in the flot of sample 3 (108), which has been spot dated as c. 1400-1550, comprise bones from small mammal, anuran and fish including eel, herring and cyprinid. Several fragments of fish scale are also present including an almost complete percoid scale.

C.2.8 Only two bones were complete enough for measurement (Table 3) and aging data was established from 4 mandibles or loose teeth (Table 4). There was no clear evidence of pathology in this small assemblage.

C.2.9 Seven bones were butchered, including a cranial fragment (probably sheep/goat) from context 107 which had knife cuts consistent with skinning or possibly associated with horn core removal although this part of the skull was missing. Conjoining pieces of a sheep/goat sacrum from context 107 had been chopped through along the side of the medial crest, presumably when splitting the carcass into "sides". The same bone has knife cuts to the ventral aspect. A cattle mandible, also from (107) has several chop marks to the lateral aspect of the ramus, immediately below the condylar process. Splitting the carcass along the midline was also evidenced by a fragment of a vertebra, probably cattle, that had been chopped through (context 304). A heavy cleaver had also been used to chop through a large mammal humerus from 802.

Conclusions

C.2.10 The bone has been fully recorded and is consistent with the broad dates assigned to it. Preservation is clearly fairly good, particularly in contexts 107-109 where small animal bones, including fish, have been recovered and even fragile fish scales survive.

Bone Condition	Number of Fragments	%
1	0	0
2	14	13
3	65	62
4	25	24
5	1	1

Table C2:1 Bone condition

		107	108	109	202	205	206	207	302	303	304	402	403	601	605	606	704	706	802	2004	2206	Grand Total
Cattle	*Bos taurus*	1	4(1)	4	1			2		3												16
Cattle?					1		1															2
Sheep/goat	*Ovis/Capra*	(1)	1(1)		2	3	1	1	1	5	2	2						1	3			24
Sheep/goat?												1										1
Pig	*Sus scrofa*			1	1													1				3
Pig?										1												1
Large mammal			1	1		2	3	3	11	4	10	1	3		2	1			1		1	44
Medium mammal		(1)	2(14)	(1)	3	4		3	1		1	3				1			1			35
Cat	*Felis catus*		1(1)	(1)					1													4
Rabbit	*Oryctolagus cuniculus*		(1)									1										2
Frog/toad	*Rana/Bufo*	(1)																				1

		107	108	109	202	205	206	207	302	303	304	402	403	601	605	606	704	706	802	2004	2206	Grand Total
Goose	*Anser* sp.	(1)																				1
Bird indet														(1)								1
Eel	*Anguilla anguilla*	(2)		(1)																		3
Herring	*Clupea harengus*	(1)	(1)																			2
Cyprinid	Cyprinidae	(1)																				1
Indeterminate		(10)	(27)				4	5		11	4	3		(3)		3	2			1		73
Grand Total		19	55	9	8	9	9	14	14	24	17	11	3	4	2	5	2	2	5	1	1	214

Table C2:2 Number of Fragments by Context and Taxon (counts in brackets are from sieved samples).

Context	Animal	Element	GL	Bp	Bd	SC/SD
108	Cattle	metacarpal	180	50.3	53.2	30
402	Sheep/goat	metatarsal	121	17.2	23.3	11.8

Table C2:3 Bone measurements

Context	Animal	Element	MWS	Age
202	Cattle	M3	44-47	Old adult
206	Sheep/goat	Mandible	34	2-4 years
108	Cattle	Mandible	3	0-0.5 years
207	Cattle	Mandible	3	0-0.5 years

Table C2:4 Mandible wear stages

Recommendations regarding the conservation, discard and retention of material

C.2.11 The bone should be retained at least until all works at the site have been completed. As a small assemblage, however, retention in the archive is not considered to be a priority unless augmented by material recovered from the site as part of a later stage of work.

C.3 Shell by Rebecca Nicholson

C.3.1 One complete oyster (*Ostrea edulis*) left valve, weighing 28g was recovered from the heavy residue of sample 2 from context 107 which has been spot dated to c. 1420-1525. The shell is of moderate size, with a large angled hinge and is fairly complete although in chalky condition. There is evidence from a diagnostic tunnel on the inner surface of the shell, close to the margin, of infestation by the polychaete worm *Polydora hoplura* and the shell also has a chalky deposit internally which may indicate growth in a habitat of changing salinity such as an estuary or tidal creek (Orton et al. 1927).

C.3.2 Fragments from at least one small oyster, in very poor condition and weighing a total of 6g, were extracted from the residue of sample 3 from context 108, which has been spot dated to c. 1400-1525.

Recommendations regarding the conservation, discard and retention of material

The shell does not merit retention in the archive

APPENDIX D GEOARCHAEOLOGICAL REPORTS

D.1 Borehole Report and Logs by C Heistermann and E Stafford

Introduction

D.1.1 Three boreholes, drilled for geotechnical purposes, at the site of the former Boswells Store, Broad Street Oxford, were recorded by a geoarchaeologist to provide preliminary information on the sub-surface sediment sequences. This supplements the results of an archaeological Watching Brief on shallower geotechnical test pits. The boreholes included two window samples (BH1 and BH2) and a deeper cable percussion borehole (BH3).

D.1.2 Borehole BH1 was drilled in the basement, it is located the furthest north of the boreholes and thought likely to encounter the medieval defensive ditch. Borehole BH2 was also drilled in the basement, to the southeast of borehole BH1 and nearer to the town wall. Borehole BH3 was drilled on the ground floor, east of borehole BH2.

Method

D.1.3 For the two window samples, the geotechnical contractor drilled duplicate boreholes to allow a continuous sequence of sleeved cores to be retained solely for geoarchaeological purposes. These cores were transported to OA premises where they were opened, cleaned, photographed and recorded. The drilling of the cable percussion borehole was monitored onsite and a series of bulk samples retained from the preliminary inspection pit and the open hole, along with smaller samples from the SPT sampler. A summary of the borehole details is presented in Table 1 and the samples recovered from BH03 in Table 2.

D.1.4 The sediment sequences were recorded from ground surface on a geoarchaeological log proforma with each layer allocated a unique context number Sediment recording followed Historic England guidelines (2015) and Jones *et al.* (1988) and typically included a description of texture, compaction, colour, clast size and abundance, bedding structures and other inclusions (eg. charcoal), post-depositional features (eg. rooting, mottling, mineralisation), and the nature of sediment contacts (eg abrupt, diffuse, irregular). All finds recovered from the boreholes were submitted to a specialist for spot dating.

Table: Summary of borehole details

Borehole	Easting	Northing	Elevation	Total depth
BH1	451293.4249	206405.0645	60.79mOD	5
BH2	451300.6163	206398.4763	60.79mOD	5
BH3	451311.3001	206398.5104	63.77mOD	15

Table: Summary of samples recovered from BH03

BH3	Depth (m)	Sample type
	0.00-1.20	Inspection pit
	1.20-1.65	SPT
	2.00-2.45	SPT
	2.00-2.70	Bulk
	3.00-3.45	SPT
	3.00-4.00	Bulk

	4.00-4.45	SPT
	4.00-4.90	Bulk
	5.00-5.45	SPT
	5.00-5.70	Bulk
	5.70-5.80	Bulk
	6.00-6.20	Bulk
	6.45-6.95	SPT

Results

D.1.5 A summary of the broad stratigraphy encountered in the boreholes is presented in Table 3 and the detailed lithological descriptions in Table 4. Oxford Clay bedrock was reached in the base of all three boreholes at elevations ranging from 55.97m to 56.84m OD. This is consistent with known heights for the surface of the Oxford Clay in the vicinity (e.g. Ship Street/Cornmarket junction, 56.6m OD).

D.1.6 This was overlain by thick deposits of Pleistocene gravel of the Summertown-Radley Terrace, the surface of which occurred at 57.57m to 58.39m OD. The lowest elevation occurred in boreholes BH3 and the highest in BH2. In boreholes BH1 and BH3 the upper part of the gravel was recorded as possibly redeposited to 58.11m and 57.97m OD respectively.

D.1.7 The gravel in boreholes BH1 and BH3 was overlain by a series of dark grey organic/humic (waterlogged) clay silts with a varying clast content. This may indicate the waterlogged silting of features. In BH1 theses layers totalled 1.32m in thickness, and borehole BH03, 0.9m. There was some indication of laminations in the basal layers (layers 2008 and 2207) which may indicate standing water in the base of features. In the upper layer in BH1 (layer 2005) charcoal, animal bone and pottery were recorded. The organic and waterlogged nature of the fills suggests there may be some potential for paleoenvironmental preservation (eg. plant remains, insects) These organic fills were not recorded in borehole BH02.

D.1.8 Overlying the organic deposits in Boreholes BH1 and BH3, and the Terrace Gravel in BH2 were a series of occupation deposits/fill comprising mixed dark grey and dark greyish/olive brown sandy clay silts with varying clast content, CBM, mortar, pottery fragments, animal bone, and oyster and mussel shell. The greenish or olive colour of some of these layers may suggest inputs of cess.

D.1.9 The archaeological sequence was capped by 'Made Ground' consisting in mixed beds of sands, silty sands and sandy silty clays with fragments red brick, mortar, concrete, and limestone pebbles and cobbles. The made ground was sealed by a concrete slab.

Table: Summary of borehole stratigraphy (top elevations, metres OD)

BOREHOLE	CONCRETE	MADE GROUND	OCCUPATION DEPOSIT/FILL	ORGANIC DEPOSIT/ FILL	TERRACE GRAVEL (REDEPOSITED?)	TERRACE GRAVEL	OXFORD CLAY
BH1	60.79	60.63	60.61	59.43	58.11	57.95	56.84
BH2	60.79	60.66	59.94			58.39	55.97
BH3	63.77	63.42	62.57	58.87	57.97	57.57	56.47

Table: Borehole lithology

TOP (m)	BASE (m)	LITHOLOGY	CONTACT	CONTEXT	FINDS AND DATE	DESCRIPTION
						Borehole BH1
0.00	0.16	Concrete	abrupt	2000		CONCRETE
0.16	0.18	gravelly sand	abrupt	2001		Light yellowish brown fine/medium sand, common (10%) inclusions of angular CBM <20mm. MADE GROUND
0.18	0.52	sandy silty clay	Clear	2002		Moderately firm dark grey 2.5Y4/1 slightly sandy silty clay with common small diffuse olive 5Y4/4 to olive green lenses (3mm), possibly from faeces, rare inclusions of pebbles and small fragments of red CBM, white mortar and pottery (2-5%). DEPOSIT
0.52	0.72	sandy clayey silt	Clear	2002	Pottery (c 1400-1625) Sandstone	Firm dark greyish brown 2.5Y4/2 clayey sandy silt with frequent (20%) with diffuse greenish olive lenses (3mm), possibly from faeces, rare inclusions (2%) of charcoal and oyster shell. DEPOSIT
0.72	0.80	clayey silt	Clear	2003		Firm dark grey 2.5Y4/1 clayey silt, trace of sand, few inclusions of charcoal (5%). DEPOSIT
0.80	1.36	sandy clayey silt	Abrupt	2004	Pottery (c1275-1500) Animal Bone	Firm olive brown 2.5Y4/3 slightly sandy, slightly clayey silt, few (5%) small (<5mm) limestone pebbles and rare small charcoal, pottery and animal bone fragments (3%). DEPOSIT
1.36	1.64	sandy clayey silt	Clear	2005		Moderately firm very dark grey 5Y3/1 humic rich slightly sandy clayey silt, common (15%) small subang/subr pebbles, matrix supported, inclusions of fragments of charcoal (15%) and animal bone (3%), organic odour. WATERLOGGED DEPOSIT
1.64	2.00	sandy clayey silt	Clear	2006	Animal Bone	Firm dark olive grey 2.5Y3/2 sandy clayey silt, common (15%) diffuse blackish lenses (5mm) above 1.80m, common (10) inclusions of small limestone pebbles <15mm, rare limestone cobbles, organic odour. DEPOSIT (WATERLOGGED)
2.00	2.48	organic rich silty clay	Clear	2007	Oolitic limestone	Soft black 5Y2.5/1 slightly silty clay, inclusions of few sandstone cobbles, organic odour. WATERLOGGED DEPOSIT
2.48	2.68	organic rich silt	clear	2008		Firm very dark grey 5Y3/1 silt, trace of clay and sand with common (10%) diffuse lenses (5mm) of grey 5Y5/1 silt, common inclusions (10%) of angular limestone pebbles <25mm, organic odour. WATERLOGGED DEPOSIST
2.68	2.71	gravelly clayey sand	clear	2009		Soft pale yellow 5Y7/3 clayey sand, frequent matrix supported subrounded

TOP (m)	BASE (m)	LITHOLOGY	CONTACT	CONTEXT	FINDS AND DATE	DESCRIPTION
						flint pebbles <30mm (30%). DEPOSIT / PRIMARY FILL?
2.71	2.84	gravelly clayey sand	clear	2010		Loose olive 2.5Y4/3 slightly clayey sand with common (15%) subang/rounded flint and limestone <60mm. RE-DEPOSITED SAND AND GRAVEL / PRIMARY FILL?
2.84	3.40	clayey sandy gravel	clear	2011		Loose yellowish red 5YR5/6 slightly clayey coarse sand, with abundant (60%) small to large subang/subr limestone pebbles <60mm. PLEISTOCENE RIVER TERRACE
3.40	3.50	gravelly sand	clear	2011		Loose brown 7.5Y5/4 fine/course, mainly course, sand (80%), common matrix supported subangular limestone pebbles <30mm. PLEISTOCENE RIVER TERRACE
3.50	3.95	gravelly sand	abrupt	2011		Loose, dense light yellowish brown 10YR6/4 fine to coarse sand, frequent (40%) subang/subr limestone pebbles <60mm. PLEISTOCENE RIVER TERRACE
3.95	4.74	silty clay	abrupt	2012		Stiff light grey 2.5Y7/2 massive silty clay. OXFORD CLAY
4.74	5.00	silty clay	abrupt	2012		Stiff, dense grey N 2.5/ silty clay, very weakly structured. OXFORD CLAY
						Borehole BH2
0.00	0.13	Concrete	abrupt	2109		CONCRETE SLAB
0.13	0.39	gravelly silty sand	clear	2100		Loose pale brown silty sand with frequent concrete and red brick fragments. MADE GROUND
0.39	0.50	sandy silty clay	clear	2101	Micaceous sandstone	Loose dark greyish brown loam (clasts or lumps) mixed with few (10%) small fragments of very pale brown mortar and red brick <10mm, frequent concrete and red brick fragments. MADE GROUND
0.50	0.63	silty sand	abrupt	2102		Loose pale brown 10YR6/3 slightly silty fine /medium sand, few (5-10%) inclusions of mortar and red brick fragments <10mm. MADE GROUND
0.63	0.85	clayey sandy silt	diffuse	2103		Firm reddish brown 5YR4/4 clayey sand with common (10%) olive grey lenses (10mm), abundant inclusions of s/m subang/subr limestone pebbles <40mm and angular sandstone slabs <100mm, clast supported. MADE GROUND
0.85	1.97	clayey sandy silt	clear	2104		Moderately firm to soft very dark greenish grey 10Y3/1 clayey sandy silt, gritty, common inclusions of mostly small subang/angular small limestone pebbles <60mm (15%), rare charcoal and rare white sandstone cobbles. DEPOSIT

TOP (m)	BASE (m)	LITHOLOGY	CONTACT	CONTEXT	FINDS AND DATE	DESCRIPTION
1.97	2.40	gravelly sandy silt	clear	2105		Loose brownish grey 10YR5/2 sandy silt, frequent angular limestone pebbles and cobbles (40%). DEPOSIT (dropdown?)
2.40	2.56	clayey sandy gravel	diffuse	2106		Moderately firm yellowish red 5YR5/8 clayey sand, frequent (50%) inclusions of ang/subang s/m flint and limestone pebbles, increasingly frequent with depth. INTERFACE SUPRA NATURAL?
2.56	3.00	sandy gravel	clear	2107		Loose yellowish red 5YR5/6 becoming dark reddish brown 5YR3/3 mainly coarse sand with abundant (70%) clast supported subang/subr limestone and rare flint pebbles <40mm. PLEISTOCENE RIVER TERRACE (WEATHERED)
3.00	3.35	sandy gravel	clear	2107		Loose brown 7.5YR5/4 sand, trace of silt, with abundant (70%) clast supported ang/subr limestone and rare quartz <40mm. PLEISTOCENE RIVER TERRACE
3.35	3.76	sandy gravel	clear	2107		Loose yellowish red 5YR5/6 sand with matrix supported frequent (40%) small to medium ang/subr limestone, flint and quartz pebbles <40mm. PLEISTOCENE RIVER TERRACE
3.76	4.33	sandy gravel	clear	2107		Loose becoming pale yellow 2.5Y7/4 sand with abundant (90%) small/medium clast supported subang/rounded limestone pebbles <40mm. PLEISTOCENE RIVER TERRACE
4.33	4.65	sandy gravel	clear	2107		Loose yellowish red 5YR5/6 becoming pale yellow 2.5Y7/4 sand with frequent (40-50%) small/medium subang/rounded clast supported limestone and rare flint pebbles <40mm. PLEISTOCENE RIVER TERRACE
4.65	4.82	gravelly silty sand	abrupt	2107		Firm, dense, yellow 2.5Y7/6 silty sand with frequent (30-40%) subang/subr small to medium matrix supported limestone pebbles <40mm. PLEISTOCENE RIVER TERRACE
4.82	4.96	silty clay	abrupt	2108		Firm to stiff very pale yellow 2.5Y8 becoming light greyish brown 2.5Y6/2 silty clay. OXFORD CLAY
4.96	5.00	silty clay		2108		Stiff, grey N 2.5/ silty clay. OXFORD CLAY
						Borehole BH3
0.00	0.35	concrete	abrupt	2200		CONCRETE SLAB Two layers of concrete (0.04-0.15 and 0.15-0.35m) and overlying shop floor surface (40mm).
0.35	1.20	sandy silt	clear	2201	Pottery c1400-1625 CBM (16-17C?)	Moderately firm dark greyish brown 2.5Y3/2sandy silt, common angular/subr limestone pebbles <80mm, rare fragments of animal bone and CBM, clear contact. MADE GROUND

TOP (m)	BASE (m)	LITHOLOGY	CONTACT	CONTEXT	FINDS AND DATE	DESCRIPTION
1.20	2.00	sandy silt	clear	2202		Firm, very dark greyish brown 2.5Y3/2 sandy silt with common inclusions of pale brown sandy mortar and limestone pebbles, clear contact MADE GROUND
2.00	2.70	clayey sandy silt	clear	2203	CBM (13-15C?) Shelly oolitic limestone	Firm dark greyish brown 10YR4/2 slightly clayey sandy silt. Sand is fine to coarse. Common inclusions of small pale brown mortar clasts and mainly small subang/subr limestone pebbles (15%), rare cobbles <100mm (5%) and rare charcoal (3%), clear contact. DEPOSIT
2.70	3.22	clayey sandy silt	abrupt	2204		Firm greyish brown 10YR5/2 clayey fine sand with rare coarse sand grains and large diffuse strong 7.5YR 4/6 mottles, abrupt contact. DEPOSIT
3.22	4.40	clayey silt	abrupt	2205	CBM (13-15C?) Shelly oolitic limestone	Firm very dark grey 2.5Y3/1 clayey silt with fine mortar flecks and subangular flint and limestone pebbles <40mm (10%), rare small fragments of charcoal, mussel shell and animal bone <1%, abrupt contact. DEPOSIT
4.40	4.90	clayey sandy silt	clear	2206	CBM (13-15C?) Shelly oolitic limestone	Moderately firm to soft dark greyish brown 2.5Y4/2 slightly clayey sandy silt with angular limestone pebbles <40mm and rare inclusions of charcoal, animal bone fragments and light brown sandy mortar (1%). DEPOSIT
4.90	5.80	clayey organic rich silt	abrupt	2207	Shelly oolitic limestone	Soft structureless very dark grey 2.5Y3/1 slightly clayey organic rich silt. becoming almost structureless black 2.5Y2.5/1 clayey organic rich silt with rare limestone pebbles and charcoal (5%) below approximately 5.25m, becoming very dark greyish brown 2.5Y3/2 with black lamination below 5.70m. Strong organic odour throughout. WATERLOGGED DEPOSIT
5.80	6.20	clayey sandy gravel	clear	2208		Light greenish grey 10GY6/1 becoming grey 2.5Y5/1 clayey sand with frequent becoming abundant (30-70%) s/m suba/subr limestone pebbles <40mm. Clear contact. RE-DEPOSITED GRAVEL
6.20	7.30	sandy gravel	clear	2209		Loose yellowish red 5YR5/4 becoming brown 10YR 5/3 slightly silty sand with abundant (70%) small/large subang/subr flint pebbles <80mm and rare quartz and quartzite pebbles (2%). Sand lens at 6.65 (100mm). PLEISTOCENE RIVER TERRACE
7.30	15.00	silty clay		2210		Stiff structureless light brownish grey 2.5Y6/2 to light olive grey 2.5Y6/3 silty clay. OXFORD

APPENDIX E BIBLIOGRAPHY

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APPENDIX F SITE SUMMARY DETAILS

Site name:	The former Boswells Department Store, 1-4 Broad Street, Oxford
Site code:	OXBSEV
Grid Reference	SP 5129 0640
Type:	Evaluation
Date and duration:	February 2021 (1 week)
Area of Site	tbc
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 services in due course, under the following accession number: OXCMS : 2021.10
Summary of Results:	Oxford Archaeology (OA) was commissioned by R Blue Regen Ox Ltd on behalf of Reef Group to excavate ten geotechnical test pits using archaeological evaluation methods and monitor and log three boreholes at the former Boswells Department Store, 1-4 Broad St, Oxford (site centre SP 5129 0640). The works are linked to a redevelopment of the site, Oxford City Council Planning Ref: 20/02480/FUL. The work clearly demonstrated that significant archaeological deposits relating to successive phases of defensive ditch, probably Anglo-Saxon and certainly Medieval and their sequences of infilling during the medieval and Tudor periods, as well as later occupation encroachment in the 17th/18th centuries survive within the site despite the existence of extensive basements. Both ditches appear to have a similar, size and form c 27m wide and c 5m deep – neither appeared to reach the Oxford Clay bedrock. The presence of waterlogged deposits in both defensive ditches shows that there is very good potential for highly significant organic remains which would contain information on the nature of the ditch environment and hydrology, as well as otherwise artefacts and ecofacts relating to diet and life that would otherwise have decayed. The presence and position of a probable part of the Medieval Town Wall supports the position and alignment of this structure as first indicated on the First Edition 1:500 OS map and then in later archaeological excavations in the churchyard of St Michael at the Northgate during 1971-2.

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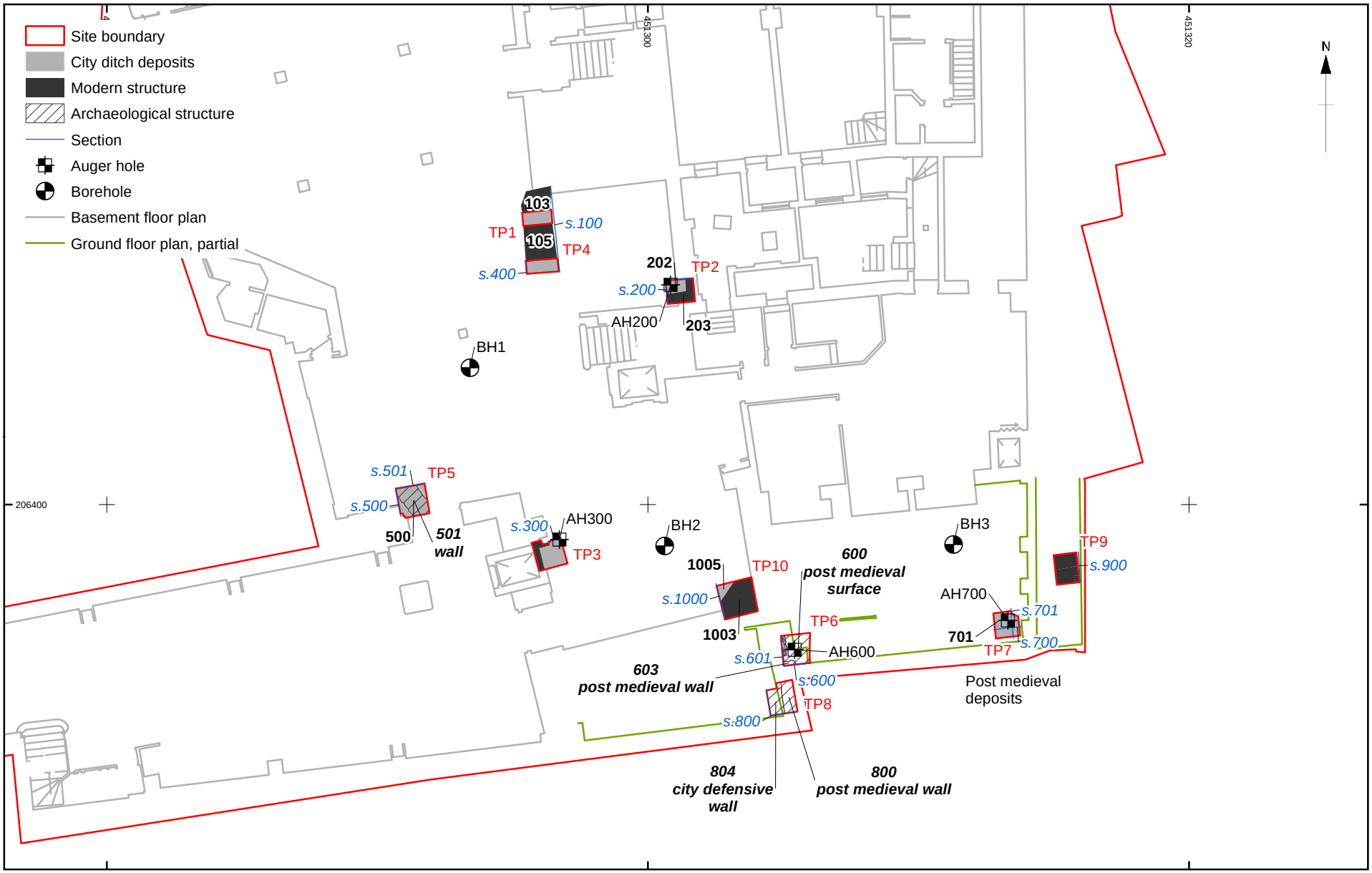
Figure 1: Site location



Contains Ordnance Survey data © Crown copyright and database right 2018

0 10m

1:200 @ A4

Figure 2: location of test pits and boreholes

X:\o\Oxford Former Boswells Building\Geomatics\02_GIS Projects\Figures\OXBS21_Figure2_A4.mxd*anne.kilgour*18/04/2021

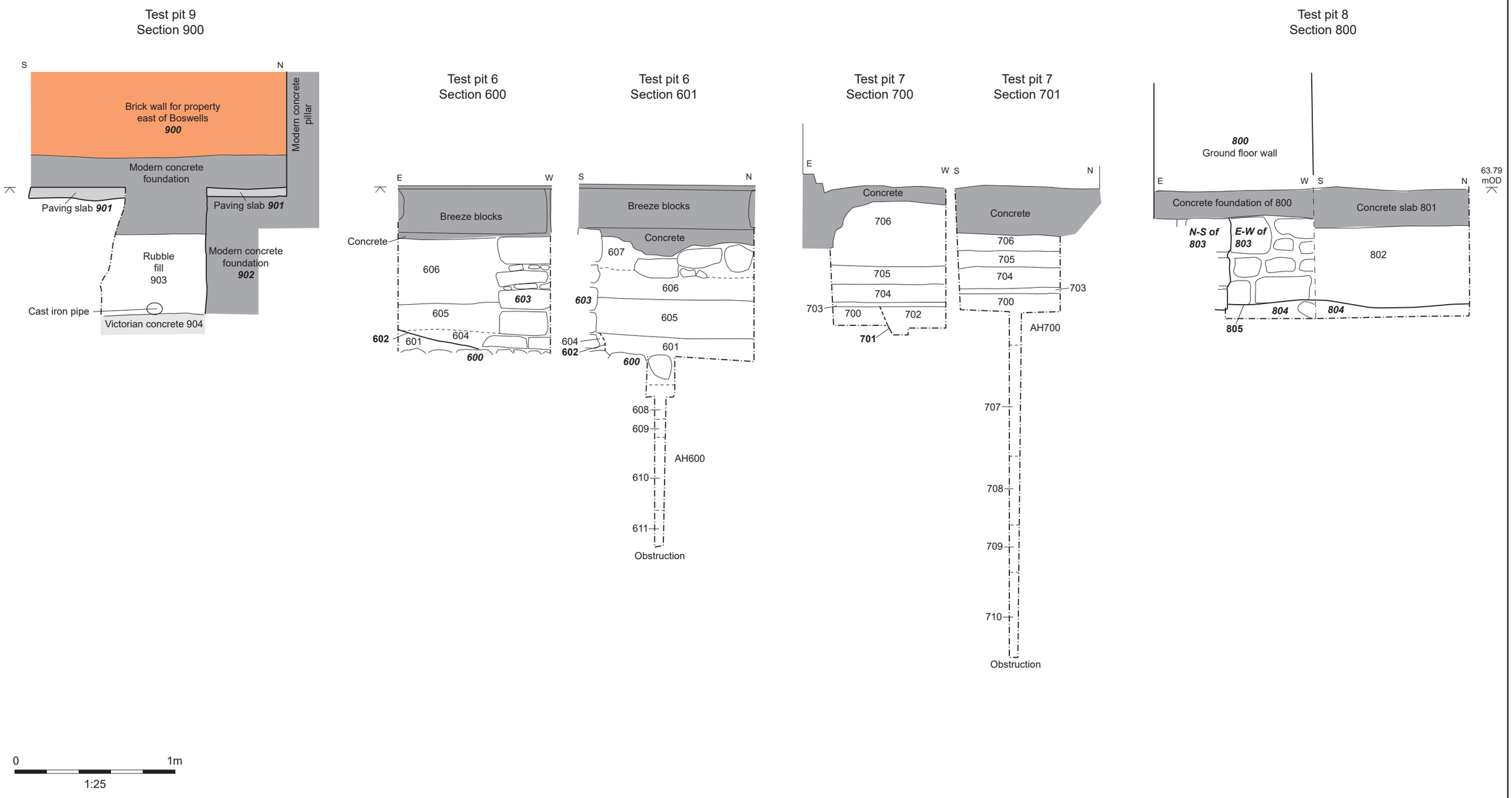


Figure 3: Sections from TPs in Ground floor (TP's 9, 6, 7 and 8 from N-S)

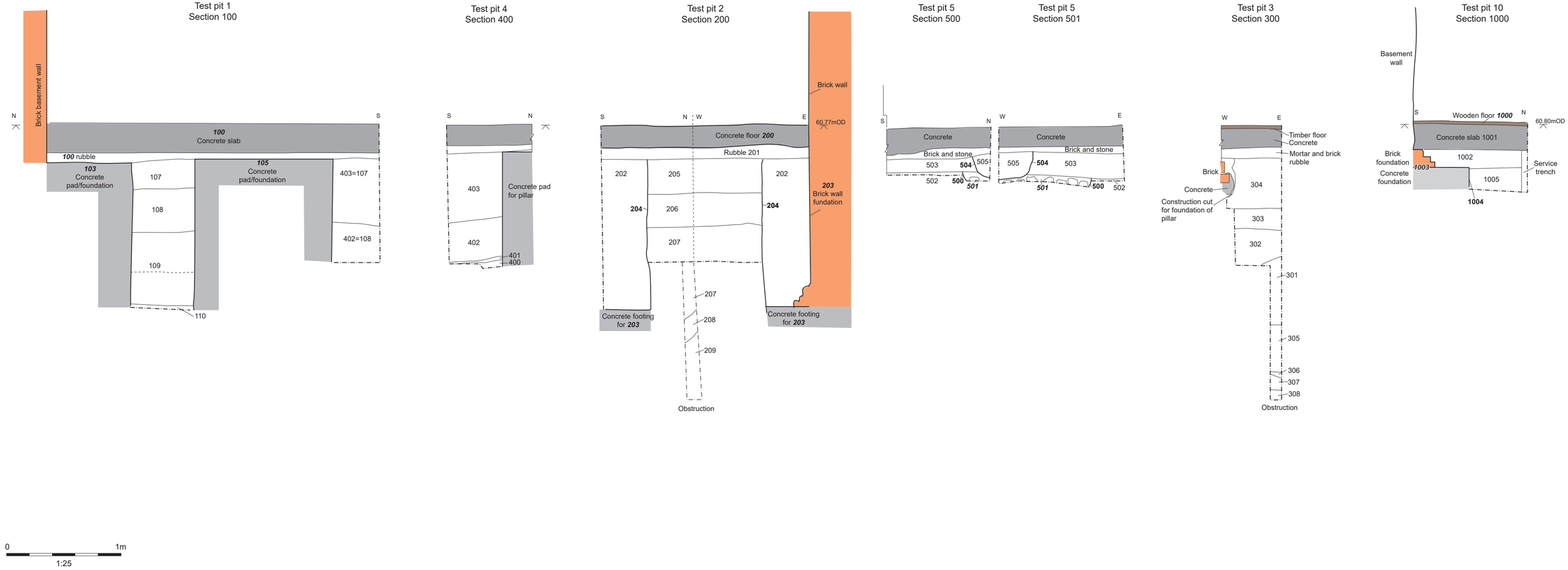


Figure 4: Sections from TPs in Basement Floor (TPs 1, 4, 2, 5, 3 and 10 from N-S)

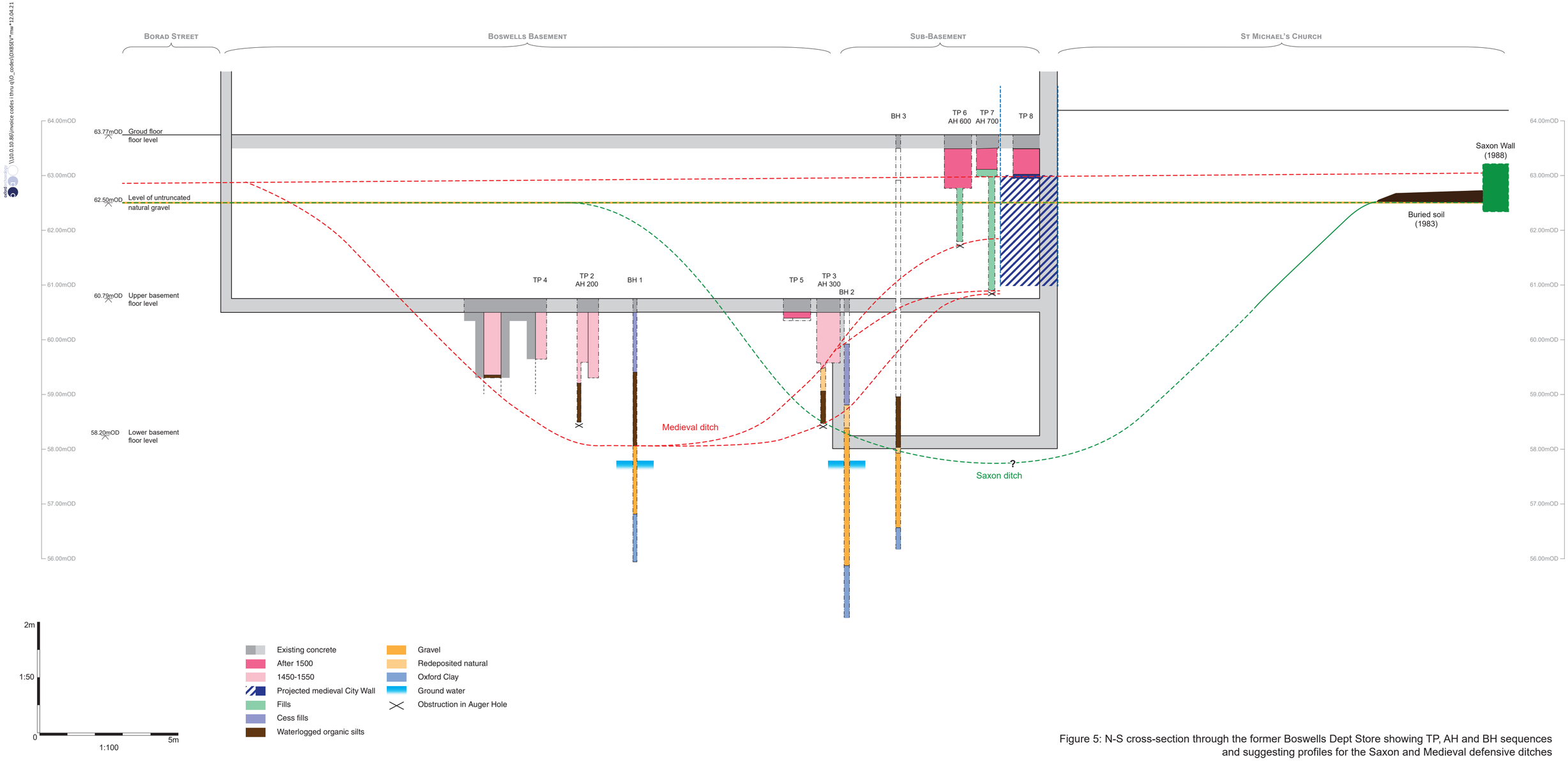


Figure 5: N-S cross-section through the former Boswells Dept Store showing TP, AH and BH sequences and suggesting profiles for the Saxon and Medieval defensive ditches

Plate 1: Test Pits 1 and 4, looking east

Plate 2: Test Pit 2, looking north

Plate 3: Test Pit 3, looking north

Plate 4: Test Pit 5, vertical shot of wall 501

Plate 5: Test Pit 6, looking west at wall 603

Plate 6: Test Pit 7, looking west

Plate 7: Test Pit 8, vertical shot of wall 800 overlying rubble core of Medieval Town Wall 804

Plate 8: Test Pit 9, looking south

Plate 9: Test Pit 10, looking south

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