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Site/Project Name: **Winchester, Pilgrims School**

Site Code: WINCM:AY 234

Site/Project Type: Evaluation

Year(s): 2005-2007

Accession Number: WINCM:AY 234

Record Group	Contents	Comments	Box/File Number
	INTRODUCTION		Box 1 file 1
	Brief for archaeological evaluation	1 bound copy	
	Written Scheme of Investigation for archaeological evaluation	1 bound copy	
	Written Scheme of Investigation for additional evaluation & watching brief	13 sheets	
	Risk assessment for evaluation (draft)	5 sheets	
	Risk assessment for additional evaluation & watching brief	6 sheets	
	Scheduled monument consent for evaluation	2 double sided sheets	
	Scheduled monument consent for additional evaluation & watching brief	3 double sided sheets	
A	**REPORT**		Box 1 file 2
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	OASIS form printout	4 sheets	
A	**PUBLICATION REPORT**		
	Champness, C., Teague, T. and Ford, B. (2010) 'Holocene Environmental Change and Roman Floodplain Management at Pilgrims' School, Cathedral Close, Winchester, Hampshire. Submitted to Proceedings of the Hampshire Field Club & Archaeological Society	Reference only	
B	**SITE DIARY/ FIELDNOTES**		Box 1 file 3
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B	**PRIMARY DRAWINGS**		Box 2 file 4 & roll 1 of 1
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Headings
Site information
Line 1: [OASouth] County:[Hampshire] Parish:[Winchester] Site:[Pilgrims School]
Site code[WINCM:AY234]
Line 2: Excavators name[Ford, B]
Line 3:
Classification of material

	Tick if present
Index to archive	✓
Introduction	
A:Final Report	
A:Publication Report	
B:Site Data – Text: Diary/Daybook/Fieldnotes	
B: Site Data – Text: General Summaries	
B: Site Data – Text: Primary Context Records	
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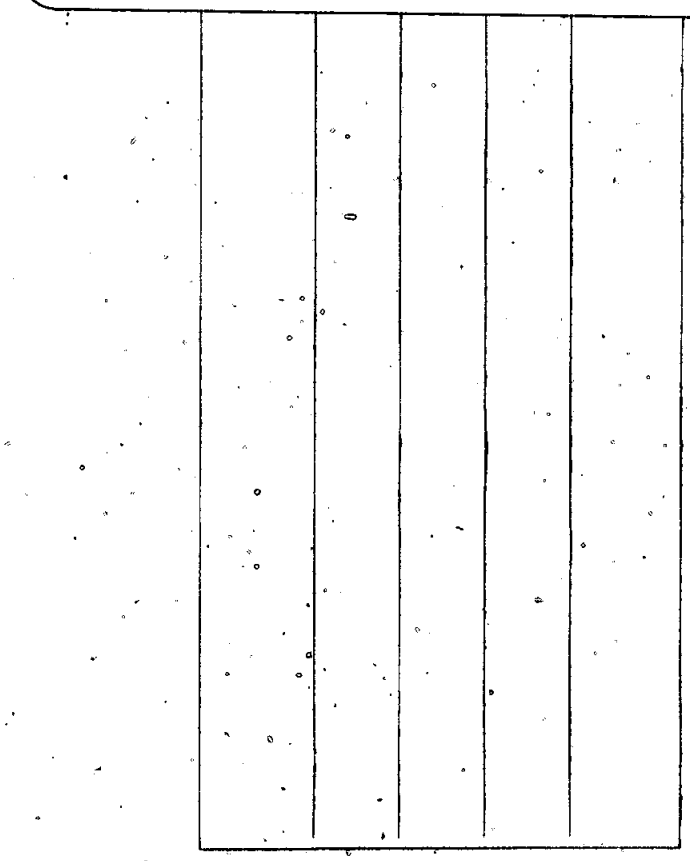
F: Press and Publicity	
G: Correspondence	
H: Miscellaneous	

Winchester, Pilgrims School
WWCM: AY 234

Box 1 File 1

INTRODUCTION



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Dr JOHN CROOK FSA
ARCHAEOLOGICAL CONSULTANT, WINCHESTER CATHEDRAL
+44-[0]1962-864392 (phone & fax)
+44-[0]7831-631657 (mobile)
e-mail: jcrook@netcomuk.co.uk

52, Canon Street,
WINCHESTER,
Hants.,
SO23 9JW

revision dated 15 May 2005

Winchester Cathedral Close

Brief for Archaeological Evaluation at The Pilgrims' School

Non-Technical Summary

This brief sets out the background, methodology, and location of archaeological evaluation work to be carried out at the Pilgrims' School, Winchester, prior to proposed building works at the school. The aim of the evaluation is to provide information for the formulation of suitable strategies of archaeological mitigation in the undertaking of those works.

1 Introduction

1.1 It is the intention of The Pilgrims' School, Winchester (hereafter 'the Client') to develop its existing facilities within Winchester Cathedral Close, a Scheduled Historical Monument (No. Hants 585), by the addition of a pre-preparatory department. In addition the proposed works include the relocation and improvement of other school facilities, notably the swimming pool and changing rooms. It is also proposed to enlarge the existing 'Stancliffe Building' eastwards by approximately 6.25m.

1.2 The proposals are the subject of a desk-based archaeological assessment entitled 'Proposed Building Works at The Pilgrims' School: Archaeological Assessment', dated 15 May 2005, written by Dr John Crook, Archaeological Consultant, to the Chapter of Winchester Cathedral (hereafter 'the Archaeological Consultant').

1.3 An application for planning consent for these works has not yet been submitted. However, the building project forms part of a wider programme of proposed building works within the Cathedral Close, which are subject to the overall discipline of a 'Close Plan' (previously known as the 'Close Masterplan') currently being drawn up in consultation with representatives of the Planning Department of Winchester City Council, English Heritage, and the Cathedrals Fabric Commission (England).

1.4 It is therefore proposed that an archaeological evaluation of the site of the works at the Pilgrims' School should be initiated as soon as possible. This evaluation is likely

to take place in advance of the submission of applications for the various statutory planning and scheduled monument consents.

1.5 The archaeological information provided by the proposed evaluation will permit the early modification of the design of the construction project, by incorporating any changes required in mitigation of its impact on below-ground deposits.

1.6 It should be clearly recognised from the outset that the investigations specified in this document encompass not only archaeology but also geoarchaeology, with the aim of acquiring further evidence for the environmental development of the site.

2 Planning and legislative issues

2.1 The planning and legal issues involving the site are summarised in Section 2 of the Archaeological Assessment.

- The Site is a Scheduled Ancient Monument (Hants 585)
- The Close wall is a Scheduled Ancient Monument
- The main buildings of The Pilgrims' School are Listed Grade I
- The Cathedral Close forms part of a Conservation Area
- The site is protected by the provisions of the Cathedrals Measure (1990)

3 Scheduled Monument Consent

3.1 The Client will obtain Scheduled Monument Consent from the Department of Culture, Media and Sport for the evaluation trenches in advance of the works.

3.2 The Client will also, working through the Chapter of Winchester, obtain the appropriate consent from the Cathedrals Fabric Commission (England), required under the provisions of the Cathedrals Measure (1990) (see the Desk-Based Assessment, para. 2.6).

4 Location

4.1 The location of the school curtilage and the specific location of the proposed construction works are shown in Figs. 1-3.

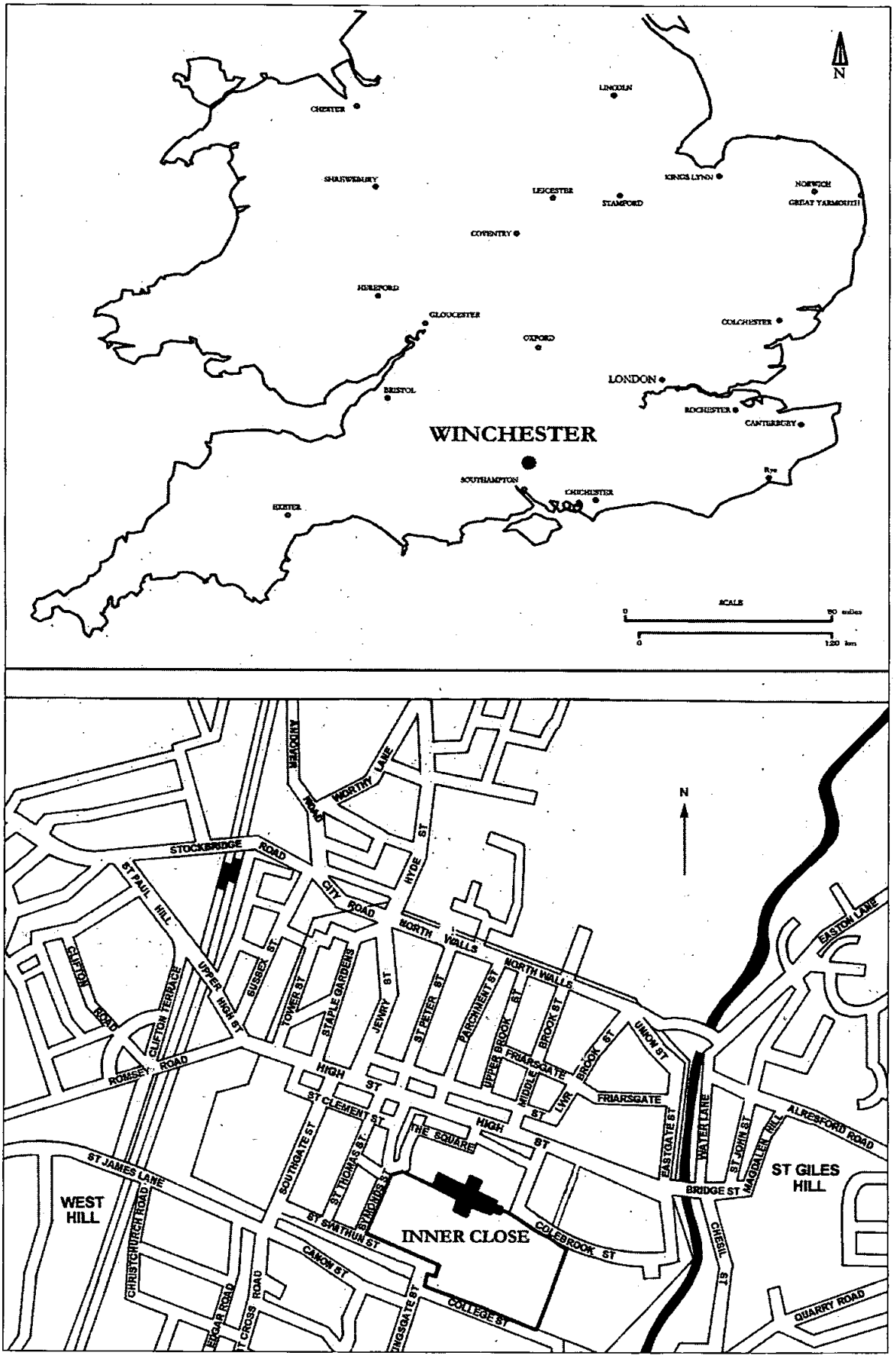

Figure 1. Above: Location map of Winchester. Below: plan of central Winchester showing Winchester Cathedral and (red outline) the Inner Close.

4.2 The site of the proposed new buildings (Figure 3) lies between the school's main classroom blocks (comprising, from north to south, the Stancliffe, Millennium, and Selwyn Buildings) and the east end of the school's garden adjacent to the Mill Stream. The site is centred on National Grid Reference SU 4825 2907.

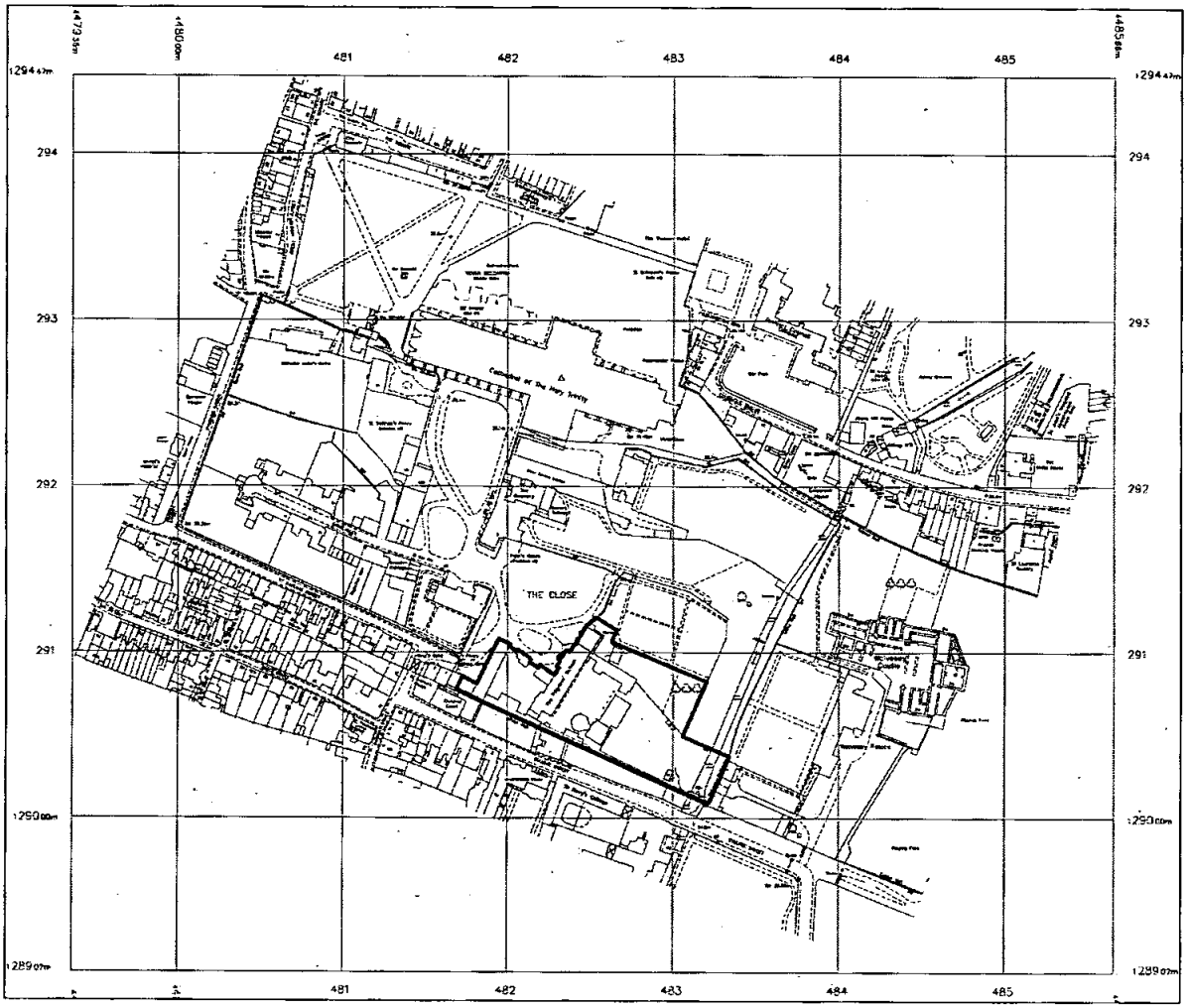

Figure 2. Location of present curtilage of The Pilgrims' School. Based on Ordnance Survey Superplan data, reproduced under licence. The squares of the grid depicted in this and some subsequent plans are at 100m intervals.

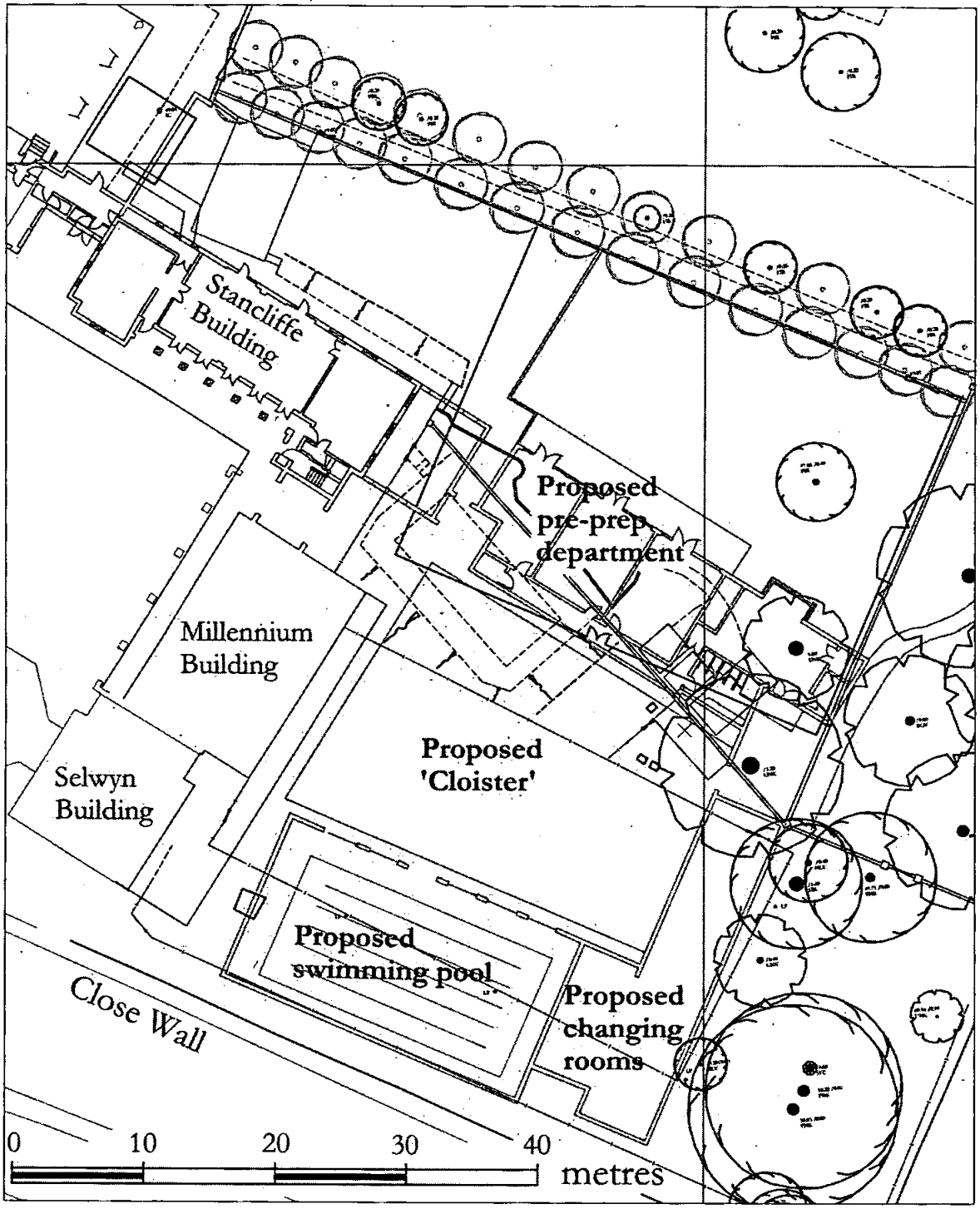

Figure 3. Preliminary proposals for new buildings (orange lines) superimposed upon existing plan.

5 Archaeological Impact of the Proposals

5.1 Until the results of the archaeological evaluation proposed in this brief are known, the impact of the proposals on the archaeology can be based only on an extrapolation of data obtained for the western limit of the site (see section 7, 'Previous Archaeological Investigations at The Pilgrims' School', below). With this *caveat* in mind, the general nature of likely archaeological impacts may be summarised as follows:

- The removal of small-scale structures, such as the tennis court and four huts, will have a negligible effect on archaeology.
- The construction of the present swimming pool, though partly above surface level, will have removed all archaeological deposits to a probable maximum depth of 32.16m AOD. The swimming pool is nevertheless contained within the post-medieval 'dump' shown in Figure 5, below.
- All the new buildings are to be supported on piled foundations and ground-beams. The piles will penetrate all archaeological levels. The ground-beams will be located at present ground-level and will have negligible archaeological impact.
- Like its predecessor, the proposed new swimming pool will be raised above ground level. It will be possible to determine its final depth more precisely once Evaluation Trench 'A' has been excavated.
- Deeper elements of the proposed drainage system, notably sumps and soakaways, my penetrate archaeological deposits. The risk of other services (water supply, gas, electricity, IT cabling, etc) penetrating such layers is smaller but cannot be discounted.

5.2 The Client and their architect recognise that the current proposals may have to be altered in response to the findings of the proposed archaeological evaluation.

5.3 Some alterations to the design have already been made as a mitigation strategy, following the recommendations of the Archaeological Consultant:

- position of drain runs. These have now been designed so as to run well clear of the Close Wall, an area where Roman and post-Roman archaeology has been identified.
- location of the new swimming pool. This has been moved north for the same reason. Nevertheless, the pool still overlies the Roman *agger* and the possible intramural Roman street depicted in Figure 5 of the Desk-Based Assessment. The final position of the pool will in part be determined by the results obtained from proposed evaluation 'Trench A'.

6 Historical and Archaeological Background

6.1 A full account of the known geology, geoarchaeology, archaeology, and history of the site is provided in the Desk-Top Assessment.

6.2 The site lies within the historic walled city in an area which successively comprised part of the Roman *civitas* of *Venta Belgarum*, the Saxon town of *Wentanceastre*, and the medieval city of Winchester. The archaeological resource within the walled city is recognised as being of national importance; the Cathedral Close is regarded as of especial archaeological value, hence its scheduled monument status.

6.3 The history of the site may be summarised as follows:

- Late Pleistocene. The site lay in the valley bottom, where the incipient river systems that were to become the River Itchen cut through the chalk downs. At the end of the last Ice Age (Late Pleistocene, *c.* 20,000 to 10,000 BP) periglacial conditions led to the formation of gravel bars over the flood plain, above the

eroded surface of the Upper Chalk. No evidence for human occupation of the site, but a flint spall and flake of probable Mesolithic date were discovered in a borehole (UAD 1866, BH 1: see Figure 4) suggesting some human activity in the area.

- Mesolithic to Late Iron Age. With warmer conditions, layers of peat were formed from decaying vegetation on the river margins. The environment was continuously wet and unsuitable for human habitation, though the marsh might have provided a site for hunting wildfowl and collecting edible plants.
- Late pre-Roman Iron Age. The site was located below the Iron Age enclosure at Oram's Arbour. A change in climatic conditions led to the deposition of further sediments. These include Iron Age pottery fragments, mussel shells, bone, and charcoal: domestic rubbish which was deposited into the valley bottom in the period prior to the Roman occupation.
- Roman. The site lay within the Roman defensive circuit: first an earth rampart (*agger*), then a second phase of earth rampart, and finally, from the 3rd century, a flint and mortar wall. The lower lying parts of the settlement were probably progressively drained as the settlement expanded eastwards, the Itchen being diverted outside the eastern boundary. Initially the floodplain may have been deemed adequate for defensive purposes. The limits of the Roman city, including the site under discussion, were certainly laid out by the late 2nd century, and probably earlier.
- Post-Roman. Reversion of the area to floodplain conditions. The pre-Roman river system re-established itself over the site, laying down alluvial silts similar to those before the Roman occupation.
- Saxon. The site lies within the walls of the Saxon city. From the time of the monastic reforms of the 960s (and possibly earlier) the site formed part of the precincts of Old Minster, a cathedral priory (the Priory of St Swithun).
- Medieval. Continued use as part of the precincts of St Swithun's Priory until the Dissolution of 1539. The site of the proposed works lay within the Prior's garden, an area used for recreational horticulture.
- Post-Medieval to present day. The site continued in use for horticulture, now forming part of the garden of the Dean of a cathedral of Henry VIII's 'New Foundation'.

7 Previous Archaeological Investigations at The Pilgrims' School

7.1 The location of previous archaeological investigations within the school curtilege is shown in Figure 4. The information provided by these investigations is summarised in the Archaeological Assessment.

7.2 It will be seen that previous archaeological investigations of the Pilgrims' School curtilage, which vary in extent, depth, and quality, have been restricted to an area to the west of the site of the proposed new construction works and a watching brief during augering for shallow post-holes north of the new site.

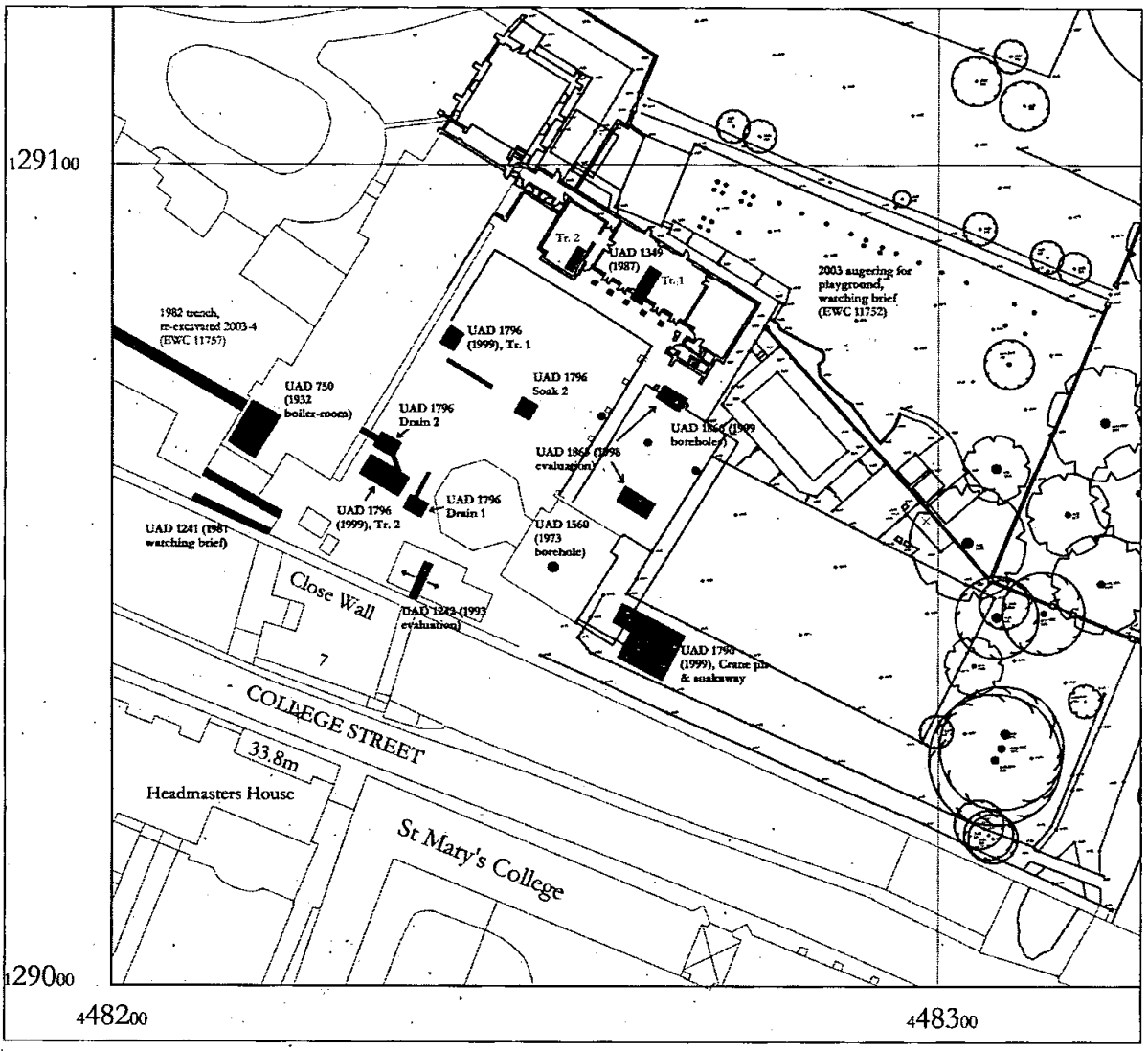

Figure 4. Location of previous archaeological investigations within the curtilege of The Pilgrims' School. The reference numbers are the site reference numbers of the Urban Archaeological Database.

8 Archaeological Potential of the Site : Summary

8.1 The archaeological potential of the site has been analysed in the Desk-Based Assessment referred to above, and may be summarised as follows:

- Low archaeological potential for Iron Age and earlier, but high potential for good preservation of organic deposits owing to waterlogged anaerobic conditions below approximately 31.8m AOD. These important deposits will require analysis in order to assist in understanding the environmental development of this part of Winchester.
- High potential for Roman remains, which are protected by phases of post-Roman silting. A probable Roman street ran north-south immediately west of the site of the proposed works, and remains of demolished Roman buildings have been identified beneath the present school buildings. The southern boundary of the site is formed by the Roman defences (an earth rampart, fortified in the 3rd century AD by a flint and rubble wall).

- Medium potential for Early- and Mid-Saxon remains, which are likely to have been preserved from disturbance by the lack of later activity apart from horticulture in this area.
- Low potential for medieval monastic remains. The area formed part of the Prior's garden, a private area reserved for recreational horticulture, and no buildings are known to have existed on the site. Some medieval structures have been identified west of the site, however, notably a timber-lined drain of post-Conquest date, and the floor (or successive floors) of a medieval building (UAD 1792, Tr 2).
- Low potential for post-medieval remains, apart from reposited material in the 'dump' brought in to raise the general level of the area to alleviate flooding. After the Dissolution of the priory, horticultural usage continued until the mid-20th century.

8.2 The likely geological/archaeological sequence (based on observations made west of the site) is shown schematically in Figure 5.

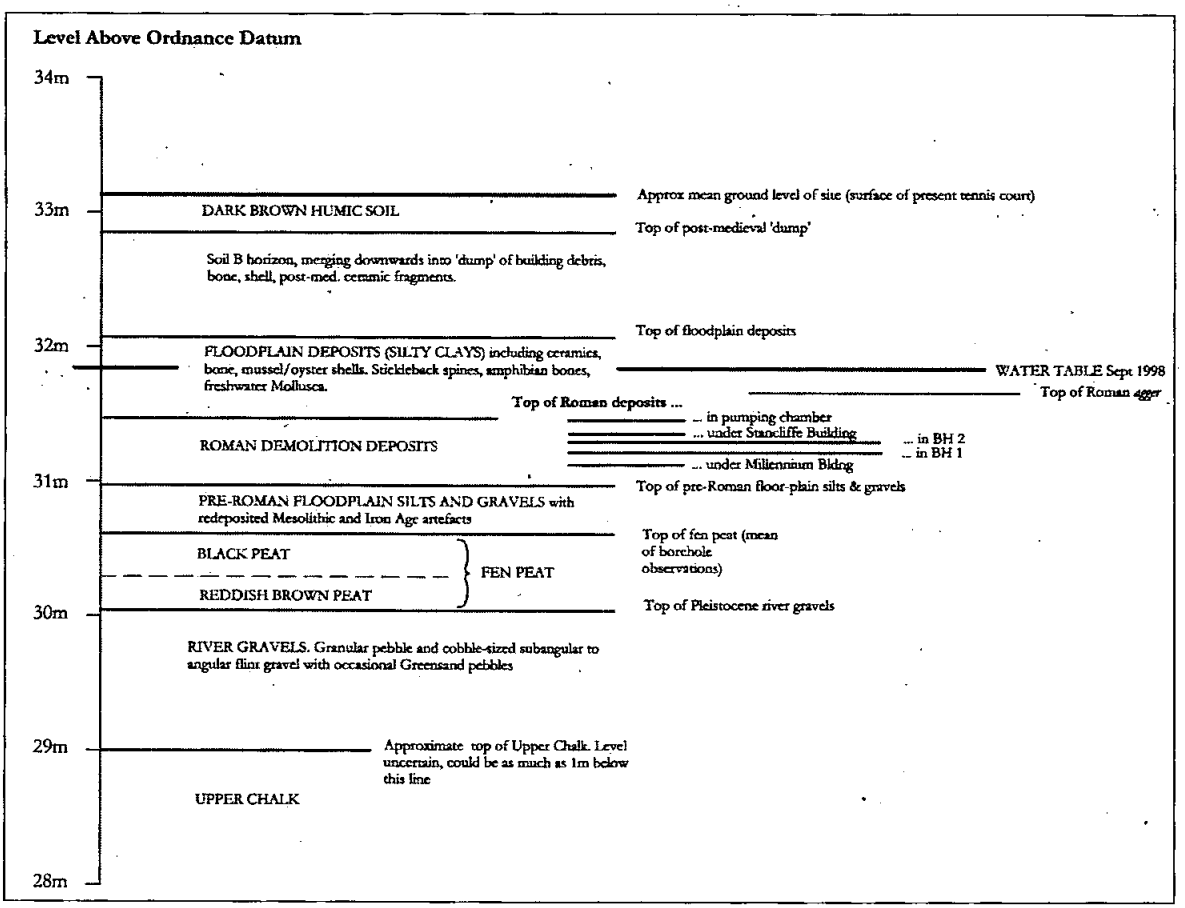

Figure 5. Diagram showing levels of previously investigated geological and archaeological layers and features.

9 Objectives of the Archaeological Evaluation

9.1 The principal aim of the evaluation is to determine the location, extent, date, character, condition, significance, and quality of any surviving archaeological remains likely to be threatened by the proposed building works.

9.2 The evaluation will add to existing knowledge of the pre-history and historical development of a site recognised as of national importance.

9.3 The evaluation will enable informed decisions to be made on a strategy of archaeological mitigation, which will ensure that, as far as possible, important buried remains are preserved *in situ*.

9.4 Where this is not possible, the data obtained through evaluation will assist in formulating policies for the full recording of archaeological features ('preservation by record').

9.5 The evaluation may also inform proposals for further archaeological investigation within the site prior to the works, and identify possible needs for certain elements of the building works (for example, the excavation of drainage sumps), to be undertaken archaeologically.

10 Written Scheme of Investigation (Method Statement)

10.1 The archaeological contractor must prepare a Written Scheme of Investigation, to be submitted to and approved by the Archaeological Consultant, the Sites and Monuments Officer of Winchester City Council, English Heritage, and the Cathedrals Fabric Commission (England).

10.2 The Written Scheme of Investigation should identify specific research aims for the evaluation. Such aims might include (though not be restricted to) the following:

- Characterising the post-glacial development of the area
- Location of the pre-Roman course of the River Itchen
- Evidence for pre-Roman use of the site
- Date of the Roman *agger* and wall
- Evidence for Roman intramural street
- Post-Roman use of the site
- Evidence for early/middle Saxon use of the site
- Did the 9th-century street grid extend into this quarter of the walled city?
- Monastic use of the site. If horticultural, type of plants grown

10.3 The Written Scheme of Investigation should conform to the guidelines contained in *The Management of Archaeological Projects*, English Heritage, 2nd edn. (1996) (henceforth *MAP 2*).

11 Professional Standards

11.1 The archaeological evaluation should be undertaken in accordance with relevant professional standards, notably those specified in *MAP 2*, and the Institute of Field Archaeology's *Standards and Guidance for Archaeological Evaluations* (1994).

12 Evaluation Methodology

12.1 The evaluation will take the form of three linear trenches, whose position and size has been determined by the Archaeological Consultant in consultation with the Sites and Monuments Officer of Winchester City Council, English Heritage, and the Cathedrals Fabric Commission (England).

12.2 In view of the acknowledged importance of the site, and the demonstrable presence, at the west end of the site, of archaeological deposits as close as 300mm below the surface, mechanical excavators will not be used. All excavation will take place by hand.

12.3 Apparently unstratified topsoil must be removed in 150mm spits and the surfaces scanned by eye and metal-detector, and the spoil should be sieved to maximise the recovery of artefacts and ecofacts, whose find spot should be recorded on a spit by spit basis.

12.4 Spoil from all trenches must be scanned, including using a metal detector, to facilitate recovery of artefactual material.

12.5 For all areas excavated the archaeological contractor will identify, characterise, record and excavate stratigraphically all archaeological elements contained within the defined area of excavation.

13 Recording

13.1 All archaeological contexts, features, and artefacts exposed must be adequately surveyed, planned, sampled, cleaned, excavated, and preserved by record on appropriate context, finds, and sample sheets. Plans, sections, and elevations must be made at appropriate scale, and a photographic record must be kept.

13.2 In order to conform with Winchester City Archaeology Service policy for the excavation of a possibly complex urban site, a single context methodology should be employed, and for stratified deposits a matrix should be constructed of all contexts located. This methodology will aid interpretation during fieldwork and in post-excavation analysis.

13.3 Comparative site levels must be recorded for each feature or important context, with reference to Ordnance Survey datum. The levels survey already undertaken in advance of the project will be made available to the contractor as an AutoCAD file.

13.4 All plans and elevations must be submitted in digital form, preferably as AutoCAD files. The version to be used will be specified by the Archaeological Consultant.

13.5 Digital photography is preferred, the data being captured as RAW or TIFF images. The minimum acceptable resolution of the camera(s) used will be 6 Megapixels. Back-up black and white photographs and colour slides or prints should also be made.

13.6 A photographic record of all stratigraphic units must be compiled, and in addition a representative photographic record of the progress of the archaeological work must be maintained.

14 Sampling

14.1 Geoarchaeological and environmental samples must be collected as appropriate.

14.2 The Written Scheme of Investigation must include a strategy for Archaeological Science (geophysics, dating, conservation, geoarchaeology, soil science, biological analysis, artefact conservation, and analysis of technological residues, ceramics, and stone). The sampling strategy must include a reasoned justification for the selection of deposits for sampling, and the results of such sampling should be adequate to form a sound basis for developing a Project Brief for any subsequent phase of work in this site or other form of mitigation strategy, in particular *in situ* preservation.

14.3 Buried soils and sediment sequences should be inspected and recorded on site by a recognised geoarchaeologist, as this may provide sufficient data for understanding site formation processes.

14.4 Environmental samples (bulk samples and samples for coarse sieving from dry deposits) should be processed at the time of fieldwork where possible, to allow for any required modification of the sampling strategy during the works.

14.5 A strategy should be developed for sampling alluvial and waterlogged deposits. The strategy should consider specialist (e.g. monolith samples for the retrieval of pollenj, diatoms, ostracods, and foraminifera) and bulk samples. The strategy should be developed in conjunction with the environmental co-ordinator and relevant specialists (e.g. a palnologist).

14.6 Geoarchaeological and environmental samples should be taken in accordance with the guidelines contained in the English Heritage publications *Geoarchaeology* (2004) and *Environmental Archaeology* (2002).

14.7 Other environmental samples should be taken in accordance with guidance documents published by English Heritage. For example,

- Sampling of waterlogged wooden structures should follow the guidelines established by Richard Brunning (1995).
- Sampling of waterlogged leather should follow English Heritage's *Guidelines for the Care of Waterlogged Archaeological Leather* (English Heritage, 1995).

14.8 Where there is evidence for industrial activity, large technological residues will be collected by hand. Separate samples (approx. 10 litres) should be collected for micro-slags (hammer-scale and spherical droplets). Reference should be made to the English Heritage/HMSO document *Archaeometallury* (2001).

15 Geophysical analysis

15.1 Given the constraints of the site, and modern surface features such as the playground surface and the 1m build-up around the existing swimming pool, opportunities for geophysical analysis/investigation are restricted.

15.2 Nevertheless, the northern part of the area (the site of the northern half of the proposed pre-preparatory school and the lawn to the north-east), between the apple walk and the existing wall, might prove suitable for geophysical investigation.

15.3 The contractor should consider this possibility, and provide appropriate details in the Written Scheme of Investigation.

16 Archaeological Science

16.1 The English Heritage regional Science Advisor can provide information and advice regarding environmental remains, archaeological science, and preservation *in situ* at all stages of the project (evaluation, mitigation).

17 Preservation of artefacts and ecofacts

17.1 All finds will be retained. They will be removed from site for processing, including the X-ray of all metal objects (except obviously recent objects and objects of lead) and conservation where necessary, in preparation for further analysis and archiving. Provision must be made for specialist treatment of finds, including investigative conservation, by a professional conservator.

18 Reporting and Publication

18.1 Following the completion of archaeological fieldwork a summary of the results must be submitted to the Archaeological Consultant within two weeks.

18.2 In particular, dating samples should be processed promptly to ensure that the results are available at the earliest opportunity to inform decisions on a suitable mitigation strategy for the construction project.

18.3 For the same reason, the summary should include an assessment of the anticipated degree of survival of archaeological deposits and structures across the remainder of the site.

18.4 A Report must subsequently be prepared on the results of the evaluation, which should include:

- A brief non-technical summary.
- The objectives of the evaluation.
- The methodology employed for the evaluation.
- A detailed account of the contextual and artefactual data obtained, supported by appropriate illustrative material such as plans, elevations, sections, drawings, and photographs. These items must also be submitted in digital format (AutoCAD for plans, elevations, and sections).
- The contextual and artefactual data should also be presented in tabular form where appropriate.
- Interpretation of the archaeological data obtained in illustrating the environmental and historical development of the site, including consideration of the nature,

location, extent, date, significance, and quality of any archaeological and environmental material uncovered, setting it in its local (and, where appropriate, regional or national) context.
- The results of any scientific assessments.
- The anticipated degree of survival of archaeological deposits and structures across the remainder of the site.
- Specialist assessment reports (as appendices).

18.5 If the results of the evaluation as presented in the report prove of sufficient importance, and if no further fieldwork takes place on the site, provision should be made for the publication of the results of the evaluation in a recognised regional or national journal.

18.6 Alternatively, if fieldwork continues during the building works and warrants publication, the results of the evaluation should form part of the publication.

19 Archive and Storage

19.1 Provision must be made for the assembly of a site archive, which should be prepared in accordance with the guidelines contained in *Guidelines for the Preparation of Excavation Archives for long-term storage* (UKIC 1990), and *MAP 2* (English Heritage).

19.2 The site archive, including all digital data in .dxf or shapefile format, will be deposited with Winchester City Museum Services for storage under appropriate conditions.

19.3 The data will be incorporated in the Winchester Urban Archaeological Database, a publicly accessible record.

20 Ownership of Artefacts and Ecofacts

20.1 All artefacts and ecofacts excavated on the site will remain the property of the Chapter of Winchester Cathedral.

20.2 However, in view of the fact that the Cathedral Chapter does not possess the proper facilities to store organic, possibly waterlogged artefacts, etc. under proper conditions, such components of the archive should be deposited with Winchester City Museum, the depositing museum for the Winchester area.

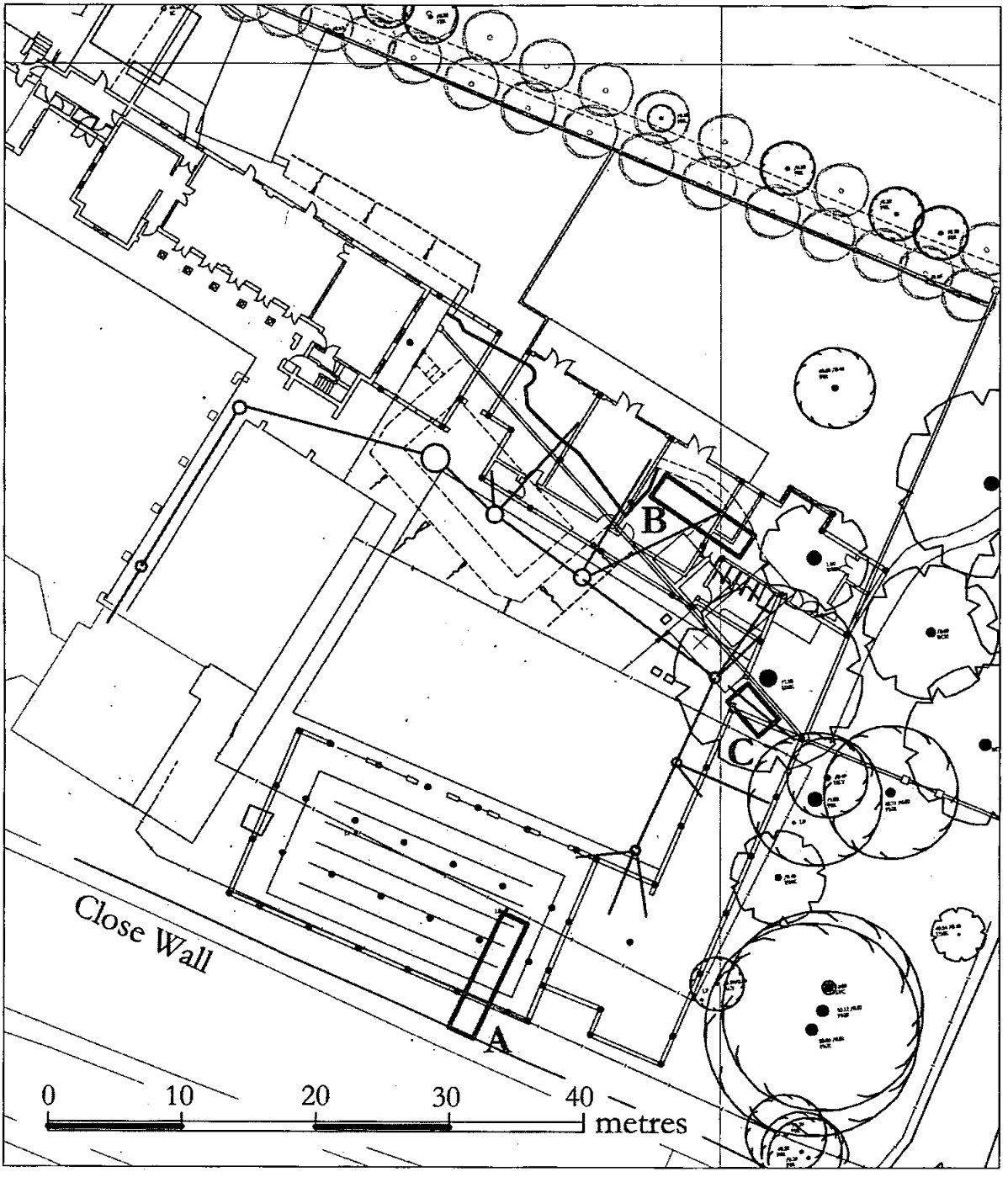

Figure 6. Location of proposed archaeological evaluation trenches A-C, superimposed on proposed site plan.

21 Location of the Proposed Trenches

21.1 In determining the position of the trenches, account was taken of the following factors.

- The trenches are located in areas which would be disturbed by the proposed building works.
- The school's sports facilities, such as the swimming pool and the hard playing grid must remain available for use until the start of the proposed building works.

- As a school for children aged 7-13 years, health and safety issues are of paramount importance.
- The trenches are located in areas likely to produce the greatest amount of new information, i.e. they are approximately equidistant, and sited at some distance from areas which have already been subject to archaeological investigation.

21.2 The location of the proposed trenches in relation to the proposed new buildings is shown in Figure 6; their location in relation to the present plan is shown in Figure 7.

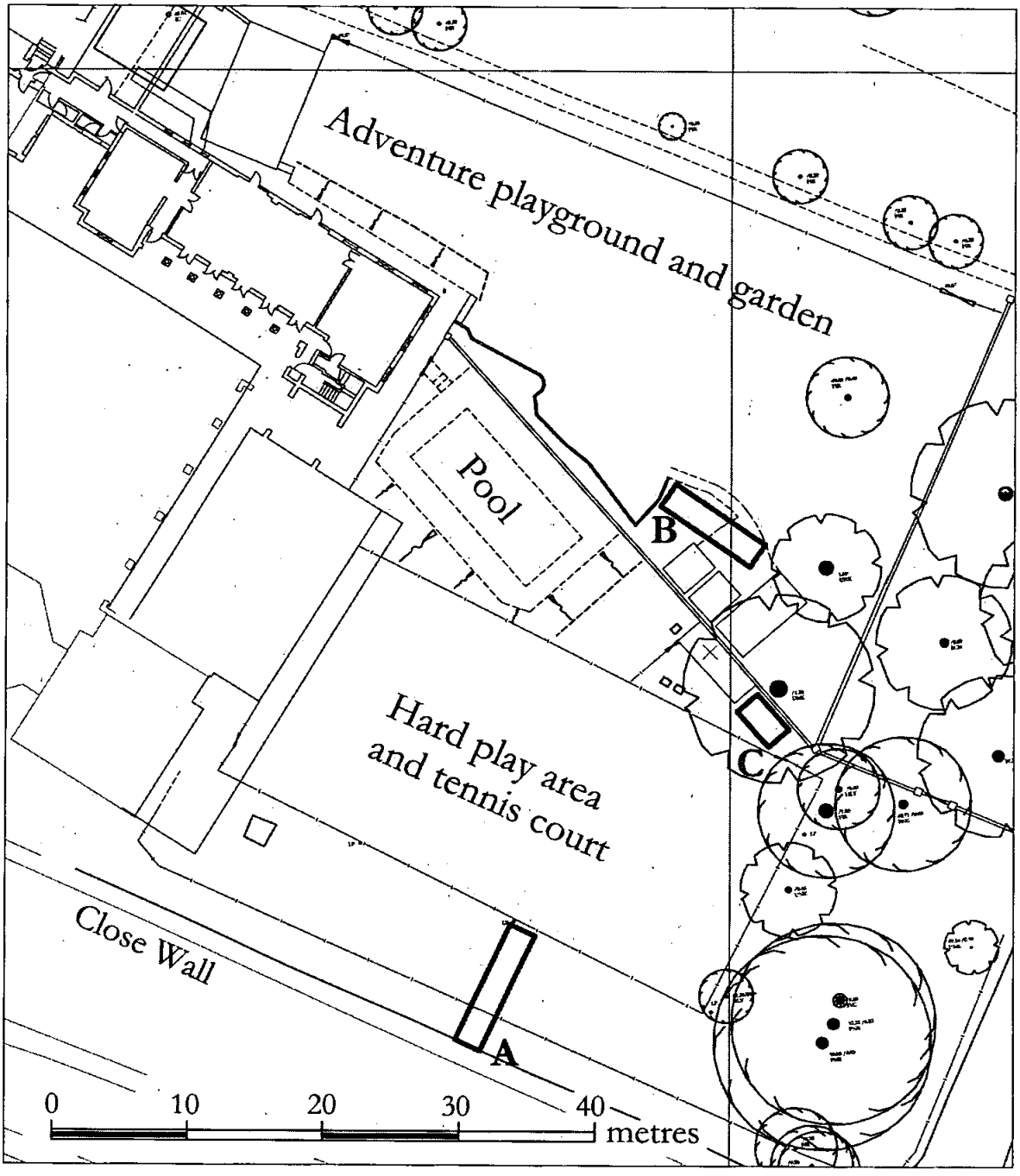

Figure 7. Location of proposed evaluation trenches A-C superimposed upon present plan.

21.3 The following notes take into account the findings of previous archaeological investigations, but their assumptions about the likely depths and nature of below-

ground deposits must be regarded only as an informed guess. It is possible therefore that the trenches will be excavated to a greater depth than that indicated here.

21.4 *Trench A*

21.4.1 Linear trench, measuring 2m x 9.5m, perpendicular to and abutting the Close Wall.

21.4.2 The main purpose of this trench is to determine the nature and position of the Roman earth rampart (*agger*), partly revealed in archaeological investigations in 1999 (UAD 1796), discussed in the Archaeological Assessment, paras. 3.2.4 and 5.5.

21.4.3 Small samples of the *agger* should be removed for analysis of its constituents (described in 1999 as 'stiff mid-brown clay with small flints'.

21.4.4 The excavation should continue in part below the *agger* in order to identify and sample possible early Roman or pre-Roman deposits buried beneath the earth rampart. At least 50% of such deposits should be sampled, i.e. an area 1m wide by the full width of the *agger*.

21.4.5 North of the *agger*, at least 50% of the trench should be excavated to the bottom of archaeological deposits, i.e. if possible to the top of the peat layer which on the basis of previous investigations will be encountered at approximately 30.6m AOD (2.6m below ground level in this area).

21.5 *Trench B*

21.5.1 Linear trench, measuring 2m x 8m, aligned approximately WNW-ESE, and located in an open area laid to lawn.

21.5.2 It is anticipated that at least 50% of this trench will be excavated to the full depth of archaeological deposits, i.e. the top of the peat layer at approximately 30.60m AOD (2.65m below ground level in this area).

21.5.3 An area of at least 1m² should be excavated to the bottom of the peat (approx. 30.04m AOD = 3.15m below the ground level in this area), in order to obtain an adequate sample of the peat for environmental analysis.

21.5.4 Particular attention is drawn to the details provided in this report of the nature of the ground water and the effect of piercing the impervious base of the peat above gravel laden with water under pressure.

21.6 *Trench C*

21.6.1 Linear trench measuring 2m x 3.5m aligned approximately WNW-ESE, located in a restricted area, laid to grass, between the fence of the existing hard play area and a brick wall.

21.6.2 It is intended that this trench should be taken down to the top of the peat at approx. 30.04m AOD, i.e. approx. 2.4m below the present surface in this area.

21.6.3 A drain pipe from the swimming pool to the river runs approximately down the centreline of this trench. The pipe will require support during the excavation, by suspending it from transverse rails over the trench at suitable intervals.

22 Shoring, Coffering, Pumping

22.1 It will be seen from the proposed excavation depths given in section 21 that the depth of each trench will greatly exceed 1.20m. Provision will have therefore to be made for shoring the trenches in accordance with Health and Safety legislation.

22.2 Furthermore, as Figure 5 shows, the water table lies approximately 1.30m below the mean ground level of the site. This was the level in September 1998; observations in the cathedral crypt indicate that the water table is subject to a variation of ±350mm, but in late summer it is usually at its lowest.

22.3 It is however important to understand the nature of the ground-water. Experience during the underpinning of Winchester Cathedral in 1906-11 (an operation requiring up to 200 constructional trenches, each of which was continued to the bottom of the peat), confirmed by more recent excavations, indicates that it is possible to dig a trench as far down as the peat layer without water ingress being a significant problem; water seepage through the sides of the trench may be kept at bay using a pump.

22.4 The peat acts as an impervious seal, and the water beneath it is under isostatic pressure; the Itchen valley in the Winchester area forms an artesian basin. However, once the bottom of the peat has been breached, the water quickly rises within the excavation to the level of the general water table. The rate of ingress is too fast to be adequately coped with by a pump.

22.5 The Written Scheme of Investigation should provide details of how the archaeological contractor intends to deal with the problems of shoring and water ingress.

22.6 Because Trench A abuts the Close Wall, there may be a need for the wall itself to be shored. Advice must be sought from the Safety Officer to the Chapter of Winchester on this point.

22.7 It is understood that the responsibility for the fabric of the entire wall, i.e. both sides, rests with the Chapter of Winchester.

23 Reinstatement

23.1 The archaeological contractor will be responsible for the reinstatement of the site, in consultation with the architect for the building project.

24 Staffing

24.1 The archaeological contractor for the evaluation must comprise professional archaeologists, of whom the Project Manager and other relevant site staff are expected to have substantial experience of urban archaeology.

24.2 The Project Manager must be a member of the Institute of Field Archaeologists of equivalent EU professional body and have an appropriate level of experience for a project of this nature.

24.3 Details of the number and qualifications of members of the project team must be provided in the Written Scheme of Investigation. Each member should submit a *curriculum vitae.*

24.4 All such members must be named in the Written Scheme of Investigation.

24.5 All ancillary specialists must be fully integrated into the project and make regular site visits if they are not members of the full-time team. Each ancillary specialist should submit a *curriculum vitae.*

25 Time-Frame

25.1 The Written Scheme of Investigation must provide details of the anticipated time on site required to complete the fieldwork.

25.2 A provisional programme outlining post-excavation analysis will specify the time provisionally allocated to this part of the project. This programme may be subject to review when the excavation results are assessed.

25.3 The archaeological contractor will give the Client and Archaeological Consultant not less than two weeks' written notice of the commencement of the fieldwork.

26 Health and Safety

26.1 All current Health and Safety legislation must be followed on site, which may include undertaking a site-specific risk assessment.

27 Public Access

27.1 In accordance with the provisions of the Children Act, public access to the site will not normally be permitted.

27.2 Nevertheless, the public should be kept informed about the purpose and progress of the evaluation by means of press releases, press photo opportunities, and information panels placed outside the school grounds.

27.3 All staff involved in the evaluation, and all visitors, must, if required by the school authorities, sign the appropriate visitors' register at the time of their arrival on site. (It is possible that this condition will be waived if the evaluation takes place during school holidays).

28 Other legal issues

28.1 It is the responsibility of the archaeological contractor to ensure that all constraints on the trench layout (such as Tree Preservation Orders) are identified.

29 Special Circumstances

29.1 Appropriate procedures under the relevant legislation must be followed in the event of the discovery of human remains or of artefacts covered by the provisions of the Treasure Act (1996).

30 Liaison and Monitoring

30.1 The Project Manager will liaise closely with the Archaeological Consultant by regular on-site meetings during the evaluation works. This is essential in order that any changes to the constructional project design may be effected as early as possible.

30.2 It is intended that the Archaeological Consultant should monitor the progress of the evaluation on a daily basis.

30.3 The Sites and Monuments Officer for Winchester City Council will visit the site regularly and participate in discussions as needed during the evaluation.

31 Variation to the Brief

31.1 Any variations to this brief must be agreed with the Archaeological Consultant.

32 Time Limit

32.1 This brief will remain valid for three months from the date of issue.

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Institute of Field Archaeologists, 1994 — *Standards and Guidance for Archaeological Evaluations.*

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Pilgrims School,
Cathedral Close,
Winchester,
Hampshire.

NGR: SU 4829 2905

Written Scheme of Investigation for Archaeological Evaluation

Oxford Archaeology: 3rd August 2005 Rev. 2

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THE PILGRIMS' SCHOOL, CATHEDRAL CLOSE, WINCHESTER, HAMPSHIRE.

NGR: SU 4829 2905

Written Scheme of Investigation for Archaeological Evaluation

Para. 3.13 - Please note the pixels / format requirements as outlined in the brief (para. 13.5).

1 Introduction

1.1 Oxford Archaeology (OA) has been appointed to carry out an evaluation exercise in advance of proposals by The Pilgrims' School to extend their buildings and leisure/sports facilities at Cathedral Close, Winchester.

1.2 The planning and legal issues involving the site are summarised below:

- The Site is a Scheduled Ancient Monument (Hants 585)
- The Close wall is a Scheduled Ancient Monument
- The main buildings of The Pilgrims' School are Listed Grade I
- The Cathedral Close forms part of a Conservation Area
- The site is protected by the provisions of the Cathedrals Measure (1990)

1.3 An application for planning consent for these works has not yet been submitted. However, the building project forms part of a wider programme of proposed building works within the Cathedral Close, which are subject to the overall discipline of a 'Close Plan' (previously known as the 'Close Masterplan') currently being drawn up in consultation with representatives of the Planning Department of Winchester City Council, English Heritage, and the Cathedrals Fabric Commission (England).

1.4 This Written Scheme of Investigation, or detailed specification, for the archaeological work has been based upon the *Brief for Archaeological Evaluation at The Pilgrims' School* (Dr John Crook 2005) and in consultation with Dr Crook, the Archaeological Consultant for Winchester Cathedral and Tracy Matthews Sites and Monuments Officer for Winchester City Council.

1.5 This Written Scheme of Investigation covers the methodology for the archaeological evaluation of the garden area, east of the existing school

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classroom blocks. The evaluation will take the form of archaeological trenching, see Fig. 1. The resulting information will help to identify potential options for minimising or avoiding damage to any significant archaeological remains affected by the development, and also indicate the weight that ought to be attached to their preservation. On this basis, an informed and reasonable planning decision for further archaeological mitigation can be taken in consultation with English Heritage and other bodies.

2 Topography and Geology

2.1 The site lies within the SE corner of Winchester Cathedral Close within the gardens located within the eastern part of the present school curtilage (centred on National Grid Reference SU 4829 2905). It is bounded to the south by the Close Wall, to the west by the existing school classrooms, to the north by the Deanery Garden and to the east by a strip of land forming part of the school's garden adjacent to the Mill Stream. The site is situated on the valley floor to the west of the River Itchen that flows from north to south.

2.2 The site currently forms a largely flat garden area, with hard surfaced tennis courts, to the east of the main school buildings (Stancliffe Building, Millennium Building and Selwyn Building) at c.33m OD. Contained within the southern part there is a swimming pool and a tennis court/hard play area.

2.3 The geology of the site comprises overlying Upper Chalk of the Cretaceous Epoch overlain by floodplain gravels dating from the late Quaternary period (BGS sheet 299D) which are in turn overlain by peat and floodplain silts.

3 Archaeological and Historical Background

3.1 The archaeological and historical background of the site has been detailed in an archaeological assessment (Crook 2005) although a concise summary presented in the brief is reproduced in full below. Previous archaeological investigations of the Pilgrims' School curtilage, which vary in extent, depth, and quality, have been restricted to an area to the west of the site of the proposed new construction works and a watching brief during augering for shallow post-holes north of the new site. Only the observations made prior to and during the construction of the Millennium Building, immediately west of the site of the proposed new works provide any information that may tentatively be extrapolated eastwards.

3.2 **Late Pleistocene**: The site lay in the valley bottom, where the incipient river systems that were to become the River Itchen cut through the chalk downs. At the end of the last Ice Age (Late Pleistocene, c. 20,000 to 10,000 BP) periglacial conditions led to the formation of gravel bars over the flood plain, above the eroded surface of the Upper Chalk. No evidence for human occupation of the site, but a flint spall and flake of probable Mesolithic date were discovered in a borehole (UAD 1866, BH 1: see Figure 4) suggesting some human activity in the area.

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3.3 **Mesolithic to Late Iron Age:** With warmer conditions, layers of peat were formed from decaying vegetation on the river margins. The environment was continuously wet and unsuitable for human habitation, though the marsh might have provided a site for hunting wildfowl and collecting edible plants.

3.4 **Late pre-Roman Iron Age:** The site was located below the Iron Age enclosure at Oram's Arbour. A change in climatic conditions led to the deposition of further sediments. These include Iron Age pottery fragments, mussel shells, bone, and charcoal: domestic rubbish which was deposited into the valley bottom in the period prior to the Roman occupation.

3.5 **Roman**: The site lay within the Roman defensive circuit: first an earth rampart (agger), then a second phase of earth rampart, and finally, from the 3rd century, a flint and mortar wall. The lower lying parts of the settlement were probably progressively drained as the settlement expanded eastwards, the Itchen being diverted outside the eastern boundary. Initially the floodplain may have been deemed adequate for defensive purposes. The limits of the Roman city, including the site under discussion, were certainly laid out by the late 2nd century, and probably earlier.

3.6 **Post-Roman**: Reversion of the area to floodplain conditions. The pre-Roman river system re-established itself over the site, laying down alluvial silts similar to those before the Roman occupation.

3.7 **Saxon**: The site lies within the walls of the Saxon city. From the time of the monastic reforms of the 960s (and possibly earlier) the site formed part of the precincts of Old Minster, a cathedral priory (the Priory of St Swithun).

3.8 **Medieval**: Continued use as part of the precincts of St Swithun's Priory until the Dissolution of 1539. The site of the proposed works lay within the Prior's garden, an area used for recreational horticulture.

3.9 **Post-Medieval to present day**: The site continued in use for horticulture, now forming part of the garden of the Dean of a cathedral of Henry VIII's 'New Foundation'.

4 Objectives and Research aims

4.1 To make available the results of the investigation.

4.2 To establish the presence/absence of archaeological remains within the area designated for archaeological evaluation.

4.3 To determine the extent, condition, nature, character, quality and date of any archaeological remains present.

4.4 To establish the ecofactual and environmental potential of archaeological deposits and features.

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4.5 The evaluation will add to existing knowledge of the pre-history and historical development of a site recognised as of national importance. In particular it will attempt to address the following research aims:

- Characterise the post-glacial development of the area
- Locate the pre-Roman course of the River Itchen and any evidence for its management during the Roman and later periods
- Establish any evidence for pre-Roman use of the site and/or its suitability for habitation or other uses during this period.
- When was the area suitably drained to allow for habitation during the Roman period and what was its nature and development?
- The date of the Roman *agger* and town wall.
- Evidence for Roman intramural street and/or other streets and for the buildings that flanked them.
- Establish the post-Roman nature of the site, particularly for evidence of the breakdown of the Roman drainage infrastructure.
- Is their any evidence for early-middle Saxon use of the site, particularly given the proximity of the site to the Old Minster and the Saxon Bishop's palace?
- Evidence for the establishment of the Saxon *Burgh,* particularly for the refurbishment of the town defences.
- Did the 9th-century street grid extend into this quarter of the walled city, and is there evidence for an intramural street, (possibly located upon the Roman *agger*?).
- Is there is any evidence for the incorporation of the site into the monastic precinct?
- What was the monastic use of the site and if horticultural, what type of plants were grown?

4.6 The evaluation results will enable informed decisions to be made on a strategy for mitigating the potential negative affects of the proposed design on the archaeological resource identified, which will ensure that, important buried remains are preserved in situ where possible and preserved by record in all other instances.

4.7 To enable a revision of the objectives and research aims for any future archaeological excavation strategy and inform the methodology for that strategy.

5 Methodology for the Evaluation

5.1 A total of three archaeological interventions (Trenches A - C) are proposed by the Brief, all placed within the development area (see Fig. 1). If, for any reason, the trenches can not be excavated in the positions indicated on Fig. 1, a new location will be agreed with Dr John Crook, the Archaeological Advisor for Winchester Cathedral and any other relevant parties prior to excavation.

5.2 **Trench A.** This trench will measure 2m x 8m (reduced from 9.5m as stated in the Brief to allow for access at its north end), and will be located perpendicular to and abutting the Close Wall. At least 50% of the archaeological deposits will

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be excavated to the underlying peat or natural levels and will include a full excavated section through the length of the Roman rampart by means of a 1m width trench. Column sample(s) and if necessary bulk samples will be taken from the rampart in order to allow analysis of its constituents.

5.3 **Trench B.** This will measure 2m x 8m, and will be located in an open area laid to lawn. It has been moved c. 1.5m to the north of the original position in agreement with Dr. Crook and Tracy Matthews. At least 50%, if practicable, of archaeological deposits will be excavated to the peat or natural levels. An area of at least 1m² will be excavated to the bottom of the peat, in order to obtain an adequate sample of the peat for environmental analysis.

5.4 **Trench C.** Originally this trench was to measure 2m x 3.5m however in agreement with Tracy Matthews of WCC it will measure 1.5m x 1.5m and will be located in a restricted area, laid to grass, between the fence of the existing hard surfaced tennis courts and a brick wall. This trench, would have been fully excavated to the level of the peat or natural geology, however it will now in agreement with Tracy Matthews only be excavated to the first significant archaeological horizon. Care will be taken not to damage the major roots to the adjacent mature tree as such may limit the extent of the excavations.

5.5 The general methodology for excavation, recording and post-excavation is detailed in *OA Standard Fieldwork Methodology Appendices* (see Appendix 1) but not withstanding the specific methodologies stated in the Brief, given below.

5.6 Trenches will be (with the possible exception of Trench C) excavated using a suitable mechanical excavator fitted with a toothless ditching bucket down to the first archaeological deposit or natural drift geology (whichever is located first). This will be achieved in c.150mm spits in order to retrieve artefactural evidence. Care will be taken not to damage archaeological deposits through un-suitable use of mechanical excavation. All machine excavation will be supervised by a qualified archaeologist.

5.7 As suggested by Tracy Matthews (Sites and Monuments Officer, Winchester City Council) a small area of overburden in trench (nominally 1m length) will be hand-excavated in order to in order to assist in the identification of any possible stratification, and controlled recovery of artefacts and ecofacts.

5.8 Given the trenches are likely to exceed 1.2m, shoring of trenches will be employed, possibly before the base of the overburden is reached. Statements on suitable methodologies that can be safely employed are given in Appendix 1 (*Shoring and Deep Excavations - OA Safety Guidance Note*). If additionally shoring is required for the fabric of the Close wall in Trench A, advice will be sought from the Chapter of Winchester for a suitable methodology.

5.9 It is possible that water seepage will occur in all trenches towards the lower levels. Consultations have been made with the School regarding the use of an existing pumping chamber and under no circumstances will unfiltered water be

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pumped into the Mill Stream. Given that water seepage will greatly increase if the basal level of the peat is breached, excavations through this deposit will be confined to Trench B to small sondage (a minimum of 1m^2.) in order to minimise excessive seepage and allow for column sampling for pollen analysis (see below).

5.10 Archaeological excavation will proceed with the view to avoiding damage to significant archaeological deposits, which will be left in-situ, but with the aim of establishing the character and full depth of the stratified archaeological sequence above the underlying peat or natural levels. Typical examples of significant archaeological remains that may feasibly occur on this site can be defined as:

- Walls and other in-situ structural remains
- Complex floor sequences
- Mosaics and other tiled floors
- In-situ human remains
- Complex road, street or other external surfaces

5.11 Waterlogged wood will be recorded and sampled in liaison with the relevant specialist for species identification and dendrochronological dating potential.

5.12 In-situ fired clay deposits will be considered for archaeomagnetic sampling dating in liaison with the Mark Hounslow of Lancaster University.

5.13 Digital photography will be captured as RAW or TIFF images. The minimum acceptable resolution of the camera(s) used will be 6 Megapixels. In addition black and white and colour (35mm transparency) photographs will be taken during the course of the excavations of all important contexts and will include working shots to illustrate more generally the nature of the archaeological work.

5.14 A Harris matrix of the context relationships will be compiled during the course of the excavation for each trench.

5.15 On completion and after confirmation by the Archaeological Consultant , the trenches will be back-filled and consolidated with a whacked plate. Full reinstatement will be the responsibility of the school.

6 Environmental Sampling

General

6.1 The environmental sampling strategy will be reviewed continuously on site by a member of OA's Environmental Dept. overseen by its Head Rebecca Nicholson and/or regional science advisor Dominique de Moulins. In general it will comply with OA Environmental Sampling Strategy (Section 12: Appendix 2). It is hoped that the sampling strategy below will provide information on past diets and activities, the environment - both locally and to some extent regionally, and the soil formation processes that resulted in the stratigraphy encountered.

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Bulk Sampling

6.2 A minimum of 1 x 40 litres bulk sample will be taken by context for the recovery of Charred Plant Remains and artefacts. Examples of typical deposits that may be encountered on this site that may warrant bulk 40 litre sampling include:

- Primary fills of pits (or any fills containing cess/ ash or other organic material
- Primary fills of ditches.
- Floor or other occupation deposits, including spreads associated with the use of.
- Hearths/ovens etc.
- Middens.
- Any charcoal/ash deposits will be sampled in the entirety.

6.3 A minimum of 1 x 20 litre bulk sample will be taken by context for insects and waterlogged plant remains. These samples should run in parallel with the sampling regime for diatoms and micro-morphology.

6.4 Diatom sampling will require a small finds bag full to be taken incrementally, every 5cm, in parallel to the micro-morphology columns and bulk samples for insects.

Column Sampling

6.5 Column samples will be taken, where appropriate, after discussion with the relevant specialist on site, but will include, if feasible, a complete section through the peat deposits and any alluvial silts above, within the excavated sondage in Trench B. Undisturbed column monolith samples of c. 40-50 cm will be taken, with an overlap if appropriate/possible (Goldberg and Macphail, 2003). These will include as much soil as possible on the back of the monolith so that these can be used for sub-sampling for bulk and pollen samples, after minor cleaning back. If thin occupation layers are to be studied, it may be necessary also to take carefully, separate bulk samples along the section in order to get sufficient sample for analysis (20-40 gms). Samples will be kept undisturbed in a cooler. Sample locations will be recorded on section drawings, and a photographic record made if appropriate/feasible.

Borehole Sampling

6.6 If site conditions prevent column sampling of the peat (and/or other deposits) a program of geoarchaeological borehole sampling will be employed (ArchaeoScape) which will may utilise a Eijkelkamp gouge set driven by an Atlas Copco 2-stroke percussion engine (dimensions: 100 x 10/7.5/5/3cm). The disadvantage to this approach would be that these borehole samples are unsuitable for the examination of insects, although they would serve to inform on pollen, diatoms and soil micromorphology.

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7 Project Team Structure and Timetable

7.1 It is envisaged that the fieldwork will take about three weeks, after a minimum of two weeks lead-in period; and will be undertaken by a team comprising:

- Ben Ford: Senior Project Manager
- Guy Cockin: Project Supervisor
- Surveyor
- 5 Field Archaeologists

8 Public relations and information dissemination

8.1 Due to the constraints of the site and for legislative reasons, members of the general public will not be allowed on the site. However press releases will be submitted to the local press that may include photo opportunities (e.g. Hampshire Chronicle, The Winchester Observer etc). A concise summary of the results will also be submitted to the quarterly newsletter of Winchester Museums Service.

9 Report and Archive Preparation

9.1 Following completion of fieldwork, a summary of the results will be submitted to the Archaeological Consultant within two weeks and will include an assessment of the anticipated degree of survival of the archaeological deposits across the site.

9.2 A report detailing the findings of the evaluation phases will be completed within 4 weeks of completion of the fieldwork (some of the specialist reports may take longer due to processing time and availability of external sub-contractors. A draft copy of this report will be submitted to the Archaeological Consultant for comment and approval. Five bound copies and one unbound copy of the approved document will then be forwarded to the Archaeological Consultant to disseminate to other parties.

9.3 The content of this report will be as defined in Appendix 1. The site archive will be deposited with an appropriate receiving museum following completion of the project.

9.4 A list of specialists used by OA is presented below:

Subject	Specialist
Animal bone analysis	Adrienne Powell (Centre for Human Ecology, Southampton)
Archaeo-magnetic dating	Mark Houndslow / Vassil Karloukovski of Lancaster University
C14 dating	The Rafter Radio Carbon Labs in New Zealand
Computer manager	Paul Miles (OA)

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Subject	Specialist
Conservator	Vanessa Fell (Oxford Institute of Archaeology)
Daub and other building materials	John Cotter (OA)
Environmental manager	Rebecca Nicholson (OA)
Finds manager	Leigh Allen (OA)
Geoarchaeologist	Liz Stafford (OA) / Martin Bates (St. David's University College, Lampeter)
Glass	(Freelance)
Head of Geomatics	Tom Evans (OA)
Lithic analysis	Hugo Lamdin-Whymark (OA)
Metalwork	Ian Scott (Freelance)
Molluscs	Mark Robinson (Oxford University Museum of Natural History)
Osteoarchaeologist	Angela Boyle (OA)
Plant remains analysis	Wendy Curruthers
Pollen, diatoms, ostracods and foraminifera for past environments (from peat and silts)	B A Haggart
Pottery - general	Helen Rees (Winchester Museum Service)
Prehistoric pottery	Alistair Barclay (OA)
Roman pottery	Paul Booth (OA)
Saxon/medieval/post-medieval pottery	John Cotter (OA)
Slag	Chris Salter (Oxford University)
Soil micromorphologist	Richard McPhail (UCL)
Thermoluminescence dating	Sarah Hall (Oxford Archaeological Research Laboratory)
Waterlogged leather	Quita Mould
Waterlogged wood	Steven J Allen of York Archaeological Trust
Worked wood/Dendrochronology	Dan Miles of the Oxford Dendro Lab

10 Health and Safety

10.1 All OA project fieldwork is undertaken in accordance with all relevant current Health and Safety Legislation. This includes in particular the following regulations (the list is not intended to be exhaustive):

Health and Safety at Work Act 1974
Construction (Design and management) Regulations 1994
The management of Health and Safety at Work Regulations 1992
Personal Protective Equipment at Work Regulations 1992
Work Equipment Regulations 1992
Manual Handling Operations Regulations 1992
Workplace (Health, Safety and Welfare) Regulations 1992

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10.2 OA has its own Health and Safety Policy which refers to the manual Health and Safety in Field Archaeology (SCAUM 1997), and these two documents constitute the Health and Safety arrangements of OA. The Director of OA is ultimately responsible under the terms of the Health and Safety Act (1974) for ensuring the safety of employees. He must know the broad requirements of relevant legislation; attend meetings of OA Health and Safety Committee; ensure that responsibility for health and safety is properly assigned and accepted at all levels. The Director and Chief Executive of OA is David Jennings.

10.3 The Safety Co-ordinator of OA: represents the director on matters of health and safety; keeps abreast of relevant legislation and approved practice, and disseminates this information to OA staff; advises staff as required on matters of health and safety; maintains OA health and safety records; calls and chairs meetings of the OA Health and Safety Committee. The Safety Co-ordinator of OA is Dan Poore.

10.4 The Project Director is the person delegated to take overall charge of a particular project. She/he is responsible for health and safety matters on the projects that they manage, reporting to the Safety Co-ordinator in the first instance, and ultimately to OA's Director. She/he must be satisfied that an adequate safety plan has been drawn up for the project, or for each phase of the project. The Project Director may also be the Project Manager in some cases (see below).

10.5 Individual Project Supervisors/Managers are the persons delegated to take charge of a particular phase or part of the overall project. They are responsible for ensuring that for each site that they are in charge of an adequate Risk Assessment and any amendments or additions to the Site Safety Plan have been drawn up prior to work starting on site, and they are immediately responsible for the Health and Safety of employees and sub-contractors under their supervision. They report directly to the Project Director and OA Safety Co-ordinator. The manager for this project will be Martin Wilson.

10.6 The OA Health and Safety Committee consists of the Director, Safety Co-ordinator, OA Manager and the Site Staff Representative. The Safety Co-ordinator normally calls meetings of the Committee when there is business for discussion, but may be called by other members of the committee.

10.7 OA's independent Health and Safety Consultants are Safety Services Ltd, Stanton Harcourt, Oxon, who are consulted with regard to matters such as deep trenching, shoring and working in confined spaces.

10.8 Prior to the project a pro-forma OA Health and Safety Risk Assessment is produced by the project manager/supervisor and passed to the OA Safety Co-ordinator for approval. The Project Manager/supervisor ensures that the following information is available to the excavation team copy of the HSE poster 'Health and Safety Law - What You should Know', copy of the Safety Plan and Risk Assessment, Emergency Information Sheet giving details of nearest hospital etc, copy of the Notification of Project to HSE, location of an accident book.

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Crook, J 2005 *Winchester Cathedral Close - Brief for Archaeological Evaluation at The Pilgrims' School.*

IFA 1992, *Standard and Guidance for Archaeological Evaluations*

OA 1992, *Fieldwork Manual* (ed. D Wilkinson, first edition, August 1992)

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11 Appendix 1: OA Standard Fieldwork Methodology Appendices

The following methods and terms will apply, where appropriate, to all OA fieldwork unless varied by undertakings specified in a detailed Written Scheme of Investigation.

2 MACHINE EXCAVATED TRENCHES

2.1 A visual inspection of the entire site will be undertaken. This will include the examination of any available exposures (e.g. recently cut field ditches and geological test pits).

2.2 An appropriate mechanical excavator will be used for machine excavated trenches. This will normally be a JCB 3CX Sitemaster or 360° tracked excavator with a 5' or 6' wide toothless bucket. For work with restricted access or working room a mini excavator such as a Kubota KH 90 will be used.

2.3 All machining will be undertaken under direct archaeological supervision.

2.4 All undifferentiated topsoil or overburden of recent origin will be removed down to the first significant archaeological horizon, in successive, level spits.

2.5 Following machine clearance, all faces of the trench that require examination or recording will be cleaned using appropriate hand tools.

2.6 Spoil heaps will be monitored in order to recover artefacts to assist in the analysis of the spatial distribution of artefacts. Modern artefacts will be noted but not retained.

2.7 All investigation of archaeological levels will be by hand, with cleaning, examination and recording both in plan and section.

2.8 Within significant archaeological levels a minimum number of features required to meet the aims will be hand excavated. Pits and postholes will be subject to a 50% sample by volume. Linear features will be sectioned as appropriate. Features not suited to excavation within narrow trenches will not be sampled. No archaeological deposits will be entirely removed unless this is unavoidable. It is not necessarily the intention that all trial trenches will be fully excavated to natural stratigraphy, but the depth of archaeological deposits across the entire site will be assessed. The stratigraphy of all evaluation trenches will be recorded even where no archaeological deposits have been identified.

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2.9 Any excavation, both by machine and by hand, will be undertaken with a view to avoiding damage to any archaeological features or deposits that appear to be worthy of preservation *in situ.*

2.10 Different environmental sampling strategies may be employed according to established research targets and the perceived importance of the strata under investigation. Bulk samples, a minimum of 10 litres, but up to 40 litres if possible for early prehistoric features will be taken for flotation for charred plant remains. Bulk samples will be taken from any waterlogged deposits present for macroscopic plant remains. Columns for pollen analysis will be taken if appropriate. Mollusc samples will be collected if present. Other bulk samples for small animal bones and other small artefacts may be taken from appropriate contexts.

2.11 Any finds of human remains will be left in-situ, covered and protected and the coroner informed. If removal is essential it will only take place under appropriate Home Office licence, section 25 of the Burial Act 1857 and local environmental health regulations, and if appropriate in compliance with the Disused Burial Grounds (Amendment) Act 1981.

2.12 All finds of gold and silver will be removed to a safe place and reported to the local Coroner according to the procedures relating to Treasure Act, 1996. Where removal can not be effected on the same working day as the discovery, suitable security measures will be taken to protect the finds from theft.

2.13 OA welcomes monitoring visits by the local authorities' archaeological representatives. Timetables of the on-site work will be provided in order that visits can be made at appropriate times.

2.14 After recording, the trenches will be backfilled with excavated material, but will otherwise not be reinstated.

RECORDING

2.15 Contexts

- If less than ten trenches are to be recorded, a block of numbers, in a continuous sequence will be allocated to each trench.
- If more than ten trenches are to be recorded, a continuous unique numbering system will operate within each trench only.

- Written descriptions will be recorded on proforma sheets comprising factual data and interpretative elements.
- Where stratified deposits are encountered a Harris matrix will be compiled during the course of the excavation.

2.16 Plans

- These will normally drawn at 1:100, but on urban or deeply stratified sites a scale of 1:50 or 1:20 will be used. Detailed plans will be at an appropriate scale. Burials will be drawn at scale 1:10.

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- The site grid will be accurately tied into the National Grid and located on the 1:2500 or 1:1250 map of the area.
- A register of plans will be kept.

2.17 Sections

- Long sections of trenches showing layers will be drawn at 1:50. Sections of features or short lengths of trenches will be drawn at 1:20.
- A register of sections will be kept.
- Generally all sections will be tied in to Ordnance Datum. The exception to this is where the proposal for the site is mineral extraction where depth in relation to the development proposals is irrelevant. In these cases only some significant sections will be tied in to OD.

2.18 Photography

- Digital photography will be captured as RAW or TIFF images. The minimum acceptable resolution of the camera(s) used will be 6 Megapixels.
- A full black and white and colour (35 mm transparency) photographic record, illustrating in both detail and general context the principal features and finds discovered will be maintained. The photographic record will also include working shots to illustrate more generally the nature of the archaeological work.
- Photographs will be recorded on OA Photographic Record Sheets.

2.19 All recording will be undertaken in accordance with the requirements of the OA Field Manual (ed. D Wilkinson 1992).

FINDS

2.20 All identified finds and artefacts will be retained, although certain classes of building material or post medieval pottery may sometimes be discarded after recording if an appropriate sample is retained. However, no finds will be discarded without the prior approval of the nominated representative of the local authority and the receiving Museum. All appropriate ironwork will be X-rayed.

2.21 The pottery and other relevant artefacts will be scanned to assess the date range of the assemblage.

2.22 All finds and samples will be treated in a proper manner and to standards agreed in advance with the approved recipient museum. These will be exposed, lifted, cleaned, conserved, marked, bagged and boxed in accordance with the guidelines set out in UKIC's "Conservation Guidelines No. 2".

2.23 The level of artefact analysis will be sufficient to establish date ranges of archaeological deposits, a general assessment of the types of pottery and other artefacts to assist in characterising the archaeology, and to establish the potential for all categories of artefacts should further archaeological work be necessary.

2.24 At the beginning of a project, the local relevant museum and the landowner will be
contacted regarding the preparation and deposition of the archive and finds.

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2.25 Environmental samples, if appropriate will be processed and scanned for potential date. This will usually be co-ordinated by Dr M Robinson of University Museum, Oxford using appropriate specialists.

8 EVALUATION REPORTS

8.1 Style and format of the report will be determined by OA, but will include as a minimum the following:

- A location plan of trenches and/or other fieldwork in relation to the proposed development.
- Plans and sections of features located at an appropriate scale.
- A section drawing showing depth of deposits including present ground level with Ordnance Datum, vertical and horizontal scale.
- A summary statement of the results.
- A table summarising per trench the features, classes and numbers of artefacts contained within, spot dating of significant finds and an interpretation.
- A reconsideration of the methodology used, and a confidence rating for the results.
- An interpretation of the archaeological findings both within the site and within their wider landscape/townscape setting.

8.2 Copies of the report will be supplied to the client and the Archaeological Officer monitoring the works. Copies of the report will also be supplied to the County Sites and Monuments Record on the understanding that it will become a public document after an appropriate period of time (normally six months).

8.3 If the evaluation works generate archaeological results of importance which merit wider publication, the client will be consulted about further arrangements.

ARCHIVES

8.4 The site archive, including finds and environmental material, will be ordered, catalogued, labelled and conserved and stored according to the UKIC Guidelines for the preparation of excavation archives for long-term storage.

8.5 The site archive will be prepared to at least the minimum acceptable standard defined in Management of Archaeological Projects 2, English Heritage 1991.

8.6 The site archive will be microfilmed by the RCHME National Archaeological Record as a safeguard against the accidental loss and the long-term degeneration of paper records and photographs.

8.7 The site archive will be deposited with the relevant receiving Museum at the earliest opportunity unless further archaeological work on the site is expected within one year of completion of the archive. OA will advise the landowner that any artefacts resulting from the project work should be given to the relevant Museum.

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11 GENERAL

11.1 The requirements of the Brief will be met in full where reasonably practicable.

11.2 Any significant variations to the proposed methodology will be agreed with the local authority's archaeological representative in advance.

11.3 The scope of work detailed in the main part of the Written Scheme of Investigation is aimed at meeting the aims of the project in a cost-effective manner. Oxford Archaeology attempts to foresee possible site-specific problems and resource these. However there may be unusual circumstances which have not been included in the costing and programme.

- Unavoidable delays due to extreme bad weather, vandalism, etc.
- Complex structures or objects, including those in waterlogged conditions, requiring specialist removal.
- Extensions to specified trenches or feature sample sizes requested by the archaeological curator.
- Trenches requiring shoring or stepping, ground contamination, unknown services, poor ground conditions requiring additional plant, specialist reinstatement of surfaces (i.e. tarmac, turf).

HEALTH AND SAFETY and INSURANCE

11.4 All work will be carried out to the requirements of *Health and Safety at Work, etc. Act 1974*, *The Management of Health and Safety Regulations 1992,* the SCAUM (Standing Conference of Archaeological Unit Managers) H & S manual *Health and Safety in Field Archaeology 1991*, the OA Health and Safety Policy, and any main contractors requirements.

11.5 A copy of OA's Health and Safety Policy is available on request. OA will require copies of the H & S policies of all other contractors and operators present on site in compliance with *The Manual of H & S Regulations 1992.*

11.6 OA holds Employers Liability Insurance, Public Liability Insurance and Professional Indemnity Insurance. Details will be supplied on request.

11.7 OA will not be liable to indemnify the client against any compensation or damages for or with respect to:

- Damage to crops being on the Area or Areas of Work (save in so far as possession has not been given to the Archaeological Contractor);
- The use or occupation of land (which has been provided by the Client) by the Project or for the purposes of completing the Project (including consequent loss of crops) or interference whether temporary or permanent with any right of way, light, air or water or other easement or quasi easement which are the unavoidable result of the Project in accordance with the Agreement;
- Any other damage which is the unavoidable result of the Project in accordance with the Agreement;

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- Injuries or damage to persons or property resulting from any act or neglect or breach of statutory duty done or committed by the client or his agents, servants or their contractors (not being employed by Oxford Archaeology) or for or in respect of any claims demands proceedings damages costs charges and expenses in respect thereof or in relation thereto.

COPYRIGHT and CONFIDENTIALITY

11.8 Oxford Archaeology will retain full copyright of any commissioned reports, tender documents or other project documents, under the Copyright, Designs and Patents Act 1988 with all rights reserved; excepting that it will provide an exclusive licence to the client in all matters directly relating to the project as described in the Written Scheme of Investigation.

11.9 Oxford Archaeology will assign copyright to the client upon written request but retains the right to be identified as the author of all project documentation and reports as defined in the Copyright, Designs and Patents Act 1988 (Chapter IV, s.79).

11.10 OA will advise the client of any such materials supplied in the course of projects that are not OA's copyright.

11.11 OA undertakes to respect all requirements for confidentiality about the client's proposals provided that these are clearly stated. It is expected that such conditions shall not unreasonably impede the satisfactory performance of the services required. OA further undertake to keep confidential any conclusions about the likely implications of such proposals for the historic environment. It is expected that clients respect OA's general ethical obligations not to suppress significant archaeological data for an unreasonable period.

OA STANDARDS AND PROCEDURES

11.12 OA shall conform to the standards of professional conduct outlined in the Institute of Field Archaeologists' Code of Conduct, the IFA Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology, the IFA Standards and Guidance for Field Evaluations, Desk Based Assessments, etc. and the British Archaeologists and Developers Liaison Group Code of Practice.

11.13 OA is a member of the Institute of Environmental Assessment and the Council for British Archaeology.

11.14 Project Directors normally will be recognised in an appropriate Area of Competence by the IFA. For more extensive and complicated evaluation projects especially where they are part of large-scale programmes of work in historic urban centres, the procedures outlined in English Heritage's *Management of Archaeological Projects* 2nd Edition 1991 (MAP 2) will be followed for immediate post-field archive preparation and initial assessment. Agreement to then be reached, in collaboration with the local authority's archaeological representative, about what aspects will need to be taken

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forward to provide a report in the required format containing the information needed for planning purposes.

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12 Appendix 2: OA Environmental Sampling Strategy

12.1 In accordance with standard practice, sampling for a number of palaeoenvironmental investigations, including plants, animals, fish and invertebrates will be undertaken where appropriate. High priority deposits for investigation are: primary fills of pits, wells and cesspits, layers of middens, occupation surfaces and other discrete activity areas, contents of hearths, kilns and ovens, storage areas or containers. Samples shall be taken from a representative cross-section of features and layers of all periods; these will be well dated or datable and well sealed (not mixed). The selection of samples will therefore take into account the presence/absence of datable artefacts and the degree of residuality and intrusiveness (e.g. of finds, recent or modern material etc.) within the deposits.

Charred plant remains

12.2 Sampling for charred remains, including charcoal, may provide information on diet, storage, rubbish disposal, agricultural practice, domestic cooking and fuel use.

12.3 Bulk samples of 40 litres (or 100% of the deposit where less than that capacity) shall be taken for the recovery of charred remains, including charcoal.

12.4 Hearths should be sampled for charcoal and food debris.

Mineralised remains

12.5 A well-preserved cess deposit can provide evidence for diet and health.

12.6 Cess deposits are a priority for sampling

12.7 Residues from all bulk samples shall be retained to 500μm, to ensure recovery of mineralised remains.

12.8 Smaller samples (1-5 litres) should be taken from the soil immediately around coprolites.

Waterlogged remains

12.9 Bulk samples of a minimum of 10 litres will be taken (or 100% of the deposit, if less than that capacity).

12.10 Incremental column samples shall be taken where appropriate.

12.11 Sub-samples of these waterlogged samples will be assessed by suitable specialists for the presence of plants, insects, and other biological indicators if relevant (e.g. diatoms, ostracods etc).

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Pollen

12.12 Dry and waterlogged deposits may have potential for pollen preservation, but should only be sampled if the feature type and level of disturbance/redeposition in the deposits is suitable.

Bones and artefacts

12.13 There is good preservation of animal and fish bone at the site and the evaluation samples produced useful quantities of fish bone and other small artefacts. Hammerscale was also noted in samples of different date and may indicate zoning of industrial activities.

12.14 All bulk samples taken for charred remains will be sieved to 0.5mm for the recovery of small bones, shell and artefacts.

12.15 Sub-samples for hammerscale shall be taken from appropriate bulk samples.

Snails

12.16 Snails, like the marine shell and bone are likely to be well preserved. If suitable deposits from earlier periods (i.e. periods of less intensive activity) are excavated, samples for snails may provide information on landscape use. However, assemblages from later urban and disturbed ground deposits will not be useful, except in comparison with earlier sequences.

12.17 Incremental snail sequences to be taken from suitable deposits.

12.18 Samples from later features to be taken only for comparison with earlier samples.

Sediment samples

12.19 It may be worthwhile to take monolith/kubiena samples from various sequences. These could provide information on land use and the degree of disturbance/redeposition. However, samples should be taken in consultation with the specialist.

12.20 All sampling shall be carried out in accordance with general procedures laid out in the OA Environmental Manual. The Environmental strategy will be reviewed and refined during the course of the excavation, with the advice of relevant specialists and the EH Regional Advisor.

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13 Appendix 3: Archaeo-Magnetic Dating Strategies

Sampling

13.1 One of three sampling techniques is employed depending on the consistency of the material (Clark, Tarling and Noel 1988):

13.2 **Consolidated materials:** Rock and fired clay samples are collected by the disc method. Several small levelled plastic discs are glued to the feature, marked with an orientation line related to True North, then removed with a small piece of the material attached.

13.3 **Unconsolidated materials:** Sediments are collected by the tube method. Small pillars of the material are carved out from a prepared platform, then encapsulated in levelled plastic tubes using plaster of Paris. The orientation line is then marked on top of the plaster.

13.4 **Plastic materials:** Waterlogged clays and muds are sampled in a similar manner to method 1b) above; however, the levelled plastic tubes are pressed directly into the material to be sampled.

Physical Analysis

13.5 Magnetic remanences are measured using a slow speed spinner fluxgate magnetometer (Molyneux et al. 1972; see also Tarling 1983, p84; Thompson and Oldfield 1986, p52).

13.6 Partial demagnetisation is achieved using the alternating magnetic field method (As 1967; Creer 1959; see also Tarling 1983, p91; Thompson and Oldfield 1986, p59), to remove viscous magnetic components if necessary. Demagnetising fields are measured in milli-Tesla (mT), figures quoted being for the peak value of the field.

Remanent Field Direction

13.7 The remanent field direction of a sample is expressed as two angles, declination (Dec) and inclination (Inc), both quoted in degrees. Declination represents the bearing of the field relative to true north, angles to the east being positive; inclination represents the angle of dip of this field.

13.8 Aitken and Hawley (1971) have shown that the angle of inclination in measured samples is likely to be distorted owing to magnetic refraction. The phenomenon is not well understood but is known to depend on the position the samples occupied within the structure. The corrections recommended by Aitken and Hawley are applied, where appropriate, to measured inclinations, in keeping with the practise of Clark, Tarling and Noel (1988).

13.9 Individual remanent field directions are combined to produce the mean

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remanent field direction using the statistical method developed by R. A. Fisher (1953). The quantity α_{95}, "alpha-95", is quoted with mean field directions and is a measure of the precision of the determination (see Aitken 1990, p247). It is analogous to the standard error statistic for scalar quantities; hence the smaller its value, the better the precision of the date.

13.10 For the purposes of comparison with standardised UK calibration data, remanent field directions are adjusted to the values they would have had if the feature had been located at Meriden, a standard reference point. The adjustment is done using the method suggested by Noel (Tarling 1983, p116).

Calibration

13.11 Material less than 3000 years old is dated using the archaeomagnetic calibration curve compiled by Clark, Tarling and Noel (1988).

13.12 Older material is dated using the lake sediment data compiled by Turner and Thompson (1982).

13.13 Dates are normally given at the 63% and 95% confidence levels. However, the quality of the measurement and the estimated reliability of the calibration curve for the period in question are not taken into account, so this figure is only approximate. Owing to crossovers and contiguities in the curve, alternative dates are sometimes given. It may be possible to select the correct alternative using independent dating evidence.

13.14 As the thermoremanent effect is reset at each heating, all dates for fired material refer to the final heating.

13.15 Dates are prefixed by "cal", for consistency with the new convention for calibrated radiocarbon dates (Mook 1986).

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14 Appendix 4: Shoring And Deep Excavations - OA Safety Guidance Note

NB The following notes are for guidance only. If you have difficulties, or the problem is too complex to be dealt with by the methods given below, you must contact the OA Health and Safety Co-ordinator, Dan Poore. Where a more complex system of shoring is required, such as systems for supporting larger (more than 3 by 3 m in plan) or deeper (more than 3.5 m deep) excavation areas, OA will normally use a specialist contractor to fit the shoring. This can be very expensive and must be planned for at tender stage.

Step 1 Do you need to shore?

If your excavation is to be more than 1 - 1.5 m deep (less in very unstable ground or where people are kneeling), and stepping/battering of the sides is not possible, you may need to shore. The law requires that you make a decision as to whether shoring is required based on the type of work to be undertaken and the ground conditions. If you do not intend to shore (and this is obviously in a minority of cases), you must be very clear as to your reasons - record them in writing on the Risk Assessment form and submit to the OA Health and Safety Co-ordinator.

Please note:

There is a common misconception that it is safe to excavate to depths *in excess* of 2 - 2.4 m by means of multiple 'steps' forming the limits of your excavation, where the height of the step is equal to its width. In reality, it is only safe to dig to 2 - 2.4 m by this stepped method, with a single step, because if the sides collapse then you will be hit by the collapsing soil at hip height only. If multiple steps collapse, then you could be buried and are likely to suffocate.

Unshored excavations in excess of 2 - 2.4 m deep must either have battered sides (with the angle of the batter dependant upon the ground conditions), or steps where the height of the step is sufficiently exceeded by the width, so that the collapse of any one step will not simply start an avalanche effect leading to the collapse of all steps beneath it.

ALL DEEP EXCAVATIONS REQUIRE SPECIFIC RISK ASSESSMENT AND A METHOD STATEMENT. IF IN DOUBT AS TO WHAT CONSTITUTES A DEEP EXCAVATION, TAKE ADVICE.

Step 2 Suitable trenches for shoring

Trenches which OA normally shores are 1 - 3 m wide/square and can be of any length. Do not attempt to shore to a depth of greater than 3.5 m with the system described here. It is common practice to take a long trench down to 1.2 m, and then to excavate deeper in selected areas. These areas, which are then shored, are known as boxes.

Step 3 Shoring equipment

The elements of shoring equipment are as follows:

1 Adjustable trench props (also sometimes called acroprops) used to brace across the trench. Available in a number of different sizes. When ordering props, ask what size the prop will expand to, which should be equal to or slightly less than the width of the trench.

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2 Metal trench sheets, used for the vertical support of the trench sides. These are commonly about 0.3 m wide, and are available in lengths from 2 m - 10 m. The longer the sheets, the more heavy and unwieldy they will be. Caps which fit over the top of the sheets are used to make driving or toeing in the sheets safer.

3 Timber walers (also referred to as batons), used for the horizontal supports. They vary in length from 1.5 to 4 m, and in width from no less than 0.2 - 0.35 m. The crucial measurement, however, is their thickness, which should be 0.1 m, minimum. Note that scaffold planks are not suitable.

4 Timber wedges, used between horizontal and vertical supports.

Step 4 Putting up the shoring

The attached diagram shows how the shoring should look.

The procedure is as follows:

1 Place trench sheets against trench sides - they should be supported in position by someone in the trench. Clean, vertical trench sides make the whole operation much easier. The hole in the trench sheet goes at the top, so that they can be pulled out by machine if necessary. Where ground allows, drive the sheet down so that it is 'toed in', using a protective cap on top of the sheet. This can be very noisy - ear defenders will be needed, as well as goggles and gloves. It is useful if the sheets protrude at least 1.2 m above the trench edge, as they will then act as edge protection for the excavation itself.

Spacing of trench sheets is very important. This ranges from complete coverage of the trench side (for extremely loose ground) to 'hit-and-miss' (spacing equivalent to width of trench sheet) or, though less commonly, wider spacing. Err on the side of caution - if you are unsure, seek advice from the OA Health and Safety Co-ordinator. Also note that trench sheets are heavy - take care when lifting - use two people.

2 Place upper timber waler in position on each side (these need to be supported by people in the trench) and then fit two props (2.5 m apart or less) against these walers. Tighten sufficiently to hold position, but not fully. Place wedges where walers and trench sheets do not meet.

3 Repeat 2, for lower walers. Then tighten all props and knock in wedges as needed.

4 Tie down the handles of the props so that they don't stick out.

5 If you wish to shore a longer trench than is shown on the diagram, repeat the above but overlap the walings which should therefore be just above or below the first set which were installed.

6 Should you need to deepen the trench once the first set of sheets, props and whalers has been installed, it should be possible to dig down below the bottoms of the sheets by up to 0.5 - 1 m DEPENDING ON GROUND CONDITIONS. The 'hit and miss' scheme will then allow you to slide additional (usually longer) sheets into the gaps and down behind the walers (again toed in). A further set of walers and props can then be inserted just above the new base of the trench. Obviously ingress of ground water will have a destabilising effect and may mean that further excavation is not possible using this system.

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Step 5 Using and maintaining the shoring

1 The shoring must not be used as a means of entry or exit from the trench -to put it another way - don't climb on it. The trench should be accessed using a ladder which is fixed (i.e. tied down) and which protrudes at least 1 m above the trench edge.

2 Check trench sheets, props and wedges at the beginning of each working session, or if there has been an obvious shift in the ground. Tighten/drive in as necessary.

3 The shoring, once in position, can also cause accidents as it can make excavation quite awkward. Hard hats should be worn at all times.

Step 6 Backfilling the trench and dismantling the shoring

1 This process has obvious risks as it involves removing the structures supporting the sides of the trenches while you are in the trench! The key is to make sure that the props are always sufficiently clear of the base of the trench so that sufficient spoil can be shovelled into the bottom to firmly brace the sheets against the sides of the trench. The lowest props and walers can then be carefully removed.

2 Continue this process until the upper most props and walers have been removed (the trench should be almost completely backfilled by now) and then lift the sheets clear using the machine, by attaching chains to the holes at the top of the sheets. If you don't have a machine on site it is wise to lift the sheets gradually during the backfilling process so that they do not become too firmly wedged in place.

Finally, safety is the overriding factor. Wanting to see the sections, or being short of time, are not sufficient reasons to omit shoring.

Dave Wilkinson (8/7/94) OAU Safety Officer
Revised by Dan Poore (17/02/05)OA Health and Safety Co-ordinator

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Server 10:/oaupubs1_RthruZ*AY234*WINPILEV*Pilgrims School, Winchester*LK*27.07.05

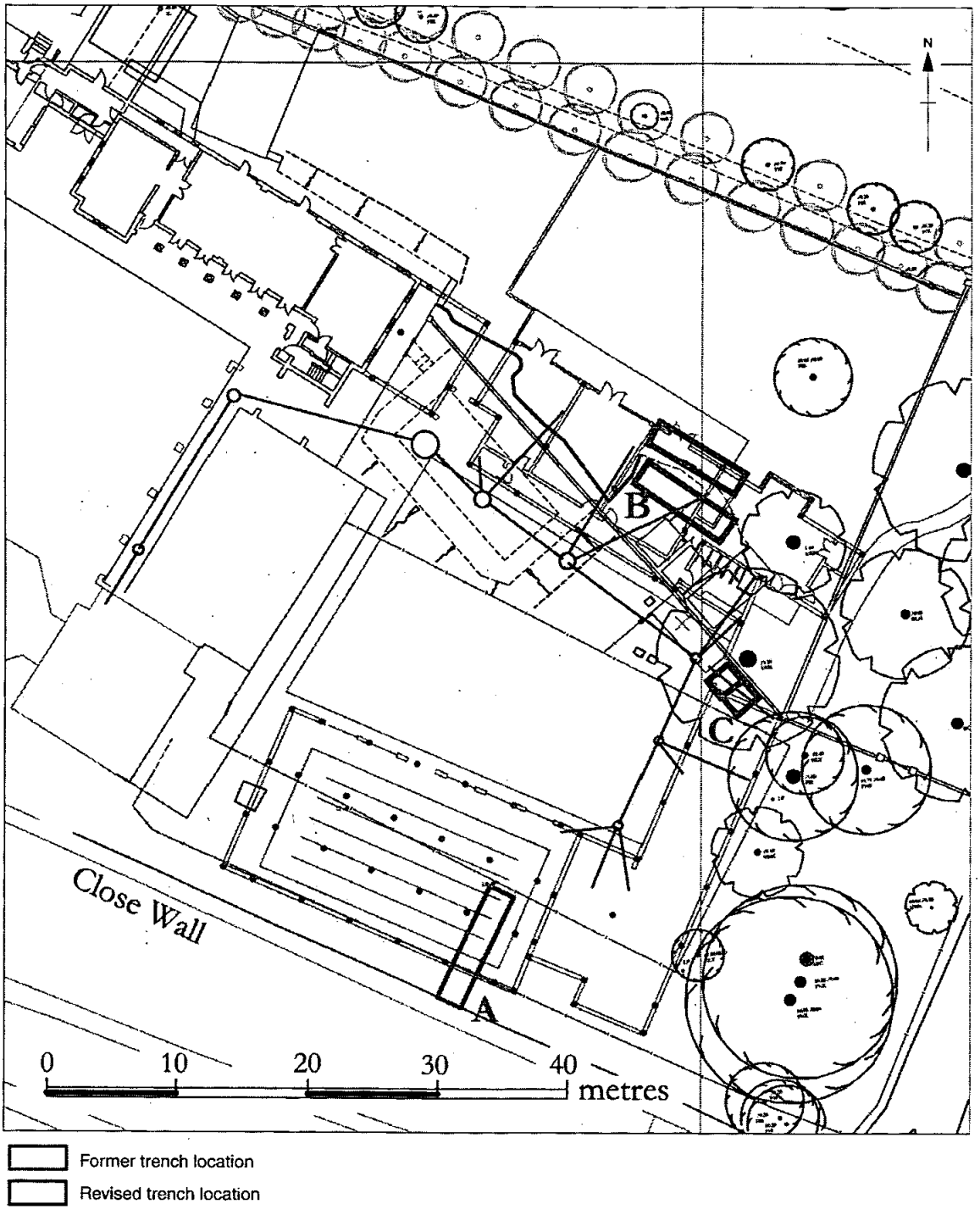

Figure 1: Proposed trench locations

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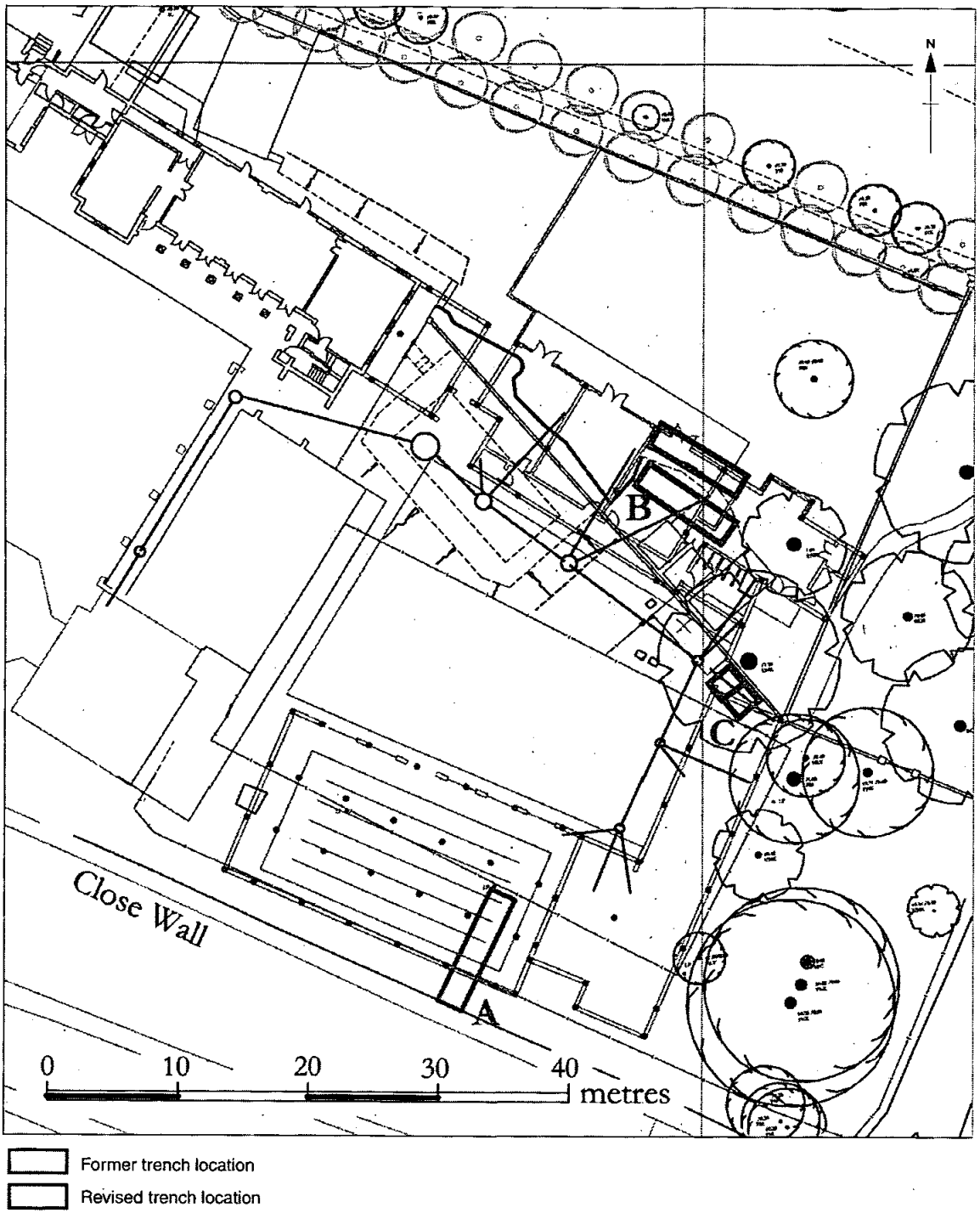

Figure 1: Proposed trench locations

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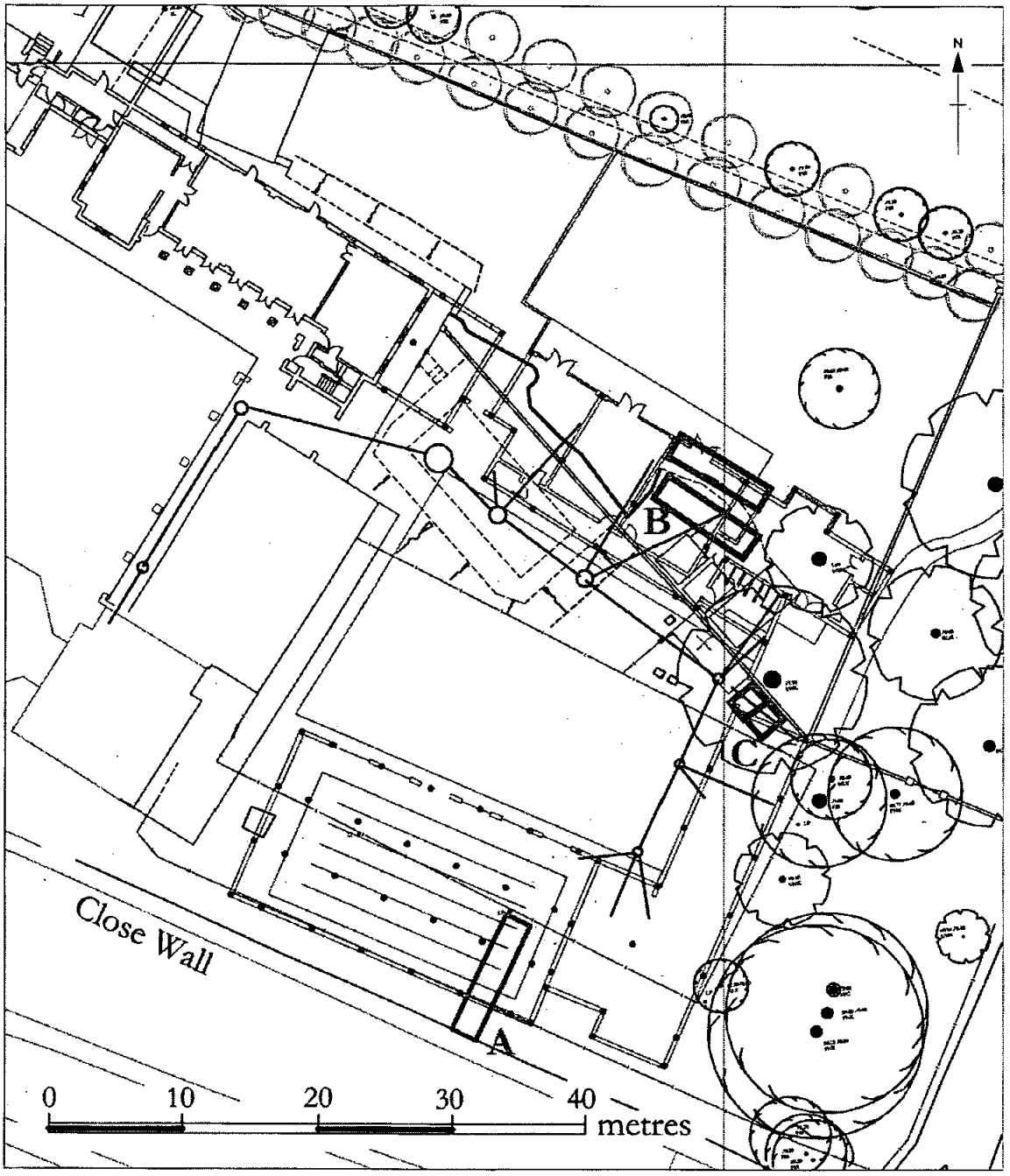

Figure 1: Proposed trench locations

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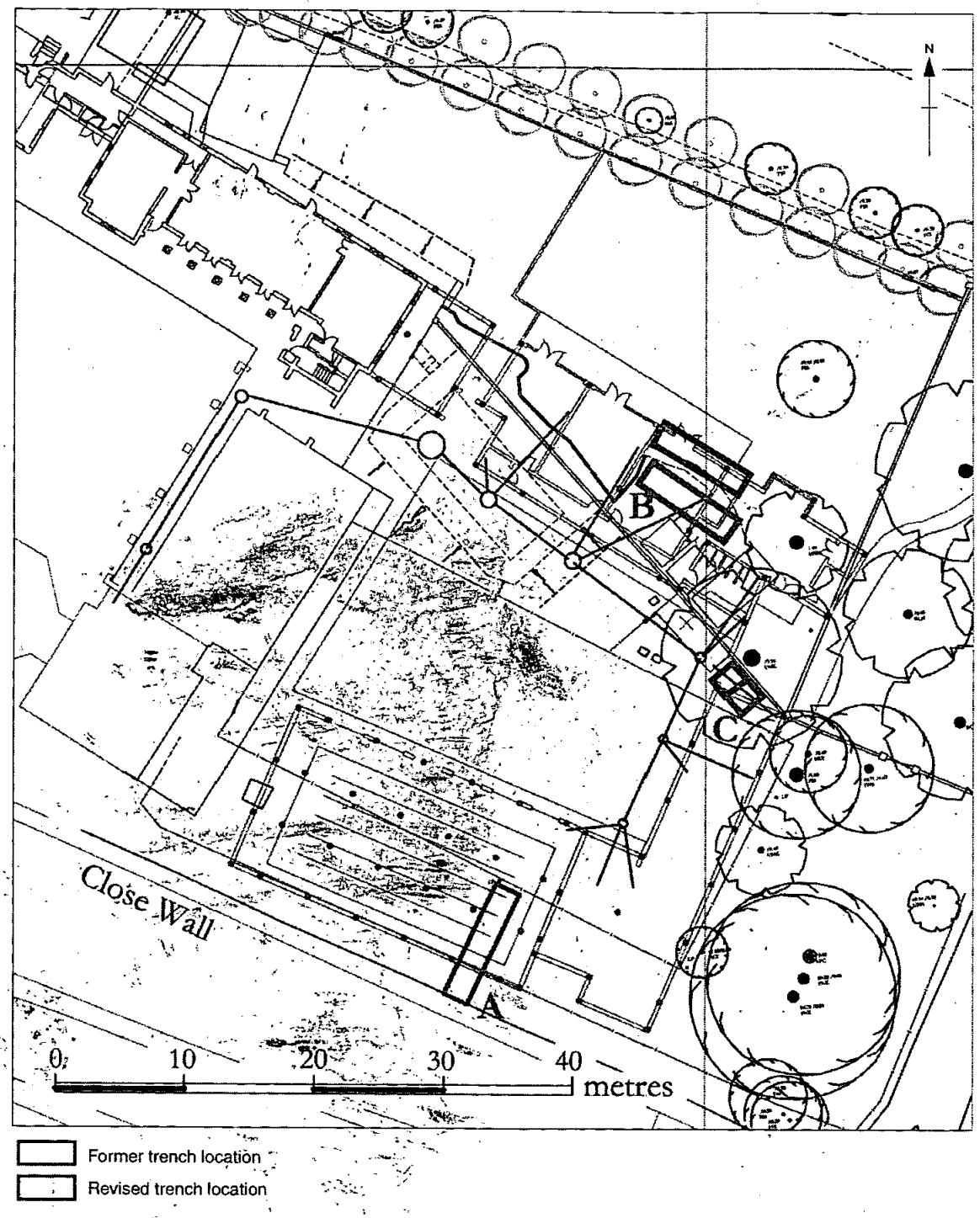

Figure 1: Proposed trench locations

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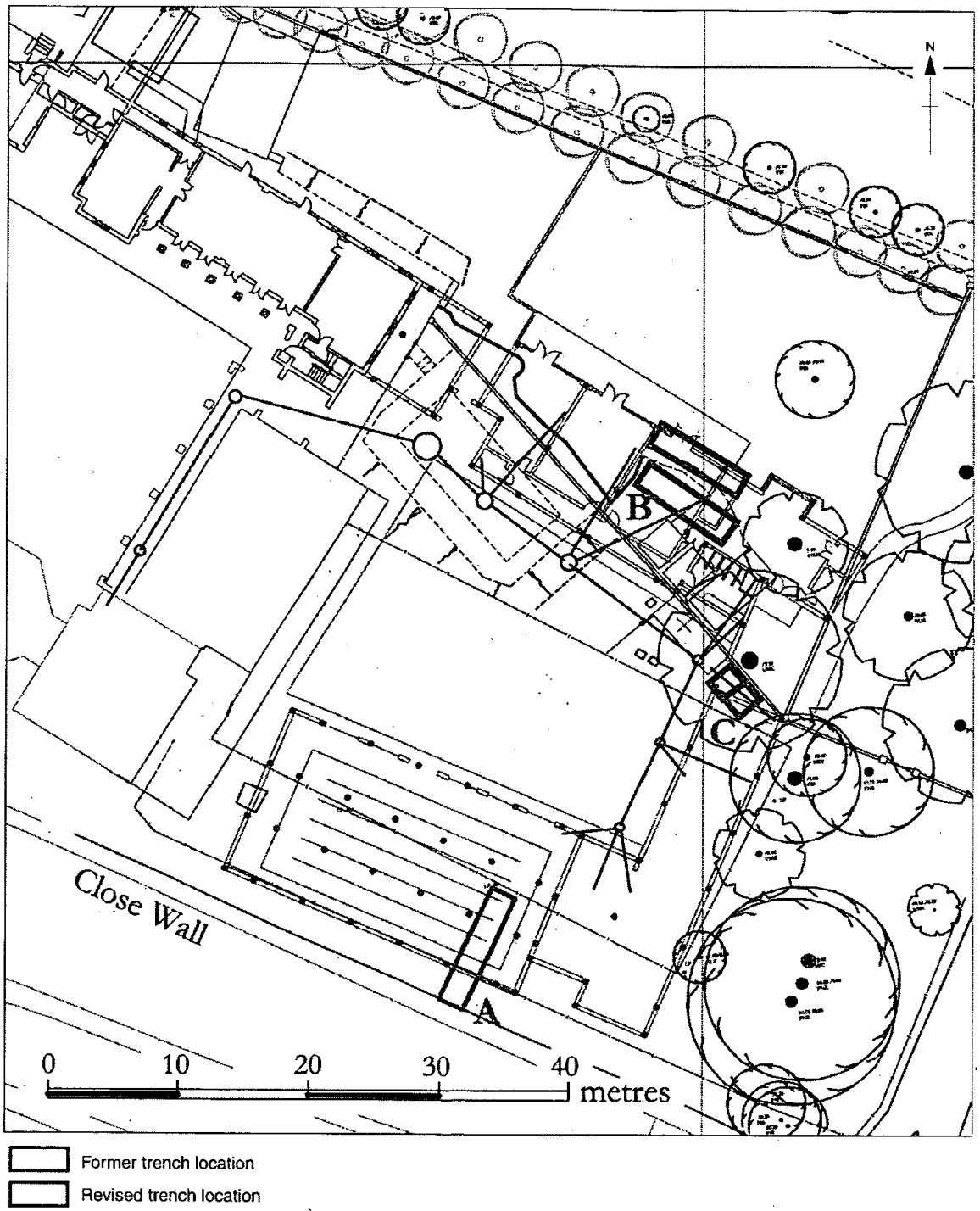

Figure 1: Proposed trench locations

Sem Files - 07967 GBG 130
Site Agent -

Pilgrims School,
Cathedral Close,
Winchester,
Hampshire.

NGR: SU 4829 2905

Written Scheme of Investigation
For Additional Archaeological Evaluation and Watching Brief

Oxford Archaeology: May 2006 Rev. 3

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THE PILGRIMS' SCHOOL,

CATHEDRAL CLOSE,

WINCHESTER,

HAMPSHIRE.

NGR: SU 4829 2905

Written Scheme of Investigation

for

Additional Archaeological Evaluation and Watching Brief

1 Introduction

1.1 Oxford Archaeology (OA) has been appointed as the Archaeological Contractor by Pilgrims' School in advance of a construction programme to extend their pre-preparatory and sports facilities at Cathedral Close, Winchester.

1.2 A number of planning and legal issues are pertinent to the site, these are summarised below:

- The Site is a Scheduled Ancient Monument (Hants 585)
- The Close wall is a Scheduled Ancient Monument
- The main buildings of The Pilgrims' School are Listed Grade I
- The Cathedral Close forms part of a Conservation Area
- The site is protected by the provisions of the Cathedrals Measure (1990)

1.3 During August 2005 Oxford Archaeology excavated three evaluation trenches on the site of the proposed development, the results of which are documented in a report (OA April 2006) - broad conclusions are presented in section 3.

1.4 Based upon the initial evaluation results (OA 2005) certain design parameters were established by Richard Massey (Inspector of Ancient Monuments - EH) and Tracy Matthews (Sites and Monuments Officer - WCC) to minimise damage to the buried heritage resource from the development. These were integrated, by Pilgrims' School, into a Design Statement (Nov. 2005) which

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was submitted to the Department for Culture Media and Sport (DCMS) for Scheduled Monument Consent (SMC) as required under Section 2 of the Ancient Monuments and Archaeological Areas Act 1979 (as Amended).

1.5 In March 2006 SMC was granted stating that;

'no ground works shall take place until implementation of a programme archaeological work has been secured in accordance with a written scheme of investigation (WSI) which has been submitted to and approved by the secretary of State advised by EH.'

it also proposes a number of archaeological requirements:

- excavation of a further single trench to be located towards the western end of the proposed swimming pool;
- A borehole transect to be undertaken across the long axis of the proposed swimming pool;
- archaeological sampling of material from specified augering at pile locations;
- Examination and recording of archaeological deposits revealed specifically by the removal of the previous swimming pool and generally during all ground works associated with the development.

1.6 This WSI, or detailed specification, for the archaeological work has been drawn up to respond to the requirements of the SMC in consultation with Dr Crook, the Archaeological Consultant for Winchester Cathedral and Tracy Matthews Sites and Monuments Officer for Winchester City Council.

1.7 The work will take the form of an archaeological evaluation trench (Trench 4), targeted boreholes on an E - W transect at 5m centres and a watching brief during construction works see Fig. 1.

2 Topography and Geology

2.1 The site lies within the SE corner of Winchester Cathedral Close within the gardens located within the eastern part of the present school curtilage (centred on National Grid Reference SU 4829 2905). It is bounded to the south by the Close Wall, to the west by the existing school classrooms, to the north by the Deanery Garden and to the east by a strip of land forming part of the school's garden adjacent to the Mill Stream. The site is situated on the valley floor to the west of the River Itchen that flows from north to south.

2.2 The site currently forms a largely flat garden area, with hard surfaced tennis courts, to the east of the main school buildings (Stancliffe Building, Millennium Building and Selwyn Building) at c.33m OD. Contained within the southern part there is a swimming pool and a tennis court/hard play area.

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2.3 The geology of the site comprises Upper Chalk of the Cretaceous Epoch overlain by floodplain gravels dating from the late Quaternary period (BGS sheet 299D) which are in turn overlain by Holocene peats and floodplain/alluvial silts.

3 Archaeological and Historical Background

3.1 The archaeological and historical background of the site has been detailed in an Archaeological Assessment Report (Crook 2005) and is summarised with additions from recent fieldwork by Oxford Archaeology (OA 2005) below:

3.2 The site lies within the historic walled city in an area which successively comprised part of the Roman *civitas* of *Venta Belgarum*, the Saxon town of *Wentanceastre*, and the medieval city of Winchester. The archaeological resource within the walled city is recognised as being of national importance; the Cathedral Close is regarded as of especial archaeological value, hence its scheduled monument status. The history of the site may be summarised as follows:

3.3 **Late Pleistocene.** The site lay in the valley bottom, where the incipient river systems that were to become the River Itchen cut through the chalk downs. At the end of the last Ice Age (Late Pleistocene, *c.* 20,000 to 10,000 BP) periglacial conditions led to the formation of gravel bars over the flood plain, above the eroded surface of the Upper Chalk. No evidence for human occupation of the site, but a flint spall and flake of probable Mesolithic date were discovered in a borehole suggesting some human activity in the area.

3.4 **Mesolithic to Late Iron Age.** With warmer conditions, layers of peat were formed from decaying vegetation on the river margins. Peat, possibly dating to the mid-Holocene, was reported from Auger 1 between 30.62 to 29.97mOD (COAS 1999). This peat was absent in Trench 1 (OA 2005) some 40m to the east and clearly shows there are local variations in the prehistoric depositional sequence. The environment was continuously wet and unsuitable for human habitation, though the marsh might have provided a site for hunting wildfowl and collecting edible plants.

3.5 **Late pre-Roman Iron Age.** The site was located below the Iron Age enclosure at Oram's Arbour. A change in climatic conditions led to the deposition of further sediments. These include Iron Age pottery fragments, mussel shells, bone, and charcoal: domestic rubbish which was deposited into the valley bottom in the period prior to the Roman occupation.

3.6 **Roman.** The site lay within the Roman defensive circuit: first an earth rampart (*agger*), then a second phase of earth rampart, and finally, from the 3rd century, a flint and mortar wall. A single phase of Earthen and a subsequent Stone wall defence was recorded in Trench 1 (*ibid*). The lower lying parts of the settlement were probably progressively drained as the settlement expanded eastwards, the Itchen being diverted outside the eastern boundary. Initially the floodplain may have been deemed adequate for defensive purposes. Evidence from Trench 3

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(*ibid*) indicates that subsequent to faster moving water there was slow moving if not a stagnant water environment here during the late 2nd to early 3rd century. This perhaps reflects Roman floodplain drainage, which was then subject to dumping and land reclamation from the late 3rd century.

3.7 **Post-Roman.** Reversion of the area to floodplain conditions. The pre-Roman river system re-established itself over the site, laying down alluvial silts similar to those before the Roman occupation. These deposits were clearly observed in Trench 3 (*ibid*) as alluvial silts rich in organic remains, whose deposition probably extends through the Saxon period into the Medieval period.

3.8 **Saxon.** The site lies within the walls of the Saxon city. From the time of the monastic reforms of the 960s (and possibly earlier) the site formed part of the precincts of Old Minster, a cathedral priory (the Priory of St Swithun). Alluvial silts continue to accumulate seasonally in the area - which remains too wet for habitation (*ibid*). Timber posts and stakes provide limited evidence for fish traps, fences? etc.

3.9 **Medieval.** Continued use as part of the precincts of St Swithun's Priory until the Dissolution of 1539. The site of the proposed works lay within the Prior's garden, an area used for recreational horticulture. Alluvial silts continue to accumulate seasonally in the area. A short lived cess pit was found in Trench 3 (*ibid*). Further west remains of substantial medieval structures were recorded (WMS 2000).

3.10 **Post-Medieval to present day.** The site continued in use for horticulture, now forming part of the garden of the Dean of a cathedral of Henry VIII's 'New Foundation'. In the 18th century substantial and extensive deposits of demolition rubble are imported into the area to raise the ground level from c. 32mOD by c. 0.5m. Loam deposits, probably representing garden levels, subsequently overlie these dumps, the result of which would possibly have been to raise the gardens out of all but the most serious floods (OA 2006).

4 Objectives and Research aims

General

4.1 To publish the results of the investigation that integrate evidence from earlier archaeological works.

4.2 To establish the presence/absence of archaeological remains within the area designated for archaeological evaluation and watching brief.

4.3 To determine the extent, condition, nature, character, quality and date of any archaeological remains present during evaluation and watching brief.

4.4 To establish the ecofactual and environmental potential of archaeological deposits and features.

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4.5 The evaluation will add to existing knowledge of the pre-history and historical development of a site recognised as of national importance.

Specific

4.6 In particular it will attempt to address the following specific research aims:

- Characterise the post-glacial development of the area
- Locate the pre-Roman course of the River Itchen and any evidence for its management during the Roman and later periods
- Establish any evidence for pre-Roman use of the site and/or its suitability for habitation or other uses during this period.
- When was the area suitably drained to allow for habitation during the Roman period and what was its nature and development?
- The date of the Roman *agger* and town wall.
- Evidence for Roman intramural street and/or other streets and for the buildings that flanked them.
- Establish the post-Roman nature of the site, particularly for evidence of the breakdown of the Roman drainage infrastructure.
- Is their any evidence for early-middle Saxon use of the site, particularly given the proximity of the site to the Old Minster and the Saxon Bishop's palace?
- Evidence for the establishment of the Saxon *Burh,* particularly for the refurbishment of the town defences.
- Did the 9th-century street grid extend into this quarter of the walled city, and is there evidence for an intramural street, (possibly located upon the Roman *agger*?).
- Is there is any evidence for the incorporation of the site into the monastic precinct?
- What was the monastic use of the site and if horticultural, what type of plants were grown?
- To reconstruct the changing past landscape within an absolute dating chronology.
- To create a cross section through the geology and the depositional sequence of the development area
- To integrate the results of this work into the previous work to give a coherent and thorough overview.

5 Methodology for Evaluation Trench 4

5.1 A single additional evaluation trench is proposed (Trench 4). This will be located within the development area to the western end of the proposed swimming pool (see Fig. 1). If, for any reason, the trench can not be excavated in the position indicated on Fig. 1, a new location will be agreed with Dr John Crook, the Archaeological Advisor for Winchester Cathedral and any other relevant parties prior to excavation.

5.2 The trench will measure 3m x 2m and will be excavated to the first significant

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archaeological horizon. If archaeological deposits extend above the predicted level of significant archaeology at 31.66mOD (see Section S1-S1 on drawing BTA31-07; Swimming Pool, General Arrangement Sections) then this will be fully hand excavated. All resultant sections and plan will be hand cleaned and recorded.

5.3 The general methodology for excavation, recording and post-excavation is detailed in *OA Standard Fieldwork Methodology Appendices* (see Appendix 1).

5.4 The trench will be excavated using a suitable mechanical excavator fitted with a toothless ditching bucket down to the first significant archaeological deposit or natural drift geology (whichever is encountered first). This will be achieved in c.150mm spits in order to retrieve artefactural evidence. Care will be taken not to damage archaeological deposits through un-suitable use of mechanical excavation. All machine excavation will be supervised by a competent archaeologist.

5.5 A small area of overburden in trench (nominally 1m length) will be hand-excavated in order to in order to assist in the identification of any possible stratification, and controlled recovery of artefacts and ecofacts.

5.6 Given the trench is likely to exceed 1.2m, stepping or battering the sides rather than shoring will be employed to provide safe access and egress for site operatives to their work areas.

5.7 It is possible that water seepage will occur at *c.*1.2m depth in the trench (previously at 31.62 - 31.64mOD). Consultations have been made with the School regarding the use of an existing pumping chamber and under no circumstances will unfiltered water be pumped into the Mill Stream. Given that water seepage will greatly increase if the basal level of the peat is breached, excavations through this deposit will be confined.

5.8 Archaeological excavation will proceed with the view to avoiding damage to significant archaeological deposits, which will be left in-situ i.e. excavation will only proceed to the top of significant archaeology. Typical examples of significant archaeological remains that may feasibly occur on this site can be defined as:

- Walls and other in-situ structural remains
- Complex floor sequences
- Mosaics and other tiled floors
- In-situ human remains
- Complex road, street or other external surfaces

5.9 Digital photography will be captured as RAW or TIFF images. The minimum acceptable resolution of the camera(s) used will be 6 Megapixels. In addition black and white and colour (35mm transparency) photographs will be taken during the course of the excavations of all important contexts and will include working shots to illustrate more generally the nature of the archaeological work.

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5.10 A Harris matrix of the context relationships will be compiled during the course of the excavation for each trench.

5.11 On completion and after confirmation by the Archaeological Consultant, the trench will be back-filled. Full reinstatement of surfacing will be the responsibility of the school.

6 Environmental Sampling

General

6.1 The environmental sampling strategy will be reviewed continuously on site by a member of OA's Environmental Dept. overseen by its Head Rebecca Nicholson and/or regional science advisor Dominique de Moulins. In general it will comply with OA Environmental Sampling Strategy (Section 12: Appendix 2). It is hoped that the sampling strategy below will provide information on past diets and activities, the environment - both locally and to some extent regionally, and the soil formation processes that resulted in the stratigraphy encountered.

Bulk Sampling

6.2 Where appropriate a minimum of 1 x 40 litres bulk sample will be taken by context for the recovery of Charred Plant Remains and artefacts. Examples of typical deposits that may be encountered on this site that may warrant bulk 40 litre sampling include:

- Primary fills of pits (or any fills containing cess/ ash or other organic material
- Primary fills of ditches.
- Floor or other occupation deposits,
- Hearths/ovens etc.
- Middens.
- Any charcoal/ash deposits

Borehole Sampling

6.3 A comprehensive program of geoarchaeological borehole sampling to mitigate the affect of the piled foundations upon the sub-surface deposits will be carried out. The boreholes will be spaced along two east-west orientated transects to the north and south of the site, Transects 1 and 2 respectively (Fig. 1).

6.4 The aim of the work will be to retrieve data from areas where there has previously been limited geo-archaeological information in order to better define subsurface topographic features and extract palaeoenvironmental material, to construct a deposit model, reconstruct the past environments, and obtain dating material to provide an absolute chronology for that evidence.

6.5 Transect 1: A program of 8 geoarchaeological boreholes to be placed at 5m centres is recommended along the northern-most alignment of piled foundations on a broad E-W alignment.

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6.6 Transect 2: A further 8 geoarchaeological boreholes to be placed at 5m centres is recommended along the long axis on the north side of the proposed swimming pool on a broad E-W alignment.

6.7 The proposed positions and frequency for the sampling, as shown on Figure 1, will allow for good resolution for two deposit profiles crossing the valley floor for a distance of c. 40m for Transect 1 and c. 36m for Transect 2.

6.8 These will add to earlier work and represent a continuation of a borehole survey conducted by Context One Archaeological Services with Dr Keith Wilkinson during June 1999 (COAS 1999). In combination an E - W profile of c. 56m will be achieved, and when combined with other data from previous excavations will allow for the generation of a comprehensive deposit model. The borehole samples will be suitable for the potential examination of insects, pollen, diatoms and soil micromorphology. They will also allow for the extraction of material for Radio-carbon dating if considered appropriate.

6.9 Continuous sequences of cores will be retrieved using a Terrier Rig (operated by a specialist sub-contractor). A suitably qualified member of OA staff will monitor the borehole drilling. Prior to drilling each borehole location will be scanned for the presence of underground services. Each location will be surveyed using either a GPS unit or total station, ensuring co-ordinates and levels relative to National Grid and Ordnance Datum are retrieved. The boreholes will be drilled from ground surface until Pleistocene gravel or bedrock has been proven. The cores will be taken within plastic casings in order that they can be cut open at a later date without disturbance to the sediments. Contingency disturbed samples will be retained if cores cannot be retrieved due to the unconsolidated nature of the sediments.

6.10 The core samples will be returned to OA premises where they will be interpreted and logged to create two E-W deposit profiles and a site-wide deposit model.

6.11 One or more representative sedimentary sequences will be selected for the assessment of the preservation of palaeoenvironmental remains. The selection of the sequences will be based on the perceived character, interpretative importance and chronological significance of the strata under investigation. Environmental sampling procedures shall be in accordance with the OA Environmental Sampling Guidelines and Instruction Manual (OA, first edition, July 2000), that is based on guidelines presented by English Heritage (2002). Samples for sediment analysis (magnetic susceptibility, phosphates and loss on ignition) may also be processed in order to further characterise the sediment sequences and identify signatures potentially indicative of human activity.

6.12 If suitable material is present within the cores a small number of selected samples for radiocarbon dating will be processed, if required, in order to help establish a chronological framework for the sequences.

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7 Watching Brief

7.1 All groundworks - such as demolition, foundation construction, piling mat construction and piling, and ground level reduction should be conducted in such a way as to minimise their negative affect on the buried archaeological resource of the Scheduled Ancient Monument.

7.2 These groundworks shall be monitored by a competent archaeologist from Oxford Archaeology. If significant archaeological deposits are revealed the archaeologist is required to make a suitable record before those groundworks can continue. If important archaeological deposits are revealed the competent archaeologist in conjunction with the Archaeological Consultant (and English Heritage - if considered appropriate) will decide what level of work is required. It should be noted that comprehensive and time consuming excavation might be warranted in certain situations where important unexpected remains are revealed.

7.3 After the careful removal of the existing swimming pool the resultant sections and plan will be subject to full and detailed recordeding by the attending archaeologist.

8 Project Team Structure and Timetable

It is envisaged that the evaluation and borehole fieldwork will take about one week, after a minimum of two weeks lead-in period, and will be undertaken by a team comprising:

- Ben Ford: Senior Project Manager
- Steve Teague: Project Officer
- 1+ Field Archaeologist(s)
- 1 Geo-archaeologist
- Borehole sub-contractors
- Watching Brief Archaeologist(s)

9 Public relations and information dissemination

9.1 Due to the constraints of the site and for legislative reasons, members of the general public will not be allowed on the site. However press releases will be considered for submission to the local press and may include photo opportunities (e.g. Hampshire Chronicle, The Winchester Observer etc). A concise summary of the results will also be submitted to the quarterly newsletter of Winchester Museums Service.

10 Report, Publication and Archive Preparation

10.1 Following completion of each fieldwork stage, a summary of the results will be submitted to the Archaeological Consultant within two weeks and will include an assessment of the anticipated degree of survival of the archaeological

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deposits across the site.

10.2 An assessment report detailing the findings of the evaluation trench, the watching brief and the borehole works will be completed within 6 weeks of completion of the fieldwork (some of the specialist reports may take longer due to processing time and availability of external sub-contractors. A draft copy of this report will be submitted to the Archaeological Consultant for comment and approval.

10.3 Five bound copies and one unbound copy of the approved document will then be forwarded to the Archaeological Consultant to disseminate to other parties.

10.4 The content of this report will be as defined in Appendix 1 - Section 8. The site archive will be prepared to standards as outlined in Appendix 1 - Section 9.

10.5 A final publication report will be written based upon the recommendations of the assessment report and agreements between OA, EH, WCC Planning Archaeologist and the clients consultant. This will be published in the local journal within 2 years of fieldwork completion.

10.6 The full archive will be deposited with an appropriate receiving museum following completion of the project.

10.7 A list of specialists used by OA is presented below:

Subject	**Specialist**
Animal bone analysis	Adrienne Powell (Centre for Human Ecology, Southampton)
Archaeo-magnetic dating	Mark Houndslow / Vassil Karloukovski of Lancaster University
C14 dating	The Rafter Radio Carbon Labs in New Zealand
Computer manager	Paul Miles (OA)
Conservator	Vanessa Fell (Oxford Institute of Archaeology)
Daub and other building materials	John Cotter (OA)
Environmental manager	Rebecca Nicholson (OA)
Finds manager	Leigh Allen (OA)
Geoarchaeologist	Liz Stafford (OA) / Martin Bates (St. David's University College, Lampeter)
Glass	(Freelance)
Head of Geomatics	Tom Evans (OA)
Lithic analysis	Hugo Lamdin-Whymark (OA)
Metalwork	Ian Scott (Freelance)
Molluscs	Mark Robinson (Oxford University Museum of Natural History)
Osteoarchaeologist	Angela Boyle (OA)
Plant remains analysis	Wendy Curruthers
Pollen, diatoms, ostracods and foraminifera for past environments (from peat and	B A Haggart

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Subject	Specialist
silts)	
Pottery - general	Helen Rees (Winchester Museum Service)
Prehistoric pottery	Alistair Barclay (OA)
Roman pottery	Paul Booth (OA)
Saxon/medieval/post-medieval pottery	John Cotter (OA)
Slag	Chris Salter (Oxford University)
Soil micromorphologist	Richard McPhail (UCL)
Thermoluminescence dating	Sarah Hall (Oxford Archaeological Research Laboratory)
Waterlogged leather	Quita Mould
Waterlogged wood	Steven J Allen of York Archaeological Trust
Worked wood/Dendrochronology	Dan Miles of the Oxford Dendro Lab

11 Health and Safety

11.1 All OA project fieldwork is undertaken in accordance with all relevant current Health and Safety Legislation. This includes in particular the following regulations (the list is not intended to be exhaustive):

- *Health and Safety at Work Act 1974*
- *Construction (Design and management) Regulations 1994*
- *The management of Health and Safety at Work Regulations 1992*
- *Personal Protective Equipment at Work Regulations 1992*
- *Work Equipment Regulations 1992*
- *Manual Handling Operations Regulations 1992*
- *Workplace (Health, Safety and Welfare) Regulations 1992*

11.2 OA has its own Health and Safety Policy which refers to the manual Health and Safety in Field Archaeology (SCAUM 1997), and these two documents constitute the Health and Safety arrangements of OA. The Director of OA is ultimately responsible under the terms of the Health and Safety Act (1974) for ensuring the safety of employees. He must know the broad requirements of relevant legislation; attend meetings of OA Health and Safety Committee; ensure that responsibility for health and safety is properly assigned and accepted at all levels. The Director and Chief Executive of OA is David Jennings.

11.3 The Safety Co-ordinator of OA: represents the director on matters of health and safety; keeps abreast of relevant legislation and approved practice, and disseminates this information to OA staff; advises staff as required on matters of health and safety; maintains OA health and safety records; calls and chairs meetings of the OA Health and Safety Committee. The Safety Co-ordinator of OA is Dan Poore.

11.4 The Project Director is the person delegated to take overall charge of a

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particular project. She/he is responsible for health and safety matters on the projects that they manage, reporting to the Safety Co-ordinator in the first instance, and ultimately to OA's Director. She/he must be satisfied that an adequate safety plan has been drawn up for the project, or for each phase of the project. The Project Director may also be the Project Manager in some cases (see below).

11.5 Individual Project Supervisors/Managers are the persons delegated to take charge of a particular phase or part of the overall project. They are responsible for ensuring that for each site that they are in charge of an adequate Risk Assessment and any amendments or additions to the Site Safety Plan have been drawn up prior to work starting on site, and they are immediately responsible for the Health and Safety of employees and sub-contractors under their supervision. They report directly to the Project Director and OA Safety Co-ordinator. The manager for this project will be Martin Wilson.

11.6 The OA Health and Safety Committee consists of the Director, Safety Co-ordinator, OA Manager and the Site Staff Representative. The Safety Co-ordinator normally calls meetings of the Committee when there is business for discussion, but may be called by other members of the committee.

11.7 OA's independent Health and Safety Consultants are Safety Services Ltd, Stanton Harcourt, Oxon, who are consulted with regard to matters such as deep trenching, shoring and working in confined spaces.

11.8 Prior to the project a pro-forma OA Health and Safety Risk Assessment is produced by the project manager/supervisor and passed to the OA Safety Co-ordinator for approval. The Project Manager/supervisor ensures that the following information is available to the excavation team copy of the HSE poster 'Health and Safety Law - What You should Know', copy of the Safety Plan and Risk Assessment, Emergency Information Sheet giving details of nearest hospital etc, copy of the Notification of Project to HSE, location of an accident book.

12 References

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13 Appendix 1: OA Standard Fieldwork Methodology Appendices

The following methods and terms will apply, where appropriate, to all OA fieldwork unless varied by undertakings specified in a detailed Written Scheme of Investigation.

2 MACHINE EXCAVATED TRENCHES

2.1 A visual inspection of the entire site will be undertaken. This will include the examination of any available exposures (e.g. recently cut field ditches and geological test pits).

2.2 An appropriate mechanical excavator will be used for machine excavated trenches. This will normally be a JCB 3CX Sitemaster or 360° tracked excavator with a 5' or 6' wide toothless bucket. For work with restricted access or working room a mini excavator such as a Kubota KH 90 will be used.

2.3 All machining will be undertaken under direct archaeological supervision.

2.4 All undifferentiated topsoil or overburden of recent origin will be removed down to the first significant archaeological horizon, in successive, level spits.

2.5 Following machine clearance, all faces of the trench that require examination or recording will be cleaned using appropriate hand tools.

2.6 Spoil heaps will be monitored in order to recover artefacts to assist in the analysis of the spatial distribution of artefacts. Modern artefacts will be noted but not retained.

2.7 All investigation of archaeological levels will be by hand, with cleaning, examination and recording both in plan and section.

2.8 Within significant archaeological levels a minimum number of features required to meet the aims will be hand excavated. Pits and postholes will be subject to a 50% sample by volume. Linear features will be sectioned as appropriate. Features not suited to excavation within narrow trenches will not be sampled. No archaeological deposits will be entirely removed unless this is unavoidable. It is not necessarily the intention that all trial trenches will be fully excavated to natural stratigraphy, but the depth of archaeological deposits across the entire site will be assessed. The stratigraphy of all evaluation trenches will be recorded even where no archaeological deposits have been identified.

2.9 Any excavation, both by machine and by hand, will be undertaken with a view to avoiding damage to any archaeological features or deposits that appear to be worthy of preservation *in situ*.

2.10 Different environmental sampling strategies may be employed according to established research targets and the perceived importance of the strata under

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investigation. Bulk samples, a minimum of 10 litres, but up to 40 litres if possible for early prehistoric features will be taken for flotation for charred plant remains. Bulk samples will be taken from any waterlogged deposits present for macroscopic plant remains. Columns for pollen analysis will be taken if appropriate. Mollusc samples will be collected if present. Other bulk samples for small animal bones and other small artefacts may be taken from appropriate contexts.

2.11 Any finds of human remains will be left in-situ, covered and protected and the coroner informed. If removal is essential it will only take place under appropriate Home Office licence, section 25 of the Burial Act 1857 and local environmental health regulations, and if appropriate in compliance with the Disused Burial Grounds (Amendment) Act 1981.

2.12 All finds of gold and silver will be removed to a safe place and reported to the local Coroner according to the procedures relating to Treasure Act, 1996. Where removal can not be effected on the same working day as the discovery, suitable security measures will be taken to protect the finds from theft.

2.13 OA welcomes monitoring visits by the local authorities' archaeological representatives. Timetables of the on-site work will be provided in order that visits can be made at appropriate times.

2.14 After recording, the trenches will be backfilled with excavated material, but will otherwise not be reinstated.

RECORDING

2.15 Contexts

- If less than ten trenches are to be recorded, a block of numbers, in a continuous sequence will be allocated to each trench.
- If more than ten trenches are to be recorded, a continuous unique numbering system will operate within each trench only.

- Written descriptions will be recorded on proforma sheets comprising factual data and interpretative elements.
- Where stratified deposits are encountered a Harris matrix will be compiled during the course of the excavation.

2.16 Plans

- These will normally drawn at 1:100, but on urban or deeply stratified sites a scale of 1:50 or 1:20 will be used. Detailed plans will be at an appropriate scale. Burials will be drawn at scale 1:10.
- The site grid will be accurately tied into the National Grid and located on the 1:2500 or 1:1250 map of the area.
- A register of plans will be kept.

2.17 Sections

- Long sections of trenches showing layers will be drawn at 1:50. Sections of features or short lengths of trenches will be drawn at 1:20.
- A register of sections will be kept.

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- Generally all sections will be tied in to Ordnance Datum. The exception to this is where the proposal for the site is mineral extraction where depth in relation to the development proposals is irrelevant. In these cases only some significant sections will be tied in to OD.

2.18 Photography
Digital photography will be captured as RAW or TIFF images. The minimum acceptable resolution of the camera(s) used will be 6 Megapixels.
A full black and white and colour (35 mm transparency) photographic record, illustrating in both detail and general context the principal features and finds discovered will be maintained. The photographic record will also include working shots to illustrate more generally the nature of the archaeological work.
Photographs will be recorded on OA Photographic Record Sheets.

2.19 All recording will be undertaken in accordance with the requirements of the OA Field Manual (ed. D Wilkinson 1992).

FINDS

2.20 All identified finds and artefacts will be retained, although certain classes of building material or post medieval pottery may sometimes be discarded after recording if an appropriate sample is retained. However, no finds will be discarded without the prior approval of the nominated representative of the local authority and the receiving Museum. All appropriate ironwork will be X-rayed.

2.21 The pottery and other relevant artefacts will be scanned to assess the date range of the assemblage.

2.22 All finds and samples will be treated in a proper manner and to standards agreed in advance with the approved recipient museum. These will be exposed, lifted, cleaned, conserved, marked, bagged and boxed in accordance with the guidelines set out in UKIC's "Conservation Guidelines No. 2".

2.23 The level of artefact analysis will be sufficient to establish date ranges of archaeological deposits, a general assessment of the types of pottery and other artefacts to assist in characterising the archaeology, and to establish the potential for all categories of artefacts should further archaeological work be necessary.

2.24 At the beginning of a project, the local relevant museum and the landowner will be

contacted regarding the preparation and deposition of the archive and finds.

Environmental samples, if appropriate will be processed and scanned for potential date. This will usually be co-ordinated by Dr M Robinson of University Museum, Oxford using appropriate specialists.

8 EVALUATION REPORTS

8.1 Style and format of the report will be determined by OA, but will include as a minimum the following:

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- A location plan of trenches and/or other fieldwork in relation to the proposed development.
- Plans and sections of features located at an appropriate scale.
- A section drawing showing depth of deposits including present ground level with Ordnance Datum, vertical and horizontal scale.
- A summary statement of the results.
- A table summarising per trench the features, classes and numbers of artefacts contained within, spot dating of significant finds and an interpretation.
- A reconsideration of the methodology used, and a confidence rating for the results.
- An interpretation of the archaeological findings both within the site and within their wider landscape/townscape setting.

8.2 Copies of the report will be supplied to the client and the Archaeological Officer monitoring the works. Copies of the report will also be supplied to the County Sites and Monuments Record on the understanding that it will become a public document after an appropriate period of time (normally six months).

8.3 If the evaluation works generate archaeological results of importance which merit wider publication, the client will be consulted about further arrangements.

ARCHIVES

8.4 The site archive, including finds and environmental material, will be ordered, catalogued, labelled and conserved and stored according to the UKIC Guidelines for the preparation of excavation archives for long-term storage.

8.5 The site archive will be prepared to at least the minimum acceptable standard defined in Management of Archaeological Projects 2, English Heritage 1991.

8.6 The site archive will be microfilmed by the RCHME National Archaeological Record as a safeguard against the accidental loss and the long-term degeneration of paper records and photographs.

The site archive will be deposited with the relevant receiving Museum at the earliest opportunity unless further archaeological work on the site is expected within one year of completion of the archive. OA will advise the landowner that any artefacts resulting from the project work should be given to the relevant Museum.

11 GENERAL

11.1 The requirements of the Brief will be met in full where reasonably practicable.

11.2 Any significant variations to the proposed methodology will be agreed with the local authority's archaeological representative in advance.

11.3 The scope of work detailed in the main part of the Written Scheme of Investigation is aimed at meeting the aims of the project in a cost-effective manner. Oxford Archaeology attempts to foresee possible site-specific problems and resource

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these. However there may be unusual circumstances which have not been included in the costing and programme.

- Unavoidable delays due to extreme bad weather, vandalism, etc.
- Complex structures or objects, including those in waterlogged conditions, requiring specialist removal.
- Extensions to specified trenches or feature sample sizes requested by the archaeological curator.
- Trenches requiring shoring or stepping, ground contamination, unknown services, poor ground conditions requiring additional plant, specialist reinstatement of surfaces (i.e. tarmac, turf).

HEALTH AND SAFETY and INSURANCE

11.4 All work will be carried out to the requirements of *Health and Safety at Work, etc. Act 1974*, *The Management of Health and Safety Regulations 1992,* the SCAUM (Standing Conference of Archaeological Unit Managers) H & S manual *Health and Safety in Field Archaeology 1991*, the OA Health and Safety Policy, and any main contractors requirements.

11.5 A copy of OA's Health and Safety Policy is available on request. OA will require copies of the H & S policies of all other contractors and operators present on site in compliance with *The Manual of H & S Regulations 1992.*

11.6 OA holds Employers Liability Insurance, Public Liability Insurance and Professional Indemnity Insurance. Details will be supplied on request.

11.7 OA will not be liable to indemnify the client against any compensation or damages for or with respect to:

- Damage to crops being on the Area or Areas of Work (save in so far as possession has not been given to the Archaeological Contractor);
- The use or occupation of land (which has been provided by the Client) by the Project or for the purposes of completing the Project (including consequent loss of crops) or interference whether temporary or permanent with any right of way, light, air or water or other easement or quasi easement which are the unavoidable result of the Project in accordance with the Agreement;
- Any other damage which is the unavoidable result of the Project in accordance with the Agreement;
- Injuries or damage to persons or property resulting from any act or neglect or breach of statutory duty done or committed by the client or his agents, servants or their contractors (not being employed by Oxford Archaeology) or for or in respect of any claims demands proceedings damages costs charges and expenses in respect thereof or in relation thereto.

COPYRIGHT and CONFIDENTIALITY

11.8 Oxford Archaeology will retain full copyright of any commissioned reports, tender documents or other project documents, under the Copyright, Designs and Patents Act 1988 with all rights reserved; excepting that it will provide an exclusive

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licence to the client in all matters directly relating to the project as described in the Written Scheme of Investigation.

11.9 Oxford Archaeology will assign copyright to the client upon written request but retains the right to be identified as the author of all project documentation and reports as defined in the Copyright, Designs and Patents Act 1988 (Chapter IV, s.79).

11.10 OA will advise the client of any such materials supplied in the course of projects that are not OA's copyright.

11.11 OA undertakes to respect all requirements for confidentiality about the client's proposals provided that these are clearly stated. It is expected that such conditions shall not unreasonably impede the satisfactory performance of the services required. OA further undertake to keep confidential any conclusions about the likely implications of such proposals for the historic environment. It is expected that clients respect OA's general ethical obligations not to suppress significant archaeological data for an unreasonable period.

OA STANDARDS AND PROCEDURES

11.12 OA shall conform to the standards of professional conduct outlined in the Institute of Field Archaeologists' Code of Conduct, the IFA Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology, the IFA Standards and Guidance for Field Evaluations, Desk Based Assessments, etc. and the British Archaeologists and Developers Liaison Group Code of Practice.

11.13 OA is a member of the Institute of Environmental Assessment and the Council for British Archaeology.

11.14 Project Directors normally will be recognised in an appropriate Area of Competence by the IFA. For more extensive and complicated evaluation projects especially where they are part of large-scale programmes of work in historic urban centres, the procedures outlined in English Heritage's *Management of Archaeological Projects* 2nd Edition 1991 (MAP 2) will be followed for immediate post-field archive preparation and initial assessment. Agreement to then be reached, in collaboration with the local authority's archaeological representative, about what aspects will need to be taken forward to provide a report in the required format containing the information needed for planning purposes.

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14 Appendix 2: OA Environmental Sampling Strategy

14.1 In accordance with standard practice, sampling for a number of palaeoenvironmental investigations, including plants, animals, fish and invertebrates will be undertaken where appropriate. High priority deposits for investigation are: primary fills of pits, wells and cesspits, layers of middens, occupation surfaces and other discrete activity areas, contents of hearths, kilns and ovens, storage areas or containers. Samples shall be taken from a representative cross-section of features and layers of all periods; these will be well dated or datable and well sealed (not mixed). The selection of samples will therefore take into account the presence/absence of datable artefacts and the degree of residuality and intrusiveness (e.g. of finds, recent or modern material etc.) within the deposits.

Charred plant remains

14.2 Sampling for charred remains, including charcoal, may provide information on diet, storage, rubbish disposal, agricultural practice, domestic cooking and fuel use.

14.3 Bulk samples of 40 litres (or 100% of the deposit where less than that capacity) shall be taken for the recovery of charred remains, including charcoal.

14.4 Hearths should be sampled for charcoal and food debris.

Mineralised remains

14.5 A well-preserved cess deposit can provide evidence for diet and health.

14.6 Cess deposits are a priority for sampling

14.7 Residues from all bulk samples shall be retained to 500μm, to ensure recovery of mineralised remains.

14.8 Smaller samples (1-5 litres) should be taken from the soil immediately around coprolites.

Waterlogged remains

14.9 Bulk samples of a minimum of 10 litres will be taken (or 100% of the deposit, if less than that capacity).

14.10 Incremental column samples shall be taken where appropriate.

14.11 Sub-samples of these waterlogged samples will be assessed by suitable specialists for the presence of plants, insects, and other biological indicators if relevant (e.g. diatoms, ostracods etc).

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Pollen

14.12 Dry and waterlogged deposits may have potential for pollen preservation, but should only be sampled if the feature type and level of disturbance/redeposition in the deposits is suitable.

Bones and artefacts

14.13 There is good preservation of animal and fish bone at the site and the evaluation samples produced useful quantities of fish bone and other small artefacts. Hammerscale was also noted in samples of different date and may indicate zoning of industrial activities.

14.14 All bulk samples taken for charred remains will be sieved to 0.5mm for the recovery of small bones, shell and artefacts.

14.15 Sub-samples for hammerscale shall be taken from appropriate bulk samples.

Snails

14.16 Snails, like the marine shell and bone are likely to be well preserved. If suitable deposits from earlier periods (i.e. periods of less intensive activity) are excavated, samples for snails may provide information on landscape use. However, assemblages from later urban and disturbed ground deposits will not be useful, except in comparison with earlier sequences.

14.17 Incremental snail sequences to be taken from suitable deposits.

14.18 Samples from later features to be taken only for comparison with earlier samples.

Sediment samples

14.19 It may be worthwhile to take monolith/kubiena samples from various sequences. These could provide information on land use and the degree of disturbance/redeposition. However, samples should be taken in consultation with the specialist.

14.20 All sampling shall be carried out in accordance with general procedures laid out in the OA Environmental Manual. The Environmental strategy will be reviewed and refined during the course of the excavation, with the advice of relevant specialists and the EH Regional Advisor.

15 Appendix 3: Archaeo-Magnetic Dating Strategies

Sampling

15.1 One of three sampling techniques is employed depending on the consistency of the material (Clark, Tarling and Noel 1988):

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15.2 **Consolidated materials:** Rock and fired clay samples are collected by the disc method. Several small levelled plastic discs are glued to the feature, marked with an orientation line related to True North, then removed with a small piece of the material attached.

15.3 **Unconsolidated materials:** Sediments are collected by the tube method. Small pillars of the material are carved out from a prepared platform, then encapsulated in levelled plastic tubes using plaster of Paris. The orientation line is then marked on top of the plaster.

15.4 **Plastic materials:** Waterlogged clays and muds are sampled in a similar manner to method 1b) above; however, the levelled plastic tubes are pressed directly into the material to be sampled.

Physical Analysis

15.5 Magnetic remanences are measured using a slow speed spinner fluxgate magnetometer (Molyneux et al. 1972; see also Tarling 1983, p84; Thompson and Oldfield 1986, p52).

15.6 Partial demagnetisation is achieved using the alternating magnetic field method (As 1967; Creer 1959; see also Tarling 1983, p91; Thompson and Oldfield 1986, p59), to remove viscous magnetic components if necessary. Demagnetising fields are measured in milli-Tesla (mT), figures quoted being for the peak value of the field.

Remanent Field Direction

15.7 The remanent field direction of a sample is expressed as two angles, declination (Dec) and inclination (Inc), both quoted in degrees. Declination represents the bearing of the field relative to true north, angles to the east being positive; inclination represents the angle of dip of this field.

15.8 Aitken and Hawley (1971) have shown that the angle of inclination in measured samples is likely to be distorted owing to magnetic refraction. The phenomenon is not well understood but is known to depend on the position the samples occupied within the structure. The corrections recommended by Aitken and Hawley are applied, where appropriate, to measured inclinations, in keeping with the practise of Clark, Tarling and Noel (1988).

15.9 Individual remanent field directions are combined to produce the mean remanent field direction using the statistical method developed by R. A. Fisher (1953). The quantity α_{95}, "alpha-95", is quoted with mean field directions and is a measure of the precision of the determination (see Aitken 1990, p247). It is analogous to the standard error statistic for scalar quantities; hence the smaller its value, the better the precision of the date.

15.10 For the purposes of comparison with standardised UK calibration data,

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remanent field directions are adjusted to the values they would have had if the feature had been located at Meriden, a standard reference point. The adjustment is done using the method suggested by Noel (Tarling 1983, p116).

Calibration

15.11 Material less than 3000 years old is dated using the archaeomagnetic calibration curve compiled by Clark, Tarling and Noel (1988).

15.12 Older material is dated using the lake sediment data compiled by Turner and Thompson (1982).

15.13 Dates are normally given at the 63% and 95% confidence levels. However, the quality of the measurement and the estimated reliability of the calibration curve for the period in question are not taken into account, so this figure is only approximate. Owing to crossovers and contiguities in the curve, alternative dates are sometimes given. It may be possible to select the correct alternative using independent dating evidence.

15.14 As the thermoremanent effect is reset at each heating, all dates for fired material refer to the final heating.

15.15 Dates are prefixed by "cal", for consistency with the new convention for calibrated radiocarbon dates (Mook 1986).

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OXFORD ARCHAEOLOGY
RISK ASSESSMENT FOR EVALUATION WORKS (Draft for comment)

Site name: Pilgrims School, Cathedral Close, Winchester, Hampshire.		**Prepared by:** Ben Ford	Client: Christopher Clay, the bursar (The Pilgrims' School, 3 The Close, Winchester SO23 9LLT)
Site code:	**WINCMAY234**	**Approved by:**	Landowner: 'The Receiver General', is Cdr. Adrian Munns, Winchester Cathedral Office, 1 The Close, Winchester, SO23 9LS
Invoice code:	**WINPILEV**	**Date:** 28.07.05	**CDM Status**: The works will not fall under CDM Regulations at this time.

THIS RISK ASSESSMENT SHOULD BE READ IN CONJUNCTION WITH AN APPROVED WSI OR SPECIFICATION

HAZARD	RISK	RISK RATING (High Medium Low)	CONTROLS	ACTION BY?	RESIDUAL RISK RATING (High Medium Low Insignificant)
Generic Risk Assessment					
Lack of understanding of the site and its hazards.	Personal injury.	**Medium**	All staff to receive and sign for an induction form the site supervisor based on this risk assessment and the WSI.	Fieldwork Director/ Supervisor	**Low**
Vehicle movement	Personal injury. Vehicle/ property damage	**Medium**	OA staff van to be driven by an authorised driver and park in the Catherdal Close in the bays reserved for the School - tools, and equipment to be carried/barrowed to site huts. All hired plant to be supplied with certificated drivers and unloaded at this same location. Banksman for plant movement at all times especially from drop zone into school grounds. PPE: Hi-vis vests. Vehicular Access to the site will be through a gate off the Cathedral Close. Special attention should be paid to vehicle size restrictions due to Medieval Gateway into the Close, and restricted access to the trench	Fieldwork Director/ Supervisor	**Low**

			locations. Boards to be used to track machine around on site to protect gardens/lawn etc.		
Vehicle security	Unauthorised use of vehicles/ vandalism	**Low**	Security at the School is good. Contractor to immobilise plant. Park in designated areas. Tools to be kept in locked OA on-site offices (wooden garden shed provided by client). Site to be fenced off using Heras/Netlon Fencing as appropriate.	Supervisor/ Driver	**Low**
Equipment in general	Personal injury, property damage	**Medium**	No OA staff to use equipment not owned or hired by OA.	Supervisor	**Low**
Damaged/ defective equipment	Personal injury, property damage	**Medium**	Daily inspection of equipment. Replace defective equipment where necessary, and ensure that Logistics Dept. are aware that defective equipment has been returned.	Supervisor	**Low**
Mechanical excavator	Personal injury	**Medium**	Certificated and competent driver. Driver's ability/attitude regarding safe working should be monitored, and action taken if necessary. Competent OA signaller to be used for plant work on site. Induction. Monitor. PPE: hard hat, hi-vis vest, safety boots. DRIVER'S CITB TICKET NEEDS TO BE CHECKED BEFORE WORK COMMENCES.	Supervisor	**Low**
Underground Services	Risk of Electrocution, gas leaks or flooding.	**Medium**	A full set of service maps will be sought from the client. Services will not be isolated prior to dig, and will remain live. Competent person to check for unknown underground services prior to machining using a Cable Avoidance Tool ("Cat and Jenny"). Hand excavate in areas of suspected live services to locate and isolate from interference from mechanical excavation. If a live service is encountered the position of the trench will be moved to an area free of services. Notify statutory bodies/clients if suspected live services are found. ALWAYS ASSUME THAT ALL SERVICES ARE LIVE. Permits to work not applicable.	Supervisor	**Low**

Damage to existing structures	Personal Injury	**High**	One trench to be excavated adjacent but perpendicular to the School boundary wall. Responsibility for safety of wall rests with the owner who will prop if necessary.	Project Manager and Supervisor	**Low**
Protection of public	Personal Injury	**Medium**	The site is situated within the private grounds of a public school. The works will take place during the summer holidays. The trenches and spoil heaps will be fenced with Heras/Netlon Fencing as appropriate for the duration of the works. 'Danger Deep Excavation' signs will be put on fencing.	Project Manager and Supervisor	**Low**
Trench collapse	Personal Injury/ Crush	**High**	All excavations judged to have unstable sides will be shored at whatever depth. All excavations below 1.2m deep will be shored or stepped in to facilitate deeper excavation. Simple trench sheet and acro-prop shoring will be used in the first instance, these will be installed by a competent member of OA staff and checked for stability before each shift. See Method Statement below. A professional shoring company will be consulted and contracted if necessary. Ingress of ground water may de-stabilise trench sides if this occurs trench may need shoring prior to continuation of work.	Project Manager and Supervisor	**Low**
Working at height	Personal injury/fall	**High**	Access to each deep excavation will be enabled via a fixed ladder. Both hands must be free when using the ladder, and only one person on the ladder at any one time. Trench edge will have Heras/Netlon fencing as appropriate. Danger Deep Excavation signs to be attached to trench fencing.		
Emergency due to fire or injury	Personal Injury	**Medium**	A fire assembly point will be designated in consultation with the School. The phone number and quickest route to the hospital will be displayed in the site welfare facilities.	Project Manager and Supervisor	**Low**
Site general	Needles/dangerous objects	**Medium**	Great care to be taken when clearing areas, moving rubbish etc for presence of needles/any materials associated with drug use. If found, to be left in place and advice sought from Local Authority Environmental Health Officer. Inspect site also for signs of tampering/moved fencing etc.	Supervisor/ all staff	**Low**
Site General	General public	**Low**	There will be no public access to the site..	Supervisor	

Weather	Cold/ wet weather: hypothermia/ice Hot weather: heatstroke/ dehydration	**Low**	Re-arrange fieldwork if practicable. Staff issued with suitable clothing and suitable footwear. Additional breaks to be taken in the event of very hot or very cold weather. OA to provide sun-block (at least factor 15)	Supervisor	**Low**
Soil contamination/ zoonotic hazards	Ingestion/contact with contaminated soils or bacteria within soils	**Medium**	The Client has not commissioned a contamination report/geo-technical report. Gloves will be provided. Good hygiene regime. Wash face and hands (hot water and soap) before each break and at end of day. Adequate wash facilities are to provided by the Schhool. A site cabin is provided for changing and canteen. No smoking or eating on site except in designated areas. Should evidence of contamination be found (either by odour or appearance) excavation to cease and suitable advice to be sought. Relevant departments should be notified of the risk (environmental, finds, archives depts).	Supervisor/Project Manager	**Low**
Leptospirosis (Weil's Disease), Tetanus	Contraction of serious disease	**Medium**	Induction. Issue information cards. High standard of hygiene (controls as for contaminated ground). Staff with up-to-date tetanus immunity.	Supervisor	**Low**
Manual handling	Risk of strain injuries from incorrect or excessive manual handling	**Medium**	Induction. Assess manual handling risks for each task. Consider alternative mechanical methods for tasks. No slinging of loads for machines by OA staff.	Supervisor	**Low**
Site Specific Risk Assessment					
Water ingress	Risk of drowning	**High**	Excavations will penetrate the water table. If peat is breached water under pressure may issue into trench. Deep water signs to be attached to fencing. Ingress of ground water may de-stabilise trench sides if this occurs trench may need shoring prior to continuation of work. Trenches to be pumped - water to be pumped into foul drains not the river.	Supervisor	**Low**
Danger of collapse of arisings into excavations	Personal Injury	**High**	Arisings will be stored away from the trench edges at a distance no nearer than a line projected at 45 degrees from the final base level of the trench/test-pit. Stored piles of arisings will have a gradient no greater than 45 degrees.	Project Manager and Supervisor	**Low**

The following empty rows are for the assessment of additional risks during the course of the works WHEN ARRIVING AT THE SITE FOR THE FIRST TIME, IT IS IMPERATIVE THAT A FURTHER ASSESSMENT OF THE RISKS IS UNDERTAKEN, AND THE FINDINGS/REQUIRED ACTIONS ARE RECORDED BELOW TO FORM PART OF THE INDUCTION, BEFORE WORK COMMENCES. Some risks will only become apparent once you are on site.

HAZARD	RISK	RISK RATING (High Medium Low)	CONTROLS	ACTION BY?	RESIDUAL RISK RATING (High Medium Low Insignificant)

Shoring: method statement for construction of shored boxes within trenches.

- Shoring materials to be supplied from OA stores. If these prove to be inadequate in any way, either in numbers or quality/serviceability, then project manager to be notified and equipment to be purchased or hired. Necessary equipment will comprise:
- Steel sheets, timber Walers, measuring not less than 0.2m x 0.1 m, V-shaped wedges and acro-props, minimum 1.5 m in length before extensions. Ladder and rope. Protective cap to be placed on top of steel sheets before they are toed in by hand using lump hammer.
- **See also attached guideline documents (Oxford Archaeological Unit 1994, revised 2005).**

1. Excavations shall proceed to a depth at which support is felt necessary (usually between 1 and 1.5 m below ground level, depending on ground conditions), a 2 m x 2 m area shall be delineated at the centre of the trench and a shored box established here.
2. Steel sheets to be placed at the trench edge, at each corner of the box to be shored, sheets to be driven in by lump hammer with protective cap on top of sheets. Appropriate PPE to be worn: gloves, goggles). Up to two further central/intermediate sheets to be driven in as above, to leave a gap just wider than the width of each of the sheets to maintain a view of the trench stratigraphy.
3. Suspend timber walers c. 300 mm from top of each side of trench. Extend 2 x acro-props widthways to secure the walers. Repeat for the bottom of the trench. See attached diagram for appropriate distances between props, and between walers.
4. V-shaped-wedges to be hammered in to gaps between walers and the steel sheets to make secure.
5. Excavations to continue to a depth not in excess of 3.5 m below ground level m; shored box to be lowered as depth increases. To extend depth, insert steel sheets between existing gaps in the frame, drive sheets downward by hammer from the top of the trench, secure by means of additional acro-props and waler.
6. Ladder secured to trench sheet by rope, and fixed at base, to be employed to reach lowest part of the trench.
7. IMPORTANT: Four people to undertake shoring construction; one to supervise from trench edge. All shoring will be installed under the supervision of a competent person. All shoring will be checked at the start and the end of each working session by a competent person.
8. Trenches to be back-filled. Acro-props will only be removed once the trench has been in-filled to the level of the supporting acro--props. Process to continue until all props are removed and the trench is nearly in-filled. Steel sheets to be removed at the end of the in-filling process.

ALL DEEP EXCAVATIONS REQUIRE SPECIFIC RISK ASSESSMENT AND A METHOD STATEMENT. IF IN DOUBT AS TO WHAT CONSTITUTES A DEEP EXCAVATION, TAKE ADVICE.

Step 2 Suitable trenches for shoring

Trenches which OA normally shores are 1 - 3 m wide/square and can be of any length. Do not attempt to shore to a depth of greater than 3.5 m with the system described here. It is common practice to take a long trench down to 1.2 m, and then to excavate deeper in selected areas. These areas, which are then shored, are known as boxes.

Step 3 Shoring equipment

The elements of shoring equipment are as follows:

1 Adjustable trench props (also sometimes called acroprops) used to brace across the trench. Available in a number of different sizes. When ordering props, ask what size the prop will expand to, which should be equal to or slightly less than the width of the trench.

2 Metal trench sheets, used for the vertical support of the trench sides. These are commonly about 0.3 m wide, and are available in lengths from 2 m - 10 m. The longer the sheets, the more heavy and unwieldy they will be. Caps which fit over the top of the sheets are used to make driving or toeing in the sheets safer.

3 Timber walers (also referred to as batons), used for the horizontal supports. They vary in length from 1.5 to 4 m, and in width from no less than 0.2 - 0.35 m. The crucial measurement, however, is their thickness, which should be 0.1 m, minimum. Note that scaffold planks are <u>not suitable</u>.

4 Timber wedges, used between horizontal and vertical supports.

Step 4 Putting up the shoring

9. If in doubt about stability, safe removal or otherwise, steel sheets to be left in situ until removal can be undertaken by suitable machine with lifting power.

SHORING AND DEEP EXCAVATIONS - OA SAFETY GUIDANCE NOTE

NB The following notes are for guidance only. If you have difficulties, or the problem is too complex to be dealt with by the methods given below, you must contact the OA Health and Safety Co-ordinator, Dan Poore. Where a more complex system of shoring is required, such as systems for supporting larger (more than 3 by 3 m in plan) or deeper (more than 3.5 m deep) excavation areas, OA will normally use a specialist contractor to fit the shoring. This can be very expensive and must be planned for at tender stage.

Step 1 Do you need to shore?

If your excavation is to be more than 1 - 1.5 m deep (less in very unstable ground or where people are kneeling), and stepping/battering of the sides is not possible, you may need to shore. The law requires that you make a decision as to whether shoring is required based on the type of work to be undertaken and the ground conditions. If you do not intend to shore (and this is obviously in a minority of cases), you must be very clear as to your reasons - record them in writing on the Risk Assessment form and submit to the OA Health and Safety Co-ordinator.

Please note:

There is a common misconception that it is safe to excavate to depths *in excess* of 2 - 2.4 m by means of multiple 'steps' forming the limits of your excavation, where the height of the step is equal to its width. In reality, it is only safe to dig to 2 - 2.4 m by this stepped method, with a single step, because if the sides collapse then you will be hit by the collapsing soil at hip height only. If multiple steps collapse, then you could be buried and are likely to suffocate.

Unshored excavations in excess of 2 - 2.4 m deep must either have battered sides (with the angle of the batter dependant upon the ground conditions), or steps where the height of the step is sufficiently exceeded by the width, so that the collapse of any one step will not simply start an avalanche effect leading to the collapse of all steps beneath it.

Step 5 Using and maintaining the shoring

1 The shoring must not be used as a means of entry or exit from the trench -to put it another way - don't climb on it. The trench should be accessed using a ladder which is fixed (i.e. tied down) and which protrudes at least 1 m above the trench edge.

2 Check trench sheets, props and wedges at the beginning of each working session, or if there has been an obvious shift in the ground. Tighten/drive in as necessary.

3 The shoring, once in position, can also cause accidents as it can make excavation quite awkward. Hard hats should be worn at all times.

Step 6 Backfilling the trench and dismantling the shoring

1 This process has obvious risks as it involves removing the structures supporting the sides of the trenches while you are in the trench! The key is to make sure that the props are always sufficiently clear of the base of the trench so that sufficient spoil can be shovelled into the bottom to firmly brace the sheets against the sides of the trench. The lowest props and walers can then be carefully removed.

2 Continue this process until the upper most props and walers have been removed (the trench should be almost completely backfilled by now) and then lift the sheets clear using the machine, by attaching chains to the holes at the top of the sheets. If you don't have a machine on site it is wise to lift the sheets gradually during the backfilling process so that they do not become too firmly wedged in place.

Finally, safety is the overriding factor. Wanting to see the sections, or being short of time, are not sufficient reasons to omit shoring.

Dave Wilkinson (8/7/94) OAU Safety Officer
Revised by Dan Poore (17/02/05) OA Health and Safety Co-ordinator

The attached diagram shows how the shoring should look.

The procedure is as follows:

1 Place trench sheets against trench sides - they should be supported in position by someone in the trench. Clean, vertical trench sides make the whole operation much easier. The hole in the trench sheet goes at the top, so that they can be pulled out by machine if necessary. Where ground allows, drive the sheet down so that it is 'toed in', using a protective cap on top of the sheet. This can be very noisy - ear defenders will be needed, as well as goggles and gloves. It is useful if the sheets protrude at least 1.2 m above the trench edge, as they will then act as edge protection for the excavation itself.

Spacing of trench sheets is very important. This ranges from complete coverage of the trench side (for extremely loose ground) to 'hit-and-miss' (spacing equivalent to width of trench sheet) or, though less commonly, wider spacing. Err on the side of caution - if you are unsure, seek advice from the OA Health and Safety Co-ordinator. Also note that trench sheets are heavy - take care when lifting - use two people.

2 Place upper timber waler in position on each side (these need to be supported by people in the trench) and then fit two props (2.5 m apart or less) against these walers. Tighten sufficiently to hold position, but not fully. Place wedges where walers and trench sheets do not meet.

3 Repeat 2, for lower walers. Then tighten all props and knock in wedges as needed.

4 Tie down the handles of the props so that they don't stick out.

5 If you wish to shore a longer trench than is shown on the diagram, repeat the above but overlap the walings which should therefore be just above or below the first set which were installed.

6 Should you need to deepen the trench once the first set of sheets, props and whalers has been installed, it should be possible to dig down below the bottoms of the sheets by up to 0.5 - 1 m DEPENDING ON GROUND CONDITIONS. The 'hit and miss' scheme will then allow you to slide additional (usually longer) sheets into the gaps and down behind the walers (again toed in). A further set of walers and props can then be inserted just above the new base of the trench. Obviously ingress of ground water will have a destabilising effect and may mean that further excavation is not possible using this system.

OXFORD ARCHAEOLOGY
RISK ASSESSMENT

Site name:	Pilgrims' School, Winchester	**Prepared by:**	Steve Teague
Site code:	WINCM:AY234	**Approved by:**	DWILKINSON D
Invoice code:	WINPIEV2	**Date:**4th Jul 06	**CDM Status**: Site does fall under CDM Regulations at this time. The Principal Contractor is : **Brymor Contractors Ltd**

Job summary: Watching brief during all significant groundwork for construction of new changing rooms/swimming pool for Pilgrims' School, situated within Cathedral Close, Winchester. One archaeologist to monitor and record when necessary by means of intermittent visits. More substantial groundwork (e.g. swimming pool, crane base) will require a more continuous presence and the assistance of 2nd archaeologist (if required). Contractors on site from 17th July 06. Groundwork to be monitored until mid October. Second phase (drainage trench) timetabled for June 07.

Basis for this Risk Assessment (e.g. is it the first RA for this site or a follow on, or review? Will it undertaken in line with a CDM Construction Phase Health and Safety Plan? etc.):

First Aid

The regulations require that your risk assessment considers the appropriate level of 1st Aid cover necessary for each site. You must consider the size of the team, the nature of the hazards present (e.g. plant on site, working in deep excavations), the remoteness from the emergency services and whether the site is shared with other contractors engaged in hazardous activities. If you feel that a first aider is required for your site please advise Nick Shepherd (Head of Fieldwork). If you are unclear about 1st Aid provision please ask Dan Poore (Health and Safety Advisor) for advice.

If you do not need a First Aider, you will need as a minimum an 'Appointed Person', whose responsibility is to take charge when someone is injured or fall ill, and who calls an ambulance if necessary. The appointed person also looks after and re-stocks the 1st Aid box.

Number of First Aiders required:N/A	**Nominated First Aider/Appointed person:N/A**

The following is a list of common risks, and suitable controls. Please review carefully, decide whether they apply to your project and complete Column 4. If Yes, add any further site specific controls that might be necessary (in Column 5), beyond those already detailed. If No, delete or strike-through the contents of Columns 5 to 7.

If there are risks on your project that are not detailed below please add them, and appropriate controls, to the Site Specific Risk Assessment table below.

1. HAZARD	2. RISK	3. RISK RATING (High Medium Low)	4. Specific to this project Yes/No	5. CONTROLS	6. ACTION BY?	7. RESIDUAL RISK RATING (High Medium Low Insignificant)
Lack of understanding of the site and its hazards.	Personal injury.	**Medium**	**Yes**	All staff to receive and sign for an induction based on this risk assessment and the WSI. All staff to sign-in at each visit and to be inducted by the main contractor before starting work. Particularly awareness mast be given to OA staff concerning the location of deep excavations and the	OA Project Manager/ Supervisor/Site Contractor	**Low**

1. HAZARD	2. RISK	3. RISK RATING (High Medium Low)	4. Specific to this project Yes/No	5. CONTROLS	6. ACTION BY?	7. RESIDUAL RISK RATING (High Medium Low Insignificant)
				activity of site machinery (e.g., Excavators, dumpers, piling-rigs, cutting equipment etc). Full PPE (minimum hard-hats, hi-vi vests and safety boots) to be worn on site at all times.		
Vehicle movement	Personal injury. Vehicle/ property damage	**Medium**	**No**	~~Authorized drivers. Banksman for plant movement. PPE: Hi-vis vests~~	~~Fieldwork Director~~	~~Low~~
Vehicle security	Unauthorised use of vehicles/ vandalism	**Low**	**Yes**	~~Contractor to immobilise plant.~~ Park in designated areas. Tools to be kept in locked OA vehicle.	OA Supervisor/ Driver	**Low**
Driving to and from site	Road traffic accident	**Medium**	**Yes**	All drivers, either of OA or of hired vehicles, must be qualified and competent to drive. Each driver must have their licence checked by Duncan Waltham (DW), OA Head of Logistics. Each driver must have their driving ability assessed, either by DW or as part of a MIDAS test undertaken by Bryan Matthews. Each driver must have a copy of the driver's Code of Conduct, which details their rights and responsibilities as a driver. On long journeys it is particularly important that drivers take breaks, or that driving is shared by more that one driver. The Project Manager is responsible for the safety of the site team once they have left the office (either Oxford or Lancaster), although this does not affect the legal responsibilities that drivers assume each time they drive for OA - see 'Drivers Risk Assessment'		**Low**

1. HAZARD	2. RISK	3. RISK RATING (High Medium Low)	4. Specific to this project Yes/No	5. CONTROLS	6. ACTION BY?	7. RESIDUAL RISK RATING (High Medium Low Insignificant)
Driving on site	Injury to staff and members of the public	**Medium**	**No**	~~All vehicle movements around sites should be subject to a 15 mph speed limit, and should take account of footpaths and access routes.~~ ~~Wheels should be checked for excess mud before driving on the public highway.~~		**Low**
Equipment in general	Personal injury, property damage	**Medium**	**Yes**	No OA staff to use equipment not owned or hired by OA.	OA Supervisor	**Low**
Damaged/ defective equipment	Personal injury, property damage	**Medium**	**Yes**	Daily inspection of OA equipment. Replace defective equipment where necessary, and ensure that Logistics Dept. are aware that defective equipment has been returned.	OA Supervisor	**Low**
Mechanical excavator	Personal injury	**Medium**	**No**	Authorised and competent driver. Driver's ability/attitude regarding safe working should be monitored, and action taken if necessary. Competent OA signaller to be used for plant work on site. Induction, Tool box talks. Monitor. PPE: hard hat, hi-vis vest, safety boots. DRIVER'S CITB TICKET NEEDS TO BE CHECKED BEFORE WORK COMMENCES	Site Contractor/OA Supervisor	**Low**

1. HAZARD	2. RISK	3. RISK RATING (High Medium Low)	4. Specific to this project Yes/No	5. CONTROLS	6. ACTION BY?	7. RESIDUAL RISK RATING (High Medium Low Insignificant)
Working in deep excavations	Trench collapse, falling objects, falling into trench. Personal injury.	**High**	**Yes**	Deep excavations can be considered as any excavation which creates the potential for a significant fall or collapse of material. This can apply to excavations as shallow as 0.5 m deep. An assessment of the stability of soils for all excavations >500 mm deep MUST be made if work will involve the excavators head being below the top of the section. No excavation deeper than 500mm will be entered by OA staff unless the site contractor has taken appropriate measures to ensure adequate edge protection and shoring in order to allow safe access.	Site Contractor/ OA Project Manager/Supervisor	**Low**
Underground Services	Risk of Electrocution, gas leaks or flooding.	**Medium**	**No**	~~Undertake Services check through statutory bodies/clients drawings wherever possible. Competent person (defined by the HSE as someone who has received, as a minimum, training from a qualified operative) to check for unknown underground services prior to machining using a Cable Avoidance Tool ("Cat and Jenny"). Hand excavate in areas of suspected live services to locate and isolate from interference from mechanical excavation. Notify statutory bodies/clients if suspected live services are found. ALWAYS ASSUME THAT ALL SERVICES ARE LIVE.~~	~~Supervisor~~	~~Low~~
Overhead cables	Risk of electrocution	**High**	**No**	~~Undertake Services check through statutory bodies/clients drawings wherever possible. Visual inspection of entire site prior to any work starting. If overhead cables present, specific risk assessment to be undertaken and entered in section below: as a minimum, goalposts to be erected for all plant movements under cables, boom restricters to be considered, all personnel to be briefed, especially with~~		

1. HAZARD	2. RISK	3. RISK RATING (High Medium Low)	4. Specific to this project Yes/No	5. CONTROLS	6. ACTION BY?	7. RESIDUAL RISK RATING (High Medium Low Insignificant)
				~~regard to use of surveying staff and erection of any towers.~~		
Weather	Cold/ wet weather: hypothermia/ice Hot weather: heatstroke/ dehydration	**Low**	**Yes**	Re-arrange fieldwork if practicable. Staff issued with suitable clothing and suitable footwear. Additional breaks to be taken in the event of very hot weather.	OA Project Manager	**Low**
Soil contamination/ zoonotic hazards	Ingestion/contact with contaminated soils or bacteria within soils	**Medium**	**Yes**	Where no contamination is known treat as suspected anyway. Good hygiene regime. Wash face and hands (hot water and soap) before each break and at end of day. No smoking or eating on site except in designated areas. Should evidence of contamination be found (either by odour or appearance) excavation to cease and suitable advice to be sought. Relevant departments should be notified of the risk (environmental, finds, archives depts).	Site Contractor / OA Project Manager	**Low**
Livestock	Personal injury, or injury to livestock	**Medium**	**No**	~~Prior to starting on site the Project Manager should establish that no fields are to have excavations undertaken within them where there is a risk that livestock will be present. Cattle in particular can be very inquisitive and injuries to personnel are not uncommon. Electric fencing is available from logistics if areas need to be isolated from livestock; livestock can also be injured by falling into open trenches.~~	~~Project Manager~~	~~Low~~

1. HAZARD	2. RISK	3. RISK RATING (High Medium Low)	4. Specific to this project Yes/No	5. CONTROLS	6. ACTION BY?	7. RESIDUAL RISK RATING (High Medium Low Insignificant)
Leptospirosis (Weil's Disease), Tetanus	Contraction of serious disease	**Medium**	**Yes**	Induction. Issue information cards. High standard of hygiene (controls as for contaminated ground).	OA Project Officer/ Supervisor	**Low**
Noise	Hearing damage; tinnitus	**High**	**Yes**	Hearing protection in the form of ear plugs, or preferably ear defenders compatible with hard hats, must be available for sites where noise is likely to be a hazard. As a general rule of thumb, if you are having to raise your voice to make yourself heard by someone less than 2 m away, the noise level is likely to be higher than 80 decibels. At this level it is advisable although not compulsory to wear ear defenders or ear plugs. This advice must be passed on to all staff by the person responsible for monitoring sound levels (usually the Supervisor or Project Officer). If you have to shout to be heard, the level is likely to be in excess of 85dB. At this level the wearing of ear defenders or plugs is mandatory, and must be enforced by the Supervisor or Project Officer. Hearing protection zones must be established on sites where noise is a problem, and appropriate PPE worn within them. In most case this zone will be the area around a working mechanical excavator.	Site Contractor/OAProject Officer/ Supervisor	**Low**

1. HAZARD	2. RISK	3. RISK RATING (High Medium Low)	4. Specific to this project Yes/No	5. CONTROLS	6. ACTION BY?	7. RESIDUAL RISK RATING (High Medium Low Insignificant)
Site general	Needles/dangerous objects	**Medium**	**No**	~~Great care to be taken when clearing areas, moving rubbish etc where there is the potential for presence of needles/any materials associated with drug use. If found, to be left in place, area cordoned off and advice sought from Local Authority Environmental Health Officer (EHO). As a last resort, needle may be moved by person wearing gloves and using a shovel. Place in a bucket and cover with a layer of soil. Report to EHO.~~	~~Supervisor/ all staff~~	~~Low~~
Gas bottle	Fire/explosion	**High**	**No**	~~If using a gas bottle for the preparation of hot drinks, the bottle itself MUST be safely positioned outside the mess hut, to ensure adequate ventilation in the event of a gas leak. If the gas ring is positioned within the mess hut, it must be placed on a fire mat, in a safe position away from walls and any overhanging materials. In transit the bottle must be securely fixed within the vehicle. The bottle, ring and connecting pipe should be regularly checked for leaks. The ring and regulator should be removed from the bottle prior to the gas bottle being moved, and especially when placed in vehicle. The regulator in the crew bus should always be disconnected from the bottle **before** the vehicle is driven anywhere, as the motion of the vehicle will cause the bottle to leak.~~	~~Supervisor~~	**Low**
Manual handling	Risk of strain injuries from incorrect or excessive manual handling	**Medium**	**Yes**	Induction. Assess manual handling risks for each task. Consider alternative mechanical methods for tasks. No slinging of loads for machines by OA staff.	OA Supervisor	**Low**

1. HAZARD	2. RISK	3. RISK RATING (High Medium Low)	4. Specific to this project Yes/No	5. CONTROLS	6. ACTION BY?	7. RESIDUAL RISK RATING (High Medium Low Insignificant)
Harassment	Stress, personal injury	**Medium**	**Yes**	No harassment or bullying of any type (be it physical, verbal, sexual, racial etc) will be tolerated on any OA project. Should any member of staff encounter harassment or feel threatened by the actions of another (within or external to OA), they must report it to the Site PO/Supervisor who in turn will report it to the appropriate authority and make a record of the harassment and any actions taken. If harassment persists, OA staff will remove themselves from the site.	Site Contractor/ OA Project Manager/Supervisor /OA Staff	**Low**

ADDITIONAL RISK ASSESSMENT					
HAZARD	**RISK**	**RISK RATING (High Medium Low)**	**CONTROLS**	**ACTION BY?**	**RESIDUAL RISK RATING (High Medium Low Insignificant)**
Water ingress	Unstable trench edges, risk of drowning	**High**	No attempt to enter *any* trench with water ingress without adequate edge protection (see above) and pumping.	Site Contractor/OA Project Manager	**Low**
Lone working	Personal injury	**Medium**	Do not undertake any hazardous task (e.g. entering deep excavation) on site (listed above) without the awareness and in view of the site contractor (and sub-contractors). This includes all work with or near plant which will be under the control of the contractor and sub-contractors. Maintain vigilance and awareness at all times. Inform site manager of arrival on site and when leaving.	Site Contractor/ OA Supervisor	**Low**

The following empty rows are for the assessment of additional risks during the course of the works WHEN ARRIVING AT THE SITE FOR THE FIRST TIME, IT IS IMPERATIVE THAT A FURTHER ASSESSMENT OF THE RISKS IS UNDERTAKEN, AND THE FINDINGS/REQUIRED ACTIONS ARE RECORDED BELOW TO FORM PART OF THE INDUCTION, BEFORE WORK COMMENCES. Some risks will only become apparent once you are on site.

HAZARD	RISK	RISK RATING (High Medium Low)	CONTROLS, and DATE RISK IDENTIFIED	ACTION BY?	RESIDUAL RISK RATING (High Medium Low Insignificant)	TOOLBOX TALK GIVEN?

Department for Culture, Media and Sport
Architecture and Historic Environment Division

2-4 Cockspur Street
London SW1Y 5DH
www.culture.gov.uk

Tel 020 7211 2352
Fax 020 7211 2389
anne.middleton@
culture.gov.uk

RECEIVED
→ Ben Ford

Dr John Crook
52 Canon Street
Winchester
Hampshire
SO23 9JW

Your Ref

Our Ref HSD 9/2/7409

4 August 2005

Dear Sir

ANCIENT MONUMENTS AND ARCHAEOLOGICAL AREAS ACT 1979 (AS AMENDED) – SECTION 2
PROPOSED WORKS AT WINCHESTER CATHEDRAL CLOSE, WINCHESTER, HAMPSHIRE – (THE PILGRIMS' SCHOOL, 3 THE CLOSE, WINCHESTER SO23 9LT)
COUNTY MONUMENT NO 585
APPLICATION BY THE CHAPTER OF WINCHESTER CATHEDRAL

1. I am directed by the Secretary of State for Culture, Media & Sport to refer to your application for scheduled monument consent dated 16 May 2005 and to the site and location maps; and the following documents: (1) Winchester Cathedral Close: Brief for Archaeological Evaluation at The Pilgrim's School (revision dated 15 May 2005); and (2) Winchester Cathedral Close: Proposed Building Works at The Pilgrim's School (draft dated 15 May 2005); submitted therewith in respect of proposed works at the above scheduled ancient monument concerning an excavation involving three archaeological evaluation trenches in advance of proposed new swimming pool and building extension at the Pilgrim's School in Winchester Cathedral Close.

2. In accordance with paragraph 3(2) of Schedule 1 to the 1979 Act, the Secretary of State is obliged to afford to the applicant, and to any person to whom it appears to the Secretary of State expedient to afford it, an opportunity has been declined in your telephone conversation with Mr Evans of the Department on 3 August 2005.

3. The Secretary of State is also required by the Act to consult with the Historic Buildings and Monuments Commission for England (English Heritage) before deciding whether or not to grant scheduled monument consent. Having received the advice of English Heritage, the Secretary of State considers that the proposed archaeological evaluation necessary to assess the extent, depth and nature of archaeological deposits in order to provide information for taking decisions on the management of the monument, changes in its land use, or

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development proposals. The Secretary of State is agreeable for the works to proceed providing the conditions recommended by English Heritage, and set out below, are adhered to, and accordingly hereby grants scheduled monument consent under section 2 of the 1979 Act for the proposed works as referred to in paragraph 1 above, subject to the following conditions:-

i. the works to which this consent relates shall be carried out to the satisfaction of the Secretary of State, who will be advised by English Heritage. In order to ensure that the works are carried out satisfactorily, at least 2 weeks' notice (or such shorter period as may be mutually agreed) in writing of the commencement of work shall be given to Mr Richard Massey, Inspector of Ancient Monuments, English Heritage, South East Region, Eastgate Court, 195-205 High Street, Guildford GU1 3EH in order that an English Heritage representative can have the opportunity to inspect and advise on the works and their effect in compliance with this consent;

ii. all those involved in the works must be informed of the scheduled status of the monument, its extent, and the legal obligations which apply;

iii. equipment and machinery shall not be used or operated in the scheduled area in conditions or in a manner likely to result in ground disturbance other than that which is expressly authorised in this consent;'

iv. the works to which this consent relates shall be carried out only by Oxford Archaeology, Janus House, Osney Mead, Oxford OX2 0ES (excavation director to be agreed);

v. the excavation shall be backfilled within 1 month (or such other period as may be mutually agreed) of completion of the excavation, to the satisfaction of the Secretary of State, who will be advised by English Heritage (the Historic Buildings and Monuments for England);

vi. a summary excavation report shall be sent to English Heritage at the address given above and the Hampshire County Historic Environment Record c/o David Hopkins, County Archaeologist, Hampshire County Council, Environment Department, The Castle, Winchester, Hampshire SO23 8UE within 3 months (or such other period as may be mutually agreed) of completion of the excavation. Within 5 years of completion of the excavation a full site archive (and assessment) shall be prepared and deposited in the County Historic Environment Record and a final report of the excavation (and analysis) shall be prepared and made available to the County Historic Environment Record for publication. The National Monuments Record shall also be invited to receive copies of both archive and report;

vii. the project design (including analysis, post-excavation and publication proposals) for which consent is granted shall be executed in full, unless variations have been agreed under the terms of condition 3(i);

4. By virtue of section 4 of the 1979 Act, if no works to which this consent relates are executed or started within five years from the date of this letter, the consent shall cease to have effect at the end of that period (unless it is revoked before then).

5. This letter does not convey any approval or consent required under any enactment, bye law, order or regulation other than section 2 of the Ancient Monuments and Archaeological Areas Act 1979.

6. Attention is drawn to the provisions of section 55 of the 1979 Act under which any person (hereinafter referred to as the 'applicant') who is aggrieved by the decision given in this letter may challenge its validity by an application made to the High Court within six weeks from the date when the decision is given. The Grounds upon which an application may be made to the Court are (1) that the decision is not within the powers of the Act (that is, the Secretary of State has exceeded her powers) or (2) that any of the relevant requirements have not been complied with and the applicant's interest have been substantially prejudice by the failure to comply. The "relevant requirements" are defined in section 55 of the 1979 Act: they are the requirements of that Act and the Tribunals and Inquiries Act 1971 and the requirements of any regulations or rules made under those Acts.

7. A copy of this letter is being sent to English Heritage and to Oxford Archaeology at the addresses given above, and to Dr David Hopkins, Principal Archaeologist, Environment Group, County Planning Department, Hampshire County Council, The Castle, Winchester SO23 8UE.

Yours faithfully

a. R. middleton

A R MIDDLETON (MISS)
Authorised by the Secretary of State
to sign in that behalf.

Department for Culture, Media and Sport
Architecture & Historical Environment Division

2-4 Cockspur Street
London SW1Y 5DH
www.culture.gov.uk

Tel 020 7211 2360
Fax 020 7211 2389
april.daines@
culture.gsi.gov.uk

RECEIVED
13 MAR 2006

Mr Alan Moon
Barrie Taylor Associates
39 Silver Street
Warminster
Wiltshire
BA12 8PT

Your Ref DJS/KM/23049

Our Ref HSD 9/2/7785

10 March 2006

Dear Sir,

ANCIENT MONUMENTS AND ARCHAEOLOGICAL AREAS ACT 1979 (AS AMENDED) – SECTION 2
PROPOSED WORKS AT WINCHESTER CATHEDRAL CLOSE, WINCHESTER, HAMPSHIRE.
COUNTY MONUMENT NO 585
APPLICATION BY THE BOARD OF GOVERNORS OF THE PILGRIMS' SCHOOL

1. I am directed by the Secretary of State for Culture, Media & Sport to refer to your application on behalf of The Board of Governors of The Pilgrim's School for scheduled monument consent dated 23 November 2005; the covering letter dated 23 November 2005; The Design Statement dated November 2005; Statement of Community Involvement and Drawings: 23049-01 (Rev. A), 02 (Rev. A), 03 (Rev. A), 04 (Rev. A), 05 (Rev. A), 06 (Rev. A), 07 (Rev. A), 08 (Rev. A), 09 (Rev. A), 10 (Rev. A), 11 (Rev. A), 12 (Rev. A), and 13 (Rev. A) submitted therewith in respect of proposed works at the above scheduled ancient monument concerning the construction of a new swimming pool, changing rooms and workshops and pre-preparatory accommodation block.

2. In accordance with paragraph 3(2) of Schedule 1 to the 1979 Act, the Secretary of State is obliged to afford to the applicant, and to any person to whom it appears to the Secretary of State expedient to afford it, an opportunity of appearing before and being heard by a person appointed for that purpose. This opportunity has been declined in your telephone conversation with Mrs A. Daines of the Department on 9 March 2006.

3. The Secretary of State is also required by the Act to consult with the Historic Buildings and Monuments Commission for England (English Heritage) before deciding whether or not to grant scheduled monument consent. Having received the advice of English Heritage, the Secretary of State considers the proposed works would not significantly diminish the visual amenity of the monument, but would cause significant damage to the monument's archaeological deposits, which can be acceptably mitigated by conditions or safeguards already specified in the application to ensure appropriate

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foundation design, prior archaeological evaluation, supervision and recording. The Secretary of State is agreeable for the works to proceed providing the conditions recommended by English Heritage, and set out below, are adhered to, and accordingly hereby grants scheduled monument consent under section 2 of the 1979 Act for the proposed works as referred to in paragraph 1 above, subject to the following conditions:-

i. The works to which this consent relates shall be carried out to the satisfaction of the Secretary of State, who will be advised by English Heritage. At least 4 weeks' notice, (or such shorter period as may be mutually agreed) in writing of the commencement of work shall be given to Richard Massey, Inspector of Ancient Monuments, English Heritage, South East Region, Eastgate Court, 195-205 High Street, Guildford GU1 3EH, in order that an English Heritage representative can have the opportunity to inspect and advise on the works and their effect in compliance with this consent.

ii. No ground works shall take place until implementation of a programme of archaeological work has been secured in accordance with a written scheme of investigation which has been submitted to and approved by the Secretary of State advised by English Heritage. This will comprise a further evaluation trench at the western extent of the proposed swimming pool, of extent and location to be specified. The results of this evaluation will determine the location and design of a borehole transect to be undertaken across the long axis of the swimming pool site. It is also recommended that removal of the previous swimming pool will offer a window of opportunity for cleaning and recording of archaeological features in section, which will offer correlative data to that obtained by evaluation. Provision should also be made for sampling of archaeological material derived from any specified auger extraction methods prior to piling.

iii. Before works are carried out, the applicant will ensure that a nominated project officer from Oxford Archaeology, Janus House, Osney Mead, Oxford OX2 0ES (unless the opportunity is declined in writing) has made arrangements to enter the site at any reasonable time before and during the execution of the specified works for the purposes of inspecting the site. Any Written Scheme of Investigation for a Watching Brief must include provision for archaeological investigation and recording of any significant archaeological features revealed during the course of site excavation.

iv. All those involved in the works must be informed of the scheduled status of the monument, its extent, and the legal obligations which apply.

v. Equipment and machinery shall not be used or operated in the scheduled area in conditions or in a manner likely to result in damage to the monument or ground disturbance other than that which is expressly authorised in this consent.

vi. Any ground disturbance works to which this consent relates shall be carried out under the archaeological supervision of Ben Ford, Oxford Archaeology or his nominated representative who shall be given 4 week's written notice (or such shorter period as may be mutually agreed) of the commencement and timetable of works.

vii. A report on the archaeological recording shall be sent to the County Historic Environment Record c/o David Hopkins, County Archaeologist, Hampshire County Council, Environment Department, The Castle, Winchester, Hampshire SO23 8UE and to English Heritage at the address given above within 3 months of the completion of the works (or such other period as may be mutually agreed).

viii. Outline plans indicate the need for ground piling both beneath the swimming pool and pre-preparatory facilities. The design and methodology of piling must be subject to agreed specifications, both in respect of piling density and percentage of area impacted, and in respect of archaeological mitigation. Agreed specifications for piling should include piling method, density and percentage of ground area impacted. Where possible, piling methodology should be such as to minimise impact on water-logged archaeological deposits by augered extraction and/or sleeving. Provision for archaeological sampling during piling and for post-piling monitoring should be considered.

4. By virtue of section 4 of the 1979 Act, if no works to which this consent relates are executed or started within five years from the date of this letter, the consent shall cease to have effect at the end of that period (unless it is revoked before then).

5. This letter does not convey any approval or consent required under any enactment, bye law, order or regulation other than section 2 of the Ancient Monuments and Archaeological Areas Act 1979.

6. Attention is drawn to the provisions of section 55 of the 1979 Act under which any person (hereinafter referred to as the 'applicant') who is aggrieved by the decision given in this letter may challenge its validity by an application made to the High Court within six weeks from the date when the decision is given. The Grounds upon which an application may be made to the Court are (1) that the decision is not within the powers of the Act (that is, the Secretary of State has exceeded her powers) or (2) that any of the relevant requirements have not been complied with and the applicant's interest have been substantially prejudice by the failure to comply. The "relevant requirements" are defined in section 55 of the 1979 Act: they are the requirements of that Act and the Tribunals and Inquiries Act 1971 and the requirements of any regulations or rules made under those Acts.

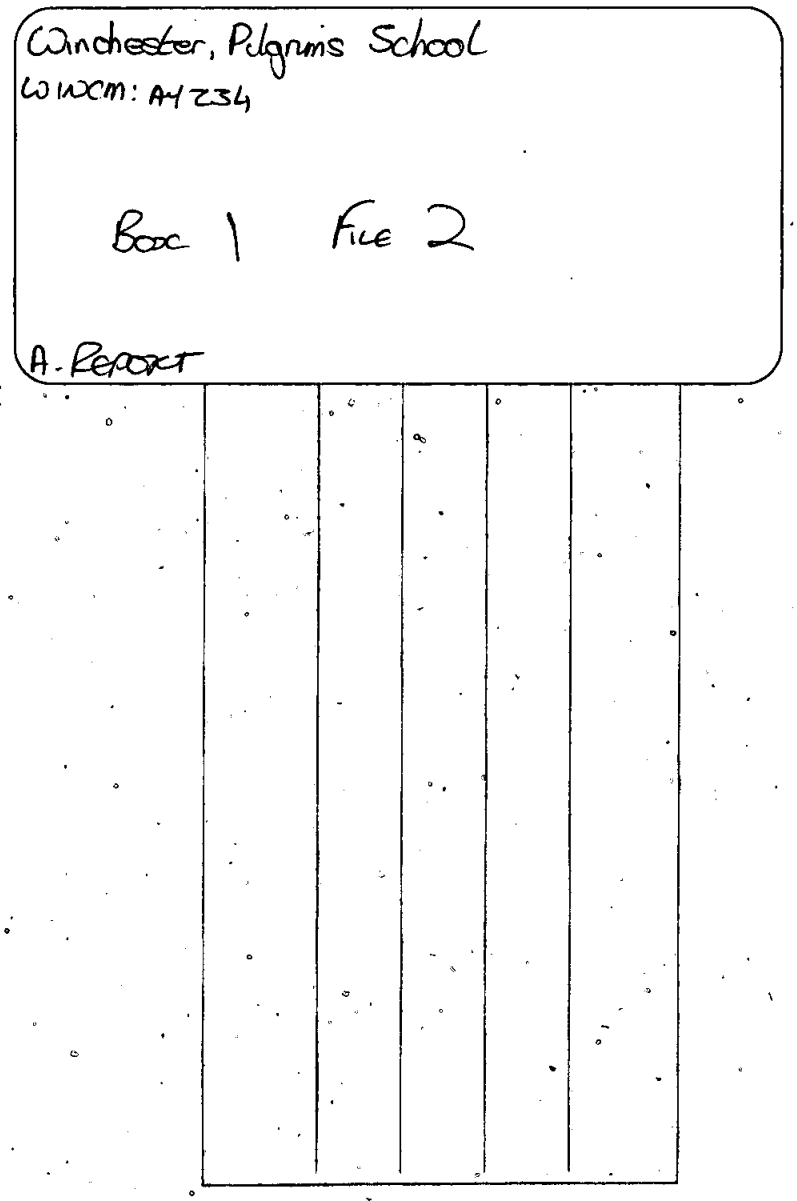
7. A copy of this letter is being sent to English Heritage, South East Region; Alison James, Field Monument Warden, English Heritage, 2 Broadside Cottages, East Ashley, West Sussex PO19 9AR; Mr Ben Ford Oxford Archaeology, Janus House, Osney Mead, Oxford OX2 0ES and Mr David Hopkins, County Archaeologist, Environment Group, County Planning Department, Hampshire County Council, The Castle, Winchester SO23 8UE.

Yours faithfully

A. R. Middleton

A. R. Middleton (Miss)

Authorised by the Secretary of State
to sign in that behalf.


Winchester, Pilgrims School
WINCM: A4234
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A. Report

OXFORD ARCHAEOLOGY, JANUS HOUSE, OSNEY MEAD, OXFORD, OX2 OES

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Site code[WINCM:AY234]
Line 2: Excavators name[Ford, B]
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Introduction	
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A:Publication Report	
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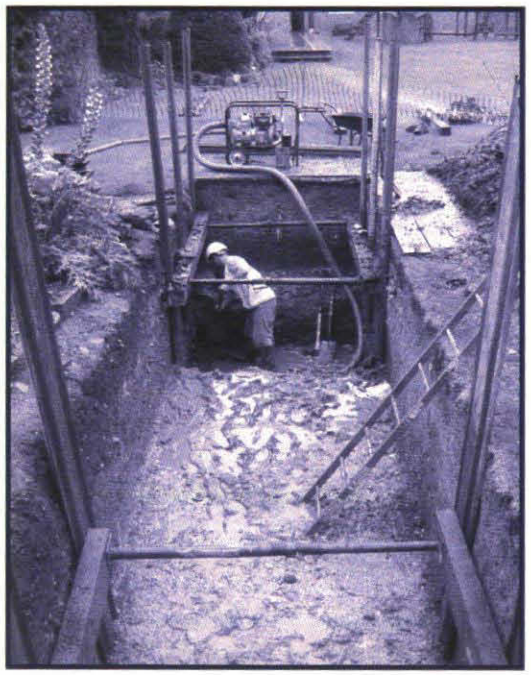

The Pilgrims' School Cathedral Close Winchester Hampshire

Archaeological Evaluation Report - Scheduled Ancient Monument Hants 585

Oxford Archaeology

April 2006

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Issue No: Draft
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Position: Project Officer
Date: 20th March 2006

Checked by: Ben M Ford
Position: Senior Project Manager
Date: 10th April 2006

Approved by: Nick Shepherd Signed.....
Position: Head of Fieldwork
Date: 18 April 2006

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Oxford Archaeology
© Oxford Archaeological Unit Ltd 2006
Janus House
Osney Mead
Oxford OX2 0ES
t: (0044) 01865 263800
f: (0044) 01865 793496
e: info@oxfordarch.co.uk
w: www.oxfordarch.co.uk

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On behalf of The Pilgrims' School, Winchester

The Pilgrims' School, Cathedral Close, Winchester, Hampshire.

NGR SU 4829 2905

Archaeological Evaluation Report

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The Pilgrims' School, Cathedral Close, Winchester, Hampshire.

NGR SU 4829 2905

ARCHAEOLOGICAL EVALUATION REPORT

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Abbreviations

AD: *Anno Domini*
bgl: Below Ground Level
OA: Oxford Archaeology
m OD: metres above Ordnance Datum

SUMMARY

Between July - August 2005, Oxford Archaeology undertook an archaeological evaluation at The Pilgrims' School, Winchester in order to provide information concerning the impact of the proposed development upon potential archaeological remains. Three trenches were excavated revealing that deeply stratified, dry and waterlogged, archaeological deposits survive below deep accumulations of post-medieval dumping and garden soils. The finds and environmental evidence retrieved from the waterlogged deposits showed excellent preservation. The water table was observed between 31.62 and 31.64m OD.

Trench 1, measured 8m x 2m and was located against the southern limit of the site. It showed that the latest significant archaeological levels fell away sharply towards the north from 32.80m OD to 31.66m OD. Two phases of Roman defences were revealed - a later defensive wall superseded an earlier earthen/turf rampart. A possible post-Roman intra-mural track was seen to run adjacent to the wall. A medieval cess/rubbish pit lined with oak boards (with exceptional preservation of organic remains) was also found. The existing Close wall was constructed upon the foundations of the demolished Roman defensive wall, during the 12th-13th century or later. Later Medieval soils were dumped in the area. Extensive 18th Century dumps of building rubble (containing medieval architectural fragments) overlay the medieval sequence, which were in turn sealed by successive garden soils.

Trench 2, was 1.5m square and situated within a restricted area towards the north of the site. Significant archaeological levels were not reached and lay below the base of excavations at 32.00m OD. The post-medieval building rubble dumps observed in Trench 1 were seen to extend into Trench 2 and contained, of note, a fragment of 14/15th Century stone basin/font.

Trench 3, measured 8.8m x 2 and was located near to the northern perimeter of the site. Significant archaeological levels were reached at 31.45m OD. Naturally deposited river gravels were encountered at 30.56m OD and were overlain with thin organic silts and sands that contained pottery datable to AD 150-200. These deposits suggest a shallow water/flooded landscape, with indicators of slow-moving or even stagnant, nutrient-rich water. Of note in this phase of works was the absence of the 'Fen Peat' located some 40 metres to the SW during previous work (COAS 1999) at a depth of 30.55m OD and thought to have formed between c.6,500 BP and 2,000BP. This would indicate that the prehistoric deposits and environmental regime in the valley floor is varied. Sealing these earlier silts was a layer comprised mainly of flint and chalk demolition[?] 'rubble' that contained fragments from a diverse range of tile forms and painted plaster, well-preserved constructional iron nails and fittings, parts of leather shoes, and several coins dating to the later 3rd Century. This deposit represented deliberate dumping derived from a high status building, possibly in the vicinity and probably in an attempt to reclaim the low-lying land in the valley bottom. From the late Roman period a thick accumulation of organic silts developed, implying the area remained too damp for permanent habitation. Preserved within these deposits were a number of small timber posts, and clusters of stakes, perhaps part of a fish trap. The area remained susceptible to seasonal flooding possibly until the 17th century. There was an absence of the later rubble layers seen in Trenches 1 and 2, and successive garden soils were seen instead.

1 INTRODUCTION

1.1 Location and scope of works (Fig. 1)

1.1.1 The Pilgrims' School intends to submit a planning application to extend their buildings and leisure/sports facilities. In advance of these they appointed Oxford Archaeology (OA) as the archaeological contractor to undertake an archaeological evaluation of the proposed impact area. The work was carried out to a Written Scheme of Investigation WSI (OA Aug 2005), based upon a *Brief* (Crook 2005) and in consultation with Dr Crook, the Archaeological Consultant for Winchester Cathedral and Tracy Matthews, Sites and Monuments Officer for Winchester City Council.

1.1.2 The building project forms part of a wider programme of proposed building works within the Cathedral Close, which are subject to the overall discipline of a 'Close Plan' (previously known as the 'Close Masterplan'), currently being drawn up in consultation with representatives of the Planning Department of Winchester City Council, English Heritage, and the Cathedrals Fabric Commission (England).

1.2 Site location topography and geology

1.2.1 The site (Fig. 1) lies within the SE corner of Winchester Cathedral Close, a Scheduled Ancient Monument (Hants 585) in gardens located within the eastern part of the curtilage of Pilgrims' School (centred on National Grid Reference SU 4829 2905). It is bounded to the south by the Close Wall, to the west by the existing school classrooms, to the north by the Deanery Garden and to the east by a strip of land forming part of the school's garden adjacent to The Mill Stream. The site is situated on the valley floor to the west of the River Itchen that flows from north to south.

1.2.2 The site currently forms a largely flat garden area to the east of the main school buildings (Stancliffe Building, Millennium Building and Selwyn Building) at c.33m OD. Contained within the southern part there are a swimming pool and a tennis court/hard-play area, elsewhere there are flower beds, gardeners sheds, party walls and fence lines and associated pathways and gates.

1.2.3 The geology comprises Upper Chalk of the Cretaceous Epoch overlain by floodplain gravels dating from the late Quaternary period (BGS sheet 299D) which are in turn overlain by peat and floodplain silts.

1.3 Archaeological background

1.3.1 The archaeological and historical background has been detailed in an archaeological assessment (Crook 2005) and the concise summary from the brief is reproduced in full below.

1.3.2 Previous archaeological investigations of the Pilgrims' School curtilage, which vary in extent, depth, and quality, have been restricted to an area to the west of the proposed new construction works with a Watching Brief during augering for shallow post-holes north of the new site (Crook 2005). Only the observations made prior to and during the construction of the Millennium Building, located immediately west of the site of the proposed new works, provide any information that may tentatively be extrapolated eastwards (Teague 2001).

1.3.3 **Late Pleistocene**: The site lay in the valley bottom, where the incipient river systems that were to become the River Itchen cut through the chalk downs. At the end of the last Ice Age (Late Pleistocene, c. 20,000 to 10,000 BP) periglacial conditions led to the formation of gravel bars over the flood plain, above the eroded surface of the Upper Chalk. No evidence for human occupation of the site, but a flint spall and flake of probable Mesolithic date were discovered in a borehole (UAD 1866, BH 1: see Figure 4) suggesting some human activity in the area.

1.3.4 **Mesolithic to Mid-Late Iron Age**: With warmer conditions, layers of peat were formed from decaying vegetation on the river margins. The environment was continuously wet and unsuitable for human habitation, though the marsh might have provided a site for hunting and gathering.

1.3.5 **Mid-Late Iron Age**: The site was located below the Iron Age enclosure at Oram's Arbour. A change in climatic conditions led to the deposition of further sediments. These include Iron Age pottery fragments, mussel shells, bone, and charcoal: domestic rubbish, which was deposited into the valley bottom in the period prior to the Roman occupation.

1.3.6 **Roman**: The site lay within the Roman defensive circuit; first an earthen rampart (*agger*), followed by a second phase of earthen rampart, and finally, from the 3rd century, a flint and mortar wall. The lower lying parts of the settlement were probably progressively drained as the settlement expanded eastwards, the Itchen being diverted outside the eastern boundary. Initially the floodplain may have been deemed adequate for defensive purposes. The limits of the Roman *civitas*, including the site under discussion, were certainly established by the late 2nd century, and probably earlier.

1.3.7 **Post-Roman**: Reversion of the area to floodplain conditions. The pre-Roman river system re-established itself over the site, laying down alluvial silts similar to those before the Roman occupation.

1.3.8 **Saxon**: The site lies within the walls of the Saxon city. From the time of the monastic reforms of the 960s (and possibly earlier) the site formed part of the precincts of Old Minster, a cathedral priory (the Priory of St Swithun).

1.3.9 **Medieval**: Continued use as part of the precincts of St Swithun's Priory until the Dissolution of 1539. The site of the proposed works lay within the Prior's garden, an area used for recreational horticulture.

1.3.10 **Post-Medieval to present day**: The site continued in use for horticulture, forming part of the garden of the Dean of a cathedral of Henry VIII's 'New Foundation'. It now forms part of the recreational area and gardens of The Pilgrims' School.

1.4 Aims of the Investigation

1.4.1 To establish the presence/absence of archaeological remains within the area designated for archaeological evaluation.

1.4.2 To determine the extent, condition, nature, character, quality and date of any archaeological remains present.

1.4.3 To establish the ecofactual and environmental potential of archaeological deposits and features.

1.4.4 The evaluation will add to existing knowledge of the pre-history and historical development of a site recognised as of national importance. In particular it will attempt to address the following research aims:

- Characterise the post-glacial development of the area
- Locate the pre-Roman course of the River Itchen and any evidence for its management during the Roman and later periods
- Establish any evidence for pre-Roman use of the site and/or its suitability for habitation or other uses during this period.
- When was the area suitably drained to allow for habitation during the Roman period and what was its nature and development?
- The date of the Roman *agger* and town wall.
- Evidence for Roman intramural street and/or other streets and for the buildings that flanked them.
- Establish the post-Roman nature of the site, particularly for evidence of the breakdown of the Roman drainage infrastructure.
- Is their any evidence for early-middle Saxon use of the site, particularly given the proximity of the site to the Old Minster and the Saxon Bishop's palace?
- Evidence for the establishment of the Saxon Burgh, particularly for the refurbishment of the town defences.
- Did the 9th century street grid extend into this quarter of the walled city, and is there evidence for an intramural street, (possibly located upon the Roman *agger*?).
- Is there is any evidence for the incorporation of the site into the monastic precinct?
- What was the monastic use of the site and if horticultural, what type of plants were grown?

1.4.5 The evaluation results will enable informed decisions to be made on a strategy for mitigating the potential negative affects of the proposed design on the archaeological resource identified, which will ensure that, important buried remains are preserved in situ where possible and preserved by record in all other instances.

1.4.6 To enable a revision of the objectives and research aims for any future archaeological excavation strategy and inform the methodology for that strategy.

1.4.7 To make available the results of the investigation.

2 EVALUATION METHODOLOGY

2.1 Scope of fieldwork (Fig. 2)

2.1.1 The evaluation comprised three trenches as shown in Fig. 2. These were positioned within the development area as proposed by the Brief with minor amendments as agreed with the relevant parties.

2.2 Fieldwork methods and recording

2.2.1 Trenches 1 and 3 were excavated using a 1.5 tonne mini-digger fitted with a toothless ditching bucket to remove the modern overburden. A small area of overburden was hand excavated in these trenches in order to assist in the identification of any possible stratification, and for controlled recovery of artefacts and ecofacts. A suitably experienced archaeologist supervised all machine work. Trench 2 was entirely hand-excavated.

2.2.2 Spoil from machined overburden was scanned by eye for artefacts.

2.2.3 Care was taken not to compromise the integrity of archaeological features or deposits, which might better be excavated under conditions pertaining to full excavation.

2.2.4 All trenches exceeded a depth at which unsupported excavation could safely continue and therefore shoring using steel trench sheets was employed in order to examine the deeper stratigraphy. At these depths significant water seepage occurred and therefore necessitated the use of pumps to remove excess water. Acting on the advice of the Environment Agency hay-bales were used to filter silt out of the pumped water prior to discharging into the Mill Stream.

2.2.5 The depth and complexity of the deposits across the whole site was assessed. Written and drawn records were produced documenting the stratigraphy of all trenches. Test pits (sondages) were excavated at the end of both Trenches 1 and 3 to assess deep stratigraphy. In Trench 2 excavation ceased at a depth of 1.5m b.g.l. with the agreement of Tracy Matthews (SMR Officer, Winchester City Council).

2.2.6 A unique site/accession code WINCM:AY234 was agreed with Winchester Museums Service.

2.2.7 The general methodology for excavation and recording and post-excavation conformed to the *OA Standard Fieldwork Methodology* but not withstanding the specific methodologies stated in the Brief. A separate matrix diagram for each trench was maintained during the fieldwork.

2.2.8 A programme of soil sampling to recover palaeobotanical, palaeozoological and pedological evidence was undertaken as appropriate.

2.2.9 Finds were recovered by hand during the course of the excavation. Finds of special interest were given a unique small find number. The use of a metal detector was employed when necessary.

2.2.10 Trenches were back-filled with the excavated material.

3 RESULTS

3.1 Stratigraphic Results

Introduction

3.1.1 The following trench descriptions indicate all levels as m OD for clarity. Context numbers are presented within parentheses. A context inventory can be found in Appendix 1.

3.1.2 The findings in each trench are described in stratigraphic order where possible, commencing with the earliest deposits first.

Trench 1 (Fig. 3)

3.1.3 Trench 1, measuring 8m x 2m, was located in area of lawn and flanking gravel path, perpendicular and adjacent to the Close Wall that defines the southern boundary of the site. The trench was excavated to the top of (150) and (152) from which two further sondages, that measured 2m x 0.8m and 1.8 x 0.9m were further excavated.

3.1.4 A clean and firm dark organic silt/possible peat deposit (151) was reached at 31.33m OD (2.04m b.g.l) within the northern sondage and at 31.23m OD within the southern sondage. Within the northern sondage, was a timber stake (146), its tapered end driven into the organic silt/peat. Two further stakes ((147) and (148) - left in-situ), were located 0.8m to the east, all three of which formed an east-west line.

3.1.5 Above the organic silt/possible peat, within the southern sondage, were two thin spreads of decayed turf (154), almost black in colour, supported on light greyish silt, possibly representing stacked sods, totalling a maximum of 0.24m in thickness (see 4.2.4). This was overlaid by a 0.13m thick dump of loose light greyish white fine sandy silt (153) and then by a thin, fairly compact and clean dark grey-brown clay-silt (152). Overlying the timbers and peat within the northern sondage was a homogenous moderately compact grey-brown clay-silt (150), 0.38m thick, probably the same deposit as (152) to the south.

3.1.6 Located on the southern end of the trench and constructed through (152), was a substantial E-W aligned wall footing (117), almost certainly representing the Roman town wall (Plate 1). It was well -constructed, comprising of coursed flint (un-knapped nodules measuring 0.11 - 0.22m in size) bonded by hard pale yellowish mortar, surviving at 32.41m OD at its highest point. It survived to a maximum height of seven flint courses, and was at least 1.15m wide upon a slightly off-set footing that was approximately 0.23m thick (its southern extent lay below the existing close wall, which was built directly above it). It was built free standing within a construction trench, 0.31m deep and greater than 1.55m wide. The construction trench was filled with a dark grey clay loam (143 and 144) that contained mortar and mottled brown clay patches.

3.1.7 Sealing (and slumping into) the wall construction trench was a spread of tightly packed flint nodules (137) that lay immediately adjacent, and parallel to the northern face of wall (117). The spread was 2.0m wide and seemingly formed a surface that ran alongside the wall. Between surface (137) and the wall was a narrow gully [138] 0.35-0.40m wide and 0.42m deep that was filled with a mottled orange grey-brown clay loam (139). The purpose of the gully is unclear, although it could have served as

a robber trench immediately before the construction of the existing Close wall - although no evidence was found for the removal of the face of wall (117). Alternately, it may have acted as a drainage gully for surface (137).

3.1.8 Wall (117) appears to have been demolished to the contemporary ground level and the existing Close wall constructed immediately upon its remains (no construction trench was evident). The footing comprised of a single course of mortared roughly squared chalk blocks overlain by two courses of knapped flint facing visible. Above, the facing corresponds with the visible wall which also has a whitish render. Abutting the existing wall was a loose bank of silty mortar rubble (101), up to 0.52m thick, that contained fragments of slate. It extended for distance of 1.7m from the wall and probably represents debris associated with its construction or later repairs. The deposit also contained sherds of 12th-13th century pottery, fragments of glazed medieval floor tile and an early peg-tile. This was overlain by a dump up to 0.8m thick of mid-grey/brown silt (100). This deposit contained mortar and tile rubble that extended 4.4m from the wall. It also contained a few sherds of 17th-18th century pottery and clay-pipe stems, although it was possible that these finds were mixed in from the overlying layers. This more substantial deposit is likely to represent dumping from elsewhere on the site rather than debris associated with the maintenance of the existing close wall. Further dumping of gravel rich mid grey-brown silt (116) followed. This extended the 'bank' northwards for a distance in excess of 6.2m from the close wall. This deposit contained pottery dated to *c.* AD1475-1550 and a 13th-14th century medieval decorated floor tile.

3.1.9 Apparently cutting into (116), close to the northern limit of the bank, was a small timber-lined pit (118) (Plate 2). Sub-rectangular in shape, it measured 1.27m x 0.80m and was 1.3m in depth. It was lined on each side by timber planks (124-26, 130-35) that had been driven in vertically. There was no evidence for horizontal bracing. The primary fill of this pit comprised a thick soft anaerobic dark brown cessy deposit (122) and sherds from vessel of ?11th - 12th century date. Above was a further, but more compact dark brown cessy fill (120) that contained a large sherd of a Tripod Pitcher dateable to the 11th-12th century. Its uppermost fill (121) consisted of compact chalk and mortar rubble, presumably used to cap the pit. Sealing the pit and silt (116) was a thin, but firm, mid grey silt (102), 0.18m thick that contained late 14th - mid 15th century pottery, possibly soil or turf that had developed on the 'bank'.

3.1.10 Above (102) was a substantial deposit of loose mortar, flint and chalk rubble (103), in excess of 0.92m thick and contained late 18th-19th century pottery, clay pipes and glass. Further dumps of mortar rich silts (104 and 110) followed, which resulted in the levelling of the 'bank'. Shallow pit [112] had been dug and infilled with mortar and rubble rich silt (111) between the deposition of (104) and (110).

3.1.11 The latest deposits (modern) included the existing topsoil (109 and 105) with evidence of two phases of flower beds located adjacent to the Close wall and an earlier version [113] of the existing gravel path.

Trench 2 (Fig. 3)

3.1.12 Trench 2, measuring 1.5m square was situated within a restricted area between the fence of the hard-play area, a brick wall, and a shed. It was positioned in order to avoid a pipe that drained the swimming pool. The trench was excavated to a depth of 1.50m b.g.l (31.95m OD) - the level at which water seepage occurred.

3.1.13 The earliest deposit (210) encountered at 32.00m OD comprised a light-mid grey-brown silty sand that contained rare inclusions of rounded chalk or limestone fragments in the SW part of the trench. Only the top 0.05m of this deposit was excavated, to the lowest level of the trench, and there was no dating evidence.

3.1.14 Above was a 0.53m thick chalk rubble layer (209) that extended across the trench that contained fragments of worked limestone, tile, 17th-18th century bottle glass and pottery. This supported a 0.22m thick, cleaner and more compact chalk rubble (208), possibly an attempt to level off the underlying rubble. This was overlaid by a further 0.22m thick dump of rubble (207) that contained predominately broken brick and tile and much 17th - 18th century pottery. This supported a 0.26m thick deposit of clean but loose mid-light greyish brown sandy silt containing 19th century pottery (206), probably a further episode of deliberate dumping rather than accumulation.

3.1.15 Above (206) was a 0.04m thick spread of yellowish mortar (212) that seemed to represent the final episode of levelling in order to form a level surface. This supported a gravel path (203) located on the western side of the trench and was abutted to its north by a 0.18m thick accumulation of mid grey-brown sandy silt (211). Cutting into 211 was a shallow brick pad (204) that may have supported a gatepost or similar feature.

3.1.16 The latest levels of the trench comprised top-soils (200 and 201).

Trench 3 (Fig. 4)

3.1.17 Trench 3, measuring 8.8m x 2m, was located towards the north of the site in an open area currently laid to lawn. At its eastern end a 2m length of trench was fully excavated to geologically derived deposits. Near to its west end, a 1.9m length was excavated to the top of rubble layer (319). Between the two sondages (a length of 3.5m), excavations ceased close to the base of silts (307/308), the maximum depth safely possible without shoring.

3.1.18 At a depth of 2.7m b.g.l (30.56m OD), 'natural' river gravel (324) was reached, its surface sloping slightly away to the west. It comprised a firm-hard orange sand and rounded-flint gravel. Above it lay a loose layer of sand and grit (323), 0.08m thick that probably formed a sand bar - a submerged ridge of alluvial sand in shallow water. This was in turn overlaid by (322), a firm mid green-grey organic silt-sand, 0.12m thick that contained 25% flint nodules, and a complete top pulley rim flagon and Samian datable to AD150-200. This deposit was reached within the eastern slot only at 30.73m OD.

3.1.19 Above was a compact layer of flint and chalk rubble (319), 0.20m thick that contained late 2nd - 4th century pottery, fragments of Roman ceramic building material and several Roman coins of late 3rd century date. The top of this deposit was reached at a depth of 2.2m b.g.l (31.03m OD) within the eastern sondage and at 30.97m OD within the western sondage where it remained unexcavated. This may represent deliberate dumping which appeared to have been compacted to form a surface. Driven through (319) into the underlying rubble were two tapered timber posts (320 and 321) 0.12m and 0.14m in diameter.

3.1.20 Above the previous sequence were two organic silt deposits (309 and 310), see section 4.2.9. These were 0.52m thick within the eastern sondage and thinned out to 0.32m within the western sondage. Its upper horizon was encountered between

31.45m OD and 31.40m OD. The lower deposit (310), which was firm in compaction, was mid reddish-brown in colour and contained lenses of green-brown fine silt. It contained sherds of late Roman pottery, a single sherd of a ?14th-15th century glazed jug and a possible bone ice-skate or bucket handle. The upper peat (309), slightly thinner, was darker in colour, almost black, again firm in compaction but homogeneous in composition, and contained fragments of 2-3 baluster jugs (15th century?), a leather sole and a leather seam.

3.1.21 Contained within the lower deposit (310), close to the NE corner of the eastern sondage were a group (305) of 5 timber stakes (311, 313, 314, 315 and 317), with diameters in the range of 0.020-0.025m. A sixth timber (326) was located further west away from the group. The stakes ranging in length from 0.18-0.30m and with tapered points had been driven vertically into peat. Two further timbers (312 and 316) lay horizontally on the surface of the lower peat (310) in an approximate E-W orientation. One piece (312) was a possible lathe, the other tapered at each end. A preliminary interpretation of these timbers is that they may have formed part of a fish trap.

3.1.22 Above the peat was succession of fine silts, possibly of alluvial origin, that were present throughout the trench. Earliest (318), 0.15m thick, comprised a clean mid green-brown silt that contained slate fragments. Above was a mottled greyer silt (308), 0.44m thick, that contained 10% chalk fragments and 1% fragments of tile, slate and mortar patches, suggestive a episodes of dumping during its accumulation. This layer thinned out towards the west of the trench where it became levelled with 307, a clean light grey silt. The upper silt (306), 0.21-0.30m thick, overlying both 307 and 308, was a darker grey. The earliest contained fragments of 14th-14th century glazed jugs while the later silt contained fragments of wares dated to silts contained fragments of 14th - ?early 16th century pottery.

3.1.23 The surface of the latest silt (306) was uneven and had been levelled with thin spread of brick rubble (304) that supported an accumulation of dark grey topsoil (303), perhaps deliberately dumped. A further dump of brick rubble and mortar rubble (302) followed, possibly to aid drainage to the existing topsoil (300 and 300). These deposits contained pottery dated to the late 17th - early 18th centuries and later.

3.2 Finds Results

Roman pottery

by Edward Biddulph (OA)

3.2.1 A total of 147 sherds of Roman pottery was recovered from ten contexts. Coarse reduced wares, oxidised wares, fine wares and samian wares were encountered. Reduced wares included ubiquitous grey wares and black-burnished-types wares. The latter were available as cooking jar and dish types; a near-complete BB1-type jar with perforated base from context (319) was of particular interest. Other reduced wares included products of the Alice Holt industry, which supplied the region throughout the Roman period (cf Hawkes 1985, 69), and Hampshire grog-tempered ware, whose flanged dishes were deposited after c AD 280 (cf Fulford 1975a, 286-91). Oxidised wares from contexts (322) and (323) were probably of local origin and reached the site as flagons, among other forms. New Forest colour-coated ware was recovered from three contexts (205, 319 and 322). No forms were identified, but sherds were thin-walled and likely to have derived from beakers. These arrived during or after the late 3rd century (Fulford 1975b). Samian was reasonably common, being recovered

from six contexts, albeit as residual sherds. Wares from southern central and eastern Gaulish factories appear to have been represented and therefore span the later 1st to mid 3rd centuries AD. Forms included cup forms Drag. 27 and 33, dish form Drag. 31, platter Drag. 15/17 and decorated bowl Drag. 29.

3.2.2 Just three contexts dated to the Roman period. The latest pottery dated contexts (319) and (322) to AD 270 or later; a flagon rim from context (323) joined a handle from (322) and must be of identical date. The remaining pottery, though residual in medieval and post-medieval deposits, included material of 1st to late 3rd/4th century date, and points to activity occurring in the vicinity throughout the Roman period.

Post-Roman pottery

by John Cotter (OA)

3.2.3 The assemblage comprises a total of 273 sherds of medieval and post-medieval pottery out of a combined Roman and post-Roman total of 420 sherds weighing 8618g (Table 1).

Table 1: All pottery by context

Context	Spot-date	Sherds	Weight (g)	Comments
100	c1680-1725	6	150	Small bodysherd (bs) tin-glazed Nevers blue from highly dec moulded small ?cup/vase with white & blue painted dec. Verwood-type ware deep bowl/jar rin. Border ware. PMRE. Also 17-18C pipe stems
101	c1200-1250	22	362	Glazed ?early Laverstock jug rim & bss. 1x fine sandy ?London-type or ?S.Hants strip jug bs w diagonal red strips. 1x green-glazed pale grey flinty ?Newbury A/B. 2x msu fine sandy cpot bss. Mostly rims & bss from 2 oxidised flint-tempered (ug f) ?jars (or 1 poss a bowl) & 1 reduced ug f cpot rim (large, fresh, L12/E13C). 1x ug q (sandy + organic/calcite?) 11-12C jar rim. Non-pot incl frag early peg tile, 2x glazed flint-temp floor tile. Frags v thick unglz flint-temp ?floor tiles 25-28mm thick
102	c1475-1550	11	234	German Raeren stoneware mug bs. Rim local orange sandy jug (like Kent M10) w reduc greenish splash glz. Other med & LM jug bss. 13-14C jug strap handle. 1x 11-12C flinty ug f. Non pot. 1x corner medieval decorated floor tile 13-14C - red fabric with inlaid white slip fleur-de-lys. Deep keying under. (1sh, 180g)
103	c1775-1875/1900	11	342	Rim LPM5 Yelloware chamberpot w blue banding. Rest = 17-18C wares incl Surrey/Hants Border ware tripod pipkin base. Iron-mottled ?Border cup base. Verwood bs. 1x ug cq 11-12C. 1x ug c 9-12C. 17-E18C pipe stems and bottle glass in context
109	L18-19C	2	26	Also in context 1x bs white opaque glass - prob 19C (1sh, 6g) & 1x frag med glazed crested ridge tile - prob 13-16C (1 sh, 110g). Pot = miniature Creamware dish w moulded dec c1770-1800? 1x Border ware 17-E18C
110	17-E18C	1	20	Yellow Border skillet rim with short horizontal solid handle
116	c1475-1550	10	232	Incl Raeren stoneware mug base & 2x unglz Guys-type redwares - 1 v corrugated. Bss LM white/pink smooth ware - speckled green glz. 1-2 Msu?

Context	Spot-date	Sherds	Weight (g)	Comments
120	11-12C	1	78	Large tripod pitcher ware (tpw) sherd with complex rouletted dec & decayed glaze
122	9-12C	5	196	Prob 11-12C? 1 vessel, chalk & flint-tempered (ug c/f) jar bss, fresh joining sherds
201	c1850-1900	2	8	Staffs-type LPM14 whiteware jug rim w blue transfer print. Mod flowepot rim
205	19-E20C	3	106	Non Pot incl 1x mod bottle glass & mod iron nut & bolt. Pot incl 17-E18C Border pipkin rim. Raeren mug rim c1475-1550. 1x Roman New Forest CC c270+
206	c1830-1900	8	260	1x mod stoneware flagon handle. 17-18C wares inc Border, Verwood-type, tin-glazed ware. Large int glazed red earthenware jar with trace of cross-in-circle stamped dec, warped rim - poss local product/second
207	c1680-1725	60	1552	NB. JOINS WITH (208). Assorted 17-18C wares, coarse & fine. Incl ?Bristol tin-glazed (TG) punchbowl w 'chinaman among grasses' design c1680-1720. Scrap TG Nevers blue c1680-1710. TG drug jars. German stonewares incl Westerwald highly dec mug & jug bss & Frechen 'Bellarmine'. Border ware incl pipkin rim. Verwood incl large jar rim & poss early large ?flowerpot base w peripheral perforations Also Verw collared jar. Few bss local smooth white & pink wares 15-16C. 2x Roman incl ?BB1 'pie dish' & grog-temp jar rim
208	c1680-1725	5	234	NB. JOINS WITH (207). Rim Westerwald stoneware mug. Base white TG drug/ointment jar. Border ware incl large frag of chafing dish (plate-warmer) rim with handle & knob, tripod pipkin base
209	c1675-1750?	3	234	?Verwood collared rim bowl. 2x redware bss. Also 17-18C bottle glass
300	c1880-1940	6	344	Mod English stoneware hot water bottle & 19C blacking bottle. Residual wares incl Creamware, Westerwald, Border
301	c1680-1725/50	9	230	Large TG drug jar base w blue bands. White TG chamberpot handle.Westerwald mug or jug rim w combed dec. Border & Verwood. 2x local 15-16C v fine smooth pink wares w copper green glaze
303	c1650-1750	6	136	Black/brown glazed redware tankard etc. Border incl sieve bs. Brown int-glazed 15-16C dripping pan rim/spout. 1x 13C green-glz fine white scale jug bs - ?French or ?Laverstock
304	c1690-1730	5	88	Date on clay pipe bowl with pronounced spur & Dutch-style stem milling. Pot incl 17-E18C Border jar rim & ba. Raeren stoneware mug rim c1475-1550. 1x med jug bs
306	16-17C	21	270	1x prob mid 16C-17C bs glazed red eathenware. Mainly 15-E16C local glazed smooth pink wares incl tripod-footed ?jug base. 1x Surrey/Hants Cheam-type green-glazed jug bs. Residual wares: 3-4x tripod pitcher ware (tpw) - 11-12C incl rim & handle; large jar sherd fine sandy ware (ug q with sparse organic); 3x late Saxon chalk-tempered bss 9-12C (ug c); flint-tempered jar rim 9-12C (ug f); 4x Roman incl rim grog-tempered 'pie dish'

Context	Spot-date	Sherds	Weight (g)	Comments
307	13-14C+?	15	292	Mostly green-glazed/speckled jug bss in S.Hants redware but poss few LM smooth cream & pink fabrics MMS? Incl strip jugs. 1x Kingston 14C-style jug rim w rod handle. 3x msu. 2x resid ug c/f. 1x Roman Samian
308	14-15C?	21	446	NB. 1x ?intrusive 17-18C slipware dish (?Donyatt). Bulk med/late med. ?S. Hants buff-red fairly sandy ware baluster jug rim/neck. Other bss smooth orange-red jugs incl rim & rod handle, 1bs w notched strip. 2x LM-looking smooth cream ware incl bs w int & ext copper green glz & frilled jug base. 1x Roman Samian
309	14-E16C?	15	328	Poss 15C? Frags 2-3 baluster jugs w reduced metallic purplish-brown glaze, copper-green in places. Incl strip jug & incised lines. Poss local copies of Cheam-type. Incl green-glazed cream/pink smooth ware & ?late S. Hants red. 1x msu. 2x Roman - grog-temp & Samian
310	14-15C?	4	44	1x bs fine pale grey sandy (reduced whiteware?) jug lower wall with glaze specks, poss late med? Or msu-related? 3x Roman c270+. (worked bone ?ice-skate or ?bucket handle also in context)
318	14-15C?	31	372	Mostly green-glazed/speckled jug bss in smooth cream & pink fabrics MMS? Incl strip jugs & combed dec. Cheam influences? 4x msu
319	c270+	74	1272	Mainly Roman 2ndC but some later 270+ incl New Forest CC & later ?contamination (small sherds) incl 1x 17-18C bottle glass, 1x 13-15C glazed jug, 1x 9-12C Late Sax chalk-temp, 2x 9-12C flint-temp. Roman (larger sherds) incl near-complete BB1 copy jar w perforated base. Samian incl fresh Drag 29, 31 & 33 plus worn stamp 'BIGA./...' ?Drag 27small cup - Central Gaulish Lezoux c120-50 (P. Booth). Alice Holt. Mortarium rim etc (J. Timby)
322	c270+	51	494	1x small bs New Forest CC. Mainly c150-200 (Ed Biddulph). Samian incl S & C Gaulish Drag 24/5, 33, ?15/17 dish forms & 1x poss E Gaulish. Greywares incl BB1 jar copies 1-2 whitewares, fine & coarse. 1x flint-tempered ?Late Iron Age/early Roman
323	c150-200	12	268	Complete top pulley rim flagon (JOINS handle in 322). BB1 type sherds. S & C Gaulish Samian (Ed Biddulph)
TOTALS		**420**	**8618**	

3.2.4 Medieval and post-medieval pottery appears to occur in roughly equal proportions although the post-medieval sherds are generally larger and better preserved. Apart from the Roman pottery the earliest wares present on the site are handmade Late Saxon and early medieval local wares covering the period from the 9C through to the start of the 13C. These include chalk, flint, and sand-tempered wares. Most of these are residual in medieval or later contexts. The medieval pottery (13C to early 16C) comprises local unglazed sandy cooking pot fabrics and wheel-thrown glazed jugs, some with applied strip decoration. These are predominantly south Hampshire redwares together with a late medieval pale buff or pink ware, which may be a more local product. A few sherds of possible Laverstock (Wiltshire), Surrey-type and London-type glazed jugs have also been identified. In general the glazed medieval jugs are quite fragmentary. Late medieval imports include one or two salt-glazed Raeren stoneware drinking mugs from the Rhineland - a common import of the

period *c.* 1475-1550. Most of the post-medieval pottery occurs in just one or two contexts, probably rubbish dumps, and includes types closely datable to *c.* 1680-1725 or to 1750. The sherds are, in several cases, large and fresh. These include local and regional glazed coarsewares including (?local) glazed red earthenwares, Verwood-type ware (Hampshire/Dorset) and Surrey/Hampshire Border whiteware. Notable pieces include a redware storage jar rim with a trace of a cross-in circle (or square?) stamp on the shoulder. This may be a product of the Graffham kilns in West Sussex. The Border whitewares include a large portion of a chafing dish - a kind of portable stove or plate-warmer. The finewares in the assemblage include tin-glazed earthenwares from Bristol and probably London, among these drug or ointment jars, dishes, chamberpots and a punchbowl. Common German stoneware imports of the period include sherds of brown 'bellarmine' bottles in Frechen stoneware and mugs and jugs in highly decorated Westerwald stoneware. A few sherds of Staffordshire-type white earthenwares (late 18-19C) and English stoneware ink and hot water bottles complete the list of post-medieval wares.

Animal bone

by Lena Strid (OA)

Quantity of material and recording methodology

3.2.5 The animal bone assemblage consisted of 1605 fragments. The assessment consisted of an overview of the material on a context by context basis recorded in a *Microsoft Access* database. Context wide data such as number of fragments and overall weight of bone fragments, bone condition, fragment size, species present were described. More specific information such as butchering marks and pathologies were recorded as present or absent. The number of bones and mandibles that were possible to age, sex and/or measure were recorded.

3.2.6 A record of the assemblage can be found with the site archive.

Recovery

3.2.7 The animal bone was recovered through hand collection during excavation and from wet sieved bulk samples (processed using 500 μm residue mesh and 250 μm flot mesh). 51% of the assessed bones derive from hand-retrieved contexts, and 49% from sieved contexts. Most of the bones from the sieved contexts were rather small (5.4% of the total weight) and mainly unidentifiable to species. They were, however, a good source for fish bones.

Table 2: Number of hand retrieved and sieved animal bones

	Hand retrieved bones	**Sieved bones**	**Total**
Roman	393	420	813
Medieval	235	365	600
Post-medieval	187		187
Modern	5		5
Identifiable to species	318	86	404
Total fragment count	**820**	**785**	**1605**
Total weight (g)	*17518*	*1004*	*18522*

Methodology

3.2.8 The bones were identified to species using a comparative reference collection, as well as osteological books and articles. Sheep and goat were not identified to species at this stage, but rather classified as 'sheep/goat'. Ribs and vertebrae, with the exception for atlas and axis, were classified by size: 'large mammal' representing cattle, horse and deer, 'medium mammal' representing sheep/goat, pig and large dog, and 'small mammal' representing small dog, cat and hare.

3.2.9 The condition of the bone was graded using criteria stipulated by Lyman (1996). Grade 0 being very well preserved bone and grade 5 indicating that the bone had suffered such structural and attritional damage as to make it unrecognisable.

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

Preservation

3.2.11 The preservation level for the assemblage was quite good in most phases

Table 3: Preservation level of animal bone assemblage.

	N	0	1	2	3	4	5
Roman	4			100.0%			
Medieval	11			66.7%	33.3%		
Post-medieval	7			85.7%	14.3%		
Modern	2				100.0%		

Species

3.2.12 The assessed assemblage consisted of 820 fragments, of which 318 (38.8%) could be determined to species (see Table 3). The species present included cattle, sheep/goat, pig, horse, deer, roe deer, dog, cat, hare, fowl, goose, duck, partridge and human. Some indeterminable bird and fish bones were also found.

3.2.13 The four phases are dominated by the cattle, sheep/goat and pig. The small number of horse, dog, cat and wild mammals are to be considered normal. Of the birds, fowl dominate the assemblage, followed by goose and duck. The presence of a few human bones is not unusual.

Table 4: Identified animal bone species for all phases

x = present

Species	Roman	Medieval	Post-medieval	Modern
Cattle	x	x	x	
Sheep/goat	x	x	x	x
Pig	x	x	x	
Horse	x			
Deer		x		

Species	Roman	Medieval	Post-medieval	Modern
Roe deer	x		x	
Dog	x	x		
Cat	x			
Hare		x		
Rodents	x	x		
Fowl	x	x	x	
Goose		x	x	
Duck		x	x	
Indet. bird	x	x	x	
Fish	x	x		
Amphibians		x		
Human		x	x	
Medium mammal	x	x	x	
Large mammal	x	x	x	
Identifiable to species	150	106	60	2
Total fragment count	**813**	**600**	**187**	**5**
Total weight (g)	*11360*	*4206*	*2902*	*54*

Identified species/context for all phases of the AY234 assemblage. x = present.

Ageing, sexing and measuring data

3.2.14 Several bones provided useful information on ageing, sexing and biometrical data. These figures would not only give information on the age and sex profile of the herds, but also add to the subsequent discussion on animal husbandry strategies, trade, breeding, nutrition etc from the Roman period and onwards.

Table 5: Mandibles and bones providing data for ageing, sexing and measuring data

	Roman	Medieval	Post-medieval	Modern
Ageable mandibles	3	2		
Ageable bones	52	54	38	2
Sexable bones		6	3	
Measureable bones	46	55	24	2

Butchering marks

3.2.15 Bones with butchering marks were found in two Roman, five Medieval and four Post-medieval contexts. The long continuity of the site would make it possible to study any changes in butchering practices. Such changes have been suggested for Roman Portchester versus Saxon Hamvic (Bourdillon and Coy 1980:97) as well as between early Medieval and high Medieval Lincoln (O'Connor 1982:16).

Pathology

3.2.16 Pathological conditions were present in three medieval contexts. Despite the small frequency, an analysis of pathological conditions present in the assemblage will add to the general discussion on animal husbandry and utilisation of animals.

Worked bone

by Rose Grant (OA)

3.2.17 Two worked bone objects were recovered from excavations at Pilgrims School.

Table 6: Worked bone

Context No	SF No	Length (mm)	Description	Parallel
310		164	Cattle Metacarpal. At one end there is a highly polished cutaway. The other end has a similar cutaway. At this end the knuckles has been broken off through wear. The object is possibly a handle of some type.	
319	17	30	Bone pin. Point end of pin missing. The pin has a conical head with 3 transverse groves below. The shaft is cylindrical.	Crummy, 1983,p21 fig 18 no159.

Ceramic and stone building materials

by J Tibbles

Introduction and methodology

3.2.18 Examples of brick and tile (414 fragments) were recovered from 25 contexts with a total weight of 45995 gm. A further 10 fragments of stone weighing 316 gm within the assemblage was also provisionally examined. Assessment of the assemblage was based on a visual scan of all the retained material. Information regarding the dimensions, shape and fabric of the material was recorded and were possible, compared with existing regional brick and tile typologies.

3.2.19 It should be noted that the diversity of size and colour within brick and tile caused during the manufacturing process must be taken into consideration when comparing examples within collected assemblages and local typologies. The varying sizes and

colours can be attributed to the variation in the clays used, shrinkage during drying, firing within the kiln or clamp and the location of the brick/tile within the kiln. The dating of ceramic building material can be highly contentious due to its re-usable nature.

3.2.20 Bricks and tiles alone cannot provide a firm date because of their re-usable nature but it is possible to date types of brick and roof tile by their earliest occurrence within dated contexts. The identification of new brick or tile types would supplement the existing regional typology and there is potential for comparison with CBM assemblages from elsewhere in the region. The presence or absence of hip and ridge tile suggests a variety of roof forms.

3.2.21 The assemblage was examined using a x15 magnification lens were applicable to aid dating, though fabric analysis was not undertaken as was considered beyond the scope of this assessment. Information regarding the dimensions, shape and fabric (were applicable) was recorded and catalogued accordingly and a Munsell colour code has been incorporated where appropriate. The presence of the original surfaces was also taken into consideration to aid identification

3.2.22 Of the total assemblage, 50% of the ceramic fragments were of Romano-British forms and/or fabrics. The remainder comprised of ceramic building materials of medieval to modern date.

Assemblage Analysis

Table 7: Quantification of ceramic and stone building materials

	No of Fragments	Weight (gm)
Brick	55	15,225
Roof tile	132	13,365
Not identified	6	60
Romano-British material	212	14,913
Miscellaneous	9	2,432
Stone	10	316
Total	**424**	**46,311**

The Medieval/Post Medieval Assemblage

Bricks

3.2.23 Of the fifty-five fragments of brick within the assemblage recovered from 7 contexts) only one complete example (9 ½" x 4 ½" x 2") was recorded from dump (103). The remainder of the brick assemblage shows seven part bricks displaying width and thickness and twenty fragments displaying thickness only (28-65mm). Twenty-three fragments displayed no diagnostic traits and twenty fragments bore evidence of mortar. All the assemblage, with one exception from context (302) (19th century) appeared to be of medieval date of manufacture.

3.2.24 The majority of fragments (71%) were manufactured in fabric F1 the remainder in fabrics F2, F4, F8 and F9.

Flat roof tile

3.2.25 One hundred and nineteen fragments of flat roof tile were identified within the assemblage of which twenty-eight fragments could be classified into three site types (1, 2 & 3). The remaining fragments although diagnostic did not have sufficient diagnostic qualities to be classified other than flat roof tile (FRT). Diagnostic qualities included the varying methods of suspension, length, width and thickness. Six fragments (3 joining) displayed a width and thickness and two displayed suspension holes. The remaining tile thicknesses ranged between 10mm-22mm with the majority of the tiles displaying a 15mm-17mm range. Ten different fabrics were recorded (F1, F2, F3, F4, F5, F6, F7, F8, F10 & F12) of which F1 dominated the assemblage (46%).

3.2.26 A single fragment from (102) displayed burning and twenty-nine mortar stains/adhesions. Three fragments displayed mortar over surfaces and broken edges suggesting their use as course levelling material.

Site medieval flat roof tile typology

Type 1
Dimensions: L. ?mm x W. 157mm x Th. 12-22mm
Suspension: Two circular punched holes 11-18mm in diameter approximately 40mm apart.
Manufacture: Moulding sand and moulding lips evident.
Fabrics: F1, 2, 3, 4, 6, & 10

Type 2
Dimensions: L. ?mm x W. 157mm x Th. 12-22mm
Suspension: Single finger-pulled nib centrally placed with nail hole to right of nib.
Manufacture: Moulding sand and moulding lips evident.
Fabrics: F2 & 8

Type 3
Dimensions: L. ?mm x W. 158mm x Th. 12-16mm
Suspension: Two square punched holes 12-13mm wide and 40mm apart.
Manufacture: Moulding sand and moulding lips evident.
Fabrics: F1, 4, & 10

Ridge tiles

3.2.27 Thirteen fragments of ridge tile were provisionally identified within the assemblage from 3 contexts of which none were complete. The general thickness ranged between

3.2.28 18mm-25mm with a mean thickness of 22mm.

3.2.29 Four fragments from contexts (101), (150) and (318) displayed glazes with a colour range of dark olive (5Y/3/2) to a strong brown (5Y/4/4). A further fragment of possible ridge tile displaying a dark yellow brown (10YR/4/6) was recorded within context (318). Evidence of mortar was recorded on seven fragments from context (101). The fragment from context (150) was found to be heavily abraded.

3.2.30 Approximately 62% of the ridge tile were of F6 fabric the remaining fragments F1, F2, F3 and F7. (See appendix I)

Floor tiles

3.2.31 Two fragments of floor tile were recorded from contexts (101) and (102). The fragment from (101) showed a plain yellowish brown (10YR/5/8) glaze. The fragment from (102) was 25mm thick with 60° bevelled edges with residual mortar. Upper surface showed white elliptical pattern sealed by a yellowish red (5YR/4/6) glaze.

Miscellaneous Medieval Material

3.2.32 From within contexts (101), (102) and (304) four fragments of Welsh roofing slate were recorded varying in thickness between 4mm-10mm. The fragment from (304) still retained its suspension hole 12mm x 10mm. One fragment displayed residual mortar stains. Although the blue-slate trade of western England and Wales was thriving in the medieval period (Jope & Dunning 1954) the material examined appears to be of a post-medieval character.

3.2.33 A small fragment (15g) of material from context (309) has a pottery appearance but within a ceramic building material fabric (F1) and may represent a fragment of roof finial.

3.2.34 A single non-diagnostic fragment of baked clay displaying a single flat surface was recorded within flood silts (308).

3.2.35 Single fragment of lime mortar (13g) was recovered from flood silts (307). Dark white fabric with frequent black inclusions <1mm. Reactive to diluted hydrochloric acid. Probable medieval in date.

3.2.36 Fragment of sandstone (?) 11mm thick displaying burning. Context (304).

3.2.37 Two fragments of brown/green glazed pottery. Context (322).

Non-identifiable material

3.2.38 Six fragments of unidentifiable ceramic building material were recorded from within context (319). Fabric was F1.

The Medieval/Post Medieval Assemblage Discussion

3.2.39 The diversity of brick/tile colour and size caused during manufacture must be allowed for when making comparisons with typologies. The brick assemblage shows typical evidence of hand-made and machine-made brick manufacture utilising alluvial clays. At least four fabrics (F1, F2, F4 & F10) have been provisionally identified in both medieval and Roman material.

3.2.40 The majority of the brick assemblage was of a medieval date with two post-medieval/modern exceptions from rubble dump (103) and topsoil (300). The former displaying the residual elements of manufacturers stamp. The example from topsoil (300) was identified as a machine-made firebrick suggesting a late 19th-20th century date.

3.2.41 Only one complete brick was recorded from context (103) with dimensions of 240mm x 115mm x 50mm (9½"x 4 ½"x 2"), its size and general characteristics suggest a date

of c. 15th century and would be residual within this context. The part bricks were classified adopting a best-fit policy based on surviving dimensions, fabrics and general characteristics. The remainder of the brick assemblage shows part bricks ranging in width between 102--115mm (4"-4 ½") and thickness of 50-65mm (2-2 ½"). Based upon the surviving diagnostic traits all appear to be of a medieval date.

3.2.42 Ten fragments of medieval brick were recorded within the RB rubble dump (319) and although all display thickness only and an F1 fabric similar to that of some RB material, they have been provisionally identified as medieval. (Medieval roof tile was also recorded within this context)

3.2.43 From within contexts (103), (304) and (319) the upper surfaces of some fragments were found to display a relatively smooth appearance created from their incorporation within an internal floor or threshold. Also from (304) non-diagnostic fragment showed upper surface wear and may represent a quarry tile. Other fragments from contexts (102) and (318) were of abraded appearance.

3.2.44 A possible tilers tally mark (Type 2) consisting of two parallel indentations within the bricks surface was recorded within context (102). Examples of this type are known from 14th-15th century contexts in Yorkshire (Tibbles (a) forthcoming).

3.2.45 The majority of the medieval building material assemblage (70%) is of ceramic roofing tile. The range recorded showed two different types of roof tile: flat and ridge. The flat roof tile could be broken down into three further site types 1, 2 and 3 (See site typology). Peg tiles with one or two suspension holes had become almost universal in the south east of England by the start of the 14th century (Drury 1981). However, Lewis (1987) suggests that nibbed tiles were in use by the 12th century and pegtiles by the mid 13th century. Ridge tiles including glazed ridge tiles have been recorded from late 12th century deposits at Beverley (Tibbles (b) forthcoming) and by the early 13th century in Southampton (Dunning 1975)

3.2.46 Fifteen fragments of medieval flat roof tile were provisionally identified and one fragment positively identified of Type 1 medieval flat roof tile was made suggesting intrusion or contamination within flood silts (318). A further 15 medieval fragments were also provisionally identified from dump (319).

3.2.47 Provisional identification of the floor tile fragments from layers (101) and (102) would suggest a 14th-15th century date although a more precise origin and date may be obtained by a more detailed analysis.

The Romano-British Material

3.2.48 An assemblage of two hundred and twelve fragments of Romano-British ceramic building material, with a combined weight of 14913g was recovered from seven contexts. Fabrics varied between soft abraded material to hard fabric and were of a colour range of Reddish Yellow (5YR/6/8) to light brown (7.5YR/6/3).

3.2.49 Four forms were identified, brick, roof tile, hypocaust material and tesserae. Of the assemblage, 25% was not identifiable by form, however the majority of the fragments were of Romano-British fabric.

Brick

3.2.50 An assemblage of thirty-five fragments of bricks, with a total weight of 8143gm was recovered from four contexts. Two forms were provisionally identified, bessales (27 fragments) and pedales (8 fragments). Thickness ranges of >25mm to 38mm and 40mm to 50mm respectively were recorded. However, identification is heavily biased towards thickness and must be treated with caution.

3.2.51 Within the assemblage one fragment of bessalis/pedalis from (310) and five fragments from dump (319) were heavily abraded, possibly water action. Also three fragments from (310) and seven from (319) displayed mortar adhesions.

Roof Tile

3.2.52 A total of sixty-eight fragments, with a combined weight 4781gm were recovered from five contexts. Three types were identified, tegulae, imbrices and ridge. However, the similarities between imbrix and ridge thickness on small fragments may affect identification and therefore quantities must be treat with caution.

Tegulae

3.2.53 Thirty-five fragments from 5 contexts were identified within the assemblage, of which seven were diagnostic. This material displayed means of suspensions in the form of finger smoothed or knife-trimmed flanges, upper and/or lower cut-aways.

3.2.54 Six part flanges were identified, maximum flange height 33mm. Only one fragment bore knife-trimmed lower cut-away of which was unidentifiable by form due to breakage in antiquity. Six fragments were found to be underfired and a further three fragments heavily abraded. A single fragment from (319) displayed a smooth worn upper surface suggesting it had been re-used as a floor or yard surface. Thickness ranged between 15mm -26mm.

Imbrices

3.2.55 Twenty-one fragments of imbrices were identified from 5 contexts within the assemblage. This material had a combined weight of 1005gm and was recovered from five contexts. The tiles had a thickness range of >12mm to 20mm.

Box-Flue Tiles (Tubulus)

3.2.56 Seventeen fragments of box-flue tiles, with a combined weight of 980 gm, were recovered from five contexts. A thickness range of 12mm to 25mm was recorded. Heat discoloration was noted on some internal surfaces, probably from original use. One fragment from context (310) was abraded.

3.2.57 Of the assemblage, ten fragments displayed diagnostic features in the form of characteristic combing/scoring, the keying element for the adhesion of plaster or mortar. Where possible the number of tines per comb recorded ranged from 4 to 6.

Unidentifiable by Form

3.2.58 Five contexts produced an assemblage of fifty-six fragments of ceramic building material, unidentifiable by form. This material had a total weight of 2528gm

3.2.59 Although forty-two fragments were non-diagnostic where complete dimensions allowed, a thickness range of 14mm to 42mm was recorded, indicating the identification of some fragments as tiles and bricks respectively. The assemblage included abraded material and underfired examples.

The Romano-British Material Discussion

3.2.60 The majority of the assemblage consisted of the range of Romano-British forms that would have been used in the various aspects of building construction, including hypocaust materials. Although possible underfired material and seconds were noted within the assemblage, overall, the material appeared to represent quality materials.

3.2.61 Secondary use was also evident in the form of smooth original and broken surfaces. This material may have been possibly used within floors, hard standing or metalled surfaces.

3.2.62 The similarities in the material from the medieval wall (102), organic silts (309), (310) and the earlier Roman deposits tend to suggest dumping of the material from the same site. Alternately the Roman material may have been re-used and incorporated with medieval structures or deposits prior to final deposition.

3.2.63 The diverse range of forms suggests a 'high status' building(s) with al least one hypocaust in operation within the vicinity of the evaluation. The presence of decorated wall plaster and tesserae add to this premise. It is likely that the assemblage represents residual elements of this/these building(s).

Romano-British Individual Finds of Intrinsic Interest

Context 319	Roman rubble dump	10g
	Fragment of wall plaster Red (7.5R/5/8) render/paint	
Context 319	Roman rubble dump	40g
	Fragment of tile disc 15mm thick. Fabric F16	

The Objects/Artefacts

3.2.64 Two limestone? Tesserae were noted from the Roman rubble dump (319) and a further tesserae from the sand bar (323). Thickness' were 22mm and 15mm respectively.

3.2.65 A further thirty-four tesserae were recorded from four contexts (309, 310, 319, 322) manufactured from tile. Remnants of white mortar were recorded on the lower 'bed' surface and edges either from original use or within floor. The tesserae had originated from within a floor; the upper surface and edges were smooth and rounded, footworn.

Architectural stone

by Julian Munby (OA)

3.2.66 Four architectural stone items were recovered. They all came from context (209), a 0.53m thick rubble make-up/dump layer that also contained 17th-18th century pottery and glass

3.2.67 All pieces are of fine limestone, with well-finished faces showing tool marks; all are likely to be medieval.

Table 8: Architectural stone

Small Find Number	Context No.	Description
1	209	Rim of part-octagon with external moulding and internal curve. Probably part of font or similar stone basin. Date 14th/15th-century.
2	209	Block of ashlar with chamfered edge and rebate. Possibly window mullion or door/cupboard jamb.
3	209	Block of ashlar with chamfered edge. Door jamb or possibly corbel table.
4	209	Block of ashlar with chamfered edge. Door jamb or possibly corbel table.

Metalwork

by Leigh Allen and Paul Booth (OA)

3.2.68 A total of 159 metal objects were recovered from the excavation at the site of Pilgrims School, Winchester. The assemblage comprises 7 copper alloy objects (including 4 coins) and 152 iron objects (including 107 nails and 39 hobnails). The metal work assemblage is in reasonable condition although many of the iron objects are covered with corrosion products. Material recovered from waterlogged contexts (319) and (322) is much better preserved and easily identifiable. The assemblage has not been x-rayed at this stage, but it is recommended that this be carried out before the full report stage in order to check the preliminary identifications made in this assessment report and for archive purposes. The majority of the assemblage comprises nails recovered from rubble dumps and make up layers of both Roman and Post Roman date. Other identifiable objects include 4 Roman coins, a horseshoe arm and two structural iron objects; a hasp and a wall hook.

Table 9: Metal objects

Context	SF No	Object	Material	Pottery spot date	Description
100	-	Nail	Iron	1680-1725	
103	-	Nail	Iron	1775-1875/19	
103	-	Horseshoe	Iron	1775-1875/19	Curved fragment from the arm of a horseshoe
103	-	Wall hook	Iron	1775-1875/19	
120	-	Nails (x2)	Iron	11-12C	

Context	SF No	Object	Material	Pottery spot date	Description
205	-	Bolt	Iron	19-20C	Large bolt with a hexagonal head and a thick circular section shank
206	-	Nails (x2)	Iron	-	
207	-	Nail	Iron	1680-1725	
208	-	Nails (x3)	Iron	1675-1725	
209	-	Nails (x3)	Iron	1675-1750	
301	-	Fitting	Iron	1680-1725/50	
304	-	Nails (x2)	Iron	1690-1730	
306	-	Nail (x4)	Iron	16-17C	
306	-	Hasp	Iron	16-17C	An incomplete figure of eight shaped hasp
307	-	Nails (x6)	Iron	13-14C	
308	-	Nails (x4)	Iron	14-15C	
318	-	Nails (x3)	Iron	-	
318	-	Object	Iron	-	Very corroded object requires x-ray for identification
319	-	Nail (x7)	Iron	RB	
319	-	Hobnails (x21)	Iron	RB	15 small dome headed hobnails with rectangular section shanks
319	-	Nail shanks (x17)	Iron	RB	
319	-	Nail (x5)	Iron	RB	
319	-	Hobnail	Iron	RB	Dome headed hobnail
319	-	Sheet	Copper alloy	RB	An irregularly shaped fragment of sheet
319	-	Strip	Copper alloy	RB	A thin strip of copper alloy (looks like an off cut)
319	19	Nail	Iron	RB	
319	16	Nail	Iron	RB	
319	9	Nail	Iron	RB	
319	-	Nails (x17)	Iron	RB	
319	10	Coin	Copper alloy	RB	
319	12	Coin	Copper alloy	RB	
319	15	Coin	Copper alloy	RB	
319	20	Coin	Copper alloy	RB	
322	-	Nail (x3)	Iron	RB	
322	-	Nail shanks (x10)	Iron	RB	

Context	SF No	Object	Material	Pottery spot date	Description
322	-	Hobnails (x17)	Iron	RB	17 small dome headed hobnails with rectangular section shanks
322	-	Nails (x13)	Iron	RB	
322	-	Misc	Copper alloy	RB	A solid amorphous lump of melted copper

Copper alloy objects

3.2.69 Four coins were recovered in the evaluation, all from context (319). All are of late 3rd century date and in moderate to good condition.

SF 10. IMP C TETRICUS P F AUG. Rev, PA[X AUG, Pax left. Irregular. AD 270-273 or later.

SF 12.] TETRICUS [. Rev, standing figure. Irregular. AD 270-273 or later.

SF 15. IMP C CARAUSIUS AUG. Rev, MO]NET AUG, Moneta left. AD 286-293.

SF 20.] C CLAUDIUS [. Rev, ?MARTI [, Mars left. AD 268-270.

3.2.70 The issues of Claudius II and Carausius appear to be regular, though on the latter coin the dies are quite imperfectly located on the large flan. The two certainly irregular coins could date as late as c AD 295.

3.2.71 The remaining 3 copper alloy objects all recovered from Roman contexts comprise a miscellaneous fragment of sheet, a thin strip that could have been cut/trimmed from a larger sheet and an amorphous lump of melted copper possibly waste from copper working.

Iron objects

3.2.72 A total of 106 nails were recovered from the excavation 75 of these were from Roman waterlogged contexts (319) and (322). Complete examples conform to Manning Type 1B, with a square-sectioned tapering shank and a circular head (Manning 1985, 132-137, fig 32, No.1b) and is the most common form of Roman nail. A total of 39 hobnails were also recovered from Roman contexts they have domed heads and square sectioned tapering shanks they range in length from 10-12mm. The Post Roman objects comprise 32 nails, less well preserved than the Roman examples but many with rectangular/square slightly domed head, and in general more robust than the earlier type. The wall hook from context (103) has a rectangular section tang for inserting into timber or masonry and a hook that separates from the shank before the end, a type that does not occur before the 13th century Goodall 1990, 328). The horseshoe arm from the same context has a slender web, plain outline, but no holes are visible through the corrosion. A fragment from a figure of eight shaped hasp was recovered from context (306).

Leather

by Quita Mould

Methodology

3.2.73 The leather was wet and washed when examined and recorded. It is currently packed in double self-sealing polythene bags in an air-tight plastic storer OA 1026. A basic record of the leather for archive is provided in appendix 1 and a summary is provided below.

3.2.74 Leather species were identified by hair follicle pattern using low powered magnification. Where the grain surface of the leather was heavily worn identification was not always possible. Shoe soles and repair pieces are presumed to be of cattle hide unless stated otherwise. The distinction between immature (calfskin) and mature cattle hides is not always easy to determine and the term bovine leather has been used when in doubt.

Summary

3.2.75 Leather was recovered from three contexts (309, 319, 322) in Trench 3. At least two shoe of nailed construction and a shoe of one-piece construction along with a very small amount of waste leather were recovered from Roman deposits (319, 322). Shoe parts of medieval date were found in a deposit of organic silts (309) tentatively dated to the 14th-early 16th century.

Roman c. AD 270+

3.2.76 A piece of secondary waste cattle hide (SF21) and part of the bottom unit of a shoe of nailed construction (SF22) were found in organic silts (322) along with coarse pottery and Samian datable to AD150-200. The nailed shoe (SF22), of adult size, had nailing of van Driel-Murray type 3A (2001, fig 21) and type 2 constructional thonging. Highly fragmentary remains of a shoe of one-piece construction (SF11 part, SF 00 part), the bottom unit of a shoe of nailed construction (SF 13) and primary waste leather were found in a layer of flint and chalk rubble (319) lying directly above organic silts (322). The primary waste included three hide edges of bovine leather.

Medieval

3.2.77 A fragment of seam from a turnshoe sole, a large clump repair piece and a length of rand were found in the upper layer of peat along with a fragment of baluster jug. These shoe parts are of medieval date supporting the ceramic evidence.

Basic record of leather recovered

Context (309) Medieval turnshoe parts
SF 7

- large clump repair piece, worn away down the right side, with tunnel stitching on flesh side along the surviving left edge. Adult size. Length 120, width 79mm.
- Curving piece with edge/flesh seam, stitch length 6mm, broken from the seat of a turnshoe sole. Length 68, width 17mm

SF 8

- length of rand with edge/flesh seam, stitch length 6-7mm. Length 140, width 8mm

Context (319) Roman shoe parts and waste leather
SF 11

- Compacted fragment with all edges torn, no grain pattern visible 68x55x1mm
- Delaminated and compacted fragment with a grain/flesh seam, stitch length 5mm along one edge, other edges torn
- Folded fragment with a cut sides, torn into two pieces 62x15(folded)x1mm bovine leather

SF 13

- Lower tread and waist area from a bottom unit of shoe of nailed construction comprising an insole and middle lamina joined with constructional thonging type 2. Fragment of constructional thong is present 5mm wide. Holes from widely-spaced nailing present, no hobnails present. Length 95mm, width 63mm. Insole worn calfskin. Also small fragments broken from the bottom unit components

In separate bag

- Fragment with grain/flesh seam and small area of second seam at right angles. The fragment is curved and likely to be the seat area of a one-piece shoe. The grain/flesh shoe is similar to that in SF11. Height 58mm, width 46mm. Leather delaminated 1mm thick.
- Fragment of compacted leather with an awl made hole present. 54x47x1.5mm
- Hide edge cattle hide 72x60x4.5mm
- Hide edge bovine 87x40x1mm
- Hide edge bovine 141x35x2mm
- Six fragments with cut and torn edges
- Nine fragments with all edges torn including one with a folded edge as seen in SF11

Context (322) Roman shoe parts and waste leather
SF 21

- elliptical piece of secondary waste with all edges cut 136x27x5mm cattle hide

SF 22

- Waist and lower tread area of bottom unit of shoe of nailed construction comprising an insole and middle joined by constructional thonging. A fragment of thong is present 5mm wide. No hobnails present but holes from a single line on one side and a double row along the other with infilling at the waist, van Driel-Murray type 3A. Impression from upper lasting margin overlaps the sides of the middle layer. Insole cattle hide 3.5mm thick. Length 102mm, width 76mm

Slag

by Lynne Keys

Table 10: Slag quantification

context	slag	wt. (g)	len. (mm)	br. (mm)	dep. (mm)	comment
116	smithing hearth bottom	392	110	70	40	
205	glass-making slag?	6				
305	run slag	26				magnetic
305	undiagnostic	214				
318	smithing	204	104	70	50	

context	slag	wt. (g)	len. (mm)	br. (mm)	dep. (mm)	comment
	hearth bottom					
318	undiagnostic	90				
319	undiagnostic	230				
207	run slag	30				
207	undiagnostic	70				

3.2.78 The only diagnostic slag were the two smithing hearth bottoms. The run slag could be produced by either smithing or smelting. The undiagnostic iron slag also could not be assigned to smelting or smithing. The slag described as possibly from glass-making was a deep black glass-like run of a type frequently encountered in glass-making (rather than glass-working) assemblages; it could however have been produced by some activity using silica, very high temperatures, and possibly a fuel like coal.

Waterlogged timbers and wooden small finds

by Steven J Allen

Introduction

3.2.79 Thirty pieces of waterlogged wood were delivered to the Wet Wood Laboratory on 20th September 2005 for assessment. The assemblage includes some very interesting pieces of timber and two 'small finds'.

Aims and Objectives

3.2.80 This report aims to meet the requirements of MAP2, Phase 3, Assessment of Potential for Analysis, (English Heritage, 1991). The work carried out has been the cleaning and examination of the objects submitted and an assessment of their condition. An evaluation of the potential for further investigation is included, with recommendations and costs for long term stabilisation.

Condition

3.2.81 Each piece of wood has been preserved through burial in a waterlogged anoxic environment and it appears that these conditions were maintained in all contexts in which the material survived up to the time of excavation. Minimal recent surface damage was present suggesting what damage is present was the result of actions before or during burial. Several of the larger boards had fragmented as in their current condition they are unable to support their own weight. Some timbers had suffered slightly from being at the very margin of the local water table where those parts at or above the water table had been eroded and rotted. None the less, overall the wood was exceptionally well preserved with many pieces retaining crisp tool signature marks.

Listing

3.2.82 All species identifications follow Schweingruber (1982)

Table 11: Wooden structural timbers

ID	Comment	Species identification
122 (I)	Radially faced board. Edges hewn to create slightly concave plan. Remains of one through hole in face at each corner. Some minor surface damage. 317 l, 125 w, 10 th.	*Quercus spp.*
122 (ii)	Radially faced board. One complete and one partial though hole at the two surviving original corners. Badly fragmented and incomplete -in eight refitting fragments. 220 l, 121 w, 10 th.	*Quercus spp.*
122 (iii)	Section of boxed heart stake point. Four hewn facets with good axe signatures cut to create sub rectangular cross section tip. End of tip missing. Some longitudinal shrinkage cracks. 281 l, 72 w, 54 th.	*Alnus viridis DC*
122 (iv)	Offcut from radially faced heartwood. Abraded surfaces. 348 l, 51 w, 26 th.	*Quercus spp.*
122 (v)	Offcut from radially faced heartwood. Abraded surfaces. 298 l, 47 w, 35 th.	*Quercus spp.*
122 (vi)	Offcut from radially faced heartwood. Abraded surfaces. 218 l, 54 w, 25 th.	*Quercus spp.*
122 (vii)	Offcut from radially faced heartwood. Abraded surfaces. 154 l, 33 w, 30 th.	*Quercus spp.*
124	Radially faced board. Both edges hewn to create point at one end. Other end eroded. Faces hewn with good axe signature (>120mm w) preservation. Sapwood present on one edge. One detached and refitting fragment near knot on other edge. 877 l, 299 w, 14 th.	*Quercus spp.*
125	Tangentially faced board. One end and both faces hewn, with good axe signature preservation. .Other end eroded. Badly fragmented and incomplete –in eight refitting fragments. 832 l, 407 w, 12 th.	*Quercus spp.*
126	Radially faced board. One end hewn roughly square, other end eroded. Axe hewing marks on face. Single through nail hole towards one edge. In three refitting sections. 837 l, 258 w, 16 th. Hole 08 dia.	*Quercus spp.*
130	Radially faced board. One end hewn roughly square, other end eroded. Good axe signature (c. 140w) preservation. Badly fragmented and incomplete -in five refitting sections. 686 l, 224 w, 14 th.	*Quercus spp.*
131	Radially faced board. One end bevelled with good axe signature preservation. Other end broken. Single through hole in face towards bevelled end. 306 l, 109 w, 14 th.	*Quercus spp.*
132	Radially faced board. Faces hewn with good axe signature (>180 w) preservation. One end hewn roughly square, other end eroded. Sapwood on one edge. In two refitting sections. 826 l, 276 w, 20 th.	*Quercus spp.*
133	Radially faced board. Both edges hewn to create tip at one end. Other end slightly eroded. Hewing marks on faces with good axe signature (>115 w) preservation. Badly fragmented –in eight refitting fragments. 947 l, 295 w, 15 th.	*Quercus spp.*

ID	Comment	Species identification
134	Radially faced board. One end hewn roughly square, other end eroded. Hewing marks on faces with good axe signature preservation. Sapwood on one edge. Sapwood on one edge. Very fragmented and incomplete –in six refitting fragments. 734 l, 274 w, 15 th.	*Quercus spp.*
135	Radially faced board. Both edges hewn to create point at one end. Faces hewn with good axe signature (c. 238 w) preservation. Other end eroded. Sapwood on one edge. Partially fragmented -in five refitting sections. 809 l, 299 w, 16 th.	*Quercus spp.*
146	Radially faced stave. Both edges hewn to create sub rectangular cross section tip. Sapwood on one edge. Surfaces abraded, slight excavation damage to surface. Tip in two refitting sections, some parts missing. 647 l, 106 w, 25 th.	*Quercus spp.*
150 (I)	Radially faced stake point cut entirely from sapwood. One edge and both faces hewn to create sub rectangular cross section tip. Abraded surfaces, some ancient woodworm damage. In three refitting sections. 168 l, 31 w, 25 th.	*Quercus spp.*
150 (ii)	Offcut from radially faced board. Abraded surfaces, no working marks. 44 l, 61 w, 19 th.	*Quercus spp.*
150 (iii)	Offcut from radially faced timber. Sub rectangular cross section, no working marks. 163 l, 82 w, 40 th.	*Quercus spp.*
311	Roundwood stake point, bark present. Single hewn facet cut to create chisel tip. In three refitting sections, end of tip missing. 264 l, 24 dia.	*Corylus avellana L.* 5 annual rings, Summer cut.
312	Roundwood stake point, bark present. Single hewn facet cut to create chisel tip. In two refitting sections. 292 l, 26 dia.	*Corylus avellana L.* 5 annual rings, Spring cut.
313	Roundwood stake point, bark present. Single hewn facet cut to create chisel tip. In three refitting sections. 227 l, 21 dia.	*Corylus avellana L.* 8 annual rings, Winter cut.
314	Roundwood stake point, bark present. Single hewn facet cut to create chisel tip. 184 l, 25 dia.	*Corylus avellana L.* 7 annual rings, Winter cut.
315	Roundwood stake point, bark present. Single hewn facet cut to create chisel tip. 321 l, 23 dia.	*Corylus avellana L.* 8 annual rings, Winter cut.
316	Roundwood stake point, bark present. Single hewn facet cut to create chisel tip. 139 l, 16 dia.	*Corylus avellana L.* 5 annual rings, Winter cut.

ID	Comment	Species identification
317	Roundwood stake point, bark present. Single hewn facet cut to create chisel tip. In three refitting sections. 362 l, 20 dia.	*Corylus avellana L.* 5 annual rings, early Spring cut.
320	Boxed heart post section. Faint hewing marks on faces and edges. Some damage to lower end. Upper end eroded with very sharp division between eroded and uneroded wood. Abraded surfaces. 637 l, 120 w, 85 th.	*Quercus spp.*
321	Boxed heart post section. Both faces and both edges hewn to create taper towards lower end which terminates in a blunt sub rectangular cross section tip. Sapwood present on one face. Abraded surfaces. 551 l, 140 w, 95 th.	*Quercus spp.*
326	Roundwood stake point, bark present. Five hewn facets cut to create sub hexagonal cross section tip with axe signatures present. Tip detached but refitting. 224 l, 38 dia.	*Corylus avellana L.* 11 annual rings, Spring cut

Table 12: Wooden small finds

ID	Comment	Species identification
319, SF 23	Radially faced staff terminal. One end broken and missing, other end shaped o a regular cone with prominent shoulder. Much surface damage. 97 l, 29 dia.	*Acer campestre L.*
319, SF 24	Box quartered peg. Sub rectangular cross section with even taper on all four faces/edges towards tip. Tip finished with single hewn facet cut at steep angle. 86 l, 15 w, 12 th.	*Quercus spp.*

Acer campestre L. Field Maple
Alnus viridis DC.- Green Alder.
Corylus avellana L. Hazel
Quercus spp.- Oak. Sub species not determinable

Discussion

3.2.83 What at a first reading appeared to be a fairly unremarkable assemblage of timbers has proved to be of very great interest once cleaned and examined. The preservation of the worked surfaces of the medieval planks, such as those on timbers (133) and (135), is exceptional. The crispness of the tool signatures and the lack of any woodworm damage to the sapwood edges indicates that these timbers were placed in their burial context immediately after being worked and have not subsequently been moved until the date of the excavation. With good tool signature preservation it ought to be possible to compare signatures on different boards and work out whether they were cut with the same tool, or whether several tools were used in their fabrication.

3.2.84 These same boards also have good dendrochronological potential. They are wide, radially faced ,with sapwood on one edge and consequently ought to be able to provide an estimated felling date for the tree(s) they were cut from. The condition of

the boards indicates they were placed in the ground very shortly after felling and have not been reused. Thus the date of the boards should approximate the date of the feature of which they formed a part. One further possibility is that, given the straightness of their grain and their width, these boards may not be English in origin.

3.2.85 The condition of the wood provides an indication of the long term height of the local water table which may be of interest for studies of the local topography and drainage patterns.

3.2.86 Finally the two small finds are worth retaining especially if, as appears from the notes supplied, they are from a Roman context. The shaft terminal is an example of the wood surviving without the metal to which it was joined. Usually the metal component is recovered and the wood survives only as mineral preserved organic. The peg may well be another example of a type used in roofing, to fasten slates or tiles in place, rather than deriving from a joint.

Glass

by Dr Hugh Willmott

Introduction

3.2.87 A small assemblage of glass from the Pilgrims School, consisting of 66 fragments from a number of vessels or windows, was submitted for assessment (summarised below). All is post-medieval in date and relatively stable, requiring no further specialist conservation or treatment.

The Assemblage

3.2.88 With the exception of three, possibly intrusive, fragments from contexts (205), and (206) the assemblage dates entirely to the late 17th or early 18th centuries. These later fragments are from two press-moulded bottles and a single window. The earlier glass consists almost entirely of early wine bottles, and although these have not been accurately quantified, there are reasonable numbers of early onion and mallet types present. The remaining glass comes either from windows and there is a single fragment of early mirror or plate glass from (306).

Table 13: Summary of the glass

Context	No Frags	Description	Date
105	1	Wine bottle	Late 17th-early 18th century
109	1	Wine bottle	Late 17th-early 18th century
205	1	Press-moulded bottle	Late 19th-early 20th century
206	4	Wine bottle	Late 17th-early 18th century
	1	Press-moulded bottle	Late 19th-early 20th century
	1	Window	Late 19th-early 20th century
207	41	Wine bottles	Late 17th-early 18th century
208	10	Wine bottles	Late 17th-early 18th century
209	1	Wine bottle	Late 17th-early 18th century
301	2	Wine bottles	Late 17th-early 18th century
306	1	Window	Late 17th-early 18th century
306	1	Mirror/plate glass	Late 17th-early 18th century
319	1	Wine bottle	Late 17th-early 18th century

Shell

by Rose Grant (OA)

3.2.89 A total of 67 fragments of oyster shell were recovered for the site. The table below gives the quantification for each context.

Table 14: Summary of the shell

Context Number	Fragment Count	Weight (g)
116	1	1
150	2	70
205	1	13
206	15	142
207	34	425
208	5	52
209	3	44
319	1	2
322	5	128

Clay tobacco pipes

by John Cotter (OA)

3.2.90 The excavation produced a total of 98 fragments of clay pipe weighing 459g. These have been spot-dated and a given a basic catalogue. The catalogue records, per context, the quantity of stem, bowl and mouth fragments, the overall sherd count, weight, and comments on condition and any makers' marks or decoration present. The collection is not particularly large or impressive but it does include a small number of interesting stamped pipes.

Table 15: Clay tobacco pipes

Context	Spot-date	Stem	Bowl	Mouth	Tot sherds	Tot Wt	Comments
100		4	0	0	4	25	Stem bores 2.5-3mm
103	17-E18C	2	0	0	2	10	Stem bores 2.5-3mm. Incl frag flat heel prob 17C
201	17-E18C	1	0	0	1	5	Stem bore 2.5mm
206	L17-18C?	5	0	1	6	21	Stem bores incl 1x c2mm, mostly 2.5-3mm
207	c1690-1730	50	11	2	63	299	Min 9 pipe bowls: 1x 1690-1730, 2x 1690-1710, 1x 1680-1710, 2x 1660-80 both with heart-shaped stamps on heels (1 with initials TR;, other poss figurative/heraldic), both unidentified. 1x 1600-40 with mailed gauntlet stamp on heel. ILLUS/PUBLISH stamped pipes?
208	17-E18C	9	0	2	11	37	1x frag flat heel. Wide stem bores 2.5-3mm
300	17-E18C	4	0	0	4	17	Wide bores

Context	Spot-date	Stem	Bowl	Mouth	Tot sherds	Tot Wt	Comments
301	17-E18C	3	1	0	4	22	Short spurred bowl frag. Wide bores
303	17-E18C	1	0	0	1	5	Wide bore
304	c1690-1730	0	1	0	1	16	Pronounced spur. Dutch-style milling (diagonal) on stem
306	17-E18C	0	0	1	1	2	Wide bore 4mm
TOTAL		**79**	**13**	**6**	**98**	**459**	

3.2.91 The largest number of fragments came from context (207) (63 fragments), which produced the widest range of datable pipes including all three stamped examples. Pipe bowls from this context range in date from c. 1600-40 to c. 1690-1730. Context (207) has a concentration of 4 pipe bowls of the late 17C to early 18C. There are no pipe bowls from the site which are later than this and all the stem fragments from the site have wide bores suggestive of 17C to early 18C dates.

3.2.92 The three stamped pipes from context (207) are all 17C types which must be residual to varying degrees in this context. Nevertheless the stamps or makers' marks are of considerable interest and should be published. One of the stamps has general parallels in Oswald 1975 (see below), the other two are unidentified. The stamps occur on the broad oval heels of the pipes and are briefly described as follows:

1. *Bowl type c. 1600-1640.* Mailed gauntlet stamp parallel to stem. This is paralleled by a slightly different stamp on a pipe from Salisbury dated c. 1650-60 (Oswald 1975, fig. 8.3) and also (with initials) on a pipe from Worcestershire (*ibid.*, pl.III.7). Gauntlet stamps are found in London, Wiltshire and Somerset (ibid., 63) and another example has recently been identified from Oxford (OXCLA 05 (6)).

2. *Bowl type c. 1660-80.* Heart-shaped stamp enclosing initials TR with a pellet above each initial.

3. *Bowl type c. 1660.* Heart-shaped stamp with uncertain figurative/heraldic details. Divided by a horizontal line with two opposing spirals above line (one in each lobe). Details below line unclear - possibly a bird, or a plant.

3.2.93 One other pipe bowl of c. 1690-1730 from context (304) has traces of Dutch-style milled decoration on the stem. Apart from these examples all the remaining pipe bowls and stems are plain.

3.3 Environmental Results

Plant remains

by Wendy Carruthers

Introduction

3.3.1 An evaluation was carried out by Oxford Archaeology in advance of construction work at The Pilgrim's School, Winchester during 2005. The school lies within the Cathedral Close, on the valley floor to the west of the River Itchen. The geology consists of Upper Chalk, overlain by floodplain gravels, overlain by peat and floodplain silts (OA Evaluation Report, September 05).

Methods

3.3.2 Environmental samples were taken by OA staff from a number of features dating from the Roman to Medieval (C14th-C15th) periods. The range of deposits sampled included flood silts, peat deposits, a Roman rubble dump, Roman ramparts and a Saxon-Norman cess pit [118]. The samples were processed by OA staff using standard methods of floatation and wet-sieving (using a wash-over technique). In some cases, where it was uncertain whether deposits were waterlogged or not, soil samples were both floated and wet sieved. Where they were available, both dry flots and waterlogged wash-overs were assessed for this report. This has proved to be useful in some cases, as discussed below.

Results

3.3.3 Seventeen samples were sent to the author for assessment from trenches 1 and 3, as listed in Table 16. The results of the assessment are presented in the table, together with indications of the potential for further analysis.

Table 16: Plant remains

Bulk sample	Context No	Description	Spot Date	sample size (litres) W-wet sieved; F - floated	Plant Remains
5	120	Fill of Pit 118	11-12C	W1 F40	Rubus++, Rumex+, Atriplex p/p, Raphanus raph+, Aethusa+, Fumaria+, Prunus sloe/damson+
6	122	Fill of Pit (cess?) 118	9-12C	W2 F20	abundant bran, Agrostemma frags = waterlogged cess
53	150	Roman ?Rampart		W1 F39	Frequent henbane+++, Urtica dioica, Conium maculatum, Sambucus+, Carex+
52	154	Roman ?Rampart (?turf)		F40	occ small wood frags, occ sedge seed (Carex) & aquatic buttercup (Ranunculus sg.Batrachium)
48	307	Flood Silt?	13-14C+?	F40	occ seeds, prob some organic decay: cf. raspberry+; spike-rush (Eleocharis)+, sedge (Carex)

Bulk sample	Context No	Description	Spot Date	sample size (litres) W-wet sieved; F - floated	Plant Remains
1	308	Flood Silt?	14-15C?	F40	several & diverse taxa - Carex++, Urtica dioica, Viola, Fumaria, Sambucus, Carduus/Cirsium, Henbane, Aethusa
46	308	Flood Silt?	14-15C?	F10	as above, also Rubus sp., Ran Batrachium
3	309	Upper peat	14-E16C?	W1	Med box - polyg aviculare++, Agrostemma+, apple endocarp, sedge, Prunella, cereal, Juncus, Poaceae. Mosses
4	310	Lower peat	14-15C?	F40	freq & diverse - Potamogeton, Eleocharis, Lapsana, Agrostemma, Poaceae, Prunella, Carex, Sambucus, Rumex Urtica
50	310	Lower peat	14-15C?	W1	nil
2	318	Flood Silt?		W1	sev Cyperaceae, Atriplex, Ranunc r/a/b, Juncus, cf. apple endocarp, Anthemis cotula
44	318	Flood Silt?		F10	occ charred cereals, wl fig, sedge, potamogeton, ranunculus r/a/b, crucifer
7	319	Roman rubble dump	c270+	W1 F30	freq & varied seeds, sloe, HNS, sambucus, ranunculus Batrachium, ranunculus r/a/b, walnut shell, apple, rubus, cf. damson
41	319	Roman rubble dump	c270+	F10	sev ranunculus r/a/b, sambucus, persicaria, carex, fig, urtica dioica
8	322	Silty ?peat	c270+	F40	potamogeton, fallopia, urtica urens, carex, HNS, walnut shell, ranunculus r/a/b, Lycopus europaeus, fig, onopordum, plum/damson
42	322	Silty ?peat	c270+	F10	charred spelt gl base, wl sambucus, HNS, polygonum, barbarea, rumex, stellaria, polygonum hydropiper, fig
39	323	Sand bar	c150-200	F20	sev ranunculus r/a/b, HNS, persicaria, fumaria, rumex, cf. bullace

Discussion

3.3.4 *State of preservation* – The state of preservation of the wet (wash-over) flots was variable, ranging from poor (e.g. sample 39, context (323)) to good (eg. sample 8, context (322)). Poorly preserved samples that have remained partially waterlogged often produce predominantly woody, thick walled fruits and seeds, such as elderberry seeds, bramble seeds and sloe stones. The flots often contain frequent charcoal and decaying wood fibres. Plant macrofossil evidence from these types of contexts will be biased towards woody-seeded taxa, so it is not a reliable source of environmental information. However, the presence and decay of organic remains in these deposits can be beneficial in firstly protecting charred plant remains from crushing and weathering, and then concentrating it into a more manageable soil sample size. Only a few charred plant remains were recovered from the Pilgrim's School samples, but the concentrating effect of carrying out floatation on a deposit that had probably been

partially waterlogged, e.g. the Roman Rampart layer (150) (sample 53), may prove to be useful for some of the waterlogged assemblages (see discussion below), providing that the effects of differential preservation are borne in mind.

Trench 1

3.3.5 Two sondages were excavated down to deposit (151) in this trench. One sample in the northern sondage was assessed for this report :

3.3.6 Sample 53, context (150) - This homogeneous, moderately compact grey-brown clay silt was thought to have possibly formed the Roman rampart (OA Evaluation report). Wooden stakes driven into the peat were recovered, demonstrating that organic survival was reasonable at least in the lower levels.

3.3.7 Both wet and dry flots were assessed by the author. They contained frequent molluscs, some charcoal and bone, peaty fragments and large fragments of wood. A narrow range of plant taxa was observed in the 3 boxes of waterlogged flot, but the drying out of the floated sample concentrated the seeds into a more easily scanned assemblage of damp and nutrient-rich wasteground taxa. Henbane (Hyoscyamus niger) seeds were particularly frequent. This is an indicator of nitrogen-rich habitats such as farm yards and middens. Other taxa of nutrient-rich soils included stinging nettle (Urtica dioica) and elderberry (Sambucus nigra). Sedges (Carex sp(p).) and hemlock (Conium maculatum) reflected the damp nature of the local environment. These taxa are commonly recovered from damp ditches and wasteground. Hemlock seeds are sometimes abundant in Roman and medieval deposits alongside faecal waste (e.g. the Saxo-Norman defensive ditch at Aldgate, London; Carruthers 2001), and there is the possibility in some cases that they had been used for medicinal purposes (Moffat, 1987).There is some potential for more detailed information to be recovered from this deposit, as additional taxa would be identified if detailed analysis was undertaken. In addition, the recovery of food plants and quantification might help to determine whether any of the plants had been exploited.for their medicinal properties, or whether they were simply growing locally as weeds. If the latter interpretation is accepted, this vegetation is more likely to represent an abandonment phase, since tall plants such as hemlock would not be left to obstruct an actively used defensive ditch.

3.3.8 In the southern sondage a sample was examined from above the peat:

Sample 52, layer (154) - This consisted of thin spreads of decayed ?turf, possibly representing stacked sods from the Roman rampart. Abundant molluscs, frequent worm cocoons, chalky fragments, peat lumps and occasional small charcoal were present in the dried flot. No waterlogged flot was available, but the presence of a few uncharred seeds and wood fragments in sample 52 indicated that the deposit had been fairly anaerobic for most of its history. Only a few 'damp to wet ground' plant remains were observed in the dry flot, consisting of sedge nutlets and aquatic buttercups (Ranunculus subg. Batrachium). Since thin-walled grass seeds do not preserve well even in fully anaerobic conditions, these few seeds probably represent turves cut from damp to wet grassland, such as probably existed along the Itchen valley.

3.3.9 Two fills from a small Saxon-Norman timber-lined pit [118] from Trench 1 were also assessed;

Sample 6, context (122) – primary fill, a thick, soft anaerobic dark brown cessy deposit (OA Evaluation report). C9th-C12th spot date.
Waterlogged flots comprised well-preserved layers of matted straw interleaved with frequent fly puparia. Mineralised (Green, 1979) concretions consisting of cereal bran, straw and fly puparia were recovered from the dried samples and a damson-type (*Prunus* sp.) stone was present. These remains are typical of concentrated, *in situ* cess deposits, with the straw probably having been used as toilet paper and/or dumped in the pit to help dampen odours. The abundant fly puparia and mineralisation demonstrate that the deposit was nutrient-rich, moist to wet, and probably very smelly.

Sample 5, context (120) – above (122), more compact, dark brown cessy fill, spot date C11th-C12th (OA Evaluation report). Wet and dry flots produced wood fragments, molluscs, charcoal, insect pupae, fish bones and mineralised cess concretions containing bran, corn cockle impressions (see Carruthers, 2005) and straw. A wider range of waterlogged fruits and seeds was present in the wet flots from sample 5 than in context (122), including some edible taxa such as bramble and sloe/plum stones. The seeds of several general ruderal weeds (e.g. docks, fumitory, orache) were also common. Perhaps the pit was more open to the elements at this later date, or a wider range of waste was being dumped in the pit. Full analysis of both of these deposits is recommended, since more direct evidence of diet will undoubtedly be obtained, including information that could be compared to Middle Saxon Hamwic and to C9th-C12th cess pits at Northgate House, Winchester (OA, ongoing). Changes in the environment and waste disposal may be investigated, particularly if insect remains are also analysed.

Trench 3

3.3.10 A sondage in this trench was excavated down to the 'natural' river gravel (324). The sequence of overlying deposits assessed for this report is described below using stratigraphic information from the OA Evaluation report (September 2005);

Sample 39, context (323) – overlying the 'natural' river gravel, consisting of a loose layer of sand and grit that probably formed a sand bar. Spot date c. AD 150-200.
A wet flot and some hand-picked dry items (bark, charcoal, sloe stone, hazelnut shell) were assessed. Although frequent wood fragments were present, the range of plant taxa was narrow and mainly tough-coated seeds were present, suggesting there may have been some drying out of the deposit from time to time. Terrestrial buttercups (*Ranunculus repens/acris/bulbosus*), docks (*Rumex* sp.) and fumitory (*Fumaria* sp.) were observed, and these are the type of plants that were probably growing in disturbed grassland areas along the river. The presence of hazelnut shell and a possible bullace (*Prunus* sp.) stone suggest that human waste may also have been deposited nearby, although the presence of sewage was not confirmed. Better-preserved samples higher up the profile from later Roman activity do appear to have contained faecal waste, so this type of material was probably being discharged into the river during the Roman period. It should be remembered that any of the water-lain deposits contain a mixed assemblage that may include plant remains washed in from some distance away from the sampling point.

Samples 8 and 42, context (322) – a firm mid-green/grey peaty silt/sand above (323). Spot date c. AD 270+. Contained flint nodules and RB pot.
The wet flot contained frequent wood fragments, several small charcoal fragments, occasional bone and leather fragments. The dried flot also contained a charred spelt

wheat glume base (chaff fragment, *Triticum spelta*), molluscs and chalky lumps, and insects were more visible than in the large, organic wet flots. The waterlogged plant assemblage included a few seeds of aquatic and waterside plants (e.g. pondweed (*Potamogeton* sp.; gipsywort (*Lycopus europaeus*)) either representing plants that were growing in and around local pools or seeds that had been washed into the area during flooding episodes. A few ruderal weeds indicated that disturbed habitats occurred locally (e,g, docks, nettles). The presence of several food remains, including imported luxury fruits and nuts such as fig (*Ficus carica*) and walnut (*Juglans regia*), indicated that faecal material was present. The origin of this may have been sewage discharged into the river that had been washed into the deposit during episodes of flooding, or more locally deposited waste. Further analysis of these samples would provide information about foods being consumed during this period, and more detailed information about the local habitat.

Samples 7 and 41, context (319) – a compact layer of flint and chalk rubble above 322. Spot date c. AD 270+. Contained RB pot, building material and coins. Appears to represent deliberate dumping to make a useable surface. Timber posts cut into this layer.
Frequent large charcoal fragments, bone, molluscs, wood and moss were present in the dry and wet flots. A similar range to context (322) of aquatic/semi-aquatic plants (including aquatic buttercups (*Ranunculus* subg. *Batrachium*), ruderal weeds (e.g. stinging nettle, persicaria) and food plants (fig, walnut, apple, cf. damson)) was observed in the flots, probably deriving from the same types of flooding episodes. As with (322), a more detailed examination might show whether or not any changes to the diet, waste deposition or the environment had taken place over time

Samples 4 and 50, context (310) – lower orgainc silt, above 319. Spot date ?C14th-C15th. Firm, mid reddish brown with lenses of green-brown fine silt. Contained sherds of late Roman pot and a ?14th-15th century sherd. Timber stakes were contained within the lower peat, perhaps representing a fish trap.
The wet plant remains consisted of fragments of matted ?reeds, molluscs, wood fragments, buds, charcoal and a wide range of fruits and seeds. Aquatics (pondweed), marsh plants (spike-rush, sedges), ruderals (nettles, docks), arable weeds (corn cockle, nipplewort) and grassland plants (Poaceae) were all represented in the assemblage. The presence of tree buds and wood in addition to marsh plants suggests that a fen-type of vegetation may have existed locally, but this suggestion needs to be confirmed by full analysis of different types of environmental evidence, particularly pollen. The input of ruderal weeds and a few arable weeds may again be due to sewage deposition. Further analysis is required to determine how intensive this was, and to provide evidence of food plants during this period.

One tentative observation concerning the trench 3 samples is that the exotic food remains such as fig and walnut and cultivated plums (including bullace and damson-type *Prunus* sp.) do not appear to have been present in the post-Roman deposits, apart from a trace of fig in context (318). More detailed work is obviously required to confirm this suggestion. Native hedgerow fruits such as hazelnuts, apples and blackberries were recorded, however, along with other indicators of sewage such as small fragments of corn cockle seed coat, so faecal waste was obviously still being deposited, but the diet of the local population appears to have become more limited. It will be useful to compare these tentative observations with results from Northgate House.

Sample 3, context (309) – upper peat, above 310. Spot date C14th-eC16th? Darker in colour, firm, homogenous. Contained ?15th century pot and leather fragments.

A similar range of plant remains was present in the wet-sieved sample to the lower peat sample, including matted ?reeds, apple endocarp ('scales' from the core), ruderals and marsh plants. No true aquatics were noted this time, so perhaps fewer wet pools existed. However, this may simply be due to the chance positioning of the sample. Pollen analysis would help to determine if conditions had become drier. Identification of the frequent moss fragments interleaved with ?reeds may also assist in characterising the habitat. The matted material should be identified, if possible, during full analysis.

Samples 2 and 44, context (318) – fine silt, possibly of alluvial origin - ?flood silt, above the organic silts of context (309). Mid green-brown silt containing slate fragments.
Once again, matted ?reeds were present and sedge nutlets were quite frequent. Rushes were also present, as were wood and twigs. The range of other plant remains in this silt, however, was not as great as in the peat samples, perhaps because of poorer conditions of preservation or perhaps because of the dilution effect of the silts being washed into the deposit. As before, sewage and/or domestic waste was still a component of the assemblage, with occasional charred cereals, a few fig seeds and apple endocarp comprising the evidence for this suggestion.

Samples 1 and 46, context (308) – mottled grey silt with 10% chalk fragments and 1% tile, slate and mortar patches suggesting episodes of dumping. Above (318). Spot date C14th-C15th?
Only dried flots were available from this deposit, although the presence of uncharred fruits and seeds indicated that it had once been waterlogged. The plant remains were fairly frequent and diverse, but the flots were small so a limited amount of information was recovered. Most of the taxa present represent disturbed and often nutrient-enriched habitats, e.g. fumitory, stinging nettle and henbane. The presence of sedges and thistles could indicate a damp, grazed meadow-type of environment, since thistles often become abundant where livestock grazes. No further work is recommended for these samples.

Sample 48, context (307) – a clean light grey silt. ?flood silt above 308. C13th-C14th +.
As with context (308), only a dry flot was assessed from this deposit. Although some organic remains had survived, these silts had probably dried out to some extent from time to time, perhaps in the summer months when the area could have been dry enough to provide lush floodmeadow grazing. The presence of remains from marsh/damp ground plants such as spike-rush and sedges could represent the habitat in the damper winter months, or the remains may have been washed into the silts during seasonal flooding episodes. A raspberry seed (*Rubus idaeus*) is slight evidence that human sewage may still have been washed into the area, or perhaps that 'night soil' had been deposited to fertilise the fields. The presence of slag, fish bone, bone, coal and large charcoal fragments in the sample demonstrates that domestic waste was a notable component of the deposit. No further work is recommended for this deposit.

Insect Remains

by David Smith (The Institute of Archaeology & Antiquity, The University of Birmingham)

Introduction

3.3.11 The insect remains discussed are from a series of samples recovered from palaeochannel deposits at Pilgrims' School, Winchester during the evaluation. The sequence of deposits dates from between c. 2nd century AD to the 15th century. They are from the flood plain of the River Itchen and are initially associated with the Roman Town. It is thought that during the medieval period this area of Winchester was open (probably gardens). The nature of the material sampled is quite variable ranging from sandy silts to organic 'peat'.

3.3.12 This assessment was carried out in order to establish the following:

- Are insect remains present? And if so, are the faunas of interpretative value?
- Do the insect remains from these samples contain information on the nature of the environment in the area at the time of the deposits formation?
- What were the water conditions in the palaeochannel?
- Is there any evidence for the dumping of domestic and settlement material in the area?

Methods

3.3.13 The samples were processed using the standard method of paraffin flotation as outlined by Kenward et al. (1980). The weights and volumes of the individual samples are included in Table 17. Insect remains were then sorted from the flot and examined under a low-power binocular microscope. The system for 'scanning' faunas as outlined by Kenward et al. (1985) was followed in this assessment.

3.3.14 When discussing the faunas recovered, two considerations should be taken into account:

1) The identifications of the insects present are provisional. In addition, many of the taxa present could be identified to species level during a full analysis, producing more detailed information. As a result, these faunas should be regarded as incomplete and possibly biased.

2) The various proportions of insects suggested are very notional and subjective.

Results

3.3.15 The insect taxa recovered from the flots are listed in Table 17. The taxonomy used for the Coleoptera (beetles) follows that of Lucht (1987). Trichopteran (caddis fly) remains were also found.

3.3.16 The numbers of individuals present is estimated using the following scale: * = 1-2 individuals ** = 2-5 individuals *** = 5-10 individuals **** = 10+ individuals.

Table 17: Insect remains

Sample No.	39	43	40	45	51	49	47
Processed Weight (kg.)	7	6.5	9	5.5	6	7.5	6.5
Processed Volume (L.)	5	5	6	5	5	6	5
COLEOPTERA							
Carabidae							
Nebria salina Fairm. Lab.	+	-	-	-	+	-	-
Dyschirius globosus (Hbst.)	-	+	-	-	-	-	-
Trechus spp.	+	-	-	-	-	-	-
Bembidion spp.	+	-	-	-	+	-	-
Agonum spp.	-	+	-	-	-	-	-
Amara spp.	+	+	-	-	-	-	-
Calathus spp.	+	-	-	-	-	-	-
Hydraenidae							
Hydraena spp.	-	-	-	-	+	-	-
Octhebius minimus (F.)	-	-	-	-	+	-	-
Octhebius spp.	-	-	-	-	+	-	-
Helophorus spp.	+	-	-	-	+	-	-
Limnebius spp.	-	+	-	-	-	-	-
Hydrophilidae							
Coelostoma orbiculare (F.)	+	-	-	-	+	-	-
Cercyon spp.	-	-	-	-	-	+++	-
Cercyon spp. (Aquatic)	+	-	-	+	-	-	-
Laccobius spp.	+	-	-	++	-	-	-
Cymbiodyta marginella (F.)	++	-	-	-	-	-	-
Orthoperidae							
Coryopholous cassidoides (Marsh.)	-	-	-	-	-	+	-
Staphylinidae							
Omalium spp.	-	-	-	-	-	+	-
Lesteva spp.	-	+	-	-	+	-	-
Trogophloeus spp.	-	+	-	-	-	-	-
Oxytelus spp.	+	++	-	-	+	++	-
Platystethus arenarius (Fourc.)	+	-	-	-	-	-	-
Stenus spp.	++	-	-	-	-	+	-
Xantholinus spp.	-	-	-	-	-	++	-
Lathrobium spp.	-	-	-	-	+	+	-
Tachyporus spp.	-	-	-	-	+	+	-
Helodidae							
Helodidae gen & spp. indet	-	-	-	-	+	-	-
Dryopidae							
Dryops spp.	-	+	-	-	-	-	-
Elmis aenea (Müll)	+	++	-	-	+	-	-
Oulimnius spp.	-	++	-	-	+	-	-
Nitidulidae							
Brachypterus spp.	+	-	-	-	-	-	-

Sample No.	39	43	40	45	51	49	47
Cucujidae							
Oryzaephilus surinamensis (L.)	+	-	-	-	-	-	-
Cryptophagidae							
Cryptophagus spp.	-	-	-	-	-	+	-
Lathridiidae							
Enicmus minutus (Group)	-	++	-	-	-	-	-
Corticaria spp.	-	-	-	-	-	+	-
Mycetophagidae.							
Typhaea stercorea (L.)	-	-	-	-	-	+	-
Endomychidae							
Mycetaea hirta (Marsh.)	-	-	-	-	-	+	-
Anobiidae							
Anobium punctatum (Geer.)	+	+	-	-	+	+	-
Ptinidae							
Ptinus spp..	+	-	-	-	-	-	-
Anthicidae							
Anthicus spp.	-	-	-	-	-	+	-
Scarabaeidae							
Trox scaber (L.)	+	-	-	-	-	-	-
Geotrupes spp.	+	+	-	-	-	-	-
Onthophagus spp.	+	-	-	-	-	-	-
Oxyomus silvestris (Scop.)	+	+	-	-	-	-	-
Aphodius spp.	++	+	-	-	+	-	-
Phyllopertha horticola (L.)	+	-	-	-	+	-	-
Chrysomelidae							
Chaetocnema spp.	-	-	+	-	-	-	-
Scolytidae							
Scolytus spp.	+	-	-	-	-	-	-
Leperisinus varius (F.)	+	-	-	-	-	-	-
Curculionidae							
Apion spp.	+	-	-	-	++	-	-
Sitona spp.	++	-	-	-	-	+	-
Tanysphyrus lemnae (Payk.)	-	-	-	-	+++	++	-
Bagous spp.	++	+	-	-	-	-	-
Sitophilus granarius (L)	+						
Ceutorhynchus spp.	++	-	-	-	+	-	-
Tricoptera	++	++	++	++	++	-	-

Discussion

Are insects present and are the faunas interpretable?

3.3.17 Moderately sized but diverse faunas of beetles were recovered from samples 39 (context 322) and 43 (context 319). These are from the peat and silts dated to the 2nd and 3rd century AD. Samples 40 (context 319) and 45 (context 318) from the overlying Roman flood silts produced very small insect faunas and are not interpretable. Samples 51 (context 310) and 49 (context 309) from the Medieval 14th-15th century AD peat produced reasonably large and diverse insect faunas. No insects were recovered from sample 47 (context 319) at the top of the sequence. Where insect faunas were recovered they are interpretable.

What is the environmental setting and land use during deposit formation?

3.3.18 The insect remains from samples 39 and 43 from the Roman peat suggest that the local landscape was open grassland with some pasture. This is suggested by the presence of Aphodius, Geotrupes and Onthophagus dung beetles. Open grassland is also suggested by the presence of Phyllopertha horticola whose larvae is associated with old pasture and meadows, where they feed on the roots of grass (Jessop 1996). The Apion, Sitona and Ceutorhynchus species of weevil usually feed on a range of grassland and waste ground vegetation. There is little indication for trees in the insect fauna with only isolated fragments of the tree dependant scolytid 'bark beetles' recovered. This suggests that the landscape was probably open and essentially treeless by this time.

3.3.19 The Medieval samples 51 and 49 produced an essentially similar fauna, again suggesting the presence of open ground. However, these faunas are much smaller than those in Roman period and the evidence is consequently more equivocal.

What were the water conditions within the palaeochannel?

3.3.20 The water beetles (the aquatic hydrophilids and the hydreanids) recovered from the samples from both the Roman and Medieval periods are all associated with vegetated, stagnant, slow moving or standing waters (Hansen 1987; Nilsson and Holman 1995). The exception to this is the relatively small numbers of elmid 'riffle beetles' recovered in the samples from the Roman peat. Elmids are normally associated with faster flowing waters. This might suggest that there were either areas of fast flowing water locally or that this material may represent a flood deposit with an origin in the main channel of the Itchen. In the Medieval deposits the weevil Tanysphyrus lemnae is present in some numbers. This species feeds exclusively upon duckweed (Lemna spp.) (Koch 1992), which is a classic indicator plant for very slow water conditions. There is however, little evidence from the insect remains from both the Roman and the Medieval periods for the presence of waterside vegetation, suggesting that the channel probably remained relatively clear of dense stands of reed bed.

Is there any evidence for the dumping of domestic and settlement material in the area?

3.3.21 Both the Roman and Medieval deposits from this section contain a number of insects that indicate that domestic material was dumped into this area or that settlement was nearby.

3.3.22 Perhaps the clearest indication for this is from the Roman sample 39 which contained the remains of the 'granary weevil' Sitophilus granarius and the 'saw toothed grain beetle' Oryzaephilus surinamensis. Both of these species are only associated with grain and granary waste and are not found in the natural environment. Similarly deposits from both periods do contain species such as Lathridius minutus, Cryptophagus spp., Mycetea hirta, and Typhaea stercorea that are common in settlement deposits and waste in the archaeological record (Hall and Kenward 1990; Kenward and Hall 1995). Equally the 'woodworm' Anobium punctatum is usually associated with settlement timbers.

Conclusions

3.3.23 This assessment of the insect remains from the Pilgrim's School, Winchester suggests that these deposits do contain reasonably large and interpretable faunas. However, the faunas are comparatively small and probably function best as an additional line of evidence to any pollen and plant macrofossil studies from these deposits. They clearly suggest that during the Roman period the area was open and probably periodically flooded. It also appears to have had settlement waste dumped onto it.

3.3.24 A similar pattern is also suggested for the Medieval deposits, though there is clearer evidence for a body of very slow still water.

Diatoms

by Nigel G Cameron (University College London)

Introduction

3.3.25 A diatom assessment was carried out on ten slides prepared from sediment samples taken from the site at Pilgrim's School Winchester (Wincmay 234). These slides were selected by Gem Swindle (Royal Holloway, University of London) from a larger group of twenty-six slides prepared from the site for diatom evaluation. The aims of this assessment are to determine if diatoms are present and the potential for percentage analysis of the diatom assemblages. Comments are made about a number of sample characteristics including: diatom valve concentrations, the quality of diatom preservation, the diversity of taxa, the types of diatom assemblage and the environmental preferences of those diatoms present.

Methods

3.3.26 Sediment sampling, diatom sample and slide preparation was carried out by Gem Swindle, Department of Geography, Royal Holloway, University of London. Diatom preparation involved the following procedures:

- Treatment of the sub-sample (0.2g) with Hydrogen peroxide (30%) to remove organic material and Hydrochloric acid (50%) to remove remaining carbonates
- Centrifuging the sub-sample at 1200 for 5 minutes and washing with distilled water (4 washes)
- Removal of clay from the sub-samples in the last wash by adding a few drops of Ammonia (1%)
- Two slides prepared, each of a different concentration of the cleaned solution, were fixed in mounting medium of suitable refractive index for diatoms (Naphrax)

3.3.27 Slides were scanned at magnifications of x400 and x1000 under phase contrast illumination. Diatom floras used to assist with diatom identification include Krammer & Lange-Bertalot (1986-1991) and Hartley et al. 1996. A semi-quantitative assessment of species abundance was made by making a skeleton count of diatom valves for each sample.

Results & Discussion

3.3.28 The semi-quantitative assessment of relative diatom abundance within each sample is presented in the archive (Excel file) which show diatom species counts. These data are presented as raw counts rather than as percentages because the total count for each sample is low. A summary of the assessment results is presented below in Table 18.

3.3.29 In addition a rapid scan (phase contrast x400 magnification) was made of the 16 remaining samples prepared from the site. These samples and their context numbers are listed in Table 19.

Table 18: Summary of diatom assessment

Sample No.	Context	Description	Diatom valve concentration	Quality of preservation	Diversity	Comments on Assemblage Type	Potential for percentage counting
11	319	Roman rubble dump	high	good to moderate	moderately high	non-plankton, attached & benthic	good
12	319	" "	high	good to moderate	moderately high	non-plankton, attached & benthic	good
13	319	" "	high	good to moderate	moderately high	non-plankton, attached, benthic less *Fragilaria* sp.	good
14	319	" "	high	good to moderate	moderately high	non-plankton, attached, benthic less *Fragilaria* sp.	good
17	310	Lower peat	high	good to poor	moderately high	higher proportion of epiphytes rheophilous species	good
18	310	Lower peat	high	good to poor	moderately high	higher proportion of epiphytes rheophilous species	good
19	309	Upper peat	moderate	good to poor	moderately high	non-plankton, attached & benthic	good
20	309	Upper peat	moderate	good to poor	moderately high	non-plankton, attached & benthic	good
23	318	Flood silt?	moderate	moderate to poor	moderate	higher proportions of *Nitzschia* spp.	good
24	308	Flood silt?	moderate	moderate to poor	moderate	higher proportions of *Gomphonema* spp.	good

Table 19: Samples for which a rapid scan for diatoms was made

Sample Number	Context Number
9	323
10	323
15	319
16	300
21	318/309
22	318
25	308
26	308
27	308
28	308
29	308
30	306
31	306
32	306
33	306

Sample Number	Context Number
34	306

3.3.30 In most of these samples diatoms are present in relatively low concentrations, in some diatoms were very sparse, and species diversity is low (sample numbers 9, 10, 16, 21; 25-34 inclusive). There are moderate numbers of diatoms in sample numbers 15 and 22. However, in the latter species diversity is low. In addition in several of these rapidly scanned samples the most common diatom component is of aerophilous, semi-terrestrial diatoms that are common in soils and damp aerial habitats as opposed to true aquatic environments. These types of diatoms can also be present in the atmosphere. Such diatoms are therefore almost ubiquitous and can be found in many terrestrial environmental samples (although they can in some contexts be useful indicators of eroded or in-washed sediment in aquatic sediments). True aquatic diatom species are rare in this group of samples and were in low concentrations.

3.3.31 The ten samples for which a full diatom evaluation was carried have high or moderately high concentrations of diatom valves. The quality of valve preservation is generally good or moderately good, but a varying number of poorly preserved valves are also present. In particular in the postulated 'flood silt' samples (23 and 24) there are a greater number of poorly preserved diatoms that show evidence of valve breakage and silica dissolution. Species diversity is moderately high, but again in sample numbers 23 and 24 the diversity is slightly reduced compared with other samples. All ten samples have very good potential for percentage diatom counting and more detailed environmental reconstruction (e.g. the use of a diatom-water chemistry transfer function) to be carried out. From the results of the skeleton counts carried out for sample numbers 11-14, 17-20, 23 and 24 some general comments on the environments represented can be made.

3.3.32 All ten samples are dominated by non-planktonic diatoms with a mixture of attached (e.g. epiphytic and epilithic) and benthic (e.g. epipelic, mud-surface) species. Planktonic (open water) diatoms are rare with only occasional occurrences of planktonic diatoms such as *Cyclotella meneghiniana* and poorly preserved valves of *Stephanodiscus sp.* However, species such as *Melosira varians* and some *Fragilaria spp.* are tychoplanktonic and may have a stage of their life cycle in open water. The habitats represented are therefore of shallow water where these non-planktonic diatoms are able to remain attached to or move on surfaces within the photic zone.

3.3.33 There is a component of diatoms specifically associated with flowing water (rheophilous diatoms) represented by *Melosira varians* (common in several samples) and *Meridion circulare*. Whilst the component of aerophilous diatoms (a diatom community described above for the rapidly scanned samples) is very small. Therefore diatoms derived from terrestrial habitats are rare but there are occasional occurrences of aerophiles such as *Hantzschia amphioxys*.

3.3.34 Sample numbers 11 to 14 are derived from context (319) (age AD270+ and interpreted from other evidence as Roman rubble dump deposits). These samples have in common a range of non-planktonic aquatic species. The species include the consistent presence of a number of *Fragilaria* taxa (*F. brevistriata, F.construens var. venter, F. lapponica, F. pinnata*) which are early colonisers of new and ephemeral aquatic habitats. However, there is a diverse range of other diatom types in this group of samples and the assemblage does not show evidence for mixing of diatoms from disparate sources. Other common species include *Achnanthes minutissima, Amphora pediculus* and *Cocconeis placentula* and its varieties. *Amphora pediculus* is particularly common in samples 13 and 14 along with *Cymbella sinuata* in sample 14.

These and other common taxa may grow either as epiphytes or as benthic species. However, the presence of relatively high numbers of *Achnanthes* species (*A. lanceolata* and its varieties, *A. minutissima, A. lauenburgiana*) probably reflects the presence of a large aquatic macrophyte habitat. Further, from the skeleton counts of common taxa there appear to be changes in the relative numbers of these species.

3.3.35 Diatom assemblages derived from peat are often poorly preserved. However, the quality of diatom preservation is excellent in the samples from contexts associated with peat formation (numbers 17, 18, 19, and 20). The presence of rheophilous diatoms in some samples has been noted, e.g. *Melosira varians* is particularly common in sample 17. Maxima of *Cocconeis placentula* occur in this group of samples. This species is commonly epiphytic. Also of note is the common occurrence of *Achnanthes hungarica* (samples 18 and 19). This diatom is particularly associated with the water plant *Lemna* and moderately high levels of nutrients.

3.3.36 The samples from the probable flood deposits (number 23 and 24) again have a range of non-planktonic diatoms. The quality of preservation in these samples is poorer and there is more silt visible on the diatom slides. There are also some indications from the diatom composition that the assemblages are derived from flooding. The dominant components of the assemblage have changed compared with the underlying levels. For example *Achnanthes minutissima* is common in sample 23, *Amphora veneta*, and *Fragilaria vaucheriae* in both 23 and 24. A range of *Nitzschia taxa* (*N. amphibia, N. frustulum, N. palea* and undifferentiated *Nitzschia spp.*) also become more common. These Nitzschia spp. are often found growing where nutrient levels are moderately high. This is also supported by the consistent occurrences of *Gomphonema spp. (G. angustatum var. productum, G. clavatum, G. minutum, G. parvulum, G. truncatum*) in sample 24. These attached diatoms are often associated with higher nutrient levels.

Conclusions

3.3.37 Diatoms are present in all ten samples evaluated. They occur in moderately high concentrations, are generally well preserved and species diversity is moderately high. The concentrations of valves, their quality of preservation and species diversity is somewhat reduced in the probable flood deposits (sample numbers 23 and 24). All ten samples have very good potential to make percentage diatom counts. The remaining sixteen samples prepared for diatom analysis, with few exceptions, have poorer diatom assemblages and where diatoms are present they are often from the ubiquitous aerophilous diatom community. Skeleton counts of ten selected samples show consistent diatom assemblages within the contexts examined with no clear evidence for mixing of disparate community types (as might be anticipated in dump deposits for example). More subtle changes in composition within the context types are also indicated from the skeleton counts. All the diatom assemblages are dominated by non-planktonic diatoms with only rare occurrences of planktonic diatoms. This reflects the shallow water origins of the diatoms. Benthic (mud) and attached (e.g. epiphytic) diatom communities are represented in the diatom assemblages along with some occurrences of species associated with flowing water. Percentage diatom counts to further investigate the species composition and possible environmental reconstruction using a transfer function (e.g. Birks *et. al.* 1995) may be of relevance here.

Acknowledgements

3.3.38 Thanks to Gem Swindle (RHUL) and Rebecca Nicholson (OAU) for preparing slides for diatom assessment and for details of the site and samples.

Microstratigraphy (Soil Micromorphology and Complementary Chemistry, Magnetic Susceptibility and Pollen Investigations)

by Dr Richard I Macphail, Dr J. Crowther** and Dr G. M. Cruise**
*Institute of Archaeology, University College London, 31-34, Gordon Sq., London WC1H 0PY
**Department of Archaeology & Anthropology, University of Wales, Lampeter, Ceredigion, UK SA48 7ED

Introduction

3.3.39 The sediments and archaeological sequence at Pilgrims School was investigated by Oxford Archaeology (Project Manager, Ben Ford) in the summer of 2005, and this included trenching and coring of samples through the Roman to medieval deposits. A number of cores/monoliths were received for the assessment of their microstratigraphy from Seren Griffiths (Oxford Archaeology), namely monolith samples 36, 37, 38 and core BH1. At Pilgrims School, microstratigraphic assessment entailed soil micromorphology and complementary chemistry, magnetic susceptibility and pollen investigations (Table 20, below).

Samples and methods

3.3.40 Parts of the monoliths were selected for thin section/bulk chemistry and microfossil/pollen sampling (in all 11 bulk and 36 pollen samples). Depths of these samples were measured and contexts identified (Table 20), according to information (pil school context database and spot dates) received from Oxford Archaeology (Seren Griffiths and Steve Teague). In all, 5 thin section, 2 bulk chemistry and 8 palynological (pollen) samples were selected for assessment.

Chemistry and magnetic susceptibility

3.3.41 Analysis was undertaken on the fine earth fraction (i.e. <2 mm) of the samples. Phosphate-Pi (inorganic phosphate) and phosphate-Po (organic phosphate) were determined using a two-stage adaptation of the procedure developed by Dick and Tabatabai (Dick and Tabatabai, 1977) in which the phosphate concentration of a sample is measured first without oxidation of organic matter (Pi); and then on the residue following alkaline oxidation with sodium hypobromite (Po).

3.3.42 In addition to χ (low frequency mass-specific magnetic susceptibility), determinations were made of χmax (maximum potential magnetic susceptibility) by subjecting a sample to optimum conditions for susceptibility enhancement in the laboratory. χconv (fractional conversion), which is expressed as a percentage, is a measure of the extent to which the potential susceptibility has been achieved in the original sample, viz: (χ/χmax) x 100.0 (Scollar et al., 1990; Tite, 1972). In many respects this is a better indicator of magnetic susceptibility enhancement than raw χ data, particularly in cases where soils have widely differing χmax values (Crowther, 2003; Crowther and Barker, 1995). A Bartington MS1 meter was used for magnetic susceptibility measurements. χmax was achieved by heating samples at 650°C in reducing, followed by oxidising conditions. The method used broadly follows that of Tite and Mullins ((Tite and Mullins, 1971), except that household flour was mixed with the

soils and lids placed on the crucibles to create the reducing environment (after Graham and Scollar, 1976; Crowther and Barker, 1995). LOI (loss-on-ignition) was determined by ignition at 375oC for 16 hours (Ball, 1964) – previous experimental studies having shown that there is no significant breakdown of carbonate at this temperature. Pb, Zn and Cu were determined by atomic absorption spectrophotometry following extraction with 1N hydrochloric acid.

Palynology

3.3.43 Eight pollen samples (Table 21) were sent to the University of Wales, Lampeter, for pollen preparation where the chemical preparation methods and methods for determining pollen concentrations were carried out and described according the literature (Moore et al., 1991; Stockmarr, 1971). The prepared pollen slides were scanned, the observed pollen types were noted and a qualitative appraisal of the frequency of taxa was made. Additional notes were also made on pollen concentrations and pollen preservation.

Soil Micromorphology

3.3.44 After the monoliths had been subsampled for bulk and pollen analyses monolith 36 and layer 323 from monolith 37 were impregnated with a crystic resin mixture, cured and prepared for selective thin section manufacture (Goldberg and Macphail, 2006). Impregnated blocks were selectively cut up into five 75 x 50 mm size blocks (Table 20; Figs 1 and 2)(Goldberg and Macphail, 2006). These blocks were sent to Quality Thin Sections, Tucson, Arizona for thin section manufacture (Murphy, 1986). Remaining impregnated material was retained for further work and/or archiving. Thin sections were analysed under plane polarised light (PPL), crossed polarised light (XPL), oblique incident light (OIL) and using fluorescent microscopy (blue light – BL), at magnifications ranging from x1 to x200/400. Thin sections were briefly described and their geoarchaeological character assessed (Bullock et al., 1985; Courty et al., 1989; Goldberg and Macphail, 2006; Stoops, 2003).

3.3.45 Overall, the microstratigraphy was assessed in the light of a 2005 assessment of Staples Gardens, Winchester (Macphail et al., 2005) and results from small English settlements and towns, including Roman and medieval London, for example (Atkinson and Preston, 1998; Macphail, 2001, 2002; Macphail et al., 2004, In press).

Results

Chemistry and magnetic susceptibility

3.3.46 The analytical data are presented in Table 20. In the absence of control samples, the results have been characterised on the basis of criteria used in the interpretation of previous analytical data from the nearby Staple Gardens excavation, Winchester (Crowther, 2005). According to these criteria, neither of the present samples shows clear signs of phosphate-P enrichment – though this characterisation will need to be re-assessed if further samples are analysed from the Pilgrims' School site. It should also be noted that the χ max values recorded are both very low. This is indicative of a low Fe content, which could be attributable to Fe loss through gleying. The notable features of the two samples are as follows:

Sample 309

- organic rich

- likely Pb enrichment

Sample 310

- very strong magnetic susceptibility enhancement – though this may need to be interpreted with caution if the context has been subject to post-depositional gleying

Palynology

3.3.47 Pollen concentrations in Monolith 36 are very variable, from rich (parts of 309 and 318) to sparse (310 and also within 309). Preservation is also equally variable. Pollen scanning found overwhelming grassland pollen types, and few trees. Even though cereals can be abundant, there are few 'supporting' arable weeds present. There are therefore indications of 'grazing' with inputs from stabling materials. Some samples have a very high potential, others have a good potential, whereas some can be counted with difficulty if important questions need answering. Sample BH1 (33 cm) is uncountable.

Soil micromorphology

3.3.48 Findings from the four thin sections are given in Table 4, and illustrated in Figures 1-11. Although mixed, M323 appears to shows inputs of constructional, latrine, cooking and animal management waste (Figs 4-7). Mixed layers also appear in thin section samples M310A, 309B and M309A, with characteristics of constructional debris (Figs 8-9), and animal husbandry waste (Figs 2-3, 10-11), but there is very little evidence of domestic or industrial waste being deposited. Importantly, the good preservation shows possibly clearly distinctive inputs of stabling waste that probably underwent weathering (on the manure heap?) and some charring/burning, whilst other microstratigraphic units (e.g., within 309B) appear to be layers of a) raw stabling crust (Figs 10-11) and b) possible 'unused' fodder/bedding.

Discussion

Roman (AD 150-200 + earlier):

3.3.49 Context (323) from monolith 37 was chosen for assessment because of its humic content. There is concordance between the palynology and soil micromorphology assessments; materials of mixed provenance are present. It is suggested that a full pollen species list is produced alongside full soil micromorphological analysis, in order to characterise this example of Roman rubbish disposal, in terms of both domestic, latrine and animal husbandry waste. It certainly has a stronger domestic component than the post-Roman deposits assessed so far, and will act as a useful comparison. The deposits can be compared to those analysed from Anderida Fort (Pevensey), Heybridge small town, Essex and No 1 Poultry, urban London, for example, where roadside and other urban middening was characterised by major inputs of stabling waste ((Hill and Rowsome, In prep; Macphail et al., 2004; Macphail and Linderholm, In press; Rowsome, 2000).

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Post-Roman 'peat' (Contexts 310-309):

3.3.50 It is clear from the chemistry (evidence of burning, moderately high phosphate and Pb enrichment in places) and soil micromorphology that the organic deposits are not peat-like. Equally, there are some anomalous pollen characteristics (e.g., lack of dominant wetland plants) also arguing against the deposits being peat. In fact, the 'peats' appear to have a strongly anthropogenic character and probably reflect local 'urban' land use/use of space in this part of Winchester (near the Cathedral). Although constructional debris may be present (cf. outside space in front of medieval Magdeburg Cathedral; (Goldberg and Macphail, 2006), there appears to be a dearth of domestic, industrial and latrine waste here (cf. Early Medieval London Guildhall; (Macphail et al., In press). Instead, waste from animal husbandry appears to dominate (Goldberg and Macphail, 2006). Moreover, there appears to be two types of waste present that needs to be investigated; a) charred and mixed material that seems to have come via the dung heap (not common at the London Guildhall)(Bakels, 1988; Mücher et al., 1990) and b) raw stabling waste and possible 'unused' fodder and bedding material (Macphail et al., 2004). Clearly the following questions can be addressed:

- How was this area of Winchester was used?
- How was animal husbandry waste managed – in contrast to the London Guildhall site was dung being managed for local manuring; was this an area of dung heaps?
- In the examples of raw stabling waste and possible fodder/bedding, the exact components of the animal foddering regimes/grazing practices may be addressed from a combined soil micromorphological, chemical and palynological study.

3.3.51 According to the dating, these deposits may act as useful comparisons to the assessed domestic and industrial 'floor' deposits at Staple Gardens.

3.3.52 Thin section M310B and further pollen samples should be processed and analysed to attempt to fine tune the suggested hypotheses concerning the understanding these deposits, supported by an extra bulk study.

Medieval silts (Context 318):

3.3.53 These deposits, as shown by their limited soil micromorphological study (top of M309A; Figs 1-2) and pollen assessment, do not simply appear to be overbank flood silts. Their anomalous character includes a rich pollen content including cereal type, but without associated arable weeds types, which does not seem consistent with upstream erosion of arable land. Instead, the assessment indicates the deposit appears to be influenced by localised activities, which as yet remain enigmatic, but certainly seem different from those found in the underlying contexts (309-310). It is therefore suggested that contexts (318) and (308) should be studied in order to understand better exactly what is going on in this area. This can be achieved through a series of bulk (x4), pollen (x3) and thin section (x2) studies.

Acknowledgements

3.3.54 The authors acknowledge pollen preparation by Sarah Jones (University of Wales, Lampeter) and thin section manufacture by Quality thin Sections (Arizona).

Table 20: Microstratigraphy: Bulk analytical data

Sample	LOI (%)	Phosphate-P_i (mg g^{-1})	Phosphate-P_o (mg g^{-1})	Phosphate-$P^{\$}$ (mg g^{-1})	Phosphate-P_i:P (%)	Phosphate-P_o:P (%)	χ (10^{-8} SI)	χ_{max} (10^{-8} SI)	χ_{conv} [¶] (%)	Pb[†] (µg g^{-1})	Zn[†] (µg g^{-1})	Cu[†] (µg g^{-1})
309	34.4	3.372	0.545	3.92	86.1	13.9	10.5	25	4.13	736 *	84.5	47.4
310	8.69	2.889	0.330	3.22	89.7	10.3	36.5	12	28.5** *	371	55.9	27.9

Notes – Provisional interpretation based on previous samples analysed from Staple Gardens Excavation:

§ **LOI:** Sample 309 (highlighted) is organic-rich

$ **Phosphate-P:** Moderately high values, but may not be indicative of enrichment (critical threshold = 5.00 mg g^{-1})

¶ χ: Figures highlighted in bold show signs of magnetic susceptibility enhancement: * = enhanced (χ_{conv} = 5.00-9.99%), ** = strongly enhanced (χ_{conv} = 10.0-19.9%), *** = very strongly enhanced (χ_{conv} ≥20.0%)

† **Pb, Zn and Cu:** Figure highlighted in bold and asterisked for Pb would appear to show signs of enrichment

Table 21: Pollen assessment

(Nomenclature follows Moore *et al.*,1991; Stace, 1991, Bennet *et al.*, 1994)

SAMPLE	234/36	36	36	36	36	36	BH1	37
Height(m OD)/depth on core	31.12	31.20	31.22	31.30	31.34	31.45	33cm	44cm
Context	***310***	***310***	***310***	***309***	***309***	***318***	***?***	***323***
TALL WOODY TAXA								
Acer		*						
Betula								*
Corylus t.		*	*		*			
Lonicera (?)					*	*		
Quercus	*	*			*			
Salix		*						
Sambucus								*
HERBACEOUS TAXA AND DWARF SHRUBS								
Cereal t.			**	***		***		*
Achillea t.	*			*	*	*		*
Calluna					**	*		
Caryophyllaceae		*						

SAMPLE	234/36	36	36	36	36	36	BH1	37
Centaurea nigra t.				*				*
Chenopodiaceae					*			*
Galium t.			*		*	*	*	
Lactuceae	*	*	*	*	**	**		*
Lotus t.		*						
Plantago lanceolata	*			*			*	*
Plantago maj/media				*				*
Poaceae	***	**	***	***	**	***	*	**
Polygonum t.						*	*	
Rumex acetosa t.	*			*				*
Rumex oxyria t.			*	*	*		*	*
Sinapis t.	*	*						
Solidago virgaurea t.						*		
Stachys sylvatica t.	*							
Trifolium t.	*							*
Umbelliferae				*				
Urtica t.								*
Veronica t.			*				*	
Vicia t.				*				
MOIST SOIL & AQUATIC TAXA								
Caltha t.					*	*		
Cyperaceae		*	*					
Equisetum			*					
Filipendula	*		*	*				
Ranunculus t.	**		**	*		*		*
Myriophyllum	**							
SPORES								
POLYPODIACEAE					*			
NOT IDENTIFIED						*	*	
UNIDENTIFIABLE	*		*	*	**	*	*	*
POLLEN CONCENTRATIONS	++	+	+	+++	+	+++	-/+	+
POLLEN PRESERVATION								
Normal	**	**	***	***	**	***	**	**
Crumpled	*	*	*	*	*	*		
Corroded	*	*				*	*	*
Degraded	*	*	**	**	**	**	*	*
Split	*	*	**	*	*	*	*	*

Key 1. Frequency of pollen types and pollen preservation categories

*** Abundant
** Frequent
* Present

Key 2. Pollen concentrations

++++ Very rich (eg. stabling/floor crust, rich peat/lake sediments)
+++ Rich
++ Countable
+ Countable with difficulty
- Not countable

Table 22: Microstratigraphy assessment

Thin section sample (Core sample)	Chief characteristics: soil micromorphology (SM), bulk data (BD) and palynology.	Preliminary Interpretation
(36)	Palynology @ 31.45 m OD (Lower 318): rich pollen concentrations of moderately well preserved pollen, predominantly cereal type and Poaceae (and Calluna present); some things in common 31.30 m(??).	Medieval (Lower 318) Chalky silts (from core description) (Rich countable pollen)
M309A (36)	31.41-31.335 m OD (0.50-0.57.5 m) SM: Lowermost (318): moderately well sorted chalky silts with few fine plant fragments; minor phosphatisation of chalk clasts and matrix, including both amorphous Fe/Ca/P (?) and vivianite; minor burrowing and sedimentary (muddy?) alluvial fine laminae. Junction between (309) and (318) marked by concentration of coarse woody debris and large chalk fragments, wood charcoal and large piece of burned bone and ubiquitous burned eggshell. Upper 309: very poorly sorted mixture of large chalk, slate(?), wood fragments, with coarse sand-size chalk, amorphous organic matter fragments, rare examples of strongly burned bone, partially charred amorphous organic coprolite set in ash and fine charcoal; calcitic and phosphate-stained ashey fine fabric in addition to fine biologically mixed chalky mineral and finely fragmented amorphous and charred organic matter.	Junction of Post-Roman peat (309 upper) and lowermost medieval (318) Unlikely to be simple chalky silt alluviation/overbank (Sedimentation containing organic fragments – deposits affected by nearby/later cess disposal, but overall landuse unclear.) Over – Wood and chalk building debris (also including included burned food waste)? Mixed organic dumps containing both wood and constructional(?) debris, alongside minor kitchen waste, in a sediment dominated by charred and unburned stabling waste that may also include pig dung(?). (Backyard animal husbandry?)
M309B (36)	31.35-31.26 m OD (0.57.5-0.65 m) SM: Layered organic 'peaty' and minerogenic 'peats', BD (x309lower): 34.4% LOI, 3.92 mg g^{-1} phosphate-P, 10.5 x 10^{-8} SI χ, 4.13% χ_{conv}, 736 $\mu g\ g^{-1}$ Pb, 84.5 $\mu g\ g^{-1}$ Zn, 47.4 $\mu g\ g^{-1}$ Cu ("Stony peat") Coarse chalk, wood charcoal, flint, pottery, brickearth, slate? and mortar-rich layer with burned eggshell, biogenic calcite (earthworm granules), plant fragments, fine amorphous and charred organic matter (in patches), with ashes, fungal material and occasionally articulated phytoliths. Palynology @ 31.34 m OD: sparse pollen and relatively poor preservation, yet containing interesting presence of woody taxa pollen types and Calluna, in addition to grassland pollen types. Layered horizontally oriented blackened long lengths of Poaceae plant fragments, often intercalated with fine mineral material; with few pot, chalk and flint stones. Two layers, a basal layer of Layered	Post-Roman peat (309 lower) (Overall very organic {LOI], moderately phosphate-rich. Origins of strong Pb signal is unclear – possibly from concentrated stabling waste)?? Mixed constructional and burned organic debris (animal husbandry?)? (Interesting and countable pollen) Dominantly dumped raw stabling waste? Dumps of unused bedding and fodder(?) and raw stabling waste? (Good countable pollen)

Thin section sample (Core sample)	Chief characteristics: soil micromorphology (SM), bulk data (BD) and palynology.	Preliminary Interpretation
	horizontally oriented blackened long lengths of Poaceae plant fragments, often intercalated with fine mineral material; overlain by layered Poaceae, but containing plant cells and organ fragments. Palynology @ 31.30 m OD: rich pollen concentrations; very abundant grasses and cereal types, and herbaceous taxa; probable mixed pollen preservation.	
M310A (36)	31.26-31.185 m OD (0.65-72.5cm) SM: Base of (309): similar to (310), biologically worked but more humic, more fine burned material – mineral and charcoal; Palynology @ 31.22 m OD (309): sparse, countable with difficulty; mixed pollen preservation (very good to very poor); mainly grasses and cereal type. 310: moderately heterogeneous poorly sorted mixture of frequent stone size flint and chalk, with very few coarse charcoal and wood fragments; occasional land snail shell, biogenic earthworm granules and slug plates present; many fine charcoal and wood fragments, and inclusions of 'humic' soil; example of burned eggshell – all set within a calcitic (includes some ash crystals and some secondary calcite formation) fine fabric containing mainly finely charred organic matter; many amorphous (dung?, including possible pig as well as herbivores) fragments, fungal bodies, phytoliths, diatoms present; after thin burrowing by mesofauna there was secondary calcite, possible patches of secondary amorphous P formation. BD (x310): 8.69% LOI, 3.22 mg g^{-1} phosphate-P, 36.8 x 10^{-8} SI χ, 28.5% χ_{conv}, 371 $\mu g\ g^{-1}$ Pb, 55.9 $\mu g\ g^{-1}$ Zn, 27.9 $\mu g\ g^{-1}$ Cu Palynology @ 31.20 m OD (310): sparse (countable with difficulty), moderately well preserved pollen; with frequent Poaceae, but also with several tree pollen types present.	Post-Roman peat (junction of 309-310) 309: similar to below, but with higher organic content. 310: Deposition/dumping of burned (% χ_{conv}) poorly ferruginous (calcareous) residues of organic waste (LOI) – possibly mainly of stabling waste origin (dominance of fine charcoal, amorphous organic matter; presence of fungal material, phytoliths, ash (Pb?); dung heap (phosphate-P) worked by mesofauna, earthworms and slugs, burned and dumped into site (?) – small number of diatoms reflecting its wet character. (Countable and useful pollen potential)
(36)	Palynology @ 31.12 m OD (Lower 310): countable, reasonably well-preserved pollen – predominantly grassland types.	(310): Post- Roman peat (Countable and useful pollen potential)
M323 (37)	0.38.5-0.46.0 mm SM: heterogeneous mixture of poorly sorted silt to small stone-size chalk, weathered chalk, flint, mortar, pot, bone, charcoal, wood/bark, shell (landsnail), coprolites including coarse fragments; with a calcitic fine fabric characterised by very abundant amorphous and fine charred organic matter; many and diverse diatoms are present; rare fungae; possible fragments of amorphous organic	AD150-200 + earlier Moderately biologically worked mixed mainly minerogenic building and occupation debris and waste (e.g., latrine and kitchen), with organic content possibly indicating inputs of charred stabling waste into a 'very wet' (given the variety and numbers of diatoms present) environment. (Pollen countable with difficulty but should prove informative)

Thin section sample (Core sample)	Chief characteristics: soil micromorphology (SM), bulk data (BD) and palynology.	Preliminary Interpretation
	matter/stabling waste present with phytoliths; abundant thin and medium size burrowing and biological mixing. Palynology @ 44.00 cm: pollen concentrations are low, although a wide variety of reasonably well preserved pollen types were noted; mainly grassland types, but also cereal type.	
BH1 (BH1)	Palynology @ 33 cm: Very low pollen concentrations, on which it would be difficult to carry out a full count; few pollen present are of grassland type.	Unclear context – compacted core sample of silty clay. (Further analysis probably not warranted)

3.4 Environmental summary and discussion

Rebecca Nicholson

3.4.1 The sedimentary sequence at Pilgrims School was sampled extensively for a range of palaeoenvironmental indicators, including charred and waterlogged plant remains, insects, and diatoms. Additionally, several monoliths and, where sampling from the trench became impossible, a borehole was taken for pollen and sedimentary analysis, including soil micro-morphology. Sampling was targeted on the Roman, post-Roman and medieval sequences from Trench 3, through layers interpreted as the Pre-Roman/early Roman river gravels and alluvial sands, later Roman dumping and "peat" formation, medieval alluvium and later medieval - post-medieval dumping and garden soils. The major aim of the sampling in Trench 3 was to investigate landscape and environmental change in the floodplain of the River Itchen, particularly relating to the proposed Roman drainage of the floodplain and diversion of the Itchen.

3.4.2 In addition, several bulk samples were taken from key contexts in Trench 1, from the fills of timber lined pit [118] and rampart layers (150) and (154) etc.

Trench 1

Roman Rampart

3.4.3 Sample 53, from context (150) was taken from the Roman rampart and was found to contain abundant indicators of nitrogen-rich waste-ground habitats such as middens and farmyards, as well as indicators of damp ground. Preliminary indications suggest the vegetation may relate to an abandonment phase of the ditch.

3.4.4 The plant remains from sample 52, context (154) were consistent with turf cut from damp-wet grassland, possibly representing turves stacked from the rampart.

Saxo-Norman Pit [118]

3.4.5 Sample 6 is consistent with a cess origin, while the upper fill of the feature represented by sample 5 appears to contain a domestic rubbish component as well as human faecal waste.

Trench 3

3.4.6 Generally preservation of all the environmental indicators was very variable, with several contexts providing little information while others contained well-preserved and significant assemblages of charred and waterlogged seeds, insects, diatoms and pollen. In all cases, preservation of the remains has resulted from the anaerobic conditions within the lower levels of Trench 3, though the deposits described as peat would be more accurately termed organic silts, since in no case was true peat formation encountered.

Roman sands and gravels

3.4.7 Context (323) from the base of the Trench 3 sequence contained sparse ecofactual evidence; however both insect remains, seeds and pollen were well preserved in the upper levels of this layer, and particularly into context (322) where an organic-rich layer had formed within the sand. Almost all the evidence from these deposits is

indicative of a shallow water, flooded landscape, with indicators of slow-moving or even stagnant, nutrient-rich water. Aquatic and waterside plant remains seem likely to have been transported in floodwater, since there is little evidence in the insect assemblage for the presence of reed beds, and a domestic/occupation component is likely to represent waste washed in from elsewhere. Context (323) contained the only evidence for faster flowing water - a small elmid "riffle" beetle component may represent a flood deposit from the main channel of the Itchen or else the proximity of a fast-flowing river channel.

Later Roman Dumping.

3.4.8 Despite being interpreted as a dumping layer, most of the environmental evidence from context (319) indicates a shallow water environment with conditions similar to those represented in the underlying deposit (322). Diatom preservation was fair-good, and generally indicative of standing water. Only sample 15 was dominated by aerobic, semi-terrestrial taxa suggesting some in-washed sediment. As a whole, the assemblages suggest almost permanent flooding, although some inwashed faecal matter was indicated by the plant assemblage. It is likely that the rubble was dumped into this wet surface to make a useable surface.

Post-Roman Peat Formation.

3.4.9 Contexts (309) and (310) do not represent true peat but rather organic silts typical of bodies of slow moving water or marshland. All lines of evidence indicate that (310) represents a period when the land was very wet and nutrient-rich, probably under standing water, with a fen-type vegetation. The formation of (309) appears to have taken place as the land dried out somewhat, with the formation of reedswamp and marsh. Soil micromorphological analysis indicated the possibility that the deposit contained a significant component deriving from animal waste (possibly pig) and stabling, and the plant remains assessment too considered a faecal component likely.

Medieval

3.4.10 Contexts (306), (307), (308) and (318) appear to represent a drier landscape. Diatoms were sparse and the plant remains were indicative of a damp possible seasonally flooded meadow, fertilised with domestic waste.

4 DISCUSSION AND INTERPRETATION

4.1 Reliability of field investigation

4.1.1 The integrity of the overall stratigraphic evidence encountered during the evaluation is judged to be good. There had been no recent disturbances and the full depth of stratigraphy survived in each trench, and archaeological levels are protected by thick layers of post-medieval dumping and garden soils. The total depth of stratigraphy, as revealed Trench 3, is 2.7m.

4.1.2 As the consequence of the difficult waterlogged conditions, especially during the excavation of the peat and underlying levels in Trench 3, where significant water seepage occurred, an element of mixing when retrieving bulk finds was inevitable.

4.2 Interpretation by period

Pre-Roman

4.2.1 River gravels were reached in Trench 3, almost certainly representing a pre-Roman course of the River Itchen. Later second century pottery from a sand bar (323) above the gravels would imply that this part of the trench was still within the river channel during the second half of the 2nd century. At some point shortly afterwards a silty 'peat' had began to accumulate (322) implying that the course of the river had changed. It is believed that during this time the main channel of the River Itchen was diverted to its present course, located immediately to the east of the town defences.

Roman

4.2.2 Evidence for the defensive Roman rampart was found in Trench 1, overlying 'peat' (151). The construction of the rampart could not presumably have began until the area had been sufficiently drained. The 'peat', although not dated, may be contemporary with the formation of the peaty silt (322) in Trench 3 although it occurs at a level of 0.50-0.60m above it. This could imply that Trench 1 lay on higher marshy ground away form the river channel. The rampart, its base constructed of re-deposited river silt and turf, probably up-cast from the nearby ditch, conforms to other sites excavated along the eastern defences. Although no dating evidence was found within the limited area excavated, this earthwork has been dated elsewhere to the late 2nd century, when the defences were extended over the former floodplain. Undoubtedly the full height of the rampart had not survived and appears to have been slighted at some point before the laying down of medieval surface (137).

4.2.3 The Roman defensive wall (117) was found to cut into the rampart, its construction trench containing mottled patches of brown clay, perhaps derived from the upper levels of the slighted defensive rampart. Previous archaeological evidence elsewhere in the town has shown that the defensive wall is subsequent to the construction of the rampart. The wall would have been cut into the front of the rampart and the shallow nature of its foundation offers further evidence of the rampart's slighting.

4.2.4 Rubble (319) found in Trench 3 appears to represent dumping rather than in-situ evidence for structures, possibly an attempt to raise levels above underlying dump conditions. Similar rubble has been identified further west during earlier archaeological work on the site and is perhaps derived from buildings located on the west of the school or from the extensive buildings that were excavated at Wolvesey Palace to the east. It is possible that timber posts (320) and (321) may have formed part of a structure founded on the rubble although no associated occupation spreads were found. Alternatively they could have formed an element of a land drainage system. As such, the evaluation has shown that within areas investigated, conditions remained too damp for sustained habitation during the Roman period.

Saxon - Medieval

4.2.5 The formation, within Trench 3, of thick deposit of 'peats' (309 and 310) from as early as the late Roman period suggests that the area continued to be wet, probably within a floodplain marsh. This situation appears to have persisted well into medieval times, assuming that the later medieval ceramics found within the later 'peat' (309) are not intrusive. If the interpretation of timber group (305) as a possible fish trap is

correct, then this would imply the existence of stream or pond in the immediate vicinity.

4.2.6 The possible track (137) located alongside of the Roman town wall in Trench 1 probably dates from this period, post-dating the slighting of the Roman rampart. Such intramural lanes or tracks are a well known feature of the late Anglo Saxon and medieval town and allowed easy access to the defences for repair or in times of conflict. Its position on top of the surviving Roman rampart would have avoided the rather damp conditions prevalent below.

4.2.7 The construction of The Close wall upon the stub of the demolished Roman wall implies that the earlier wall (117) had been in a poor state of repair. Evidence for the total rebuild of the Roman town wall has been recognised on previous sites within the town. This perhaps pertains to the siege of AD 1216-17, which resulted in significant damage to the walls, after which a series of murage grants beginning from AD 1228 appears to indicate a period of substantial repairs or rebuilding (Keene 1985). Pottery of 12th - 13th century date from mortar rubble (101), dating to immediately after the construction of the medieval wall, would appear to corroborate this.

4.2.8 Timber lined pit (118), if it served as a cess-pit, is located some distance west of the nearest known medieval structures (Teague 2000). Its close proximity to the town wall, and its somewhat small size, suggests that it may have been only used occasionally or for a relatively short period of time.

4.2.9 The thick 'water-born silts' (307, 308, 318) overlying the organic silts within Trench 3 and possibly at the base of Trench 2 (210) implies that the area remained subject to flooding until at least to the end of the medieval period. A conjectural plan of the Cathedral Close, based upon the Parliamentary Survey of AD 1649 indicates the area fell within the 'Dean's small orchard and piece of meadow' (Crook 2005, Fig. 8).

Post-medieval

4.2.10 The evidence from all trenches suggests that from the 17th century, efforts were made to level up the site by the dumping of rubble presumably in order to aid drainage for the existing garden.

4.3 Impact assessment of proposed development

4.3.1 The evaluation of shown that archaeological levels on the site are protected by a thick accumulations of post-medieval make-up layers and garden soils. Discussions with Tracy Matthews, Site and Monuments Officer, Winchester City Council and Richard Massey of English Heritage have agreed levels to which *significant* archaeological deposits occur within each trench. It should be emphasised that such levels will be subject to variation across the proposed development area, outside the area of the evaluation trenches.

4.3.2 Near the north side of Trench 1 these levels lie at 31.66m OD (at the top of Roman rampart (150)), and rise to 32.80m OD at its south end (at the top of construction debris 101).

4.3.3 Within Trench 2, *significant* archaeological levels where not reached and lie below 32.00m OD (silt 210).

4.3.4 Within Trench 3, the latest significant archaeological horizon is taken to be the upper peat (309), which occurs at 31.40m OD at the west end of the trench, rising to 31.45m OD at its east end.

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6 APPENDICES

6.1 Appendix 1: Archaeological Context Inventory

Context No	*Type*	*Description*	*Spot Date*
Trench 1 (8x2m)			
100	Layer	Soil dump?	c1680-1725
101	Layer	Medieval Wall Construction debris	c1200-1250
102	Layer	Disuse?	c1475-1550
103	Layer	Rubble dump/makeup	c1775-1875/1900
104	Layer	Rubble dump/makeup	
105	Layer	Soil dump	
106	Fill	Fill of flower bed 115	
107	Fill	Fill of flower bed 114	
108	Fill	Path	
109	Layer	Topsoil	L18-19C
110	Layer	Makeup	17-E18C
111	Fill	Fill of Pit	
112	Cut	Cut of Pit	
113	Cut	Cut for Path	
114	Cut	Cut for flower bed	
115	Cut	Cut for flower bed	
116	Layer	Dump	c1475-1550
117	Wall	Roman Town Wall	
118	Cut	Cut of timber-lined Pit	
119	Group	Group No for timbers in Pit 118	
120	Fill	Fill of Pit 118	11-12C
121	Fill	Fill of Pit 118	
122	Fill	Fill of Pit (cess?) 118	9-12C
123	Layer	Trample?	
124	Wood	Part of timber-lined pit 118	
125	Wood	Part of timber-lined pit 118	
126	Wood	Part of timber-lined pit 118	
127	Cut	Cut of ?Posthole	
128	Fill	Fill of ?Posthole	
129	Void	Voided context	
130	Wood	Part of timber-lined pit 118	
131	Wood	Part of timber-lined pit 118	
132	Wood	Part of timber-lined pit 118	
133	Wood	Part of timber-lined pit 118	
134	Wood	Part of timber-lined pit 118	
135	Wood	Part of timber-lined pit 118	
136	Layer	Trample?	
137	Layer	Flint surface? Track?	
138	Cut	Cut of ?Robber Trench	
139	Fill	Fill of ?Robber Trench 139	
140	Cut	Cut of slot	
141	Fill	Fill of slot	
142	Layer	Trample?	
143	Fill	Fill of construction trench 145	
144	Fill	Fill of construction trench 145	
145	Cut	Cut for Roman wall construction trench	

Context No	*Type*	*Description*	*Spot Date*
146	Wood	Timber stake	
147	Wood	Timber stake	
148	Wood	Timber stake	
149	Layer	Dump	
150	Layer	Roman ?Rampart	
151	Layer	Pre-Roman Peat	
152	Layer	Roman ?Rampart	
153	Layer	Roman ?Rampart	
154	Layer	Roman ?Rampart (?turf)	
Trench 2 (1.5x1.5)			
200	Layer	Topsoil	
201	Layer	Gravelly topsoil	c1850-1900
202	Layer	Mortar spread	
203	Layer	Gravel Path	
204	Wall	Brick wall or pad	
205	Layer	Brick rubble	19-E20C
206	Layer	Soil ?dump	
207	Layer	Brick rubble makeup	c1680-1725
208	Layer	Chalk levelling	c1680-1725
209	Layer	Limestone & chalk rubble dump/makeup	c1675-1750?
210	Layer	Flood Silts? (unexcavated)	
211	Layer	Soil dump	
212	Layer	Mortar rubble dump/levelling	
Trench 3 (8.8x2m)			
300	Layer	Topsoil	c1880-1940
301	Layer	Garden soil	c1680-1725/50
302	Layer	Rubble dump	
303	Layer	Buried topsoil	c1650-1750
304	Layer	Rubble dump	c1690-1730
305	Group	Group No for timbers 311-17	
306	Layer	Flood Silt?	16-17C
307	Layer	Flood Silt?	13-14C+?
308	Layer	Flood Silt?	14-15C?
309	Layer	Upper peat	14-E16C?
310	Layer	Lower peat	14-15C?
311	Wood	Timber stake	14-15C?
312	Wood	Timber stake	
313	Wood	Timber stake	
314	Wood	Timber stake	
315	Wood	Timber stake	
316	Wood	Timber stake	
317	Wood	Timber stake	
318	Layer	Flood Silt?	
319	Layer	Roman rubble dump	c270+
320	Wood	Timber post	
321	Wood	Timber post	
322	Layer	Silty ?peat	c270+
323	Layer	Sand bar	c150-200
324	Layer	Natural river gravel	
325	Group	Group No for timbers 320-21	
326	Wood	Timber stake	

6.2 Appendix 2: Finds Compendium

Finds Compendium						
Site Code:	**Invoice Code:**	**Site Name:**			**Accession No:**	**OA No:**
WINCM:AY 234	WINPILEV	Winchester Pilgrims' School			WINCM:AY 234	
Material	**No of boxes**	**No of contexts**	**No of sherds**	**Total Weight (g)**	**Box Sizes**	**Box Numbers**
Animal Bone	2	5	428	10124	1 x Winchester Large, 1 x Winchester mixed	B.01, B.02, MISC 0.03
CBM	8	24	650	45203	3 x Winchester, 5 x Winchester	BM.01, BM.02, BM.03, BM.04, BM.05, BM.06, BM.07, BM.08, MISC.03 mixed box
Clay Pipe		12	94	461		MISC.01 - mixed box
Copper Alloy		1	7	0		FE.01
Flint		8	111	795		MISC.01 - mixed box, MISC.03 - mixed box
Glass		13	77	2013		MISC.01 - mixed box, MISC.03 - mixed box
Iron		17	165	0		FE.01
Leather	1	3	7	0	1 x Plastic size 8	L.01
Mortar		2	2	50		MISC.01 - mixed box
Pottery	2	31	912	15011	2 x Winchester	P.01, MISC.03 - mixed box
Shell		15	171	1210		MISC.01 - mixed box, MISC.03 - mixed box
Slag		11	54	1399		MISC.02 - mixed box, MISC.03 - mixed box
Stone	4	5	25	3125	4 x Unboxed	ST.01, ST.02, ST.03, ST.04, MISC.02 - mixed box
Wall Plaster		1	1	0		BM.06
Worked Bone	1	2	2	0	1 x Size 4	WB.01
Totals:			**2,707**	**79391g**		
Total No of Boxes:	19 boxes and 3 miscellaneous boxes				Miscellaneous boxes	Box Size
					MISC 0.01	Winchester Large
					MISC 0.02, MISC 0.03	Winchester Small

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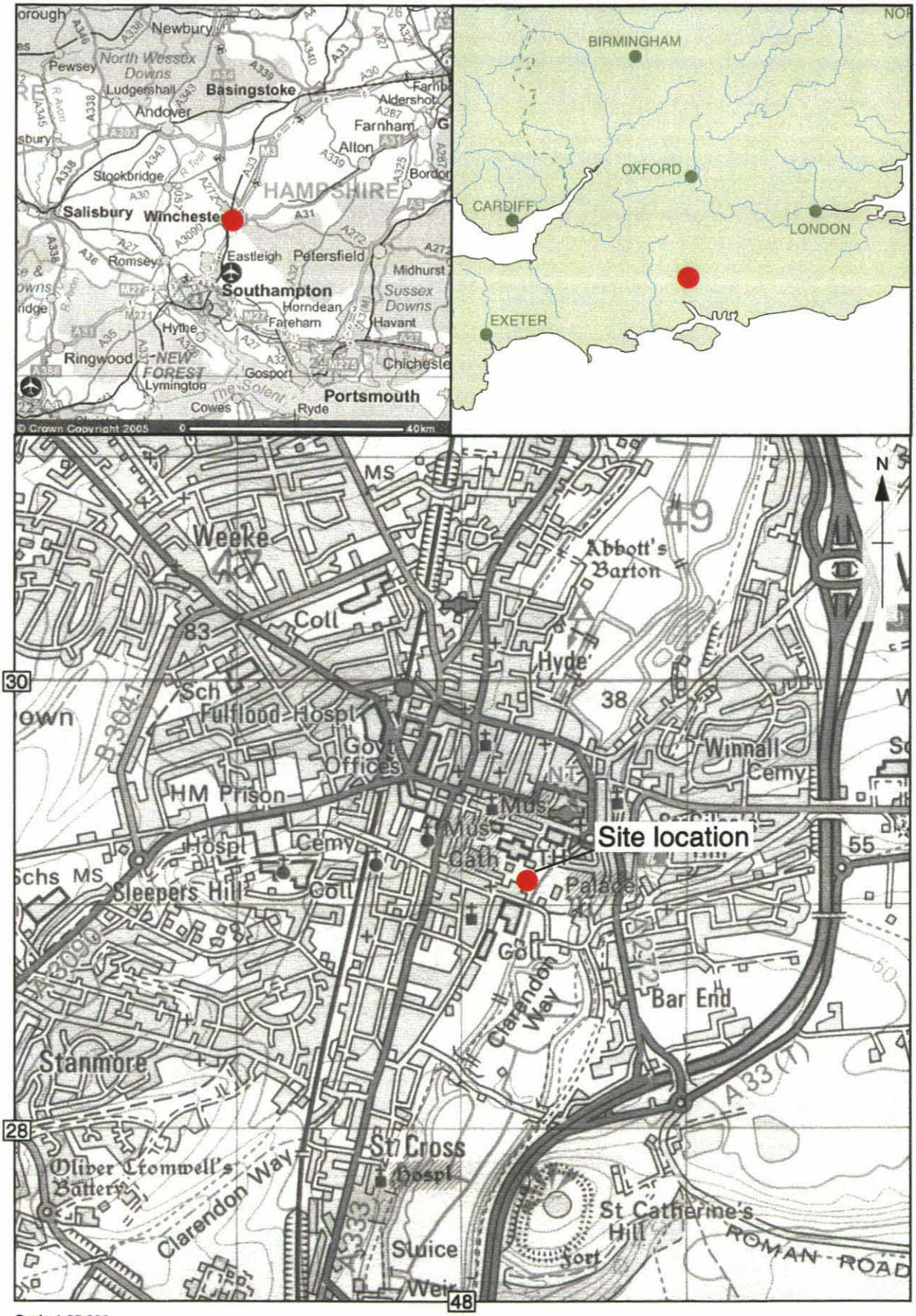

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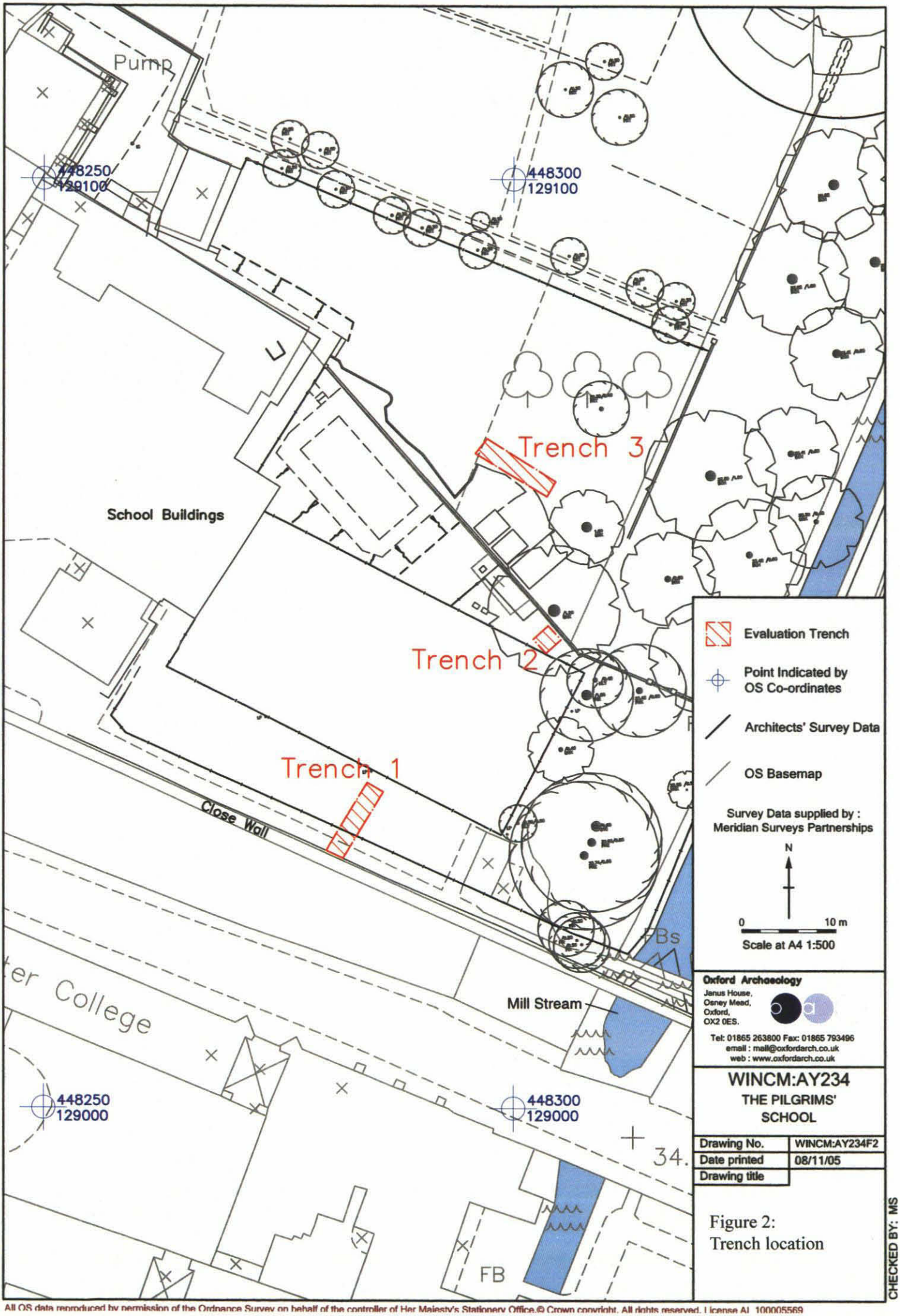
Figure 1: Site location



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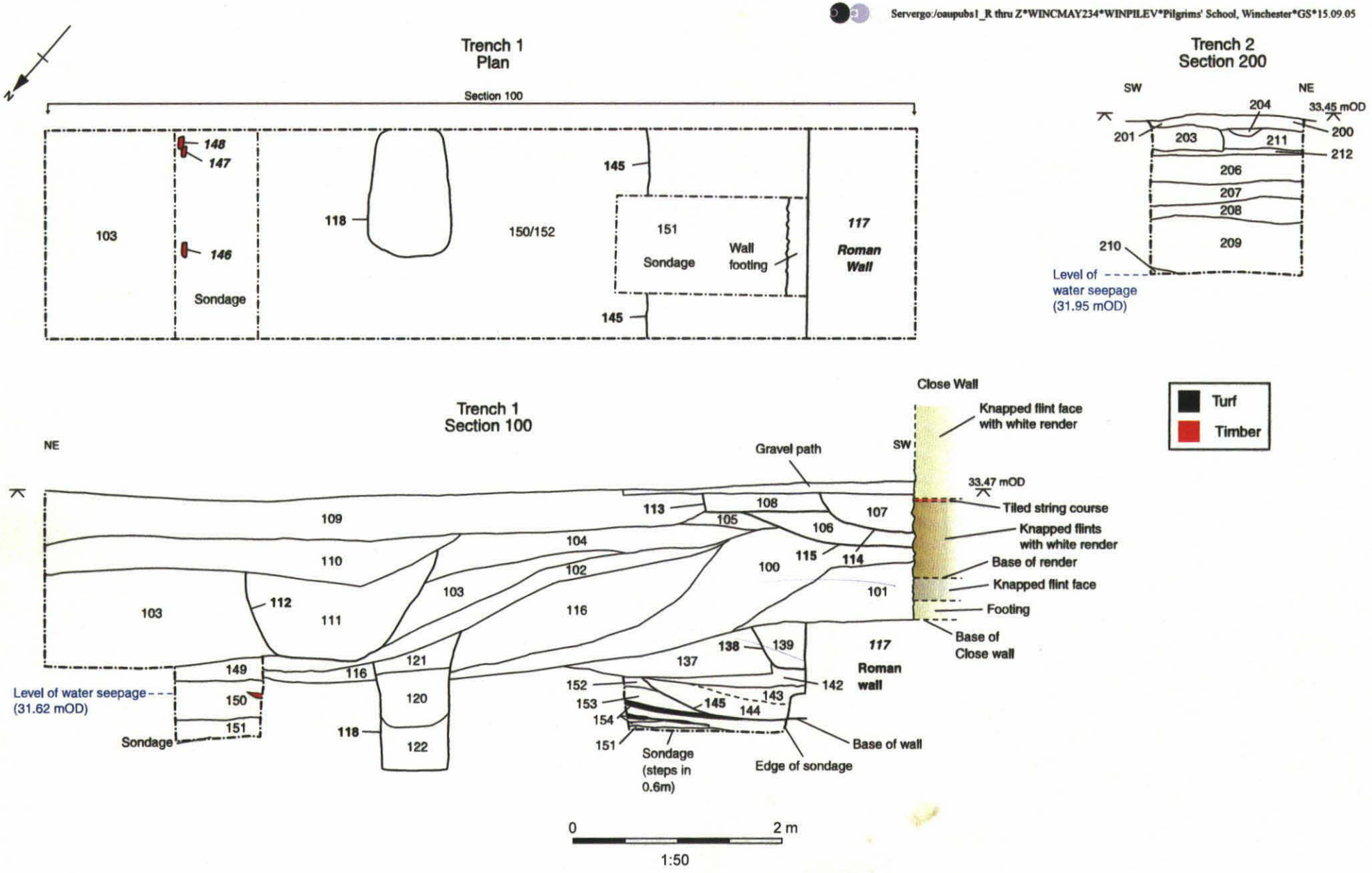

Figure 3: Trench 1 and 2, plan and sections

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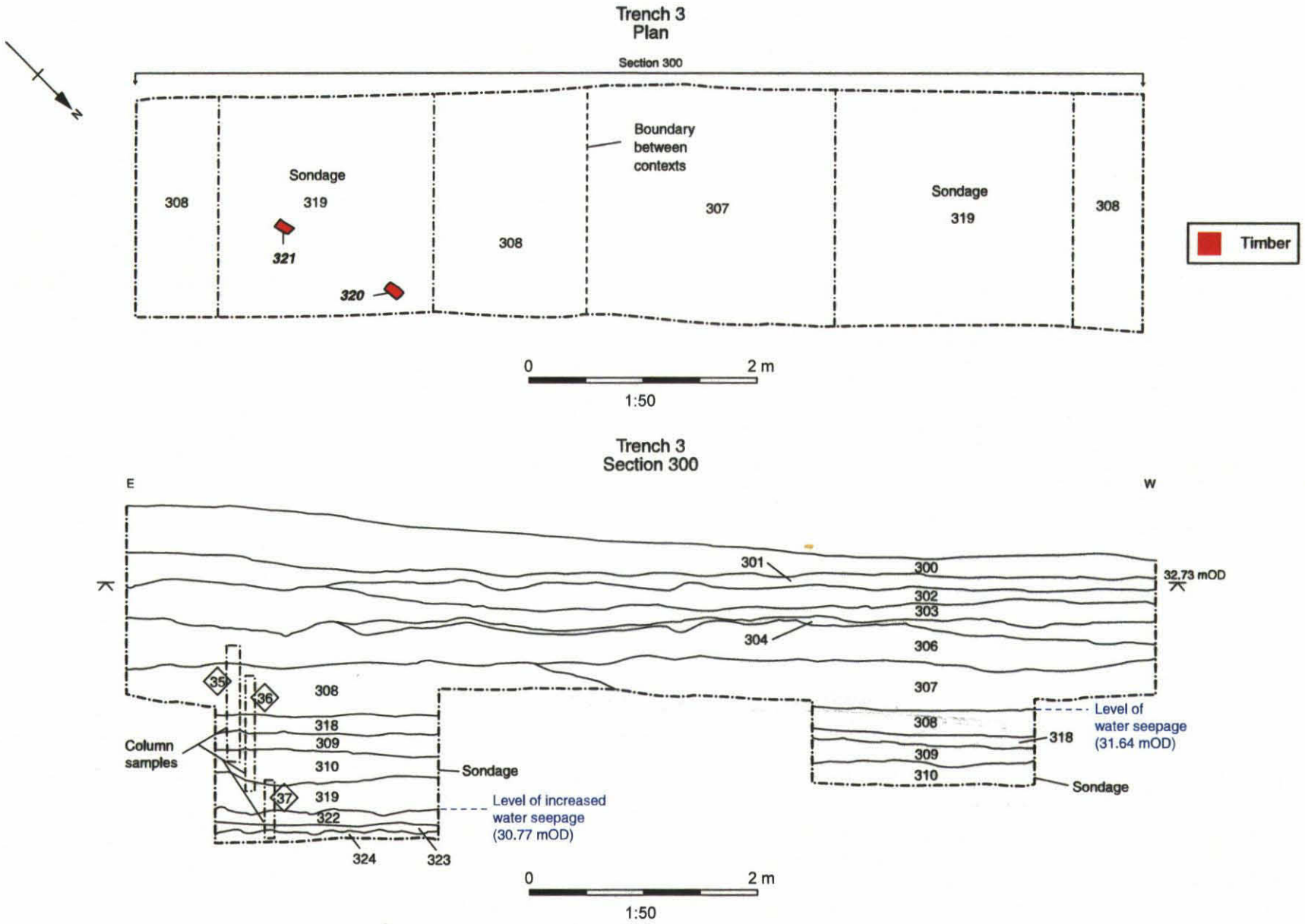

Figure 4: Trench 3, plan and section



Plate 1: Tr 1: Roman town wall 117 (looking south)



Plate 2: Tr 1: Medieval timber-lined cess pit 118 (vertical view)

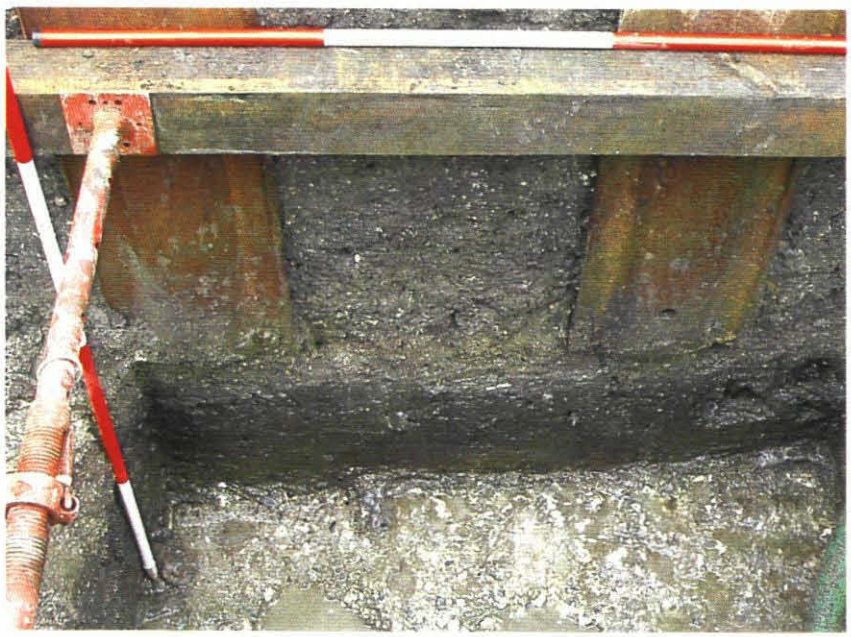

Plate 3: Tr 3: Roman rubble dump 319 overlain by organic silts 309/310

Oxford Archaeology

Janus House
Osney Mead
Oxford OX2 0ES

t: (0044) 01865 263800
f: (0044) 01865 793496
e: info@oxfordarch.co.uk
w:www.oxfordarch.co.uk

Oxford Archaeology North

Storey Institute
Meeting House Lane
Lancaster LA1 1TF

t: (0044) 01524 541000
f: (0044) 01524 848606
e: lancinfo@oxfordarch.co.uk
w:www.oxfordarch.co.uk

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The Pilgrims' School Cathedral Close Winchester Hampshire



Post Excavation Assessment and Research Design (Incorporating Second Phase Evaluation, Geoarchaeological Survey and Watching Brief 2006-07)

oxford archaeology

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Position: Project Officer
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Checked by: Ben M Ford
Position: Senior Project Manager
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Oxford OX2 0ES
t: (0044) 01865 263800
f: (0044) 01865 793496
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THE PILGRIMS' SCHOOL, CATHEDRAL CLOSE, WINCHESTER, HAMPSHIRE

POST-EXCAVATION ASSESSMENT AND RESEARCH DESIGN
(Incorporating Second Phase Evaluation, Geoarchaeological Survey and Watching Brief 2006-07)

By Carl Champness and Steven Teague

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1 INTRODUCTION

1.1 Project background

1.1.1 Oxford Archaeology (OA) were appointed as the Archaeological Contractor by The Pilgrims' School in advance of a construction programme to extend their pre-preparatory and sports facilities at Cathedral Close, Winchester (Scheduled Ancient Monument - Hants 585). During August 2005 Oxford Archaeology excavated three evaluation Trenches (Fig. 2 Trenches 1-3) on the site of the proposed development, the results of which are documented in a report (OA 2006a).

1.1.2 Based upon the results from the evaluation in 2005 design parameters were established by Richard Massey (Inspector of Ancient Monuments – English Heritage), Tracy Matthews (Sites and Monuments Officer – Winchester City Council) and the Cathedrals Fabric Commission (England) to minimise damage to the buried heritage resource from the development. These were integrated, by The Pilgrims' School, into a Design Statement (Nov. 2005) which was submitted to the Department for Culture Media and Sport (DCMS) for Scheduled Monument Consent (SMC) and consent granted in March 2006 with the following conditions:

- excavation of a further single trench to be located towards the western end of a proposed new swimming pool;
- a borehole transect to be undertaken across the long axis of the proposed swimming pool
- archaeological sampling of material from specified augering at selected proposed pile locations;
- examination and recording of archaeological deposits revealed specifically by the removal of the previous swimming pool and generally during all ground works associated with the development.

1.1.3 A Written Scheme of Investigation (WSI) for the archaeological work was drawn up to respond to the requirements of the SMC in consultation with Dr John Crook (Archaeological Consultant for Winchester Cathedral) and Tracy Matthews (OA 2006b).

1.1.4 The work took the form of an archaeological evaluation Trench (Trench 4), targeted boreholes on two E - W transects at c. 5 m intervals and a watching brief during construction works (see Fig. 2). The evaluation and borehole investigation were undertaken between 30th May - 1st June 2006 and the watching brief from 20th July 2006 until 15th February 2007.

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1.2 Location and geology

1.2.1 The site lies within the SE corner of Winchester Cathedral Close within the gardens located in the eastern part of the present curtilage of The Pilgrims' School (centred on National Grid Reference SU 4829 2905). It is bounded to the south by the Close Wall, to the west by the existing school classrooms, to the north by the Deanery Garden and to the east by a strip of land forming part of the school's garden adjacent to the Mill Stream. The site is situated on the valley floor to the west of the River Itchen that flows from north to south.

1.2.2 The site formally formed a largely flat garden area, with hard surfaced tennis courts, to the east of the main school buildings (Stancliffe Building, Millennium Building and Selwyn Building) at *c.*33 m aOD. A swimming pool was situated within the northern part of the site.

1.2.3 The geology of the site comprises Upper Chalk of the Cretaceous Epoch, athough a small east-west anticline exposing Middle and Lower Chalk is located less than 1 km to the southeast, in the Chilcomb area (BGS sheet 299D). It is overlain by floodplain gravels dating from the late Quaternary period which are in turn overlaid by Holocene peats and floodplain/alluvial silts.

1.3 Archaeological and historical background

1.3.1 The archaeological and historical background of the site has been detailed in an Archaeological Assessment Report (Crook 2005) and is summarised with additions from recent fieldwork by Oxford Archaeology (OA 2005). Only a brief summary of the main archaeological context of the site has been presented below.

1.3.2 The site lies on the former floodplain of the River Itchen, before the river was diverted towards the east on its present course (James 1997, 30-1). The Iron Age oppidum of Orams Arbour lies to the northwest. The site lies within the later historic walled city in an area which successively comprised part of the Roman *civitas* of *Venta Belgarum*, the Saxon town of *Wentanceastre*, and the medieval city of Winchester. The archaeological resource within the walled city is recognised as being of national importance and the Cathedral Close is regarded as of special archaeological value with an active status as a Scheduled Monument.

1.3.3 A brief summary, reproduced from the report (OA 2006), of the results of the 2005 evaluation is presented below (see Figure 2):

Between July - August 2005, Oxford Archaeology undertook an archaeological evaluation at The Pilgrims' School, Winchester in order to provide information concerning the impact of the proposed development upon potential archaeological remains. Three trenches were excavated revealing that deeply stratified, dry and waterlogged, archaeological deposits survive below deep accumulations of post-medieval dumping and garden soils. The finds and environmental evidence retrieved from the waterlogged deposits showed excellent preservation. The water table was observed between 31.62 and 31.64m aOD.

Trench 1 measured 8m x 2m and was located against the southern limit of the site. It showed that the latest significant archaeological levels fell away sharply towards the north from 32.80 m aOD to 31.66 m aOD. Two phases of Roman defences were revealed - a later defensive wall superseded an earlier earthen/turf rampart. A possible post-Roman intra-mural track was seen to run adjacent to the wall. A medieval cess/rubbish pit lined with oak boards (with exceptional preservation of organic remains) was also found. The existing Close wall was constructed upon the foundations of the demolished Roman defensive wall, during the 12th-13th century or later. Later medieval soils were dumped in the area. Extensive 18th century dumps of building rubble (containing medieval architectural fragments) overlay the medieval sequence, which were in turn sealed by successive garden soils.

Trench 2 was 1.5 m square and situated within a restricted area towards the north of the site. Significant archaeological levels were not reached and lay below the base of excavations at 32.00 m aOD. The post-medieval building rubble dumps observed in Trench 1 were seen to extend into Trench 2 and contained, of note, a fragment of 14/15th century stone basin/font.

Trench 3 measured 8.8 m x 2 m and was located near to the northern perimeter of the site. Significant archaeological levels were reached at 31.45 m aOD. Naturally deposited river gravels were encountered at 30.56 aOD and were overlain with thin organic silts and sands that contained pottery datable to AD 150-200. These deposits suggest a shallow water/flooded landscape, with indicators of slow-moving or even stagnant, nutrient-rich water. Of note in this phase of works was the absence of the 'Fen Peat' located some 40 m to the SW during previous work (COAS 1999) at a depth of 30.55m aOD and thought to form between c.6,500 BP and 2,000 BP. This would indicate that the prehistoric deposits and environmental regime in the valley floor is varied. Sealing these earlier silts was a layer comprised mainly of flint and chalk demolition[?] 'rubble' that contained fragments from a diverse range of tile forms and painted plaster, well-preserved constructional iron nails and fittings, parts of leather shoes, and several coins dating to the later 3rd century. This deposit represented deliberate dumping derived from a high status building, possibly in the vicinity and probably in an attempt to reclaim the low-lying land in the valley bottom. From the late Roman period a thick accumulation of organic silts developed, implying the area remained too damp for permanent habitation. Preserved within these deposits were a number of small timber posts, and clusters of stakes, perhaps part of a fish trap. The area remained susceptible to seasonal flooding possibly until the 17th century. There was an absence of the later rubble layers seen in Trenches 1 and 2, and successive garden soils were seen instead.

1.4 Scope of this document

1.4.1 This assessment report outlines the results of the second phase of archaeological work and includes more detailed assessment of biological and sedimentary evidence in order to address specific research aims that exist over the development of the Roman town. The work aimed to incorporate all the results of the previous evaluations and borehole work to provide a comprehensive depositional sequence and indicate the archaeological potential of the data collected.

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1.5 Acknowledgements

1.5.1 The archaeological field excavation and watching brief was supervised by Steve Teague with the assistance of Martin Greening. The geoarchaeological fieldwork was supervised by Carl Champness and was undertaken by CC Ground Investigations who carried out the drilling of the boreholes. The project was managed by Ben Ford.

2 PROJECT AIMS

2.1 Aims

2.1.1 The project attempted to address the following specific research aims:

- To characterise the post-glacial development of the area
- To locate the pre-Roman course of the River Itchen and any evidence for its management during the Roman and later periods
- To establish any evidence for pre-Roman use of the site and/or its suitability for habitation or other uses during this period.
- To determine when was the area was suitably drained to allow for habitation during the Roman period and what was its nature and development?
- To establish the date of the Roman *agger* and town wall.
- To recover evidence for the Roman intramural street and/or other streets and for the buildings that flanked them.
- To establish the post-Roman nature of the site, particularly for evidence of the breakdown of the Roman drainage infrastructure.
- To recover any evidence for early-middle Saxon use of the site, particularly given the proximity of the site to the Old Minster and the Saxon Bishop's palace.
- To recover evidence for the establishment of the Saxon *Burh*, particularly for the refurbishment of the town defences.
- To determine if the 9th-century street grid extended into this quarter of the walled city, and evidence for an intramural street (possibly located upon the Roman *agger*).
- To recover any evidence for the incorporation of the site into the monastic precinct.
- To determine the monastic use of the site and if horticultural, what type of plants were grown.
- To reconstruct the changing past landscape within an absolute dating chronology.
- To create a cross section through the geology and the depositional sequence of the development area
- To integrate the results of this work into the previous work to give a coherent and thorough overview.

2.1.2 The primary aims of the geoarchaeological survey were set out as follows:

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- To characterise the sequence of sediments and patterns of accumulation across site, including the depth and lateral extent of major stratigraphic units, and the character of any basal land surface pre-dating these sediments.
- To identify significant variations in the deposit sequence indicative of localised features such as topographic highs or palaeochannels.
- To identify the location and extent of any waterlogged organic deposits and retrieve suitable samples in order to assess the potential for the preservation of palaeoenvironmental remains and material for scientific dating.
- To clarify the relationships between the sediment sequences and other deposit types, including periods of 'soil', peat growth, archaeological remains, and the effects of relatively recent human disturbance, including the location and extent of made-ground.

3 METHODOLOGY

3.1 Evaluation (Trench 4)

3.1.1 A single trench (Fig. 2: Trench 4) measuring 3 m x 2 m was located in exact accordance to the WSI in order to access the impact of the deepest formation level of the proposed swimming pool (this level was 31.785 m aOD). Initially the Trench was mechanically excavated to a depth of *c* 1.2 m below ground level (b.g.l) — the maximum depth that the Trench could be entered without shoring. At this point excavation ceased and the long (west) and short (north) sides of the Trench were drawn and photographed. After recording, mechanical excavation continued to or just above the water table, reached at *c* 31.88 m aOD -although significant archaeological levels were not reached. During this work the Trench was enlarged on each side by c.1 m and reduced to a depth in order to form stepped sides to allow safe access. The trench was then recorded. A slot, approximately 0.10m in depth, was hand-excavated along the western side of the Trench to formation level.

3.2 Geoarchaeological assessment

3.2.1 The geoarchaeological assessment comprised 16 borehole samples arranged in two transects (see Fig. 2) and targetted on two alignments of the piled foundations for the proposed development (Fig. 8: BH 1-8, Fig 9: BH 9-16). A program of 8 boreholes was placed at 5m intervals along the northern-most alignment of piled foundations on a broadly E-W alignment. A further 8 boreholes (Transect 2) were placed 5m apart along the south side of the proposed swimming pool (the southern most alignment of piled foundations) on a broadly E-W alignment. The aim of the survey was to obtain spatial data, combined with the data from previous excavations, to provide a comprehensive coverage of the site sequence and its geoarchaeological potential.

3.2.2 Ordnance Survey co-ordinates were retrieved for each sample location with the use of digital mapping and hand tapes with surface heights transposed from the Cathedral benchmark (35.95 m aOD). The boreholes were drilled using a Terrier percussion rig

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capable of extracting continuous 100 mm diameter cores in 1 m lengths suitable for geoarchaeological and palaeoenvironmental assessment. Each location was drilled until the underlying gravel had been proven. The cores were returned to OA premises where they were extruded and logged.

3.2.3 The lithological data from the borehole logs was inputted into geological modelling software (©Rockworks 2006) for analysis and correlation of deposits into key stratigraphic units. These units have been used to demonstrate the nature and the extent of the sediment accumulation patterns across site. Various cross sections and elevation plots have been produced in order to illustrate the main points of the discussion (Figs. 7-9). A plot of the bedrock surface was also produced in order to identify the underlying early Holocene landscape that was buried by later alluvial and archaeological make-up deposits. This data was added to earlier work and formed a continuation of a borehole survey conducted by Context One Archaeological Services with Dr Keith Wilkinson during June 1999 (COAS 1999).

3.2.4 Two representative sedimentary sequences (BH 3 and BH 13) were selected for the assessment of the preservation of palaeoenvironmental remains and detailed sediment analysis. The selection of these sequences was based on the perceived character, interpretative importance and chronological significance of the strata under investigation in relation to the project aims. These samples were assessed for the preservation of plant remains, pollen, insects, snails and diatoms.

3.2.5 The geoarchaeological assessment was undertaken following guidelines set out by English Heritage (EH 2006). Environmental sampling procedures were in accordance with the OA Environmental Sampling Guidelines and Instruction Manual (OA 2000), that is based on guidelines presented by English Heritage (2002). Samples for sediment analysis (soil micromorphology, phosphate and soil chemistry) were also processed in order to further characterise the sediment sequences and identify signatures potentially indicative of human activity. They will also allow for the extraction and selection of material suitable for Radiocarbon dating.

3.3 The watching brief

3.3.1 The watching brief involved the monitoring of all significant groundwork during the course of the development (nominally all works in excess of 1 m depth) by means of regular and co-ordinated visits when appropriate. All groundworks took place above the significant archaeological levels as dictated by the Design Statement (Nov. 2005). Representative records (drawn sections and photographs) were made for each major groundworks intervention (see Fig. 2), as follows:

- Demolition of the old pool (see Fig. 3 - Section 500)
- Construction of a new manhole (see Fig. 4 - Section 502)
- Groundbeam excavations for new pre-preparatory block (see Fig. 4 - Section 503)

- Groundbeam excavations for new changing room block (see Fig. 4 - Section 504 and Fig. 5 - Section 505)
- Formation of the south ring-beam for the new swimming pool (see Fig. 5 - Sections 506 and 507)
- Excavations to the formation level of the new swimming pool (see Fig. 6)

4 RESULTS: DESCRIPTIONS

4.1 Evaluation

(Fig. 2, Trench 4 and Fig. 3, Section 400)

4.1.1 The earliest deposit (406) was reached at 31.98 m aOD (1.51 m b.g.l) and comprised a clean and friable pale grey silty clay containing much calcium carbonate precipitate — presumably formed by the percolation of the underlying water-table. This deposit was at least 0.20 m thick -its basal level lay below the excavated level of 31.78 m aOD. Contained within it was a fragment of late 17th - 19th century storage jar and small sherd of Roman pottery. Also recovered was a fragment of late medieval ridge tile and a fragment of 17th - 19th century roof tile.

4.1.2 Overlying (406) was a fairly flinty firm mid grey silty clay (405). It was 0.47 m thick and contained fragments of early slate (medieval?) and a fragment of medieval roof tile. It probably represented an accumulated garden soil. Overlying this soil but confined to the eastern edge of the trench was a dump of mortar rubble (404), to a visible depth of 0.37 m. It contained frequent chalk lumps and fragments of CBM/brick and *c* 17th-early 18th century bottle glass. This appears to represent a dump of rubble probably derived from demolition and robbing of structures elsewhere —similar and contemporary with rubble (103) found in Trench 1 (OA 2005). On the western side of the trench this was overlain by a dump of mid greyish-brown silty loam (403) that measured 0.49 m thick. Overlying this sequence was the existing topsoil (400 and 401) and a buried tarmac surface (402).

4.2 The watching brief

Demolition of the old swimming pool (Fig. 2, Section 500)

4.2.1 The former swimming pool was located immediately east of the Stancliffe Building, its internal area measuring 12.80 m x 5.50 m. The upper surface of the pool was constructed upon a raised bank raised *c* 0.70 m above the surrounding ground level at *c* 34.15 m aOD. Demolition of the pool entailed breaking up its basal slab and then infilling it with the levelled bank. This methodology did not allow for a view of the profile of its construction cut, although a short strip was purposely exposed at its deepest end to allow for a representative drawn section to be made.

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4.2.2 The underside of the slab of pool at its deepest end was found to occur at *c* 32.85 m aOD, or *c* 0.67 m below the extant ground level. This concurred with a dark humic soil (500), which represented the recent topsoil/garden soil on which the bank had been built. It is clear therefore that the construction of the pool did not impact upon archaeological levels which were found to occur at 31.40 m aOD at the west end of Trench 3 (OA 2006).

Construction pit for new manhole (Fig. 4 - Section 502)

4.2.3 All drainage and services trenches were dug to depths of less than 1 m revealing relatively modern soils and are not reported here. However a trench for the insertion of a manhole was excavated immediately to the east of the Science block. It measured *c* 2.60 m x 2.40 m, and was dug to *c* 31.33 m aOD, a depth of 2.20 m b.g.l. The trench was unshored and close inspection of the deposits could not be safely made, although a sketch profile of its west side was achieved.

4.2.4 The earliest deposit comprised buff-coloured mortar rubble (503) that occurred at *c* 31.70 m aOD, or at *c* 1.87 m below the existing surface. It was fairly clean, and in excess of *c* 0.37 m in thickness, apparently largely devoid of coarse fragments of rubble or building material — suggesting it represented a single dump of robbing debris. Above was a clean homogeneous mid grey-brown silty clay (502), *c* 1.05 m thick, containing occasional slate and CBM fragments — almost certainly post-medieval garden soil. Above this was the extant topsoil (500).

The new pre-preparatory school (Fig. 4 - Section 503)

4.2.5 Trenches for the installation of the ground beams were excavated to a level of *c* 32.35 m aOD in accordance with the architect's foundation scheme (Fig. 2). This effectively entailed an excavated depth of *c* 1.00 - 1.40 m below the existing surface. Significant archaeological levels in this area are as defined in Trench 3 of the evaluation occur below 31.40 m aOD. Throughout the trench the basal level of the homogenous dark grey loamy garden soil (502) - pertaining to post-medieval use of the site- was not reached. Near to the eastern end of the new block the garden soil was absent and had been replaced by dumps of mortar rubble (504) - largely devoid of coarse components apart from occasional brick and tile fragments. The rubble was seen to overlay garden soil (502) and therefore is of post-medieval date — seemingly infilling and levelling a large depression situated to the east.

The changing rooms (Fig. 4 - Section 504, Fig. 5 - Section 505)

4.2.6 Trenches for the installation of the ground beams were excavated to a level of *c* 32.35 m aOD in accordance with the architect's foundation scheme (Fig. 2). The foundation trench along its southern side was somewhat shallower at *c* 32.80 m aOD or approximately 0.80 m below the extant ground level. Significant archaeological levels in this area — as defined in Trench 2 of the evaluation — occur below 31.95

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m aOD towards the north and at 32.80 m aOD at its highest point in Trench 1 (within 1 m of The Close wall) at 32.80 m aOD.

4.2.7 Dumps of mortar rubble, similar to those observed on the east-side of the new pre-preparatory school, were found over much of the area (Fig. 2) although a thin strip of earlier post-medieval garden soil occurred along the western side and within the southern foundation trenches. The undersides of these deposits were not breached and therefore significant archaeological levels were not exposed. Section 504 (Fig. 4) illustrates the western extent of the rubble dumping identified within the eastern end of the new pre-preparatory school (Fig. 4, Section 503). The earliest deposit (507), a homogeneous dark grey brown silty clay loam, is equivalent to the post-medieval 'garden soil' identified elsewhere. Overlaying this soil and tipping away towards the east were dumps of mortar rubble (505, 506) largely devoid of coarse material apart from small fragments of brick and other ceramic building material.

4.2.8 Further dumping of mortar rubble were observed alongside the western footings of the new building (Fig. 2, Section 505). Here clean mortar rubble (509) was observed to tip away towards the west, partially overlying post-medieval 'garden soil' (510). It is likely that this rubble is the same as the 17th or 18th century rubble found at the northern end of Trench 1, excavated in 2005.

The new swimming pool (Fig 5 - Sections 506 and 507, Fig. 6 - Section 508)

4.2.9 The new swimming pool was constructed in two main stages over a protracted period. The foundation trench for the ring-beam along its southern side was first excavated and the concrete beam formed — presumably to provide stability and protection to the nearby Close wall - located 2.3 m away. The trench was excavated to its formation depth of 32.15 m aOD, or *c.* 1.45 m below the surface of the extant gravel path, and measured *c* 0.60 m - 1.00 m with somewhat unstable sides - hindering safe inspection in places. However two representative sections were drawn (Fig. 5, Sections 506 and 507). The main excavation for the pool entailed a trench measuring *c.* 21 m x 11 m, undertaken in 3-4 spits until its formation level of 31.785 m aOD was reached, undertaken over a period of several weeks. A drawn section (Fig. 6, Section 508) was made of its northern side.

4.2.10 The earliest deposit revealed within the ring-beam trench comprised a deposit (515) of compact mid-brown clay (Fig. 5, Section 506) revealed near the base of the trench at 32.02 m aOD. This deposit directly underlay a thick dark-grey silty loam (514) - indicative of the post-medieval garden soil that overlays the site. This deposit, presumably a dump, measured at least 0.14 m in thickness. The deposit was absent at the west end of the ring-beam trench and here the earliest level was represented by a dark grey silty clay, context (517), (Fig. 5, Section 507), over 0.38 m thick and containing lenses of mortar. This was overlaid by a thin dump of light brown clay containing patches of mortar (516) that was in turn overlain by the post-medieval garden soil 514.

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4.2.11 The earliest deposit revealed within the excavated area of the swimming pool comprised a clean and seemingly homogenous mid to dark grey silty clay loam (519) that occurred on its western side, (Fig. 6, Section 508), that was over 1.30 m in thickness. Due to the proximity of the water table, its lowest visible level could not be closely examined. This deposit is stratigraphically identical to the post-medieval garden soils seen elsewhere on the site — and is also equivalent to the garden soils (404 and 405) that were examined in more detail within Trench 4 (Fig. 3, Section 400). These soils were absent over the eastern part of the pool, where dumps of mortar rubble (518) were present (Fig. 2 and Fig. 6, Section 508). At the north-western corner of the pool the garden soils were also absent and similar mortar rubble levelling layers (521 and 522) were observed (Fig. 6, Section 508). Recovered from the mortar rubble (518) was a large rim sherd from a late 17th - 18th century storage jar, along with a fragment of post-medieval brick and fragments of late medieval floor tile. The nature and date of these deposits suggests they are contemporary with similar deposits found in evaluation Trenches 1 and 4 (and elsewhere on the site) seemingly filling at least three large depressions/features.

4.3 Deposit model

4.3.1 The study combined with data retrieved during the previous evaluations and geoarchaeological investigations on the site has served well in characterising the broad morphology of the sub-surface stratigraphy underlying the present ground surface at the site. It has helped to develop a basic understanding of the sedimentation sequence and the types of environment in which deposition occurred. The proposed depositional sequence is summarised in Table 1.

Table 1: Summary of sedimentary sequence

Elevation	Units	Context	Inferred environment
33.7 m - 32.75 m aOD	**Unit VII: Topsoil**	(1001, 2001, 3001, 4001, 5001, 6001, 7001, 8001, 9001, 10001, 11001, 12001, 13001, 14001, 15001 & 16001)	Modern topsoil soil that has developed during the post-medieval period.
33.1 m - 31.2 m aOD	**Unit VI: Post-medieval makeup**	**a) Gravel dumps** (9004-9007, 10004, 11003, 12004-12005, 13005, 14005, 15004-15005, 16004-16005) **b) Garden soils** (1002-1003, 2002-2004, 3002-3003, 4002-4003, 5002, 6002-6003, 7002-7003, 6002, 7002-7003, 8002, 9002-9003, 10002-	Rubbish and other material dumped on the floodplain in order to reclaim the land and raise it above the level of flooding. Also includes rubble deposits used to backfill possible medieval features.

Elevation	Units	Context	Inferred environment
		10003, 11002-11003, 12002-12003, 13002-13003, 14002, 15002-15003, 16002-16003)	
32.25 m - 30.85 m aOD	**Unit V: Medieval deposits**	**a) organic alluvium** (1004, , 4004, 5003, 6005, 7004, 8003-8004,); **b) Bank** (2006 & 3005) & c) Stabilisation horizon (2005 & 3004)	Return to wetter conditions on the floodplain possibly associated with overbank flooding of the predecessor of the Mill Stream and other managed local watercourses.
31.65 m - 30.6 m aOD	**Unit IV: Roman deposits**	**a) Sand bar deposits** (4007, 4008, 5004, 5005, 6007, 7007 & 8006), **b) Gravel and chak dumps** (1005, 2007 4005 7005 8005); **c) Peaty alluvium** (2008, 3007, 4005, 6006, 7006, 9008, 10006, 11005, 12007, 13010, 14004) and **d) Rampart deposits** (10005, 11004, 12006, 13006, 13007 13008, & 13009)	Early activity identified on the sand bar, followed by drainage of the floodplain and diversion of the river. Gravel and chalk dumps associated with beginnings of reclamation. Construction of the agger in the late 2nd century, capped with a stone wall in the late 3rd century.
31.25 m- 28.4 m aOD	**Unit III: pre-Roman alluvial/fluvial deposits**	**a) Channel deposits** (1006-1007, 2009-2011, 3008-3011, 4006) and **b) floodplain deposits** (9009-9012, 10007-1009, 11006-11007, 12008-12009, 13011-13014, 14005-14008, 15006-15007, 16006)	Floodplain environment with meandering channels with areas of reed swamp and flood meadow. Prehistoric activity focussed around the wetland edge and gravel/Tufa islands.
29.25 m- 30.60 m aOD	**Unit II: Gravel**	(1008, 2012, 3012, 14009, 5006, 6008, 7009, 8008, 9013, 10010, 11008, 12010, 13015, 14009, 15008 & 160070)	Pleistocene deposits accumulating within a high environment braided streams during spring snow melt.
	Unit I: Chalk		Bedrock

4.4 Pre-Holocene deposits and basement topography

4.4.1 Unit I: Chalk. The geology of the site is mapped as Upper Chalk overlain by floodplain gravels (BGS sheet 299D) which are in turn overlain by Holocene peats and alluvial silts. The bedrock was not reached in any of the boreholes, but angular chalk fragments recorded within the lower sequence potentially indicate outcrops in the immediate vicinity.

4.4.2 Unit II: River gravels (29.25 m-30.60 m aOD): This unit directly overlies the bedrock geology and consists of a light grey well sorted rounded pebble gravel.

4.4.3 These deposits represent high-energy deposition, which accumulated in a cold periglacial environment relating to the development of braided river systems that date from the late Pleistocene (*c* 20-10,000 BP). These types of deposits are typically found in river valleys and consist of gravel bars that formed due to high seasonal flow associated with melting snow during the spring. Any archaeological material within these deposits are unlikely to be *in situ*, although prehistoric flint work has been previously recovered from the gravel surface from the site (COAS 1999).

4.4.4 The surface of the gravely sand and stiff clay deposits essentially defines the topography of the early Holocene landscape (Fig. 7). Bates (1998) refers to this as the 'topographic template' and suggests that variations in the template largely dictated the patterns of subsequent landscape evolution, as flooding and sedimentation ensued during the prehistoric period.

4.4.5 The plot of the gravel surface illustrates the topography prior to major Holocene sedimentation and shows that there were gradually lower elevations at the edge of the Stancliff building, likely to represent a former prehistoric channel of the River Itchen. The model has also revealed that the edge of the floodplain may be located near to or possibly on the line followed by the old school building, along with The Pilgrims' Hall. Previous investigations within this area of the site have identified the remains of both Roman and medieval buildings that were overlain by dry ground deposits of dark earth and post-medieval deposits. Floodplain deposits have been previously identified (COAS, 1999) within the school courtyard indicating a gradual shallowing of the floodplain in this location. The eastern boundary of the floodplain is likely to be located just east of the Mill Stream, near to Wolvesey Palace — where excavations revealed substantial remains of Roman buildings and streets (Biddle 1975, 321-6).

4.5 Holocene sedimentation sequence

4.5.1 Unit III: Pre-Roman Floodplain deposits (29.30 m - 31.25 m aOD): These deposits consists of a natural alluvial/fluvial sequence of silty peat (Unit IIIa), calcareous silty (Unit IIIb), silty sand (1007, 2010 & 3010) and basal peat (2011, 3011, & 9012) overlying gravel within borehole Transect 1.

4.5.2 These deposits are confined to the western edge of the site due to the presence of the gravel bar that rises above the level of prehistoric flooding. A more extensive pre-Roman sequence is represented in borehole Transect 2, consisting of a sequence of alluvial/fluvial deposits of calcareous silt (9009, 10008-10007, 10006, 12008 13011 & 14005), silty peat (130012, 14006, 15006 & 16006), calcareous silt/tufa (14007, & 13013), and woody peat (9010, 1009, 11007, 12009, 13014, 14008) overlying gravel. The floodplain sequence (Unit IIIb) indicates that for most of the prehistoric period the site would have been a continually changing wetland environment with a network of shifting slow-moving channels with frequent overbank flooding.

4.5.3 There is at least two phases of transition represented within the sequence from organic deposits to minerogenic calcareous silts/tufa deposits. The more organic deposits of the sequence are likely to be representative of wetland environment, for example reed swamp or alder carr-woodland. The other more minerogenic parts of the sequence may indicate periodic overbank flooding or shallow flow. The higher energy sandy silt deposits are likely to represent fluvial deposition within a former channel of the River Itchen. As the sequence processed, the texture of the deposits became finer, indicating that the rate of channel flow was slowly decreasing throughout the prehistoric period.

4.5.4 Any archaeology found in association with these deposits is likely to have undertaken a moderate degree of reworking. Also the type of archaeological activity represented in this type of environment is likely to be associated with trapping or utilising water resources.

4.5.5 Unit IV: Roman deposits (31.65 m - 30.6 m aOD): The earliest Roman deposits identified within the sequence consisted of sandy rubble deposits (Unit IVa) which were also encountered within Trench 3 (323) on a gravel high. These deposits produced dating material from 2nd century AD (early-mid Roman period) indicating activity on the higher ground on the floodplain. It is likely that the channel and the floodplain were still active at this time, making the surrounding area unsuitable for habitation.

4.5.6 Chalk rubble deposits (Unit IVb) identified in Transect 1 appear to have been used to level out the undulating topography of the floodplain and help infill the former prehistoric channel. During the previous geoarchaeological assessment (COAS, 1999) these deposits were interpreted as evidence of demolished buildings in the vicinity, which still requires confirmation.

4.5.7 The accumulation of an organic silt clay/peat (Unit IVc) indicates that after this initial phase of activity the area was progressively becoming wetter mostly likely as a response to rising ground water levels.

4.5.8 Unit V: Medieval deposits (30.85 m to 32.25 m aOD): The post-Roman layers consist of thick deposits of silty clay/building rubble overlying a thin layer of organic silts and silty peats.

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4.5.9 The organic alluvial silts (Unit Va) are laterally extensive across Transect 1. This is probably an organic alluvium that reflects increasing wetness during the post-Roman period.

4.5.10 A silty clay deposit (Unit Vb) identified within Borehole 2 and 3 within Transect 1 may represent a dump, possibly a medieval bank.

4.5.11 Unit VI: Post-medieval makeup deposits (31.2 m to 33.1.25 m aOD): Overlying these deposits are thick accumulations of chalk and flint rubble within a silt clay matrix (Unit VIb), consisting of a mixture of dumped post-medieval rubbish and building rubble deposits.

4.5.12 Unit VII: Modern garden soils (31.2 m to 33.1.25 m aOD): The post-medieval deposits are overlain by a silty loam that makes up the modern garden soil of the school.

4.6 Biostratigraphy

4.6.1 The earliest deposits identified on the site are from the basal peat deposit (3011) between 29.60 m aOD (-3.77 m bgl) and 29.30 m aOD (-3.90 m bgl) from the palaeochannel identified in Borehole 3, which has been radiocarbon dated to the c.6,142±82 BC (OxA-17233) placing it in the mid-late Mesolithic period. Pollen was too poorly preserved to be interpretable, but the waterlogged plant remains produced a reasonable diversity of taxa, including wood fragments, and several mollusca and insect remains. The snail and diatom assemblage indicated slow-flowing water species within a channel relatively free from vegetation.

4.6.2 The upper horizon of deposit 3011 shows signs of disturbance indicating a possible erosional contact and a potential hiatus in the sediment sequence. The pollen profile in the upper part of the channel silts has a rich herb community, which includes pollen types typical of moist soils, and is consistent with a later disturbed environment when compared to the main floodplain sequence. Detailed sediment analysis and enhanced nutrient levels may suggests that latrine waste and other rubbish may have been used to infill the channel after the channel had been diverted in the mid/late Roman period.

4.6.3 The main floodplain sequence identified in Transect 2 between 29.30 m aOD (-3.56 m bgl) and 31.25 m aOD (-2.12 m bgl) started to accumulate from the c.5669±50 BC (OxA-17170) in Borehole 13, placing it within the late Mesolithic period. The pollen profile consisted of tall woody and arboreal taxa that are dominated by *Alnus* (alder) and *Corylus* (hazel) pollen, with the presence of *Tilia* (lime) and *Ulmus* (elm). The preservation of the pollen was generally good from the basal deposits and indicated a lack of reworking. Only *Alnus* and *Corylus* grains were poorly preserved suggesting that this material may be reworked from older material.

4.6.4 The local environmental indicators like snails, waterlogged plant remains and insects suggest wet open conditions with trees nearby the immediate area throughout much

of the mid-late Holocene. The waterlogged plant remains are not well preserved and there were signs that the deposits may have previously dried out. The small identifiable assemblage consisted of evidence of wet marshy conditions with *Mentha sp*, (Mint), *Juncus sp.* (rush) stinging nettles and decaying *Ranunculus* (buttercup) seeds. This was supported by the snail assemblage that consisted of a totally open wet grassland fauna up until the early Roman period. They included *Vallonia pulchella*, *Succinea* or *Oxyloma*, *Cochlicopa lubericella*, *Trichia l.c. Hispida* and *Cepaea sp.* A small range of freshwater species of *Valvata Cristata*, *Valvata piscinalis* , *Bithynia sp.* and *Lymnaea truncatula* were also present. The presence of both a typical damp grassland fauna with an amphibious element have been previously thought to indicate floodmeadow (Robinson 1992). Diatoms were not preserved within these deposits, probably due to repeated wetting and drying or high alkalinity of the samples.

4.6.5 The first evidence of clearance within the sequence is recorded quite early on at 30.57 m aOD (-2.47 m bgl) from a peat deposit (13011) that was radiocarbon dated to *c* 4278.5±55.5 BC (OxA-17231). This broadly matches the regional pollen picture of an early phase of late Mesolithic woodland reduction of trees like elm at around 5,600 years BP in this part of southern England (Greig 1986). This is followed by a possible phase of secondary woodland regeneration of locally growing elm and lime, with alder and hazel pollen possible being reworked, at a depth from -2.345m bgl. This deposit produced a radiocarbon date of *c* 3997.5±48.5 BC (OxA-17232), placing it within the early Neolithic period. Evidence of a further second phase of woodland clearance comes from the palaeochannel deposits (3008, 3009, & 3010) and the disturbed soils on the gravel high (322) within Trench 3. This is consistent with the more regional pattern of clearance from the Iron Age that has been identified by Greig (1996) again citing Watson (1982).

4.6.6 The earliest significant archaeological activity identified on the site comes from the high area of gravel that was previously identified in Trench 3. This activity on the higher ground has been dated to the 2nd century AD based on pottery. In addition to the rich collection of finds, the gravel high deposits produced a well-preserved assemblage of waterlogged plant remains, and a charred spelt wheat and glume base. The assemblage included a few seeds of aquatic and waterside plants, *Potaogeton* (pondweed sp.) *Lycopus europaeus* (gipsywort) either representing plants that were growing in and around pools or seeds that had washed in. The presence of several food remains, including imported luxury fruits and nuts like *Ficus carica* (fig) and *Juglans regia* (walnut) indicate that faecal material was present. The origin of the waste may have been sewage discharge into the river that had been washed into the deposits through episodes of flooding, or more locally deposited waste.

4.6.7 A compact layer of flint and chalk rubble (Unit IVb) appears to represent a deliberate period of dumping onto the floodplain surface in order to create a usable surface within Transect 1. This dumped material was also used to level off undulations within the floodplain and fill in the former course of the prehistoric river channel. This deposit was dated to the late 2nd and 3rd century AD in Trench 3 (319) and

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within the previous borehole survey (COAS 1999) and reflects an attempt to reclaim the floodplain during this period. The diatom assemblage consisted of a range of non-planktonic aquatic species. The species include the consistent presence of a number of *Fragilaria* taxa (*F. brevistriata, F.construens* var. *venter, F. lapponica, F. pinnata*) which are early colonisers of new and ephemeral aquatic habitats.

4.6.8 The insect fauna from the reclaimed late Roman surface on the high area of gravel suggest the local landscape was open grassland with some pasture. This is suggested by the *Aphodius*, *Geotrupe*, and *Onthophagus* dung beetle recovered from these deposits. Open grassland is also suggested by the presence of *Phyllopertha hortocla* whose larvae are associated with old pasture and meadows. There is little indication of trees in the insect fauna with only isolated fragments of the tree dependent *scoyltid* 'bark beetle' recovered. This suggests that the floodplain was probably open and essentially treeless.

4.6.9 These deposits were overlain by organic silt, deposits (310 and 151), that formed a late Roman ground surface. A series of timber stakes were recovered from this deposit indicating activity within the immediate area. The deposits contained a mixed pottery assemblage of late 3rd-century Roman pottery and one early medieval sherd, so their formation probably commenced in the late Roman period. The plant remains consisted of fragments of matted reeds, molluscs, wood fragments, buds, charcoal and a wide range of fruits and seeds. Aquatics (pondweed), marsh plants (spike rush, sedges), ruderals (nettles, docks), arable weeds (corn cockle, nipplewort) and grassland plants (*Poaceae*) were all represented in the assemblage. The input of ruderal weeds and a few arable weeds may again indicate sewage deposition. The assemblage consisted of wet grass/marsh taxa that indicate that the reclaimed Roman floodplain surface was gradually inundated by rising ground water.

4.6.10 During the same period the Roman rampart identified within Trench 1 and Transect 2, was being constructed directly on to the floodplain deposits. This buried the early Roman floodplain surface and ensured its preservation. Further detailed sediment and chemical assessment of these deposits revealed that the rampart was constructed with a mixture of reworked soils, anthropogenic material and alluvium. It also confirmed that two periods of construction appeared to be indicated by two thin organic deposits potentially representing periods of stabilization (Unit IVd). The preservation of thin wall grass seeds within the assemblage may indicate that turves cut from damp grassland elsewhere were used in the construction of the rampart. The thin sections taken through the deposits revealed dumps of mixed soil horizons from locally derived clay-with-flint soils, with small amounts of anthropogenic inclusions, such as latrine waste, and mixed alluvial silts.

4.6.11 The environmental assemblage of the rampart is difficult to interpret due to complex issues of taphonomy. A narrow range of taxa was identified indicating an assemblage of damp and nutrient-rich wasteground taxa. This included nutrient rich damp taxa of *Hyoscyamus niger* (henbane), *Urtica dioica* (stinging nettles) and *Sambucus nigra* (elderberry), *Carex spp.* (sedges) and *Cnium maculatum* (hemlock). The snail

assemblage from the embankment (150) consisted of several shade-loving species of *Discus rotundatus*, *Carychium minimum* and *Oxyclilus Cellarius* in the assemblage in addition to the open fauna, possibly indicating the presence of nearby hedges or scrub vegetation. It is also possible that this assemblage derives from soils and other deposits from elsewhere that were used in the construction of the rampart.

4.6.12 The immediate post-Roman environment sees a continuation of the conditions and processes of sedimentation that occurred within the late Roman period. Deposits (Unit IVc) represent the transition. A similar range of plant material consists of matted reeds, apple andocarp, ruderals and marsh plant were present within context 309 in Trench 3. No truly aquatic taxa were noted and conditions might have been slightly drier than in the late Roman period.

4.6.13 The insect fauna from these deposits was essentially the same as the early Roman deposits suggesting open ground conditions. Enhanced phosphate and lead levels may indicate possible concentrations of stabling waste within the deposit. Detailed sedimentary examination suggests that the mixed organic waste from the deposit consist of both wood and possible construction debris, along side kitchen waste, dominated by charred and unburnt stabling waste that may have also included pig dung.

4.6.14 The only Saxon/Norman feature identified on the site consisted of a timber lined cesspit (118) within Trench 1. This produced well preserved wood fragments, molluscs, charcoal, insects fish bones and mineralised cess concentrations containing brain, corn cockle impressions and straw. The remains are typical of *in situ* cess deposits, with the straw having been used as toilet paper and/or dumped into the pit to help dampen the smell. The abundance of fly puparia and mineralisation demonstrates that the deposit was nutrient rich, moist to wet, and probably very smelly. The upper fill (120) also produced a wide range of waterlogged edible fruits and seeds like bramble and sloe/plum stones. The seeds of several general ruderal weeds including docks, fumitory and orache, were also present, perhaps indicating that either the pit was more open to the elements or that a wider range of waste was being dumped into the pit.

4.6.15 A second embankment appears to have been constructed on the floodplain during the post-Roman period. This can be seen in section within Transect 1 running from north to south towards the Roman rampart (Fig. 9). It is on the alignment of a projected Roman road that Biddle (1972) believed to run through the site. However it does not appear to have been of Roman construction, consisting of alluvial silt dumps rather than well-constructed road foundations and metalled surfaces. The embankment consisted of deposits of silt (Unit Vb) overlain by organic rubbish dumps (Unit Vc). A stabilisation horizon has been identified on its surface (3005) which developed into a weathered soil horizon during this period with signs of animal trampling. It is possible that the embankment was created as either a flood defence or as access to the ramparts. The date of the construction of the embankment needs to be confirmed

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by radiocarbon dating. However it is possible that this may correspond with the reconstruction of the city's defences that occurred in the late 9th century.

4.6.16 The post-Roman silt deposits (Unit Va; and contexts 306, 307, 309 & 318 in Trench 3) consisted of organic silts that overlay the Roman surface deposits. The pottery assemblage indicates accumulation between the 14th to 17th centuries. The diatom preservation is poor and there is silt visible on the slides. There are also some indications that from the diatom composition the assemblage is derived from flooding. The samples from these deposits again have a range of well preserved non-planktonic diatoms, but differ from the assemblage of the underlying late Roman and early post Roman deposits. For example *Achnanthes minutissima* is common in sample 23, *Amphora veneta*, and *Fragilaria vaucheriae* in both samples 23 and 24. A range of *Nitzschia* taxa *(N. amphibia, N. frustulum, N. palea* and undifferentiated *Nitzschia* spp.) also become more common. These *Nitzschia* spp. are often found growing where nutrient levels are moderately high. This is also supported by the consistent occurrences of *Gomphonema* spp. (*G. angustatum* var. *productum, G. clavatum, G. minutum, G. parvulum, G. truncatum*) in Sample 24. These diatoms are often associated with higher nutrient levels that are associated with waste ground environments.

4.6.17 The plant remains from the silts were fairly diverse and frequent, preservation was limited and most flots tended to be small. Most of the taxa appeared to represent disturbed and nutrient-enriched habitats, like fumitory, stinging nettle and henbane. The presence of sedges and thistle could indicate a damp, grazed meadow type of environment. The presence of marsh/damp ground plants such as spike-rush and sedges could represent the habitat in the damper winter months, or the remains of flooding. The presence of slag, fish bone, coal, tile and charcoal fragments also indicated that domestic waste was a notable component of these deposits.

4.6.18 The gravel and mortar deposits (Unit VIa) overlying the silts represents deliberate dumps to reclaim the floodplain in the post-medieval period. The distribution of these deposits might indicate that they were used to infill specific features. The excavation of the crane pit (Teague, 2000) identified a degree of regularity within the distribution of these deposits which may suggest that they were used to infill cut features like medieval fish ponds that might have been located at the site during the monastic period.

4.6.19 The uppermost part of the sequence consists of garden soils that date from the 16th century onwards, following the dissolution of St Swithun's Priory in 1539. These deposits were largely aerobic and therefore did not produce a preserved waterlogged plant remains assemblage.

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5 DISCUSSION AND INTERPRETATION

5.1 Discussion

5.1.1 The assessment has been particularly useful in being able to view the previous excavations within the wider context of the floodplain sequence. It has also been able to address specific research questions that still remain over the development of the Roman town and its post-Roman development. More crucially it has been able to map the pre-Roman floodplain sediment sequence and assess its potential, which has not been previously investigated in any detail within the town.

5.2 Early Prehistoric

5.2.1 The site appears to occupy an area of the Itchen floodplain with the higher and dryer ground located towards the east where The Pilgrims' School is presently situated. Previous work in the area of the school has identified limited early prehistoric activity associated with the surface of the gravel. Evidence of prehistoric activity on the floodplain may have previously occurred on higher ground and gravel/tufa islands (Scobie 1995). The higher elevations of the gravel bar represented in Trench 3 may have provided one such location for early prehistoric communities to be able to exploit the rich resources of the floodplain environment.

5.2.2 Previous evidence from the underpinning of the Cathedral and nearby boreholes, have indicated that before the River Itchen was diverted during the Roman period, it flowed in at least two main channels, to the east and west of the tufa island to the north (Qualmann 1993; James 1997, 29-30). The more easterly channel was conjectured to flow through the site of The Pilgrims' School, flowing north to south between the tennis courts and Mill Stream; and the westerly channel, north to south just west of the main school building. The model has confirmed the presence of at least one channel running on the same alignment at the edge of the Stancliffe Building. Based on these assumptions the most likely candidate is that this represents part of the eastern channel sequence. However there are hints within Borehole 8 that another potential channel could be located just to the east of Transect 1 towards the Mill Stream. This still needs to be confirmed through further investigations. The exact arrangement of channels within the floodplain needs to await further confirmation of whether the floodplain extends further west of the main school building.

5.2.3 The pre-Roman floodplain landscape would have consisted of a patchwork of different wetland environments that appears to have ranged from wet grassland to flood meadow with alder carr woodland possible nearby at the floodplain edge. The prehistoric channel would have been slow-flowing and relatively free of vegetation. Spring activity would also have appeared to have been very vigorous during this period depositing thin bands of tufa on the floodplain. The former prehistoric channel of the River Itchen would appear to run north-south through the site represented in Boreholes 1, 2, 3 and 9. This channel appears to have been active from the late

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Mesolithic period onwards and was possible rejuvenated in the late prehistoric period, depositing silts within the channel. Throughout the pre-Roman period most of the site would have been too wet for human habitation, but would have likely provided seasonal pasture.

5.2.4 The main floodplain sequence identified underneath the Roman ramparts in Transect 1 formed between the Late Mesolithic to the early Neolithic period. The accumulation of peat and tufa indicate changing conditions within the floodplain. The transitions from the deposition of organic to minerogenic deposits in the sequence are related to significant changes in hydrology and sediment input into the river systems. The causes of these changes could be attributed to both climate change and human activities. The floodplain sequence provides a good opportunity to investigate the relationships between human activity and floodplain sedimentation. Previous research has identified a link between the beginnings of alluviation on floodplains and woodland clearance associated with the intensification of agriculture in low land river systems (Robinson 1992; Brown 1997). The timing of this change obviously varies depending on location and the river system, but most common dates indicate either late Bronze Age or Iron Age. The present sequence may suggest a much earlier date for alluviation in Winchester that was not related to the introduction of agriculture within the area. In fact, sedimentation appears to have decreased within this area of the floodplain between the late prehistoric and late Roman period.

5.2.5 The first evidence of clearance within the sequence occurs within the late Mesolithic period, representing a significant decline in woodland species of lime. A possible phase of secondary woodland regeneration within the early Neolithic period is recorded within the buried soil sealed beneath the Roman rampart. This is consistent with the paucity of Neolithic remains identified within Hampshire in general (Fasham *et al* 1989, 142). The process of sedimentation appears to have been significantly reduced in the late prehistoric and Roman periods.

5.3 Iron Age

5.3.1 During the early Iron Age, more permanent settlement is believed to have been established in the area, concentrated on features and deposits over the east facing side of St Paul's (Qualmann 1993). The floodplain appears to have been cleared by this point and we see the first evidence for widespread occupation of the area. Field systems at Crowder Terrace, possible animal enclosures at Carfax, and settlement features at Staple Gardens, all indicate open settlement related to a wide range of agricultural activities.

5.3.2 By the middle Iron Age the large enclosure of Oram's Arbour was constructed on the western side of the narrowest point of the floodplain. Although the eastern extend of the Iron Age enclosure has not been fully defined it is believed to have been located at the edge of the floodplain. The floodplain would have been wide enough and marshy enough to present a significant barrier to all east-west movement within the

area. The enclosure therefore appears to have been located in order to controlled access to a natural ford over the River Itchen.

5.3.3 The site sequence reveals that the prehistoric Itchen channel was rejuvenated during the late prehistoric period and still active within the Iron Age. The evidence suggests that the floodplain was being extensively used to dump domestic and latrine waste. The environmental indicators suggest that the floodplain would have consisted of flood meadow, possible offering seasonal grazing but was still too wet for permanent habitation.

5.4 Early Roman period (*c* AD 43-199)

5.4.1 Early Roman activity on the site appears to have focussed around the gravel bar identified within Trench 3, indicating that much of the surrounding area was most likely still too wet. This phase of activity has been dated to the 2nd century AD based on pottery recovered from the sandy deposits (323) that overlies the gravel. The former channel of the River Itchen that ran through the site may still have been active into the early Roman period.

5.4.2 The site area appears to have been progressively drained possibly as the settlement expanded eastward during the late 2nd century, as the limits of the *civitas* was established and the river was diverted outside of the eastern boundary. The construction of the defensive embankment *(agger)* deposits occurred shortly after, possibly because prior to this the floodplain marsh may have offered adequate protection.

5.4.3 The Roman rampart was constructed from a mix of reworked soils, anthropogenic sediments and alluvium. Thin section analysis of the deposits indicates that the embankment was being affected by flooding during its construction. The sediment sequence appears to support the idea that the Roman embankment was constructed in two phases, indicating a second phase of either repair or strengthening of the defences at Winchester. Soil micromorphology will help to determine whether the two stabilisation horizons represent dumping of organic rubbish deposits or trampled surfaces.

5.5 Late Roman period (*c* AD 200-410)

5.5.1 The defences of the town appear to have been further reinforced in the late 3rd century by a flint and mortar wall.

5.5.2 Several large deposits of chalk and flint were dumped on to the floodplain in the late 2nd and 3rd century in order help create a dry surface and elevate it above the ground water level. These deposits were compacted in order to create a usable surface for a period of time. These deposits were also used to infill and level off any ground undulations associated with the former palaeochannel of the River Itchen. The presence of wooden stakes that formed undiscernable structures indicate that limited activity was associated with this surface. However the overlying organic silty

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alluvium suggests that this activity was relatively short-lived and that wetter conditions returned by the late 3rd century.

5.5.3 This indicates that the Roman town engineers expended considerable effort to create a surface that was suitable for occupation. It does, however, appear that they were not fully successful in this aim, and there is no evidence to indicate that this land was ever suitable for the construction of buildings and roads. The absence of any such evidence for *in situ* building remains or foundations identified within the sequence suggests that the area was used for other activities that may have used more lightweight wooden structures that leave little archaeological trace.

5.5.4 The environmental assemblage from the late Roman surface and overlying silts indicated that the area was still relatively wet, consisting of damp grassland with areas of nearby marsh. Although low level activity can be detected in association with these deposits, the evidence suggests that the area was still too wet for permanent habitation.

5.6 Anglo-Saxon period (*c* AD 410-960)

5.6.1 With the collapse of the Roman administration of the town in Winchester in the early 5th century, urban occupation of the town is believed to have ceased. Defensive ditches and embankments were placed at the former entrances to the town (Biddle 1976, 109-119 and 206).

5.6.2 The post-Roman deposits suggest that conditions remained unchanged from the late Roman period. The environment consisting of damp grassland with areas of marsh and ponds. Evidence of cereal growth and possible seasonal grazing was also occurring within the local area. There is no evidence to suggest that the River Itchen reverted back to its prehistoric path during this period following the collapse of the Roman administration.

5.7 Monastic period (*c* AD 970-1538)

5.7.1 Evidence of late Saxon/Norman activity at the site is notable by its absence from the sequence in general. The only significant feature from the post Roman period is the Saxo-Norman timber-lined cesspit (118) identified within Trench 1. The plant remains indicate that exotic food remains such as fig and walnut and cultivated plums does not appear to have present in the post-Roman deposits, apart from a trace of fig from context (3180). Native hedgerow fruits such as hazelnuts, apples and blackberries were recorded indicating a change to local grown produce. The more extensive network of trade that existed within the Roman period appeared to have declined after the collapse of the Roman administration.

5.7.2 A silty clay deposit (2006 & 3005) within Borehole 2 and 3 within Transect 1 may possibly represent the construction of a medieval embankment that was potentially associated with flood management or access route to the town's defences. The date of its construction needs to be confirmed by radiocarbon dating, however it appears

consistent with the re-organisation of the town in the late 9th century. This may have part of the reconstruction of the town and its defences by King Alfred or his predecessor, intended to provide rapid access to the town walls for defensive purposes. This would help to confirm Biddle's suggestion (1975b, 127) that the new Saxon street pattern completely filled the former Roman town, including the southeast corner.

5.7.3 The Mill Stream is also believed to have been constructed with the re-organisation of the town in the late 9th century and to be contemporary with the laying out of the Brooks water courses north of the present High Street. Certainly the Millstream appears to have been established by the time of the late 10th century monastic reforms. The organic alluvial silts overlying the late Roman deposits within Transect 1 possibly indicates alluviation in the late monastic period as the infrastructure behind the drainage systems struggled to cope.

5.7.4 Assessment of pollen, diatoms and soil micromorphology within these deposits has confirmed that a return to wetter conditions occurred during this period, most likely associated with overbank flooding. It is possible that at certain times of the year the Mill Stream and other managed watercourses within the town could not cope with the flow of water and overbank flooding that occurred fequently over the site between the 14th and 17th centuries.

5.8 Post-medieval period (*c* AD 1538-present)

5.8.1 The post-Roman layers consist of thick deposits of silty clay/building rubble overlying a thin layer of organic silt/silty peat. A thick deposit of compacted poorly sorted well-rounded gravels directly overlay the Roman embankment deposits within Transect 2, and may represent in-filled medieval fishponds or makeup material.

5.8.2 Overlying these deposits are thick accumulations of chalk and flint rubble within a silt clay matrix, consisting of a mixture of dumped post-medieval rubbish and building rubble make-up deposits.

5.8.3 These are overlain by a silty loam that makes up the modern garden soil of the school that has developed over the last 200 years or so.

6 CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusion

6.1.1 The Pilgrims' School assessment has successfully been able to map the main deposits across the site and provide an interpretation of the depositional sequence of the floodplain. The assessment has identified a complex sequence of pre-Roman, Roman and post-Roman deposits that have a high potential for the recovery of both bio-remains and samples suitable for sedimentary analysis. The sequence has

considerable potential to address many of the current research aims that exist concerning the development of Winchester through time (outlined previously in 2.1). The next stage of analysis will attempt to focus on addressing these aims and providing a wider context for the archaeology identified previously at the site.

6.1.2 The following potential has been identified:

- The floodplain of the River Itchen at The Pilgrims' School saw moderate use before the Roman period. Only limited evidence of human activity can be detected within the floodplain sequence and it was probably used for seasonal pasture. Two episodes of woodland clearance have been identified during the Late Mesolithic period and the early Iron Age within the wider landscape.

- The assessment has confirmed that the prehistoric path of the river Itchen did flow through the site at the edge of the Stancliffe Building extension and was later diverted in the late Roman period. The exact route of the two prehistoric channels proposed by Qualmann (1993) still needs to be confirmed, in particular, whether the floodplain does extend west of the main school building.

- The Roman town engineers attempted to drain the site and raise the ground level by dumping and compacting deposits deriving from building demolition (possibly in the immediate vicinity) during the late 2nd and early 3rd centuries. These deposits included chalk, flint, iron nails and ceramic building materials but also occupation waste including coins and pottery. Evidence was recovered for the use of this reclaimed area within the excavations, although this was limited to poorly defined structures consisting of wooden stakes. This period of use appears to have been relatively short lived, as the wet silty peat deposits (Unit IVc) appear to have accumulated above the surface form the late 3rd century onwards. Indeed this evidence calls into question the success of the reclamation in this area, and the suggestion that the town street grid extended into the area (Biddle 1972).

- The post-Roman environment appears to have been a continuation of the late Roman environment consisting of wet grassland and flood meadow with only low level arable and pasture activity occurring within the outskirts of the town.

- There is an indication that the 9th-century street grid may have extended into the site and connected the south of the town with the defences. The deposits relating to Unit VIb indicate a linear embankment running north to south and probably joining up with the rampart within Transect 1. Further detailed investigation of the stabilisation horizon (Unit VIc) on the embankment will help to indicate how extensively it was used and whether it was ever used to drive animals.

- The work has confirmed that the reconstruction of the cathedral and monastic building may have had some impact on the southeast corner of the close or the wall. Although the principle monastic buildings were located further to the north and west, and there is no evidence, architectural and documentary, for buildings on the site. The discovery of possible building remains, a floor surface and timber

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water course during the excavation of a sump between the main school and Octagon, indicate that this area was used to a greater extent then previously thought. In addition, the cesspit (118) located within Trench 1 may provide further supporting evidence of a building nearby.

- The deposition of the post-Roman alluvial silts suggests a return to overbank alluviation within the late medieval and early post-medieval periods. These deposits probably post-date the creation of the Mill Stream and the water courses known as the Brooks. It is possible that these deposits were laid down during periods of flooding when the drainage system of the town failed to cope with the amount of input into the river system.
- During the post-medieval period there was an increased effort to reclaim the floodplain and elevate the ground level above the water table. The rubble and mortar deposits may indicate in-filled medieval fishponds and other features.

6.2 Recommended methodology for further analysis

6.2.1 The floodplain sequence revealed at The Pilgrims' School has considerable potential to elucidate the character and development of pre-Roman Winchester.

6.2.2 In order to address these questions a combined bulk, palynological and soil micromorphological analysis is recommended of the sequence from Borehole 3, 13 and the previous OA evaluation trenches.

Pre-Roman floodplain sequence

6.2.3 The lowermost part of BH 13 (1314) has the palynological potential of monitoring the 'pre-clearance' (5,600 bp) environment for the area (3 pollen preps, 4 analyses), a study that would also benefit from bulk study of the sediments, in order to compare changes induced by the putative clearance phase (2 bulk samples).

6.2.4 The floodplain deposits found at -2.43 m and -2.53 m bgl (1311-13) have the potential to elucidate the character and impact of clearance on the catchment and local area, through not only palynology but also through associated bulk and soil micromorphological analyses (3 pollen preps, 4 analyses; 2 bulks; 1 thin section, 2 soil micromorphological analyses). Vegetation (woodland regeneration?) and sediment changes in context 1310 should also be examined (1 pollen prep, 2 analyses; 2 bulks; 1 thin section, analysis) in order to record the changing floodplain environment.

6.2.5 In Borehole BH 3, there appears to be plenty of evidence of pre-Roman impact/activity as found in the late prehistoric channel deposits (3007-3009), which could be better understood after systematic sediment analysis (2 bulk; 3 soil micromorphological analyses).

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The Roman rampart and surface- environment and waste deposal

6.2.6 The construction of the Roman rampart and associated pedological and alluvial activity can be investigated by the analysis of thin sections of contexts 1306, 1307 and 1308 (2 thin sections).

6.2.7 Context 319 (samples 7 + 41) and 322 (8 + 42) from the higher area of gravel could provide information relating to the Roman diet. The dried flots could be used in conjunction with the waterlogged flots to provide a rapidly sorted source of rarer, large food remains such as fruit stones and nutshells. In addition the uncharred fruits and seeds could provide some information about the local environment and the deposition of waste, particularly in conjunction with mollusc and pollen data. Preservation bias would need to be taken into account, but the range of taxa is interesting and points to a very nutrient-rich habitat.

6.2.8 The charred cereal remains in the Northgate House site should provide reasonable information concerning the arable component of the Roman diet. Frequent plum/bullace stones from a mineralised cesspit at Northgate house suggest that further dietary information may be present in the residues from this feature. This information can then be compared to the mineralised and waterlogged information from The Pilgrims' School.

Post-Roman environment

6.2.9 The questions about what happened after the Roman period and whether the environment and drainage system reverted back to its previous state, can be further answered by detailed examination and dating of the late- and post-Roman alluvial silts.

6.2.10 The late Roman deposits appear to have a strongly anthropogenic character and probably reflect local 'urban' land use/use of space in this part of Winchester (near the Cathedral). Although constructional debris may be present there appears to be a dearth of domestic, industrial and latrine waste. Instead, waste from animal husbandry appears to dominate (Goldberg and Macphail 2006). Moreover, there appears to be two types of waste present that needs to be investigated; a) charred and mixed material that seems to have come via a dung heap (Bakels 1988; Mücher *et al* 1990) and b) raw stabling waste and possible 'unused' fodder and bedding material (Macphail *et al* 2004). Clearly the following questions can be addressed:

- How was this area of Winchester was used?
- How was animal husbandry waste managed – in contrast to the London Guildhall site, was dung being managed for local manuring; was this an area of dung heaps?
- Can a combined soil micromorphological, chemical and palynological study address the exact components of the animal foddering regimes/grazing practices from the examples of raw stabling waste and possible fodder/bedding?
- Do these deposits act as useful comparisons to contempory domestic and industrial 'floor' deposits at Staple Gardens?

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6.2.11 Thin section M310B and further pollen samples should be processed and analysed to attempt to fine tune the suggested hypotheses concerning the understanding of these deposits, supported by an extra soil chemistry bulk study.

6.2.12 The post-Roman silt deposits do not simply appear to just represent overbank alluviation. Their anomalous character includes a rich pollen content including cereal type, but without associated arable weed types, which does not seem consistent with upstream erosion of arable land. Instead, the assessment indicates the deposit appears to be influenced by localised activities, which as yet remain enigmatic, but certainly seem different from those found in the underlying contexts (309-310) within Trench 3. It is therefore suggested that contexts (318) and (308) should be studied in order to understand better what is occurring in this area. This can be achieved through a series of bulk (x4), pollen (x3) and thin section (x2) studies.

Saxon and Norman diet

6.2.13 Frequent mineralised samples from cesspits at Northgate House will provide plenty of dietary information with which to compare cesspit (118) at The Pilgrims' School. Other excavations in Winchester and Southampton have produced charred, waterlogged and mineralised evidence from this period, but much of this is unpublished (Green, unpublished thesis 1979; Monk, unpublished thesis 1977). An attempt will be made to draw this information together to see if luxury foods imported into the town during the Roman period continued to be available. Most of the evidence to date suggests not, but preservation biases need to be taken into account when different types of deposit are compared. The analysis of samples 5 and 6 from cesspit (118) (including mineralised remains sorted from the residues, if available) would be worthwhile.

Saxon/medieval embankment

6.2.14 The suspected period of stabilisation in context (3005) on the medieval bank can be further investigated (1 bulk; 1 soil micromorphological analysis). Lastly, 3004 appears to have similarities to contexts 309-310 found in Trench 3 (2005), which should be identifiable from further study of these possible dumped stabling waste deposits (1 pollen prep, 2 analyses; 1 soil micromorphological analysis).

The medieval diet and disposal of faecal waste

6.2.15 The medieval period has been investigated in many towns across the British Isles, particularly on waterfront sites such as Norwich (Murphy 1983), Bristol (Jones 1987) and Reading Abbey (Carruthers 1997), where waterlogged preservation has provided a wide range of information. Because evidence from The Pilgrims' School represents mixed flood and peat deposits, precise interpretation and dating of the remains may not be straightforward. However, further analysis may provide information that could be compared to the Roman silty-peat deposits, since they have a similar origin. In addition, changes in the environment might be detected if the upper and lower medieval peat layers are examined in more detail. Samples 3 and 4 would provide

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information on the environment and the medieval diet. If dated, Samples 2 and 44 could also be included.

7 PUBLICATION AND PRESENTATION

7.1 Publication synopses

7.1.1 OA propose that the publication take the form of a medium sized article in Hampshire Archaeology (Hampshire Field Club) of *c.* 50-70 pages, *c.* 25,000 words in length incorporating figures plans and sections, and plates.

7.1.2 The synopsis below presents a broad outline of the proposed publication. Some elements may be subject to modification as analysis progresses.

Holocene environmental change and Roman floodplain management at The Pilgrims' School, Winchester

by Steve Teague and Carl Champness with contributions by.....

	Author	Words	Figs/tables	Plates
Totals		**27,500**	**24**	**10**
Abstract				
1. Introduction				
1.1 Site location and topography			2	
1.2 Archaeological and historical background			2	
1.3 Archaeological and geoarchaeological methodologies			1	2
	Subtot	**2,500**	**5**	**2**
2. Site Development				
2.1 Pre-Holocene deposits and basement topography			1	
2.2 Holocene sedimentation sequence			1	
2.3 Late Prehistoric			1	
2.4 Roman			4	3
2.5 Medieval			2	2
2.6 Post-medieval			1	1
	Subtot	**10,000**	**10**	**6**
3. Environmental Evidence				
3.1 Insect remans			1	1
3.2 Diatoms			5	1
3.3 Molluscs			1	
3.4 Soil Micromorphology and Palynology			2	1

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3.5 Plant remains			2	
	Subtot	**10,000**	**11**	**3**
4. Finds				
4.1 Pottery			2	
4.2 Ceramic and stone building material			2	
4.3 Metalwork			1	1
4.4 Coins			1	
4.5.Worked bone objects			2	
4.6 Waterlogged timbers and wooden small finds			3	
	Subtot	**2,500**	**11**	**1**
5. Discussion				
5.1 The Pre-Roman floodplain			1	
5.2 Roman floodplain management and defences			1	
5.3 The pre-monastic environment			1	
5.4 The monastic period			1	
5.5 Later land use			1	
	Subtot	**2,500**	**5**	**0**

Acknowledgements

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9 APPENDICES

ASSESSMENT OF THE ROMAN POTTERY

Edward Biddulph (OA)

A total of 147 sherds of Roman pottery was recovered from ten contexts. Coarse reduced wares, oxidised wares, fine wares and samian wares were encountered. Reduced wares included ubiquitous grey wares and black-burnished-types wares. The latter were available as cooking jar and dish types; a near-complete BB1-type jar with perforated base from context 319 was of particular interest. Other reduced wares included products of the Alice Holt industry, which supplied the region throughout the Roman period (cf Hawkes 1985, 69), and Hampshire grog-tempered ware, whose flanged dishes were deposited after *c* AD 280 (cf Fulford 1975a, 286-91). Oxidised wares from contexts 322 and 323 were probably of local origin and reached the site as flagons, among other forms. New Forest colour-coated ware was recovered from three contexts (205, 319 and 322). No forms were identified, but sherds were thin-walled and likely to have derived from beakers. These arrived during or after the late 3rd century (Fulford 1975b). Samian was reasonably common, being recovered from six contexts, albeit as residual sherds. Wares from southern central and eastern Gaulish factories appear to have been represented and therefore span the later 1st to mid 3rd centuries AD. Forms included cup forms Drag. 27 and 33, dish form Drag. 31, platter Drag. 15/17 and decorated bowl Drag. 29.

Just three contexts dated to the Roman period. The latest pottery dated contexts 319 and 322 to AD 270 or later; a flagon rim from context 323 joined a handle from 322 and must be of identical date. The remaining pottery, though residual in medieval and post-medieval deposits, included material of 1st to late 3rd/4th -century date, and points to activity occurring in the vicinity throughout the Roman period.

Further work

Although the Roman assemblage was chronologically mixed and largely residual, it contained diagnostic forms and fabrics. Since 'quantitative data represents an essential component of basic data' (Willis 2004, 6), it is recommended that the small assemblage be sorted into fabric groups within context and quantified by weight and sherd count. Forms should be identified and the data presented formally and accompanied by a brief discussion. The near-complete BB1 jar and other vessels from context 319 should be illustrated if warranted.

Recording: 0.5 days
Reporting: 0.5 days
Illustration: 0.5 days

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Appendix: Roman pottery from evaluation Trench 4

John Cotter

Two Roman sherds (total 46g) come from two contexts. A Roman grey sandy ware cooking pot base from context (406) is clearly residual in its context and a single body sherd of Roman grog-tempered ware from context (405) may well be residual also.

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ASSESSMENT OF THE POST-ROMAN POTTERY

John Cotter (OA)

Introduction and Methodology

The assemblage comprises a total of 273 sherds of medieval and post-medieval pottery out of a combined Roman and post-Roman total of 420 sherds weighing 8618g.

All the pottery was examined and spot-dated during the present assessment stage. For each context the total pottery sherd count and weight were recorded on an Excel spreadsheet, followed by the context spot-date which is the date-bracket during which the latest pottery types in the context are estimated to have been produced or were in general circulation. Comments on the presence of datable types were also recorded, usually with mention of vessel form (jugs, bowls etc.) and any other attributes worthy of note (eg. decoration, complete profiles etc.). Residual earlier types were also noted when this was considered worthwhile. Potentially drawable items, in particular, were also highlighted in the comments field. The Roman pottery was briefly examined by in-house Roman pottery specialists and their comments and identifications noted.

Date and Nature of the Assemblage

Medieval and post-medieval pottery appears to occur in roughly equal proportions although the post-medieval sherds are generally larger and better preserved. Apart from the Roman pottery the earliest wares present on the site are handmade Late Saxon and early medieval local wares covering the period from the 9C through to the start of the 13C. These include chalk, flint, and sand-tempered wares. Most of these are residual in medieval or later contexts. The medieval pottery (13C to early 16C) comprises local unglazed sandy cooking pot fabrics and wheel-thrown glazed jugs, some with applied strip decoration. These are predominantly south Hampshire redwares together with a late medieval pale buff or pink ware which may be a more local product. A few sherds of possible Laverstock (Wiltshire), Surrey-type and London-type glazed jugs have also been identified. In general the glazed medieval jugs are quite fragmentary. Late medieval imports include one or two salt-glazed Raeren stoneware drinking mugs from the Rhineland - a common import of the period *c.* 1475-1550. Most of the post-medieval pottery occurs in just one or two contexts, probably rubbish dumps, and includes types closely datable to *c.* 1680-1725 or to 1750. The sherds are, in several cases, large and fresh. These include local and regional glazed coarsewares including (?local) glazed red earthenwares, Verwood-type ware (Hampshire/Dorset) and Surrey/Hampshire Border whiteware. Notable pieces include a redware storage jar rim with a trace of a cross-in circle (or square?) stamp on the shoulder. This may be a product of the Graffham kilns in West Sussex. The Border whitewares include a large portion of a chafing dish - a kind of portable stove or plate-warmer. The finewares in the assemblage include tin-glazed earthenwares from Bristol and probably London, among these drug or ointment jars, dishes, chamberpots and a punchbowl. Common German stoneware imports of the period include sherds of brown 'bellarmine' bottles in Frechen stoneware and mugs and jugs in highly decorated Westerwald stoneware. A few sherds of Staffordshire-type white earthenwares (late 18-19C) and English stoneware ink and hot water bottles complete the list of post-medieval wares.

Potential of the Material

The pottery has some potential to inform us about the activities of the occupants of the site during the medieval and post-medieval periods. It also has the obvious potential to provide a chronological framework for the development of the site. The types present however are all fairly well known types typical of Winchester and this part of southern England. The relatively small quantity of pottery recovered together with its fairly poor state of preservation suggests that further more detailed analysis and publication of the assemblage would not produce very meaningful results. More detailed work on the assemblage could be deferred until after the full excavation stage by which time a more significant sample of pottery should have been amassed. Nevertheless a basic catalogue of the post-Roman fabric types (including sherd counts and weights) should be undertaken to accompany the published site report or for incorporation at a later stage with fuller pottery report. A more researched overview or summary of the post-Roman pottery should also undertaken for inclusion in the final publication report. A small number of unidentified fabrics should be checked against the Winchester fabric reference collection and if necessary extracted for addition either to the Winchester or OA fabric reference collections and described in more detail for archival purposes or inclusion in the report.

Illustration of the material is not considered necessary as most of the forms present can be paralleled in existing publications.

Recommendations for further work

Preparation & Analysis

Background research: including familiarisation with Winchester fabric codes, library research and possible consultation of Winchester fabric reference collection:	1 day
Detailed description of new fabrics and addition to reference collection:	0.5 days
Basic pottery catalogue:	1 day
Report writing	1 day
Sundry tasks To include bibliography, checking text, correspondence etc.:	0.5 days
TOTAL:	**4 days**

Appendix: Post-Roman pottery from evaluation Trench 4 and the watching brief

Three sherds of pottery, which are large and fresh (weighing 329 g), are all of post-medieval date - most probably 18th century. These comprise sherds from two storage jars in Verwood-type ware and a third storage jar in a fine local yellow-glazed post-medieval ware.

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ASSESSMENT OF THE CERAMIC AND STONE BUILDING MATERIALS

J Tibbles

Introduction and methodology

Examples of brick and tile (414 fragments) were recovered from 25 contexts with a total weight of 45,995 gm. A further 10 fragments of stone weighing 316 gm within the assemblage was also provisionally examined. Assessment of the assemblage was based on a visual scan of all the retained material. Information regarding the dimensions, shape and fabric of the material was recorded and were possible, compared with existing regional brick and tile typologies.

It should be noted that the diversity of size and colour within brick and tile caused during the manufacturing process must be taken into consideration when comparing examples within collected assemblages and local typologies. The varying sizes and colours can be attributed to the variation in the clays used, shrinkage during drying, firing within the kiln or clamp and the location of the brick/tile within the kiln. The dating of ceramic building material can be highly contentious due to its re-usable nature.

Bricks and tiles alone cannot provide a firm date because of their re-usable nature but it is possible to date types of brick and roof tile by their earliest occurrence within dated contexts. The identification of new brick or tile types would supplement the existing regional typology and there is potential for comparison with CBM assemblages from elsewhere in the region. The presence or absence of hip and ridge tile suggests a variety of roof forms.

The assemblage was examined using a x15 magnification lens were applicable to aid dating, though fabric analysis was not undertaken as was considered beyond the scope of this assessment. Information regarding the dimensions, shape and fabric (were applicable) was recorded and catalogued accordingly and a Munsell colour code has been incorporated where appropriate. The presence of the original surfaces was also taken into consideration to aid identification

Of the total assemblage, 50% of the ceramic fragments were of Romano-British forms and/or fabrics. The remainder comprised of ceramic building materials of medieval to modern date.

Assemblage Analysis

Quantification of ceramic and stone building materials

	No of Fragments	Weight (gm)
Brick	55	15,225
Roof tile	132	13,365
Not identified	6	60
Romano-British material	212	14,913
Miscellaneous	9	2,432
Stone	10	316
Total	**424**	**46,311**

The medieval/post-medieval Assemblage

Bricks

Of the fifty-five fragments of brick within the assemblage (recovered from 7 contexts) only one complete example (9 ½" x 4 ½" x 2") was recorded (from dump 103). The remainder of the brick assemblage shows seven part-bricks displaying width and thickness and twenty fragments displaying thickness only (28-65mm). Twenty-three fragments displayed no diagnostic traits and twenty fragments bore evidence of mortar. All the assemblage, with one exception from context (302 -19th century) appeared to be of medieval date of manufacture.

The majority of fragments (71%) were manufactured in fabric F1 the remainder in fabrics F2, F4, F8 and F9.

Flat roof tile

One hundred and nineteen fragments of flat roof tile were identified within the assemblage of which twenty-eight fragments could be classified into three site types (1, 2 & 3). The remaining fragments although diagnostic did not have sufficient diagnostic qualities to be classified other than flat roof tile (FRT). Diagnostic qualities included the varying methods of suspension, length, width and thickness. Six fragments (3 joining) displayed a width and thickness and two displayed suspension holes. The remaining tile thicknesses ranged between 10 mm-22 mm with the majority of the tiles displaying a 15 mm-17 mm range. Ten different fabrics were recorded (F1, F2, F3, F4, F5, F6, F7, F8, F10 & F12) of which F1 dominated the assemblage (46%).

A single fragment from (102) displayed burning and twenty-nine mortar stains/adhesions. Three fragments displayed mortar over surfaces and broken edges suggesting their use as course levelling material.

Site medieval flat roof tile typology

Type 1
Dimensions: L. ?mm x W. 157 mm x Th. 12-22 mm
Suspension: Two circular punched holes 11-18 mm in diameter approximately 40 mm apart.
Manufacture: Moulding sand and moulding lips evident.
Fabrics: F1, 2, 3, 4, 6, & 10

Type 2
Dimensions: L. ?mm x W. 157 mm x Th. 12-22 mm
Suspension: Single finger-pulled nib centrally placed with nail hole to right of nib.
Manufacture: Moulding sand and moulding lips evident.
Fabrics: F2 & 8

Type 3
Dimensions: L. ?mm x W. 158 mm x Th. 12-16 mm
Suspension: Two square punched holes 12-13 mm wide and 40 mm apart.
Manufacture: Moulding sand and moulding lips evident.
Fabrics: F1, 4, & 10

Ridge tiles

Thirteen fragments of ridge tile were provisionally identified within the assemblage from 3 contexts of which none were complete. The general thickness ranged between 18 mm-25 mm with a mean thickness of 22 mm.

Four fragments from contexts (101), (150) and (318) displayed glazes with a colour range of dark olive (5Y/3/2) to a strong brown (5Y/4/4). A further fragment of possible ridge tile displaying a dark yellow brown (10YR/4/6) was recorded within context (318). Evidence of mortar was recorded on seven fragments from context (101). The fragment from context (150) was found to be heavily abraded.

Approximately 62% of the ridge tiles were of F6 fabric the remaining fragments F1, F2, F3 and F7. (See appendix I)

Floor tiles

Two fragments of floor tile were recorded from contexts 101 and 102. The fragment from 101 showed a plain yellowish brown (10YR/5/8) glaze. The fragment from 102 was 25 mm

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thick with 60° bevelled edges with residual mortar. Upper surface showed white elliptical pattern sealed by a yellowish red (5YR/4/6) glaze.

Miscellaneous medieval material
From within contexts 101, 102 and 304 four fragments of Welsh roofing slate were recorded varying in thickness between 4 mm-10 mm. The fragment from 304 still retained its suspension hole 12 mm x 10 mm. One fragment displayed residual mortar stains. Although the blue-slate trade of western England and Wales was thriving in the medieval period (Jope & Dunning 1954) the material examined appears to be of a post-medieval character.
A small fragment (15g) of material from context 309 has a pottery appearance but within a ceramic building material fabric (F1) and may represent a fragment of roof finial.
A single non-diagnostic fragment of baked clay displaying a single flat surface was recorded within flood silts (308).
Single fragment of lime mortar (13g) was recovered from flood silts (307). Dark white fabric with frequent black inclusions <1mm. Reactive to diluted hydrochloric acid. Probable medieval in date.
Fragment of sandstone (?) 11mm thick displaying burning. Context (304).
Two fragments of brown/green glazed pottery. Context (322).

Non-identifiable material
Six fragments of unidentifiable ceramic building material were recorded from within context (319). Fabric was F1.

The medieval/post-medieval assemblage discussion
The diversity of brick/tile colour and size caused during manufacture must be allowed for when making comparisons with typologies. The brick assemblage shows typical evidence of hand-made and machine-made brick manufacture utilising alluvial clays. At least four fabrics (F1, F2, F4 & F10) have been provisionally identified in both medieval and Roman material. The majority of the brick assemblage was of a medieval date with two post-medieval/modern exceptions from rubble dump 103 and topsoil 300. The former displaying the residual elements of manufacturer's stamp. The example from topsoil 300 was identified as a machine-made firebrick suggesting a late 19th-20th century date.

Only one complete brick was recorded from context (103) with dimensions of 240mm x 115 mm x 50 mm (9½"x 4 ½"x 2"), its size and general characteristics suggest a date of c. 15th century and would be residual within this context. The part bricks were classified adopting a best-fit policy based on surviving dimensions, fabrics and general characteristics. The remainder of the brick assemblage shows part bricks ranging in width between 102—115 mm (4"-4 ½") and thickness of 50-65mm (2-2 ½"). Based upon the surviving diagnostic traits all appear to be of a medieval date.

Ten fragments of medieval brick were recorded within the RB rubble dump (319) and although all display thickness only and an F1 fabric similar to that of some RB material, they have been provisionally identified as medieval. (medieval roof tile was also recorded within this context)

From within contexts (103), (304) and (319) the upper surfaces of some fragments were found to display a relatively smooth appearance created from their incorporation within an internal floor or threshold. Also from (304) non-diagnostic fragment showed upper surface wear and may represent a quarry tile. Other fragments from contexts (102) and (318) were of abraded appearance.

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A possible tilers tally mark (Type 2) consisting of two parallel indentations within the bricks surface was recorded within context (102). Examples of this type are known from 14th-15th century contexts in Yorkshire (Tibbles (a) forthcoming).

The majority of the medieval building material assemblage (70%) is of ceramic roofing tile. The range recorded showed two different types of roof tile: flat and ridge. The flat roof tile could be broken down into three further site types 1, 2 and 3 (See site typology). Peg tiles with one or two suspension holes had become almost universal in the south east of England by the start of the 14th century (Drury 1981). However, Lewis (1987) suggests that nibbed tiles were in use by the 12th century and pegtiles by the mid 13th century. Ridge tiles including glazed ridge tiles have been recorded from late 12th century deposits at Beverley (Tibbles (b) forthcoming) and by the early 13th century in Southampton (Dunning 1975) Fifteen fragments of medieval flat roof tile were provisionally identified and one fragment positively identified of Type 1 medieval flat roof tile, suggesting intrusion or contamination within flood silts (318). A further 15 medieval fragments were also provisionally identified from dump 319.

Provisional identification of the floor tile fragments from layers 101 and 102 would suggest a 14th-15th-century date although a more precise origin and date may be obtained by a more detailed analysis.

The Romano-British Material

An assemblage of two hundred and twelve fragments of Romano-British ceramic building material, with a combined weight of 14913g was recovered from seven contexts. Fabrics varied between soft abraded material to hard fabric and were of a colour range of Reddish Yellow (5YR/6/8) to light brown (7.5YR/6/3).
Four forms were identified, brick, roof tile, hypocaust material and tesserae. Of the assemblage, 25% was not identifiable by form, although the majority of the fragments were of Romano-British fabric.

Brick
An assemblage of thirty-five fragments of bricks, with a total weight of 8143 gm was recovered from four contexts. Two forms were provisionally identified, bessales (27 fragments) and pedales (8 fragments). Thickness ranges of >25 mm to 38 mm and 40 mm to 50 mm respectively were recorded. However, identification is heavily biased towards thickness and must be treated with caution.
Within the assemblage one fragment of bessalis/pedalis from context 310 and five fragments from dump 319 were heavily abraded, possibly water action. Also three fragments from context 310 and seven from context 319 displayed mortar adhesions.

Roof Tile
A total of sixty-eight fragments, with a combined weight of 4781 gm were recovered from five contexts. Three types were identified, tegulae, imbrices and ridge. However, the similarities between imbrix and ridge thickness on small fragments may affect identification and therefore quantities must be treat with caution.

Tegulae
Thirty-five fragments from 5 contexts were identified within the assemblage, of which seven were diagnostic. This material displayed means of suspensions in the form of finger smoothed or knife-trimmed flanges, upper and/or lower cut-aways.
Six part flanges were identified, maximum flange height 33 mm. Only one fragment bore a knife-trimmed lower cut-away which was unidentifiable by form due to breakage in antiquity.

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Six fragments were found to be underfired and a further three fragments heavily abraded. A single fragment from 31) displayed a smooth worn upper surface suggesting it had been re-used as part of a floor or yard surface. Thickness ranged between 15 mm - 26 mm.

Imbrices
Twenty-one fragments of imbrices were identified from 5 contexts within the assemblage. This material had a combined weight of 1005 gm and was recovered from five contexts. The tiles had a thickness range of >12 mm to 20 mm.

Box-Flue Tiles (Tubulus)
Seventeen fragments of box-flue tiles, with a combined weight of 980 gm, were recovered from five contexts. A thickness range of 12 mm to 25 mm was recorded. Heat discoloration was noted on some internal surfaces, probably from original use. One fragment from context 310 was abraded.
Of the assemblage, ten fragments displayed diagnostic features in the form of characteristic combing/scoring, the keying element for the adhesion of plaster or mortar. Where possible the number of tines per comb recorded ranged from 4 to 6.

Unidentifiable by form
Five contexts produced an assemblage of fifty-six fragments of ceramic building material, unidentifiable by form. This material had a total weight of 2528 gm.

Although forty-two fragments were non-diagnostic, where complete dimensions allowed, a thickness range of 14 mm to 42 mm was recorded, indicating the identification of some fragments as tiles and bricks respectively. The assemblage included abraded material and underfired examples.

The Romano-British material discussion

The majority of the assemblage consisted of the range of Romano-British forms that would have been used in the various aspects of building construction, including hypocaust materials. Although possible underfired material and seconds were noted within the assemblage, overall the material appeared to represent quality materials.

Secondary use was also evident in the form of smooth original and broken surfaces. This material may have been possibly used within floors, hard standing or metalled surfaces. The similarities in the material from the medieval wall (102), organic silts (309), (310) and the earlier Roman deposits tend to suggest dumping of the material from the same site. Alternately the Roman material may have been re-used and incorporated with medieval structures or deposits prior to final deposition.

The diverse range of forms suggests a 'high status' building(s) with at least one hypocaust in operation within the vicinity of the evaluation. The presence of decorated wall plaster and tesserae add to this premise. It is likely that the assemblage represents residual elements of this/these building(s).

Romano-British Individual Finds of Intrinsic Interest

Context 319	Roman rubble dump	10 g
	Fragment of wall plaster Red (7.5R/5/8) render/paint	
Context 319	Roman rubble dump	40 g
	Fragment of tile disc 15 mm thick. Fabric F16	

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The objects/artefacts
Two limestone? tesserae were noted from the Roman rubble dump (319) and a further tesserae from the sand bar (323). Thicknesses were 22 mm and 15 mm respectively.
A further thirty-four tesserae were recorded from four contexts (309, 310, 319, 322) manufactured from tile. Remnants of white mortar were recorded on the lower 'bed' surface and edges either from original use or within floor. The tesserae had originated from within a floor; the upper surface and edges were smooth and rounded, footworn.

Recommendations
These recommendations are based upon the completion of contextual and site interpretation and dating of contexts.

- The potential of the assemblage is limited at the present level of assessment, however, after the refinement of dating and interpretation of contexts further analysis of the fabrics (provisionally by visual examination) to identify types should be undertaken to try to ascertain source. This will aid as reference for comparative purposes with ceramic building material assemblages recovered from previous and future archaeological investigations within Winchester. Refined identification of forms should also undertaken. Comparative fabric analysis with the medieval fabrics within the assemblage may also be of benefit.
- The medieval and Romano-British assemblages should be recorded fully, including illustrations of diagnostic material including flange types, and the individual finds of intrinsic interest.
- A synopsis of the complete assemblage, including individual finds of intrinsic interest, should be brought up to publication in a suitable regional journal.
- The assemblage needs to be in a suitable condition for deposition within the relevant museum accordance with museum guidelines for the deposition of archaeological material. After fabric samples have been retained, a selective discarded policy should be implemented.

Appendix: The building materials from evaluation Trench 4 and the watching brief

John Cotter

The assemblage comprises 11 pieces from four contexts weighing 2185 g. Four of these are of stone or slate and the remainder are ceramic building materials (CBM). The latest pieces in the assemblage are a couple of flat roof tile (peg tile) fragments in a late-looking fine red sandy fabric probably of 18th- or early 19th-century date. There is a single piece of probable medieval roofing tile in a coarser fabric and a fairly large fresh fragment from a crested ridge tile which is probably of 13th- or 14th-century date, but residual in its context (406). Besides this there are two other residual ceramic pieces including a very worn 15th- or 16th-century Flemish-type floor or quarry tile, and a very worn fragment of decorated medieval floor tile. The latter belongs to the 'stabbed Wessex' floor tile tradition (*c* 1280-1330) and is decorated with a fleur de lys design in inlaid white slip. Given the proximity of the cathedral the discovery of medieval floor tile fragments is hardly surprising.

The stone building materials include three small pieces of grey slate (context 405), which may well be medieval rather than later. There is also a small broken rectangular slab-like object (context 404) of fine oolitic limestone which has been adzed on one face and cut completely flat on the other face. It could be something like a paving slab - although it only exhibits wear on its edges - or perhaps a stone veneer? The date is either medieval or post-medieval.

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ASSESSMENT OF THE ARCHITECTURAL STONE

by Julian Munby (OA)

Four architectural stone items were recovered. They all came from context 209, a 0.53 m thick rubble make-up/dump layer that also contained 17th-18th-century pottery and glass. All pieces are of fine limestone, with well-finished faces showing tool marks; all are likely to be medieval.

Architectural stone

Small Find Number	Context No.	Description
1	209	Rim of part-octagon with external moulding and internal curve. Probably part of font or similar stone basin. Date 14th/15th-century.
2	209	Block of ashlar with chamfered edge and rebate. Possibly window mullion or door/cupboard jamb.
3	209	Block of ashlar with chamfered edge. Door jamb or possibly corbel table.
4	209	Block of ashlar with chamfered edge. Door jamb or possibly corbel table.

The objects are not especially worth drawing or further study except for Item 1, which should be shown to a specialist, drawn and photographed.

ASSESSMENT OF THE METALWORK

Leigh Allen and Paul Booth (OA)

A total of 159 metal objects were recovered from the excavation at the site of The Pilgrims' School, Winchester. The assemblage comprises 7 copper alloy objects (including 4 coins) and 152 iron objects (including 107 nails and 39 hobnails). The metal work assemblage is in reasonable condition although many of the iron objects are covered with corrosion products. Material recovered from waterlogged contexts (319) and (322) is much better preserved and easily identifiable. The assemblage has not been x-rayed at this stage, but it is recommended that this be carried out before the full report stage in order to check the preliminary identifications made in this assessment report and for archive purposes. The majority of the assemblage comprises nails recovered from rubble dumps and make up layers of both Roman and post-Roman date. Other identifiable objects include 4 Roman coins, a horseshoe arm and two structural iron objects; a hasp and a wall hook.

Metal objects

Context	SF No	Object	Material	Pottery spot date	Description
100	-	Nail	Iron	1680-1725	
103	-	Nail	Iron	1775-1875/19	
103	-	Horseshoe	Iron	1775-1875/19	Curved fragment from the arm of a horseshoe
103	-	Wall hook	Iron	1775-1875/19	
120	-	Nails (x2)	Iron	11-12C	
205	-	Bolt	Iron	19-20C	Large bolt with a hexagonal head and a thick circular section shank
206	-	Nails (x2)	Iron	-	
207	-	Nail	Iron	1680-1725	
208	-	Nails (x3)	Iron	1675-1725	
209	-	Nails (x3)	Iron	1675-1750	
301	-	Fitting	Iron	1680-1725/50	
304	-	Nails (x2)	Iron	1690-1730	
306	-	Nail (x4)	Iron	16-17C	
306	-	Hasp	Iron	16-17C	An incomplete figure of eight-shaped hasp
307	-	Nails (x6)	Iron	13-14C	
308	-	Nails (x4)	Iron	14-15C	
318	-	Nails (x3)	Iron	-	
318	-	Object	Iron	-	Very corroded object requires x-ray for identification
319	-	Nail (x7)	Iron	RB	
319	-	Hobnails (x21)	Iron	RB	15 small dome-headed hobnails with rectangular section shanks
319	-	Nail shanks (x17)	Iron	RB	

Context	SF No	Object	Material	Pottery spot date	Description
319	-	Nail (x5)	Iron	RB	
319	-	Hobnail	Iron	RB	Dome-headed hobnail
319	-	Sheet	Copper alloy	RB	An irregularly shaped fragment of sheet
319	-	Strip	Copper alloy	RB	A thin strip of copper alloy (looks like an off-cut)
319	19	Nail	Iron	RB	
319	16	Nail	Iron	RB	
319	9	Nail	Iron	RB	
319	-	Nails (x17)	Iron	RB	
319	10	Coin	Copper alloy	RB	
319	12	Coin	Copper alloy	RB	
319	15	Coin	Copper alloy	RB	
319	20	Coin	Copper alloy	RB	
322	-	Nail (x3)	Iron	RB	
322	-	Nail shanks (x10)	Iron	RB	
322	-	Hobnails (x17)	Iron	RB	17 small dome-headed hobnails with rectangular section shanks
322	-	Nails (x13)	Iron	RB	
322	-	Misc	Copper alloy	RB	A solid amorphous lump of melted copper

Copper alloy objects

Four coins were recovered in the evaluation, all from context 319. All are of late 3rd century-date and in moderate to good condition.

SF 10. IMP C TETRICUS P F AUG. Rev, PA[X AUG, Pax left. Irregular. AD 270-273 or later.

SF 12.] TETRICUS [. Rev, standing figure. Irregular. AD 270-273 or later.

SF 15. IMP C CARAUSIUS AUG. Rev, MO]NET AUG, Moneta left. AD 286-293.

SF 20.] C CLAUDIUS [. Rev, ?MARTI [, Mars left. AD 268-270.

The issues of Claudius II and Carausius appear to be regular, though on the latter coin the dies are quite imperfectly located on the large flan. The two certainly irregular coins could date as late as *c* AD 295.

The remaining 3 copper alloy objects all recovered from Roman contexts comprise a miscellaneous fragment of sheet, a thin strip that could have been cut/trimmed from a larger sheet and an amorphous lump of melted copper, possibly waste from copper working.

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Iron objects

A total of 106 nails were recovered from the excavation; 75 of these were from Roman waterlogged contexts 319 and 322. Complete examples conform to Manning Type 1B, with a square-sectioned tapering shank and a circular head (Manning 1985, 132-137, fig 32, No.1b) and is the most common form of Roman nail. A total of 39 hobnails were also recovered from Roman contexts; they have domed heads and square sectioned tapering shanks they range in length from 10-12 mm. The post Roman objects comprise 32 nails, less well preserved than the Roman examples but many with rectangular/square slightly domed head, and in general more robust than the earlier type. The wall hook from context 103 has a rectangular section tang for inserting into timber or masonry and a hook that separates from the shank before the end, a type that does not occur before the 13th century (Goodall 1990, 328). The horseshoe arm from the same context has a slender web, plain outline, but no holes are visible through the corrosion. A fragment from a figure-of-eight shaped hasp was recovered from context 306.

Statement of potential

The majority of the metalwork recovered from the excavations comprises structural iron objects of Roman and post-Roman date from rubble dumps and make up layers. The evidence indicates that the material originated from buildings but not necessarily from the site. The assemblage should be x-rayed for archive purposes to check identifications but no further work is recommended.

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ASSESSMENT OF THE SLAG

Lynne Keys

Slag quantification

context	slag	wt. (g)	len. (mm)	br. (mm)	dep. (mm)	comment
116	smithing hearth bottom	392	110	70	40	
205	glass-making slag?	6				
305	run slag	26				magnetic
305	undiagnostic	214				
318	smithing hearth bottom	204	104	70	50	
318	undiagnostic	90				
319	undiagnostic	230				
207	run slag	30				
207	undiagnostic	70				

The only diagnostic slag were the two smithing hearth bottoms. The run slag could be produced by either smithing or smelting. The undiagnostic iron slag also could not be assigned to smelting or smithing. The slag described as possibly from glass-making was a deep black glass-like run of a type frequently encountered in glass-making (rather than glass-working) assemblages; it could however have been produced by some activity using silica, very high temperatures, and possibly a fuel like coal.

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ASSESSMENT OF THE CLAY TOBACCO PIPES

John Cotter (OA)

The excavation produced a total of 98 fragments of clay pipe weighing 459g. These have been spot-dated and a given a basic catalogue. The catalogue records, per context, the quantity of stem, bowl and mouth fragments, the overall sherd count, weight, and comments on condition and any makers' marks or decoration present. The collection is not particularly large or impressive but it does include a small number of interesting stamped pipes.

The largest number of fragments came from context 207 (63 fragments), which produced the widest range of datable pipes including all three stamped examples. Pipe bowls from this context range in date from *c.* 1600-40 to *c.* 1690-1730. Context 207 has a concentration of 4 pipe bowls of the late 17th to early 18th centuries. There are no pipe bowls from the site which are later than this and all the stem fragments from the site have wide bores suggestive of 17th to early 18th century dates.

The three stamped pipes from context 207 are all 17th century types, which must be residual to varying degrees in this context. Nevertheless the stamps or makers' marks are of considerable interest and should be published. One of the stamps has general parallels in Oswald 1975 (see below), the other two are unidentified. The stamps occur on the broad oval heels of the pipes and are briefly described as follows:

1. Bowl type *c.* 1600-1640. Mailed gauntlet stamps parallel to stem. This is paralleled by a slightly different stamp on a pipe from Salisbury dated *c.* 1650-60 (Oswald 1975, fig. 8.3) and also (with initials) on a pipe from Worcestershire (*ibid.*, pl.III.7). Gauntlet stamps are found in London, Wiltshire and Somerset (*ibid.*, 63) and another example has recently been identified from Oxford (OXCLA 05 (6)).

2. Bowl type *c.* 1660-80. Heart-shaped stamp enclosing initials TR with a pellet above each initial.

3. Bowl type *c.* 1660. Heart-shaped stamp with uncertain figurative/heraldic details. Divided by a horizontal line with two opposing spirals above line (one in each lobe). Details below line unclear - possibly a bird, or a plant.

One other pipe bowl of *c.* 1690-1730 from context 304 has traces of Dutch-style milled decoration on the stem. Apart from these examples all the remaining pipe bowls and stems are plain.

Bibliography

Oswald, A, 1975 *Clay Pipes for the Archaeologist*, BAR **14**

Recommendations

Apart from the stamped pipes it is probably not worth reporting on this assemblage in any detail. A summary report should be sufficient. The three stamped pipes, however, are worthy of publication in their own right. These should be illustrated and a brief search of more up-to-date publications made in order to identify the makers, if possible, or to find published parallels. It is recommended that this work should be carried out by Dr. David Higgins, a leading authority on clay pipes in Britain.

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Illustration:	1 day
Background research:	0.5 days
Report writing:	0.5 days
TOTAL:	**2 days**

ASSESSMENT OF THE GLASS

Dr Hugh Willmott

Introduction

A small assemblage of glass from The Pilgrims' School, consisting of 66 fragments from a number of vessels or windows, was submitted for assessment (summarised below). All is post-medieval in date and relatively stable, requiring no further specialist conservation or treatment.

The assemblage

With the exception of three, possibly intrusive, fragments from contexts 205 and 206, the assemblage dates entirely to the late 17th or early 18th centuries. These later fragments are from two press-moulded bottles and a single window. The earlier glass consists almost entirely of early wine bottles, and although these have not been accurately quantified, there are reasonable numbers of early onion and mallet types present. The remaining glass comes either from windows and there is a single fragment of early mirror or plate glass from context 306.

Table 1: Summary of the glass

Context	No Frags	Description	Date
105	1	Wine bottle	Late 17th-early 18th century
109	1	Wine bottle	Late 17th-early 18th century
205	1	Press-moulded bottle	Late 19th-early 20th century
206	4	Wine bottle	Late 17th-early 18th century
	1	Press-moulded bottle	Late 19th-early 20th century
	1	Window	Late 19th-early 20th century
207	41	Wine bottles	Late 17th-early 18th century
208	10	Wine bottles	Late 17th-early 18th century
209	1	Wine bottle	Late 17th-early 18th century
301	2	Wine bottles	Late 17th-early 18th century
306	1	Window	Late 17th-early 18th century
306	1	Mirror/plate glass	Late 17th-early 18th century
319	1	Wine bottle	Late 17th-early 18th century

Recommendations and resource requirements

Although the assemblage is small, it is potentially interesting, especially as it dates mainly to a single period. Furthermore it contains a good sequence of early wine bottle forms that merit further study and quantification. Therefore it is recommended that the glass is written up to full publication level and a couple of illustrations of the most diagnostic bottles made.

Appendix: Glass from evaluation Trench 4

John Cotter

A single piece of green bottle glass weighing 342 g was recovered from context 404. This is from the thick prunted base of small onion-type wine bottle of 17th- to early 18th-century date.

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ASSESSMENT OF THE WATERLOGGED TIMBERS AND WOODEN SMALL FINDS

Steven J Allen

Introduction

Thirty pieces of waterlogged wood were delivered to the Wet Wood Laboratory on 20th September 2005 for assessment. The assemblage includes some very interesting pieces of timber and two 'small finds'.

Aims and Objectives

This report aims to meet the requirements of MAP2, Phase 3, Assessment of Potential for Analysis, (English Heritage, 1991). The work carried out has been the cleaning and examination of the objects submitted and an assessment of their condition. An evaluation of the potential for further investigation is included, with recommendations and costs for long term stabilisation.

Condition

Each piece of wood has been preserved through burial in a waterlogged anoxic environment and it appears that these conditions were maintained in all contexts in which the material survived up to the time of excavation. Minimal recent surface damage was present suggesting what damage is present was the result of actions before or during burial. Several of the larger boards had fragmented as in their current condition they are unable to support their own weight. Some timbers had suffered slightly from being at the very margin of the local water table where those parts at or above the water table had been eroded and rotted. None the less, overall the wood was exceptionally well preserved with many pieces retaining crisp tool signature marks.

Listing

All species identifications follow Schweingruber (1982)

Wooden structural timbers

ID	Comment (dimensions in mm)	Species identification
122 (I)	Radially faced board. Edges hewn to create slightly concave plan. Remains of one through hole in face at each corner. Some minor surface damage. 317 l, 125 w, 10 th.	*Quercus spp.*
122 (ii)	Radially faced board. One complete and one partial though hole at the two surviving original corners. Badly fragmented and incomplete -in eight refitting fragments. 220 l, 121 w, 10 th.	*Quercus spp.*
122 (iii)	Section of boxed heart stake point. Four hewn facets with good axe signatures cut to create sub rectangular cross section tip. End of tip missing. Some longitudinal shrinkage cracks. 281 l, 72 w, 54 th.	*Alnus viridis DC*
122 (iv)	Offcut from radially faced heartwood. Abraded surfaces. 348 l, 51 w, 26 th.	*Quercus spp.*
122 (v)	Offcut from radially faced heartwood. Abraded surfaces. 298 l, 47 w, 35 th.	*Quercus spp.*
122 (vi)	Offcut from radially faced heartwood. Abraded surfaces. 218 l, 54 w, 25 th.	*Quercus spp.*

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ID	Comment (dimensions in mm)	Species identification
122 (vii)	Offcut from radially faced heartwood. Abraded surfaces. 154 l, 33 w, 30 th.	*Quercus spp.*
124	Radially faced board. Both edges hewn to create point at one end. Other end eroded. Faces hewn with good axe signature (>120mm w) preservation. Sapwood present on one edge. One detached and refitting fragment near knot on other edge. 877 l, 299 w, 14 th.	*Quercus spp.*
125	Tangentially faced board. One end and both faces hewn, with good axe signature preservation. Other end eroded. Badly fragmented and incomplete –In eight refitting fragments. 832 l, 407 w, 12 th.	*Quercus spp.*
126	Radially faced board. One end hewn roughly square, other end eroded. Axe hewing marks on face. Single through nail hole towards one edge. In three refitting sections. 837 l, 258 w, 16 th. Hole 08 dia.	*Quercus spp.*
130	Radially faced board. One end hewn roughly square, other end eroded. Good axe signature (*c* 140w) preservation. Badly fragmented and incomplete -in five refitting sections. 686 l, 224 w, 14 th.	*Quercus spp.*
131	Radially faced board. One end bevelled with good axe signature preservation. Other end broken. Single through hole in face towards bevelled end. 306 l, 109 w, 14 th.	*Quercus spp.*
132	Radially faced board. Faces hewn with good axe signature (>180 w) preservation. One end hewn roughly square, other end eroded. Sapwood on one edge. In two refitting sections. 826 l, 276 w, 20 th.	*Quercus spp.*
133	Radially faced board. Both edges hewn to create tip at one end. Other end slightly eroded. Hewing marks on faces with good axe signature (>115 w) preservation. Badly fragmented –in eight refitting fragments. 947 l, 295 w, 15 th.	*Quercus spp.*
134	Radially faced board. One end hewn roughly square, other end eroded. Hewing marks on faces with good axe signature preservation. Sapwood on one edge. Sapwood on one edge. Very fragmented and incomplete –in six refitting fragments. 734 l, 274 w, 15 th.	*Quercus spp.*
135	Radially faced board. Both edges hewn to create point at one end. Faces hewn with good axe signature (c. 238 w) preservation. Other end eroded. Sapwood on one edge. Partially fragmented -in five refitting sections. 809 l, 299 w, 16 th.	*Quercus spp.*
146	Radially faced stave. Both edges hewn to create sub rectangular cross section tip. Sapwood on one edge. Surfaces abraded, slight excavation damage to surface. Tip in two refitting sections, some parts missing. 647 l, 106 w, 25 th.	*Quercus spp.*

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ID	Comment (dimensions in mm)	Species identification
150 (I)	Radially faced stake point cut entirely from sapwood. One edge and both faces hewn to create sub rectangular cross section tip. Abraded surfaces, some ancient woodworm damage. In three refitting sections. 168 l, 31 w, 25 th.	*Quercus spp.*
150 (ii)	Offcut from radially faced board. Abraded surfaces, no working marks. 44 l, 61 w, 19 th.	*Quercus spp.*
150 (iii)	Offcut from radially faced timber. Sub rectangular cross section, no working marks. 163 l, 82 w, 40 th.	*Quercus spp.*
311	Roundwood stake point, bark present. Single hewn facet cut to create chisel tip. In three refitting sections, end of tip missing. 264 l, 24 dia.	*Corylus avellana L.* 5 annual rings, Summer cut.
312	Roundwood stake point, bark present. Single hewn facet cut to create chisel tip. In two refitting sections. 292 l, 26 dia.	*Corylus avellana L.* 5 annual rings, Spring cut.
313	Roundwood stake point, bark present. Single hewn facet cut to create chisel tip. In three refitting sections. 227 l, 21 dia.	*Corylus avellana L.* 8 annual rings, Winter cut.
314	Roundwood stake point, bark present. Single hewn facet cut to create chisel tip. 184 l, 25 dia.	*Corylus avellana L.* 7 annual rings, Winter cut.
315	Roundwood stake point, bark present. Single hewn facet cut to create chisel tip. 321 l, 23 dia.	*Corylus avellana L.* 8 annual rings, Winter cut.
316	Roundwood stake point, bark present. Single hewn facet cut to create chisel tip. 139 l, 16 dia.	*Corylus avellana L.* 5 annual rings, Winter cut.
317	Roundwood stake point, bark present. Single hewn facet cut to create chisel tip. In three refitting sections. 362 l, 20 dia.	*Corylus avellana L.* 5 annual rings, early Spring cut.
320	Boxed heart post section. Faint hewing marks on faces and edges. Some damage to lower end. Upper end eroded with very sharp division between eroded and uneroded wood. Abraded surfaces. 637 l, 120 w, 85 th.	*Quercus spp.*
321	Boxed heart post section. Both faces and both edges hewn to create taper towards lower end which terminates in a blunt sub rectangular cross section tip. Sapwood present on one face. Abraded surfaces. 551 l, 140 w, 95 th.	*Quercus spp.*
326	Roundwood stake point, bark present. Five hewn facets cut to create sub hexagonal cross section tip with axe signatures present. Tip detached but refitting. 224 l, 38 dia.	*Corylus avellana L.* 11 annual rings, Spring cut

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Wooden small finds

ID	Comment	Species identification
319, SF 23	Radially faced staff terminal. One end broken and missing, other end shaped o a regular cone with prominent shoulder. Much surface damage. 97 l, 29 dia.	*Acer campestre L.*
319, SF 24	Box quartered peg. Sub rectangular cross section with even taper on all four faces/edges towards tip. Tip finished with single hewn facet cut at steep angle. 86 l, 15 w, 12 th.	*Quercus spp.*

Acer campestre L. Field Maple
Alnus viridis DC.- Green Alder.
Corylus avellana L. Hazel
Quercus spp.- Oak. Sub species not determinable

Discussion

What at a first reading appeared to be a fairly unremarkable assemblage of timbers has proved to be of very great interest once cleaned and examined. The preservation of the worked surfaces of the medieval planks, such as those on timbers (133) and (135), is exceptional. The crispness of the tool signatures and the lack of any woodworm damage to the sapwood edges indicates that these timbers were placed in their burial context immediately after being worked and have not subsequently been moved until the date of the excavation. With good tool signature preservation it ought to be possible to compare signatures on different boards and work out whether they were cut with the same tool, or whether several tools were used in their fabrication.

These same boards also have good dendrochronological potential. They are wide, radially faced, with sapwood on one edge and consequently ought to be able to provide an estimated felling date for the tree(s) they were cut from. The condition of the boards indicates they were placed in the ground very shortly after felling and have not been reused. Thus the date of the boards should approximate the date of the feature of which they formed a part. One further possibility is that, given the straightness of their grain and their width, these boards may not be English in origin.

The condition of the wood provides an indication of the long-term height of the local water table, which may be of interest for studies of the local topography and drainage patterns. Finally the two small finds are worth retaining especially if, as appears from the notes supplied, they are from a Roman context. The shaft terminal is an example of the wood surviving without the metal to which it was joined. Usually the metal component is recovered and the wood survives only as mineral preserved organic. The peg may well be another example of a type used in roofing, to fasten slates or tiles in place, rather than deriving from a joint.

Recommendations and Further Work:

- Most of the assemblage may now be discarded unless required for further work or analysis. However the 10 boards (124-146) should be sampled for dendrochronological studies and the two small finds, as portable artefacts, ought to be drawn and conserved.

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- It is recommended that before any sampling is carried out a record of the tool signatures be made. This would involve the production of silicone rubber moulds of the relevant surfaces of the boards, which may then be used for comparative studies.

- A scale drawing of each board should also be prepared as part of the archive and for any future publication.

- Normally, such boards would not be recommended for conservation. However this may be reconsidered given the quality of their preservation. A decision to conserve any or all of the boards need not preclude their sampling for dendrochronology as, provided the dendro samples are returned and placed through the same conservation regime as the parent timbers, it is quite possible to rejoin the components once stabilisation has been completed.

ASSESSMENT OF THE LEATHER

Quita Mould

Methodology

The leather was wet and washed when examined and recorded. It is currently packed in double self-sealing polythene bags in an air-tight plastic storer OA 1026. A basic record of the leather for archive is provided in appendix 1 and a summary is provided below. Leather species were identified by hair follicle pattern using low powered magnification. Where the grain surface of the leather was heavily worn identification was not always possible. Shoe soles and repair pieces are presumed to be of cattle hide unless stated otherwise. The distinction between immature (calfskin) and mature cattle hides is not always easy to determine and the term bovine leather has been used when in doubt.

Summary

Leather was recovered from three contexts (309, 319, 322) in Trench 3. At least two shoe of nailed construction and a shoe of one-piece construction along with a very small amount of waste leather were recovered from Roman deposits (319, 322). Shoe parts of medieval date were found in a deposit of organic silts (309) tentatively dated to the 14th-early 16th century.

Roman c. AD 270+

A piece of secondary waste cattle hide (SF21) and part of the bottom unit of a shoe of nailed construction (SF22) were found in organic silts (322) along with coarse pottery and Samian datable to AD150-200. The nailed shoe (SF22), of adult size, had nailing of van Driel-Murray type 3A (2001, fig. 21) and type 2 constructional thonging. Highly fragmentary remains of a shoe of one-piece construction (SF11 part, SF 00 part), the bottom unit of a shoe of nailed construction (SF 13) and primary waste leather were found in a layer of flint and chalk rubble (319) lying directly above organic silts (322). The primary waste included three hide edges of bovine leather.

Medieval

A fragment of seam from a turnshoe sole, a large clump repair piece and a length of rand were found in the upper layer of peat along with a fragment of baluster jug. These shoe parts are of medieval date supporting the ceramic evidence.

Further work

A basic record of the leather is provided in the appendix below. No further work is required.

Basic record of leather recovered

Context (309) Medieval turnshoe parts
SF 7
large clump repair piece, worn away down the right side, with tunnel stitching on flesh side along the surviving left edge. Adult size. Length 120, width 79 mm.
Curving piece with edge/flesh seam, stitch length 6mm, broken from the seat of a turnshoe sole. Length 68, width 17 mm
SF 8
length of rand with edge/flesh seam, stitch length 6-7 mm. Length 140, width 8 mm

Context (319) Roman shoe parts and waste leather
SF 11
Compacted fragment with all edges torn, no grain pattern visible 68x55x1 mm

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Delaminated and compacted fragment with a grain/flesh seam, stitch length 5 mm along one edge, other edges torn
Folded fragment with a cut sides, torn into two pieces 62x15(folded)x1 mm bovine leather
SF 13
Lower tread and waist area from a bottom unit of shoe of nailed construction comprising an insole and middle lamina joined with constructional thonging type 2. Fragment of constructional thong is present 5mm wide. Holes from widely-spaced nailing present, no hobnails present. Length 95 mm, width 63 mm. Insole worn calfskin. Also small fragments broken from the bottom unit components
In separate bag
Fragment with grain/flesh seam and small area of second seam at right angles. The fragment is curved and likely to be the seat area of a one-piece shoe. The grain/flesh shoe is similar to that in SF11. Height 58 mm, width 46 mm. Leather delaminated 1 mm thick.
Fragment of compacted leather with an awl made hole present. 54x47x1.5 mm
Hide edge cattle hide 72x60x4.5 mm
Hide edge bovine 87x40x1 mm
Hide edge bovine 141x35x2 mm
Six fragments with cut and torn edges
Nine fragments with all edges torn including one with a folded edge as seen in SF11

Context (322) Roman shoe parts and waste leather
SF 21
elliptical piece of secondary waste with all edges cut 136x27x5 mm cattle hide
SF 22
Waist and lower tread area of bottom unit of shoe of nailed construction comprising an insole and middle joined by constructional thonging. A fragment of thong is present 5 mm wide. No hobnails present but holes from a single line on one side and a double row along the other with infilling at the waist, van Driel-Murray type 3A. Impression from upper lasting margin overlaps the sides of the middle layer. Insole cattle hide 3.5 mm thick. Length 102 mm, width 76 mm

ASSESSMENT OF THE WORKED BONE

Rose Grant (OA)

Two worked bone objects were recovered from excavations at The Pilgrims' School.

Worked bone

Context No	SF No	Length (mm)	Description	Parallel
310		164	Cattle Metacarpal. At one end there is a highly polished cutaway. The other end has a similar cutaway. At this end the knuckles has been broken off through wear. The object is possibly a handle of some type.	
319	17	30	Bone pin. Point end of pin missing. The pin has a conical head with 3 transverse groves below. The shaft is cylindrical.	Crummy, 1983,p21 fig 18 no159.

Further work

Catalogue entries for publication
Preparation of drawing briefs.

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ASSESSMENT OF THE ANIMAL BONES

Lena Strid (OA)

Quantity of material and recording methodology

The animal bone assemblage consisted of 1605 fragments. The assessment consisted of an overview of the material on a context by context basis recorded in a *Microsoft Access* database. Context wide data such as number of fragments and overall weight of bone fragments, bone condition, fragment size, species present were described. More specific information such as butchering marks and pathologies were recorded as present or absent. The number of bones and mandibles that were possible to age, sex and/or measure were recorded. A record of the assemblage can be found with the site archive.

Recovery

The animal bone was recovered through hand collection during excavation and from wet sieved bulk samples (processed using 500 µm residue mesh and 250 µm flot mesh). 51% of the assessed bones derive from hand-retrieved contexts, and 49% from sieved contexts. Most of the bones from the sieved contexts were rather small (5.4% of the total weight) and mainly unidentifiable to species. They were, however, a good source for fish bones.

Table 1: Number of hand retrieved and sieved animal bones

	Hand retrieved bones	**Sieved bones**	**Total**
Roman	393	420	813
Medieval	235	365	600
Post-medieval	187		187
Modern	5		5
Identifiable to species	318	86	404
Total fragment count	**820**	**785**	**1605**
Total weight (g)	*17518*	*1004*	*18522*

Methodology

The bones were identified to species using a comparative reference collection, as well as osteological books and articles. Sheep and goat were not identified to species at this stage, but rather classified as 'sheep/goat'. Ribs and vertebrae, with the exception for atlas and axis, were classified by size: 'large mammal' representing cattle, horse and deer, 'medium mammal' representing sheep/goat, pig and large dog, and 'small mammal' representing small dog, cat and hare.

The condition of the bone was graded using criteria stipulated by Lyman (1996); grade 0 being very well preserved bone and grade 5 indicating that the bone had suffered such structural and attritional damage as to make it unrecognisable.

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

Preservation

The preservation level for the assemblage was quite good in most phases.

Table 2: Preservation level of animal bone assemblage.

	N	0	1	2	3	4	5
Roman	4			100.0%			
Medieval	11			66.7%	33.3%		
Post-medieval	7			85.7%	14.3%		
Modern	2				100.0%		

Species

The assessed assemblage consisted of 820 fragments, of which 318 (38.8%) could be determined to species (see Table 3). The species present included cattle, sheep/goat, pig, horse, deer, roe deer, dog, cat, hare, fowl, goose, duck, partridge and human. Some indeterminable bird and fish bones were also found.

The four phases are dominated by the cattle, sheep/goat and pig. The small number of horse, dog, cat and wild mammals are to be considered normal. Of the birds, fowl dominate the assemblage, followed by goose and duck. The presence of a few human bones is not unusual.

Table 3: Identified animal bone species for all phases
x = present

Species	**Roman**	**Medieval**	**Post-medieval**	**Modern**
Cattle	x	x	x	
Sheep/goat	x	x	x	x
Pig	x	x	x	
Horse	x			
Deer		x		
Roe deer	x		x	
Dog	x	x		
Cat	x			
Hare		x		
Rodents	x	x		
Fowl	x	x	x	
Goose		x	x	
Duck		x	x	
Indet. bird	x	x	x	
Fish	x	x		
Amphibians		x		
Human		x	x	
Medium mammal	x	x	x	
Large mammal	x	x	x	
Identifiable to species	150	106	60	2
Total fragment count	**813**	**600**	**187**	**5**
Total weight (g)	*11360*	*4206*	*2902*	*54*

Ageing, sexing and measuring data

Several bones provided useful information on ageing, sexing and biometrical data. These figures would not only give information on the age and sex profile of the herds, but also add to the subsequent discussion on animal husbandry strategies, trade, breeding, nutrition etc from the Roman period and onwards.

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Table 4: Mandibles and bones providing data for ageing, sexing and measuring data

	Roman	Medieval	Post-medieval	Modern
Ageable mandibles	3	2		
Ageable bones	52	54	38	2
Sexable bones		6	3	
Measureable bones	46	55	24	2

Butchering marks

Bones with butchering marks were found in two Roman, five medieval and four post-medieval contexts. The long continuity of the site would make it possible to study any changes in butchering practices. Such changes have been suggested for Roman Portchester versus Saxon Hamvic (Bourdillon and Coy 1980:97) as well as between early medieval and high medieval Lincoln (O'Connor 1982:16).

Pathology

Pathological conditions were present in three medieval contexts. Despite the small frequency, an analysis of pathological conditions present in the assemblage will add to the general discussion on animal husbandry and utilisation of animals.

Potential And recommendations

Although the assemblage as a whole is not particularly large it is recommended that further work be done on the bone. While the main focus of the work will need to be aimed at the Roman period, from which the majority of the bone was recovered, I recommend that the stratified contexts in the Roman, medieval and post-medieval phases are fully analysed. Further quantification and identification of the animal bone, such as the identified number of fragment per species (NISP) and minimum number of individuals (MNI) should be carried out which will help determine the importance of individual species at the site. Bird bones should be identified to species/family where possible. Fish and human bones would be transferred to specialists in the respective fields. Further analysis of tooth eruption and tooth wear stages, horncore structure and epiphysial fusion data will determine age at death patterns, and alongside sexing data and the incidences of butchery marks and pathologies may determine animal husbandry regimes as well as the utilisation of various species.
All this information would be part of a larger animal husbandry discussion regarding the town of Winchester and its surroundings from the Roman period up to the post-medieval one. This would include inter-site comparisons with sites such as Fishbourne (Cunliffe 1996), Southampton (Bourdillon and Coy 1980) and Eynsham Abbey (Ayres et al 2003), as well as with other sites within Winchester.

While the modern contexts contain no useful data for the archaeological context, I recommend that they are sorted through in order to discover any human or worked bones.

Time estimation

Task	**Time (days)**
Bone identification	3.5
Identification of bird bones (including travel to reference collections at museums)	0.5
Identification of sieved bones	0.5
Analysis of data	2
Library research time	1
Writing report	3
Final editing	1
TOTAL	**11.5**

ASSESSMENT OF THE OYSTER SHELL

Rose Grant (OA)

A total of 67 fragments of oyster shell were recovered for the site. The table below gives the quantification for each context.

Summary of the shell

Context Number	Fragment Count	Weight (g)
116	1	1
150	2	70
205	1	13
206	15	142
207	34	425
208	5	52
209	3	44
319	1	2
322	5	128

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ASSESSMENT OF THE PLANT REMAINS

Wendy Carruthers

Introduction

A second batch of samples was assessed in October 2006. These samples came from two of the sixteen boreholes sunk in a Transect across the site in June 2006, in order to locate the former channel of the River Itching (OA assessment notes, Carl Champness, *pers. comm.*). Eight contexts were identified, as described below. The results from this second assessment have been added to the original assessment report, written in October 2005.

Methods

Environmental samples were taken by OA staff from a number of features dating from the Roman to medieval periods. The range of deposits sampled included flood silts, peat deposits, a Roman rubble dump, Roman ramparts and a Saxon-Norman cess pit (118). The samples were processed by OA staff using standard methods of floatation and wet-sieving (using a wash-over technique). In some cases, where it was uncertain whether deposits were waterlogged or not, soil samples were both floated and wet sieved. Where they were available, both dry flots and waterlogged wash-overs were assessed for this report. This has proved to be useful in some cases, as discussed below.

The borehole samples were wet-sieved at OA and the flots were sent to the author for assessment.

Results

Seventeen samples were submitted for assessment from Trenches 1 and 3, as listed in Table 1. Eight additional samples were recovered from the boreholes, and the results were added to Table 1.

The results of the assessment are presented in the table, together with indications of the potential for further analysis. The codes used in the 'potential' column should be interpreted as follows;

Potential for further analysis key:

A = plant remains are sufficiently frequent, well-preserved or of an interesting character to be worthy of analysis in their own right.
B = reasonable quantity or quality of material, particularly if examined alongside other samples from the period. Worthy of full analysis.
C = some remains present but possibly poorly preserved or few in number. These samples are of little value on their own but they could be selected for analysis if they form part of a group or if the context is of particular importance. C category samples are usually omitted from the analysis unless the Project Manager or other specialists advise otherwise.
D = no remains, or the few remains present have already been identified and counted.

C and D assessment data may be included in the full report, if it proves to be useful, but no further analysis is usually required on these samples.

Discussion

State of preservation – The state of preservation of the wet (wash-over) flots was variable, ranging from poor (e.g. sample 39, context 323) to good (eg. sample 8, context 322). Poorly preserved samples that have remained partially waterlogged often produce predominantly woody, thick walled fruits and seeds, such as elderberry seeds, bramble seeds and sloe stones. The flots often contain frequent charcoal and decaying wood fibres. Plant macrofossil

evidence from these types of contexts will be biased towards woody-seeded taxa, so it is not a reliable source of environmental information. However, the presence and decay of organic remains in these deposits can be beneficial in firstly protecting charred plant remains from crushing and weathering, and then concentrating it into a more manageable soil sample size. Only a few charred plant remains were recovered from The Pilgrims' School samples, but the concentrating effect of carrying out flotation on a deposit that had probably been partially waterlogged, e.g. the Roman Rampart layer 150 (sample 53), may prove to be useful for some of the waterlogged assemblages (see discussion below), providing that the effects of differential preservation are borne in mind.

The borehole samples were poorly preserved and there was some evidence to suggest that organic material had been subjected to differential preservation through drying out of the deposits. The peaty samples showed signs of oxidation, and very few, mainly woody organic remains were present. The fluvial silts were also fairly unproductive, with woody taxa such as alder (seeds and catkins) often being the only remains to survive. Small fragments of charcoal were present in some of the samples but no identifiable charred plant remains were found.

I. PHASE 1 EVALUATION, 2005

Trench 1

Two sondages were excavated down to the peat (151) in this Trench. One sample in the northern sondage was assessed for this report :

Sample 53, context150. - This homogeneous, moderately compact grey-brown clay silt was thought to have possibly formed the Roman rampart (OA Evaluation report). Wooden stakes driven into the peat were recovered, demonstrating that organic survival was reasonable at least in the lower levels.

Both wet and dry flots were assessed by the author. They contained frequent molluscs, some charcoal and bone, peaty fragments and large fragments of wood. A narrow range of plant taxa was observed in the 3 boxes of waterlogged flot, but the drying out of the floated sample concentrated the seeds into a more easily scanned assemblage of damp and nutrient-rich wasteground taxa. Henbane (*Hyoscyamus niger*) seeds were particularly frequent. This is an indicator of nitrogen-rich habitats such as farmyards and middens. Other taxa of nutrient-rich soils included stinging nettle (*Urtica dioica*) and elderberry (*Sambucus nigra*). Sedges (*Carex* sp(p).) and hemlock (*Conium maculatum*) reflected the damp nature of the local environment. These taxa are commonly recovered from damp ditches and wasteground. Hemlock seeds are sometimes abundant in Roman and medieval deposits alongside faecal waste (e.g. the Saxo-Norman defensive ditch at Aldgate, London; Carruthers 2001), and there is the possibility in some cases that they had been used for medicinal purposes (Moffat, 1987). There is some potential for more detailed information to be recovered from this deposit, as additional taxa would be identified if detailed analysis was undertaken. In addition, the recovery of food plants and quantification might help to determine whether any of the plants had been exploited for their medicinal properties or whether they were simply growing locally as weeds. If the latter interpretation is accepted, this vegetation is more likely to represent an abandonment phase, since tall plants such as hemlock would not be left to obstruct an actively used defensive ditch.

In the southern sondage a sample was examined from above the peat:

Sample 52, layer 154 - This consisted of thin spreads of decayed ?turf, possibly representing stacked sods from the Roman rampart. Abundant molluscs, frequent worm cocoons, chalky fragments, peat lumps and occasional small charcoal were present in the dried flot. No

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waterlogged flot was available, but the presence of a few uncharred seeds and wood fragments in sample 52 indicated that the deposit had been fairly anaerobic for most of its history. Only a few 'damp to wet ground' plant remains were observed in the dry flot, consisting of sedge nutlets and aquatic buttercups (*Ranunculus* subg. *Batrachium*). Since thin-walled grass seeds do not preserve well even in fully anaerobic conditions, these few seeds probably represent turves cut from damp to wet grassland, such as probably existed along the Itchen valley.

Two fills from a small Saxon-Norman timber-lined pit 118 from Trench 1 were also assessed; *Sample 6, context 122* – primary fill, a thick, soft anaerobic dark brown cessy deposit (OA Evaluation report). 9th-12th century spot date.
Waterlogged flots comprised well-preserved layers of matted straw interleaved with frequent fly puparia. Mineralised (Green, 1979) concretions consisting of cereal bran, straw and fly puparia were recovered from the dried samples and a damson-type (*Prunus* sp.) stone was present. These remains are typical of concentrated, *in situ* cess deposits, with the straw probably having been used as toilet paper and/or dumped in the pit to help dampen odours. The abundant fly puparia and mineralisation demonstrate that the deposit was nutrient-rich, moist to wet, and probably very smelly.

Sample 5, context 120 – above 122, more compact, dark brown cessy fill, spot dates C11th-C12th (OA Evaluation report). Wet and dry flots produced wood fragments, molluscs, charcoal, insect pupae, fish bones and mineralised cess concretions containing bran, corn cockle impressions (see Carruthers, 2005) and straw. A wider range of waterlogged fruits and seeds was present in the wet flots from sample 5 than in context 122, including some edible taxa such as bramble and sloe/plum stones. The seeds of several general ruderal weeds (e.g. docks, fumitory, orache) were also common. Perhaps the pit was more open to the elements at this later date, or a wider range of waste was being dumped in the pit. Full analysis of both of these deposits is recommended, since more direct evidence of diet will undoubtedly be obtained, including information that could be compared to Middle Saxon Hamwic and to 9th-12th century cess pits at Northgate House, Winchester (OA, ongoing). Changes in the environment and waste disposal may be investigated, particularly if insect remains are also analysed.

Trench 3

A sondage in this Trench was excavated down to the 'natural' river gravel (324). The sequence of overlying deposits assessed for this report is described below using stratigraphic information from the OA Evaluation report (September 2005);

Sample 39, context 323 – overlying the 'natural' river gravel, consisting of a loose layer of sand and grit that probably formed a sand bar. Spot date c. 150-200AD.
A wet flot and some hand-picked dry items (bark, charcoal, sloe stone, hazelnut shell) were assessed. Although frequent wood fragments were present, the range of plant taxa was narrow and mainly tough-coated seeds were present, suggesting there may have been some drying out of the deposit from time to time. Terrestrial buttercups (*Ranunculus repens/acris/bulbosus*), docks (*Rumex* sp.) and fumitory (*Fumaria* sp.) were observed, and these are the type of plants that were probably growing in disturbed grassland areas along the river. The presence of hazelnut shell and a possible bullace (*Prunus* sp.) stone suggest that human waste may also have been deposited nearby, although the presence of sewage was not confirmed. Better-preserved samples higher up the profile from later Roman activity do appear to have contained faecal waste, so this type of material was probably being discharged into the river during the Roman period. It should be remembered that any of the water-lain deposits contain a mixed assemblage that may include plant remains washed in from some distance away from the sampling point.

Samples 8 and 42, context 322 – a firm mid-green/grey peaty silt/sand above 323. Spot date c. 270+. Contained flint nodules and RB pot.
The wet flot contained frequent wood fragments, several small charcoal fragments, occasional bone and leather fragments. The dried flot also contained a charred spelt wheat glume base (chaff fragment, *Triticum spelta*), molluscs and chalky lumps, and insects were more visible than in the large, organic wet flots. The waterlogged plant assemblage included a few seeds of aquatic and waterside plants (e.g. pondweed (*Potamogeton* sp.; gipsywort (*Lycopus europaeus*)) either representing plants that were growing in and around local pools or seeds that had been washed into the area during flooding episodes. A few ruderal weeds indicated that disturbed habitats occurred locally (e,g, docks, nettles). The presence of several food remains, including imported luxury fruits and nuts such as fig (*Ficus carica*) and walnut (*Juglans regia*), indicated that faecal material was present. The origin of this may have been sewage discharged into the river that had been washed into the deposit during episodes of flooding, or more locally deposited waste. Further analysis of these samples would provide information about foods being consumed during this period, and more detailed information about the local habitat.

Samples 7 and 41, context 319 – a compact layer of flint and chalk rubble above 322. Spot date c. 270+. Contained RB pot, building material and coins. Appears to represent deliberate dumping to make a useable surface. Timber posts cut into this layer.
Frequent large charcoal fragments, bone, molluscs, wood and moss were present in the dry and wet flots. A similar range to context 322 of aquatic/semi-aquatic plants (including aquatic buttercups (*Ranunculus* subg. *Batrachium*), ruderal weeds (e.g. stinging nettle, persicaria) and food plants (fig, walnut, apple, cf. damson)) was observed in the flots, probably deriving from the same types of flooding episodes. As with 322, a more detailed examination might show whether or not any changes to the diet, waste deposition or the environment had taken place over time

Samples 4 and 50, context 310 – lower peat, above 319. Spot date ?14th-15th centuries. Firm, mid reddish brown with lenses of green-brown fine silt. Contained sherds of late Roman pot and a ?14th -15th century sherd. Timber stakes were contained within the lower peat, perhaps representing a fish trap.
The wet plant remains consisted of fragments of matted ?reeds, molluscs, wood fragments, buds, charcoal and a wide range of fruits and seeds. Aquatics (pondweed), marsh plants (spike-rush, sedges), ruderals (nettles, docks), arable weeds (corn cockle, nipplewort) and grassland plants (Poaceae) were all represented in the assemblage. The presence of tree buds and wood in addition to marsh plants suggests that a fen-type of vegetation may have existed locally, but this suggestion needs to be confirmed by full analysis of different types of environmental evidence, particularly pollen. The input of ruderal weeds and a few arable weeds may again be due to sewage deposition. Further analysis is required to determine how intensive this was, and to provide evidence of food plants during this period.

One tentative observation concerning the Trench 3 samples is that the exotic food remains such as fig and walnut and cultivated plums (including bullace and damson-type Prunus sp.) do not appear to have been present in the post-Roman deposits, apart from a trace of fig in context 318. More detailed work is obviously required to confirm this suggestion. Native hedgerow fruits such as hazelnuts, apples and blackberries were recorded, however, along with other indicators of sewage such as small fragments of corn cockle seed coat, so faecal waste was obviously still being deposited, but the diet of the local population appears to have become more limited. It will be useful to compare these tentative observations with results from Northgate House.

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Sample 3, context 309 – upper peat, above 310. Spot date 14th-16th centuries. Darker in colour, firm, homogenous. Contained ?15th century pot and leather fragments.
A similar range of plant remains was present in the wet-sieved sample to the lower peat sample, including matted ?reeds, apple endocarp ('scales' from the core), ruderals and marsh plants. No true aquatics were noted this time, so perhaps fewer wet pools existed. However, this may simply be due to the chance positioning of the sample. Pollen analysis would help to determine if conditions had become drier. Identification of the frequent moss fragments interleaved with ?reeds may also assist in characterising the habitat. The matted material should be identified, if possible, during full analysis.

Samples 2 and 44, context 318 – fine silt, possibly of alluvial origin - ?flood silt, above the peat, context 309. Mid green-brown silt containing slate fragments.
Once again, matted ?reeds were present and sedge nutlets were quite frequent. Rushes were also present, as were wood and twigs. The range of other plant remains in this silt, however, was not as great as in the peat samples, perhaps because of poorer conditions of preservation or perhaps because of the dilution effect of the silts being washed into the deposit. As before, sewage and/or domestic waste was still a component of the assemblage, with occasional charred cereals, a few fig seeds and apple endocarp comprising the evidence for this suggestion.

Samples 1 and 46, context 308 – mottled grey silt with 10% chalk fragments and 1% tile, slate and mortar patches suggesting episodes of dumping. Above 318. Spot date 14th-15th centuries.
Only dried flots were available from this deposit, although the presence of uncharred fruits and seeds indicated that it had once been waterlogged. The plant remains were fairly frequent and diverse, but the flots were small so a limited amount of information was recovered. Most of the taxa present represent disturbed and often nutrient-enriched habitats, e.g. fumitory, stinging nettle and henbane. The presence of sedges and thistles could indicate a damp, grazed meadow-type of environment, since thistles often become abundant where livestock grazes. No further work is recommended for these samples.

Sample 48, context 307 – a clean light grey silt. ?flood silt above 308. 13th-14th centuries.
As with context 308, only a dry flot was assessed from this deposit. Although some organic remains had survived, these silts had probably dried out to some extent from time to time, perhaps in the summer months when the area could have been dry enough to provide lush floodmeadow grazing. The presence of remains from marsh/damp ground plants such as spike-rush and sedges could represent the habitat in the damper winter months, or the remains may have been washed into the silts during seasonal flooding episodes. A raspberry seed (*Rubus idaeus*) is slight evidence that human sewage may still have been washed into the area, or perhaps that 'night soil' had been deposited to fertilise the fields. The presence of slag, fish bone, bone, coal and large charcoal fragments in the sample demonstrates that domestic waste was a notable component of the deposit. No further work is recommended for this deposit.

Conclusions and recommendations for further analysis
Although a reasonable amount of information can be obtained from a rapid assessment scan of the wet and dry flots, changes between the periods are difficult to detect without detailed analysis and quantification of the remains, since they often consist of subtle changes in a number of different taxa. In addition, comparisons between sites cannot be undertaken unless quantified, detailed species lists are available. Therefore, further analysis is required for at least some of the more accurately dated and productive deposits.

This report has indicated which deposits could provide more detailed information (see Table 1). It is suggested that, in view of the range of deposits and types of preservation available amongst the samples from Northgate House, the following topics would be worth following up in the samples from The Pilgrims' School:

1. Diet and the deposition of faecal waste in the Roman period.
Charred cereal remains in the Northgate House samples should provide reasonable information concerning the arable component of the Roman diet. Frequent plum/bullace stones from a mineralised cesspit at Northgate house suggest that further dietary information will be present in the residues from this feature. This information can then be compared to the mineralised and waterlogged information from The Pilgrims' School.
Further work - Providing that the dating information is considered adequate, samples 7 + 41 and 8 + 42 could provide this data. The dried flots would be used in conjunction with the waterlogged flots to provide a rapidly sorted source of rarer, large food remains such as fruit stones and nutshells.

2. The Roman Rampart – environment and waste disposal.
Although only dried flots are available, the uncharred fruits and seeds could provide some information about the local environment and the deposition of waste, particularly in conjunction with mollusc (and pollen?) data. The dry flot would be quick to sort, so further analysis would not be expensive. Preservation bias would need to be taken into account, but the range of taxa is interesting and points to a very nutrient-rich habitat.
Further work - Analysis of flot 53.

3. The Saxon-Norman diet
Frequent mineralised samples from cesspits at Northgate House will provide plenty of dietary information with which to compare cesspit 118 at The Pilgrims' School. Other excavations in Winchester and Southampton have produced charred, waterlogged and mineralised evidence from this period, but much of this is unpublished (Green, unpublished thesis 1979; Monk, unpublished thesis 1977). An attempt will be made to draw this information together to see whether or not luxury foods imported into towns during the Roman period continued to be available. Most of the evidence to date suggests not, but preservation biases need to be taken into account when different types of deposit are compared.
Further work – The analysis of samples 5 and 6 from cesspit 118 (including mineralised remains sorted from the residues, if available) would be worthwhile.

3. The medieval diet and disposal of faecal waste
As above, this period has been investigated in many towns across the British Isles, particularly on waterfront sites such as Norwich (Murphy 1983), Bristol (Jones 1987) and Reading Abbey (Carruthers 1997), where waterlogged preservation has provided a wide range of information. Since the Pilgrims' School remains represent mixed flood and peat deposits, precise interpretation and dating of the remains may not be straightforward. However, further analysis may provide information that could be compared to the Roman silty-peat deposits, since they have a similar origin. In addition, changes in the environment might be detected if the upper and lower medieval peat layers are examined in more detail.
Further work – Samples 3 and 4 would provide information on the environment and the medieval diet. If dated, samples 2 + 44 could also be included.

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Resource Requirements
The analysis of 5 waterlogged, 4 dry and 2 wet/mineralised samples would take the author 13 days.

II. PHASE 2 EVALUATION: The Borehole Samples, 2006

Samples (0.7 to 1 litre volume, see Table 1) were examined from Borehole 2 (3-4 m) and Borehole 14 (2-3 m). None of the samples contained well-preserved organic remains although wood fragments, molluscs and a few insect fragments were observed as indicated in the table. It is likely that in most cases the deposits dried out periodically, since brown lumps of what appeared to be oxidised peat were often present. Small fragments of charcoal but no identifiable charred remains were found. The main conclusions were as follows;

BH2 – Contexts 2009, 2010 and 2011. Below possible medieval bank material, 2006.
Context 2009, fluvial deposit - This large flot appeared to contain decaying organic peaty material containing several twigs and wood fragments. The only identifiable plant macrofossils were alder (*Alnus glutinosa*) seeds and catkins, which were fairly frequent. Because these plant propagules are designed to float in order to disperse seeds more widely they are often abundant in river sediments where alder is growing along the banks. As a result of their buoyancy, they can be carried some distance, so alder trees may not necessarily been growing on the site.

Context 2010, fluvial silt – the small flot contained chalk and shell fragments. Small charcoal fragments were frequent and a few wood and insect remains were present. The small number of seeds present was limited in range to a few tough-coated taxa, including sedges (*Carex* sp.), stinging nettle (*Urtica dioica*), elderberry (*Sambucus nigra*) and alder seeds. A fairly disturbed, nutrient-enriched, damp bankside vegetation-type is indicated, i.e. waste disposal was probably occurring nearby.

Context 2011, lower peat – This was the only sample to produce a reasonable diversity of taxa, as well as wood fragments, and several mollusc and insect fragments. Small charcoal was present. As with the sample above, alder and stinging nettle were represented, but a few other wet ground/bankside taxa and disturbed ground taxa were observed. These included (wetground plants) crowfoot buttercups (*Ranunculus* subg. *Batrachium*), water cress (*Rorippa nasturtium-aquaticum*) and (disturbed ground) chickweed (*Stellaria media*) and docks (*Rumex* sp.). Further analysis of this sample could provide a more detailed picture of the local environment, perhaps with some evidence for waste disposal if economic plants are found.

BH14 – Contexts 14004, 14005, 14006, 14007, 14008. Below Roman embankment deposits – natural alluvial sequence of peats and silts.
Context 14004, peat – oxidised lumps of peaty material, frequent tufa fragments, wood fragments, occasional insect fragments and small bone. No identifiable plant remains in small flot.

Context 14005, calcareous silt – Oxidised peaty lumps and tufa as above. Several molluscs, occasional small charcoal. Mint (*Mentha* sp.) and rushes (*Juncus* sp.) were the only identifiable seeds in this small flot. Evidence of wet, marshy conditions.

Context 14006, silty peat – as 14004. No plant remains.

Context 14007, calcareous silt – oxidised peaty lumps, occasional small charcoal, molluscs and insect fragments. Occasional decaying buttercup (*Ranunculus* sp.), stinging nettle and

mint seeds. Suggests wet grassland with some nutrient enrichment of the soil due to disturbance by humans or livestock.

Context 14008, peat – Reasonably large flot but no plant remains recovered. Oxidised, peaty lumps and tufa, occasional small bone and wood fragments.

The lack of identifiable plant remains from these borehole samples suggests that the deposits had dried out at some point in the past, perhaps through drainage during the Roman period. Some pre-Roman disturbance of the area is indicated in context 14007, but the plant remains can provide no further details of this.

Conclusions and Recommendations for Further Work

From the small quantities of fruits and seeds observed in the borehole samples, evidence for alder carr was recovered from the three contexts from BH2, with signs of disturbance and wetland plants in the lower two levels. No alder was found in the BH14 samples and they showed more signs of drying out. However, disturbed ground weeds and wetland/grassland plants were present in the middle of the sequence. Either human dumping of waste or animal disturbance and nutrient-enrichment was occurring in both areas, as indicated by the presence of stinging nettles, docks and chickweed. It would be useful to compare this information with that recovered from mollusc and insect analysis.

Unfortunately no additional soil samples exist for BH 2 (Carl Champness, *pers. comm*), and this produced the only sample of interest, context 2011. Nevertheless, full analysis of this sample would provide a little information about the local environment and extent of human or livestock disturbance in the area. Radiocarbon dating (perhaps on fragments of wood?) would need to be carried out in order to put this information into context.

Although additional soil exists for BH 14, further processing is unlikely to produce useful plant assemblages since organic decay appears to have taken place. However, additional soil from contexts 1406 and 1407 could be processed for insects if required, as the small number of fragments in these samples may not provide sufficient information on their own. Insects from BH2 2011 could also be examined, after the plant macrofossils have been removed from the flot. They were not very frequent but, in conjunction with the seeds, they may provide additional habitat information.

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ASSESSMENT OF DIATOMS

Nigel G. Cameron

Introduction

A diatom assessment was carried out on ten slides prepared from sediment samples taken from the site at Pilgrims' School Winchester (Wincmay 234). These slides were selected by Gem Swindle (Royal Holloway, University of London) from a larger group of twenty-six slides prepared from the site for diatom evaluation. The aims of this assessment are to determine if diatoms are present and the potential for percentage analysis of the diatom assemblages. Comments are made about a number of sample characteristics including: diatom valve concentrations, the quality of diatom preservation, the diversity of taxa, the types of diatom assemblage and the environmental preferences of those diatoms present.

Methods

Sediment sampling, diatom sample and slide preparation was carried out by Gem Swindle, Department of Geography, Royal Holloway, University of London. Diatom preparation involved the following procedures:

Treatment of the sub-sample (0.2 g) with Hydrogen peroxide (30%) to remove organic material and Hydrochloric acid (50%) to remove remaining carbonates
Centrifuging the sub-sample at 1200 for 5 minutes and washing with distilled water (4 washes)
Removal of clay from the sub-samples in the last wash by adding a few drops of Ammonia (1%)
Two slides prepared, each of a different concentration of the cleaned solution, were fixed in mounting medium of suitable refractive index for diatoms (Naphrax)

Slides were scanned at magnifications of x400 and x1000 under phase contrast illumination. Diatom floras used to assist with diatom identification include Krammer & Lange-Bertalot (1986-1991) and Hartley *et al.* (1996). A semi-quantitative assessment of species abundance was made by making a skeleton count of diatom valves for each sample.

Results & Discussion

Table 1: Diatom species counts

Diatom Species/Sample Number	11	12	13	14	17	18	19	20	23	24
Achnanthes exilis	2									
Achnanthes hungarica						9	4	1	2	
Achnanthes lanceolata		4	2	4		2			1	2
Achnanthes lanceolata var. elliptica	7									
Achnanthes lanceolata var. rostrata	2		4							
Achnanthes lauenbergiana			1	10						
Achnanthes minutissima		6	3	1	2	3	1		14	
Achnanthes sp.						2				
Amphora libyca					1	2	1	1		1
Amphora pediculus	6	2	17	20		2	5	3		
Amphora veneta					1	1	1	3	5	10
Caloneis silicula					1	1				

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Diatom Species/Sample Number	11	12	13	14	17	18	19	20	23	24
Cocconeis disculus		1	1	1				1		
Cocconeis pediculus	2						3		1	
Cocconeis placentula & var. euglypta	4	3	7		32	11	23	2	1	1
Cyclotella meneghiniana							1			
Cyclotella sp.		1								
Cymatopleura solea										1
Cymbella sinuata			5	12						
Cymbella affinis			2	1			2			
Cymbella amphicephala			1	1						
Cymbella minuta						3		1		1
Cymbella sp.	1									
Diatoma vulgare				2						
Diploneis ovalis								1		
Fragilaria brevistriata	4	19	2	1						
Fragilaria capucina var. mesolepta					10	2		1	7	1
Fragilaria cf. oldenbergiana										
Fragilaria construens					1			2		
Fragilaria construens var. venter	6	2	2	2		2				
Fragilaria lapponica	2	2		1		1				
Fragilaria pinnata	6	11	3	3		1				
Fragilaria sp.	1	9								
Fragilaria vaucheriae	1							1	8	2
Gomphonema acuminatum					1					
Gomphonema angustatum var. productum								2		1
Gomphonema clavatum										1
Gomphonema minutum			2							2
Gomphonema parvulum										1
Gomphonema sp.	1	1	1		1					
Gomphonema truncatum						2				1
Gyrosigma acuminatum	1				1					
Gyrosigma sp.		1								
Hantzschia amphioxys	1								1	3
Melosira varians		1			10	3	4	1	1	6
Meridion circulare	2	2			1			1		
Navicula capitata						2	1	1		
Navicula cari			1	2						
Navicula cryptocephala						4	1	1		
Navicula cincta	1	1	1	3	1					
Navicula minima		1				3		1	2	
Navicula pupula						1		1		
Navicula seminulum				1						
Navicula sp.	2			1	1	1		1		
Navicula tripunctata		2								
Nitzschia amphibia									4	

Diatom Species/Sample Number	11	12	13	14	17	18	19	20	23	24
Nitzschia dubia		1								
Nitzschia frustulum									1	1
Nitzschia palea									2	
Nitzschia sp.		2	2					3	3	2
Pinnularia gibba								1		
Rhoicosphaenia curvata							1			
Stephanodiscus sp.						1		1		
Surirella sp.		1								
Synedra capitata					1					
Synedra ulna	1	1	1		3	2	1	1		1

The semi-quantitative assessment of relative diatom abundance within each sample is presented in Table 1 (Excel file) which show diatom species counts. These data are presented as raw counts rather than as percentages because the total count for each sample is low. A summary of the assessment results is presented in Table 2.

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Table 2: Summary of diatom assessment

Sample Number	Context	Description	Diatom valve concentration	Quality of preservation	Diversity	Comments on Assemblage Type	Potential for percentage counting
11	319	Roman rubble dump	high	good to moderate	moderately high	non-plankton, attached & benthic	good
12	319	" "	high	good to moderate	moderately high	non-plankton, attached & benthic	good
13	319	" "	high	good to moderate	moderately high	non-plankton, attached, benthic less *Fragilaria* sp.	good
14	319	" "	high	good to moderate	moderately high	non-plankton, attached, benthic less *Fragilaria* sp.	good
17	310	Lower peat	high	good to poor	moderately high	higher proportion of epiphytes rheophilous species	good
18	310	Lower peat	high	good to poor	moderately high	higher proportion of epiphytes rheophilous species	good
19	309	Upper peat	moderate	good to poor	moderately high	non-plankton, attached & benthic	good
20	309	Upper peat	moderate	good to poor	moderately high	non-plankton, attached & benthic	good
23	318	Flood silt?	moderate	moderate to poor	moderate	higher proportions of *Nitzschia* spp.	good
24	308	Flood silt?	moderate	moderate to poor	moderate	higher proportions of *Gomphonema* spp.	good

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In addition a rapid scan (phase contrast x400 magnification) was made of the 16 remaining samples prepared from the site. These samples and their context numbers are listed in Table 3.

Table 3: Samples for which a rapid scan for diatoms was made

Sample Number	Context Number
9	323
10	323
15	319
16	300
21	318/309
22	318
25	308
26	308
27	308
28	308
29	308
30	306
31	306
32	306
33	306
34	306

In most of these samples diatoms are present in relatively low concentrations, in some diatoms were very sparse, and species diversity is low (sample numbers 9, 10, 16, 21; 25-34 inclusive). There are moderate numbers of diatoms in sample numbers 15 and 22. However, in the latter species diversity is low. In addition in several of these rapidly scanned samples the most common diatom component is of aerophilous, semi-terrestrial diatoms that are common in soils and damp aerial habitats as opposed to true aquatic environments. These types of diatoms can also be present in the atmosphere. Such diatoms are therefore almost ubiquitous and can be found in many terrestrial environmental samples (although they can in some contexts be useful indicators of eroded or in-washed sediment in aquatic sediments). True aquatic diatom species are rare in this group of samples and were in low concentrations.

The ten samples for which a full diatom evaluation was carried out (Table 1 and Table 2) have high or moderately high concentrations of diatom valves. The quality of valve preservation is generally good or moderately good, but a varying number of poorly preserved valves are also present. In particular in the postulated 'flood silt' samples (23 and 24) there are a greater number of poorly preserved diatoms that show evidence of valve breakage and silica dissolution. Species diversity is moderately high, but again in sample numbers 23 and 24 the diversity is slightly reduced compared with other samples. All ten samples have very good potential for percentage diatom counting and more detailed environmental reconstruction (e.g. the use of a diatom-water chemistry transfer function) to be carried out. From the results of the skeleton counts carried out for sample numbers 11-14, 17-20, 23 and 24 some general comments on the environments represented can be made.

All ten samples are dominated by non-planktonic diatoms with a mixture of attached (e.g. epiphytic and epilithic) and benthic (e.g. epipelic, mud-surface) species. Planktonic (open water) diatoms are rare with only occasional occurrences of planktonic diatoms such as *Cyclotella meneghiniana* and poorly preserved valves of *Stephanodiscus* sp. However, species such as *Melosira varians* and some *Fragilaria* spp. are tychoplanktonic and may have a stage of their life cycle in open water. The habitats represented are therefore of

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shallow water where these non-planktonic diatoms are able to remain attached to or move on surfaces within the photic zone.

There is a component of diatoms specifically associated with flowing water (rheophilous diatoms) represented by *Melosira varians* (common in several samples) and *Meridion circulare*. Whilst the component of aerophilous diatoms (a diatom community described above for the rapidly scanned samples) is very small. Therefore diatoms derived from terrestrial habitats are rare but there are occasional occurrences of aerophiles such *as Hantzschia amphioxys*.

Samples numbers 11 to 14 are derived from context 319 (age AD270+ and interpreted from other evidence as Roman rubble dump deposits). These samples have in common a range of non-planktonic aquatic species. The species include the consistent presence of a number of *Fragilaria* taxa (*F. brevistriata, F.construens* var. *venter, F. lapponica, F. pinnata*) which are early colonisers of new and ephemeral aquatic habitats. However, there is a diverse range of other diatom types in this group of samples and the assemblage does not show evidence for mixing of diatoms from disparate sources. Other common species include *Achnanthes minutissima, Amphora pediculus* and *Cocconeis placentula* and its varieties. *Amphora pediculus* is particularly common in samples 13 and 14 along with *Cymbella sinuata* in sample 14. These and other common taxa may grow both as epiphytes or as benthic species. However, the presence of relatively high numbers of *Achnanthes* species (*A. lanceolata* and its varieties, *A. minutissima, A. lauenburgiana*) probably reflects the presence of a large aquatic macrophyte habitat. Further, from the skeleton counts of common taxa there appear to be changes in the relative numbers of these species.

Diatom assemblages derived from peat are often poorly preserved. However, the quality of diatom preservation is excellent in the samples from contexts associated with peat formation (numbers 17, 18, 19, and 20). The presence of rheophilous diatoms in some samples has been noted, e.g. *Melosira varians* is particularly common in sample 17. Maxima of *Cocconeis placentula* occur in this group of samples. This species is commonly epiphytic. Also of note is the common occurrence of *Achnanthes hungarica* (samples 18 and 19). This diatom is particularly associated with the water plant *Lemna* and moderately high levels of nutrients.

The samples from the probable flood deposits (number 23 and 24) again have a range of non-planktonic diatoms. The quality of preservation in these samples is poorer and there is more silt visible on the diatom slides. There are also some indications from the diatom composition that the assemblages are derived from flooding. The dominant components of the assemblage have changed compared with the underlying levels. For example *Achnanthes minutissima* is common in sample 23, *Amphora veneta*, and *Fragilaria vaucheriae* in both 23 and 24. A range of *Nitzschia* taxa *(N. amphibia, N. frustulum, N. palea* and undifferentiated *Nitzschia* spp.) also become more common. These *Nitzschia* spp. are often found growing where nutrient levels are moderately high. This is also supported by the consistent occurrences of *Gomphonema* spp. (*G. angustatum* var. *productum, G. clavatum, G. minutum, G. parvulum, G. truncatum*) in sample 24. These attached diatoms are often associated with higher nutrient levels.

Conclusions

Diatoms are present in all ten samples evaluated. They occur in moderately high concentrations, are generally well preserved and species diversity is moderately high. The concentrations of valves, their quality of preservation and species diversity is somewhat reduced in the probable flood deposits (sample numbers 23 and 24). All ten samples have very good potential to make percentage diatom counts. The remaining sixteen samples

prepared for diatom analysis, with few exceptions, have poorer diatom assemblages and where diatoms are present they are often from the ubiquitous aerophilous diatom community. Skeleton counts of ten selected samples show consistent diatom assemblages within the contexts examined with no clear evidence for mixing of disparate community types (as might be anticipated in dump deposits for example). More subtle changes in composition within the context types are also indicated from the skeleton counts. All the diatom assemblages are dominated by non-planktonic diatoms with only rare occurrences of planktonic diatoms. This reflects the shallow water origins of the diatoms. Benthic (mud) and attached (e.g. epiphytic) diatom communities are represented in the diatom assemblages along with some occurrences of species associated with flowing water. Percentage diatom counts to further investigate the species composition and possible environmental reconstruction using a transfer function (e.g. Birks *et. al.* 1995) may be of relevance here.

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2006 Floodplain Assessment

Introduction and background

In 2005 a diatom assessment was carried out for Oxford Archaeology and Archaeoscape (Royal Holloway, University of London) for the site at The Pilgrims' School, Winchester. Relatively well preserved diatoms were found in ten samples taken from a number of contexts (Cameron 2005). Oxford Archaeology returned to the site for a second phase of archaeological assessment in 2006. As part of this work, a borehole survey was undertaken which has been able to place the previous Trenches within a wider context of the floodplain sequence (Carl Champness pers.comm.). A former channel of the River Itchen has been revealed by this new work and the aim of the present diatom evaluation is therefore to supplement the previous assessment of the site. The aim here is then to assess the potential of new samples for diatom analysis, and to revise previous recommendations for further diatom analysis as appropriate.

The two selected boreholes were sub-sampled by Richard Macphail at UCL for pollen and soil micromorphology. Richard Macphail also took sub-samples for diatom evaluation from the same levels that were sampled for pollen analysis. A total of eight new samples were selected for diatom assessment. Included is a sample from BH3 at 3.55 m in the upper part of context 3010. This context has not previously been subsampled for pollen or diatoms, but is believed to represent a palaeochannel of the River Itchen (Carl Champness & Richard Macphail pers.comm.).

Methods

Diatom preparation followed standard techniques: the oxidation of organic sediment, removal of carbonate and clay, concentration of diatom valves and washing with distilled water. Two coverslips, each of a different concentration of the cleaned solution, were prepared from each sample and fixed in Naphrax, a mounting medium with a suitable refractive index for diatom microscopy. Slides were scanned at magnifications of X200, x400 and x1000 under phase contrast illumination. Diatom floras and taxonomic publications consulted to assist with diatom identification include Hartley et al. (1996) and Krammer & Lange-Bertalot (1986-1991).

Results

The results of the diatom evaluation are summarised in Table 1 and a qualitative assessment of the main species found in the samples is presented in Table 2.

Diatom assemblages of high quality are present in the four uppermost samples from BH3. Diatoms are absent from the remaining four samples, these are the basal sample from BH3 and all three samples from BH13. The absence of diatoms may reflect unfavourable conditions for diatom silica preservation such as repeated wetting and drying of sediment or extremes of pH either in the water or in the sediment (Flower 1993, Ryves *et al.* 2001).

Table 1: Summary of diatom assessment of samples from two boreholes BH3 and BH13

Sample Depth (m)	Diatoms presence	Diatom valve Concentration	Quality of preservation	Diversity	Assemblage type	Potential for percentage counting
BH3 1.89	+	Moderately High	Good to Poor	Moderately High	Epiphyte Benthic Plankton	Good

Sample Depth (m)	Diatoms presence	Diatom valve Concentration	Quality of preservation	Diversity	Assemblage type	Potential for percentage counting
BH3 2.38	+	High	Good	High	Epiphyte Benthic Plankton	Very Good
BH3 2.76	+	High	Good	High	Epiphyte Benthic Plankton	Very Good
BH3 3.55	+	High	Good	High	Epiphyte Benthic Plankton	Very Good
BH3 3.85	-	-	-	-	-	None
BH13 2.435	-	-	-	-	-	None
BH13 2.47	-	-	-	-	-	None
BH13 2.87	-	-	-	-	-	None

Table 2: Diatom species in samples from BH3 1.89 m, 2.38 m, 2.76 m and 3.55 m depth.

+ species present; ++ common: +++ abundant

Diatom Species/Sample Number	*BH3 1.89m*	*BH3 2.38m*	*BH3 2.76m*	*BH3 3.55m*
Achnanthes clevei				+
Achnanthes kolbei	+			
Achnanthes lanceolata	++	++	++	+
Achnanthes minutissima		+	+	
Achnanthes sp.	+			
Amphora normanii	+			
Amphora ovalis		+	+	
Amphora pediculus		++	++	+
Caloneis bacillum		+		
Campylodiscus hibernicus				+
Chrysophyte cysts	+			
Cocconeis pediculus		+		+
Cocconeis placentula & var. *euglypta*	+	++	+++	+++
Cyclotella kuetzingiana	+		+	+
Cyclotella radiosa	+			
Cymatopleura solea				+
Cymbella aspera		+	+	+
Cymbella cistula				+
Cymbella minuta		+	+	+
Cymbella sinuata			+	
Denticula tenuis		+	+	+
Diatoma vulgare			+	+
Didymosphaenia geminata				+
Diploneis oblongella	++			
Diploneis ovalis	+		+	
Ellerbeckia arenaria			+	+
Eunotia curvata		+		
Eunotia pectinalis *var.* minor				+
Fragilaria brevistriata	++	++	+	+
Fragilaria construens var. *binodis*		+		
Fragilaria construens var. *venter*	+	++	+++	+
Fragilaria leptostauron	+	+		+
Fragilaria pinnata	+	+++	+++	+++
Fragilaria sp.	+			

Diatom Species/Sample Number	*BH3 1.89m*	*BH3 2.38m*	*BH3 2.76m*	*BH3 3.55m*
Fragilaria vaucheriae		+	+	
Fragilaria virescens	+ +			
Gomphonema truncatum	+	+	+	+
Gyrosigma attenuatum		+ +	+ +	+
Hantzschia amphioxys	+			
Indeterminate pinnate	+			
Melosira varians	+			+
Meridion circulare		+	+	+
Navicula bacillum			+	
Navicula capitata				+
Navicula cf. *cryptocephala*		+		
Navicula cincta	+ +	+		+
Navicula pseudotuscula			+	
Navicula pupula	+			
Navicula radiosa				+
Navicula sp.		+		
Navicula tripunctata			+	+
Nitzschia amphibia	+		+	
Nitzschia sinuata	+			
Nitzschia sp.	+		+	
Pinnularia microstauron *var.* brebissonii	+			
Pinnularia sp.	+		+	+
Rhopalodia gibberula				+
Stauroneis anceps	+			
Stauroneis smithii				+
Stephanodiscus sp.		+		
Synedra parasitica		+		
Synedra ulna	+	+	+	+
Unknown naviculaceae	+			

Discussion

The diatom assemblages from the four diatomaceous samples from BH3 are composed mainly of benthic and epiphytic (or other attached) non-planktonic diatoms. These non-planktonic diatoms are restricted to the photic zone in shallow-water. However, three samples have a small component of open water, planktonic diatoms e.g. *Cyclotella kuetzinghiana, Cyclotella radiosa, Melosira varians* (the latter species appears from the scan of the slide to be absent in any numbers in BH3 at 2.38 m).

The dominant diatoms in all four samples are epiphytic or are from other non-plankton habitats (epilithic, epipsammic). Common epiphytes include *Cocconeis placentula, Achnanthes lanceolata, Fragilaria brevistriata, Fragilaria pinnata* and *Fragilaria construens* var. *venter*. In addition the benthic, mud surface habitat is represented by species such as the large diatom *Gyrosigma attenuatum*.

Aerophilous, desiccation tolerant, diatoms associated with semi-terrestrial habitats (damp soil) or sediments subject to cycles of wetting and drying, or from the inwash of eroded bank or terrestrial sediments form a small component of the diatom assemblages in BH3. The exception is in the top sample where the aerophile *Navicula cincta* is common along with the presence of other aerophilous taxa such as *Pinnularia microstauron* var. *brebissonii*, *Hantzschia amphioxys* and chrysophyte stomatocysts. However, a number of true aquatic, non-planktonic diatoms such as *Achnanthes lanceolata, Diploneis oblongella, Fragilaria virescens* and *Fragilaria brevistriata* are also common in this sample.

A rare occurrence of a few valves of *Didymosphenia geminata* (found on both coverslips prepared from the sample) is restricted to the sample from 3.55 m in BH3. This species is generally found in low numbers in the north of the UK in circumneutral (c. 10 mg calcium per litre) oligotrophic (low nutrient levels c. 20 µg per litre) rivers in cooler temperatures (it is also found in Scandinavia and Poland (Kaweka & Sanecki 2003)). Unfortunately *Didymosphenia geminata* has been introduced to New Zealand, Canada and the United States

where since the late 1980s as an invasive species it can form large dense algal mats in rivers resulting in deoxygenation and the death of fish. In its native habitats in Northern Europe the species is not problematic. The record in Winchester seems to be a southerly record for the species in the UK, where *Didymosphenia* is typically a small component of the diatom assemblage of streams in northern Britain. The species is usually found in clean, unpolluted water, in cool and unshaded conditions. *Didymosphenia geminata* is found where there are low rates of water flow and stable habitats where there is a low level of scour and with low levels of suspended solids. The presence of the rheophilous diatoms *Meridion circulare* and *Melosira varians* in samples from BH3 also indicate the presence of flowing water. The nutrient levels indicated by the diatom assemblages in BH3 are likely to be moderate or low. Diatoms associated with organic pollution and eutrophic, nutrient enriched, conditions are not very common here. However, this idea could be tested using a diatom-phosphorus nutrient transfer function so that phosphorus levels and any quantitative changes between samples could be established (Bennion *et al.* 1996).

Conclusions

In conclusion the evaluation of a number of the diatom assemblages in BH3 indicates that where diatoms are present there is shallow, flowing water. Nutrient levels are only moderately high and the component of aerophilous diatoms is generally small, with the highest numbers of aerophiles in the top sample of BH3. The environment could be further investigated by carrying out percentage diatom counting for BH3 and applying a diatom-phosphorus transfer function to examine variation in nutrient levels between samples. The present evaluation therefore reinforces the conclusions made in the previous diatom assessment made for the site (Cameron 2005). Diatom-based nutrient reconstruction might also complement the work on soil micromorphology in relation to the presence of possible dung deposits in the sequence (Macphail 2006). Diatoms are absent from the samples assessed from BH13.

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ASSESSMENT OF INSECTS

David Smith

University of Birmingham Environmental Archaeology Services Report 116

Introduction

The insect remains discussed are primarily from a series of samples recovered in 2005 from palaeochannel deposits in Trench 3 at The Pilgrims' School, Winchester during the initial evaluation. This sequence of deposits dated from between *c.* 2nd century AD to the 15th century. They are from the flood plain of the River Itchen and are initially associated with the Roman Town. It is thought that in during the medieval period this area of Winchester was open (probably gardens). The nature of the material sampled is quite variable ranging from sandy silts to organic 'peat'.

Subsequently in 2006 three samples from two boreholes from transects across the site were submitted for analysis. These were context 2011 from Borehole 2 and context 1407 and 1406 from Borehole 14. The material consisted of the plant macro flots from these deposits and a number of insect specimens picked out from the waterlogged plant remain flots by Wendy Carruthers.

This assessment was carried out in order to establish the following:

- Are insect remains present? And if so, are the faunas of interpretative value?
- Do the insect remains from these samples contain information on the nature of the environment in the area at the time of the deposits formation?
- What were the water conditions in the palaeochannel?
- Is there any evidence for the dumping of domestic and settlement material in the area?

Methods

The samples from 2005 were processed using the standard method of paraffin flotation as outlined by Kenward *et al* (1980). The weights and volumes of the individual samples are included in Table 1. Insect remains were then sorted from the flot and examined under a low-power binocular microscope. The system for 'scanning' faunas as outlined by Kenward *et al.* (1985) was followed in this assessment.

The material from 2006 was examined separately. Given the essential similarity in terms of location and deposit it was felt that an examination of the recovered insect fragments and a fast scan of several Petri dishes of material from the plant macrofossil flots would confirm preservation and presence at minimal cost.

When discussing the faunas recovered, two considerations should be taken into account:

1) The identifications of the insects present are provisional. In addition, many of the taxa present could be identified to species level during a full analysis, producing more detailed information. As a result, these faunas should be regarded as incomplete and possibly biased.

2) The various proportions of insects suggested are very notional and subjective.

Results

The insect taxa recovered from the 2005 excavations are listed in Table 1. The taxonomy used for the Coleoptera (beetles) follows that of Lucht (1987). Trichopteran (caddis fly) remains were also found.

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The numbers of individuals present is estimated using the following scale: * = 1-2 individuals ** = 2-5 individuals *** = 5-10 individuals **** = 10+ individuals.

Discussion

Are insects present and are the faunas interpretable?
Moderately sized but diverse faunas of beetles were recovered from samples 39 and 43. These are from the peat and silts dated to the 2nd and 3rd century AD. Samples 40 and 45 from the overlying roman flood silts produced very small insect faunas and are not interpretable. Samples 51 and 49 from the 14th-15th-century peat produced reasonably large and diverse insect faunas. No insects were recovered from sample 47 at the top of sequence. Where insect faunas were recovered these are interpretable.

What is the environmental setting and land use during deposit formation?
The insect remains from samples 39 and 43 from the Roman peat suggest that the local landscape was open grassland with some pasture. This is suggested by the *Aphodius, Geotrupes* and *Onthophagus* dung beetles recovered. Open grassland is also suggested by the presence of *Phyllopertha horticola* whose larvae is associated with old pasture and meadows where they feed on the roots of grass (Jessop 1996). The *Apion, Sitona* and *Ceutorhynchus* species of weevil usually feed on a range of grassland and waste ground vegetation. There is little indication for trees in the insect fauna with only isolated fragments of the tree dependant scolytid 'bark beetles' recovered. This suggests that the landscape was probably open and essentially treeless by this time.

The medieval samples 51 and 49 produced an essentially similar fauna again suggesting the presence of open ground. However, These faunas are much smaller than those in Roman period and the evidence is less equivocal.

What were the water conditions within the palaeochannel?
The water beetles (the aquatic hydrophilids and the hydreanids) recovered from the samples from both the Roman and medieval periods are all associated with vegetated, stagnant, slow moving or standing waters (Hansen 1987; Nilsson and Holman 1995). The exception to this is the relatively small numbers of elmid 'riffle beetles' recovered in the samples from the Roman peat. . Elmids are normally associated with faster flowing waters. This might suggest that there were either areas of fast flowing water locally or that this material might represent a flood deposit with an origin in the main channel of the Itchen. In the Mediveal period the weevil *Tanysphyrus lemnae* is present in some numbers. This species feeds exclusively upon duckweed (*Lemna* spp.) (Koch 1992), which is a classic indicator plant for very slow water conditions. There is however, little evidence from the insect remains from both periods for the presence of waterside vegetation, suggesting that the channel probably remained relatively clear of dense stands of reed bed.

Is there any evidence for the dumping of domestic and settlement material in the area?
Both the Roman and medieval deposits from this section contain a number of insects that indicate that domestic material was dumped into this area or that settlement was nearby.

Perhaps the clearest indication for this is from the Roman sample 39 which contained the remains of the 'granary weevil' *Sitophilus granarius* and the 'saw toothed grain beetle' *Oryzaephilus surinamensis*. Both of these species are only associated with grain and granary waste and are not found in the natural environment. Similarly deposits from both periods do contain species such as *Lathridius minutus, Cryptophagus spp., Mycetea hirta,* and *Typhaea stercorea* that are common in settlement deposits and waste in the archaeological record

(Hall and Kenward 1990; Kenward and Hall 1995). Equally the 'woodworm' *Anobium punctatum* is usually associated with settlement timbers.

2006 FLOODPLAIN SEQUENCE

Introduction

The insects sorted by Wendy Carruthers from samples 2011 and 1407 were not identifiable since they consisted of small fragments or undiagnostic elements. However, it is clear that preservation is quite good. Equally, a quick scan of the plant macro fossil flots showed that well-preserved insects fragments were present. If larger volumes of this material were paraffin-floated reasonably large and interpretable insect faunas should result.

Conclusions

This assessment of the insect remains from The Pilgrims' School, Winchester suggests that these deposits do contain reasonably large and interpretable faunas. However, the faunas are comparatively small and probably function best as an additional line of evidence to any pollen and plant macrofossil studies from these deposits. They clearly suggest that during the Roman period the area was open and probably periodically flooded. It also appears to have had settlement waste dumped onto it.

A similar pattern is also suggested for the medieval deposits, though there is clearer evidence for a body of very slow-moving or still water.

Recommendations

A fuller analysis of the insect faunas from these samples would result in an improved understanding of the environments surrounding these channels and the depositional regime present. This would be particularly true if larger faunas were available for study. It is suggested that the material presently reserved from these samples should be processed and analysed at the same time as the existing faunas. At present I know of no other archaeological insect faunas from Winchester, or the area surrounding the town, except for the single brief report on the contents of a medieval latrine (Jones *et al.* 1991).

It is recommended that the insect faunas from samples 39, 43, 51 and 49 from 2005 are fully analysed. It is also recommended that any unprocessed material from these contexts is also processed and the insect faunas analysed. Equally, the three samples of material from the 2006 boreholes also need to be examined. In this case any remaining unprocessed material form these contexts and the existing plant macro fossil flots will need to be processed and paraffin floated.

Time to complete this work:

3.5 days processing and sorting
2.5 days laying out of insect fauna
2 days identification
1 day table preparation and statistics
1 day report writing

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Table 1: The Insect Remains from The Pilgrims' School, Winchester

Sample No.	39	43	40	45	51	49	47
Processed Weight (kg.)	7	6.5	9	5.5	6	7.5	6.5
Processed Volume (L.)	5	5	6	5	5	6	5
COLEOPTERA							
Carabidae							
Nebria salina Fairm. Lab.	+	-	-	-	+	-	-
Dyschirius globosus (Hbst.)	-	+	-	-	-	-	-
Trechus spp.	+	-	-	-	-	-	-
Bembidion spp.	+	-	-	-	+	-	-
Agonum spp.	-	+	-	-	-	-	-
Amara spp.	+	+	-	-	-	-	-
Calathus spp.	+	-	-	-	-	-	-
Hydraenidae							
Hydraena spp.	-	-	-	-	+	-	-
Octhebius minimus (F.)	-	-	-	-	+	-	-
Octhebius spp.	-	-	-	-	+	-	-
Helophorus spp.	+	-	-	-	+	-	-
Limnebius spp.	-	+	-	-	-	-	-
Hydrophilidae							
Coelostoma orbiculare (F.)	+	-	-	-	+	-	-
Cercyon spp.	-	-	-	-	-	+++	-
Cercyon spp. (Aquatic)	+	-	-	+	-	-	-
Laccobius spp.	+	-	-	++	-	-	-
Cymbiodyta marginella (F.)	++	-	-	-	-	-	-
Orthoperidae							
Coryopholous cassidoides (Marsh.)	-	-	-	-	-	+	-
Staphylinidae							
Omalium spp.	-	-	-	-	-	+	-
Lesteva spp.	-	+	-	-	+	-	-
Trogophloeus spp.	-	+	-	-	-	-	-
Oxytelus spp.	+	++	-	-	+	++	-
Platystethus arenarius (Fourc.)	+	-	-	-	-	-	-
Stenus spp.	++	-	-	-	-	+	-
Xantholinus spp.	-	-	-	-	-	++	-
Lathrobium spp.	-	-	-	-	+	+	-
Tachyporus spp.	-	-	-	-	+	+	-
Helodidae							
Helodidae gen & spp. indet	-	-	-	-	+	-	-
Dryopidae							
Dryops spp.	-	+	-	-	-	-	-
Elmis aenea (Müll)	+	++	-	-	+	-	-
Oulimnius spp.	-	++	-	-	+	-	-
Nitidulidae							
Brachypterus spp.	+	-	-	-	-	-	-
Cucujidae							

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Sample No.	39	43	40	45	51	49	47
Oryzaephilus surinamensis (L.)	+	-	-	-	-	-	-
Cryptophagidae							
Cryptophagus spp.	-	-	-	-	-	+	-
Lathridiidae							
Enicmus minutus (Group)	-	++	-	-	-	-	-
Corticaria spp.	-	-	-	-	-	+	-
Mycetophagidae.							
Typhaea stercorea (L.)	-	-	-	-	-	+	-
Endomychidae							
Mycetaea hirta (Marsh.)	-	-	-	-	-	+	-
Anobiidae							
Anobium punctatum (Geer.)	+	+	-	-	+	+	-
Ptinidae							
Ptinus spp..	+	-	-	-	-	-	-
Anthicidae							
Anthicus spp.	-	-	-	-	-	+	-
Scarabaeidae							
Trox scaber (L.)	+	-	-	-	-	-	-
Geotrupes spp.	+	+	-	-	-	-	-
Onthophagus spp.	+	-	-	-	-	-	-
Oxyomus silvestris (Scop.)	+	+	-	-	-	-	-
Aphodius spp.	++	+	-	-	+	-	-
Phyllopertha horticola (L.)	+	-	-	-	+	-	-
Chrysomelidae							
Chaetocnema spp.	-	-	+	-	-	-	-
Scolytidae							
Scolytus spp.	+	-	-	-	-	-	-
Leperisinus varius (F.)	+	-	-	-	-	-	-
Curculionidae							
Apion spp.	+	-	-	-	++	-	-
Sitona spp.	++	-	-	-	-	+	-
Tanysphyrus lemnae (Payk.)	-	-	-	-	+++	++	-
Bagous spp.	++	+	-	-	-	-	-
Sitophilus granarius (L)	+						
Ceutorhynchus spp.	++	-	-	-	+	-	-
Tricoptera	++	++	++	++	++	-	-

ASSESMENT OF THE MOLLUSCS

Carl Champness (OA)

Introduction

A total of 9 samples were assessed from an evaluation and borehole survey from The Pilgrims' School, Hampshire (AY234). The samples derive from a range of different deposits and cover the early prehistoric to the Romano-British periods. The purpose of the work was to ascertain if the molluscan assemblages retrieved could provide data on the local site environment for the various phases of activity represented.

Site location and Geology

The site lies within the south east corner of Winchester Cathedral Close, a Scheduled Ancient Monument (Hants 585) and part of the Roman town. National Grid Reference (SU 4829 2905). The site is situated on the valley floor to the west of the River Itchen that flows from north to south.

The geology comprises Upper Chalk of the Cretaceous Epoch overlain by floodplain gravels dating from the late Quaternary period (BGS sheet 299D) which are in turn overlain by peat and floodplain silts.

Aims

At the most basic level the assessment aimed to:

- Determine the presence/absence of molluscan remains
- Give preliminary data on taxonomic content
- Indicate the potential for further work

Specific research aims:

- Help identify the changing environment of the floodplain
- Indicate the affects of Roman drainage practices on the floodplain

Method

Assessment was carried out on a mixed sampling assemblage of small 2 litre samples, specifically collected for the retrieval of waterlogged plant remains, and bulk samples that were taken for the retrieval of charred plant remains, but were also found to contain molluscs. The sediment was floated in water onto 0.5 mm mesh and the flots retained wet. The residues were also sieved to 0.5mm and examined. Both the flots and residues were then scanned under a binocular microscope at magnifications of x10 and x20 and the abundance of taxa recorded. Flotation was generally found to have given poor shell recovery as many of the molluscs were incrusted with tufa and were found not to float.

The abundance of taxa was recorded on a sliding scale of + (present, 1-5 individuals), ++ (some 6-10), +++ (many 11-25), and ++++ (26-51) +++++(abundant 51+). An estimate was also made of the total number of individuals in each flot excluding *Cecilioides acicula*. This species was excluded because it burrows deeply and provides no useful information on conditions as a sediment or soil formed. *C. acicula* can be extremely numerous and its inclusion in the total tends to obscure the results from the other species. The results are presented in Tables 1. For the purposes of assessment the species are grouped at a very basic level by ecological preferences following Boycott (1936), Ellis (1926), and Evans (1972),. Nomenclature follows Kerney (1999).

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Results (see Table 1)

Preservation and abundance of molluscan remains were highly variable in the assemblage, ranging from low to poor from the samples examined from the palaeochannel sequence in Borehole 2 and moderate to good from the floodplain sequence in Borehole 14. The samples from the floodplain sequence, contexts 1404, 1405, 1406, 1407 and 1408 produced well preserved and rich assemblages, some of which would be suitable for further analysis. Also one sample <53>, context 150, part of the possible Roman rampart deposit, produced a rich assemblage of well preserved shells. The abundance and diversity of species through the assemblage may be a reflection of the nature and diversity of the prevailing local habitat, i.e. woodland, arable, pasture and/or the mode and energy of deposition.

The results of the assessment indicate certain changes in the local environment can be detected through time, although there appears to be a low diversity and a high degree of consistency within the whole assemblage. Floodplain taphonomies can be difficult to interpret as the molluscan assemblages can be very mixed and receive inputs from several sources. A pragmatic approach has been adopted here, in that the samples are taken to represent the wider floodplain environment and due consideration has been given to the fact that they are likely to have undergone a degree of reworking. For convenience, the samples are discussed in chronological order to develop a picture of the changing floodplain environment.

On the whole the early pre-Roman floodplain assemblage (context 1405-1408) consisted of totally open country/wetland grassland fauna up until the early Roman period. They include, *Vallonia pulchella, Succinea or Oxyloma, Cochlicopa lubericella, Trichia hispida and Cepaea sp.* A small range of freshwater species of *Valvata cristata, Valvata piscinalis. Bithynia sp. and Lymnaea truncatula* were also present. The presence of both a typical damp grassland fauna with a amphibious element have been previously thought to indicate floodmeadow (Robinson 1992). The absence of certain slum species like *Anisus leucostoma* would indicate that this environment would not have seasonal inundated and would most likely have been lightly grazed.

The samples from the palaeochannel 2009 2010 and 2011 from Borehole 2, produced a very poor assemblage of flowing water species. Only a few of these were readily identifiable and preservation is limited to the more robust shells. The assemblage consisted of *Bathyomphalus contortus* and *Planorbis spirorbis* with frequent well-broken up shell fragments. This is consistent with a slow flowing channel of the River Itchen that was believed to cross the site before it was diverted in the Roman period (Biddle 1983).

The Roman assemblage (context 1404) shows a continuation of damp grassland conditions and a gradual reduction in aquatic species. The reduction of fresh water species within the sample corresponds with the reclamation of the floodplain in the 2nd century AD. This surface would likely have become much drier as indicated by the increase of terrestrial/marsh species compared to that of aquatics. The area may still have been prone to waterlogging and occasional flooding as indicated by the presence of *Valvata cristata* and *Valvata piscinalis* within the assemblage.

By the time of the construction of the Roman embankment of the town (context 150), the site appears to have become much drier and more suitable for settlement. Shade loving species of *Discus rotundatus, Carychium minimum* and *Oxychilus cellarius* appear in the assemblage, possibly indicating the presence of nearby hedges or scrub vegetation. The continued dominance of open wet grassland fauna within the assemblage may indicate that a much more diverse range of habitats existed in this area at this time. The presence of shade loving species may indicate that this area was not being so heavily grazed as before and shrub

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vegetation was able to become more established. One note of caution is that this mixed assemblage could also be the result of reworking caused by the practice of rubbish dumping.

Recommendation for further analysis

In general the majority of samples have limited potential for further work considering the poor preservation throughout the sequence. Only contexts 150 from Trench 1, and context 1404 and 1405 from Borehole 14, have sufficient numbers for full analysis. It therefore recommended that a complete sorting of all flots from Borehole 14 be undertaken to provide a full count of snails from the early floodplain sequence. These samples should also include context 150, from Trench 1 that represents the Roman rampart that is not present within the Borehole 14 samples. The confirmation of the snail identifications and full analysis of the flots will help to provide greater detail about the environmental changes that occurred during the Roman drainage of the floodplain and after.

Time for further analysis:

Tasks	**Days**
Sorting and counting	3
Preparation of text	1

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Table 1: Molluscs assessment

+ (present, 1-5 individuals), ++ (some 6-10), +++ (many 11-25), and ++++ (26-51) +++++(abundant 51+)

Feature type		Channel sequence (BH2)			Floodplain sequence (BH14)					Roman Rampart (TR1)
Context		2009	2010	2011	1404	1405	1406	1407	1408	150
Depth (m)		2.64-2.96	2.96-3.64	3.64-3.80	2.24-2.42	2.42-2.61	2.61-2.75	2.75-2.89	2.89-3.04	1.70-2.00
Volume processed (litres)		2	2	2	2	2	2	2	2	2
Total no. shells		1	0	4	87	90	49	10	16	215
Taxa	**Habitat**									
Valvata cristata (Müller)	D				+	++++	+		+	+++
Valvata piscinalis (Müller)	F				+	++	++++	+	++	+++
Bithynia spp. (Linnaeus)	F				+					+
Carychium minimum (Müller)	T(m)s									++
Lymnaea truncatula (Müller)	S M				+	+				
Ancylus fluviatilis (Müller)	F								+	
Succinea/Oxyloma sp.	Tmo				+	+++	+	+		+++
Cochlicopa sp.	T(m)				+					++
Vertigo pygmaea (Draparnaud)	T(m)o				+	+				+
Pupilla muscorum (Linnaeus)	To				+	+	+		+	++
Vallonia costata (Müller)	To									+
Vallonia excentrica (Sterki)	To				+					+
Vallonia pulchella (Müller)	T(m)o				++	+	+			+++
Vallonia sp.	T(m)o				++	+	+	+	+	+++
Nesovitrea hammonis	Tc				+	+				+
Oxychilus c.f. *cellarius*(Müller)	Ts									++
Discus rotundatus (Müller)	Ts							+		+++
Trichia hispida (Linnaeus)	Tc(m)o			+	++++	+++	+++	+		+++++
Cepaea/Arianta sp.	Tc(m)									++
Psidium sp.	Tm Sl D C			+		+	+	+		+

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Feature type		Channel sequence (BH2)			Floodplain sequence (BH14)					Roman Rampart (TR1)
Context		2009	2010	2011	1404	1405	1406	1407	1408	150
	F									
Bathyomphalus contortus (Linnaeus)	F	+		+						+
Planorbis spirorbis (Linnaeus)	F	+								+

F = Flowing water species require a clean stream with a current.

S= Slum species are those able to live in water subject to stagnation, drying up and large temperature variations.

D= Ditch species require clean slowly moving water often with abundant aquatic plants.

C = Catholic species that tolerate a wide range of conditions except the most extreme of environments

T = Terrestrial

m = Obligate marsh species

o = Open country

s = Shaded environments

c = Catholic (species that tolerate a wide range of conditions except the most extreme of environments)

(m) = Terrestrial species that can live in wet conditions

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ASSESSMENT OF MICROSTRATIGRAPHY

Dr Richard I Macphail, Dr J. Crowther** and Dr G. M. Cruise**
*Institute of Archaeology, University College London, 31-34, Gordon Sq., London WC1H 0PY
**Department of Archaeology & Anthropology, University of Wales, Lampeter, Ceredigion, UK SA48 7ED

Introduction

The sediments and archaeological sequence at The Pilgrims' School was investigated by Oxford Archaeology (Project Manager, Ben Ford) in the summer of 2005, and this included Trenching and coring of samples through the Roman to medieval deposits. A number of cores/monoliths were received for the assessment of their microstratigraphy from Seren Griffiths (Oxford Archaeology), namely monolith samples 36, 37, 38 and core BH1. At The Pilgrims' School, microstratigraphic assessment entailed soil micromorphology and complementary chemistry, magnetic susceptibility and pollen investigations (Table 1, below).

Samples and methods

Parts of the monoliths were selected for thin section/bulk chemistry and microfossil/pollen sampling (in all 11 bulk and 36 pollen samples). Depths of these samples were measured and contexts identified (Table 1), according to information received from Oxford Archaeology (Seren Griffiths and Steve Teague). In all, 5 thin section, 2 bulk chemistry and 8 palynological (pollen) samples were selected for assessment.

Chemistry and magnetic susceptibility

Analysis was undertaken on the fine earth fraction (i.e. <2 mm) of the samples. Phosphate-Pi (inorganic phosphate) and phosphate-Po (organic phosphate) were determined using a two-stage adaptation of the procedure developed by Dick and Tabatabai (Dick and Tabatabai, 1977) in which the phosphate concentration of a sample is measured first without oxidation of organic matter (Pi); and then on the residue following alkaline oxidation with sodium hypobromite (Po).
In addition to χ (low frequency mass-specific magnetic susceptibility), determinations were made of χmax (maximum potential magnetic susceptibility) by subjecting a sample to optimum conditions for susceptibility enhancement in the laboratory. χconv (fractional conversion), which is expressed as a percentage, is a measure of the extent to which the potential susceptibility has been achieved in the original sample, viz: (χ/χmax) x 100.0 (Scollar *et al.* 1990; Tite 1972). In many respects this is a better indicator of magnetic susceptibility enhancement than raw χ data, particularly in cases where soils have widely differing χmax values (Crowther 2003; Crowther and Barker 1995). A Bartington MS1 meter was used for magnetic susceptibility measurements. χmax was achieved by heating samples at 650°C in reducing, followed by oxidising conditions. The method used broadly follows that of Tite and Mullins ((Tite and Mullins 1971), except that household flour was mixed with the soils and lids placed on the crucibles to create the reducing environment (after Graham and Scollar 1976; Crowther and Barker 1995). LOI (loss-on-ignition) was determined by ignition at 375oC for 16 hours (Ball 1964) – previous experimental studies having shown that there is no significant breakdown of carbonate at this temperature. Pb, Zn and Cu were determined by atomic absorption spectrophotometry following extraction with 1N hydrochloric acid.

Palynology

Eight pollen samples (Table 2) were sent to the University of Wales, Lampeter, for pollen preparation where the chemical preparation methods and methods for determining pollen

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concentrations were carried out and described according the literature (Moore *et al.* 1991; Stockmarr 1971). The prepared pollen slides were scanned, the observed pollen types were noted and a qualitative appraisal of the frequency of taxa was made. Additional notes were also made on pollen concentrations and pollen preservation.

Soil Micromorphology

After the monoliths had been subsampled for bulk and pollen analyses monolith 36 and layer 323 from monolith 37 were impregnated with a crystic resin mixture, cured and prepared for selective thin section manufacture (Goldberg and Macphail, 2006). Impregnated blocks were selectively cut up into five 75 x 50 mm size blocks (Table 20; Figs 1 and 2)(Goldberg and Macphail 2006). These blocks were sent to Quality Thin Sections, Tucson, Arizona for thin section manufacture (Murphy 1986). Remaining impregnated material was retained for further work and/or archiving. Thin sections were analysed under plane polarised light (PPL), crossed polarised light (XPL), oblique incident light (OIL) and using fluorescent microscopy (blue light – BL), at magnifications ranging from x1 to x200/400. Thin sections were briefly described and their geoarchaeological character assessed (Bullock et al. 1985; Courty *et al.* 1989; Goldberg and Macphail 2006; Stoops 2003). Overall, the microstratigraphy was assessed in the light of a 2005 assessment of Staples Gardens, Winchester (Macphail *et al.* 2005) and results from small English settlements and towns, including Roman and medieval London, for example (Atkinson and Preston 1998; Macphail 2001, 2002; Macphail *et al.* 2004, In press).

Results

Chemistry and magnetic susceptibility

The analytical data are presented in Table 1. In the absence of control samples, the results have been characterised on the basis of criteria used in the interpretation of previous analytical data from the nearby Staple Gardens excavation, Winchester (Crowther, 2005). According to these criteria, neither of the present samples shows clear signs of phosphate-P enrichment – though this characterisation will need to be re-assessed if further samples are analysed from The Pilgrims' School site. It should also be noted that the χ max values recorded are both very low. This is indicative of a low Fe content, which could be attributable to Fe loss through gleying. The notable features of the two samples are as follows:

Sample 309

- organic rich
- likely Pb enrichment

Sample 310

- very strong magnetic susceptibility enhancement – though this may need to be interpreted with caution if the context has been subject to post-depositional gleying

Palynology

Pollen concentrations in Monolith 36 are very variable, from rich (parts of 309 and 318) to sparse (310 and also within 309). Preservation is also equally variable. Pollen scanning found overwhelming grassland pollen types, and few trees. Even though cereals can be abundant, there are few 'supporting' arable weeds present. There are therefore indications of 'grazing' with inputs from stabling materials. Some samples have a very high potential,

others have a good potential, whereas some can be counted with difficulty if important questions need answering. Sample BH1 (33 cm) is uncountable.

Soil micromorphology

Findings from the four thin sections are given in Table 4, and illustrated in Figures 1-11. Although mixed, M323 appears to shows inputs of constructional, latrine, cooking and animal management waste (Figs 4-7). Mixed layers also appear in thin section samples M310A, 309B and M309A, with characteristics of constructional debris (Figs 8-9), and animal husbandry waste (Figs 2-3, 10-11), but there is very little evidence of domestic or industrial waste being deposited. Importantly, the good preservation shows possibly clearly distinctive inputs of stabling waste that probably underwent weathering (on the manure heap?) and some charring/burning, whilst other microstratigraphic units (e.g., within 309B) appear to be layers of a) raw stabling crust (Figs 10-11) and b) possible 'unused' fodder/bedding.

Discussion and suggested further study

Roman (AD 150-200 + earlier):

Context (323) from monolith 37 was chosen for assessment because of its humic content. There is concordance between the palynology and soil micromorphology assessments; materials of mixed provenance are present. It is suggested that a full pollen species list is produced alongside full soil micromorphological analysis, in order to characterise this example of Roman rubbish disposal, in terms of both domestic, latrine and animal husbandry waste. It certainly has a stronger domestic component than the post-Roman deposits assessed so far, and will act as a useful comparison. The deposits can be compared to those analysed from Anderida Fort (Pevensey), Heybridge small town, Essex and No 1 Poultry, urban London, for example, where roadside and other urban middening was characterised by major inputs of stabling waste ((Hill and Rowsome In prep; Macphail *et al.* 2004; Macphail and Linderholm In press; Rowsome 2000).

Post-Roman 'peat' (Contexts 310-309):

It is clear from the chemistry (evidence of burning, moderately high phosphate and Pb enrichment in places) and soil micromorphology that the organic deposits are not peat-like. Equally, there are some anomalous pollen characteristics (e.g., lack of dominant wetland plants) also arguing against the deposits being peat. In fact, the 'peats' appear to have a strongly anthropogenic character and probably reflect local 'urban' land use/use of space in this part of Winchester (near the Cathedral). Although constructional debris may be present (cf. outside space in front of medieval Magdeburg Cathedral; (Goldberg and Macphail, 2006), there appears to be a dearth of domestic, industrial and latrine waste here (cf. Early Medieval London Guildhall; (Macphail *et al.* In press). Instead, waste from animal husbandry appears to dominate (Goldberg and Macphail 2006). Moreover, there appears to be two types of waste present that needs to be investigated; a) charred and mixed material that seems to have come via the dung heap (not common at the London Guildhall (Bakels 1988; Mücher *et al.* 1990) and b) raw stabling waste and possible 'unused' fodder and bedding material (Macphail *et al.* 2004). Clearly the following questions can be addressed:

How was this area of Winchester used?

- How was animal husbandry waste managed – in contrast to the London Guildhall site was dung being managed for local manuring; was this an area of dung heaps?
- In the examples of raw stabling waste and possible fodder/bedding, the exact components of the animal foddering regimes/grazing practices may be addressed from a combined soil micromorphological, chemical and palynological study.

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- According to the dating, these deposits may act as useful comparisons to the assessed domestic and industrial 'floor' deposits at Staple Gardens.

Thin section M310B and further pollen samples should be processed and analysed to attempt to fine tune the suggested hypotheses concerning the understanding these deposits, supported by an extra bulk study.

Medieval silts (Context 318):

These deposits, as shown by their limited soil micromorphological study (top of M309A; Figs 1-2) and pollen assessment, do not simply appear to be overbank flood silts. Their anomalous character includes a rich pollen content including cereal type, but without associated arable weeds types, which does not seem consistent with upstream erosion of arable land. Instead, the assessment indicates the deposit appears to be influenced by localised activities, which as yet remain enigmatic, but certainly seem different from those found in the underlying contexts (309-310). It is therefore suggested that contexts 318 and 308 should be studied in order to understand better exactly what is going on in this area. This can be achieved through a series of bulk (x4), pollen (x3) and thin section (x2) studies.

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Table 2: Microstratigraphy: Bulk analytical data

Sample	LOI (%)	Phosphate-P_i (mg g^{-1})	Phosphate-P_o (mg g^{-1})	Phosphate-$P^{\$}$ (mg g^{-1})	Phosphate-P_i:P (%)	Phosphate-P_o:P (%)	χ (10^{-8} SI)	χ_{max} (10^{-8} SI)	χ_{conv}[¶] (%)	Pb[†] (μg g^{-1})	Zn[†] (μg g^{-1})	Cu[†] (μg g^{-1})
309	**34.4**	3.372	0.545	3.92	86.1	13.9	10.5	254	4.13	**736***	84.5	47.4
310	8.69	2.889	0.330	3.22	89.7	10.3	36.8	129	**28.5*****	371	55.9	27.9

Notes – Provisional interpretation based on previous samples analysed from Staple Gardens Excavation:

§ **LOI:** Sample 309 (highlighted) is organic-rich

$ **Phosphate-P:** Moderately high values, but may not be indicative of enrichment (critical threshold = 5.00 mg g^{-1})

¶ □: Figures highlighted in bold show signs of magnetic susceptibility enhancement: * = enhanced (χ_{conv} = 5.00-9.99%), ** = strongly enhanced (χ_{conv} = 10.0-19.9%), *** = very strongly enhanced (χ_{conv} ≥20.0%)

† **Pb, Zn and Cu:** Figure highlighted in bold and asterisked for Pb would appear to show signs of enrichment

Table 3: Pollen assessment
(Nomenclature follows Moore *et al.*,1991; Stace, 1991, Bennet *et al.*, 1994)

SAMPLE	234/36	36	36	36	36	36	BH1	37
Height(m aOD)/depth on core	31.12	31.20	31.22	31.30	31.34	31.45	33cm	44cm
Context	***310***	***310***	***310***	***309***	***309***	***318***	***?***	***323***
TALL WOODY TAXA								
Acer		*						
Betula								*
Corylus t.		*	*		*			
Lonicera (?)					*	*		
Quercus	*	*			*			
Salix		*						
Sambucus								*
HERBACEOUS TAXA AND DWARF SHRUBS								
Cereal t.			**	***		***		*
Achillea t.	*			*	*	*		*
Calluna					**	*		
Caryophyllaceae		*						
Centaurea nigra t.				*				*
Chenopodiaceae					*			*
Galium t.			*		*	*	*	
Lactuceae	*	*	*	*	**	**		*
Lotus t.		*						
Plantago lanceolata	*			*			*	*
Plantago maj/media				*				*
Poaceae	***	**	***	***	**	***	*	**
Polygonum t.						*	*	
Rumex acetosa t.	*			*				*
Rumex oxyria t.			*	*	*		*	*
Sinapis t.	*	*						
Solidago virgaurea t.						*		
Stachys sylvatica t.	*							
Trifolium t.	*							*
Umbelliferae				*				
Urtica t.								*
Veronica t.			*				*	
Vicia t.				*				
MOIST SOIL & AQUATIC TAXA								
Caltha t.					*	*		
Cyperaceae		*	*					
Equisetum			*					

SAMPLE	234/36	36	36	36	36	36	BH1	37
Filipendula	*		*	*				
Ranunculus t.	**		**	*		*		*
Myriophyllum	**							
SPORES								
POLYPODIACEAE					*			
NOT IDENTIFIED						*	*	
UNIDENTIFIABLE	*		*	*	**	*	*	*
POLLEN CONCENTRATIONS	++	+	+	+++	+	+++	-/+	+
POLLEN PRESERVATION								
Normal	**	**	***	***	**	***	**	**
Crumpled	*	*	*	*	*	*		
Corroded	*	*				*	*	*
Degraded	*	*	**	**	**	**	*	*
Split	*	*	**	*	*	*	*	*

Key 1. Frequency of pollen types and pollen preservation categories

*** Abundant
** Frequent
* Present

Key 2. Pollen concentrations

++++ Very rich (eg. stabling/floor crust, rich peat/lake sediments)
+++ Rich
++ Countable
+ Countable with difficulty
- Not countable

Table 4: Microstratigraphy assessment

Thin section sample (Core sample)	**Chief characteristics: soil micromorphology (SM), bulk data (BD) and palynology.**	**Preliminary Interpretation**
(36)	Palynology @ 31.45 m aOD (Lower 318): rich pollen concentrations of moderately well preserved pollen, predominantly cereal type and *Poaceae* (and *Calluna* present); some things in common 31.30 m(??).	Medieval (Lower 318) Chalky silts (from core description) (Rich countable pollen)
M309A (36)	31.41-31.335 m aOD (0.50-0.57.5 m) SM: Lowermost (318): moderately well sorted chalky silts with few fine plant fragments; minor phosphatisation of chalk clasts and matrix, including both amorphous Fe/Ca/P (?) and vivianite; minor burrowing and sedimentary (muddy?) alluvial fine laminae. Junction between (309) and (318) marked by concentration of coarse woody debris and large chalk fragments, wood charcoal and large piece of burned bone and ubiquitous burned eggshell. Upper 309: very poorly sorted mixture of large chalk, slate(?), wood fragments, with coarse sand-size chalk, amorphous organic matter fragments, rare examples of strongly burned bone, partially charred amorphous organic coprolite set in ash and fine charcoal; calcitic and phosphate-stained ashey fine fabric in addition to fine biologically mixed chalky mineral and finely fragmented amorphous and charred organic matter.	Junction of Post-Roman peat (309 upper) and lowermost medieval (318) Unlikely to be simple chalky silt alluviation/overbank (Sedimentation containing organic fragments – deposits affected by nearby/later cess disposal, but overall landuse unclear.) Over – Wood and chalk building debris (also including included burned food waste)? Mixed organic dumps containing both wood and constructional(?) debris, alongside minor kitchen waste, in a sediment dominated by charred and unburned stabling waste that may also include pig dung(?). (Backyard animal husbandry?)
M309B (36)	31.35-31.26 m aOD (0.57.5-0.65 m) SM: Layered organic 'peaty' and minerogenic 'peats', BD (x309lower): 34.4% LOI, 3.92 mg g^{-1} phosphate-P, 10.5 x 10^{-8} SI χ, 4.13% χ_{conv}, 736 µg g^{-1} Pb, 84.5 µg g^{-1} Zn, 47.4 µg g^{-1} Cu	Post-Roman peat (309 lower) (Overall very organic {LOI], moderately phosphate-rich. Origins of strong Pb signal is unclear – possibly from concentrated stabling waste)??

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Thin section sample (Core sample)	Chief characteristics: soil micromorphology (SM), bulk data (BD) and palynology.	Preliminary Interpretation
	("Stony peat") Coarse chalk, wood charcoal, flint, pottery, brickearth, slate? and mortar-rich layer with burned eggshell, biogenic calcite (earthworm granules), plant fragments, fine amorphous and charred organic matter (in patches), with ashes, fungal material and occasionally articulated phytoliths. Palynology @ 31.34 m aOD: sparse pollen and relatively poor preservation, yet containing interesting presence of woody taxa pollen types and *Calluna*, in addition to grassland pollen types.	Mixed constructional and burned organic debris (animal husbandry?)? (Interesting and countable pollen)
	Layered horizontally oriented blackened long lengths of Poaceae plant fragments, often intercalated with fine mineral material; with few pot, chalk and flint stones.	Dominantly dumped raw stabling waste?
	Two layers, a basal layer of Layered horizontally oriented blackened long lengths of Poaceae plant fragments, often intercalated with fine mineral material; overlain by layered Poaceae, but containing plant cells and organ fragments. Palynology @ 31.30 m aOD: rich pollen concentrations; very abundant grasses and cereal types, and herbaceous taxa; probable mixed pollen preservation.	Dumps of unused bedding and fodder(?) and raw stabling waste? (Good countable pollen)
M310A (36)	31.26-31.185 m aOD (0.65-72.5cm) SM: Base of (309): similar to (310), biologically worked but more humic, more fine burned material – mineral and charcoal; Palynology @ 31.22 m aOD (309): sparse, countable with difficulty; mixed pollen preservation (very good to very poor); mainly grasses and	Post-Roman peat (junction of 309-310) 309: similar to below, but with higher organic content. 310: Deposition/dumping of burned (% χ_{conv}) poorly ferruginous (calcareous) residues of organic waste (LOI) – possibly mainly of stabling waste origin (dominance of fine charcoal, amorphous organic matter; presence of fungal material, phytoliths, ash (Pb?);

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Thin section sample (Core sample)	Chief characteristics: soil micromorphology (SM), bulk data (BD) and palynology.	Preliminary Interpretation
	cereal type. 310: moderately heterogeneous poorly sorted mixture of frequent stone size flint and chalk, with very few coarse charcoal and wood fragments; occasional land snail shell, biogenic earthworm granules and slug plates present; many fine charcoal and wood fragments, and inclusions of 'humic' soil; example of burned eggshell – all set within a calcitic (includes some ash crystals and some secondary calcite formation) fine fabric containing mainly finely charred organic matter; many amorphous (dung?, including possible pig as well as herbivores) fragments, fungal bodies, phytoliths, diatoms present; after thin burrowing by mesofauna there was secondary calcite, possible patches of secondary amorphous P formation. BD (x310): 8.69% LOI; 3.22 mg g^{-1} phosphate-P, 36.8 x 10^{-8} SI χ, 28.5% χ_{conv}, 371 µg g^{-1} Pb, 55.9 µg g^{-1} Zn, 27.9 µg g^{-1} Cu Palynology @ 31.20 m aOD (310): sparse (countable with difficulty), moderately well preserved pollen; with frequent Poaceae, but also with several tree pollen types present.	dung heap (phosphate-P) worked by mesofauna, earthworms and slugs, burned and dumped into site (?) – small number of diatoms reflecting its wet character. (Countable and useful pollen potential)
(36)	Palynology @ 31.12 m OD (Lower 310): countable, reasonably well-preserved pollen – predominantly grassland types.	(310): Post- Roman peat (Countable and useful pollen potential)
M323 (37)	0.38.5-0.46.0 mm SM: heterogeneous mixture of poorly sorted silt to small stone-size chalk, weathered chalk, flint, mortar, pot, bone, charcoal, wood/bark, shell (landsnail), coprolites including coarse fragments; with a calcitic fine fabric characterised by very abundant amorphous and fine charred organic matter; many and diverse diatoms are present; rare fungae; possible fragments of amorphous organic matter/stabling waste present with	AD150-200 + earlier Moderately biologically worked mixed mainly minerogenic building and occupation debris and waste (e.g., latrine and kitchen), with organic content possibly indicating inputs of charred stabling waste into a 'very wet' (given the variety and numbers of diatoms present) environment. (Pollen countable with difficulty but should prove informative)

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Thin section sample (Core sample)	**Chief characteristics: soil micromorphology (SM), bulk data (BD) and palynology.**	**Preliminary Interpretation**
	phytoliths; abundant thin and medium size burrowing and biological mixing. Palynology @ 44.00 cm: pollen concentrations are low, although a wide variety of reasonably well preserved pollen types were noted; mainly grassland types, but also cereal type.	
BH1 (BH1)	Palynology @ 33 cm: Very low pollen concentrations, on which it would be difficult to carry out a full count; few pollen present are of grassland type.	Unclear context – compacted core sample of silty clay. (Further analysis probably not warranted)

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2006 Floodplain sequence

Dr Richard I Macphail*, Dr J. Crowther** and Dr G. M. Cruise***

*Institute of Archaeology, University College London, 31-34, Gordon Sq., London WC1H 0PY
**Department of Archaeology & Anthropology, University of Wales, Lampeter, Ceredigion, UK SA48 7ED

Introduction
Test pit and trial Trench excavations at The Pilgrims' School, Winchester in 2005 (by Oxford Archaeology, project manager Ben Ford), and the assessment of the microstratigraphy (Macphail et al., 2006) were followed up by a borehole study involving two lines of boreholes (eg BH13), one series (eg BH3) close to the line of the Roman wall (Carl Champness, pers. comm.). Two borehole samples were focused upon, namely borehole samples BH3 (1-2 m, 2-3 m, 3-4 m) and BH13 (1-2 m, 2-3 m).

Methods
Subsampling
Pollen, diatom and bulk samples were collected from Cores BH3 and BH13, prior to the removal of undisturbed sediment to be impregnated with resin and used for soil micromorphological analysis (Table 5).

Bulk analyses
Analysis was undertaken on the fine earth fraction (i.e. <2 mm) of the samples. LOI (loss-on-ignition) was determined by ignition at 375°C for 16 hours (Ball, 1964) – previous experimental studies having shown that there is no significant breakdown of carbonate at this temperature. Phosphate-P_i (inorganic phosphate) and phosphate-P_o (organic phosphate) were determined using a two-stage adaptation of the procedure developed by Dick and Tabatabai (1977) in which the phosphate concentration of a sample is measured first without oxidation of organic matter (P_i), using 1N HCl as the extractant; and then on the residue following alkaline oxidation with sodium hypobromite (P_o), using 1N H_2SO_4 as the extractant. Pb, Zn and Cu were determined by atomic absorption spectrophotometry following extraction with 1N hydrochloric acid. pH (1:2.5, water) was determined using a combination electrode and the carbonate

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concentration was estimated by observing the reaction when 10% HCl was added to the sample (Hodgson 1974).

In addition to χ (low frequency mass-specific magnetic susceptibility), determinations were made of χ_{max} (maximum potential magnetic susceptibility) by subjecting a sample to optimum conditions for susceptibility enhancement in the laboratory. χ_{conv} (fractional conversion), which is expressed as a percentage, is a measure of the extent to which the potential susceptibility has been achieved in the original sample, viz: $(\chi / \chi_{max}) \times 100.0$ (Tite 1972; Scollar *et al.* 1990). In many respects this is a better indicator of magnetic susceptibility enhancement than raw χ data, particularly in cases where soils have widely differing χ_{max} values (Crowther and Barker 1995; Crowther 2003). A Bartington MS2 meter was used for magnetic susceptibility measurements. χ_{max} was achieved by heating samples at 650°C in reducing, followed by oxidizing conditions. The method used broadly follows that of Tite and Mullins (1971), except that household flour was mixed with the soils and lids placed on the crucibles to create the reducing environment (after Graham and Scollar 1976; Crowther and Barker 1995).

Palynology

Eight pollen samples (Tables 3-4) were sent to the University of Wales, Lampeter, for pollen preparation where the chemical preparation methods and methods for determining pollen concentrations were carried out and described according the literature (Moore *et al.* 1991; Stockmarr 1971). The prepared pollen slides were scanned, the observed pollen types were noted and a qualitative appraisal of the frequency of taxa was made. Additional notes were also made on pollen concentrations and pollen preservation.

Soil micromorphology

The undisturbed samples collected during subsampling (see above) were impregnated with a polyester resin-acetone mixture, and topped up with resin ahead of curing and manufacture into a single thin section by Quality Thin Sections, Tucson, Arizona, USA (Murphy 1986).

Thin sections were analysed using a petrological microscope under plane polarised light (PPL), crossed polarised light (XPL), oblique incident light (OIL) and using fluorescent microscopy (blue light – BL), at magnifications ranging from x1 to x200/400. Thin sections were briefly described according to established methods, and assessed according to the literature and previous investigations at The Pilgrims' School, Winchester. (Bullock *et al.* 1985; Courty 2001; Courty *et al.* 1989; Goldberg and Macphail 2006; Macphail and Cruise 2001; Macphail *et al.* 2006; Stoops 2003).

Results

Bulk analyses

The analytical data are presented in Table 1 and 2. Here, a broad overview of the analytical data is presented. Key features relating to individual samples are highlighted in Table 1. None of the samples have a particularly low LOI (minimum, 8.69% in sample 310), and several of the samples (highlighted in Table 1) are clearly very humic and/or comprise mixed peat and minerogenic material, and one sample (1314) is of peat. It should be noted that the LOI value recorded for sample 3008 (10.9%) is not consistent with it being a 'peat' (as described on data sheets supplied). Apart from peat sample 1314, the samples from boreholes 3 and 13 are all alkaline and quite calcareous, with an estimated carbonate content of at least 10%. The samples display very marked variability in phosphate-P, though none of the values are exceptionally high (range, 0.195-3.92 mg g^{-1}). These figures compare, for example, with a range of 6.11-12.3 mg g^{-1} recorded in nearby Staples Gardens, Winchester (Crowther, 2005). However, on the basis of the range of values observed it is reasonable to assume that samples with concentrations of $\geq$2.00 mg g^{-1} show some degree of enrichment. The exceptionally low phosphate-P concentration (0.195 mg g^{-1}) in peat sample 1314 reflects the very limited mineralization of organic material within the peat, either during its development or as a result of post-depositional processes. Apart from in peat sample 1314, the majority of the phosphate is present in inorganic forms. On the whole, however, the P_o:P ratio is somewhat higher than is often found in archaeological contexts.

With the exception of sample 1308, the χ_{max} values are very low (<400 x 10^{-8} SI). This is indicative of a low Fe content, which seems likely to be attributable to Fe loss through gleying associated with wet or waterlogged conditions – a factor that would also explain the apparent accumulation of organic residues within the contexts sampled and also the quite high P_o:P ratios recorded in some of the samples. Two of the samples seem to show strong or very strong signs of enhancement which is likely associated with burning (sample 1308: χ_{conv}, 15.0%; and sample 310: χ_{conv}, 28.5%), though in view of the possibility of post-depositional gleying effects, the magnetic susceptibility data do need to be interpreted with some degree of caution.

Unfortunately, heavy metal determinations were only made on two of the samples. In comparison with previous data from the Staples Garden site (Crowther 2005), only sample 309 appears to show any sign of enrichment, with a Pb concentration of 736 $\mu g\ g^{-1}$.

Conclusions and recommendations

Despite the limitations of the sample set noted above, some of the samples appear to show clear signs of chemical enrichment and/or susceptibility enhancement associated with human activity. These results are encouraging and suggest that analysis of a wider range of contexts, including samples of natural soils, would significantly enhance our understanding of the various soils and deposits present at the site. It is recommended that analyses of bulk samples are undertaken to complement any further thin sections investigated from the site.

Palynology

Assessment counts are presented in Tables 3 and 4.

Differences between the core BH3 and BH13.

a) Core 13.

Preservation is very variable with both excellently preserved grains and very degraded grains on the same slide, particularly in the upper samples (243.5 cm, 247 cm). Overall preservation is much better in the lower samples. Pollen concentration data show that none of the samples are very rich, but three of the samples are thought to be rich-enough for counting, albeit two would be countable with some difficulty and would probably only produce counts of 100 each. Only one of the samples (287), is thought to be uncountable; this is probably because of the presence of wood peat at this depth. All but one of the samples (247 cm), have high frequencies of arboreal and tall shrubby taxa.

b) Core 3

Pollen preservation is much better than in core BH13, but concentrations are much lower. Only one of the samples (237.5 cm) contains enough pollen for counting. In contrast to core BH13, there are few arboreal taxa, and in contrasts (especially in sample 237.5 cm) there is quite a rich herb assemblage.

Interpretation

BH13: In core BH13, abundant *Alnus* and *Corylus t.* pollen, likely shows that these trees were present in the flood-plain. Particularly interesting is the presence of *Tilia* and *Ulmus*, neither of which were observed in any of the samples from core BH3. In 243.5 cm, most *Tilia* grains appear to be well-preserved so they are unlikely to have been derived from older re-worked deposits. In contrast, many *Alnus* and *Corylus t.* are poorly preserved and may be derived from re-worked material. In the basal sample (297 cm), however, overall preservation of most pollen types is good and again suggests a lack of re-working. The presence of *Tilia* in particular, in three of the samples, is interesting as it may be consistent with peat formation of some antiquity. Greig (Greig 1996) citing Waton (Waton 1982) notes a major woodland clearance that caused a sharp reduction in trees like Tilia at 5,600 years bp in this part of southern England (sites of near Winchester). If indeed the lowermost deposits are this old, then it seems that there could have been an ancient clearance phase as represented by sample 247 cm in BH13. With regard to possible radio-carbon dating, it is suggested that dating may most usefully be carried out on the basal deposits as the upper deposits are likely to be comprised of mixed materials.

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Core BH3: The rich herb community (sample 237.5 cm) found in this core, which includes pollen types typical of moist soils, is consistent with a much later date than core BH13, and is probably indicative of use of the flood-plain during a later period; Greig (1996) again citing Waton (1982) notes another woodland clearance phase at 900 bp. The possibility that pollen in the upper parts of BH3 may be of more direct anthropogenic origin also has to be considered, in the light of the earlier assessment of contexts 309 and 310 in Trench 3 excavated in 2005 (Macphail *et al* 2006), which found likely stabling waste dumps.

Soil micromorphology

Brief soil micromorphological descriptions are presented in Table 5 and Figs 1-8.

Discussion and recommendations

Combined bulk, palynological and soil micromorphological data are given in Table 5, which also outlines suggested interpretations of the selected units from each borehole core. Clearly, the lowermost part of BH13 (1314;) have the palynological potential of monitoring the 'pre-clearance' (5,600 bp??) environment for the area (3 pollen preps, 4 analyses), a study that would also benefit from bulk study of the sediments, in order to compare changes induced by the putative clearance phase (see below)(2 bulk). The deposits found in 1311-13 (Figs 1-2), e.g., at 2.43-2.53 m have the potential to elucidate the character and impact of clearance on the catchment and local area, through not only palynology but also through associated bulk and soil micromorphological analyses (3 pollen preps, 4 analyses; 2 bulks; 1 thin section, 2 soil micromorphological analyses). Vegetation (woodland regeneration?) and sediment changes in context 1310 should also be monitored (1 pollen prep, 2 analyses; 2 bulks; 1 thin section, analysis). Attempts to build embankments and associated pedological and alluvial activity can be investigated by the analysis of thin sections of contexts 1306, 1307 and 1308 (Figs 3-4)(2 thin analyses). In borehole BH3, there appears to be plenty of evidence of pre-Roman impact/activity as found in 3007-3009 (Figs 5-6), which should be better understood after systematic analysis (2 bulk; 3 soil micromorphological analyses).Similarly a suspected period of stabilisation in 3005 can be further investigated (Figs 7-8) (1 bulk; 1 soil micromorphological analysis). Lastly, 3004 appears to have similarities to contexts 309-310 found in Trench 3 (2005), which should be identifiable from further study of these possible dumped stabling waste deposits (1 pollen prep, 2 analyses; 1 soil micromorphological analysis).

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Table 1: Chemical (excluding phosphate fractionation) and magnetic susceptibility data

Sample	Depth (m)	Description	LOI[§] (%)	pH (1:2.5, water)	CO_3^{2-} (est, %)	Phosphate-P[$] (mg g^{-1})	χ (10^{-8} SI)	χ_{max} (10^{-8} SI)	χ_{conv}[¶] (%)	Pb[†] (mg g^{-1})	Zn[†] (mg g^{-1})	Cu[†] (mg g^{-1})
Monolith 36 (analysed November 2005)												
309	?	Stony peat	**34.4***	n.d.	n.d.	**3.92***	10.5	254	4.13	**736***	84.5	47.4
310	?		8.69	n.d.	n.d.	**3.22***	36.8	129	**28.5*****	371	55.9	27.9
Borehole 3												
3004	1.87-1.97	Humic organic silts	**27.3***	7.9	10	**2.25***	13.1	383	3.42	n.d.	n.d.	n.d.
3007	2.38-2.46	Humic silt with peat	9.14	8.0	10	1.74	5.1	140	3.64	n.d.	n.d.	n.d.
3008	2.46-2.79	Peat	10.9	8.0	10	0.752	2.8	73.5	3.81	n.d.	n.d.	n.d.
Borehole 13												
1308	2.00-2.08	Fine sands with gravel	10.3	8.0	10	1.41	126	841	**15.0****	n.d.	n.d.	n.d.
1314	2.73-3.00	Peat	**83.6****	6.8	0	0.195	0.6	n.d.	n.d.	n.d.	n.d.	n.d.

§ **LOI:** Samples highlighted in bold are organic-rich: * = very humic or mixed peat/minerogenic material, ** = peat

$ **Phosphate-P:** Figures highlighted in bold show likely phosphate enrichment: * = enriched (none of samples are strongly or very strongly enriched)

¶ **□:** Figures highlighted in bold show signs of magnetic susceptibility enhancement: * = enhanced (χ_{conv} = 5.00-9.99%), ** = strongly enhanced (χ_{conv} = 10.0-19.9%), *** = very strongly enhanced (χ_{conv} ≥20.0%)

† **Pb, Zn and Cu:** Figure highlighted in bold and asterisked for Pb would appear to show signs of enrichment

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Table 2: Phosphate fractionation data

Sample	Depth (m)	Description	Phosphate-P_i (mg g^{-1})	Phosphate-P_o (mg g^{-1})	Phosphate-$P^{\$}$ (mg g^{-1})	Phosphate-P_i:P (%)	Phosphate-P_o:P (%)
Monolith 36 (analysed February 2006)							
309		Stony peat	3.372	0.545	3.92	86.1	13.9
310			2.889	0.330	3.22	89.7	10.3
Borehole 3							
3004	1.87-1.97	Humic organic silts	1.895	0.359	2.25	84.1	15.9
3007	2.38-2.46	Humic silt with peat	1.524	0.214	1.74	87.7	12.3
3008	2.46-2.79	Peat	0.590	0.162	0.752	78.5	21.5
Borehole 13							
1308	2.00-2.08	Fine sands with gravel	1.132	0.274	1.41	80.5	19.5
1314	2.73-3.00	Peat	0.098	0.097	0.195	50.3	49.7

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Table 5: The Pilgrims' School, Winchester microstratigraphy assessment

Thin section sample (Core sample)	**Chief characteristics: soil micromorphology (SM), bulk data (BD) and palynology.**	**Preliminary Interpretation**
Borehole 3	***Borehole 3***	***Borehole 3***
3004 (BH3)	Palynology @ 1.89 m: non-countable herbaceous pollen suite, with probable background valley woodland. BD (1.87-1.97 m): Very humic and phosphate-enriched SM 3F (1.87-1.97 m): generally well-sorted humic to very humic calcitic silts, with silt-size rounded humic detrital clasts dominant (humified organic matter and humified tissue and organ fragments); woody fragments, stone size, mortar, Greensand and earthworm granules also present.	Alluvium of locally fluvially-worked possible humified dung residues, with woody fragments (anthropogenic origin of herb-dominated pollen suite?); included constructional and 'terrestrial' debris; high humic and phosphate-enriched bulk data is consistent with this. (Possible similarities to the dung-dominated deposits in 309-310, 2005 Trench 3) *Medieval deposits as in Trench 3*
3005 (BH3)	SM 3G (2.11-2.21 m): Very poorly sorted and heterogeneous deposit with very broad (35 mm) burrows, composed of stone size flint, 'brick', 'tile', burned shell, mortar and chalk, with charcoal, bone and possible coprolite fragments; earthworm granules throughout; upper part of slide shows biological (terrestrial) soil formation/homogenisation; lower half of slide is more alluvial (calcareous and humic silts) in character. **(Figs 7-8)**	'Terrestrial' weathered (earthworm and small mammal burrowed) soil formed in dumps and calcareous humic alluvial silts. This appears to record a period of stasis. *Clear stabilisation horizon here.*
3007 (BH3)	Palynology @ 2.33 m: non-countable herbaceous pollen suite, with probable background valley woodland. Palynology @ 237.5 m: countable herbaceous rich pollen suite with numerous woodland species. BD (2.38-2.46 m): moderately humic (in terms of peat), with moderate phosphate present. SM 3D upper (2.40-2.46 m): Part-burrowed broadly layered very organic and moderately organic very well sorted calcitic silts and calcitic silts containing humified and charred organic fragments and *in situ* plant roots; occasional fine charcoal.	Accumulation of fine silty calcareous and moderately humic 'alluvium' – with countable pollen, formed under probable open herb-dominated conditions (tall woody taxa pollen from included wood fragments) – or material of organic anthropogenic origin (reworked dung residues? possibly consistent with phosphate) – as in 3004. (Pollen analysis has the potential here to help resolve this) *Humic alluvium with palynological potential to be able to clearly interpret the local environment.*

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3008 (BH3)	BD (2.46-2.79 m): moderately humic (in terms of peat), with both very low phosphate content and negligible magnetic susceptibility SM 3D lower (Upper 3008; 2.46-2.50 m): Very poorly sorted, silts to gravel size quartz, flint, chalk, fossil and tufa fragments, in calcitic/tufaceous matrix that includes many charcoal and woody fragments. **(Figs 5-6)** SM 3E (Lower 3008): poorly sorted silt to small stone size quartz, chalk, 'tufa', flint and mollusc fragments; with fine and very coarse charcoal and wood fragments; possible woody roots(?); partially cemented by micritic matrix associated with *in situ* tufa formation.	Poorly humic calcareous gravels that also contain locally dumped? woody debris and charcoal; partially cemented by tufa formation; an apparent anthropogenic background signal here too. *Possible apparent signal of anthropogenic activity.* Alluvial tufa formation in poorly sorted alluvial and anthropogenic deposits, containing reworked tufa and background silts. *Possible apparent signal of anthropogenic activity.*
3009 (BH3)	SM 3E: Moderately well sorted mineral component of silt and very fine sand-size quartz and micritic material ('tufa'), partially cemented by micrite/tufa; aquatic(?) molluscs and shell fragments and *in situ* 'fleshy' roots; very abundant coarse charcoal, wood fragments and highly humified organic materials – possible fragments of stabling waste.	*In situ* calcareous fine alluvial sedimentation with mollusc fauna; weak tufa formation and vegetated surface; all contemporary with 'local' dumping of organic waste – charcoal, wood fragments and possible stabling waste. *Apparent continuing background anthropogenic activity.*
3011 (BH3)	Palynology @ 3.85m: uncountable pollen with both tall woody taxa and herbs present.	Uncountable pollen. (Palynology possibly reflects natural open conditions after 2nd clearance phase around 900 bp??) *Unfortunately insufficient pollen to analyse this pre-Roman deposit – better potential in BH13.*
Borehole 13	***Borehole 13***	***Borehole 13***
1306 (BH13)	SM 13A (upper) top c. 1.76 m: heterogeneous minerogenic silt-rich deposits; a compact mixture of clay-rich ('Bt') and clay-poor ('Eb') soil, with chalky soil, mollusc fragments, earthworm granules and rare included latrine-waste, all partially biologically worked and homogenised with calcareous silty alluvium that shows relict bedding.	Dump of mixed soil horizons from local Clay-with-Flint soils (high loess content), with small amounts of included anthropogenic inclusions, such as latrine waste, all mixed with silty calcareous alluvium. Partial biological mixing ensued. *Roman embankment constructional material dump, with both weak pedological working and possibly also affected by continuing alluviation*

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1307 (BH13)	SM 13A (lower) base c. 1.90 m: very heterogeneous minerogenic silt-rich deposits; a compact mixture of clay-rich ('Bt'), clay-poor ('Eb') and humic ('Ah') soil, with chalky soil, chalk, stone-size flints, mollusc fragments, earthworm granules and many charcoal; calcareous silty and 'peaty' alluvial fragments also present.	Partially biologically worked mixture of dumped soils and anthropogenic materials, and alluvium; perhaps all locally fluvially reworked? *Again, embankment material was being affected by 'river' flow when being constructed?*
1308 (BH13)	BD (2.00-2.08 m): moderately humic (in terms of peat), moderate phosphate content, but strongly enhanced magnetic susceptibility. SM 13C 2.00-208 m: very heterogeneous mixture of soil fragments (see 1307), but with abundant coarse charcoal, flint, mortar and peats and humic (alluvial?) silts; calcite root pseudomorphs. **(Figs 3-4)**	Highly mixed dump of constructional (and industrial – inferred from strongly enhanced magnetic susceptibility) material, with both soil and 'peat' and silty alluvium also present. *Both soil and occupation (constructional and other debris) materials employed – a little evidence of weathering.*
1310 (BH13)	Palynology @ 2.435 m: countable pollen; dominant arboreal and tall woody taxa including elm and lime.	Pollen preservation suggests local growth of elm and lime, with alder and hazel pollen possibly being reworked? *Good potential for understanding 'post first clearance' environment*
1311-1312-1313 (BH13)	SM 13B (2.43-2.53 m): partially turbated but still recognisable laminated calcareous silts, and peat (both amorphous and plant-tissue-rich material; common patches of tufa and occasional (aquatic?) molluscs present. **(Figs 1-2)** Palynology @ 2.47 m: pollen countable with difficulty; tall woody taxa and herbs.	Despite some tufa formation and minor disruption well laminated humic silts and peat are present, of good integrity, consistent with the palynology. Pollen suite suggests a possible clearance phase here, that needs dating in order to compare this with the major clearance phase in the local area (i.e., 5,600 bp?). *Opportunity to elucidate woodland clearance and effects on alluvial sedimentation.*
1314 (BH13)	BD: Peat (83.6% LOI) with extremely low phosphate and no magnetic susceptibility. Palynology @ 2.87 m: not countable (wood peat layer); dominant tall woody and arboreal taxa, including lime. Palynology @ 2.97 m: pollen countable with difficulty; dominantly tall woody and arboreal taxa including elm and lime.	Pollen data indicates a pre-clearance (i.e., pre-5,600 bp?) woodland- dominated environment. *Excellent (eg 2.97 m) potential for monitoring early mid-Holocene environment.*

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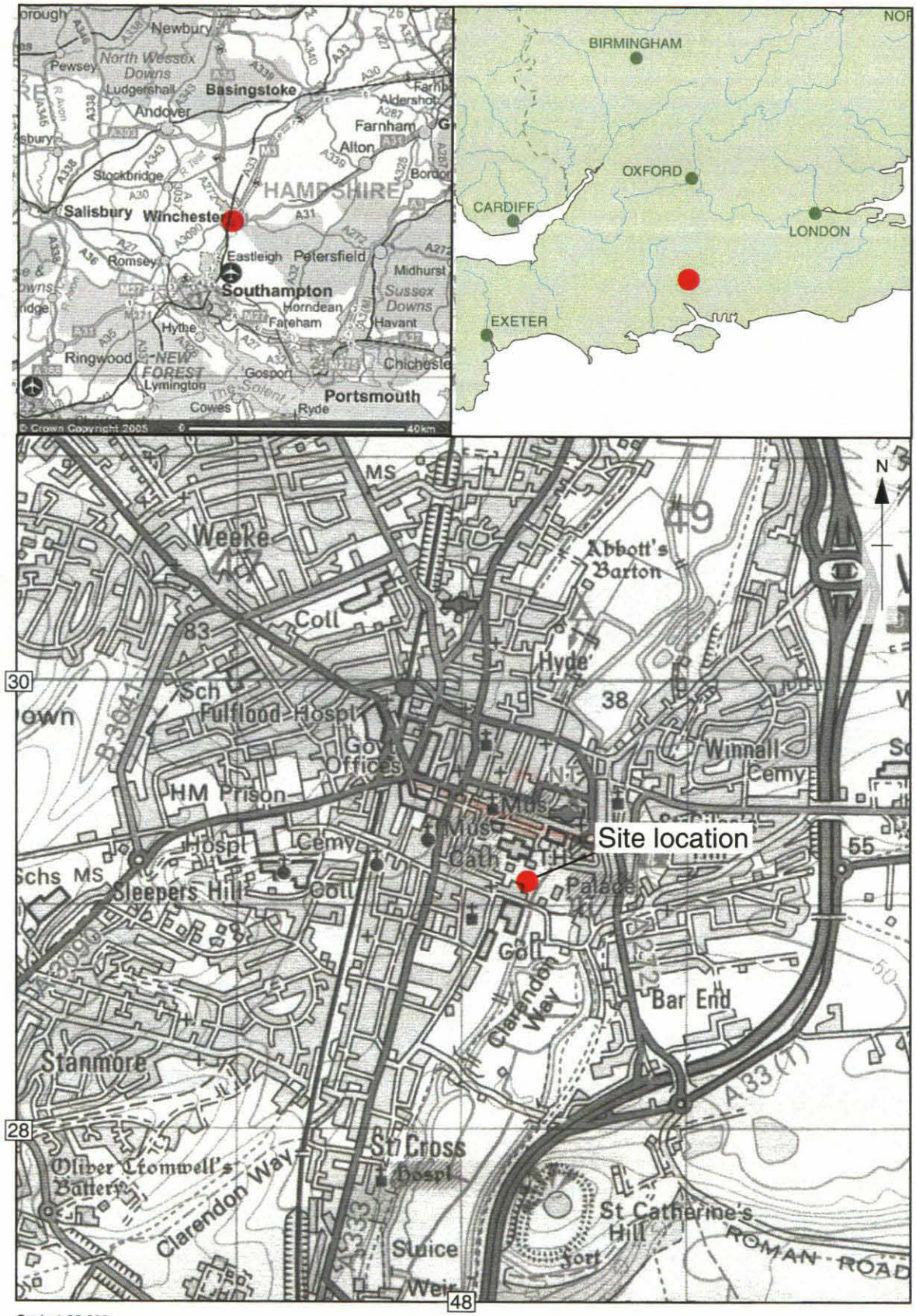

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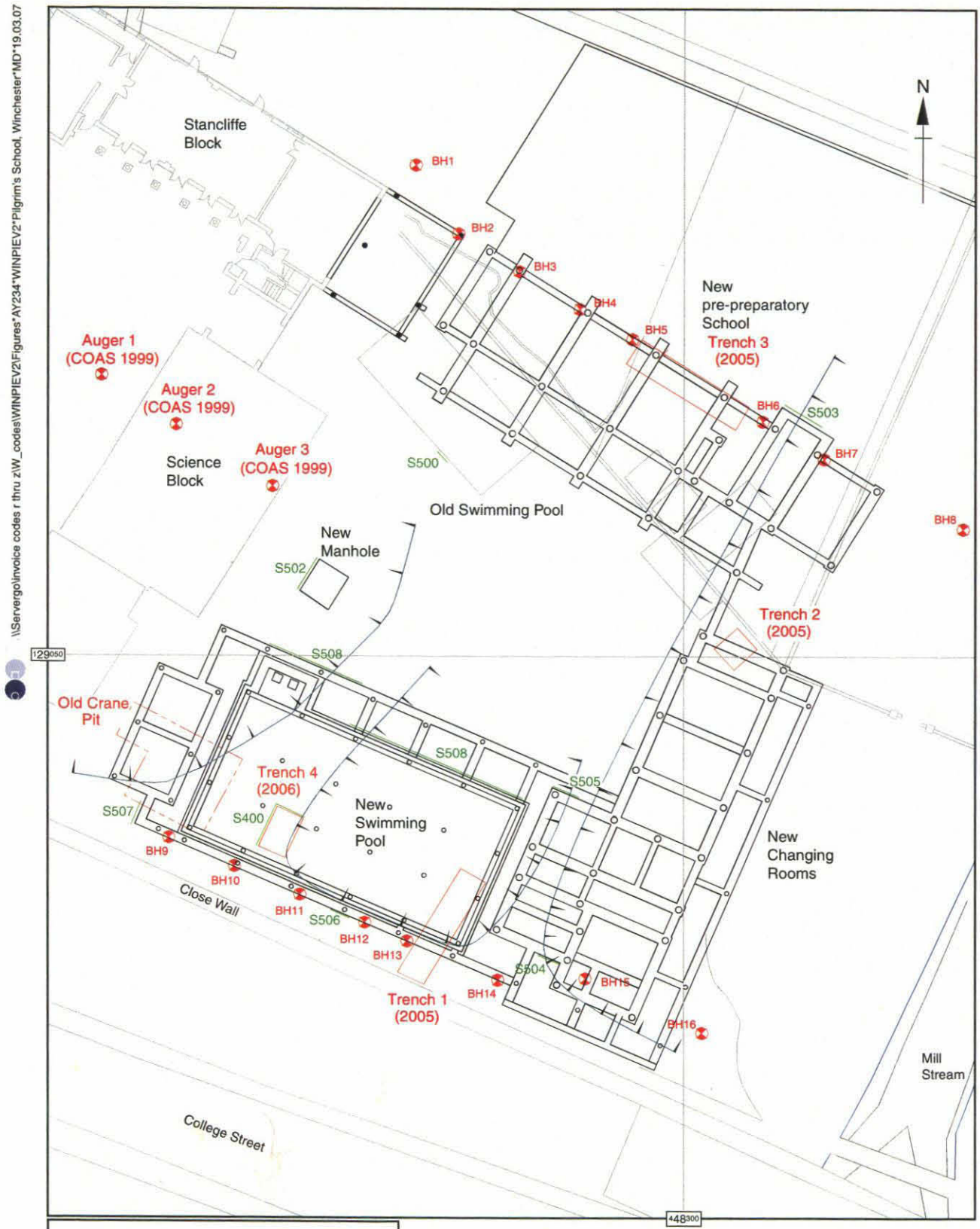
Figure 1: Site location



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Foundation plan based on Drawing BTA31 by Rusby Brewster Associates

Figure 2:Site Plan

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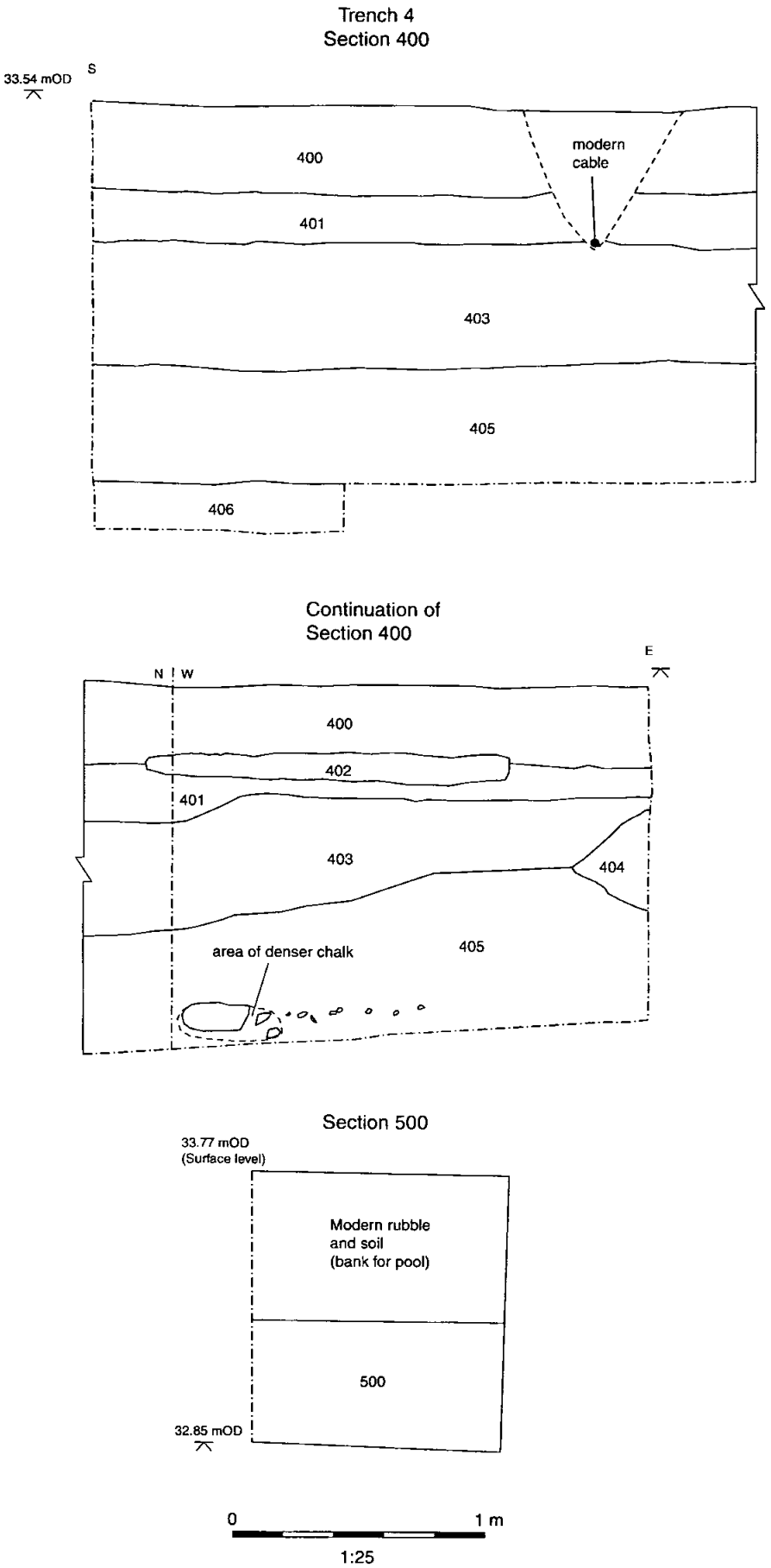

Figure 3: Trench 4, Section 400 and Section 500

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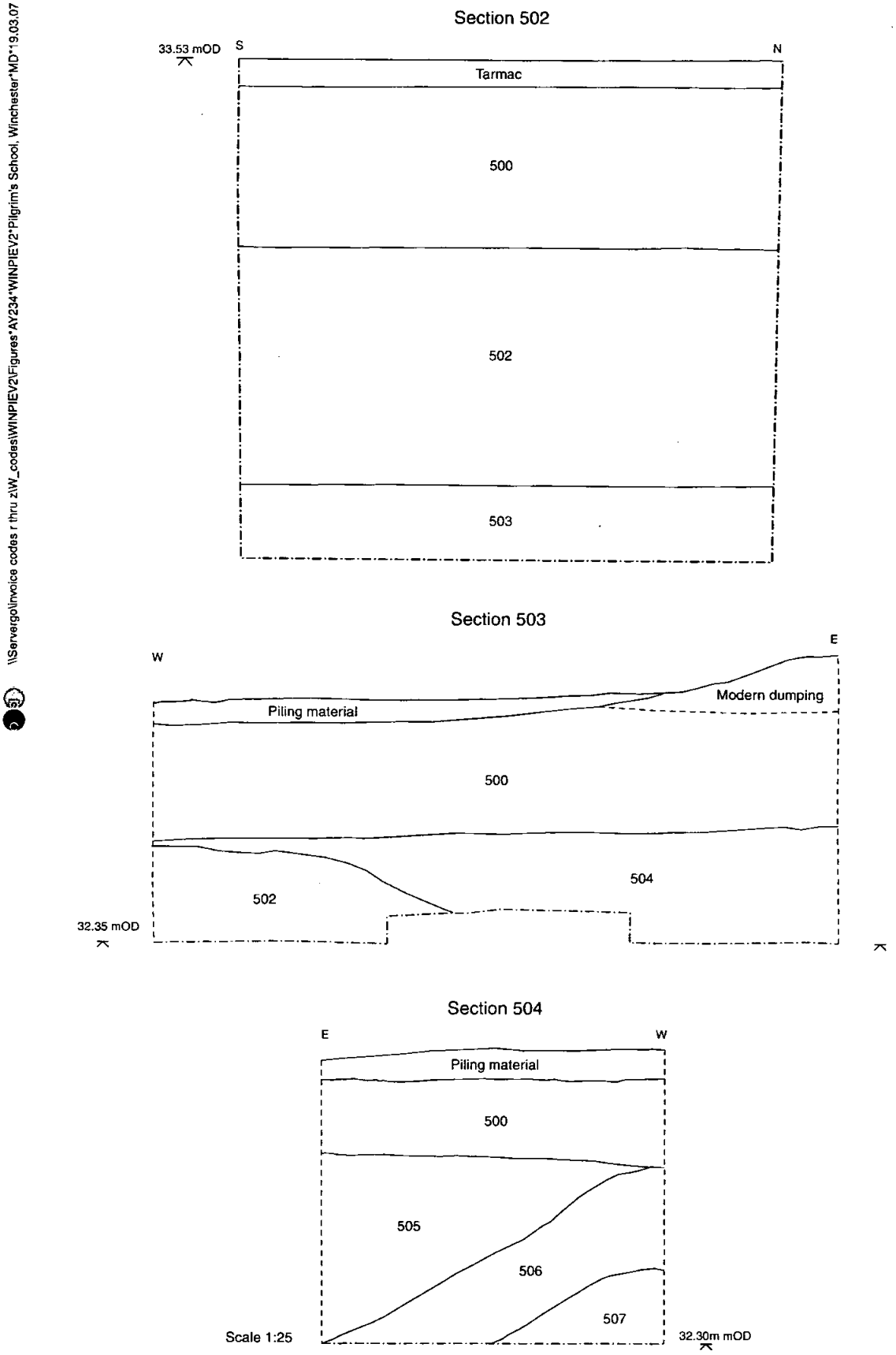

Figure 4: Sections 502, 503 and 504

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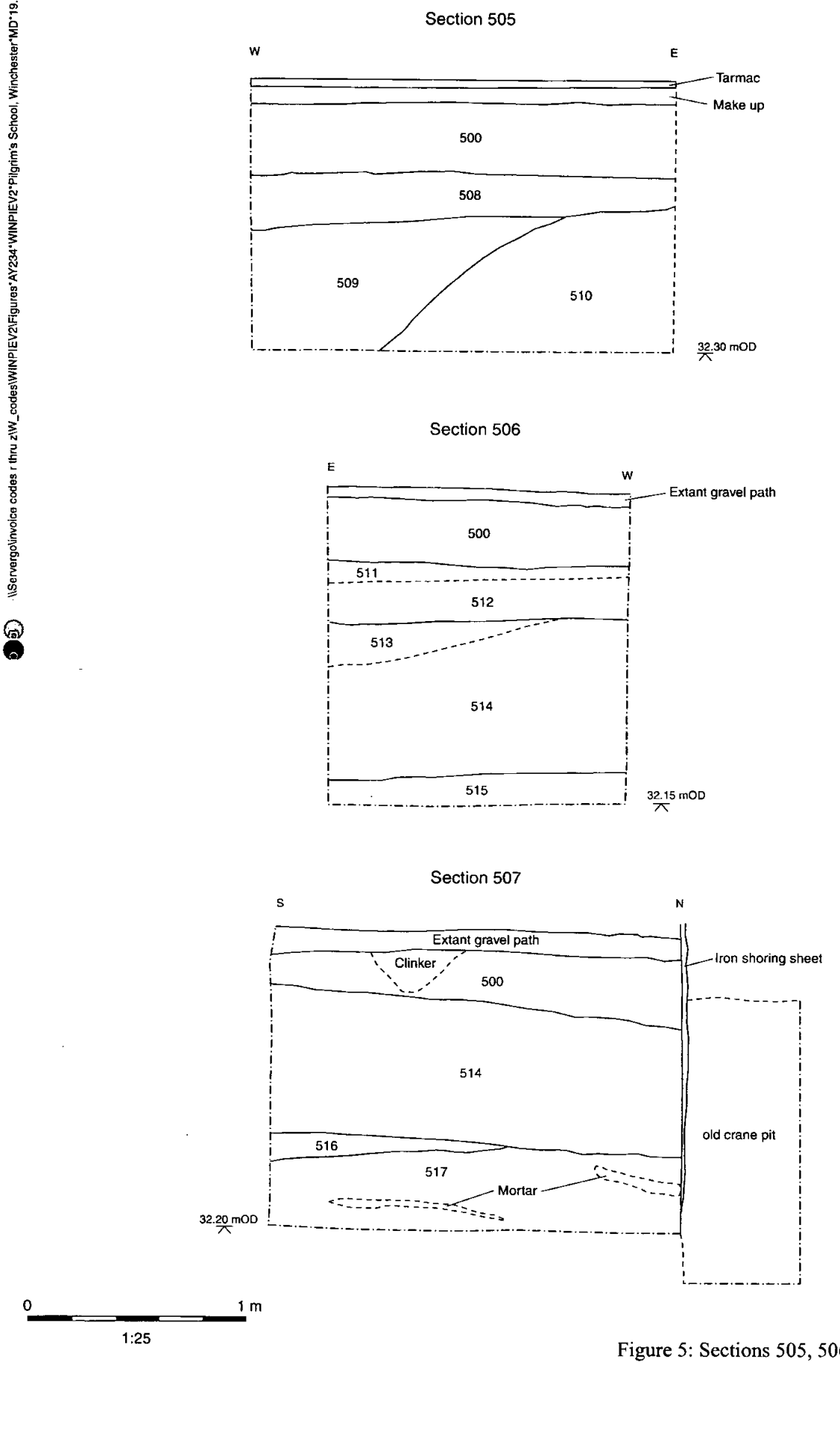

Figure 5: Sections 505, 506 and 507

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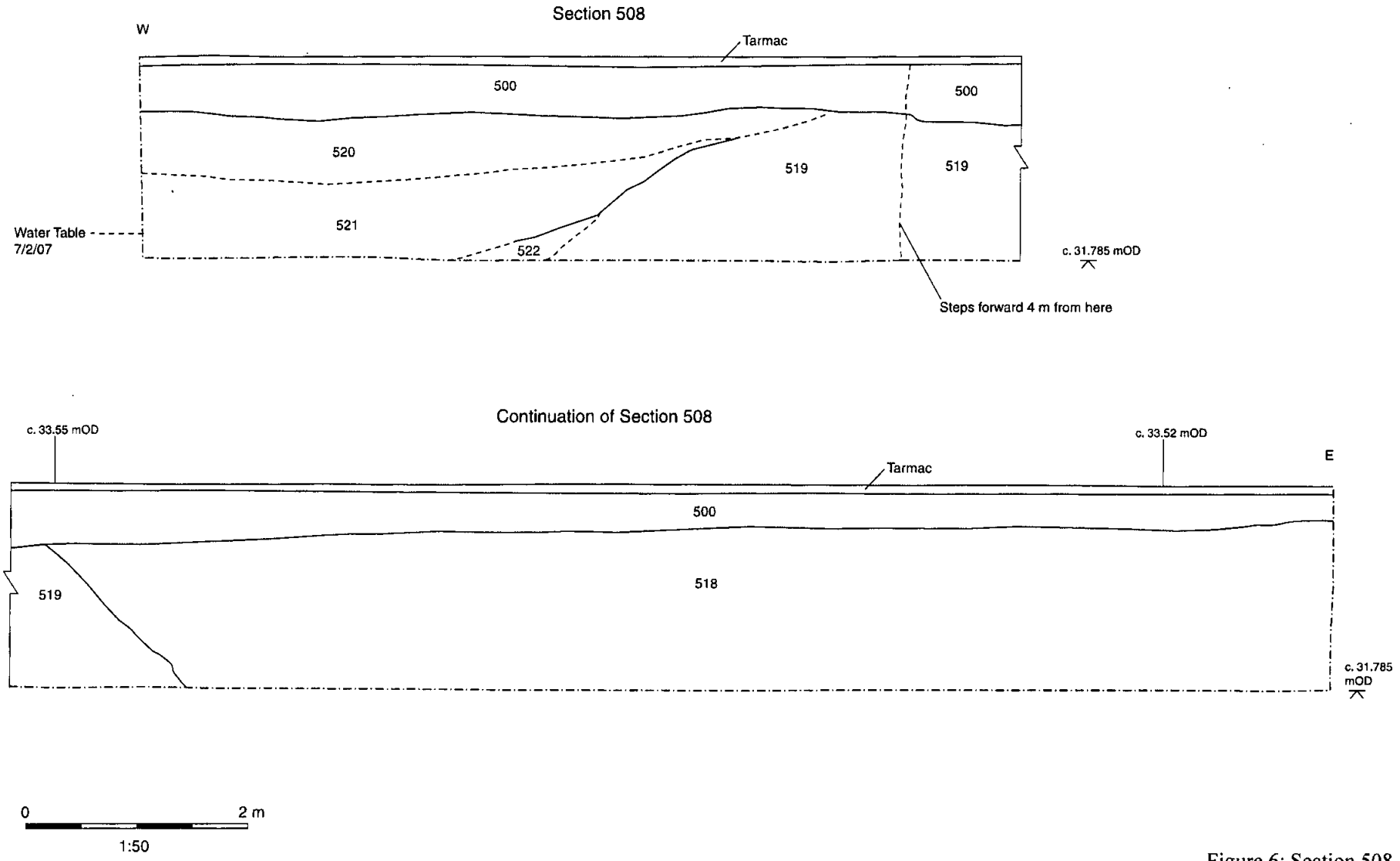

Figure 6: Section 508

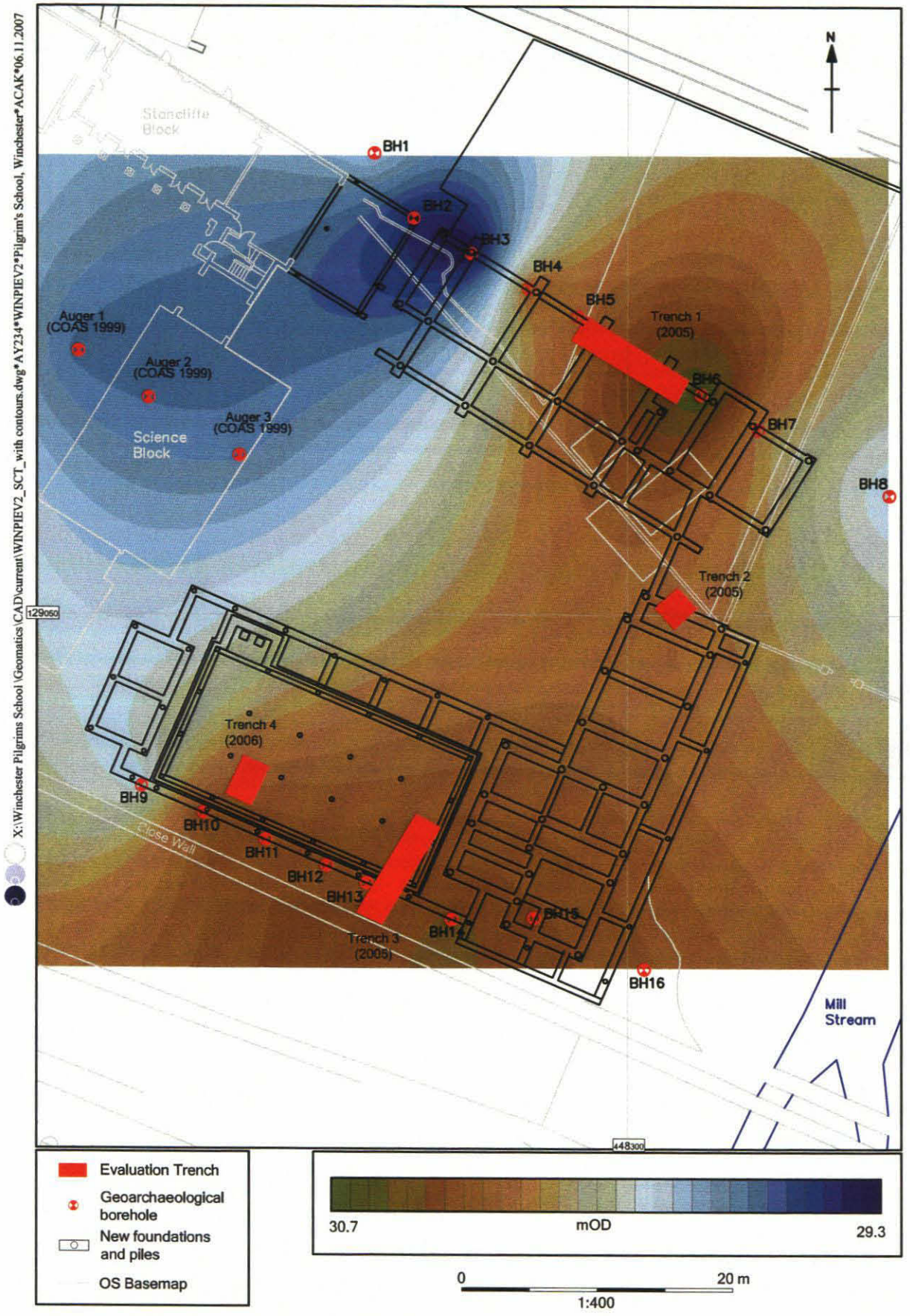

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Figure 7: Gravel elevation (mOD)

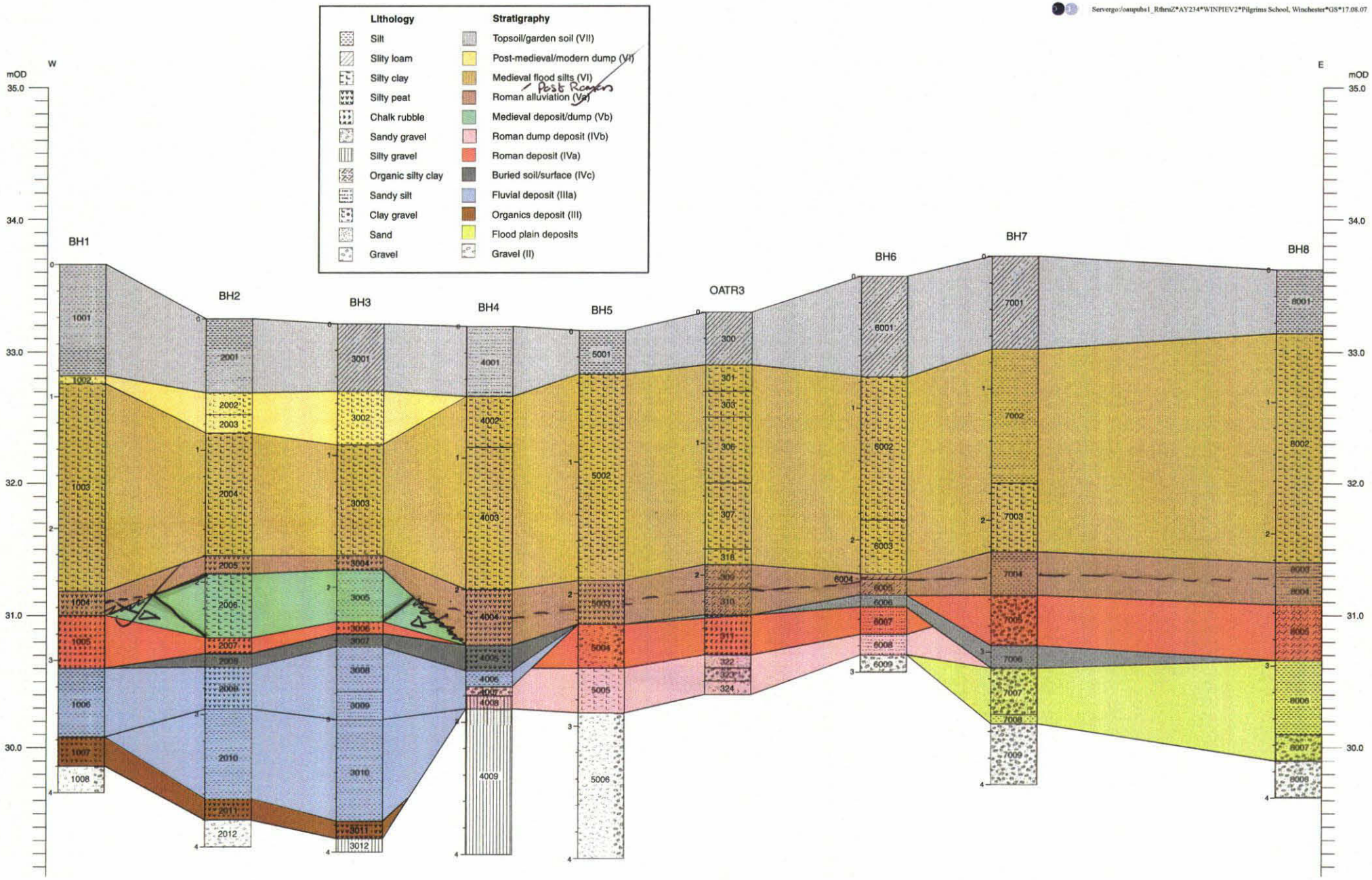

Figure 8: East-west cross section: Transect 1

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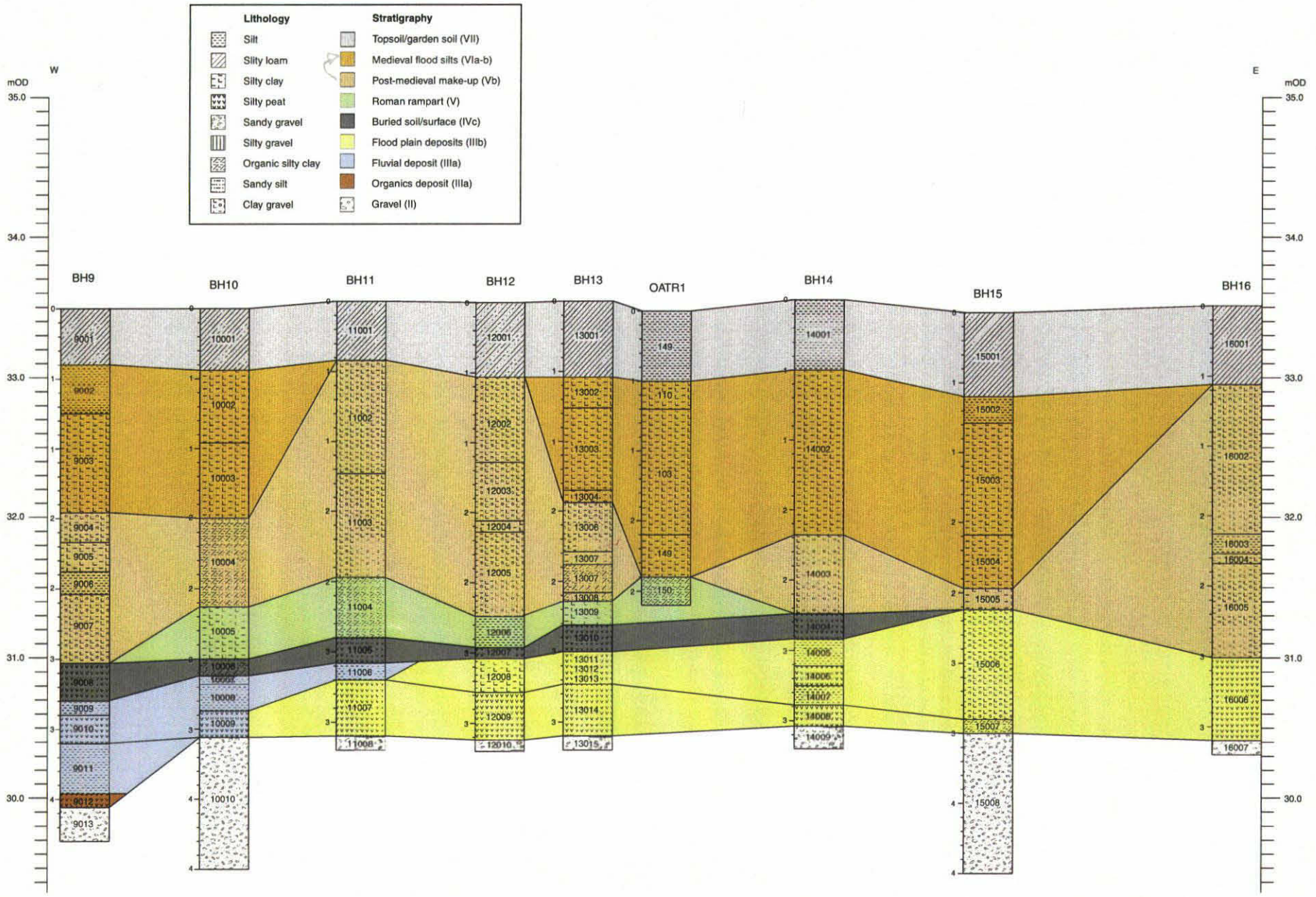

Figure 9: East-west cross section: Transect 2

Oxford Archaeology

Janus House
Osney Mead
Oxford OX2 0ES

t: (0044) 01865 263800
f: (0044) 01865 793496
e: info@oxfordarch.co.uk
w: www.oxfordarch.co.uk

Oxford Archaeology North

Mill 3
Moor Lane
Lancaster LA1 1GF

t: (0044) 01524 541000
f: (0044) 01524 848606
e: lancinfo@oxfordarch.co.uk
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OASIS ID: oxfordar1-102319

Project details

Project name	Winchester, Pilgrims' School
Short description of the project	Between 2005 and 2007 Oxford Archaeology carried out a programme of archaeological investigation within the gardens of Pilgrims' School, Winchester, as part of proposals to extend the schools pre-preparatory and sporting facilities. The site lies within Scheduled Ancient Monument Hants 585. The work identified a former prehistoric channel of the River Itchen running through the site, before it was diverted to the east in the late Roman period, just outside the town walls. It also revealed the remains of the Roman town defences and processes of floodplain reclamation. Systematic drainage of the Itchen floodplain appears to have started by the late 2nd century AD, followed by ground levelling and land transformation activities. This process appears not to have been completed by the late 4th century, when Winchester's civic structure had largely broken down and the town drainage system started to fail, The post-Roman environment reflects a return to wetter conditions on the floodplain with increased flooding during the early medieval period. During the monastic period it supported a series of fishponds, that where later infilled and transformed into Prior's garden. The garden became part of the Pilgrims' School during its foundation in 1931
Project dates	Start: 04-07-2005 End: 15-02-2007
Previous/future work	Yes / Not known
Any associated project reference codes	WINCM:AY234 - Sitecode
Any associated project reference codes	WINCM:AY234 - Museum accession ID
Type of project	Field evaluation
Site status	Scheduled Monument (SM)
Site status	Conservation Area
Site status (other)	Protected by the provisions of the Cathedrals Measure (1990)
Current Land use	Other 5 - Garden
Current Land use	Other 15 - Other
Monument type	CLOSE Medieval
Significant Finds	POTTERY Roman

Significant Finds	POTTERY Medieval
Significant Finds	POTTERY Post Medieval
Significant Finds	CERAMIC BUILDING MATERIAL Roman
Significant Finds	CERAMIC BUILDING MATERIAL Medieval
Significant Finds	CERAMIC BUILDING MATERIAL Post Medieval
Significant Finds	METALWORK Roman
Significant Finds	METALWORK Medieval
Significant Finds	METALWORK Post Medieval
Significant Finds	CLAY TOBACCO PIPES Post Medieval
Significant Finds	GLASS Post Medieval
Significant Finds	LEATHER Roman
Significant Finds	LEATHER Medieval
Methods & techniques	'Augering','Targeted Trenches'
Development type	Large/ medium scale extensions to existing structures (e.g. church, school, hospitals, law courts, etc.)
Prompt	Scheduled Monument Consent
Position in the planning process	Pre-application

Project location

Country	England
Site location	HAMPSHIRE WINCHESTER WINCHESTER Pilgrims' School
Study area	4400.00 Square metres
Site coordinates	SU 4825 2907 51.0584058536 -1.311446018140 51 03 30 N 001 18 41 W Point

Project creators

Name of Organisation	Oxford Archaeology
Project brief originator	Winchester Cathedral Archaeological Consultant
Project design originator	Oxford Archaeology
Project director/manager	B Ford
Project supervisor	S, Teague

Project archives

Physical Archive recipient	Winchester City Museum
Physical Archive ID	WINCM:AY234
Physical Contents	'Animal Bones','Ceramics','Glass','Industrial','Leather','Metal','Wood','Worked bone','Worked stone/lithics','other'

Digital Archive recipient	Oxford Archaeology
Digital Archive ID	WINCM:AY234/ WINPILEV/ WINPIEV2
Digital Contents	'Stratigraphic'
Digital Media available	'Images raster / digital photography','Text'
Paper Archive recipient	Winchester City Museum
Paper Archive ID	WINCM:AY234
Paper Contents	'Stratigraphic'
Paper Media available	'Context sheet','Diary','Matrices','Photograph','Plan','Report','Section','Survey ','Unpublished Text'

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	The Pilgrims' School, Cathedral Close, Winchester, Hampshire - Archaeological Evaluation - Scheduled Ancient Monument Hants 585
Author(s)/Editor(s)	Teague, S.
Date	2006
Issuer or publisher	Oxford Archaeology
Place of issue or publication	Oxford
Description	A4 bound client report

Project bibliography 2

Publication type	Grey literature (unpublished document/manuscript)
Title	The Pilgrims' School, Cathedral Close, Winchester, Hampshire - Post-Excavation Assessment and Research Design (incorporating Second Phase Evaluation, Geoarchaeological Survey and Watching Brief 2006-07)
Author(s)/Editor(s)	Teague, S.
Date	2007
Issuer or publisher	Oxford Archaeology
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Description	A4 bound client report

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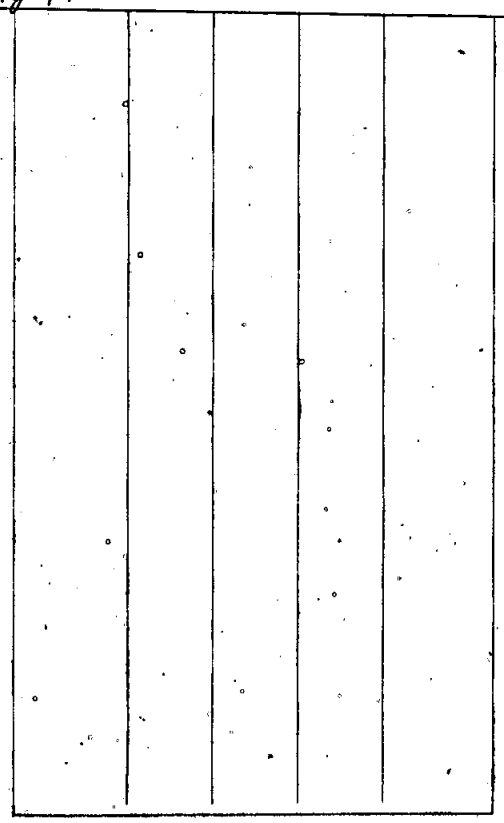
Winchester, Pilgrims School
WINCM: AT 234

Box 1 File 3

B. Site Diary / Fieldnotes



OXFORD ARCHAEOLOGY, JANUS HOUSE, OSNEY MEAD, OXFORD, OX2 OES

SCAN PDF

FILMING INSTRUCTIONS
Submitter OASouth
No. of CD copies: 2

Headings
Site information
Line 1: [OASouth] County:[Hampshire] Parish:[Winchester] Site:[Pilgrims School]
Site code[WINCM:AY234]
Line 2: Excavators name[Ford, B]
Line 3:
Classification of material

	Tick if present
Index to archive	
Introduction	
A:Final Report	
A:Publication Report	
B:Site Data – Text: Diary/Daybook/Fieldnotes	✓
B: Site Data – Text: General Summaries	
B: Site Data – Text: Primary Context Records	
B: Site Data – Text: Synthesised Context Records	
B: Site Data – Text: Survey Reports	
B: Site Data – Text: Catalogue of Drawings	
B: Site Data – Text: Primary Drawings	
B: Site Data – Text: Synthesised Drawings	
C: Finds Data – Text: Primary Finds Data	
C: Finds Data – Text: Synthesised Finds Data	
C: Finds Data – Text: Specialist Reports	
C: Finds Data – Text: Box/Bag List	
D: Catalogue of Photos/Slides/Videos/X--rays	
E: Environmental/Ecofact Data: Primary Records	
E: Environmental/Ecofact Data: Synthesised Records	
E: Environmental/Ecofact Data: Specialist Reports	
F: Documentary	
F: Press and Publicity	
G: Correspondence	
H: Miscellaneous	

Oxford Archaeology

CONTEXT RECORD ADDITIONAL SHEET

Context No. Notes

SITE CODE AY234 | SITE NAME Pilgrims School, Winchester | SHEET NO.

TUES 30TH May – Wednesday 31ST May.

Machine on site 8am

SCT / Carl / MDG on site 8am – 4pm

- Marked out TR4 as shown on WSI - Scanned for cables with excavator dug
- Removed overburden to c.1.2-1.3m (archaeological levels not reached)
  → record trench (photos & W/N sections)
- Continued machine excavation to top of water-table (~0.1-0.15m above formation level of swimming pool (31.785m OD)
- recorded trench at full depth (overburden (406) || Wednesday 31st May SCT/Carl/MDG 8am
  → Sondage dug against W-section to formation level = (406) was not bottomed
  ∴ Significant archaeological levels not reached.

John Crook at site am - agreed significant archaeological levels not reached.

Borehole survey / trench recording completed

Off site 3pm.

Oxford Archaeology

WATCHING BRIEF RECORD

1 (My Birthday!)

SITE CODE AY234	SITE NAME Pilgrims School, Winchester	DATE 20/7/06
NGR	County Hants.	Start Time 10:30 (site)
		Finish Time 11:50 (home)
Milage — (Bus!)	Previous Visit —	Visit By SCT

Type of construction work: Extension to School/swimming pool

Contacts made: Temp - Site Manager (Tony Strapley) + School Bursar

Archaeology present?

Yes:

No: ✓

Undated:

Other:

COMMENTS

* 1st site visit *

Brymor still setting up site (Tennis court fence removed - Herri fencing erected

No machinery on site - no groundwork.

Spoke to (Temp site manager).

- Swimming pool will be infilled from Monday but could involve not removing to pool lining - just level it off to existing ground level. If this is the case then there will be no need for any recording.

They may demolish E-W garden wall this week (to ground level only).

The crane will be positioned near SW (within) of former Tennis court. - Depth ?1m.

Records? This only.

Dean Kelly

Site Manager

07818 473129

Oxford Archaeology

WATCHING BRIEF RECORD

1

SITE CODE AY234	SITE NAME Pilgrims' School, Winchester	DATE 24/4/06
NGR	County Hants	Start Time 8am (Site)
		Finish Time 10am (OA)
Milage 55	Previous Visit 20/7/06	Visit By

Type of construction work
Extension to School / new Swimming pool etc

Contacts made
Temp Site Manager. (Tony).

Archaeology present?

Yes:

No: ✓

Undated:

Other:

COMMENTS

No groundwork on site (no machinery on site) contractors demolishing Garden (brick wall) by hand.

Spoke to Site Manager → Swimming pool to be demolished from tomorrow → lining will have to be removed after all. Machinery to arrive on site am tomorrow (small machines). Advised that work not likely to commence in earnest until later in day.
SCT will visit site PM tomorrow to access progress).

* Phoned site

Records? No

Oxford Archaeology	**WATCHING BRIEF RECORD**	3

SITE CODE AY234	SITE NAME Pilgrims School Winchester	DATE 26/7/06
NGR	County	Start Time 12:15 (OA)
		Finish Time 2:30 (home)
Milage 58	Previous Visit 24/7/06	Visit By SCT

Type of construction work: Extension to school / new swimming pool

Contacts made: Site Manager.

Archaeology present?

Yes:

No: ✓

Undated:

Other:

COMMENTS

Work has commenced on demolishing of old swimming pool - although the lining is still in intact (seem to be just reducing the built up platform to ground level)

- Site Manager said unlikely lining will be removed to any significant extent until tomorrow PM at very earliest, will phone Mikday tomorrow before visiting (if necessary)

Records? Digi Shots of Pool (1-4)

Oxford Archaeology	**WATCHING BRIEF RECORD**		4
SITE CODE AT234	SITE NAME Pilgrims School Winchester		DATE 27/7/06
NGR	County Hants	Start Time	1.00pm (Home)
		Finish Time	2:30pm (Home)
Milage 6	Previous Visit 26/7/06	Visit By SCT	

Type of construction work: Extension to school + new swimming pool

Contacts made: Site Manager.

Archaeology present?

Yes:

No: ✓

Undated:

Other:

COMMENTS

Demolition of old swimming pool underway - concrete lining (re-inforced with steel pins) still being removed.

(N.B. phoned site manager at 11:57am who advised that lining on edges had been removed)

→ Safe access into the pool not possible due to presence of protruding steel pins -

→ However it clear that now the pool has been reduced to near surrounding GL, that actual depth of pool 'cut' is less than 1m (max) below ground-level closer to 0.5 - 0.75m at W-end. This is confirmed by visible edges revealing late/recent topsoils & modern rubble. *

→ will return tomorrow once lining has been removed

Records? Digi shots

Oxford Archaeology

WATCHING BRIEF RECORD

5

SITE CODE A1234	SITE NAME Pilgrims' School, Winchester		DATE 31ST July 06
NGR	County Hants.	Start Time	12:15 (none)
		Finish Time	1:45 (none)
Milage 6	Previous Visit 27/7/06	Visit By SCF	

Type of construction work: Extension to School

Contacts made: Site Manager (Phone beforehand)

Archaeology present?

Yes:

No: ✓

Undated:

Other:

COMMENTS

Demolition of pool now completed – base of pool broken up – rubble left in-situ – partially infilled with topsoil. – Instructed machine driver to re-exposed part of S-face of construction cut for lining

→ made brief record of visible section

→ Base of cut = 32.85m aOD

Surface of Tennis court = 33.52

∴ Base of cut = 0.67m below Tennis court

W-end of TR3 surface ≈ 33.27m.

Sequence: 32.85m OD – Pmed brick rubble/mortar

33.34m OD – Topsoil (Buried).

33.77 – Truncat top of bank for pool

Records? Digi shots

Oxford Archaeology	**WATCHING BRIEF RECORD**		6
SITE CODE AY234	SITE NAME PILGRIMS SCHOOL		DATE 3/8/06
NGR	County HANTS	Start Time	8.15 (SITE)
		Finish Time	9.30 (LEAVE SITE)
Milage /	Previous Visit 31/7/06	Visit By	A MARSHALL

Type of construction work: EXTENSION TO SCHOOL

Contacts made: SITE MANAGER STEVE TERGUE.

Archaeology present? ~~Yes~~

Yes:

No: ✓

Undated:

Other:

COMMENTS

VISIT SITE TO HAND OVER W.B FROM STEVE TERGUE AND VIEW SITE.
MET SITE STAFF AND EXCHANGED NO.S.
CONFIRMED CRANE BASE DESIGN HAS CHANGED SO NOW NO MASS FILL ONLY PILES + CAPS.
SITE REDUCTION FOR PILING MAT DUE TO START MONDAY BUT PROGRESS. WILL BE SLOW DUE TO SMALL MACHINE. STRIP WILL PROBABLY ONLY REACH 18TH C LEVELS BUT I AGREED TO VISIT AND OVERSEE PROGRESS.
FIRST VISIT MONDAY 7/8/06. AM

Records? THIS ONLY.

Oxford Archaeology

WATCHING BRIEF RECORD

7

SITE CODE AY 234	SITE NAME Pilgrims School		DATE 7/8/06
NGR	County Hants	Start Time	7.45 (home)
		Finish Time	14.00 (left site)
Milage	Previous Visit 3/8/06	Visit By	A Marshall

Type of construction work
School Extension

Contacts made
Site agent, Groundwork foreman

Archaeology present?

Yes:

No: —

Undated:

Other:

COMMENTS

Groundworkers began site reduction for piling mat etc.
This is generally very shallow and is unlikely to impact on underlying archaeology but as it is opening areas of new ground it is worth 'Policing' to build up a picture of the site conditions.
Reduced dig level = 0.5m approx below current ground.
Machining slow due to problems with site access (removing spoil in 6m³ skips)

Steve Teague suggested it may be useful to see one or two piles being bored to estimate natural depth. Crane base piles being cast on Thursday. I will visit to see these.

Records? context sheet, Photo (SLR)

Oxford Archaeology

WATCHING BRIEF RECORD

8

SITE CODE AY 234	SITE NAME PILGRIMS SCHOOL - WINCHESTER		DATE 10/8/06
NGR	County HANTS.	Start Time	13·40 (on site)
		Finish Time	14·40 (off site)
Milage 4	Previous Visit 7/8/06	Visit By D MARSHALL	

Type of construction work: SCHOOL EXTENTION - PILING

Contacts made:

Archaeology present?

Yes: ✓

No:

Undated:

Other:

COMMENTS

VISITED TO SEE 'ROGER BULLIVANT' PILING CRANE BASE.
OBSERVED SOUTH EAST CORNER PILE of CRANE BASE.

THIS SEEMS TO INDICATE:

GROUND SURFACE TO BASE of ARCHAEOLOGY = 2·5M APPROX
GRAVEL + SILT DUE TO REPEATED RIVER FLOODING = 2·5M - 6M
BED CHALK = 6M - 15M
15M = MAX PILING DEPTH

BECAUSE PILES ARE BORED NO STRATIGRAPHY COULD BE NOTED.

Records? THIS ONLY.

Oxford Archaeology	WATCHING BRIEF RECORD		9
SITE CODE AY234	SITE NAME PILGRIMS SCHOOL		DATE 25/8/06
NGR	County HANTS	Start Time	13·50
		Finish Time	15·50
Milage 4	Previous Visit 10/8/06	Visit By A MARSHALL	

Type of construction work: SCHOOL EXTENSION

Contacts made: SITE MANAGER - TONY STAPELY

Archaeology present?

Yes:

No: ✓

Undated:

Other:

COMMENTS

VISIT TO SITE TO GAUGE PROGRAM OF WORK.

DRAIN RUN 'A' DUG THROUGH QUADRANGLE AREA. TOPSOIL ONLY, DOES NOT REACH DEPTH OF ARCHAEOLOGY. - RECORDED AS DRAWINGS + CONTEXT + OVERALL PHOTO. (501)

CURRENTLY BREAKING OUT OLD CRANE BASE WHICH I WILL RETURN TO RECORD WHEN CONCRETE IS REMOVED - NEXT WEEK.

DUE TO BEGIN PILING AROUND 1/9/06 AND GROUND BEAMS ON NORTH SIDE OF SITE 8/9/06. - I WILL UPDATE THIS ESTIMATE NEXT WEEK.

TONY HAS CONCERNS ABOUT STABILITY OF CLOSE WALL TO THEIR EDGE OF FOUNDATIONS ACCORDING TO EVALUATION REPORT THEIR DIG WILL RUN ALONG SIDE ROMAN FOUNDATIONS STABILITY IS A CONCERN FOR THEM TO ADDRESS BUT WATCHING BRIEF IN THAT AREA IS VITAL. TO ASSIST SETTING OUT I WILL COPY EVAL REPORT TRENCH 1 INFO FOR TONY NEXT WEEK.

Records? PHOTO, CONTEX 501, SECTION 501, PLAN 501

Oxford Archaeology

WATCHING BRIEF RECORD

10

SITE CODE AZ234	SITE NAME PILGRIMS SCHOOL		DATE 30/8/06
NGR	County HANTS	Start Time	12.30
		Finish Time	14.20
Milage 4	Previous Visit 25/8/06	Visit By A MARSHALL	

Type of construction work: SCHOOL EXTENSION

Contacts made: TONY STAPLEY, DEAN KELLY - SITE MANAGERS

Archaeology present?

Yes:

No: /

Undated:

Other:

COMMENTS

VISIT TO CHECK PROGRESS

NO FURTHER WITH REMOVAL OF CRANE BASE CONCRETE.

RING BEAM EXCAVATION DUE TO BEGIN NEXT WEDNESDAY. 6/9/06.

DROPPED OFF COPY OF TRENCH1 RECORDS FROM EVALUATION DIG - INFORMED DEAN THAT THEIR BUILDING IS DESIGNED TO MISS ROMAN FOUNDATIONS OF CLOSE WALL

I WILL BE PRESENT TO WATCH EXCAVATION IN THE AREA BUT ANY CONFLICTING PLANS OR INSTABILITY OF WALL IS THE REMIT OF THE ARCHITECT.

Records? THIS ONLY.

Oxford Archaeology

WATCHING BRIEF RECORD

11

SITE CODE AYZ34	SITE NAME PILGRMS SCHOOL		DATE 6/9/06
NGR	County HANTS	Start Time	12·30
		Finish Time	3·00
Milage 6	Previous Visit 30/8/06	Visit By A MARSHALL	

Type of construction work

SCHOOL EXTENSION

Contacts made

Archaeology present?

Yes:

No: ✓

Undated:

Other:

COMMENTS

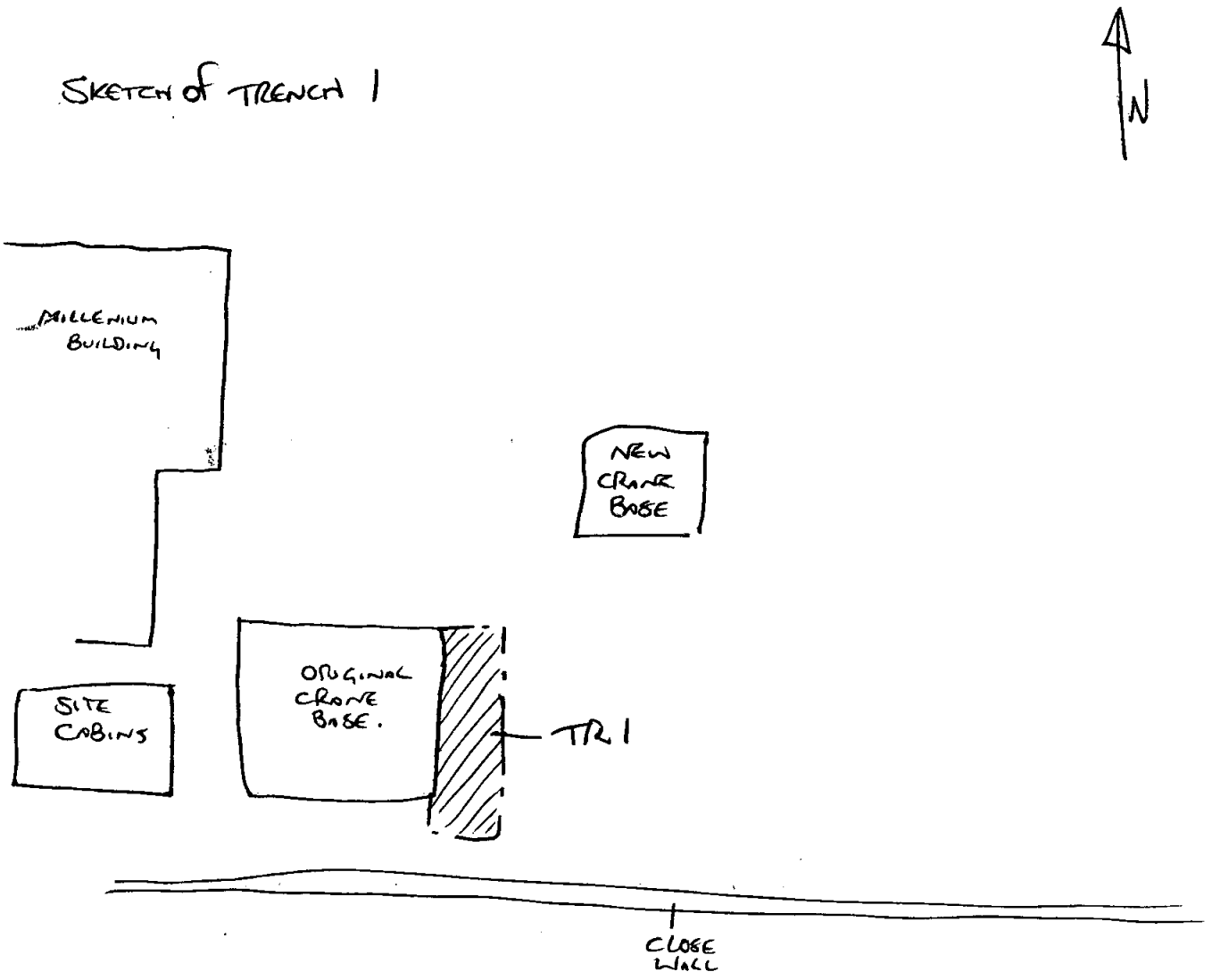
VISIT TO GUAGE PROGRAMME ON SITE - STILL BEGGINING PILING SO GROUNDBEAMS DUE TO START NEXT WEEK. - VISIT AROUND 15TH/9/06

EXCAVATED HOLE NEXT TO ORIGINAL CRANE BASE RECORDED IN PREVIOUS WORK ON SITE. 2M DEEP BY 1M X 5M (SEE SKETCH ON REVERSE) THIS APPEARS TO ALL BE IN MADE UP GROUND AND THE FEW FINDS FROM THE SPOIL ARE MODERN CBM/FLOWER POT. - THIS EXCAVATION WAS BEEN CALLED TR #1 - NO ARCHAEOLOGY. (ALL MADE GROUND AROUND CRANE) INFORMED TONY, SITE MANAGER THAT I NEED TO SEE WORKS AT THIS DEPTH IN FUTURE AND PHOTOGRAPHED.

THERE WILL BE A MANHOLE NEAR NEW CRANE BASE AT SOME POINT, WHICH I WILL BE INFORMED ABOUT.

Records? PHOTOS - WB1

SKETCH of TRENCH 1



Oxford Archaeology

WATCHING BRIEF RECORD

12

SITE CODE AY234	SITE NAME Pilgrims' School, Winchester	DATE 8/9/06
NGR	County	Start Time 9:30 (home)
		Finish Time 10:55 (home)
Milage 6	Previous Visit 6/9/06	Visit By SCT

Type of construction work: Extension to School

Contacts made: Site Manager

Archaeology present?

Yes:

No: ✓

Undated:

Other:

COMMENTS

Piling for new building is underway (northern part of the site)
- Crane is erected (near W- end of E. Tennis court)
Removal of concrete slab for former crane pit is underway - slot dug along E-side to aid breaking up - recorded by Alan Marshall on previous visit - according to site manager.

Site Manager: → Ground beams to be dug w/c: 18TH Sept.
→ Soakaways to W of crane pit to be re-located to north involving deep excavations of two new pits → timetable not yet established - will inform SCT.

Records? General Digi Shots

Oxford Archaeology	**WATCHING BRIEF RECORD**		13
SITE CODE A7234	SITE NAME The Pilgrims' School Winchester		DATE 14/9/06
NGR	County Hants	Start Time	12:05 (noon)
		Finish Time	1:45 (hours)
Milage 6	Previous Visit 8/9/06	Visit By SCT	

Type of construction work: Drainage works

Contacts made: Tony Stapley (Site Manager)

Archaeology present?

Yes:

No:

Undated: ✓

Other:

COMMENTS

Phone call from Tony Stapley informing that excavation of new manhole now underway (11:30 am)

On arrival a c. 2·2 × 2·2m (and 2·2m deep) pit dug for insertion of concrete surround (pre-fab) for drainage inspection pit. Trench is unshored so close inspection not safe. At base of trench - mortar rubble visible overlain by deep 'garden soil' - contractor indicated area of spoil where earlier deposit derived from. SCT recovered several finds including large sherd of Late med - early post-med pot apparently adhering to similar material seen in trench.

Tony Stapley said connecting drainage trench will be c. 0·75m in depth and second manhole to be dug not for 'some while'. On

Records? Section & dig photos.

p.t.o.

Monday groundbeams to be dug (under 1m). He also informed SCT that excavation for new swimming pool will not commence for c. 2 months! Also informed that a 'pumping chamber' to aid flow of drains will be dug during school holidays. - Xmas at the earliest.

Oxford Archaeology	**WATCHING BRIEF RECORD**		14
SITE CODE A4234	SITE NAME The Pilgrims' School, Winch.		DATE 21/9/06
NGR	County Hants	Start Time	8:05 (home)
		Finish Time	9:10am (back OA 11:30)
Milage 3+55 = 58	Previous Visit 14/9/06	Visit By SCT	

Type of construction work: School Extension

Contacts made: Site Manager.

Archaeology present?

Yes:

No: ✓

Undated:

Other:

COMMENTS

Ground beams under excavation on NW corner of new building. Depth of trenches does not exceed 0.8–1m below extant ground levels revealing the homogeneous dark grey/brown soils throughout (Contexts 500/502).
– therefore trenches are (significantly) well above levels of intact archaeology.

Site Manager confirmed no significant groundwater encountering above 1m BLGS. will occur until excavation of new pool (c. 2 months)
– will continue to monitor site (1–2 weekly).

Records? Digi shots. only.

Oxford Archaeology	**WATCHING BRIEF RECORD**		15
SITE CODE AY234	SITE NAME The Pilgrims' School, Winchester		DATE 28/9/06
NGR	County Hants	Start Time	7:50 (home)
		Finish Time	10.55 (OA)
Milage 3+55 = 58	Previous Visit 21/9/08	Visit By SCT	
Type of construction work	Extension to School.		
Contacts made	Site Manager (new one).		
Archaeology present?			
Yes:			
No:			
Undated:			
Other:	✓		

COMMENTS

Excavation of groundbeams defining the N-extent of the new building is complete

– Trench still open - but with 50-75mm of blinding at base. – Piles in process of being 'cut off'.

Much of trench (1 – 1.4m deep) reveals post-medieval garden soil / Top Soils which are not breached. (c/f: Contexts 500 and 502). However towards the east end the post-med garden soil (502) appears to had been removed (or its surface dips down to below the base of the trench. At this point it is level with a thick deposit of clean mortar rubble (504) that extends beyond the E-end of the trench - This deposit is similar to the 17-19th c rubble found in TR2 of the evaluation.

Records? S.503 - Digi Shots

Oxford Archaeology

WATCHING BRIEF RECORD

16

SITE CODE A-1234	SITE NAME Pilgrims School, Winchester		DATE 4/10/06
NGR	County Hants	Start Time	8:30 (hours)
		Finish Time	10am (hours)
Milage 6	Previous Visit 28/9/06	Visit By SCT	

Type of construction work: Extension to School

Contacts made: Site Manager (Bob Oliver)

Archaeology present?

Yes:

No:

Undated:

Other: ✓

COMMENTS

Ground beams for northern building (new pre-prep School) now fully excavated - concrete blinding in place → piles being cut down.

All ground beams at min-level of 32.37mOD - well above the base of post-medieval garden soil (502). Mortar dumping (504) visible along E-side of new building (base not penetrated) - becomes more mixed with dumps of chalk/tile.
- plotted extent on plan P503.
Probably 17TH/18TH C+ in date - is it filling a large Sunken feature (Fish pond for e.g.?)

Regarding digging of Swimming pool - will NOT commence until NOVEMBER (at earliest)

Records? Digi photo etc

Oxford Archaeology	WATCHING BRIEF RECORD		17
SITE CODE AY234	SITE NAME Pilgrims' School, Winchester		DATE 12/10/06
NGR	County Hants	Start Time	8 am (home)
		Finish Time	11:10am (OA)
Milage 55+3 = 58	Previous Visit 4/10/06	Visit By SCT	

Type of construction work: Extension to School

Contacts made: Site manager / surveyor

Archaeology present?

Yes:

No: ✓

Undated:

Other:

COMMENTS

Groundbeams for new changing room block alongside E-boundary more or less completely excavated to formation level.
A similarly sequence of deposits ~~of depo~~ revealed (as east-end of new pre-prep school) Topsoils over mortar rubble (the base of which is not penetrated. Mortar rubble (with lenses of tile fragments (as 504) is revealed at base of all groundbeams - implying a extensive coverage over E-part of the site. Can be equated with those similar (17/18C) deposits with Eval Tr 1 and 17/18C rubble (103) in Eval Trench 1.
Site manager says that remaining piles for swimming pool area to begin W/C 23/10/06. Digging out of pool approx week after piling in early Nov?

Records? Dig shots

Oxford Archaeology	**WATCHING BRIEF RECORD**		18
SITE CODE AY234	SITE NAME Pilgrims' School, Winchester		DATE 17/10/06
NGR	County	Start Time	8:15 (home)
		Finish Time	11am (home)
Milage 6	Previous Visit 12/10/06	Visit By SCT	

Type of construction work: Extension to School

Contacts made: Site Manager, foreman etc.

Archaeology present?

Yes:

No: ✓

Undated:

Other:

COMMENTS

Ground beams for new changing room block now almost complete apart from small area close to the path on the S-side (to be done later today).

Similar sequence of post-med deposits revealed as previous visits
→ Topsoil
→ Dumps of mortar rubble / dirty rubble
→ Early garden soil horizon (late med+)

Along Groundbeam defining S-side of building limit of mortar rubble revealed in approx same western extent as revealed at N-end of building (see S.503).
Will return tomorrow / Thursday to inspected pipe along path.

Records? Digi shots, Section S.504

Oxford Archaeology

WATCHING BRIEF RECORD

19

SITE CODE	SITE NAME Pilgrims School, Winchester	DATE 18/10/06
NGR	County	Start Time 8:30 (Home)
		Finish Time 10:35 (Home)
Milage 6	Previous Visit 17/10/06	Visit By SCT

Type of construction work: Extension to School.

Contacts made: Site Manager etc.

Archaeology present?

Yes:

No: ✓

Undated:

Other: ✓

COMMENTS

Foundation trenches along path NOT dug because issues with a 'missing' pile & access for piling rig (next week). However remaining area of changing room now complete (no machining in area allowing for safe examination).

Further dumps of post-med mortar rubble visible alongside W-edge of new changing room — seemingly infilling a hollow/cut further west. Therefore this is separate from deposits recording in Section S503 & S504 which are filling a large feature towards the E of the site - could they be infilling large features such as Fishponds and/or Meadow management features?? Remaining ground beams (along path) to be dug after next week (when remaining piles for swimming are complete)

Records? Digi shot, Section S505

Oxford Archaeology

WATCHING BRIEF RECORD

20

SITE CODE AY234	SITE NAME The Pilgrims' School		DATE 24/10/06
NGR	County Hants	Start Time	1 pm (warm)
		Finish Time	2 pm (light rain)
Milage 3	Previous Visit 18/10/06	Visit By S.C.T.	

Type of construction work: Extension to School

Contacts made: Site Manager.

Archaeology present?

Yes:

No: ✓

Undated:

Other:

COMMENTS

No further groundwork of significance since last visit.

- contrary to my impression gained last week piling rig will be coming NEXT WEEK followed by further groundwork once piles have 'set' - the week after.

∴ Next scheduled visit W/B 6TH NOV

Records? Digi photos

Oxford Archaeology

WATCHING BRIEF RECORD

21

SITE CODE AY234	SITE NAME The Pilgrims' School, Winchester	DATE 6/11/06
NGR	County Hants	Start Time 8am (home)
		Finish Time 9:30 (home)
Milage 6	Previous Visit 24/11/06	Visit By SCT

Type of construction work: Extension to School

Contacts made: Site Manager.

Archaeology present?

Yes:

No: ✓

Undated:

Other:

COMMENTS

No further groundwork since last visit. Piling rig (for new swimming pool) still on site. Site manager informed me that excavation for new pool will commence w/b 20/11/06 when the beam alongside the South part of pool will be dug.

SCT informed that will not visit until then but advised him to contact me if substantial groundworks commence before then.

Records? Digi shots

Oxford Archaeology

WATCHING BRIEF RECORD

22

SITE CODE A4234	SITE NAME The Pilgrims School, Winchester		DATE 20/11/06
NGR	County Hants	Start Time	8am (home)
		Finish Time	10:15 (OA)
Milage 3+55=58	Previous Visit 6/11/06	Visit By SCT	

Type of construction work: Extension to School

Contacts made: Site Manager

Archaeology present?

Yes:

No: ✓

Undated:

Other:

COMMENTS

Groundwork for swimming pool not yet commenced. No previous GW since last visit apart from G. shallow groundbeams alongside S-line of new changing rooms (next to close wall) - well above archaeological levels.

Site Manager said strip trench for groundbeam alongside S-wall of new pool will probably commence later today.
- agreed to return tomorrow.

Records? No.

Oxford Archaeology	**WATCHING BRIEF RECORD**		23
SITE CODE A4234	SITE NAME The Pilgrims School, Winchester		DATE 21/11/06
NGR	County	Start Time	1:40 (home)
		Finish Time	the 3:55 (home)
Milage 3+3=6	Previous Visit 21/11/06	Visit By SCT	

Type of construction work: Extension to School

Contacts made: Site Manager / Surveyor.

Archaeology present?

Yes:

No: ✓

Undated: ✓

Other:

COMMENTS

Ground beam for new pool now excavated (c. 2m from close wall E-W). Trench is approx 1.50m – 1.60m in depth. - Sides very unstable so close-inspection not possible although N-side trench was later stepped to allow safe access to piles (to enable 'cut-off'). It is clear from the sequence visible that the cut of the deposits represent post-medieval soil, and mortar rubble dumping (as observed elsewhere on the site). The mortar rubble predominates towards the W-end of the trench (in area of old chapel pit) and can be equated with the rubble recorded in 1999-2000 by SCT. Towards the east the usual 20-30cm of deposit comprise of clean brown clay – possibly dumping – or ? Roman rampart. (Was quick to draw a sample section at this point. Further trenches for the ring-beam to be

Records? Digi shots, section

day later / early next week (according to site engineer -). Will return then.

The site manager informed me that once the ring-beam is established - then pool excavation will not resume until 'March 2007'.

Oxford Archaeology

WATCHING BRIEF RECORD

24

SITE CODE A1234	SITE NAME Pilgrims' School, Winchester	DATE 27/11/06
NGR	County Hants	Start Time 9:30 (Home)
		Finish Time 11:10 (Home)
Milage 3+3=6	Previous Visit 21/11/06	Visit By SCT

Type of construction work: Extension to School

Contacts made: Site Manager /

Archaeology present?

Yes:

No:

Undated: ✓

Other:

COMMENTS

Last few metres of ring-beam for S-wall of new swimming pool now excavated and concrete footing in place.

SCT inspected the far west end of the ring-beam trench - allowing for cleaning and recording of a N-S profile (immediately south of the former crane pit).

No significant archaeological horizons were visible - the earliest deposit comprising of a (? accumulated) dark grey soil with lenses of mortar rubble - probably medieval 'garden soil' - the lenses of mortar (c 2m from line of city wall) probably derived from repairs to the wall.

Records? Section + Digi photos

Oxford Archaeology

WATCHING BRIEF RECORD

25

SITE CODE A7234	SITE NAME The Pilgrims School, Winchester	DATE 14/12/06
NGR	County	Start Time 7:45 (home)
		Finish Time 9:40 (OA)
Milage 5+55 = 58	Previous Visit 27/11/06	Visit By SCT

Type of construction work: Extension to School

Contacts made: Site Surveyor.

Archaeology present?

Yes:

No: ✓

Undated:

Other:

COMMENTS

No further groundwork since last visit — Concrete beam for S-wall of swimming pool now in place.

Spoke to Site Surveyor (PM off site). Further work on the swimming will not commence until "after Xmas". This will include the excavation for the new pumping chamber which now appears to have been re-designed to be "shallower" and is now apparently to be located on the W-side of the new pool - possibly within the former crane pit.

Records? No.

Oxford Archaeology	**WATCHING BRIEF RECORD**		26
SITE CODE A4234	SITE NAME The Pilgrims' School, Winchester		DATE 20/12/06
NGR	County Hants	Start Time	8am
		Finish Time	9am
Milage 6	Previous Visit 4/12/06	Visit By SCT	

Type of construction work: Extension to School etc.

Contacts made: Site Manager.

Archaeology present?

Yes:

No: ✓

Undated:

Other:

COMMENTS

No groundwork since last visit – no further progress on Swimming pool.

Spoke to Site Manager who confirmed that excavation of Swimming pool will commence

* W/B – 8TH Jan 07 *.

No further G/W anticipated beforehand apart from minor (shallow) drainage trenches – not worth bothering with.

Took some record shots of site – Agreed with Site Surveyor any general shots will not be used without permission.

Records? Digi photos.

Oxford Archaeology

WATCHING BRIEF RECORD

27

SITE CODE AY234	SITE NAME Pilgrims School, Winchester		DATE ~~3/8~~/1/07
NGR	County Hants	Start Time	10:30 (car)
		Finish Time	12:00pm (home)
Milage 4	Previous Visit 20/12/06	Visit By SCT	

Type of construction work: Extension to school + new swimming pool

Contacts made: Site Manager

Archaeology present?

Yes:

No: ✓

Undated:

Other:

COMMENTS

No work on swimming started yet. Site Manager said that groundwork constractor not due on site until tomorrow. After 'set-up etc' probably not envisaging work to commence until Wednesday.

Site Manager advised visit later Wednesday or Thursday.

SCT enquired about further significant groundwork - site manager 'soon enough'.

- SCT noticed shallow (infilled) trench leading from lawn area to west of site along pavement. - this would appear to be less than 0.5m in depth.

Records? None.

Oxford Archaeology	**WATCHING BRIEF RECORD**		28
SITE CODE AY234	SITE NAME Pilgrims' School, Winchester		DATE 2 11/1/07
NGR	County	Start Time	7:45 (home)
		Finish Time	9:30 (County Hall)
Milage 3	Previous Visit 8/1/07	Visit By SCT	

Type of construction work: Ext + Swimming pool

Contacts made: Site Manager

Archaeology present?

Yes:

No: ✓

Undated:

Other:

COMMENTS

Work on digging out of new swimming pool not yet started.
Site manager explained that work delayed because of weather (wind)
Machine coming to site today,
start digging tomorrow (weather permitting)
SCT Jain will visit on Monday.

Records? —

Oxford Archaeology

WATCHING BRIEF RECORD

29

SITE CODE	SITE NAME Pilgrims' School, Winchester		DATE 15/1/07
NGR	County Hants	Start Time	7:50 (home)
		Finish Time	10:30 (OA)
Milage 3+55 = 58	Previous Visit 11/1/07	Visit By SCT	

Type of construction work: Extension to School (New Swimming Pool)

Contacts made: Site Manager

Archaeology present?

Yes:

No: ✓

Undated:

Other:

COMMENTS

On site 8:15 – 8:35 am.
– Work has just started on excavation for new swimming pool (SE corner)
– Depth so far c.0.7 – 0.8m (just penetrating) topsoil – revealing underlying 17–18C + mortar rubble make-up (see evaluation TR 1)

Spoke to machine driver (3 Tn 360° digger). He will proceed at this level initially throughout the footprint of the new pool – before returning to dig to formation depth.
Depending on rate of strip, this will take most of the week (at least).

SCT will return on Friday or Monday to monitor progress. Since pre-17/18C levels unlikely to be reached in the meantime.

Records? No.

Oxford Archaeology	**WATCHING BRIEF RECORD**		30
SITE CODE A-4234	SITE NAME Pilgrim's School, Winchester		DATE 19/1/07
NGR	County Hants	Start Time	7:55 (home)
		Finish Time	9:50 (OA)
Milage 3+55=58	Previous Visit 15/11/07	Visit By SCT	

Type of construction work: Extension to school - new swimming pool.

Contacts made: Machine driver

Archaeology present?

Yes: ~~✓~~

No: ✓

Undated:

Other:

COMMENTS

Little significant progress since last visit.
- Further 0.5 - 0.7m topsoil/etc removed down to 17-18c Mortar rubble make-up. This deposit is as seen in evaluation trenches (and earlier in WB in N-side of site).
Mainly chalk + mortar rubble with occ flint, and CBM frags. No evidence for architectural frags (presumably removed prior to dumping).

Spoke to machine driver who said rate of work is dependant on availability of crane ~~wit~~ to remove strips of spoil - Said his timetable was 2 wks but clearly this going to take much longer.

A further visit is not recommended prior to the end of next week.

Records? —

Oxford Archaeology	**WATCHING BRIEF RECORD**		31
SITE CODE A1234	SITE NAME Pilgrims School, Winchester		DATE 26/01/07
NGR	County Hants	Start Time	12:45 (OA)
		Finish Time	4.00 (home)
Milage 55	Previous Visit 19/1/07	Visit By SCT	

Type of construction work: School Extension – new swimming pool

Contacts made: Site Surveyor (Dean)

Archaeology present?

Yes:

No:

Undated:

Other: ✓

COMMENTS

General depth achieved 1.2 – 1.3m over most of the area of the new swimming pool – apart from NW corner. Over much of the area the c17-18c mortar rubble is exposed at base of excavation – apart from along western side where Late Post Med gravelly soils (pre-date mortar rubble) are exposed, but not breached. Distinct limit of 17-18c rubble within N-facing side and along base of excavation.

- Started to draw 1:50 profile of N-face of excavation
- Took photos of section
- Dean said further c.0.5m excavation required – this will continue once piles have been beaten down.

Records? Film 6/1-4, Section 508.

Oxford Archaeology	**WATCHING BRIEF RECORD**		32
SITE CODE A7234	SITE NAME Pilgrim's School, Winchester		DATE 1/2/07
NGR	County Hants	Start Time	12:20 (Oxford)
		Finish Time	4pm (home)
Milage 55	Previous Visit 26/1/07	Visit By SCT	

Type of construction work: New swimming pool etc

Contacts made: Site Manager

Archaeology present?

Yes:

No: ✓

Undated:

Other:

COMMENTS

Completed reduction to 1.2–1.3 over completed area of swimming pool + 'annex' on NW side (almost complete)

– Next reduction will commence Monday to formation level c. 1.6–1.7m depth. This will be done in small spits (since water-table has been reached) infilling with blinding as progress continues.

Will pay a visit towards end of next week.

Records? General progress B/W/CIS shots

Oxford Archaeology

WATCHING BRIEF RECORD

33

SITE CODE	SITE NAME Pilgrims' School, Winchester		DATE 7/2/07
NGR	County Hants	Start Time	7:45 (Home)
		Finish Time	10:15 (Soton College)
Milage 3+15 (OA VAN)	Previous Visit 1/2/07	Visit By SCr	

Type of construction work
New Swimming pool

Contacts made
Site Manager

Archaeology present?

Yes:

No:

Undated:

Other: ✓

COMMENTS

Work progressing rather slowly despite what Site Manager says - Northern arm of pool now down to formation level c. 1.8m below surface of former play court. c. 0.20-0.25 below water table.
Dark grey soils revealed to formation level (late med - post med 'garden soil' etc. Cut for a large rubble filled 'cut' alongside W-side of pool (As revealed during observation of crane pit in 1999?) Contains mortar rubble/slate etc - probably similar date to 17-18C infilled at E-side of pool
- Will return early next week

Records? Digi shots - continued section 508.

Oxford Archaeology	**WATCHING BRIEF RECORD**		34
SITE CODE A-1234	SITE NAME Pilgrims' School, Winchester		DATE 15/2/07
NGR	County Hants	Start Time	7:40 (Home)
		Finish Time	9:20 (Solon NC)
Milage 3	Previous Visit 7/2/07	Visit By SCF	

Type of construction work: Exc. of new swimming pool

Contacts made: Site Manager / groundworker

Archaeology present?

Yes:

No:

Undated:

Other: ✓

COMMENTS

Swimming pool at formation level apart from c100-200mm in a few areas.
- lower level than those recorded before not reached
- 2 large Mortar rubble areas fill most of the site (c17-18C infill?) recorded as in TR 1 eval / TR 2 eval. & earlier 1999-2000 WB
- A small strip between - 'garden soil' not breached
- will be filling in with concrete later today onwards
- site manager said no more significant groundwork planned although unsure about new swimming pool drainage arrangements - probably W of site - positive, shallow
- will let OA know if significant

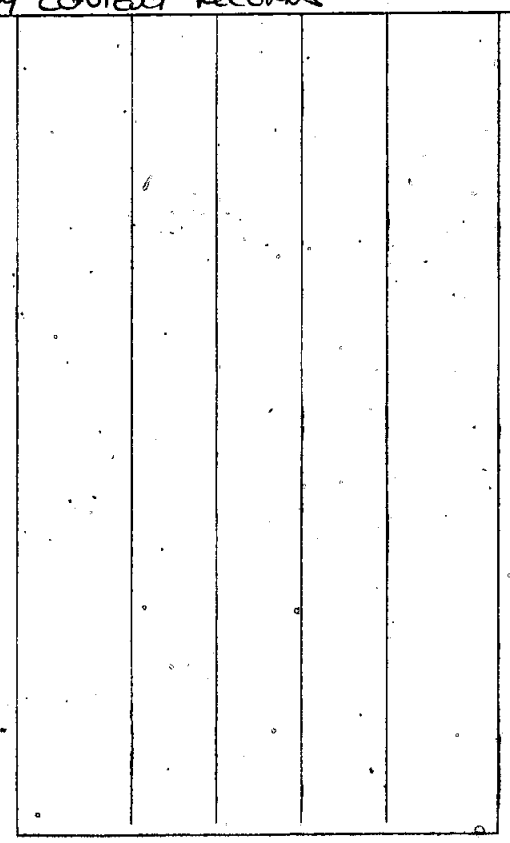
Records? Digi Photo.

Winchester, Pilgrims School

WINCM: A/234

Box 1 file 4

B. Primary Contract Records



OXFORD ARCHAEOLOGY, JANUS HOUSE, OSNEY MEAD, OXFORD, OX2 OES

SCAN PDF

FILMING INSTRUCTIONS
Submitter OASouth
No. of CD copies: 2

Headings
Site information
Line 1: [OASouth] County:[Hampshire] Parish:[Winchester] Site:[Pilgrims School]
Site code[WINCM:AY234]
Line 2: Excavators name[Ford, B]
Line 3:

Classification of material	Tick if present
Index to archive	
Introduction	
A:Final Report	
A:Publication Report	
B:Site Data – Text: Diary/Daybook/Fieldnotes	
B: Site Data – Text: General Summaries	
B: Site Data – Text: Primary Context Records	✓
B: Site Data – Text: Synthesised Context Records	
B: Site Data – Text: Survey Reports	
B: Site Data – Text: Catalogue of Drawings	
B: Site Data – Text: Primary Drawings	
B: Site Data – Text: Synthesised Drawings	
C: Finds Data – Text: Primary Finds Data	
C: Finds Data – Text: Synthesised Finds Data	
C: Finds Data – Text: Specialist Reports	
C: Finds Data – Text: Box/Bag List	
D: Catalogue of Photos/Slides/Videos/X--rays	
E: Environmental/Ecofact Data: Primary Records	
E: Environmental/Ecofact Data: Synthesised Records	
E: Environmental/Ecofact Data: Specialist Reports	
F: Documentary	
F: Press and Publicity	
G: Correspondence	
H: Miscellaneous	

*Note Problem with level - Added 0.13m on to value,

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LEVELS REGISTER

SITE CODE: WINCMAY 234 | SITE NAME: WINCH. PILGRIMS SCHOOL TR 1 | SHEET NO: 1

TBM	Backsite	Instrument Height (IH) (TBM+Backsight)	Level number	Foresight	Reduced Level (IH-Foresight) * 47	Comments/Context No(s)/ Small Find No(s)/Plan or Section No(s)
33.25	1.66	34.91	↑	1.57	33.34	S.106
	1.66		1	3.17	31.87	P.104
			2	3.19	31.85	
			3	4.04	31.00	
			4	3.31	31.73	
			5	Staff to low.		See Section S.1.
			6	3.11	31.93	
			7	3.88	31.16	
			8	2.63	32.41	
			9	2.95	32.09	
			10	3.81	31.23	
			11	3.89	31.15	
			12	3.80	31.24	

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LEVELS REGISTER — TRENCH TWO

SITE CODE WINCHAM 234 | SITE NAME PILGRIMS SCHOOL, WINCHESTER | SHEET NO 1

TBM	Backsite	Instrument Height (IH) (TBM+Backsight)	Level number	Foresight	Reduced Level (IH-Foresight)	Comments/Context No(s)/ Small Find No(s)/Plan or Section No(s)
33.42	1.32	34.74	T1	1.43	33.31	PLAN 200, (202)
			T2	1.42	33.32	PLAN 200, (203)
			T3	1.43	33.31	PLAN 200, (204)
			T4	1.41	33.33	PLAN 200, (205)
			T5	1.50	33.24	PLAN 200, (206)
33.42	1.50	34.92	T6	2.40	32.52	CONTEXT 208
			T7	2.32	32.60	CONTEXT 208
			T8	2.45	32.47	CONTEXT 208
			T9	2.49	32.43	CONTEXT 208
33.42	1.37	34.79	T10	2.76	32.03	[redacted] (1)
			T11	2.79	32.00	(2)
			T12	2.90	31.89	(3)
33.42	1.63	35.05	T13	3.11	31.94	Context (209)
			T14	3.14	31.91	CONTEXT (210) top
			T15	3.18	31.87	Context (210) top *
			T16	3.23	31.82	(4)
33.42	1.63	35.05	T17	1.60	33.45	DRAWING POINT 3
			T18	1.61	33.44	DRAWING POINT 4
			T19	1.57	33.48	DRAWING POINT 5
			T20	1.63	33.42	DRAWING POINT 6
			T21	1.68	33.37	DRAWING POINT 7
			T22	1.64	33.41	DRAWING POINT 8
			T23	1.58	33.47	DRAWING POINT 9
			T24	1.59	33.46	DRAWING POINT 10

* Excavation ceased at this level in Trench 2

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LEVELS REGISTER

SITE CODE WINCMAY 234 | SITE NAME WINCHESTER PILGRIMS WAY | SHEET NO 1 (TR. 3)

TBM	Backsite	Instrument Height (IH) (TBM+Backsight)	Level number	Foresight	Reduced Level (IH-Foresight)	Comments/Context No(s)/ Small Find No(s)/Plan or Section No(s)
33.10	1.23	34.33	T1	2.60	31.69	PLAN 300
			T2	3.28	31.05	
			T3	2.92	31.41	
			4	2.98	31.35	
			5	2.96	31.37	
			6	2.98	31.35	
			7	2.96	31.37	
			8	2.96	31.37	
			9	2.90	31.43	
			10	2.98	31.35	
			11	2.98	31.35	
33.10	1.35	34.45	T	1.72	32.73	SECTION 300
~~33.10~~	~~1.27~~	~~34.37~~	T	3.42	31.03	BOTTOM OF THE PIT
33.10	1.27	34.37	T1	2.75	31.62	Top of (318)
			T2	2.88	31.49	
			T3	2.83	31.54	
			T4	2.93	31.44	
			T5	3.01	31.36	
			T6	2.59	31.78	
33.10	1.36	34.46	T1	3.45	31.01	Small find 9
11	11	11	T2	3.61	30.85	Small find 10
11	11	11	T3	3.73	30.73	Small find 11
11	11	11	T4	3.89	30.57	Small find 12
		11		3.85	30.61	SFS 13
		11		3.87	30.59	14
33.10	1.33	34.43	T	3.90	30.53	15
			T	3.95	30.48	16
			T	3.56	30.87	17
			T	3.88	30.55	18
			T	3.94	30.49	19
33.10	1.43	34.53		2.75	31.78	TOP OF TR BOREHOLE 5
				2.62	TOP OF (36)	30.91

(319)

3.42 2.26 (35) 32.26
3.48 (37) 32.05

Oxford Archaeology

LEVELS REGISTER

SITE CODE WINCMAY 234 | SITE NAME WINCH PILGRIMS SCHOOL | SHEET NO 2 (TR3)

TBM	Backsite	Instrument Height (IH) (TBM+Backsight)	Level number	Foresight	Reduced Level (IH-Foresight)	Comments/Context No(s)/ Small Find No(s)/Plan or Section No(s)
33.10	1.43	34.53	1	2.75	31.78	TOP 38
			2	2.62	31.91	36
			3	2.26	32.26	35
			4	3.48	31.05	37
	1.47	34.57	5	3.89 ~~1.147~~	30.68	25

Oxford Archaeology

LEVELS REGISTER

SITE CODE A7234 | SITE NAME Pilgrim's School, Winchester | SHEET NO 1 of 1

TBM	Backsite	Instrument Height (IH) (TBM+Backsight)	Level number	Foresight	Reduced Level (IH-Foresight)	Comments/Context No(s)/ Small Find No(s)/Plan or Section No(s)
33.45	1.55	35.00	1	1.46	33.54	S.400
35.95	0.91	36.86		2.89	33.97	
	0.99	34.96		1.54	33.42	Taped TBM
	1.53	34.95		1.50	33.45	TBM height
~~33.45~~				~~1.45~~	~~33.50~~	~~TBM temp base~~
				1.46	33.49	Tr 1 test
33.45	1.55	35.00		2.66	32.34	S400 (Phase 2)
				3.14	31.86	Sondage depth
~~33.45~~		35.00		1.51	33.49	Borehole 9
				1.51	33.49	10
				1.46	33.54	11
				1.47	33.53	12
				1.46	33.54	13
				1.45	33.55	14
				1.54	33.46	15
				1.49	33.51	16
33.42	1.53	34.95		1.29	33.66	Borehole 1
				1.70	33.25	2
				1.74	33.21	3
				1.76	33.19	4
				1.79	33.16	5
				1.38	33.57	6
				1.24	33.71	7
				1.33	33.62	8

Oxford Archaeology

LEVELS REGISTER

SITE CODE A7234 | SITE NAME Pilgrim's School, Winchester | SHEET NO 1 of 1

TBM	Backsite	Instrument Height (IH) (TBM+Backsight)	Level number	Foresight	Reduced Level (IH-Foresight)	Comments/Context No(s)/ Small Find No(s)/Plan or Section No(s)
33.45	1.55	35.00	1	1.46	33.54	S.400
35.95	0.91	36.86		2.89	33.97	
	0.99	34.96		1.54	33.42	Taped TBM
	1.53	34.95		1.50	33.45	TBM height
~~33.45~~				~~1.45~~	~~33.50~~	~~TA temp bm~~
				1.46	33.49	Tr 1 test
33.45	1.55	35.00		2.66	32.34	S400 (Plan 2)
				3.14	31.86	Sandage depth
~~33.45~~		35.00		1.51	33.49	Borehole 9
				1.51	33.49	10
				1.46	33.54	11
				1.47	33.53	12
				1.46	33.54	13
				1.45	33.55	14
				1.54	33.46	15
				1.49	33.51	16
33.42	1.53	34.95		1.29	33.66	Borehole 1
				1.70	33.25	2
				1.74	33.21	3
				1.76	33.19	4
				1.79	33.16	5
				1.38	33.57	6
				1.24	33.71	7
				1.33	33.62	8

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CONTEXT CHECKLIST

SITE CODE WINCMAY 234 | SITE NAME PILGRIMS WAY WINCHESTER

Context number	Type	Excavated within segments	Relationships	Drawn		Matrix	Comments	Recorder initials
				Section	Plan			
100	DEP			100	100		DEMOLITION LAYER	RW/CS
101	DEP						DEMOLITION LAYER	
102	DEP						DEMOLITION LAYER	
103	DEP				100 102,104		RUBBLE / MAKE-UP	
104	DEP						DEMOLITION MAKE-UP	
105	DEP						DUMP OF SOIL/MAKE-UP	
106	FILL		Fo 115				FILL OF FLOWER BED	
107	FILL		Fo 114				FILL OF FLOWER BED	
108	FILL		Fo 113				ASHLAR PATH	
109	DEP						TOPSOIL	
110	DEP						MAKE-UP LAYER	
111	FILL		Fo 112		100	100	PIT FILL	
112	CUT		Fb 111		101 100	~~100~~	? RUBBISH PIT	
113	CUT		Fb 108				CUT FOR PATH	
114	CUT		Fb 107				CUT FOR FLOWER BED	
115	CUT		Fb 106				CUT FOR FLOWER BED	
116	DEP.			100			DEMOLITION / MAKE-UP	
117	STRUCT				102 100 103	104	WALL.	
118	CUT		Fb 119-121		102		MED CESS PIT	
119	WOOD		Fo 118				WOODEN LINING TO 118	
120	DEP		" "				CESSY FILL OF 118	
121	DEP		" "				MORTAR + CHALK CAP TO 118	
122	DEP		" "				CESSY FILL OF 118	
123	DEP		BELOW 101	100			ORANGE BROWN CLAY LOAM.	
124	WOOD		CUTS 116				PLANK WITHIN 119	MDG
125	WOOD		" "				PLANK in 119	
126	WOOD		" "				PLANK IN 119	
127	CUT		CUTS 123				RECTANGULAR PIT.	
128	DEP		To 127				To PIT 127	
129	DEP		BELOW 123	100			ORANGE BROWN CLAY LOAM	
130	WOOD		CUTS 116				PLANK Part of 119	
131	WOOD		" "				" " "	

Oxford Archaeology

CONTEXT CHECKLIST

SITE CODE WSWCPW 234 | SITE NAME Pilgrims Way Winchester.

Context number	Type	Excavated within segments	Relationships	Drawn		Matrix	Comments	Recorder initials
				Section	Plan			
132	Wood		CUTS (116)	100			Plank, part of 119	MDC
133	Wood		" "				" " " "	"
134	Wood		" "				" " " "	"
135	Wood		" "				" " " "	"
~~136~~	~~Deposit~~						~~Demolition/makeup~~	~~RM~~
136	Deposit				103		Demolition/makeup	RM
137	Deposit		Below (136)	100			Demolition/Fill	RM
138	Cut		Fb (139)	100	103		Construction for 117?	RM
139	Deposit		Fo [138]	100			Back fill of construction [138]	RM
140	CUT		TO 141		103		Poss. BEAM SLOT	C
141	DEP		Fo 140				Fo BEAM SLOT	C
142	DEP		Below (137)	100			Orange layer	RM
143	DEP		Below 142	100			Dark grey/black layer	MDC
144	DEP		Below 143	100			Dark grey clay loam	"
145	CUT		Fo 142-144	100			CONSTRUCTION FOR 117	C
146	WOOD		Cuts (151)		104		Plank.	RM
147	WOOD		Cuts (151)		104		Plank.	RM
148	WOOD		Cuts (151)		104		Plank	RM
149	DEP			100			Mortar Capping/Demolition	RM
150	DEP		Below (149)	100			Clay Silt layer	RM
151	DEP		Below (150)	100	104		Peat layer	RM
152	"		Cut by 145	100	104		Dark Soil	SCT
153	"		Below (152)	100			Dump?	"
154	"		Below (153)	100			Decayed Turf?	"

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CONTEXT RECORD

Context No. 100

SITE WINCMAY234 | ADDITIONAL SHEETS: | TYPE LAYER

Trench 1	Context Type: Deposit / ~~Cut / Structure~~
Site sub-div	Overlain by: 102 105 106 116
Structure No.	Abutted by:
Plan No. 100 ADD SHEET	Cut by: 115 114
	Filled by:
Section No. 100	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies: 101
Level	Butts:
Slide No.	Cuts:
Neg No.	Fill of:
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

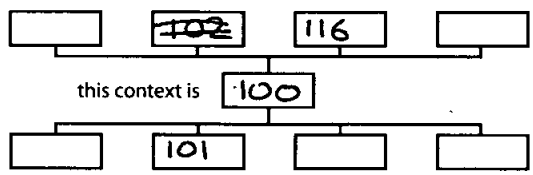
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4 coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

(1) FRIABLE
(2) MID GREY BROWN
(3) SILT
(4) 5% CHALK GRANULES, 1% CBM (MORTAR+TILE), 2% CHALK LUMPS
(5) 0.4m THICK
(6) BUTTS WALL TIPS DOWN TO ~~SOUTH~~ NORTH EAST

STRATIGRAPHIC MATRIX



Interpretation/Discussion

DEMOLITION LAYER. QUITE A STERILE BACKFILL. CONTAINS SOME MED. POT.

Finds (tick): None [ ] Pot [ ] Bone [✓] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [✓] CBM [✓] Wood [ ] Leather [ ]

△ Small Finds
◇ Samples
⌂ Building Materials

Recorder GUY
Date 15/8/05
Initials

Oxford Archaeology

CONTEXT RECORD ADDITIONAL SHEET

Context No. 100

SITE CODE AY234 | SITE NAME Pilgrim's Way School | SHEET NO. 1

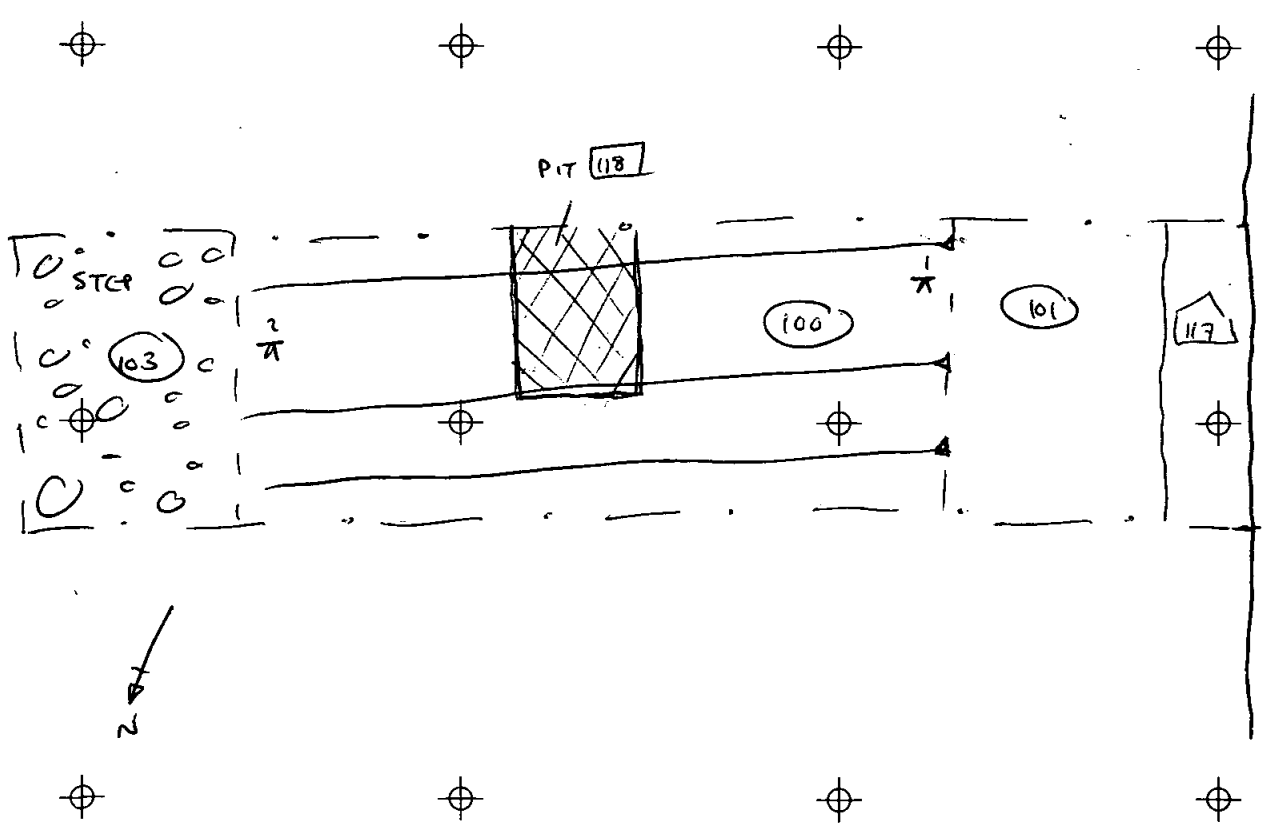
TBM

BS

FS 1 =

2 =

SKETCH PLAN OF LAYER (100). TRENCH 1. 1:50.



Oxford Archaeology

CONTEXT RECORD

Context No. 101

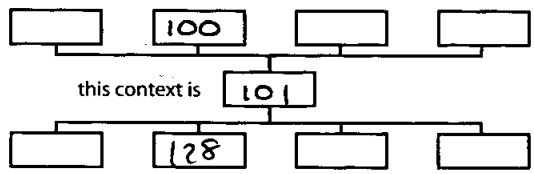
SITE WINCMAY 234 | ADDITIONAL SHEETS: | TYPE LAYER

Trench 1	Context Type: Deposit / ~~Cut / Structure~~	Check Lists:
Site sub-div	Overlain by: 100	DEPOSIT: 1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions
Structure No.	Abutted by:	
Plan No.	Cut by:	
	Filled by:	
Section No. 100	Same as:	CUT: 1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments
Co-Ordinates	Part of:	
	Consists of:	
	Overlies:	
Level	Butts: (WALL)	MASONRY: 1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments
Slide No.	Cuts:	
Neg No.	Fill of:	
Matrix location	Relationships uncertain	

Description (See check lists):

1. FRIABLE
2. MID YELLOWY GREY
3. MORTARY SILT
4. 10% CHALK GRANULES, 1% FLINT FRAGS c. 100mm Ø
   1% CBM (SLATE)
5. > 0.3 m THICK (NOT FULLY EXCAVATED)

STRATIGRAPHIC MATRIX



Interpretation/Discussion

DEMOLITION LAYER. INCLUDES A SIGNIFICANT PROPORTION OF MORTAR & BUTTS UP AGAINST MAIN WALL AT SW END OF TRENCH. POSSIBLY ASSOCIATED WITH DEMOLITION OF ONE PHASE OF WALL.

23/08/05. CS. CONFIRMED AS ROBBING & DEMOLITION OF 117.

Finds (tick): None [ ] Pot [✓] Bone [✓] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [✓] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder GUY

Date 15/8/05

Initials

Oxford Archaeology

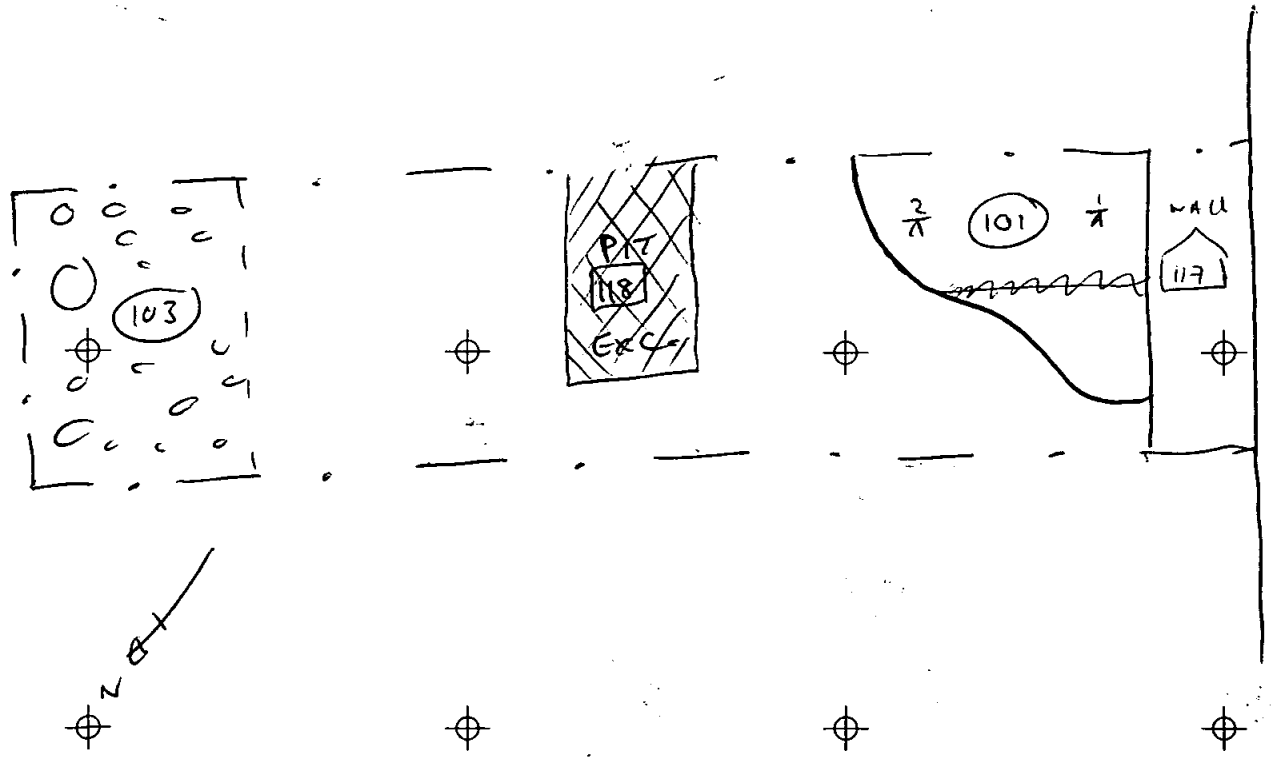
CONTEXT RECORD ADDITIONAL SHEET

Context No. (101)

SITE CODE AY234 | SITE NAME PILGRIM'S WAY WINCHESTER | SHEET NO. 1

TBM	33.42		
BS	1.69		35.11
FS	1.2.85	=	32.26
	2.2.89	=	32.22

SKETCH PLAN OF LAYER (101). TRENCH 1. 1:50



Oxford Archaeology

CONTEXT RECORD

Context No. 102

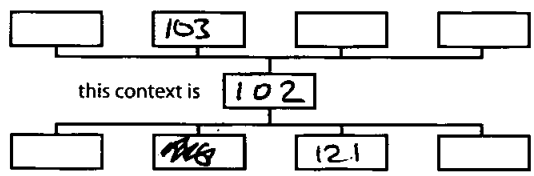
SITE WINCMAY 234 | ADDITIONAL SHEETS: (1) | TYPE LAYER

Trench 1	Context Type: Deposit / ~~Cut / Structure~~	Check Lists:
Site sub-div	Overlain by: 103 104	DEPOSIT: 1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions
Structure No.	Abutted by:	
Plan No. ADD. SHEET	Cut by:	
	Filled by:	
Section No. 100	Same as:	CUT: 1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments
Co-Ordinates	Part of:	
	Consists of:	
	Overlies: 116 100 121	
Level	Butts:	MASONRY: 1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments
Slide No.	Cuts:	
Neg No.	Fill of:	
Matrix location	Relationships uncertain	

Description (See check lists):

(1) FIRM — FRIABLE
(2) MID GREY
(3) SILT
(4) 20% CHALK FRAGS c. 40mm Ø, 5% MORTAR, 1% FLINT FRAGS
(5) 0.18M THICK
(6) 1.6M N—S

STRATIGRAPHIC MATRIX



Interpretation/Discussion

~~DEMOLITION LAYER~~. QUITE A FINE SILT. POSSIBLY DEPOSITED IN STANDING WATER AS RIVER FLOODED. CONTAINS MED. POT, BONE & SHELL. FIRST MEDIEVAL LAYER SEALS CESS PIT 118

Finds (tick): None [ ] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds 5

◇ Samples

⌂ Building Materials

Recorder GUY

Date 15/8/05

Initials SCT

Oxford Archaeology

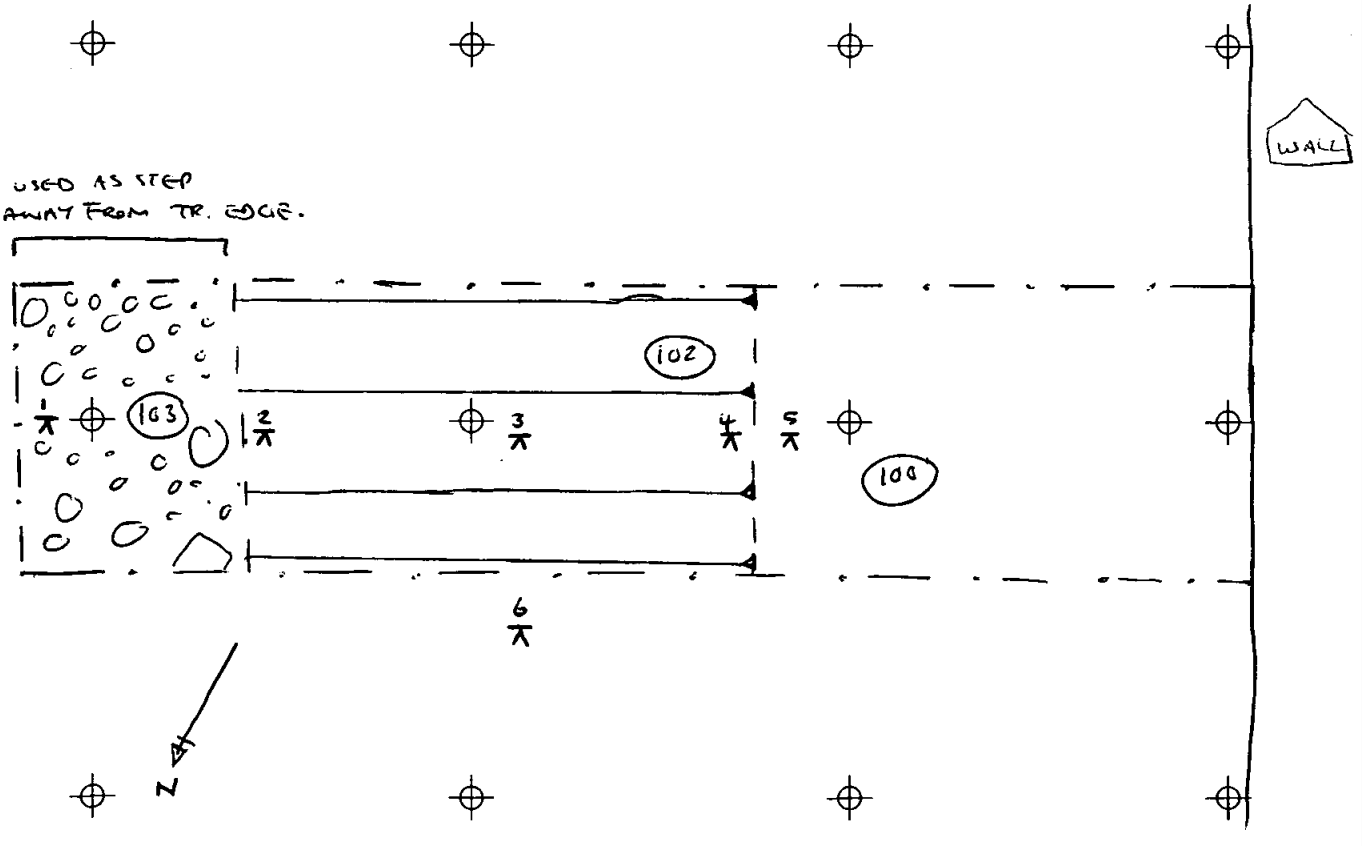
CONTEXT RECORD ADDITIONAL SHEET

Context No. 102

SITE CODE AY234 | SITE NAME PILGRIMS WAY, WINCHESTER | SHEET NO. 1

TBM		33.42
BS		1.47 = 34.89
FS	1	3.03 = 31.86
	2	2.93 = 31.93
	3	2.57 = 31.92
	4	2.33 = 32.56
	5	2.50 = 32.39
	6	1.35 = 33.54

SKETCH PLAN OF CONTEXT (102), APPROX 1:50. TRENCH 1.



Oxford Archaeology

CONTEXT RECORD

Context No. 103

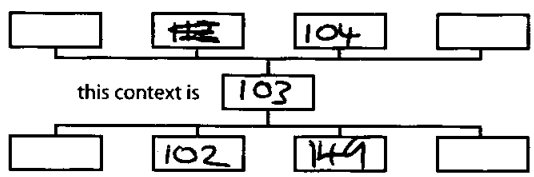
SITE WINCMAY 234 | ADDITIONAL SHEETS: | TYPE LAYER

Trench 1	Context Type: Deposit / ~~Cut / Structure~~	Check Lists:
Site sub-div	Overlain by: 104 110	DEPOSIT: 1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions
Structure No.	Abutted by:	
Plan No. 100, 102, 104	Cut by: 112	
	Filled by:	
Section No. 100	Same as:	CUT: 1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill pos 7. other comments
	Part of:	
Co-Ordinates	Consists of:	
	Overlies: (102), (149)	
Level	Butts:	MASONRY: 1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments
Slide No.	Cuts:	
Neg No.	Fill of:	
Matrix location	Relationships uncertain	

Description (See check lists):

(1) FRIABLE
(2) DARK GREY BROWN
(3) SILT
(4) 5% GRANULAR CHALK, 1% FLINT c. 120mmØ, 1% CBM (SLATE)
(5) 0.12m THICK
(6) 0.9m N-S

STRATIGRAPHIC MATRIX



Interpretation/Discussion

- RUBBLE / MAKE-UP LAYERS. CUT BY PIT 112. APPEARS TO HAVE MED - POST-MED POT INCLUSIVE.

Finds (tick): None [ ] Pot [✓] Bone [✓] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [✓] CBM [✓] Wood [ ] Leather [ ]

△ Small Finds	Recorder Guy
◇ Samples	Date 15/8/05
⌂ Building Materials	Initials JCT

Oxford Archaeology

CONTEXT RECORD

Context No. 104

SITE WINCMAY234

ADDITIONAL SHEETS:

TYPE LAYER

Trench 1	Context Type: Deposit / ~~Cut / Structure~~
Site sub-div	Overlain by: 105 109
Structure No.	Abutted by:
Plan No.	Cut by: 112
	Filled by:
Section No. 100	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies: 103
Level	Butts:
Slide No.	Cuts:
Neg No.	Fill of:
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

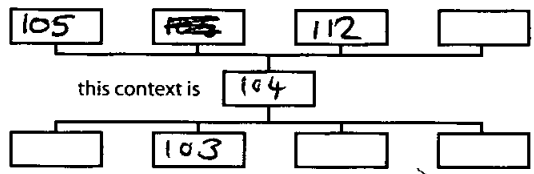
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

1. FRIABLE
2. LIGHT GREY
3. MORTARY SILT
4. 20% CBM (TILE, FLINT)
5. 0.35m THICK (MAX)
6. 3.2m (N-S)

STRATIGRAPHIC MATRIX



Interpretation/Discussion

DEMOLITION MAKE-UP LAYER

Finds (tick): None [ ] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder GUY

Date 15/8/05

Initials SLT

Oxford Archaeology

CONTEXT RECORD

Context No. 105

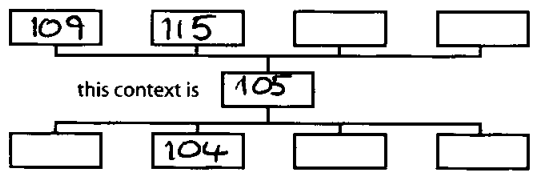
SITE WINCMAY Q34 | ADDITIONAL SHEETS: | TYPE LAYER

Trench 1	Context Type: Deposit / ~~Cut / Structure~~	Check Lists:
Site sub-div	Overlain by: 109	DEPOSIT: 1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions
Structure No.	Abutted by:	
Plan No.	Cut by: 113 115	
	Filled by:	
Section No. 100	Same as:	CUT: 1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments
Co-Ordinates	Part of:	
	Consists of:	
	Overlies: 104 100	
Level	Butts:	MASONRY: 1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments
Slide No.	Cuts:	
Neg No.	Fill of:	
Matrix location	Relationships uncertain	

Description (See check lists):

(1) FRIABLE
(2) MID GREY BROWN
(3) MIXED SOILY SILT + MORTAR
(4) 2% MORTAR + CBM, 2% CHALK GRANULES, 2% CHARCOAL FLECK
(5) 0.2m THICK
(6) 0.8m (N-S) CUT AWAY TO S. BY ~~10~~ [115]

STRATIGRAPHIC MATRIX



Interpretation/Discussion

DUMP OF SOIL / MAKE-UP LAYER

Finds (tick): None [ ] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds
◇ Samples
⌂ Building Materials

Recorder GUY
Date 15/8/05
Initials SCF

Oxford Archaeology

CONTEXT RECORD

Context No. 106

SITE WINCMAY 234

ADDITIONAL SHEETS:

TYPE FILL

Trench	
Site sub-div	
Structure No.	
Plan No.	
Section No. 100	
Co-Ordinates	
Level	
Slide No.	
Neg No.	
Matrix location	

Context Type: Deposit / ~~Cut / Structure~~

Overlain by:

Abutted by:

Cut by: 113 114

Filled by:

Same as:

Part of:

Consists of:

Overlies:

Butts:

Cuts:

Fill of: 115

Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

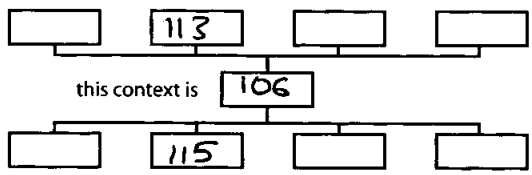
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

(1) FRIABLE
(2) LIGHT GREY BROWN
(3) SILT
(4) 2% CHALK FLECK, 1% CBM (TILE)
(5) 0.17M THICK
(6) FILL OF [115], 1.2M WIDE (LINEAR E-W)

STRATIGRAPHIC MATRIX



Interpretation/Discussion

FILL OF FLOWER BED

Finds (tick): None [ ] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder GUY

Date 15/8/05

Initials SG

Oxford Archaeology

CONTEXT RECORD

Context No. 107

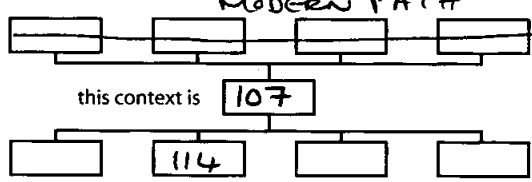
SITE WINCMAY 234 | ADDITIONAL SHEETS: | TYPE FILL

Trench 1	Context Type: Deposit / ~~Cut / Structure~~	Check Lists:
Site sub-div	Overlain by: GRAVEL PATH	DEPOSIT: 1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions
Structure No.	Abutted by:	
Plan No.	Cut by:	
	Filled by:	
Section No. 100	Same as:	CUT: 1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments
Co-Ordinates	Part of:	
	Consists of:	
	Overlies:	
Level	Butts:	MASONRY: 1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments
Slide No.	Cuts:	
Neg No.	Fill of: 114	
Matrix location	Relationships uncertain	

Description (See check lists):

1. FRIABLE
2. DARK BROWNY GREY
3. SILT
4. 1% CHALK FLECK
5. 0.34m THICK
6. 0.9m WIDE (FILL OF [114])

STRATIGRAPHIC MATRIX



Interpretation/Discussion

FILL OF FLOWER BED, GARDEN SOIL SEALED BY MODERN GRAVEL PATH.

Finds (tick): None [ ] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds	Recorder GUY
◇ Samples	Date 15/8/05
⌂ Building Materials	Initials SL

Oxford Archaeology

CONTEXT RECORD

Context No. 108

SITE WINCMAY 234 | ADDITIONAL SHEETS: | TYPE FILL

Trench 1	Context Type: Deposit / ~~Cut / Structure~~
Site sub-div	Overlain by:
Structure No.	Abutted by:
Plan No.	Cut by: 114
	Filled by:
Section No. 100	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies:
Level	Butts:
Slide No.	Cuts:
Neg No.	Fill of: 113
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

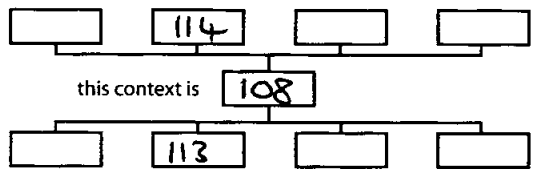
CUT:
1. shape in plan 2. base/sides/top ~~profile~~ 3. ~~dimension and~~ depth 4. ~~sketch~~ 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4 coursing/~~bond~~ 5. form 6. faces 7. ~~bond~~ 8. dimensions as found 9. other comments

Description (See check lists):

(1) FRIABLE
(2) MID REDDISH BROWN + BLACK
(3) SILTY CLAY
(4) OCC. GRAVEL
(5) 0·18m THICK
(6) 1·2m WIDE (FILL OF [113]) LINEAR PATH c. 50m LONG

STRATIGRAPHIC MATRIX



Interpretation/Discussion

ASHLAR PATH

CUT BY FLOWER BED [114]. SEALED BY MODERN PATH.

Finds (tick): None [ ] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds
◇ Samples
⌂ Building Materials

Recorder GUY
Date 15/8/05
Initials GT

Oxford Archaeology

CONTEXT RECORD

Context No. 109

SITE WINKMAY 234

ADDITIONAL SHEETS:

TYPE LAYER

Trench 1	Context Type: Deposit / ~~Cut / Structure~~
Site sub-div	Overlain by: GRAVEL PATH
Structure No.	Abutted by:
Plan No.	Cut by: 113
	Filled by:
Section No. 100	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies: 110 105 104
Level	Butts:
Slide No.	Cuts:
Neg No.	Fill of:
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

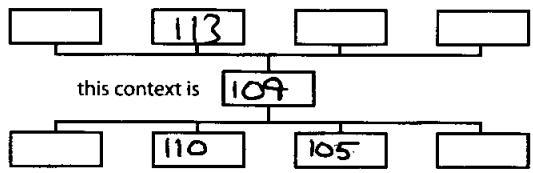
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

1. FRIABLE
2. DARK BROWN
3. SILT
4. FREQ. GRAVEL, OCC. TILE/BRICK FRAG.
5. 0.39M THICK
6. SOUTHERN 6.2M OF THE TRENCH THEN CUT AWAY BY 113

STRATIGRAPHIC MATRIX



Interpretation/Discussion

TOPSOIL

Finds (tick): None [ ] Pot [✓] Bone [✓] Flint [ ] Stone [ ] Burnt stone [ ] Glass [✓] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder GUY

Date 15/8/05

Initials SLA

Oxford Archaeology

CONTEXT RECORD

Context No. 110

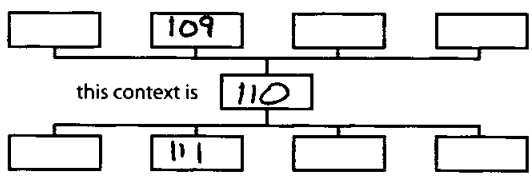
SITE WINCMAY234 | ADDITIONAL SHEETS: | TYPE LAYER

Trench 1	Context Type: Deposit / ~~Cut / Structure~~	Check Lists:
Site sub-div	Overlain by: 109	DEPOSIT: 1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions
Structure No.	Abutted by:	
Plan No.	Cut by:	
	Filled by:	
Section No. 100	Same as:	CUT: 1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments
Co-Ordinates	Part of:	
	Consists of:	
	Overlies: 103 111	
Level	Butts:	MASONRY: 1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments
Slide No.	Cuts:	
Neg No.	Fill of:	
Matrix location	Relationships uncertain	

Description (See check lists):

(1) FRIABLE
(2) LIGHT GREY BROWN
(3) SILT
(4) 1% CBM FRAGS, 5% MORTAR, 20% GRAVEL, 5% FLINT FRAGS c. 100mm Ø
(5) 0.5M THICK
(6) FOR @ 3.9M FROM N. END OF THE TRENCH

STRATIGRAPHIC MATRIX



Interpretation/Discussion

MAKE-UP LAYER

Finds (tick): None [ ] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds
◇ Samples
⌂ Building Materials

Recorder GUY
Date 15/8/05
Initials SUT.

Oxford Archaeology

CONTEXT RECORD

Context No. 111

SITE WINCMAY 234 | ADDITIONAL SHEETS: | TYPE FILL

Trench 1	Context Type: Deposit / ~~Cut / Structure~~
Site sub-div	Overlain by: 110
Structure No.	Abutted by:
Plan No.	Cut by:
	Filled by:
Section No. 100	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies:
Level	Butts:
Slide No.	Cuts:
Neg No.	Fill of: 112
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

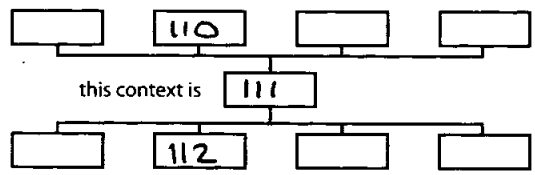
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

(1) FRIABLE
(2) MID GREY BROWN
(3) SILT
(4) 5% CHALKY GRAVEL, TIP LINE (LENS) OF FLINT FRAGS C. 100mm x 50mm, 1% COM, 5% MORTAR (+1 VOID)
(5) > 0.62m (NOT BOTTOMED)
(6) FILL OF 112

STRATIGRAPHIC MATRIX



Interpretation/Discussion

PIT FILL. PROBABLE POST-MED RUBBISH PIT.

Finds (tick): None [ ] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder GUY

Date 15/8/05

Initials SW

Oxford Archaeology

CONTEXT RECORD

Context No. 112

SITE WINCMAY 234

ADDITIONAL SHEETS:

TYPE CUT

Trench 1	Context Type: ~~Deposit~~ / Cut / ~~Structure~~
Site sub-div	Overlain by:
Structure No.	Abutted by:
Plan No. 101	Cut by:
	Filled by: 111
Section No. 100	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies:
Level	Butts:
Slide No.	Cuts: 104 103
Neg No.	Fill of:
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

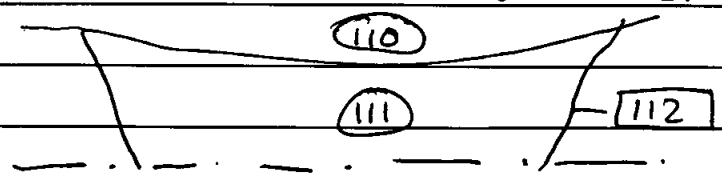
Description (See check lists):

(1) CIRCULAR

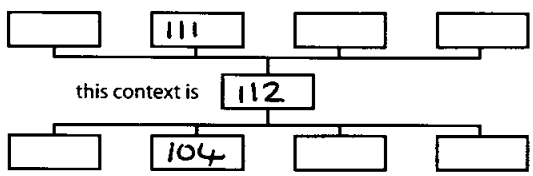
(2) STEEP C. 80° SIDES
BASE UNKNOWN

(3) 1.7m Ø x > 0.63m DEEP

(4)



STRATIGRAPHIC MATRIX



Interpretation/Discussion

RUBBISH PIT. PROBABLE POST-MED

RUBBISH PIT.

Finds (tick): None [ ] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder GUY

Date 15/8/05

Initials GJ

Oxford Archaeology

CONTEXT RECORD

Context No. 113

SITE WINCMAY234

ADDITIONAL SHEETS:

TYPE CUT

Trench 1	Context Type: ~~Deposit~~ / Cut / ~~Structure~~
Site sub-div	Overlain by:
Structure No.	Abutted by:
Plan No.	Cut by:
	Filled by: 108
Section No. 100	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies:
Level	Butts:
Slide No.	Cuts: ~~105~~ 106, 109
Neg No.	Fill of:
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

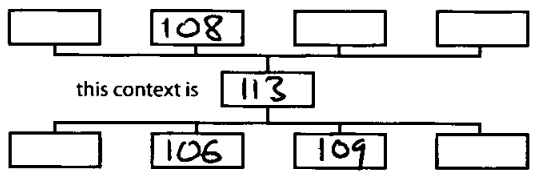
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

LINEAR E-W 1.2m WIDE + c. 50m LONG (ALONG THE LENGTH OF CATHEDRAL CLOSE WALL) 0.2m DEEP

STRATIGRAPHIC MATRIX



Interpretation/Discussion

CUT FOR PATH (MODERN)

Finds (tick): None [ ] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder GUY

Date 15/8/05

Initials SKJ

Oxford Archaeology

CONTEXT RECORD

Context No. 114

SITE WINCMAY234 | ADDITIONAL SHEETS: | TYPE CUT

Trench 1	Context Type: ~~Deposit~~ / Cut / ~~Structure~~	Check Lists:
Site sub-div	Overlain by:	DEPOSIT: 1. compaction 2. ~~colour~~ 3. composition ~~4. inclusion~~ 5. ~~thickness~~ 6. extent 7. ~~comments~~ 8. method & conditions
Structure No.	Abutted by:	
Plan No.	Cut by:	
	Filled by: 107	
Section No. 100	Same as:	CUT: 1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments
Co-Ordinates	Part of:	
	Consists of:	
	Overlies:	
Level	Butts:	MASONRY: 1. materials 2. size of ~~bricks~~ etc 3. ~~finish of stones~~ 4. ~~coursing~~/bond 5. form 6. faces 7. ~~bond~~ 8. dimensions as found 9. other comments
Slide No.	Cuts: 108 106	
Neg No.	Fill of:	
Matrix location	Relationships uncertain	

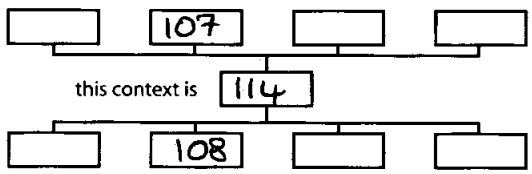
Description (See check lists):

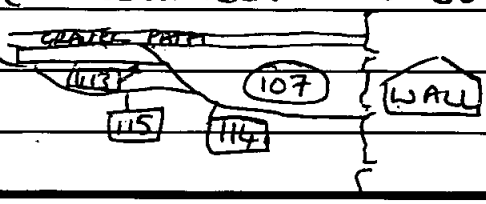
① LINEAR (? c. 50m LONG - LENGTH OF CATHEDRAL CLOSE WALL)

0.9m WIDE

c. 45° SIDE FLAT BASE - SOUTHERN SIDE BUTTS CATHEDRAL CLOSE WALL

STRATIGRAPHIC MATRIX





Interpretation/Discussion

CUT FOR FLOWER BED

Finds (tick): None [ ] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder GUY

Date 15/8/05

Initials SGT

Oxford Archaeology

CONTEXT RECORD

Context No. 115

SITE WINCMAY 2034

ADDITIONAL SHEETS:

TYPE CUT

Trench 1	Context Type: ~~Deposit~~ / Cut / ~~Structure~~
Site sub-div	Overlain by:
Structure No.	Abutted by:
Plan No.	Cut by:
	Filled by: 106
Section No. 100	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies:
Level	Butts:
Slide No.	Cuts: 105 100
Neg No.	Fill of:
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

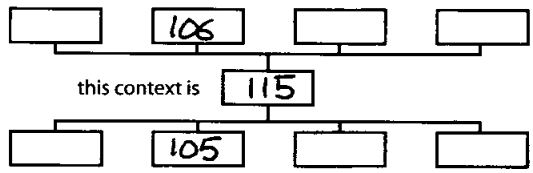
(1) ? LINEAR (SEE [114] - [115] IS EARLIER PHASE OF SAME THING)

(2) SHALLOW LOOKING SCOOP 45° SIDE FLAT BASE. S. SIDE TRUNCATED BY [114]

(3) 1.0m WIDE x 0.14m DEEP

(4) SEE [114]

STRATIGRAPHIC MATRIX



Interpretation/Discussion

CUT FOR FLOWER BED

Finds (tick): None [ ] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder GUY

Date 15/8/05

Initials SJ

Oxford Archaeology

CONTEXT RECORD

Context No. 116

SITE WINCMAY 23

ADDITIONAL SHEETS:

TYPE DEP

Trench 1	Context Type: Deposit / ~~Cut / Structure~~
Site sub-div	Overlain by: 102
Structure No.	Abutted by:
Plan No. ADD SHEET	Cut by: 118
	Filled by:
Section No. 100	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies: 100
Level	Butts:
Slide No.	Cuts:
Neg No.	Fill of:
Matrix location	Relationships uncertain

Check Lists:

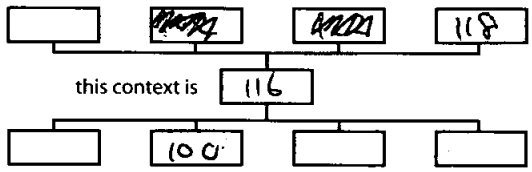
DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):
2 MID GREY BROWN
1 LOOSE/FIRM
3 GRAVELLY SILT
4 FREQUENT CHALK & GRAVEL FRAG'S
(70%) 10mm x 10mm - 40mm x 40mm.
5 APPROX 0.2m
6 SEE ADD SHEET
7 8 MATTOCK/ TROWEL. SUNNY

STRATIGRAPHIC MATRIX



Interpretation/Discussion
LAYER OF DUMPED DEMOLITION & DOMESTIC REFUSE.
CONTAINS MED. POT.

Finds (tick): None [ ] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds	Recorder
◇ Samples	Date
⌂ Building Materials	Initials SJ.

Oxford Archaeology

CONTEXT RECORD ADDITIONAL SHEET

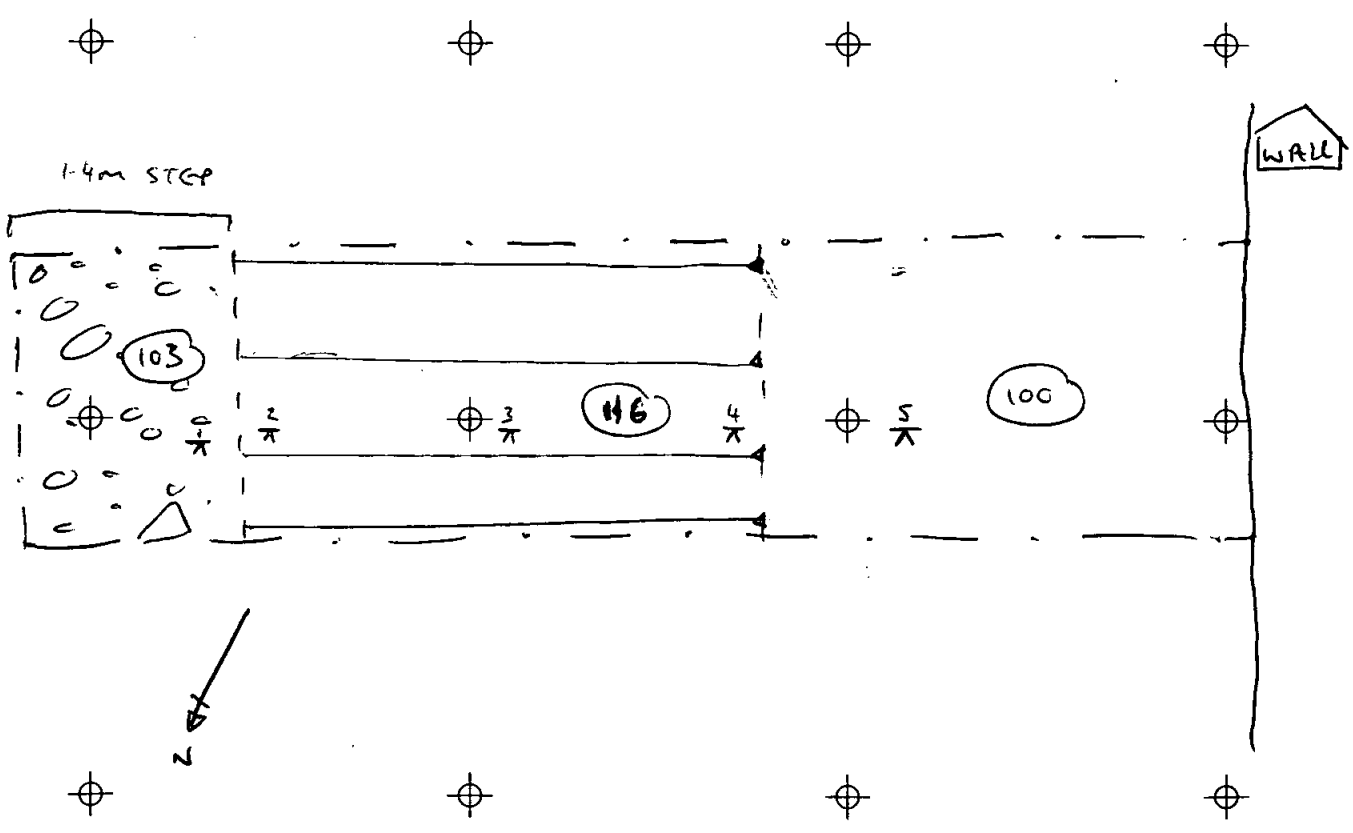
Context No. 116

SITE CODE AY234 | SITE NAME Pilgrim's Way, Winchester | SHEET NO. 1

TBM 33.42

BS	1.63	MH = 35.05	
FS	1	=	31.86
	2	3.27	= 31.78
	3	2.98	= 32.07
	4	2.63	= 32.42
	5		= 32.39
	6		= 33.54

Sketch Plan of context (102). Trench 1. 1:50



Oxford Archaeology

CONTEXT RECORD

Context No. 117

SITE AY234

ADDITIONAL SHEETS:

TYPE STRUCT

Trench 1	Context Type: ~~Deposit / Cut / Structure~~ WALL
Site sub-div	Overlain by:
Structure No.	Abutted by: 144.
Plan No. 100, 102, 103, 104	Cut by:
	Filled by:
Section No. 100	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies:
Level	Butts:
Slide No.	Cuts:
Neg No.	Fill of: [145]
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

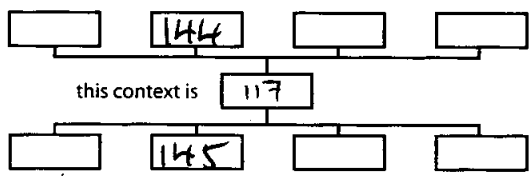
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

1. Flint nodules
2. 0.11 – 0.22m
3. Unfrogged flints on N-edge
4. 7 – courses surviving above off-set foundation
5. Alligned E-W 6. N-edge visible comprising of
7 – courses of flint 7. Pale yellowish/buff lime mortar.
8. 1.15m+ wide surviving max 0.87m above off-set footing

STRATIGRAPHIC MATRIX



Interpretation/Discussion: POSSIBLE FOUNDATION FOR ROMAN CITY WALL.

~~ROMAN~~ – Very well constructed. The existing clay wall is built directly above its surviving upper level – implying that the ?Roman wall was wider than its existing counterpart. It appears to have demolished to pre-existing ground level before being replaced by the existing wall.

Finds (tick): None [ ] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Skip #142

Recorder SLT

Date 1/9/05

Initials SLT

9 min 22 hr 35 each bag dump #92 + #5 each

Oxford Archaeology

CONTEXT RECORD

Context No. 118

SITE AY234

ADDITIONAL SHEETS:

TYPE CUT

Trench 1	Context Type: ~~Deposit~~ Cut ~~Structure~~
Site sub-div	Overlain by:
Structure No.	Abutted by:
Plan No. 102	Cut by:
	Filled by: 119, 120–122
Section No. 100	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies:
Level	Butts:
Slide No.	Cuts: 116
Neg No.	Fill of:
Matrix location	Relationships uncertain

Check Lists:

~~DEPOSIT:~~
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

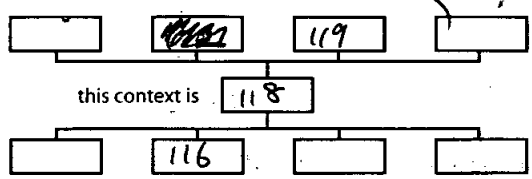
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

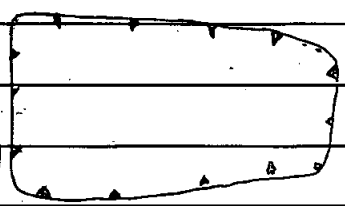
MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

Rectangular cut, steep, nearly vertical sides, horizontal, undulating base, flat bp. 0.8m x 1.27m.

STRATIGRAPHIC MATRIX





Interpretation/Discussion: MED CESS PIT. RECTANGULAR CUT WHICH IS WOOD LINED CONTAINS CESSY FILL (120) & IS CAPPED BY CHALK/MORTAR LAYER (121). CUTS (116) & IS SEALED BY (102)

Finds (tick): None [✓] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder MDG

Date 24/8/05

Initials SH

Oxford Archaeology

CONTEXT RECORD

Context No. 119

SITE AY234 | ADDITIONAL SHEETS: Group No | TYPE Wood

Trench 1	Context Type: Deposit / Cut / Structure
Site sub-div	Overlain by: (122)
Structure No.	Abutted by:
Plan No.	Cut by:
	Filled by:
Section No. 106	Same as:
	Part of:
Co-Ordinates	Consists of: (124 - 126), (130 - 135)
	Overlies:
Level	Butts:
Slide No.	Cuts:
Neg No.	Fill of: [118]
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

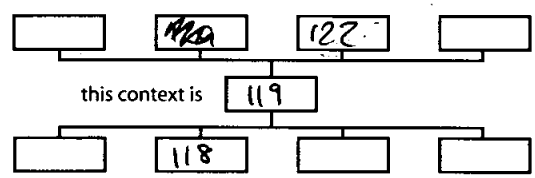
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

Rectangular, steep sided (nearly vertical), flat base and top. 0.8m wide x 1.25m long x c 1m deep. See [118] for sketch. Filled by cessy layer (122).

STRATIGRAPHIC MATRIX



Interpretation/Discussion: Wooden lining to cess pit [118]. Group No for planks 124 - 126, 130 - 135.

Finds (tick): None [✓] Pot [✓] Bone [✓] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder NDG

Date 24/8/05

Initials

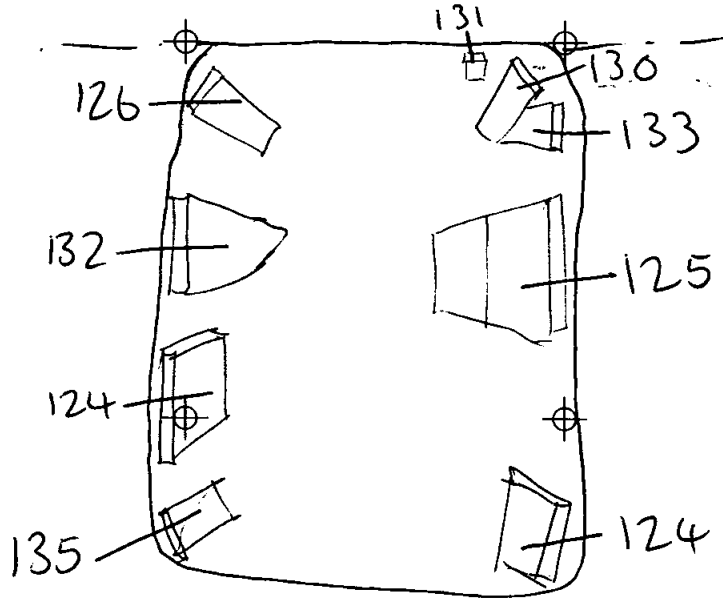
Oxford Archaeology

CONTEXT RECORD ADDITIONAL SHEET

Context No. 119

SITE CODE AY234 | SITE NAME | SHEET NO. 1

See sketch below for positions of planks in wood lining to cess pit. (rough guide for reference to geo-ref photo)



Oxford Archaeology

CONTEXT RECORD

Context No. 120

SITE AY234

ADDITIONAL SHEETS:

TYPE DEPOSIT

Trench 1	Context Type: Deposit / ~~Cut / Structure~~
Site sub-div	Overlain by: 121
Structure No.	Abutted by:
Plan No.	Cut by:
	Filled by:
Section No. 100	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies: ~~111~~ 122
Level	Butts:
Slide No.	Cuts:
Neg No.	Fill of: 118
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

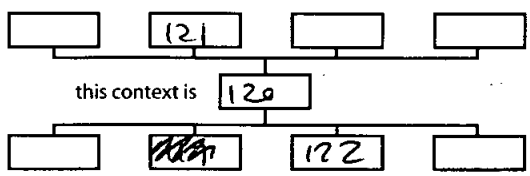
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

Compact, dark brown layer. Silty clay. c 0.4m deep, filling cut [118], within wood-lined cess pit. Hand exc. in waterlogged conditions.

STRATIGRAPHIC MATRIX



Interpretation/Discussion: CESSY FILL OF CESS PIT [118]. SAMPLE NO 1

Finds (tick): None [ ] Pot [✓] Bone [✓] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples 5. 4 BUCKETS

⌂ Building Materials

Recorder MDG

Date 24/8/05

Initials SF

Oxford Archaeology

CONTEXT RECORD

Context No. 121

SITE AY234

ADDITIONAL SHEETS:

TYPE DEPOSIT FILL

Trench 1

Site sub-div

Structure No.

Plan No.

Section No. 100

Co-Ordinates

Level

Slide No.

Neg No.

Matrix location

Context Type: Deposit / ~~Cut / Structure~~

Overlain by: 102

Abutted by:

Cut by:

Filled by:

Same as:

Part of:

Consists of:

Overlies: 120

Butts:

Cuts:

Fill of: 118

Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

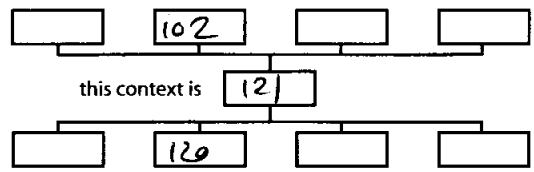
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

V compact pale yellow-grey layer containing chalk + mortar. c. 0.25m deep, filling cut [118]. Cap for ceramic pit, exc. by hand near water table.

STRATIGRAPHIC MATRIX



Interpretation/Discussion CHALK MORTAR DEBRIS OF MATERIAL USED TO CAP CESS

PIT [118].

Finds (tick): None [✓] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder MDG

Date 24/8/05

Initials SF

Oxford Archaeology

CONTEXT RECORD

Context No. 122

SITE AY234

ADDITIONAL SHEETS:

TYPE DEPFILL

Trench 1	Context Type: Deposit / ~~Cut / Structure~~
Site sub-div	Overlain by: 120
Structure No.	Abutted by:
Plan No.	Cut by:
	Filled by:
Section No. 100	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies:
Level	Butts:
Slide No.	Cuts:
Neg No.	Fill of: 119
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

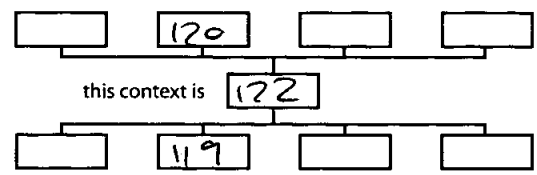
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

Dark brown organic layer at bottom of cess pit. Soft, not very compact, occ containing grass + fruit seeds. c. 0.75m deep ~~with~~ within [119]. Bottom cess layer in Mod cess pit hard exce. in heavily waterlogged conditions. Poss disturbance of Roman layers beneath.

STRATIGRAPHIC MATRIX



Interpretation/Discussion: BOTTOM CESS FILL OF CESS PIT [118]. SAMPLE No 6

Finds (tick): None [ ] Pot [✓] Bone [✓] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples 6 2 BUCKETS

⌂ Building Materials

Recorder MDG

Date 24/8/05

Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 123

SITE AY234

ADDITIONAL SHEETS:

TYPE Deposit

Trench 1

Context Type: Deposit / ~~Cut~~ / ~~Structure~~

Check Lists:

Site sub-div

Overlain by:

Structure No.

Abutted by:

Plan No. ADD SHEET

Cut by: 127, 138, 140

Filled by:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

Section No. 100

Same as:

Part of:

CUT:
1. shape in plan ~~2. base/sides/top profile~~ 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

Co-Ordinates

Consists of:

Overlies: 139 (141)

Level

Butts:

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Slide No.

Cuts:

Neg No.

Fill of:

Matrix location

Relationships uncertain

Description (See check lists): 1/ FIRM, TENACIOUS

2/ MOTTLED ORANGE BROWN 3 CLAY LOAM

4/ OCCASIONAL MORTAR & FLINT FLECKS (5%).

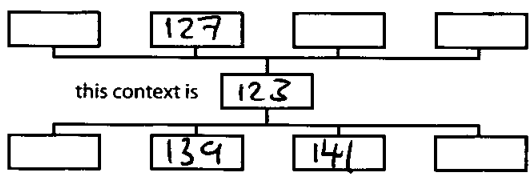
5/ 0.10M

6/ 1.9M x 3M

7/

8/ MATTOCK/ TROWEL. DRY.

STRATIGRAPHIC MATRIX



Interpretation/Discussion DEPOSIT BUTTS AGAINST WALL 117. SEALED BY DEMOLITION & ROBBING LAYER (101). LAYER ~~123~~ (123) IS CUT BY POSSIBLE PH. 127.

Trample?

Finds (tick): None [ ] Pot [✓] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder

Date 23/08/05

Initials

Oxford Archaeology

CONTEXT RECORD ADDITIONAL SHEET

Context No. 123

SITE CODE AY234 | SITE NAME Pilgrims Way School | SHEET NO. 1

35.0P

TBM 33.42

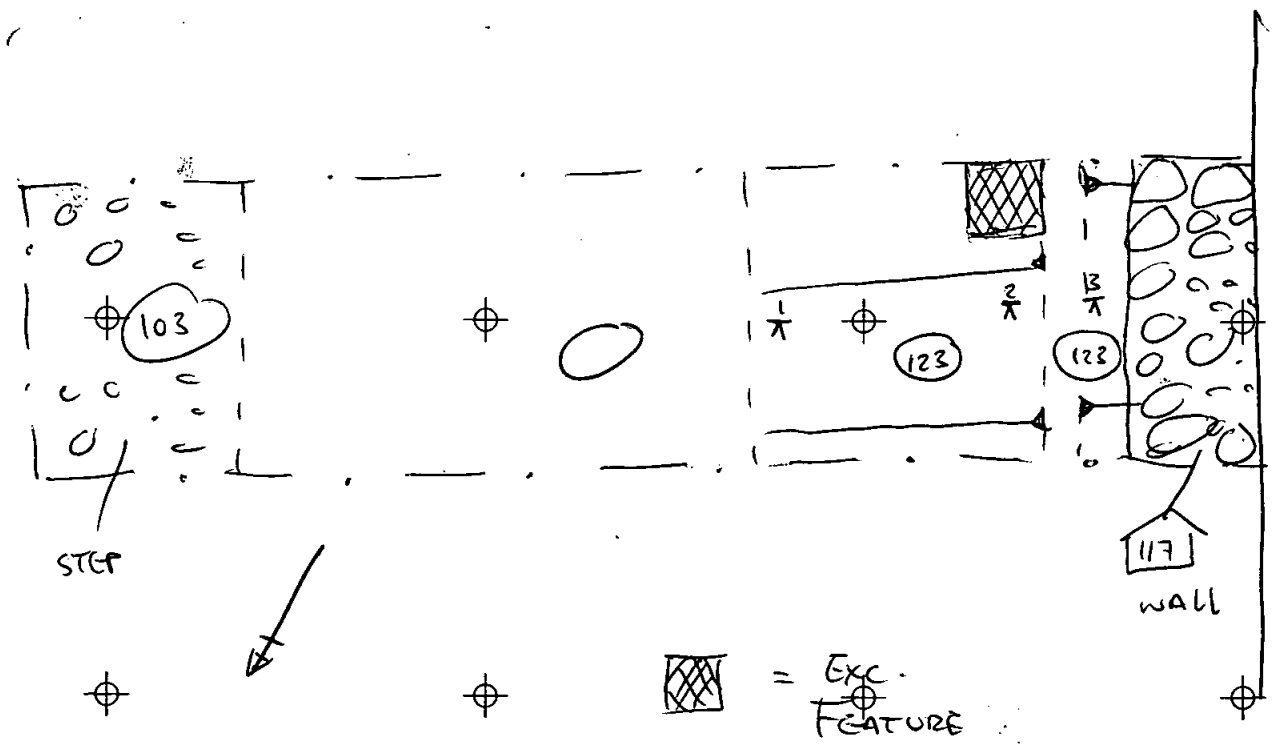
BS 1.66

FS 2.97

2.68

2.88

SKETCH PLAN OF LAYER (123). TRENCH 1. 1:50.

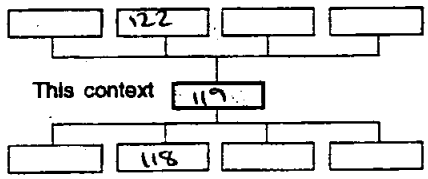


Oxford Archaeological Unit

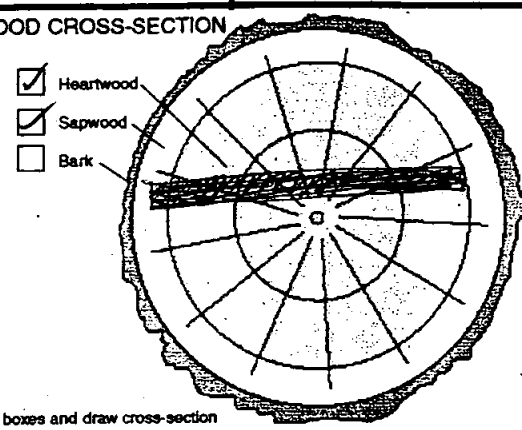
SITE BY234	WOOD RECORD	Context No. 124
Area: Trench No: 1	Additional sheets:	Type: WOOD

Plan no. Sec 119	Structure/group no. 119	Checklist: 1. Type (post,plank etc.) 2. Orientation & angle 3. Condition/preservation 4. Conversion 5. Dimensions (mm) 6. Tool-marks 7. Joints/fixings 8. Sketch 9. Other comments 10. Methods & conditions
Section/elevation no.	Within layer:	
Colour film/slide no.	Cuts layer: 116	
B/W film/neg. no.	Joined to other timber?	
Levels:	Overlies other timber?	
Co-ordinates:	Overlain by other timber?	

STRATIGRAPHIC MATRIX



WOOD CROSS-SECTION

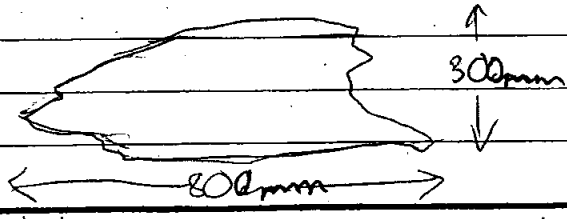


Tick boxes and draw cross-section

Description (see check-list)

Plank, placed vertically against cut [118]. Good preservation but slightly soft + spongy.

4) Mortar-like compaction in patches 5) See sketch 6) None 7) None 8) 9) – 10) Hand exc. in waterlogged pit.



Interpretation/discussion

Part of wooden lining of cess pit. [118]

If identified as Oak, tick box ☐ Initials:

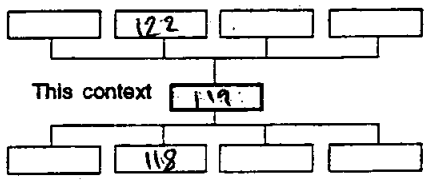
Wood Sample No.s	Species	Dendro	Retained Whole	Recorded by:	Date:	Checked by:
			✓	MDG	23/8/05	

Oxford Archaeological Unit

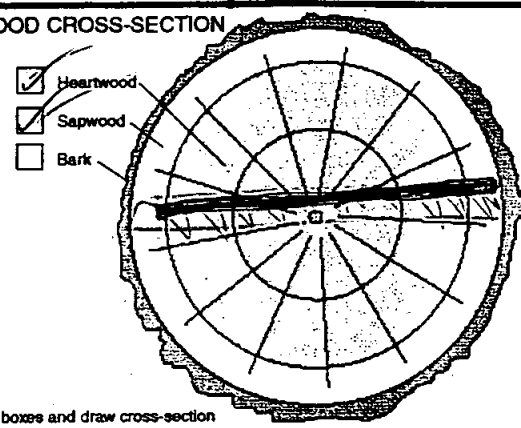
SITE AY234	WOOD RECORD	Context No. 125
Area: Trench No: 1	Additional sheets:	Type: WOOD

Plan no. See 119	Structure/group no. 119	Checklist: 1. Type (post,plank etc.) 2. Orientation & angle 3. Condition/preservation 4. Conversion 5. Dimensions (mm) 6. Tool-marks 7. Joints/fixings 8. Sketch 9. Other comments 10. Methods & conditions
Section/elevation no.	Within layer:	
Colour film/slide no.	Cuts layer: 116	
B/W film/neg. no.	Joined to other timber?	
Levels:	Overlies other timber?	
Co-ordinates:	Overlain by other timber?	

STRATIGRAPHIC MATRIX



WOOD CROSS-SECTION

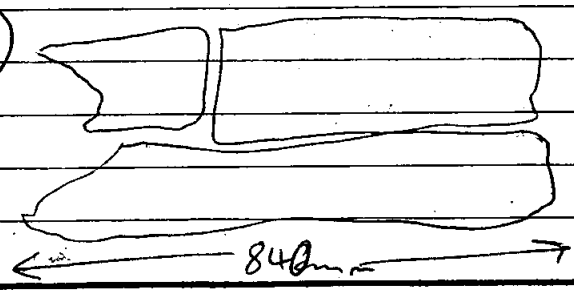


Tick boxes and draw cross-section

Description (see check-list)

1) Plank 2) Wear vertical (prob originally vertical) 3) Slightly spongy, but well preserved shape. 4) Mortar like patches (compaction). 5) See sketch 6) — 7) None 9) — 10) Hand exc. in waterlogged pit.

8)



Interpretation/discussion

Wood lining for corn-pit [118]

If identified as Oak, tick box ☐ Initials:

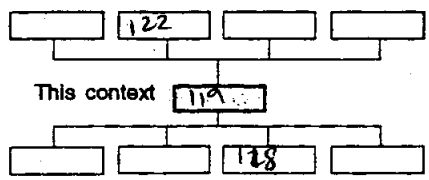
Wood Sample No.s	Species	Dendro	Retained Whole	Recorded by:	Date:	Checked by:
			✓	MOC	23/8/05	SJ

Oxford Archaeological Unit

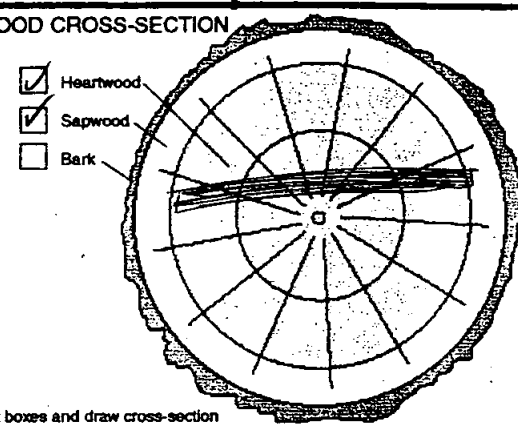
SITE A47234	WOOD RECORD	Context No. 126
Area: Trench No: 1	Additional sheets:	Type: WOOD

Plan no. See 114	Structure/group no. 119	Checklist: 1. Type (post,plank etc.) 2. Orientation & angle 3. Condition/preservation 4. Conversion 5. Dimensions (mm) 6. Tool-marks 7. Joints/fixings 8. Sketch 9. Other comments 10. Methods & conditions
Section/elevation no.	Within layer:	
Colour film/slide no.	Cuts layer: 116	
B/W film/neg. no.	Joined to other timber?	
Levels:	Overlies other timber?	
Co-ordinates:	Overlain by other timber?	

STRATIGRAPHIC MATRIX



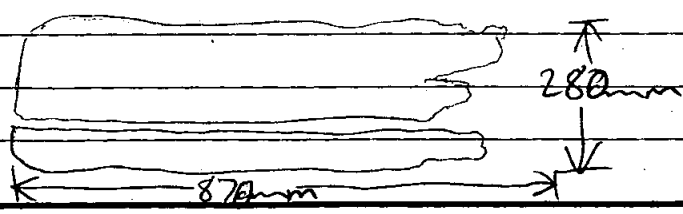
WOOD CROSS-SECTION



Tick boxes and draw cross-section

Description (see check-list)

Plank, driven in vertically. Well preserved yet soft + spongy. Patches of compacted mortar. No tool marks visible, or joints/fixings. Hand excavated in waterlogged pit.



Interpretation/discussion

Part of wood lining for cess pit 118

If identified as Oak, tick box ☐ Initials:

Wood Sample No.s	Species	Dendro	Retained Whole	Recorded by:	Date:	Checked by:
				MDG	23/8/05	SJ

Oxford Archaeology

CONTEXT RECORD

Context No. 127

SITE A7234

ADDITIONAL SHEETS:

TYPE CUT

Trench 1	Context Type: ~~Deposit~~ / Cut / ~~Structure~~
Site sub-div	Overlain by:
Structure No.	Abutted by:
Plan No.	Cut by:
	Filled by: 128
Section No. 100	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies:
Level	Butts:
Slide No.	Cuts: 123
Neg No.	Fill of:
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

1/ SQUARE – RECTANGULAR

2/ STEEP SIDES / BASE

3/ 0.76m x 0.5m x DEEP

4/ SEE PLAN

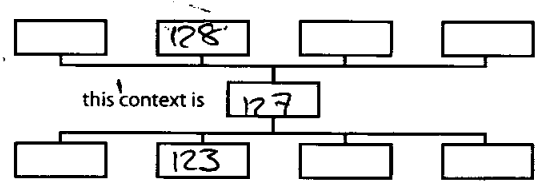
5/

6/ 128

7/

8/

STRATIGRAPHIC MATRIX



Interpretation/Discussion

POSSIBLE SQUARE – RECTANGULAR PH. CONTAINS FLINT PACKING. ROMAN POT RECOVERED FROM FILL. CUTS THROUGH LAYER 123

POSSIBLY ASSOCIATED WITH ROMAN CITY WALL 117.

Finds (tick): None [ ] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder

Date 23/08/05

Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 128

SITE A7234

ADDITIONAL SHEETS:

TYPE Deposit

Trench 1	Context Type: Deposit / Cut / Structure
Site sub-div	Overlain by: 101
Structure No.	Abutted by:
Plan No.	Cut by:
	Filled by:
Section No. 100	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies:
Level	Butts:
Slide No.	Cuts:
Neg No.	Fill of: 127
Matrix location	Relationships uncertain

Check Lists:

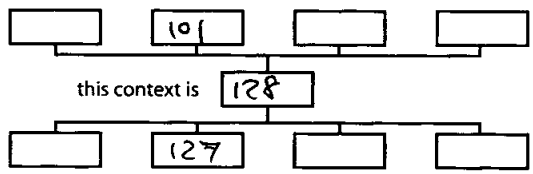
DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):
1/ Soft, Loose
3/ Mid Grey Brown 3 clay loam
4/ Very Frequent Flint nodules (60%) 50mm x 50mm.
5/
6/ 0.5m x 0.76m
7/
8/ Mattock/ Trowel

STRATIGRAPHIC MATRIX



Interpretation/Discussion: Fill of PH 127. Pot/CBM. Recovered.

Finds (tick): None [ ] Pot [✓] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [✓] Wood [ ] Leather [ ]

△ Small Finds	Recorder
◇ Samples	Date
⌂ Building Materials	Initials SH

VOID

Oxford Archaeology

CONTEXT RECORD

Context No. 129

SITE AY234

ADDITIONAL SHEETS:

TYPE DEPOSIT

Trench	Context Type: Deposit / ~~Cut / Structure~~
Site sub-div	Overlain by: 123
Structure No.	Abutted by:
Plan No.	Cut by:
	Filled by:
Section No. 100	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies:
Level	Butts:
Slide No.	Cuts:
Neg No.	Fill of:
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3: composition 4. inclusion 5. thickness 6. extent 7. comments ~~8. method & conditions~~

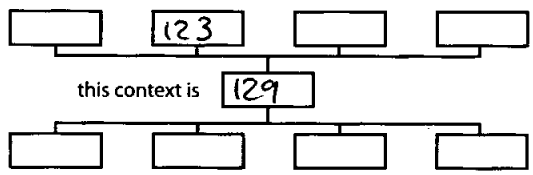
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

1/ FIRM, TENACIOUS
2/ MOTTLED ORANGE GREY BROWN
3/ CLAY LOAM
4/ OCCASIONAL FLINT FRAGMENTS & MORTAR FLECKS + CHARCOAL (15%)
5/
6/ 1.9m x 3m
7/ 8/ MATTOCK / TROWEL. RAINING

STRATIGRAPHIC MATRIX



Interpretation/Discussion

VOID

NB. MAY VOID.

Finds (tick): None [ ] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder

Date 24/08/05

Initials

Oxford Archaeology

CONTEXT RECORD ADDITIONAL SHEET

Context No. 129

SITE CODE AY234 | SITE NAME Pilgrim's Way school | SHEET NO. 1

TBM

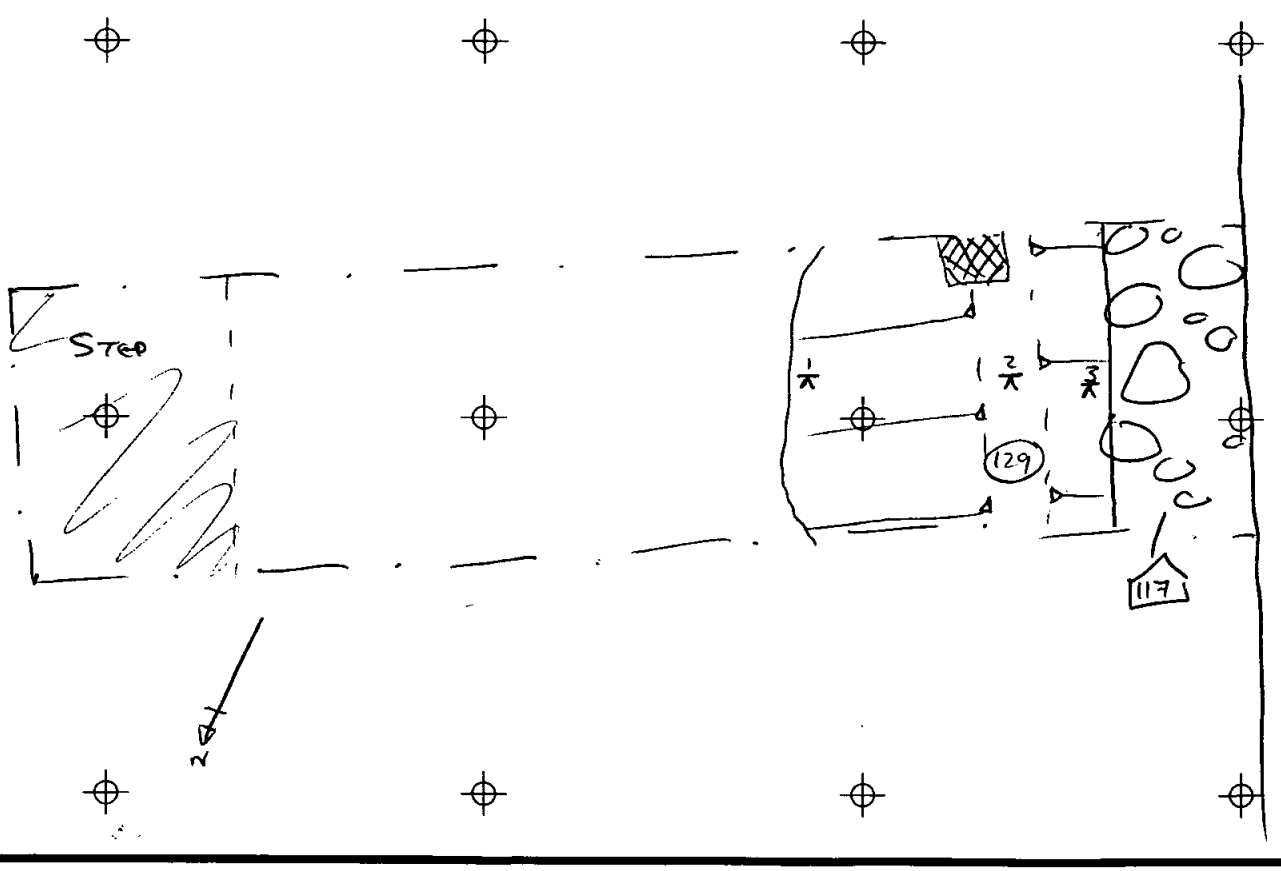
BS

FS 1

2

3

SKETCH PLAN OF LAYER (129). TR1. 1:50.

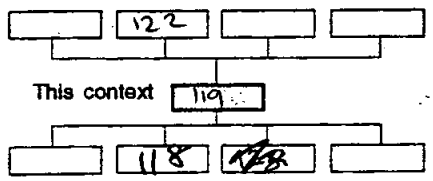


Oxford Archaeological Unit

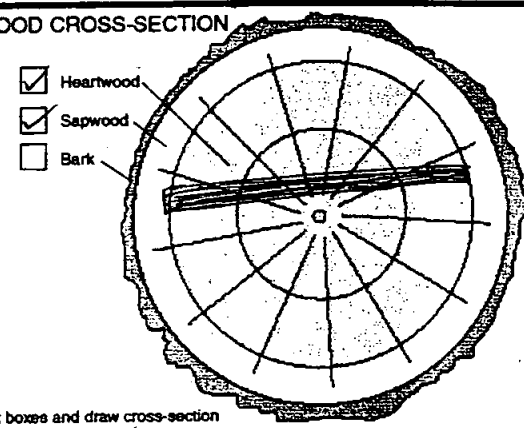
SITE	WOOD RECORD	Context No.
A1234		130
Area: Trench No: 1	Additional sheets:	Type: WOOD

Plan no. Sq 119	Structure/group no. 119	Checklist: 1.Type (post,plank etc.) 2.Orientation & angle 3. Condition/preservation 4. Conversion 5. Dimensions (mm) 6. Tool-marks 7. Joints/fixings 8. Sketch 9. Other comments 10. Methods & conditions
Section/elevation no.	Within layer:	
Colour film/slide no.	Cuts layer: 116	
B/W film/neg. no.	Joined to other timber?	
Levels:	Overlies other timber?	
Co-ordinates:	Overlain by other timber?	

STRATIGRAPHIC MATRIX



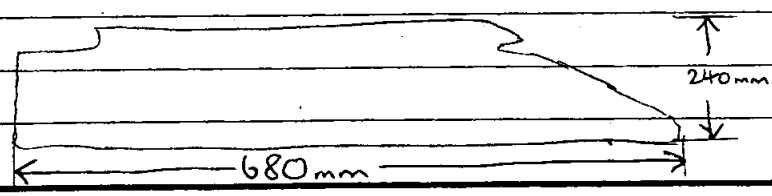
WOOD CROSS-SECTION



Tick boxes and draw cross-section

Description (see check-list)

Plank, rear vertical, well preserved yet soft/spongy. No toolmarks visible, 680mm x 240mm. No fixings, part of wood lining. Pass. shaped end (right in sketch) for driving into ground.



Interpretation/discussion

One plank of vertical pieces, part of wood lining of Medieval cess pit. [118]

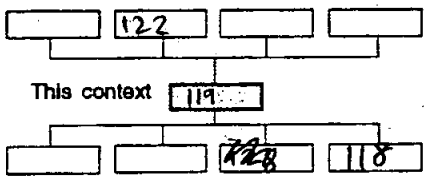
If identified as Oak, tick box ☐ Initials:

Wood Sample No.s	Species	Dendro	Retained Whole	Recorded by:	Date:	Checked by:
		☐	✓	MDG	24/8/05	

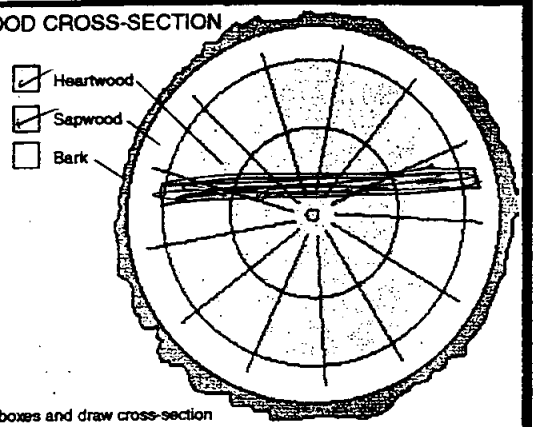
Oxford Archaeological Unit

SITE A-1234	**WOOD RECORD**	Context No. 131
Area: Trench No: 1	Additional sheets:	Type: WOOD
Plan no. See 119	Structure/group no. 119	Checklist: 1. Type (post,plank etc.) 2. Orientation & angle 3. Condition/preservation 4. Conversion 5. Dimensions (mm) 6. Tool-marks 7. Joints/fixings 8. Sketch 9. Other comments 10. Methods & conditions
Section/elevation no.	Within layer:	
Colour film/slide no.	Cuts layer: 116	
B/W film/neg. no.	Joined to other timber?	
Levels:	Overlies other timber?	
Co-ordinates:	Overlain by other timber?	

STRATIGRAPHIC MATRIX



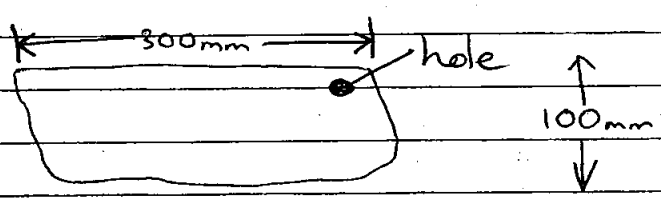
WOOD CROSS-SECTION



Tick boxes and draw cross-section

Description (see check-list)

Plank, sitting vertically behind 130. Small piece, only 300mm x 100mm, poss broken off larger plank. Well preserved but slightly softened. No sign of tool marks or fixings.* Hard exc. in waterlogged conditions.



*Hole in wood may be nat. knot or part of fixing.

Interpretation/discussion

Part of wood lining for Med cess pit. 118

If identified as Oak, tick box ☐ Initials:

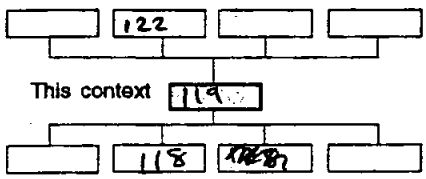
Wood Sample No.s	Species	Dendro	Retained Whole	Recorded by:	Date:	Checked by:
			✓	MDG	24/8/05	SDJ

Oxford Archaeological Unit

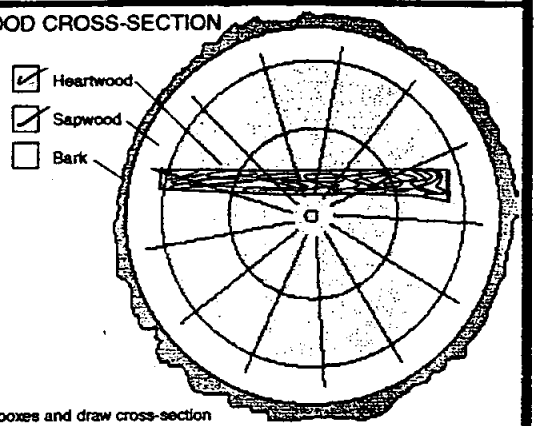
SITE AY234	WOOD RECORD	Context No. 132
Area: Trench No: 1	Additional sheets:	Type: WOOD

Plan no. See 119	Structure/group no. 119	Checklist: 1.Type (post,plank etc.) 2.Orientation & angle 3. Condition/preservation 4. Conversion 5. Dimensions (mm) 6. Tool-marks 7. Joints/fixings 8. Sketch 9. Other comments 10. Methods & conditions
Section/elevation no.	Within layer:	
Colour film/slide no.	Cuts layer: 116	
B/W film/neg. no.	Joined to other timber?	
Levels:	Overlies other timber?	
Co-ordinates:	Overlain by other timber?	

STRATIGRAPHIC MATRIX

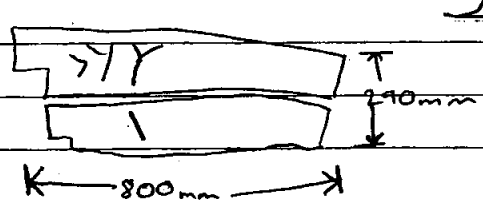


WOOD CROSS-SECTION



Description (see check-list)

Vertical plank to N of cess pit. Well preserved yet slightly spongy. Separated into two planks, both of which show tool marks. No signs of joints / fixings. Hand excc. in waterlogged conditions



Interpretation/discussion

Part of wooden lining of Med. cess pit 118

If identified as Oak, tick box ☐ Initials:

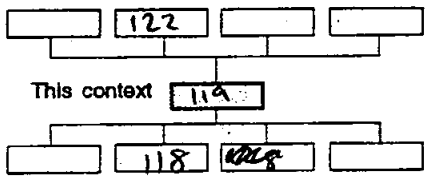
Wood Sample No.s	Species	Dendro	Retained Whole	Recorded by:	Date:	Checked by:
			✓	MDG	24/8/05	SF

Oxford Archaeological Unit

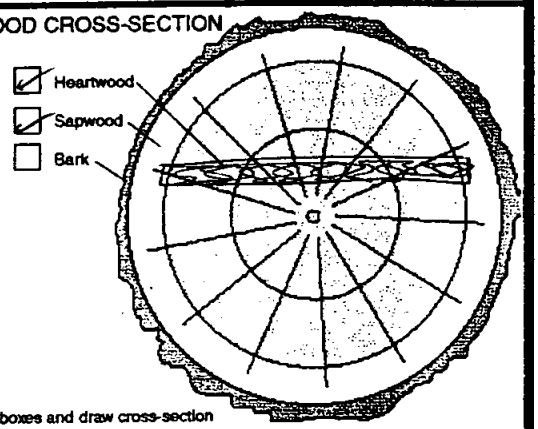
SITE A7234	WOOD RECORD	Context No. 133
Area: Trench No: 1	Additional sheets:	Type: WOOD

Plan no. See 119	Structure/group no. 119	Checklist: 1. Type (post,plank etc.) 2. Orientation & angle 3. Condition/preservation 4. Conversion 5. Dimensions (mm) 6. Tool-marks 7. Joints/fixings 8. Sketch 9. Other comments 10. Methods & conditions
Section/elevation no.	Within layer:	
Colour film/slide no.	Cuts layer: 116	
B/W film/neg. no.	Joined to other timber?	
Levels:	Overlies other timber?	
Co-ordinates:	Overlain by other timber?	

STRATIGRAPHIC MATRIX



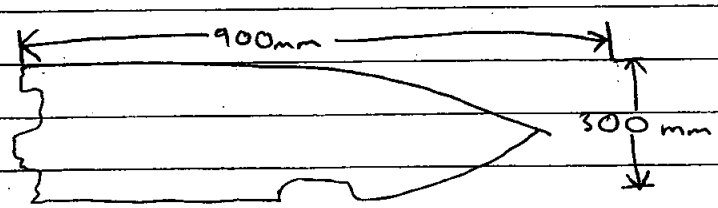
WOOD CROSS-SECTION



Tick boxes and draw cross-section

Description (see check-list)

Near vertical plank, well preserved but slightly softened. No sign of tool marks, but probably shaped at one end (to right in sketch) to aid driving into ground. Hard excavated in waterlogged conditions.



Interpretation/discussion

Plank, part of wooden lining of cess pit. 118

If identified as Oak, tick box ☐ Initials:

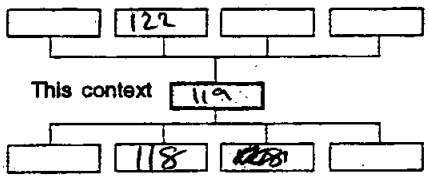
Wood Sample No.s	Species	Dendro	Retained Whole	Recorded by:	Date:	Checked by:
			?	MOG	24/8/05	SJ

Oxford Archaeological Unit

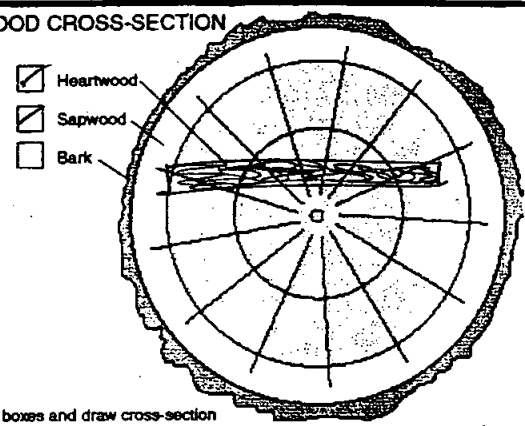
SITE A-f234	WOOD RECORD	Context No. 134
Area: Trench No: 1	Additional sheets:	Type: WOOD

Plan no. See 119	Structure/group no. 119	Checklist: 1.Type (post,plank etc.) 2.Orientation & angle 3. Condition/preservation 4. Conversion 5. Dimensions (mm) 6. Tool-marks 7. Joints/fixings 8. Sketch 9. Other comments 10. Methods & conditions
Section/elevation no.	Within layer:	
Colour film/slide no.	Cuts layer: 116	
B/W film/neg. no.	Joined to other timber?	
Levels:	Overlies other timber?	
Co-ordinates:	Overlain by other timber?	

STRATIGRAPHIC MATRIX



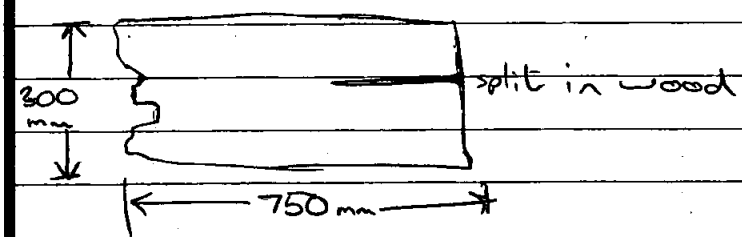
WOOD CROSS-SECTION



Tick boxes and draw cross-section

Description (see check-list)

Near vertical plank, well preserved but slightly spongy. No sign of tool marks, or joints/fixing. No sign of shaping. Hard exc. in waterlogged conditions. Pouring rain.



Interpretation/discussion

Plank as part of wooden lining for cess pit. 118

If identified as Oak, tick box ☐ Initials:

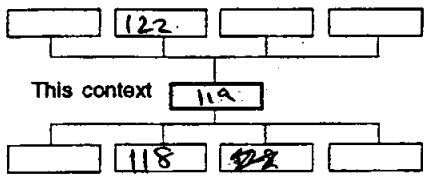
Wood Sample No.s	Species	Dendro	Retained Whole	Recorded by:	Date:	Checked by:
			✓	MOG	24/8/05	

Oxford Archaeological Unit

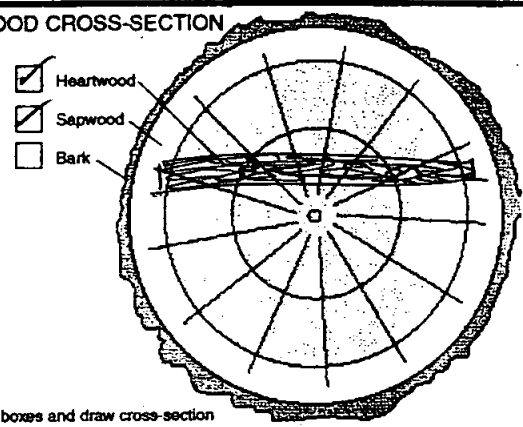
SITE A-7234	WOOD RECORD	Context No. 135
Area: Trench No: 1	Additional sheets:	Type: WOOD

Plan no. See 119	Structure/group no. 119	Checklist: 1.Type (post,plank etc.) 2.Orientation & angle 3. Condition/preservation 4. Conversion 5. Dimensions (mm) 6. Tool-marks 7. Joints/fixings 8. Sketch 9. Other comments 10. Methods & conditions
Section/elevation no.	Within layer:	
Colour film/slide no.	Cuts layer: 116	
B/W film/neg. no.	Joined to other timber?	
Levels:	Overlies other timber?	
Co-ordinates:	Overlain by other timber?	

STRATIGRAPHIC MATRIX



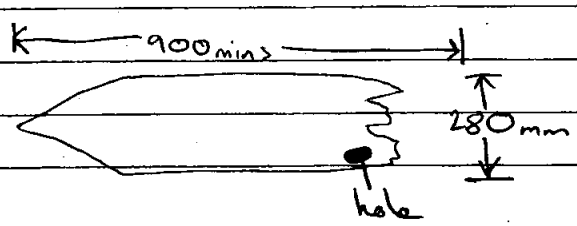
WOOD CROSS-SECTION



Tick boxes and draw cross-section

Description (see check-list)

Vertical plank, good preservation but slightly spongy. No signs of tool marks or fixings. *Shaped at one end (to left in sketch) to aid pushing into ground. Hand excavated in waterlogged conditions while raining.



*although hole may be part of fixings.

Interpretation/discussion

Wooden planks as part of wooden lining to cess pit 118

If identified as Oak, tick box ☐ Initials:

Wood Sample No.s	Species	Dendro	Retained Whole	Recorded by:	Date:	Checked by:
			✓	MDG	24/8/05	

Oxford Archaeology

CONTEXT RECORD

Context No. 136

SITE AY234 | ADDITIONAL SHEETS: 1 | TYPE Deposit

Trench 1	Context Type: Deposit / ~~Cut~~ / ~~Structure~~
Site sub-div	Overlain by:
Structure No.	Abutted by:
Plan No. 103	Cut by: 138, 140
	Filled by:
Section No. ~~100~~ 108	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies: 137
Level	Butts:
Slide No.	Cuts:
Neg No.	Fill of:
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

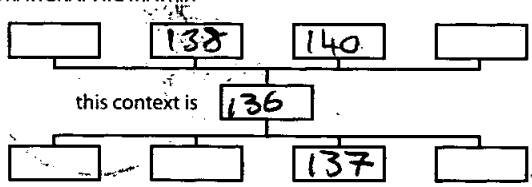
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

1/ Moderate
2/ Orange
3/ Clay, Silt
4/ Some flint nodules Irregular, 15-20 cm 20%
5/ 0.10 m
6/ m+ m
7/ None 8/ Hand excavated

STRATIGRAPHIC MATRIX



Interpretation/Discussion – Orange coloured deposit. Demolition deposit?

Finds (tick): None [✓] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds /
◇ Samples /
⌂ Building Materials /

Recorder PM
Date 25/08/05
Initials SD

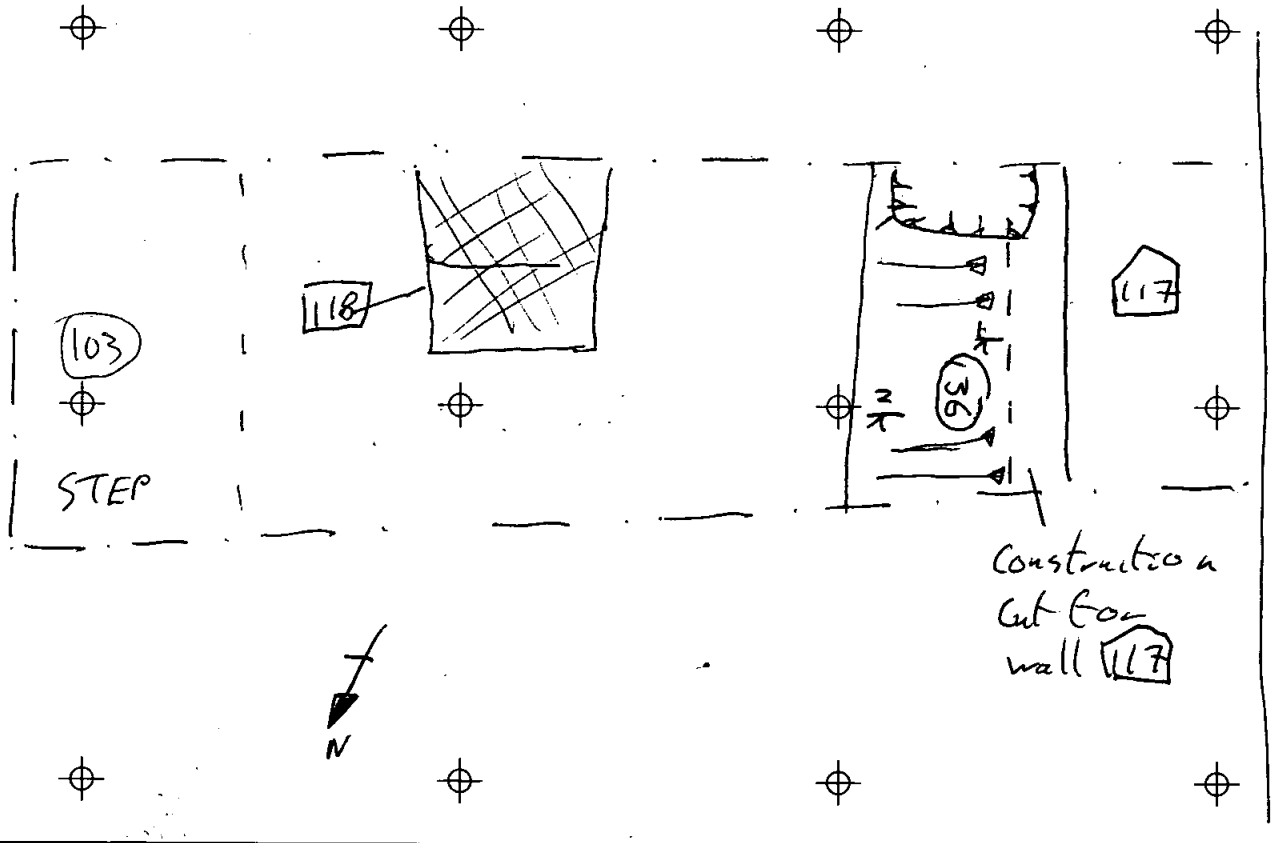
Oxford Archaeology	CONTEXT RECORD ADDITIONAL SHEET	Context No. 136
SITE CODE AY234	SITE NAME Pilgrims Way School	SHEET NO. 1

Sketch plan of deposit/layer (136) Trench 1

Not to Scale

T	TBM	33.42	
	BS	1.53	
Y	=	2.73	= 32.22
Z	=	2.78	= 32.17

25/08/05.



Oxford Archaeology

CONTEXT RECORD

Context No. 137

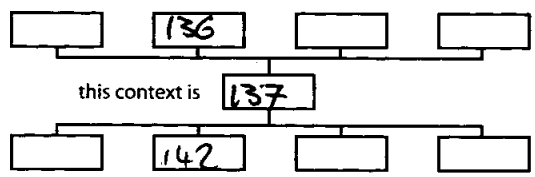
SITE WINCMAY234 | ADDITIONAL SHEETS: 1 | TYPE Deposit/Fill?

Trench 1	Context Type: Deposit / ~~Cut / Structure~~	Check Lists:
Site sub-div	Overlain by: (136)	DEPOSIT: 1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions
Structure No.	Abutted by:	
Plan No. ADD SHEET.	Cut by:	
	Filled by:	
Section No. 100	Same as:	CUT: 1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments
Co-Ordinates	Part of:	
	Consists of:	
	Overlies: (142)	
Level	Butts:	MASONRY: 1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments
Slide No.	Cuts:	
Neg No.	Fill of:	
Matrix location	Relationships uncertain	

Description (See check lists):

1/ Compact
2/ Grey
3/ Silt 20% Flint 80%
4/ Flint nodules Angular - Irregular 15-20cm 80%
5/
6/ m t m
7/ None 8/ Hand excavated.

STRATIGRAPHIC MATRIX



Interpretation/Discussion

layer of Flint nodules which was overlain by orang lens. Possible Fill of Roman Rampart ditch, which has been backfilled & with Flint nodules. EITHER TOP FILL OF CONSTRUCTION CUT [145] ASSOCIATED WITH WALL [117] OR MAYBE A ROUGH PATHWAY BESIDE WALL [117]

on 26/08/05

Finds (tick): None [ ] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds
◇ Samples
⌂ Building Materials

Recorder RM
Date 25/08/04
Initials SF

Oxford Archaeology	CONTEXT RECORD ADDITIONAL SHEET	Context No. 137
SITE CODE WINCMAY8	SITE NAME Pilgrims School	SHEET NO. 1

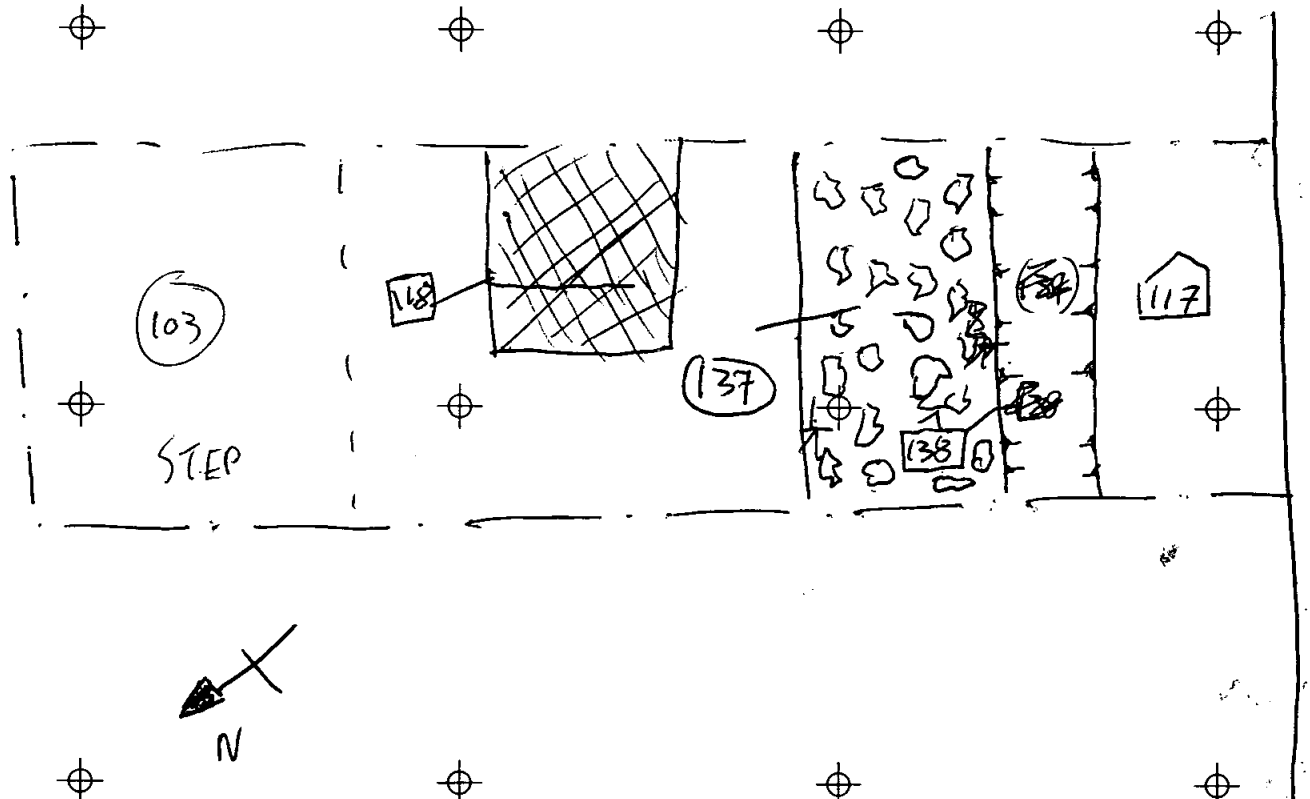
Sketch of layer / Fill? (137) Trench 1

Not to scale

TBM = 33.42
BS = 1.61

1	3.02	= 32.01
2	3.04	= 31.99
~~3~~	~~3.14~~	=

25/08/05



Oxford Archaeology

CONTEXT RECORD

Context No. 138

SITE AY234

ADDITIONAL SHEETS:

TYPE CUT

Trench 1	Context Type: ~~Deposit~~ Cut ~~Structure~~
Site sub-div	Overlain by:
Structure No.	Abutted by:
Plan No. ~~103~~ 103	Cut by:
	Filled by: 139
Section No. 100	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies:
Level	Butts:
Slide No.	Cuts: 136
Neg No.	Fill ~~of~~: -
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments ~~8. method & conditions~~

CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

~~MASONRY:~~
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

1/ LINEAR (E-W)

2/ CONCAVE BASE, MODERATE SIDE SLOPE AT ~~60°~~ 60°

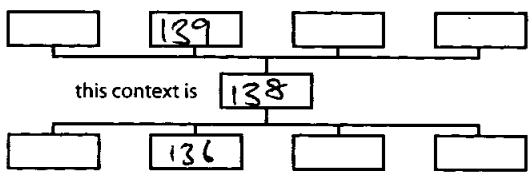
3/ 1.9M LONG, 0.3M VISIBLE OF WIDTH, 0.3M DEEP

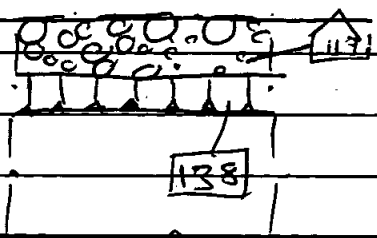
4/

5/

6/ (139) 7/

STRATIGRAPHIC MATRIX





Interpretation/Discussion

CUT RUNNING PARALLEL TO WALL 117. POSSIBLY A CONSTRUCTION CUT ALTHOUGH UNCLEAR AS YET IF IT REACHES WALL FOUNDATIONS. OTHER POSSIBILITY IS THAT IT IS ASSOCIATED WITH ROBBING CUT OF WALL 117. SEALED BY LATER (123). CUTS THROUGH LAYER (136). NOW APPEARS TO BE LATER ROBBING OR POSSIBLY REPAIR OF 117. 26/08/05.

Finds (tick): None [ ] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder

Date 25/08/05

Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 139

SITE A7234

ADDITIONAL SHEETS:

TYPE DEPOSIT

Trench 1	Context Type: Deposit / ~~Cut / Structure~~
Site sub-div	Overlain by: 123
Structure No.	Abutted by:
Plan No. ADD. SHEET	Cut by:
	Filled by:
Section No. ~~ABBY~~ 100	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies:
Level	Butts:
Slide No.	Cuts:
Neg No.	Fill of: 138
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

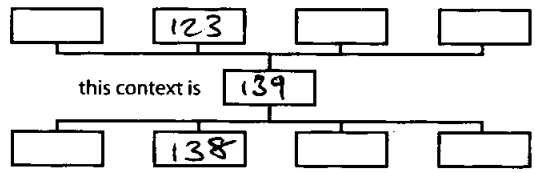
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

1/ FIRM, TENACIOUS
2/ MOTTLED ORANGE GREY BROWN
3/ CLAY LOAM
4/ OCCASIONAL GRAVELS & MORTAR FLECKS (10%)
5/ 0.3m
6/ 1.9m x 0.3m
7/ 8/ MATTOCK/TROWEL. SUNNY

STRATIGRAPHIC MATRIX



Interpretation/Discussion: BACKFILL OF CONSTRUCTION/ROBBER CUT ASSOCIATED WITH WALL 117

Finds (tick): None [✓] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder

Date 25/09/07

Initials

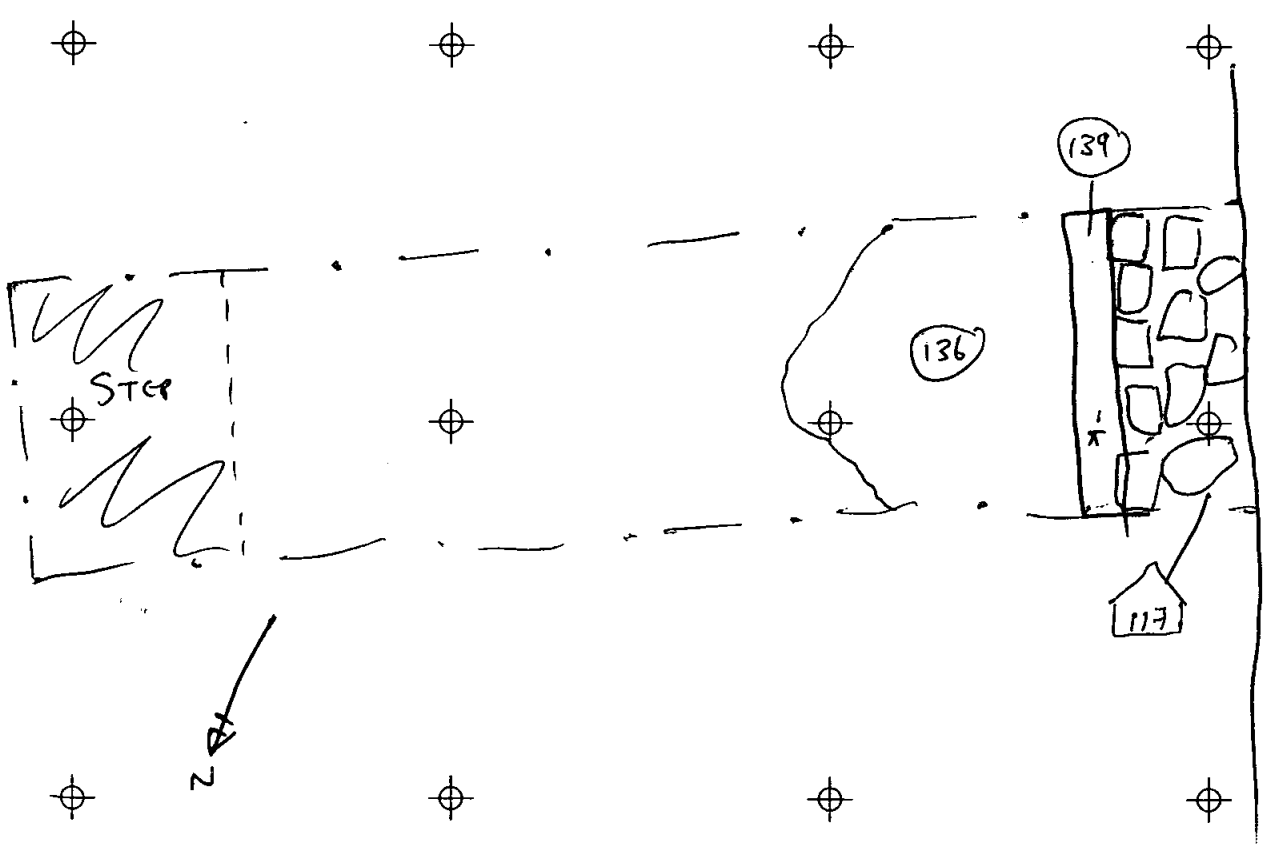
Oxford Archaeology	CONTEXT RECORD ADDITIONAL SHEET	Context No. 139
SITE CODE AY234	SITE NAME PILGRIM'S WAY SCHOOL	SHEET NO. 1

TBM

BS

FS (1) =

SKETCH PLAN OF FILL (139). TR 1. 1:50.



Oxford Archaeology

CONTEXT RECORD

Context No. 140

SITE A7234

ADDITIONAL SHEETS:

TYPE CUT

Trench 1	Context Type: ~~Deposit~~ / Cut / ~~Structure~~
Site sub-div	Overlain by:
Structure No.	Abutted by:
Plan No. 103	Cut by:
	Filled by: 141
Section No.	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies:
Level	Butts:
Slide No.	Cuts: 136
Neg No.	Fill of:
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

1/ LINEAR (E-W)

2/ FLAT BASE, STRAIGHT SIDES

3/ 0.2M WIDE, 1.9M LONG, 0.03M DEEP

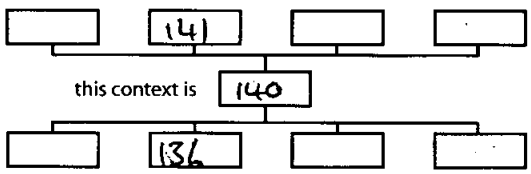
4/

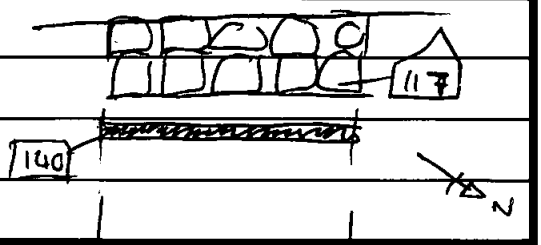
5/

6/ (141)

7/

STRATIGRAPHIC MATRIX





Interpretation/Discussion VERY EPHEMERAL & SHALLOW LINEAR CUT. POSSIBLY A BEAM SLOT. RUNS PARALLEL TO WALL [117] AT A DISTANCE OF SOME 0.35M. SOME SORT OF STRUCTURE ASSOCIATED WITH WALL??

See (141) Sct.

Finds (tick): None [✓] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder

Date 25/07/01

Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 141

SITE AY234

ADDITIONAL SHEETS:

TYPE Deposit

Trench 1	Context Type: Deposit / ~~Cut / Structure~~
Site sub-div	Overlain by: 123
Structure No.	Abutted by:
Plan No. ADD SHEET	Cut by:
	Filled by:
Section No.	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies:
Level	Butts:
Slide No.	Cuts:
Neg No.	Fill of: 140
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

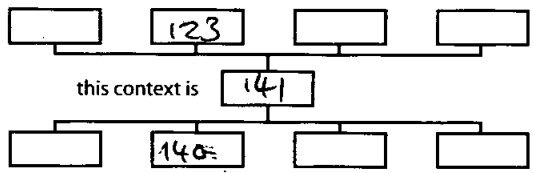
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

1/ FIRM, TENACIOUS
3/ MID GREY BROWN 3/ CLAY LOAM
4/ OCCASIONAL CHALK FLECKS (10%)
5MM x 5MM + CHARCOAL (<1%)
5/ 0.03M
6/ 1.9M x 0.2M
7/
8/ TROWEL. RAINING.

STRATIGRAPHIC MATRIX



Interpretation/Discussion

INWASH OF SILTS INTO VOID AFTER DECAY OF BEAM.
FILL OF BEAM SLOT.

NO evidence for this in Section - probably an upper fill of Slot [138]
SET.

Finds (tick): None [/] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds
◇ Samples
⌂ Building Materials

Recorder
Date 25/08/05
Initials SJ

Oxford Archaeology

CONTEXT RECORD ADDITIONAL SHEET

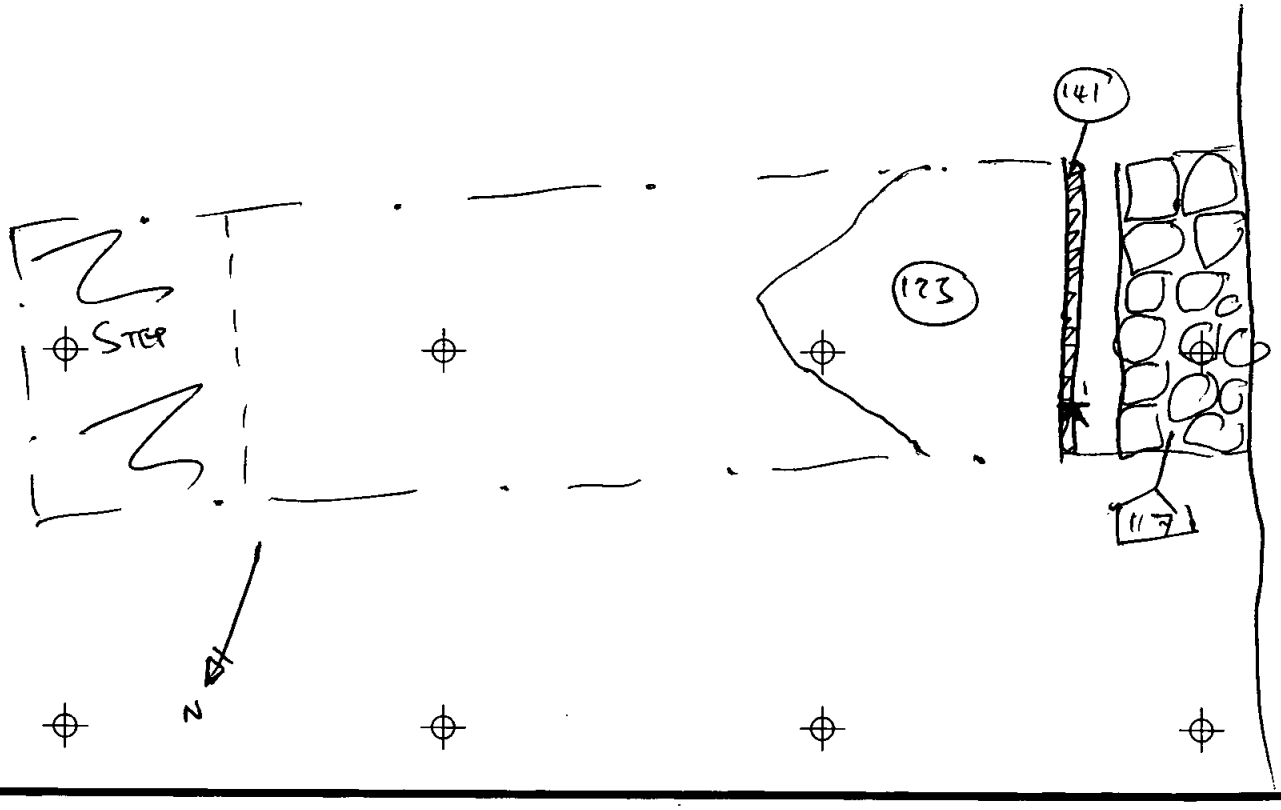
Context No. 141

SITE CODE AY234 | SITE NAME Pilgrim's Way School | SHEET NO. 1

TBM

BS

FS 1. = OD



Oxford Archaeology

CONTEXT RECORD

Context No. 142

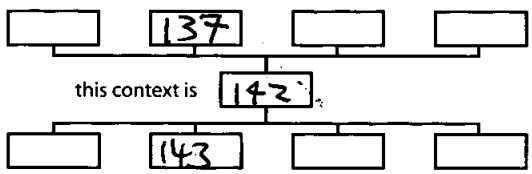
SITE WINCMAY234 | ADDITIONAL SHEETS: 1 | TYPE Deposit

Trench 1	Context Type: Deposit / ~~Cut~~ / ~~Structure~~	Check Lists:
Site sub-div	Overlain by: (137)	DEPOSIT: 1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions
Structure No.	Abutted by:	
Plan No.	Cut by:	
	Filled by:	
Section No. 100	Same as:	CUT: 1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments
Co-Ordinates	Part of:	
	Consists of:	
	Overlies: (143)	
Level	Butts:	MASONRY: 1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments
Slide No.	Cuts:	
Neg No.	Fill of: 145	
Matrix location	Relationships uncertain	

Description (See check lists):

1/ COMPACT
2/ LIGHT RED-YELLOW BROWN
3/ CLAY
4/ OCCASIONAL GRAVEL (10%) 10MM X 10MM
5/ 0.15M
6/ SEE ADD SHEET
7/ 8/ MATTOCK/ WET

STRATIGRAPHIC MATRIX



Interpretation/Discussion

Orange layer which seems to BUTT wall [117] and cuts dark earth.
BACKFILL OF CONSTRUCTION CUT [145] ASSOCIATED WITH WALL [117]

Finds (tick): None [ ] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [✓] Wood [ ] Leather [ ]

△ Small Finds
◇ Samples
⌂ Building Materials

Recorder PM
Date 26/08/05
Initials SF

Oxford Archaeology

CONTEXT RECORD ADDITIONAL SHEET

Context No. 142

SITE CODE WINCMAS SITE NAME Pilgrims Way School

SHEET NO. 1

Sketch plan of (142) Orange layer below (137)

TBM = 33.42 BS = 1.53

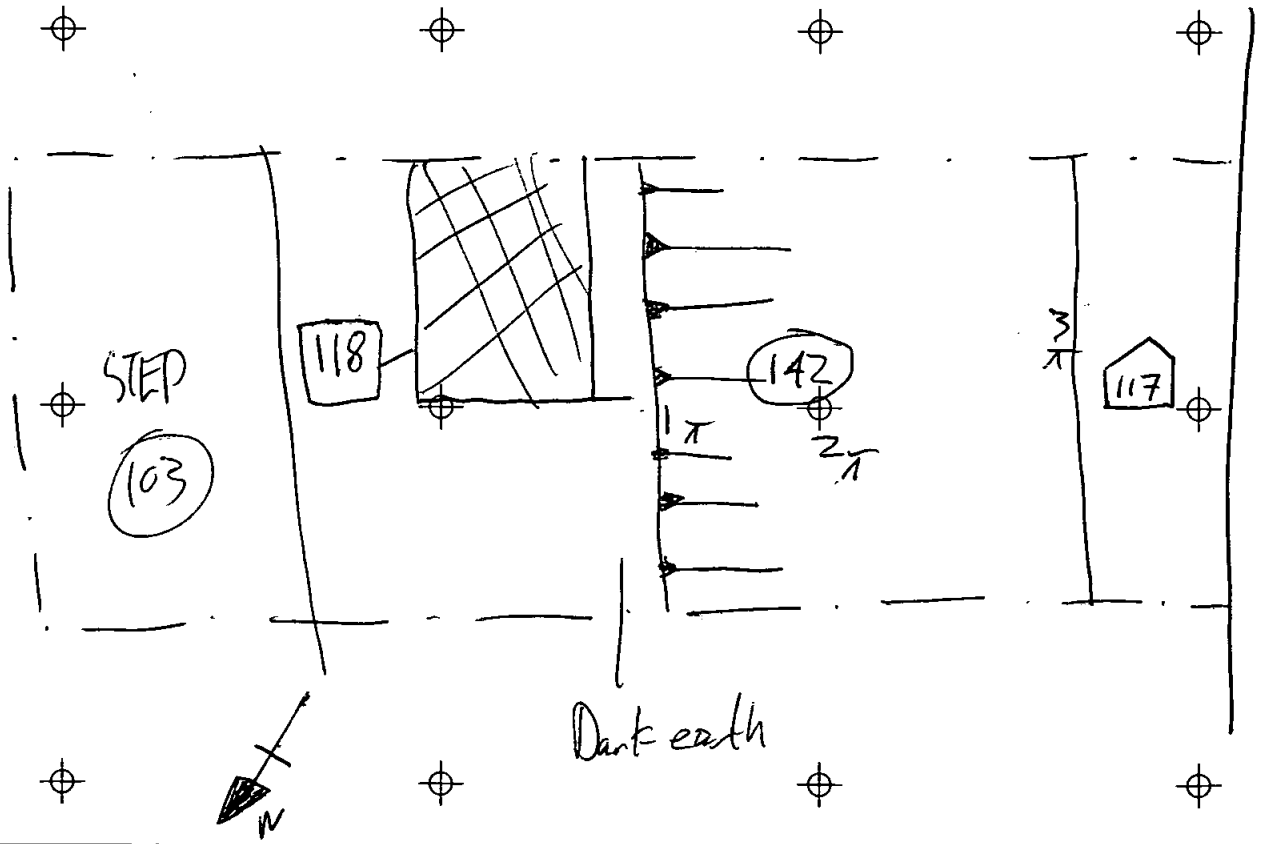
1 to 2.99 Reduced = 31.96

2 to 3.12 Reduced = 31.83

3 3.12 Reduced = 31.83

Not to scale

26/08/05



Oxford Archaeology

CONTEXT RECORD

Context No. 143

SITE A47234 | ADDITIONAL SHEETS: 1 | TYPE DEPOSIT

Trench 1	Context Type: Deposit / ~~Cut / Structure~~
Site sub-div	Overlain by: 142
Structure No.	Abutted by:
Plan No.	Cut by:
	Filled by:
Section No. 100	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies: 144
Level	Butts:
Slide No.	Cuts:
Neg No.	Fill of: 145
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

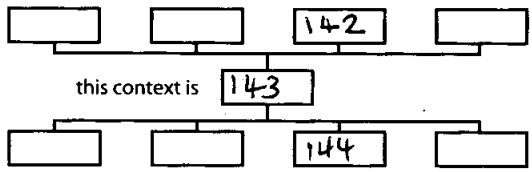
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

Firm and tenacious, orange BLACK mottled clay loam, overlying brighter orange layer (142). Hand exc. in overcast conditions. Slightly waterlogged (top of water table).

STRATIGRAPHIC MATRIX



Interpretation/Discussion

Dark layer beneath orange layer (142). Mottled orange clay loam. BACKFILL OF CONSTRUCTION CUT [145] ASSOCIATED WITH WALL [117].

Finds (tick): None [ ] Pot [✓] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

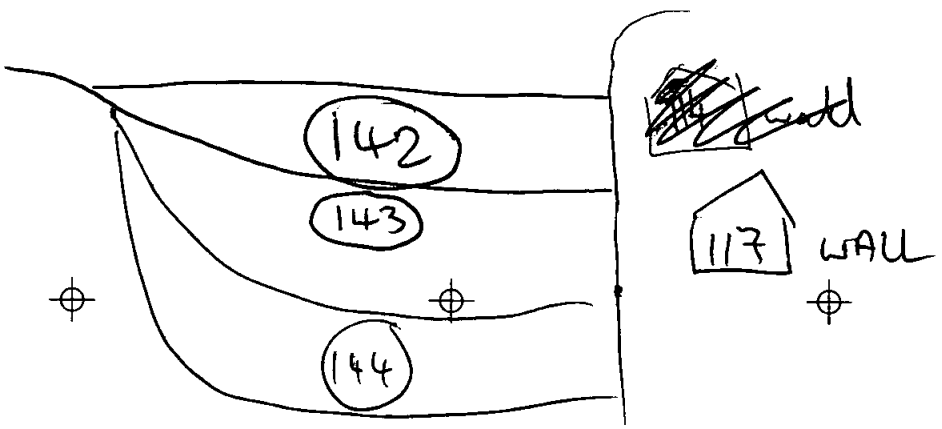
Recorder MDG

Date 26/8/05

Initials SJA

Oxford Archaeology	CONTEXT RECORD ADDITIONAL SHEET	Context No. 143
SITE CODE AY234	SITE NAME Pilgrims School, Winchester	SHEET NO. 2 of 2

Section



Oxford Archaeology

CONTEXT RECORD

Context No. 144

SITE A4234 | ADDITIONAL SHEETS: | TYPE DEPOSIT

Trench 1	Context Type: ~~Deposit~~ / ~~Cut~~ / ~~Structure~~
Site sub-div	Overlain by: 143
Structure No.	Abutted by:
Plan No.	Cut by:
	Filled by:
Section No: 100	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies:
Level	Butts:
Slide No.	Cuts:
Neg No.	Fill of: 145
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

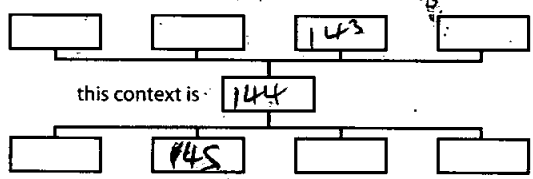
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

Firm + tenacious, dark grey clay loam, chalk inclusions lying below (143). Hard exc. in overcast, waterlogged conditions.

STRATIGRAPHIC MATRIX



Interpretation/Discussion

Dark grey clay loam, chalk inclusions. Bottom fill of construction cut [145] associated with wall [117]. Quite a large concentration of chalk/mortar (30%) derived from construction of [117].

Finds (tick): None [ ] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder MBG

Date 26/08/15

Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 145

SITE AY234

ADDITIONAL SHEETS:

TYPE CUT

Trench 1	Context Type: Deposit / Cut / ~~Structure~~
Site sub-div	Overlain by:
Structure No.	Abutted by:
Plan No.	Cut by:
	Filled by: (142 - 144)
Section No. 100	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies:
Level	Butts:
Slide No.	Cuts: (152)
Neg No.	Fill of:
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT: 1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

CUT: 1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY: 1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

1/ LINEAR (E-W)

2/ SIDES CONCAVE, BASE

3/ 0.31m deep.

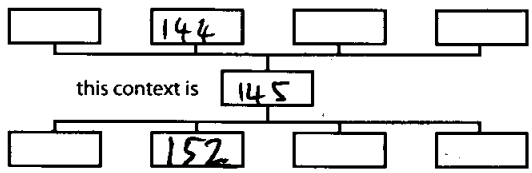
4/

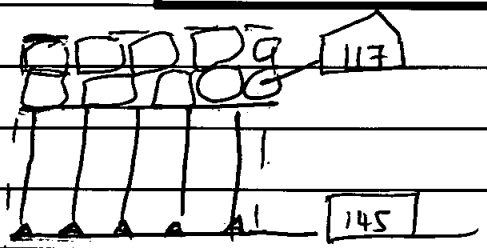
5/

6/ (142 - 144)

7/

STRATIGRAPHIC MATRIX





Interpretation/Discussion

CONSTRUCTION CUT FOR WALL (117). CUTS THROUGH BLACK CLAY LOAM LAYER (151).

Finds (tick): None [ ] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder CR

Date 26/08/05

Initials JT

Oxford Archaeological Unit

SITE: WINCMAY234

Area: Trench No: 1

WOOD RECORD

Additional sheets:

Context No. 146

Type: WOOD

Plan no. 104

Section/elevation no.

Colour film/slide no.

B/W film/neg. no. Film 4

Levels:

Co-ordinates:

Structure/group no.

Within layer: 150

Cuts layer: 151

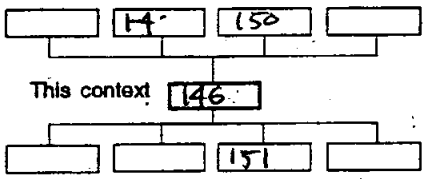
Joined to other timber? —

Overlies other timber? —

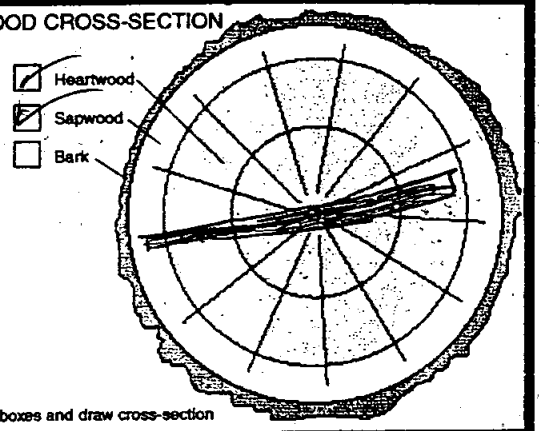
Overlain by other timber? —

Checklist:
1. Type (post,plank etc.)
2. Orientation & angle
3. Condition/preservation
4. Conversion
5. Dimensions (mm)
6. Tool-marks
7. Joints/fixings
8. Sketch
9. Other comments
10. Methods & conditions

STRATIGRAPHIC MATRIX



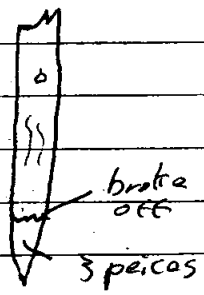
WOOD CROSS-SECTION



Tick boxes and draw cross-section

Description (see check-list)

1/ Plank
2/ E-W, Vertical placed.
3/ Good
4/ 1 large peice 3 small peices (point)
5/ 500 mm (L) x mm (W)
6/ Cut
7/ None
8/
9/
10/ Hand Excavated, Dry bright conditions



Interpretation/discussion

Single tappered end plank. Possible part of river channeling.

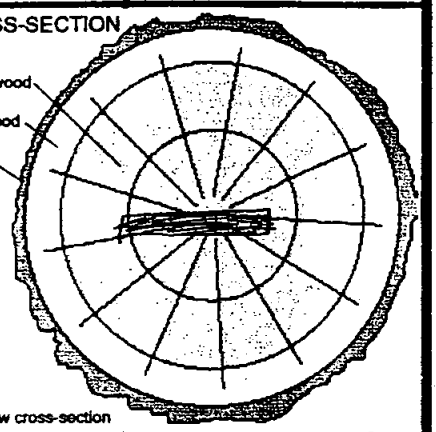
If identified as Oak, tick box ☐ Initials:

Wood Sample No.s	Species	Dendro	Retained Whole	Recorded by:	Date:	Checked by:
			✓			

Oxford Archaeological Unit

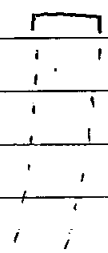
SITE WINCMAY234	WOOD RECORD	Context No. 147
Area: Trench No: 1	Additional sheets: —	Type: WOOD

Plan no. 104	Structure/group no.	Checklist: 1.Type (post,plank etc.) 2.Orientation & angle 3. Condition/preservation 4. Conversion 5. Dimensions (mm) 6. Tool-marks 7. Joints/fixings 8. Sketch 9. Other comments 10. Methods & conditions
Section/elevation no.	Within layer: 150	
	Cuts layer: 151	
Colour film/slide no. Film 4.	Joined to other timber? 148	
	Overlies other timber? —	
B/W film/neg. no.	Overlain by other timber? —	
Levels:	STRATIGRAPHIC MATRIX: 150 / This context 147 / 151	WOOD CROSS-SECTION: Heartwood, Sapwood, Bark
Co-ordinates:		Tick boxes and draw cross-section



Description (see check-list)

1 Plank
2 E-W
3 Good
4 1 peice?
5 300 mm (w) - unknown length
6 Unknown
7 None
8
9 None
10 Partially excavated.



Interpretation/discussion

Plank of wood which maybe joined to 148 only partially excavated as below impact level.

If identified as Oak, tick box ☐ Initials:

Wood Sample No.s	Species	Dendro	Retained Whole	Recorded by:	Date:	Checked by:

Oxford Archaeological Unit

SITE: WINCMAY234	WOOD RECORD	Context No.: 148
Area: Trench No: 1	Additional sheets: -	Type: WOOD

Plan no.: 104

Section/elevation no.:

Colour film/slide no.: Film 4

B/W film/neg. no.: Film 4

Levels:

Co-ordinates:

Structure/group no.:

Within layer: 150

Cuts layer: 151

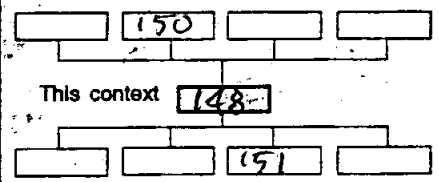
Joined to other timber? 147

Overlies other timber?

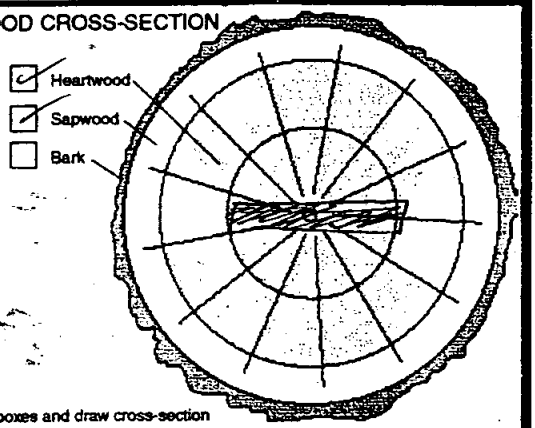
Overlain by other timber?

Checklist:
1. Type (post,plank etc.)
2. Orientation & angle
3. Condition/preservation
4. Conversion
5. Dimensions (mm)
6. Tool-marks
7. Joints/fixings
8. Sketch
9. Other comments
10. Methods & conditions

STRATIGRAPHIC MATRIX

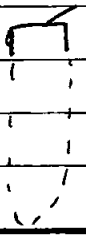


WOOD CROSS-SECTION



Description (see check-list)

1/ Plank
2/ E-W
3/ Good
4/ Unknown 1peice
5/ 200 (W) mm
6/ Unknown, presumed saw marks
7/ None
8/
9/ N/a Not excavated
10/ Bright Conditions.



Interpretation/discussion

Top of plank which appears tobe Connected to 147. Not excavated as below impact level. Possibley part of river Channeling.

If identified as Oak, tick box ☐ Initials:

Wood Sample No.s	Species	Dendro	Retained Whole	Recorded by:	Date:	Checked by:

Oxford Archaeology

CONTEXT RECORD

Context No. 149

SITE WINCAN234

ADDITIONAL SHEETS:

TYPE Layer

Trench 1	Context Type: Deposit / ~~Cut / Structure~~
Site sub-div	Overlain by: (103)
Structure No.	Abutted by:
Plan No.	Cut by:
	Filled by:
Section No. 100	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies: (150)
Level	Butts:
Slide No.	Cuts:
Neg No.	Fill of:
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

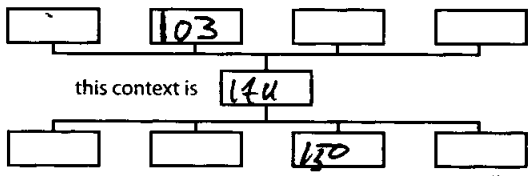
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

1/ Moderate
2/ Yellow - grey
3/ Mortar, stone rubble
4/ Stones 5-10cm 15-20cm+ regular - angular
5/ 0.32 m
6/ 0.60 (W) m + 1.20 (L) m in slot.
7/ None 8/ Hand excavated, Dry bright conditions.

STRATIGRAPHIC MATRIX



Interpretation/Discussion

Demolition layer, which comprises of mortar and large stones. No finds present.

Finds (tick): None [✓] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder RM

Date 1/09/05

Initials RM

Oxford Archaeology

CONTEXT RECORD

Context No. 150

SITE WINCMAN 23A | ADDITIONAL SHEETS: | TYPE Layer

Trench 1	Context Type: Deposit / ~~Cut / Structure~~
Site sub-div	Overlain by: 149
Structure No.	Abutted by:
Plan No.	Cut by:
	Filled by:
Section No. 100	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies: 151 146 147 148
Level	Butts:
Slide No. Film 4.	Cuts:
Neg No.	Fill of:
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

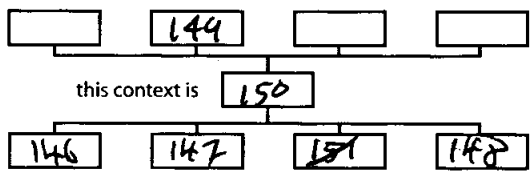
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

1/ Moderate - Compact
2/ Grey - Brown
3/ Clay to silt 30%
4/ Small stones, 2-5 cm 30%.
5/
6/ ~~0.4~~ 0.60 m (W) x @ 1.20 m (L) in slot.
7/ Waterlogged remains of wood. (see wood sheets). 8/ Hand excavated.

STRATIGRAPHIC MATRIX



Interpretation/Discussion

Dump deposit/layer, which consists of a clay silt and is Grey-brown in colour. Contained three preserved wood timbers, one of which was removed. Appear to be in line running E-W in direction. Layer is possible dump and remants of the construction of earlier Roman Construction of the town ramparts.

Finds (tick): None [ ] Pot [✓] Bone [✓] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [✓] Wood [✓] Leather [ ]

△ Small Finds		Recorder RM
◇ Samples	40 litres.	Date 1/09/05
⌂ Building Materials	146 147 148 wood timbers.	Initials SJ

Oxford Archaeology

CONTEXT RECORD

Context No. 151

SITE WINCMAN 234

ADDITIONAL SHEETS:

TYPE layer

Trench 1	Context Type: Deposit / ~~Cut / Structure~~
Site sub-div	Overlain by: 150
Structure No.	Abutted by:
Plan No. 104	Cut by: 146, 147, 148 = timbers.
	Filled by:
Section No. 100.	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies: — not excavated.
Level	Butts:
Slide No.	Cuts:
Neg No.	Fill of:
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

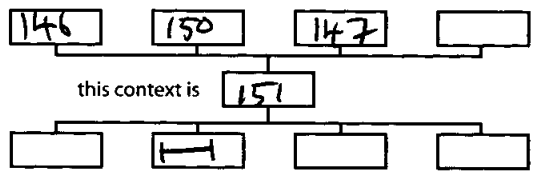
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

1/ Compact.
2/ Black
3/ Peat
4/ None
5/ 0.22 m
6/ 0.60 (u) m + 1.20 (c) m in slot.
7/ Not fully excavated 8/ ~~Hand~~ partially Hand excavated

STRATIGRAPHIC MATRIX



Interpretation/Discussion

'Natural' peat formation which has been cut by timbers 146 147 148. No finds present and not excavated due to below impact level.

Finds (tick): None [4] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds	Recorder RM
◇ Samples	Date 11/04/05.
⌂ Building Materials	Initials SJ

Oxford Archaeology

CONTEXT RECORD

Context No. 152

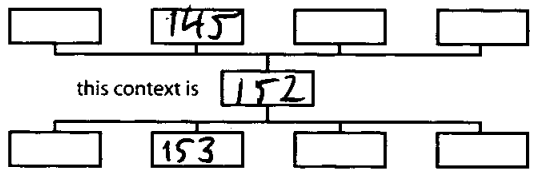
SITE WWSM:AT234 ~~A19~~	ADDITIONAL SHEETS:	TYPE Deposit
Trench 1	Context Type: Deposit / ~~Cut / Structure~~	Check Lists:
Site sub-div	Overlain by:	DEPOSIT: 1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions
Structure No.	Abutted by:	
Plan No. 104	Cut by: (145)	
	Filled by:	
Section No. 100	Same as:	CUT: 1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments
	Part of:	
Co-Ordinates	Consists of:	
	Overlies: (153)	
Level	Butts:	MASONRY: 1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments
Slide No.	Cuts:	
Neg No.	Fill of:	
Matrix location	Relationships uncertain	

Description (See check lists):

2. Dark Grey Brown
1. Moderately compact & well consolidated
3. clay silt
4. <10% or less small flint or gravel
5. 0.08m thick 6. Within sondage only

STRATIGRAPHIC MATRIX

	145		
this context is	152		
	153		



Interpretation/Discussion

Soil accumulation on ?Rampart? Pre-dates construction of Roman wall (117)

Finds (tick): None [✓] Pot [✓] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds	Recorder SG
◇ Samples	Date 1/9/05
⌂ Building Materials	Initials SG

Oxford Archaeology

CONTEXT RECORD

Context No. 153

SITE AY234 | ADDITIONAL SHEETS: — | TYPE Deposit

Trench 1	Context Type: Deposit / ~~Cut / Structure~~
Site sub-div	Overlain by: (152)
Structure No.	Abutted by:
Plan No.	Cut by:
	Filled by:
Section No. 100	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies: (154)
Level	Butts:
Slide No.	Cuts:
Neg No.	Fill of:
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

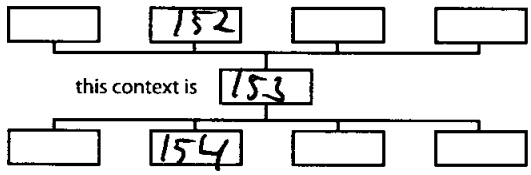
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

1. Fairly loose
2. Light greyish white
3. Fine Sandy silt
4. Very few natural silt gravels
5. 6. Sondage.
7. Mattock / shovel — wet / waterlogged

STRATIGRAPHIC MATRIX



Interpretation/Discussion

Dump at front on rampart — redeposited natural?

Finds (tick): None [✓] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder SCT

Date 1/9/03

Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 154

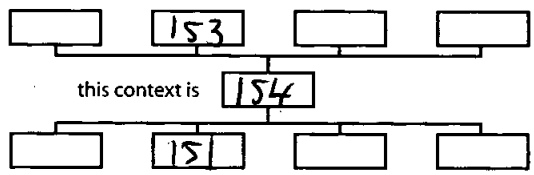
SITE A41234 | ADDITIONAL SHEETS: | TYPE ~~LAYER~~ Deposit

Trench 1	Context Type: Deposit / ~~Cut / Structure~~	Check Lists:
Site sub-div	Overlain by: (153)	DEPOSIT: 1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions
Structure No.	Abutted by:	
Plan No.	Cut by:	
	Filled by:	
Section No. 100	Same as:	CUT: 1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments
	Part of:	
Co-Ordinates	Consists of:	
	Overlies: (151)	
Level	Butts:	MASONRY: 1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments
Slide No.	Cuts:	
Neg No.	Fill of:	
Matrix location	Relationships uncertain	

Description (See check lists):

1. Moderately Compact
2. Very dark grey - almost black
3. Degraded organic ?? turf
4. Very clean with very few small intrusions
5. 0.28 thick 6. Sondage
8. Mollusk / Travel — waterlogged / wet.

STRATIGRAPHIC MATRIX



Interpretation/Discussion

Decayed turf ?? — part of levelment for Roman wall part?
Layer directly over peat (151)

Finds (tick): None [✓] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds	Recorder SJ
◇ Samples 52	Date 1/9/05
⌂ Building Materials	Initials SJ

Oxford Archaeology

CONTEXT CHECKLIST

SITE CODE WINCMAY 234 | SITE NAME PILGRIMS SCHOOL, WINCHESTER

Context number	Type	Excavated within segments	Relationships	Drawn		Matrix	Comments	Recorder initials
				Section	Plan			
200	LAYER			201 202 200	200		TOPSOIL	LE
201	LAYER			201 202 200	200		GRAVELLY SUB-SOIL	LE
202	LAYER			202	200		HARD MORTAR LAYER	LE
203	LAYER			200 202	200		HARD GRAVEL LAYER	
204	WALL?			200	200		POSS WALL STRUCTURE RUBBLE & SOURCING	
205	LAYER				200		RUBBLE HARDCORE LAYER SMALL AREA OF RUBBLE	
206	LAYER			201 202 200	[redacted]		POSS ALLUVIAL SOIL LAYER	
207	LAYER			201 202 200	SEE CONTEXT ADD SHEET		RUBBLE HARD CORE	
208	LAYER			201 202 200	SEE CONTEXT [redacted] ADD SHEET		CHALK SURFACE	LE
209	LAYER			201 202 200 [redacted]	SEE CONTEXT ADD SHEET		LIMESTONE + CBM RUBBLE LAYER	LE
210	LAYER			200 202	SEE CONTEXT ADD SHEET		BOTTOM LAYER OF TRENCH & LAYER ABOVE WATER TABLE	LE
211	LAYER			201 202 200	200		POSS ALLUVIAL SOIL LAYER	LE
212	LAYER			201 202 200	/		[redacted] CHALKY MORTARY LAYER [redacted]	LE

Oxford Archaeology

CONTEXT RECORD

Context No. 2000

SITE AM234

ADDITIONAL SHEETS:

TYPE DEPOSIT

Trench 2	Context Type: Deposit / ~~Cut~~ / ~~Structure~~
Site sub-div –	Overlain by: –
Structure No. –	Abutted by: –
Plan No. 200	Cut by: –
	Filled by: –
Section No. 200 201 202 203	Same as: –
	Part of: –
Co-Ordinates	Consists of: –
	Overlies: 2001
Level	Butts: –
Slide No. 27-29 (1)	Cuts: –
Neg No. 25-26 (1)	Fill of: –
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

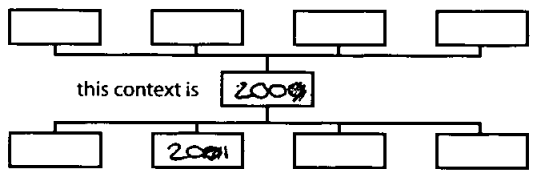
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

LOOSE COMPACTION. DARK GREY BROWN IN COLOUR. TOPSOIL WITH 70-80% PEBBLEY INCLUSIONS. AVERAGE ABOUT 10CM IN DEPTH. MATTOCKED & TROWELLED IN DRY SUNNY CONDITIONED

STRATIGRAPHIC MATRIX



Interpretation/Discussion

TOPSOIL RECENT DEPOSIT AS NOT CUT. RECENTLY FORMED FLOOR OF KENNEL BETWEEN TENNIS/BASKETBALL COURT & POST-MED RED BRICK WALL (VICTORIAN)

Finds (tick): None [✓] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder CE

Date 08/08/05

Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 2001

SITE AM284

ADDITIONAL SHEETS:

TYPE DEPOSIT

Trench 2	Context Type: Deposit / ~~Cut~~ ~~Structure~~
Site sub-div —	Overlain by: 2000
Structure No. —	Abutted by: —
Plan No. 200	Cut by: —
	Filled by: —
Section No. 200 201 202 203	Same as: —
	Part of: —
Co-Ordinates	Consists of: —
	Overlies: 2002
Level	Butts: —
Slide No. 27-29 (1)	Cuts: —
Neg No. 24-26(1)	Fill of: —
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

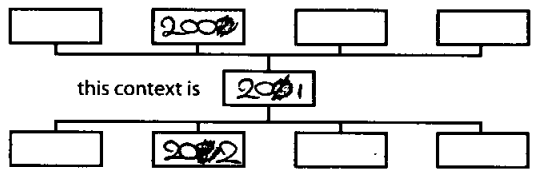
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

LOOSE COMPACTION. MID-GREY BROWN IN COLOUR. 5% PEBBLY INCLUSIONS. SOME ROOT DISTURBANCE. AVERAGE THICKNESS 10cm. MATTOCKED & TROWELLED IN DRY SUNNY WEATHER.

STRATIGRAPHIC MATRIX



Interpretation/Discussion

SUBSOIL. RECENT DEPOSIT.

Finds (tick): None [ ] Pot [✓] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder LE

Date 08/08/05

Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 2002

SITE A42 34

ADDITIONAL SHEETS:

TYPE DEPOSIT

Trench 2	Context Type: Deposit / ~~Cut~~ / ~~Structure~~
Site sub-div –	Overlain by: 2001
Structure No. –	Abutted by:
Plan No. 200	Cut by:
	Filled by: –
Section No. 200, 201, 202, 203	Same as: –
	Part of: –
Co-Ordinates	Consists of: –
	Overlies: 2003
Level –	Butts:
Slide No. 27 - 29 (1)	Cuts:
Neg No. 24 - 26 (1)	Fill of:
Matrix location	Relationships uncertain NOT SURE IF 2004 CUTS / ABUTTED

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

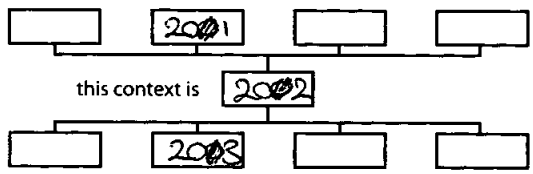
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

QUITE TIGHTLY COMPACTED BUT SOFT DEPOSIT & EASY TO DIG. PINKY-BROWN IN COLOUR. NO INCLUSIONS. LESS THAN 1CM THICK. VERY THIN MORTAR LAYER TROWELLED & MATTOCKED IN SUNNY DRY WEATHER.

STRATIGRAPHIC MATRIX



Interpretation/Discussion

VERY THIN MORTAR LAYER COVERING WEST HALF OF THE TRENCH. DIRECTLY BENEATH SUBSOIL (2001) & DIRECTLY OVER RUBBLE LAYER (2003).

Finds (tick): None [✓] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds	Recorder CE
◇ Samples	Date 08/08/05
⌂ Building Materials	Initials

Oxford Archaeology

CONTEXT RECORD

PILGRIMS SCHOOL, WINCHESTER

Context No. 203

SITE WINCMAH 234

ADDITIONAL SHEETS:

TYPE LAYER

Trench 2

Site sub-div —

Structure No. —

Plan No. 200

Section No. 200 202, 203

Co-Ordinates

Level —

Slide No. 27-29 (1)

Neg No. 24-26 (1)

Matrix location

Context Type: Deposit/ ~~Cut / Structure~~

Overlain by: 202, 201

Abutted by: POSSIBLY ABUTTED BY 204 & 205

Cut by:

Filled by:

Same as:

Part of:

Consists of:

Overlies: 206

Butts:

Cuts:

Fill of:

Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

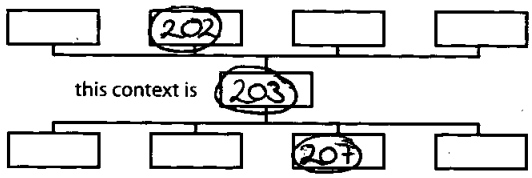
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

1) Hard
2) Light - mid orangey yellowish brown
3) Silty sand
4) >80% small sub-rounded flint gravell nodules & river pebbles, approx 0.01m - 0.04m diameter
5) @ 0.016m thick
7) Possible flooring / pathway layer
8) Mattocked & travelled in dry & sunny conditions.

STRATIGRAPHIC MATRIX



Interpretation/Discussion

Pathway or walkway layer. Very smooth worn surface. Seems to have been overlain or possibly patched up by mortar layer 202.

Finds (tick): None [ ] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder

Date 8th Aug '05

Initials

Oxford Archaeology

CONTEXT RECORD

PILGRIMS SCHOOL, WINCHESTER

Context No. 204

SITE WINCMAY 234

ADDITIONAL SHEETS: 1

TYPE MASONARY

Trench 2	Context Type: ~~Deposit / Cut~~ / Structure
Site sub-div	Overlain by: (201)
Structure No.	Abutted by: POSSIBLY ABUTTED OR OVERLAIN BY (205)
Plan No. 200	Cut by:
	Filled by:
Section No. 200	Same as: *LATER EXCAVATION SEEMED TO SHOW IT WAS SAME AS/OR PART OF LAYER (205)
	Part of:
Co-Ordinates	Consists of:
	Overlies: POSSIBLY OVERLIES OR CUTS (206)
Level ~~3~~ *	Butts:
Slide No. 27-29 (1)	Cuts:
Neg No. 24-26 (1)	Fill of:
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

1) Bricks & Mortar

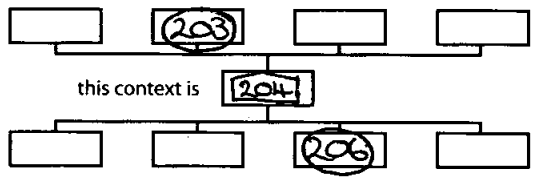
2) 0.30M wide, 0.38M long

3) Very roughly worn bricks with mortar in between. The bricks have worn away almost completely leaving very little except for the mortar in-between

4) No discernable type of brick bond, joint size is regular but weathered

9) Could be part of a brick wall, alternatively may have fallen from the Victorian wall just 0.5M from the NE side of the trench.

STRATIGRAPHIC MATRIX



Interpretation/Discussion

Very weathered small section of wall which appears in plan to be a small section of wall. Possibly the foundation part of a gate post or some such structure, but could also be a piece of the Victorian garden wall 1M from 204 to the NE.

* NB - 9th August 2005 - later excavation showed it was a sandstone slab which had obviously been used as a base

Finds (tick): None [✓] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder

Date 8th Aug '05

Initials

Oxford Archaeology	CONTEXT RECORD ADDITIONAL SHEET	Context No. 204
SITE CODE WINCHAY 284	SITE NAME PILGRIMS SCHOOL, WINCHESTER	SHEET NO. 2/2

for a brick pilar of some sort, but which had been placed in the trench with the rest of the (205) rubble hardcore Make up layer.

* NB. ANOTHER EXPLANATION COULD BE THAT SLAB ASSUMED TO (INITIALLY) BE PART OF A WALL, COULD POTENTIALLY HAVE BEEN A FACING SLAB OF SOME SORT. AND THE AREAS WE ORIGINALLY PERCIEVED AS 'BRICKS' WERE SIMPLY THE OUTLINE WITH POSSIBLY A LITTLE BIT OF BRICK WHICH CAME AWAY WHEN THE FACING WAS REMOVED. (L.E. 10/08/05)

Oxford Archaeology

CONTEXT RECORD

Context No. 205

SITE WINCHAY 234

ADDITIONAL SHEETS: 1

TYPE LAYER

Trench 2	Context Type: Deposit / ~~Cut / Structure~~
Site sub-div	Overlain by: 201
Structure No.	Abutted by:
Plan No. 200	Cut by:
	Filled by:
Section No. /	Same as: 207
	Part of:
Co-Ordinates	Consists of: 204 & 205
	Overlies: 206
Level *	Butts:
Slide No. 27-29 (1)	Cuts:
Neg No. 24-26 (1)	Fill of:
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

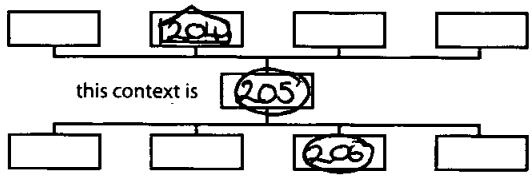
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

1) Loose
2) Orange & white brick fragments
3) Brick fragments & rubble hard-core
4) 100% brick & rubble hard-core
5) 0.19m thick
6) Situated only on the SW side of the trench. See attached plan
8) Hattocked & travelled in dry & sunny conditions.

STRATIGRAPHIC MATRIX



Interpretation/Discussion

Demolition rubble hard core layer, running along the SW side of the trench. Could be a filler layer laid down when the pipes for the existing swimming pool were laid down just SW of the trench.

* NB. RUBBLE POTENTIALLY TOO NARROW IN DEPTH FOR PIPE FILLER UNLESS

* SEE ADDITIONAL SHEET FOR PLAN DRAWING. PIPES ARE VERY SHALLOW (LE 09/08/05)

Finds (tick): None [✓] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

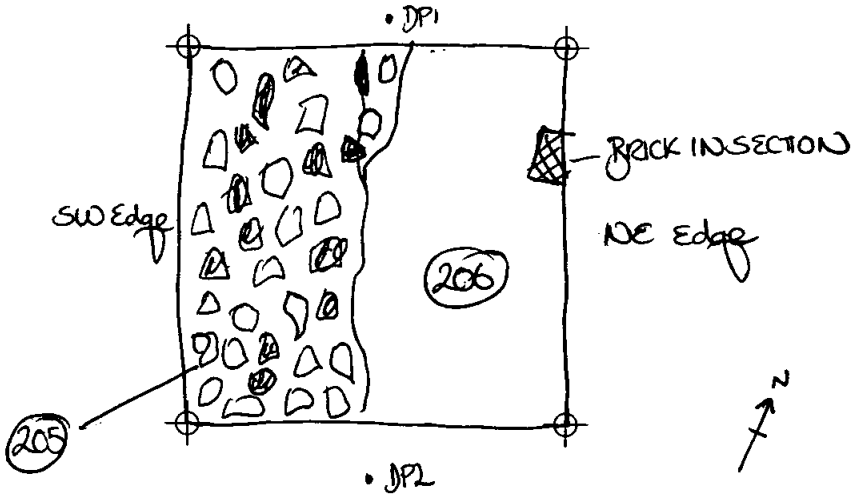
⌂ Building Materials

Recorder

Date 8th Aug '05

Initials

Oxford Archaeology	CONTEXT RECORD ADDITIONAL SHEET	Context No. 205
SITE CODE WINCMAY 234	SITE NAME PILGRIMS SCHOOL, WINCHESTER	SHEET NO. 2/2



Oxford Archaeology

CONTEXT RECORD

Context No. 206

SITE WINCMAN 234 | ADDITIONAL SHEETS: / | TYPE LAYER

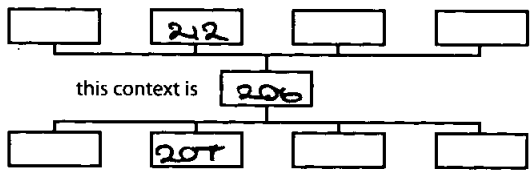
Trench 2	Context Type: Deposit / Cut / Structure	Check Lists:
Site sub-div	Overlain by: 212	DEPOSIT: 1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions
Structure No.	Abutted by:	
Plan No. /	Cut by:	
	Filled by:	
Section No. 200 201 202 203	Same as:	CUT: 1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments
Co-Ordinates	Part of:	
	Consists of:	
	Overlies: 207	
Level	Butts:	MASONRY: 1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments
Slide No. 27-29 (1)	Cuts:	
Neg No. 24-26 (1)	Fill of:	
Matrix location	Relationships uncertain	

Description (See check lists):

LOOSE COMPACTION. MID TO LIGHT GREYISH-BROWN SANDY SILT IN COMPOSITION. <10% OCCASSIONAL PIECE OF DEMOLITION RUBBLE (APPROX 5-7cm IN DIAMETER) AND <15% SMALL RIVER PEBBLES. THICKNESS:

THIS LAYER APPEARS TO ENCOMPASS WHOLE OF TRENCH TWO. MATTOCKED AND TROWELLED IN DRY AND SUNNY CONDITIONS.

STRATIGRAPHIC MATRIX



Interpretation/Discussion

MODERN LAYER OF REDEPOSITED ALLUVIAL SOIL. THIS CONTEXT SHEET HAS BEEN RE-WRITTEN AFTER THE RECOGNITION OF TWO SEPERATE CONTEXTS ABOVE IT WHICH WERE (DURING EXCAVATION) THOUGHT TO BE THE SAME CONTEXT. THEREFORE ALL FINDS ASSOCIATED WITH (211) AND (213) ARE NOTED AS (206)

Finds (tick): None [ ] Pot [✓] Bone [✓] Flint [ ] Stone [ ] Burnt stone [ ] Glass [✓] Metal [✓] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds	Recorder LE
◇ Samples	Date 28/08/06
⌂ Building Materials	Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 207

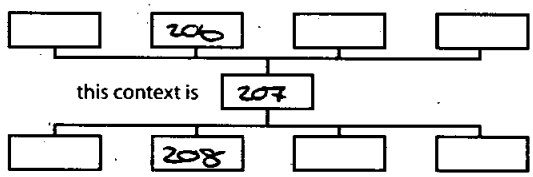
SITE AY 234 | ADDITIONAL SHEETS: 1 | TYPE LAYER

Trench 2	Context Type: Deposit / ~~Cut~~ / ~~Structure~~	Check Lists:
Site sub-div	Overlain by: 206	DEPOSIT: 1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions
Structure No.	Abutted by:	
Plan No. /	Cut by:	
	Filled by:	
Section No. 200 201 202, 203	Same as:	CUT: 1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments
Co-Ordinates	Part of:	
	Consists of:	
	Overlies: 208	
Level	Butts:	MASONRY: 1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments
Slide No.	Cuts:	
Neg No.	Fill of:	
Matrix location	Relationships uncertain	

Description (See check lists):

LOOSE COMPACTION OF SOIL, MID TO DARK GREYISH-BROWN, CLAYEY-SILTY IN COMPOSITION, APPROXIMATELY 90% RUBBLE INCLUSIONS. DUG BY TROWEL & MATTOCK ON A BRIGHT WARM DRY & SUNNY DAY. OTHER INCLUSIONS INCLUDE & SUBSTANTIAL AMOUNTS OF: POT, CLAY PIPE, BONE, SHELL & GLASS (POSSIBLY DATABLE TO MED/POST-MED)

STRATIGRAPHIC MATRIX



Interpretation/Discussion

RUBBLE LOOKS RELATIVELY MODERN, MOSTLY RED BRICK/TILE CBM. BRICKS (& FINISH ETC) APPROX SAME SIZE AS THOSE IN LATE VICTORIAN WALL TO THE N/E OF TRENCH 2 (WALL HAS A DATE OF 1903 ABOVE GATE A SHORT DISTANCE AWAY). ALL RUBBLE SMASHED/BROKEN IN SOME WAY BUT DEPTH OF BRICKS = 5cm / DEPTH OF TILES = 1½ cm.

Finds (tick): None [ ] Pot [✓] Bone [✓] Flint [ ] Stone [ ] Burnt stone [ ] Glass [✓] Metal [ ] CBM [✓] Wood [ ] Leather [ ]

△ Small Finds	Recorder LE
◇ Samples	Date 11/08/08
⌂ Building Materials	Initials

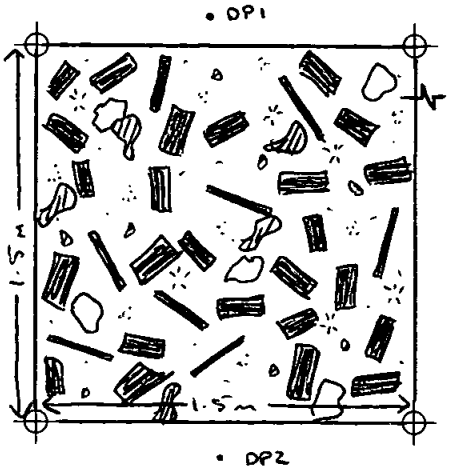
Oxford Archaeology

CONTEXT RECORD ADDITIONAL SHEET

Context No. 207

SITE CODE AY 234 | SITE NAME PILGRIMS SCHOOL WINCHESTER | SHEET NO. 2/2

NOT TO SCALE





KEY

- BRICK (MODERN)
- TILE
- CHALK
- FLINT
- COAL / CHARCOAL

Oxford Archaeology

CONTEXT RECORD

Context No. 208

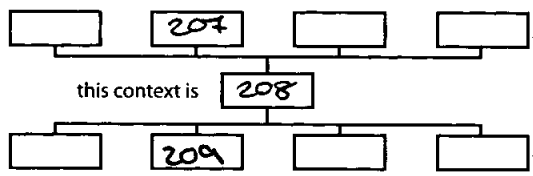
SITE A4234 | ADDITIONAL SHEETS: ONE | TYPE LAYER

Trench 2	Context Type: Deposit / ~~Cut~~ / ~~Structure~~	Check Lists:
Site sub-div	Overlain by: 207	DEPOSIT: 1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions
Structure No.	Abutted by:	
Plan No. [redacted]	Cut by:	
	Filled by:	
Section No. 200 201 202, 203	Same as:	CUT: 1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments
Co-Ordinates	Part of:	
	Consists of:	
	Overlies: 209	
Level 6.38, 9.38	Butts:	MASONRY: 1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments
Slide No.	Cuts:	
Neg No.	Fill of:	
Matrix location	Relationships uncertain	

Description (See check lists):

MID COMPACTION. ASHEY GREY [redacted] SILT, WITH 90% CHALK INCLUSIONS (RANGING FROM 9cm - 19cm ALL OF WHICH ARE SUBROUNDED) AND 5% RED CBM. EXTENT OF CHALK LAYER = 80% OF TRENCH 2 SCATTERED THROUGHOUT SOUTHEAST PORTION OF TRENCH WITH A CLEAR 20% IN NORTHWEST. EXCAVATED WITH MATTOCK AND TROWEL IN WARM DRY AND SUNNY WEATHER.

STRATIGRAPHIC MATRIX



Interpretation/Discussion

THE CHALK LAYER COVERS 80% OF TRENCH TWO WITH ABOUT 2% RED CBM. SURFACE HAS NO MORTAR + THEREFORE WE BELIEVE IT ISNT A [redacted] STRUCTURED SURFACE BUT 'MADE GROUND' WHERE SOMEONE HAS EITHER BUILT UP THE FLOODPLAIN TO AVOID [redacted] FLOOD DAMAGE OR TO MAKE THE GROUND MORE EVEN.

Finds (tick): None [ ] Pot [✓] Bone [✓] Flint [ ] Stone [ ] Burnt stone [ ] Glass [✓] Metal [✓] CBM [ ] Wood [ ] Leather [ ]

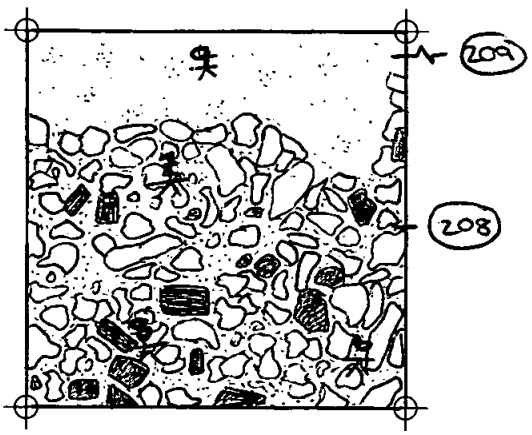
△ Small Finds	Recorder LE
◇ Samples	Date 12/08/05
⌂ Building Materials	Initials

Oxford Archaeology

CONTEXT RECORD ADDITIONAL SHEET

Context No. 208

SITE CODE AY234 | SITE NAME PILGRIMS SCHOOL WINCHESTER | SHEET NO. 2/2



KEY

CHALK

RED CBM

Oxford Archaeology

CONTEXT RECORD

Context No. 209

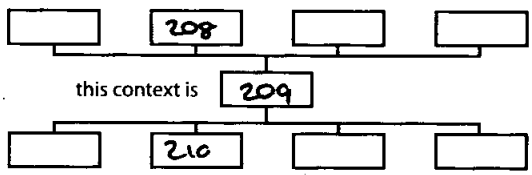
SITE AH234 | ADDITIONAL SHEETS: 1 | TYPE DEPOSIT

Trench	Context Type: Deposit / ~~Cut~~ / ~~Structure~~	Check Lists:
Site sub-div	Overlain by: 208	DEPOSIT: 1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions
Structure No.	Abutted by: –	
Plan No.	Cut by: –	
	Filled by: –	
Section No. 203 200 201 202	Same as: –	CUT: 1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments
Co-Ordinates	Part of: –	
	Consists of: –	
	Overlies: 210	
Level 10 11 12 13 16	Butts: –	MASONRY: 1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments
Slide No.	Cuts: –	
Neg No.	Fill of: –	
Matrix location	Relationships uncertain	

Description (See check lists):

MID COMPACTION. SANDY BEIGE IN COLOUR. COMPOSITION CHALK AND LIMESTONE. CHALK 55%. LIMESTONE 40% APPROXIMATELY. FULL EXTENT OF TRENCH TWO. RUBBLE LAYER WITH SOME WORKED COMPONENTS. MATTOCKED AND TROWELLED IN WARM DRY SUNNY CONDITIONS. RUBBLE INCLUSIONS RANGE FROM: 4cm TO 25cm IN DIAMETER BUT ONLY FAT BLOCKS APPEAR TO HAVE BEEN WORKED.

STRATIGRAPHIC MATRIX



Interpretation/Discussion

[redacted]

ALTHOUGH THIS LAYER DOES HAVE A SIGNIFICANT AMOUNT OF WORKED STONE (SOME OF WHICH HAVE BEEN TAKEN AS SMALL FINDS) IT STILL APPEARS TO BE JUST RUBBLE. ALTHOUGH FURTHER EXCAVATION (THROUGH THIS LAYER) WILL DETERMINE WHETHER THIS ASSUMPTION IS ACCURATE.

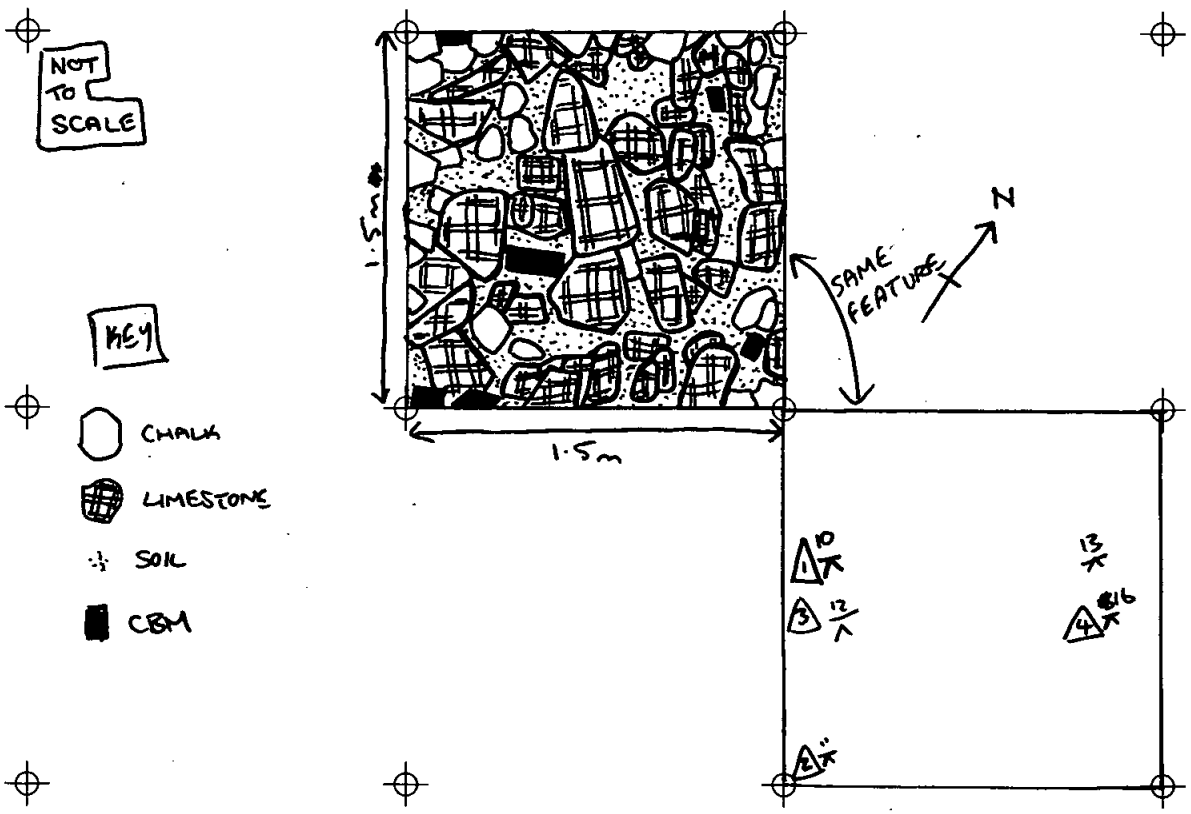
Finds (tick): None [ ] Pot [✓] Bone [✓] Flint [ ] Stone [✓] Burnt stone [ ] Glass [✓] Metal [redacted] ✓ CBM [✓] Wood [ ] Leather [ ]

Small Finds 1 2 3 4	Recorder LE
Samples	Date 16/08/05
Building Materials	Initials

Oxford Archaeology	CONTEXT RECORD ADDITIONAL SHEET	Context No. 209
SITE CODE A4234	SITE NAME PILGRIMS SCHOOL WINCHESTER	SHEET NO. 2/2

WHEN STONES [redacted] WERE LIFTED THE APPROXIMATE PERCENTAGE OF CHALK TO [redacted] LIMESTONE WAS:

CHALK 80% LIMESTONE 18% CBM 2%



Oxford Archaeology

CONTEXT RECORD

Context No. 210

SITE A4284

ADDITIONAL SHEETS:

TYPE LAYER

Trench 2	Context Type: Deposit / ~~Cut~~ / ~~Structure~~
Site sub-div	Overlain by: 209
Structure No.	Abutted by: /
Plan No.	Cut by: /
	Filled by: /
Section No. 200 202 203	Same as: /
	Part of: /
Co-Ordinates	Consists of: /
	Overlies: UNKNOWN.
Level 14 13	Butts: /
Slide No.	Cuts: /
Neg No.	Fill of: /
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

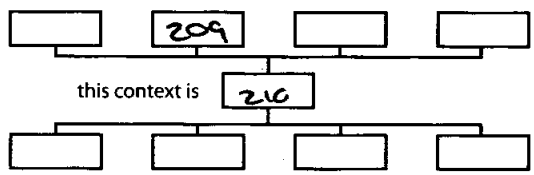
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

MID-LIGHT
LIGHT COMPACTION. [redacted] GREY-BROWN, SILTY-SAND IN COMPOSITION WITH APPROX 10% INCLUSIONS OF CHALK AND/OR LIMESTONE WHICH ARE SUB-ROUNDED. UNKNOWN EXTENT OF DEPOSIT. MATTOCKED AND TROWELLED ON A WARM DRY SUNNY DAY.

STRATIGRAPHIC MATRIX



Interpretation/Discussion

RELATIONSHIP OF THIS LAYER WITH POSSIBLE LOWER (EARLIER) DEPOSITS UNKNOWN AS EXCAVATION CEASED AT THIS DEPTH DUE (1.5m) DUE TO WATER TABLE BEING REACHED AND TRENCH TOO SMALL FOR SHORING.

Finds (tick): None [✓] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder LE

Date 18/08/05

Initials

Oxford Archaeology

CONTEXT RECORD

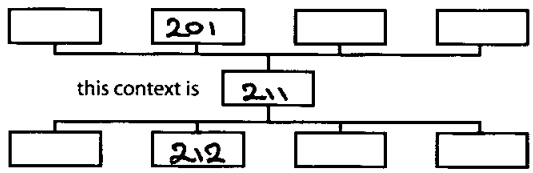
Context No. 211

SITE WINCMAY234	ADDITIONAL SHEETS: /	TYPE LAYER
Trench 2	Context Type: Deposit / ~~Cut~~ / ~~Structure~~	Check Lists:
Site sub-div	Overlain by: 201	DEPOSIT: 1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions
Structure No.	Abutted by: /	
Plan No. 200	Cut by: 203	
	Filled by: /	
Section No. 200 201 202	Same as: /	CUT: 1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments
	Part of: /	
Co-Ordinates	Consists of: /	
	Overlies: 212	
Level 5 X	Butts: /	MASONRY: 1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments
Slide No.	Cuts: /	
Neg No.	Fill of: /	
Matrix location	Relationships uncertain	

Description (See check lists):

LIGHT COMPACTION. MID GREY-BROWN. SANDY-SILT IN COMPOSITION. 15-30% SMALL RIVER PEBBLE INCLUSIONS. THICKNESS:

STRATIGRAPHIC MATRIX



DEPOSIT ONLY SITUATED ON NE HALF OF TRENCH TWO AS IS CUT BY 203. MATTOCKED AND TROWELLED IN DRY AND SUNNY CONDITIONS

Interpretation/Discussion

MODERN LAYER OF REDEPOSITED ~~[illegible]~~ ALLUVIAL SOIL. THIS LAYER ONLY RECOGNISED AS SEPERATE LAYER ~~[illegible]~~ AFTER EXCAVATION THEREFORE ALL FINDS ASSOCIATED WITH THIS LAYER ~~[illegible]~~ NOTED ALONG WITH THOSE OF 206.

Finds (tick): None [ ] Pot [✓] Bone [✓] Flint [ ] Stone [ ] Burnt stone [ ] Glass [✓] Metal [✓] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds	Recorder LE
◇ Samples	Date 23/08/05
⌂ Building Materials	Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 212

SITE WINCMAN 234 | ADDITIONAL SHEETS: — | TYPE LAYER

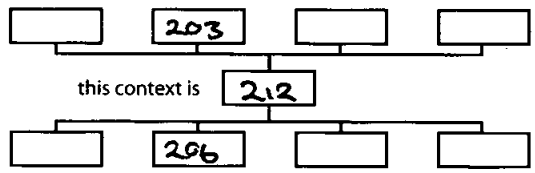
Trench 2	Context Type: Deposit / ~~Cut~~ / ~~Structure~~	Check Lists:
Site sub-div	Overlain by: 203	DEPOSIT: 1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions
Structure No.	Abutted by: —	
Plan No.	Cut by: —	
	Filled by: —	
Section No. 200 201 202 203	Same as: —	CUT: 1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments
Co-Ordinates	Part of: —	
	Consists of: —	
	Overlies: 206	
Level	Butts: —	MASONRY: 1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments
Slide No.	Cuts: —	
Neg No.	Fill of: —	
Matrix location	Relationships uncertain	

Description (See check lists):

LIGHT COMPACTION. CHALKY-YELLOW COLOUR. CHALKY IN COMPOSITION. VERY NARROW DEPOSIT THEREFORE INCLUSIONS LIMITED (<15% SMALL RIVER PEBBLES). THICKNESS:

EXTENT OF DEPOSIT APPEARS TO BE THROUGHOUT TRENCH TWO. MATTOCKED AND TROWELLED IN DRY AND SUNNY CONDITIONS.

STRATIGRAPHIC MATRIX



Interpretation/Discussion

THIS NARROW CHALKY LENSE APPEARS TO BE A MANUAL DEPOSIT, POSSIBLY TO LEVEL THE GROUND BEFORE THE RUBBLE LAYER (203) WAS DEPOSITED. UNFORTUNATELY THIS LAYER WAS ONLY IDENTIFIED AFTER EXCAVATION AND ANY FINDS ASSOCIATED WITH IT HAVE THEREFORE BEEN NOTED ALONG WITH THOSE OF (206)

Finds (tick): None [ ] Pot [✓] Bone [✓] Flint [ ] Stone [ ] Burnt stone [ ] Glass [✓] Metal [✓] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds	Recorder LE
◇ Samples	Date 23/08/05
⌂ Building Materials	Initials

Oxford Archaeology -

CONTEXT CHECKLIST

SITE CODE WINCMAY 234 | SITE NAME WINCHESTER PILGRIMS WAY

Context number	Type	Excavated within segments	Relationships	Drawn		Matrix	Comments	Recorder initials
				Section	Plan			
300	LAYER			300			TOPSOIL	
301	↓			↓			BURIED TOPSOIL	
302							DEMOLITION LAYER	
303	↓						BURIED TOPSOIL	
304	LAYER						DEMOLITION LAYER	
305	GROUP/ STRUCT		CONSISTS OF W 311 — 317		300		WOODEN STAKES	
306	LAYER		OVER LAIN BY 304				CHANNEL SILT	
307	↓		OVERLAIN BY 306		301		CHANNEL SILT	
308			OVERLAIN BY 307		301		CHANNEL SILT	
309	↓		OVERLAIN BY 308				PEAT (BLACK)	
310	LAYER		OVERLAIN BY 309	↓	300		PEAT (REDDISH BROWN)	
311	WOOD		P.O. 305	—	300			
312	WOOD		↓	—	↓			
313	WOOD			—			WOODEN STAKES	
314	WOOD			—				
315	WOOD			—				
316	WOOD			—				
317	WOOD		↓	—	↓			
318	LAYER			300			FLINT + CHALK	
319	Layer			300	301		Roman demolition	
320	wood		P.O. 325	~~300~~	301		Revetment posts?	
321	wood		↓	~~300~~	301		Revetment posts?	
322	LAYER			300			SILTING UNDER ROMAN DEMO.	
323	LAYER			300			SAND BAR?	
324	LAYER			300			NAT. FLINT GRAVEL	
325	GRP.				301		POSS. REVETING TIMBERS.	
326	WOOD		P.O. 305?		300		WOODEN STAKE	

Oxford Archaeology

CONTEXT RECORD

Context No. 300

SITE AY234

ADDITIONAL SHEETS:

TYPE LAYER

Trench 3	Context Type: Deposit / ~~Cut / Structure~~	Check Lists:
Site sub-div	Overlain by: —	DEPOSIT: 1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions
Structure No.	Abutted by:	
Plan No.	Cut by:	
	Filled by:	
Section No. 300	Same as:	CUT: 1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments
Co-Ordinates	Part of:	
	Consists of:	
	Overlies: 301	
Level	Butts:	MASONRY: 1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments
Slide No.	Cuts:	
Neg No.	Fill of:	
Matrix location	Relationships uncertain	

Description (See check lists):

DARK GREY BLACK

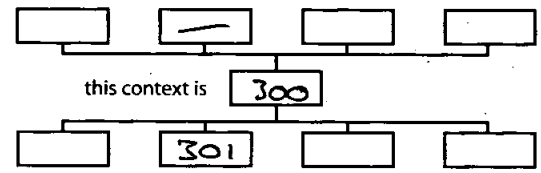
1. topsoil particles, 2. Earthy brown SILT 3. Less angular particles. 4. stone & chalk GRAVEL + / FLECKS + CHARCOAL 3% 5. 20cm - 30cm

6. length of trench

7. topsoil - modern layer

8. machine excavated - sunny clear.

STRATIGRAPHIC MATRIX



Interpretation/Discussion

Topsoil layer containing pottery & CBM.

Finds (tick): None [ ] Pot [✓] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [✓] Wood [ ] Leather [ ]

△ Small Finds	Recorder RW
◇ Samples	Date 12/8/05
Building Materials	Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 301

SITE AY234

ADDITIONAL SHEETS:

TYPE Layer

Trench 3	Context Type: Deposit / ~~Cut / Structure~~
Site sub-div	Overlain by: 300
Structure No.	Abutted by:
Plan No.	Cut by:
	Filled by:
Section No. 300	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies: 302
Level	Butts:
Slide No.	Cuts:
Neg No.	Fill of:
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

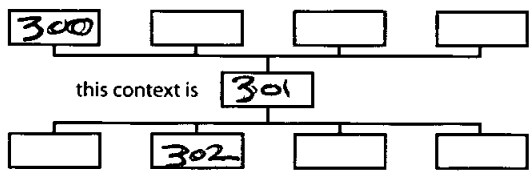
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

1. Medium 2. blackish brown.
3. granual 4. ~~stone~~ stone & demolition material
5. 20cm 6. ~~majority~~ whole of trench.
7. buried topsoil layer
8. Machine excavated. fine/sunny & clear

STRATIGRAPHIC MATRIX



Interpretation/Discussion

Burned topsoil layer containing pottery, Glass, metal & CBM. (PROBABLE BURIED GARDEN SOIL)

* (5) OCC. CBM FRAG, (TILE SLATE + MORTAR) FREQ. GRAVEL

Finds (tick): None [ ] Pot [✓] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [✓] Metal [✓] CBM [✓] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder RW

Date 12/8/05

Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 302

SITE A41234

ADDITIONAL SHEETS:

TYPE Layer

Trench 3	Context Type: Deposit / ~~Cut / Structure~~
Site sub-div	Overlain by: 301
Structure No.	Abutted by:
Plan No.	Cut by:
	Filled by:
Section No. 300	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies: 303
Level	Butts:
Slide No.	Cuts:
Neg No.	Fill of:
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

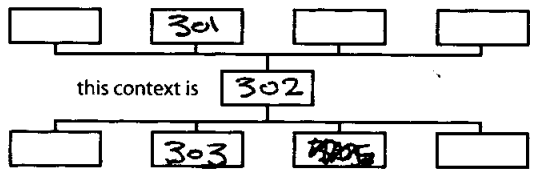
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

1. Medium 2. dark silt grey 3. mottling composition
4. large amounts of demolition material. MORTAR
5. 10–15cm
6. 3/4 of trench, 7m
7. layer of demolition
8. machine excavated. Sunny/ clear

STRATIGRAPHIC MATRIX



Interpretation/Discussion

Demolition layer containing CBM.

Finds (tick): None [ ] Pot [✓] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [✓] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder RW

Date 12/8/05

Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 303

SITE A4234

ADDITIONAL SHEETS:

TYPE layer

Trench 3	Context Type: Deposit / ~~Cut / Structure~~
Site sub-div	Overlain by: 302
Structure No.	Abutted by:
Plan No.	Cut by:
	Filled by:
Section No. 300	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies: 304
Level	Butts:
Slide No.	Cuts:
Neg No.	Fill of:
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

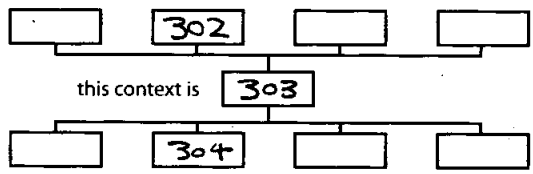
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

1. Compact 2. light black/clay 3. Compact occ. MORTAR
4. Small stones 5. 10cm
6. 6½m
7. Buried topsoil layer - compacted.
8. Machine excavated, sunny / clear.

STRATIGRAPHIC MATRIX



Interpretation/Discussion

Buried topsoil ~~Containing pot~~ type deposit, running as a thin band between (302) + (304)

Finds (tick): None [ ] Pot [✓] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder RW

Date 12/8/05

Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 304

SITE AY234

ADDITIONAL SHEETS:

TYPE Layer

Trench 3	Context Type: Deposit / ~~Cut / Structure~~
Site sub-div	Overlain by: 303
Structure No.	Abutted by:
Plan No.	Cut by:
	Filled by:
Section No. 300	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies: ~~303~~ 306
Level	Butts:
Slide No.	Cuts:
Neg No.	Fill of:
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

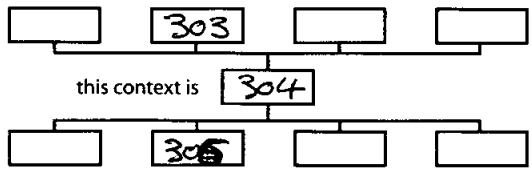
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

1. Medium 2. Sandy grey
3. loose/ granular 4. large demolition material. 5. 10cm 6. 5½ - 6m
7. Layer of demolition material & loose soil.
8. Machine excavated. Sunny/ clear.

STRATIGRAPHIC MATRIX



Interpretation/Discussion

Demolition layer containing metal, pot, bone & CBM

Finds (tick): None [ ] Pot [✓] Bone [✓] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [✓] CBM [✓] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder RJ

Date 12/8/05

Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 305

SITE AY234

ADDITIONAL SHEETS:

TYPE GROUP/STRUCT

Trench 3	Context Type: ~~Deposit / Cut /~~ Structure
Site sub-div	Overlain by:
Structure No.	Abutted by:
Plan No. 300	Cut by:
	Filled by:
Section No. ~~3600~~	Same as:
	Part of:
Co-Ordinates	Consists of: 311 312 313 314 315 316 317
	Overlies:
Level	Butts:
Slide No.	Cuts:
Neg No.	Fill of:
Matrix location	Relationships uncertain

Check Lists:

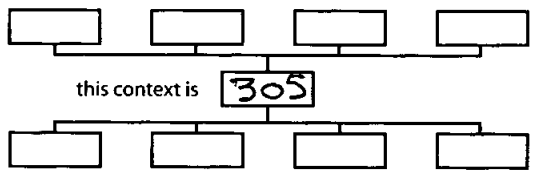
DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

STRATIGRAPHIC MATRIX



Interpretation/Discussion

Finds (tick): None [ ] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds	Recorder
◇ Samples	Date
⌂ Building Materials	Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 306

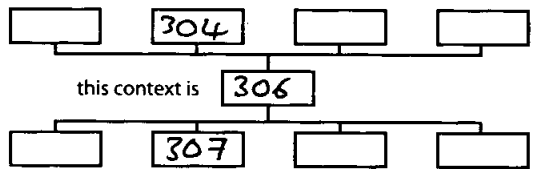
SITE WINCMAN 234 | ADDITIONAL SHEETS: | TYPE LAYER

Trench 3	Context Type: Deposit / ~~Cut / Structure~~	Check Lists:
Site sub-div	Overlain by: 304	DEPOSIT: 1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions
Structure No.	Abutted by:	
Plan No.	Cut by:	
	Filled by:	
Section No. 300	Same as:	CUT: 1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments
	Part of:	
Co-Ordinates	Consists of:	
	Overlies: 307	
Level	Butts:	MASONRY: 1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments
Slide No.	Cuts:	
Neg No.	Fill of:	
Matrix location	Relationships uncertain	

Description (See check lists):

(1) FIRM
(2) MID GREY
(3) SILT
(4) 5% CHALK FRAGS. 2% MORTAR FLECK 1% TILE, 2% CHARCOAL FLECK
(5) 0·3 M THICK
(6) THROUGHOUT TRENCH (8) BY MACHINE + HAND / FINE

STRATIGRAPHIC MATRIX



Interpretation/Discussion

PROBABLE CHANNEL SILT, NATURAL HOLLOWS IN TOP SURFACE OF THIS MATERIAL ARE FILLED WITH DEMOLITION DEBRIS (304)

Finds (tick): None [ ] Pot [✓] Bone [✓] Flint [ ] Stone [ ] Burnt stone [ ] Glass [✓] Metal [✓] CBM [✓] Wood [ ] Leather [ ] SLAG ✓

△ Small Finds	Recorder GUY
◇ Samples ~~30~~, 31, 32, 33, 34, 35	Date 15/8/05
⌂ Building Materials	Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 307

SITE WINCMAY23

ADDITIONAL SHEETS:

TYPE LAYER

Trench 3	Context Type: Deposit / ~~Cut / Structure~~
Site sub-div	Overlain by: 306
Structure No.	Abutted by:
Plan No. 301	Cut by:
	Filled by:
Section No. 300	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies: 308
Level	Butts:
Slide No.	Cuts:
Neg No.	Fill of:
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

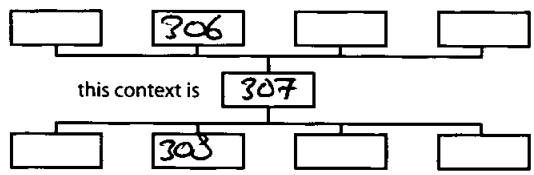
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

1. FIRM
2. LIGHT GREY
3. SILT
4. 2% CHARCOAL, 2% CHALK FRAGS, 1% CBM (SLATE)
5. > 0.32m THICK
6. TIPPING IN FROM EAST 3.5m FROM E. END OF TRENCH
7. 8. BY HAND + MACHINE / FINE

STRATIGRAPHIC MATRIX



Interpretation/Discussion

PROBABLE CHANNEL SILTS

Finds (tick): None [ ] Pot [✓] Bone [✓] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [✓] Wood [ ] Leather [ ]

△ Small Finds	Recorder GUY
◇ Samples 481	Date 15/8/05
⌂ Building Materials	Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 308

SITE WINCMAY 234

ADDITIONAL SHEETS:

TYPE LAYER

Trench 3

Site sub-div

Structure No.

Plan No. 301

Section No. 300

Co-Ordinates

Level

Slide No.

Neg No.

Matrix location

Context Type: Deposit / ~~Cut / Structure~~

Overlain by: 307

Abutted by:

Cut by:

Filled by:

Same as:

Part of:

Consists of:

Overlies: 309

Butts:

Cuts:

Fill of:

Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

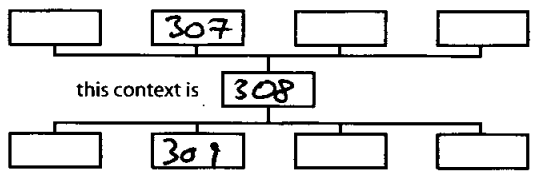
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

(1) FIRM
(2) MOTTLED MID GREY + GREENY BROWN
(3) SILT (4) 10% CHALK FRAGS, 1% CBM (SLATE TILE + MORTAR)
1% CHARCOAL, 5% FLINT FRAGS c. 70mm Ø
(5) > 0·22m THICK (NOT FULLY EXCAVATED YET).
(6) AT E. END OF TRENCH (8) BY MACHINE TO TOP OF THIS DEPOSIT THEN BY HAND

STRATIGRAPHIC MATRIX



Interpretation/Discussion

CHANNEL SILT, WITH POSSIBLE DELIBERATELY DUMPED BESSY MATERIAL

Finds (tick): None [ ] Pot [✓] Bone [✓] Flint [ ] Stone [ ] Burnt stone [ ] Glass [✓] Metal [✓] CBM [✓] Wood [ ] Leather [ ] SLAG ✓

△ Small Finds

◇ Samples 1, 24, 25, 26, 27, 28, 29, 35, 36, 38, 46, 47

⌂ Building Materials

Recorder GUY

Date 15/8/05

Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 309

SITE WINCMAY 234

ADDITIONAL SHEETS:

TYPE LAYER

Trench 3	Context Type: Deposit / ~~Cut / Structure~~
Site sub-div	Overlain by: 308
Structure No.	Abutted by:
Plan No.	Cut by:
	Filled by:
Section No. 300	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies: 310
Level	Butts:
Slide No.	Cuts:
Neg No.	Fill of:
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

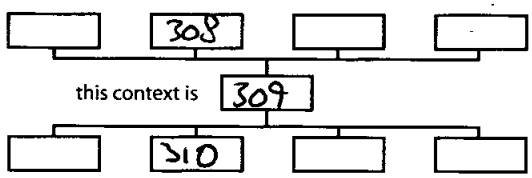
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

1. FIRM
2. DARK BLACK
3. ~~OF~~ PEAT
4. OCC. CHALK FLECK
5. 0.26M THICK
6. THROUGHOUT TR 3 (PROJECTED TO BE PRESENT IN BOTH SLOTS AT EITHER END)

STRATIGRAPHIC MATRIX



Interpretation/Discussion

UPPER PEAT LAYER

1 SHERD OF SAMIAN

Finds (tick): None [ ] Pot [✓] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [✓] Wood [ ] Leather [ ]

△ Small Finds 6 7 8

◇ Samples 3, 19, 20, 21, 35, 36, 38, 49

⌂ Building Materials

Recorder GUY

Date:

Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 310

SITE WINCMAY23 | ADDITIONAL SHEETS: | TYPE LAYER

Trench 3	Context Type: Deposit / ~~Cut / Structure~~
Site sub-div	Overlain by: 309
Structure No.	Abutted by:
Plan No.	Cut by:
	Filled by:
Section No. 300	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies: 319
Level	Butts:
Slide No.	Cuts:
Neg No.	Fill of:
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

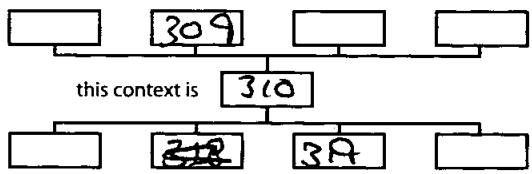
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

(1) FIRM
(2) MID REDDISH BROWN
(3) PEAT WITH LENSES OF MID GREENY BROWN FINE SILT,
(4) OCC. CHALK GRANULE
(5) 0.2 M THICK
(6) THROUGHOUT TRENCH (SEE (309))

STRATIGRAPHIC MATRIX



Interpretation/Discussion: LOWER PEAT

Finds (tick): None [ ] Pot [✓] Bone [✓] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [✓] Wood [ ] Leather [✓]

△ Small Finds

◇ Samples 4, 16, 17, 18, 35, 36, 37, 38, 50, 51

⌂ Building Materials

Recorder GUY

Date

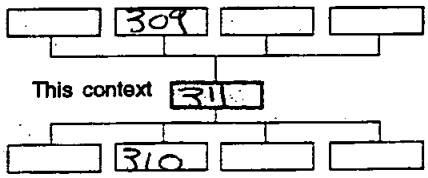
Initials

Oxford Archaeological Unit

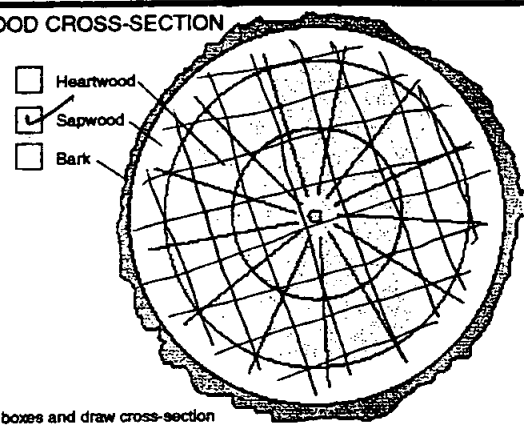
SITE	WOOD RECORD	Context No.
WINCMAY 234		311
Area: Trench No: 3	Additional sheets:	Type: WOOD

Plan no. 300	Structure/group no. 305	Checklist: 1.Type (post,plank etc.) 2.Orientation & angle 3. Condition/preservation 4. Conversion 5. Dimensions (mm) 6. Tool-marks 7. Joints/fixings 8. Sketch 9. Other comments 10. Methods & conditions
Section/elevation no. /	Within layer: 310	
Colour film/slide no. Digi	Cuts layer:	
B/W film/neg. no.	Joined to other timber?	
Levels:	Overlies other timber?	
Co-ordinates:	Overlain by other timber?	

STRATIGRAPHIC MATRIX



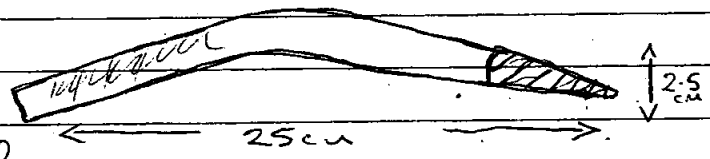
WOOD CROSS-SECTION



Tick boxes and draw cross-section

Description (see check-list)

1. vertical stake
2. W
3. Good
4. whole piece
5. 250mm / 25mm
6. Cut end lying vertically down
7. None
8.
9. whole



Interpretation/discussion

part of 305 possible fish trap.

If identified as Oak, tick box ☐ Initials:

Wood Sample No.s	Species	Dendro	Retained Whole	Recorded by:	Date:	Checked by:
			✓			

Oxford Archaeological Unit

SITE	WOOD RECORD	Context No.
WINCMAY234		~~316~~ 312
Area: Trench No: 3	Additional sheets:	Type: WOOD

Plan no. 300	Structure/group no. 305	Checklist: 1. Type (post,plank etc.) 2. Orientation & angle 3. Condition/preservation 4. Conversion 5. Dimensions (mm) 6. Tool-marks 7. Joints/fixings 8. Sketch 9. Other comments 10. Methods & conditions
Section/elevation no. —	Within layer: 310	
Colour film/slide no. DIG1	Cuts layer:	
B/W film/neg. no.	Joined to other timber?	
Levels:	Overlies other timber?	
Co-ordinates:	Overlain by other timber?	

STRATIGRAPHIC MATRIX

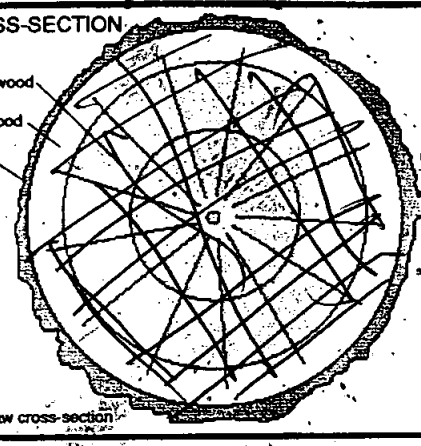
309

This context 312

310

WOOD CROSS-SECTION

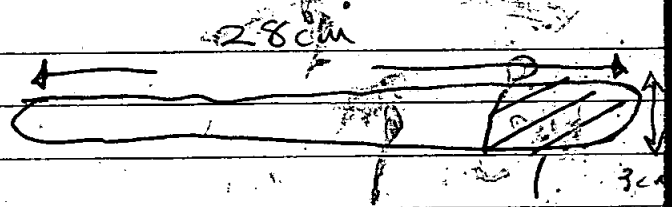
Heartwood ☐
Sapwood ☐
Bark ☑



Tick boxes and draw cross-section

Description (see check-list)

1. HORIZONTAL STAKE / LATHE
2. E-W
3. GOOD
4. WHOLE: PIECE
5. 280 mm / 30 mm
6. CUT END LYING TO EAST
7. NONE
8.
9. WAS WHOLE. SPLIT WHEN EXCAVATED



Interpretation/discussion

PART OF 305 POSSIBLE FISH TRAP

If identified as Oak, tick box ☐ Initials:

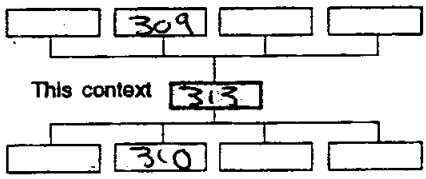
Wood Sample No.s	Species	Dendro	Retained Whole	Recorded by:	Date:	Checked by:
			✓			

Oxford Archaeological Unit

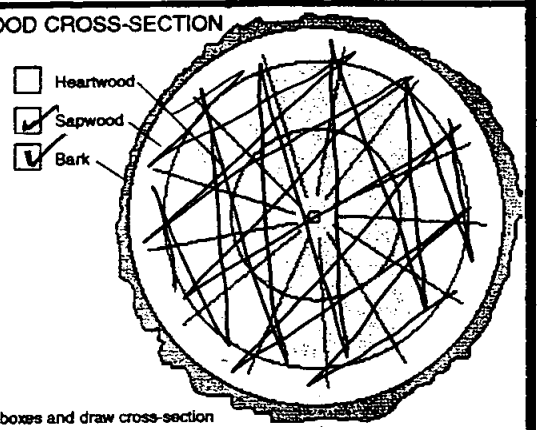
SITE	WOOD RECORD	Context No.
WINCNAY 234		313
Area: Trench No: 3	Additional sheets:	Type: WOOD

Plan no. 300	Structure/group no. 305	Checklist: 1.Type (post,plank etc.) 2.Orientation & angle 3. Condition/preservation 4. Conversion 5. Dimensions (mm) 6. Tool-marks 7. Joints/fixings 8. Sketch 9. Other comments 10. Methods & conditions
Section/elevation no. /	Within layer: 310	
Colour film/slide no.	Cuts layer:	
B/W film/neg. no. DIG 1	Joined to other timber?	
Levels:	Overlies other timber?	
Co-ordinates:	Overlain by other timber?	

STRATIGRAPHIC MATRIX



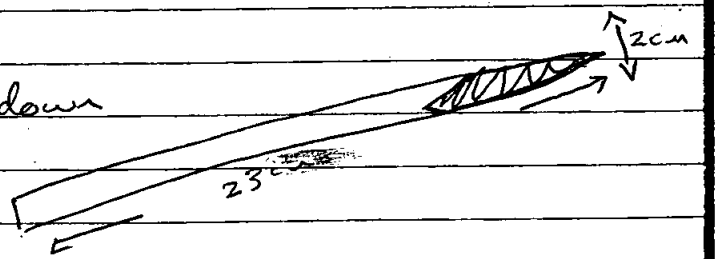
WOOD CROSS-SECTION



Tick boxes and draw cross-section

Description (see check-list)

1. Vertical stake
2.
3. Good
4. whole piece
5. 230 mm / 20 mm
6. Cut end lying vertically down
7. None
8.
9. whole
10. Sieving / hand excavated with trowell



Interpretation/discussion

part of [305] possible fish trap.

If identified as Oak, tick box ☐ Initials:

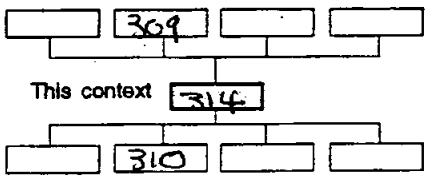
Wood Sample No.s	Species	Dendro	Retained Whole	Recorded by:	Date:	Checked by:
			✓			

Oxford Archaeological Unit

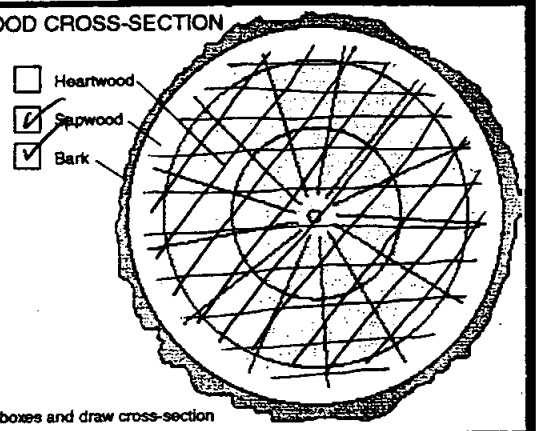
SITE	WOOD RECORD	Context No.
WINCMAY 234		314
Area: Trench No: 3	Additional sheets:	Type: WOOD

Plan no. 300	Structure/group no. 305	Checklist: 1.Type (post,plank etc.) 2.Orientation & angle 3. Condition/preservation 4. Conversion 5. Dimensions (mm) 6. Tool-marks 7. Joints/fixings 8. Sketch 9. Other comments 10. Methods & conditions
Section/elevation no.	Within layer: 310	
Colour film/slide no.	Cuts layer: no	
B/W film/neg. no. 3 DIG.1	Joined to other timber?	
Levels:	Overlies other timber?	
Co-ordinates:	Overlain by other timber?	

STRATIGRAPHIC MATRIX



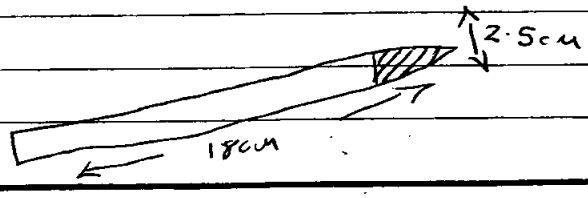
WOOD CROSS-SECTION



Tick boxes and draw cross-section

Description (see check-list)

(1) vertical stake
(2) W
(3) Good
(4) whole piece
(5) 180 mm / 25 mm
(6) cut end lying vertically down
(7) None
(8)
(9) whole



Interpretation/discussion

Part of 305 possible fish trap

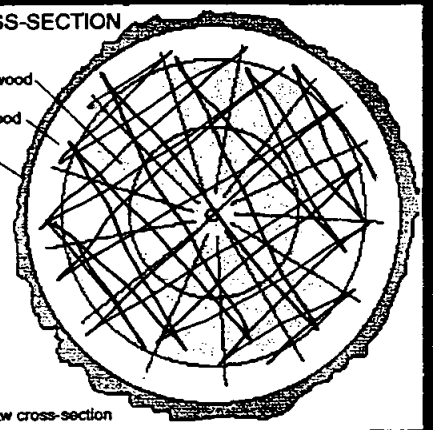
If identified as Oak, tick box ☐ Initials:

Wood Sample No.s	Species	Dendro	Retained Whole	Recorded by:	Date:	Checked by:
			✓			

Oxford Archaeological Unit

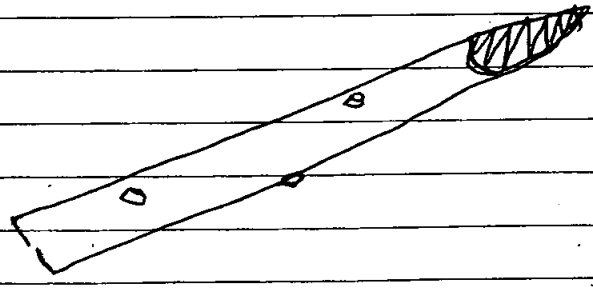
SITE	WOOD RECORD	Context No.
WINCMAY 234		315
Area: Trench No: 3	Additional sheets:	Type: WOOD

Plan no: 300	Structure/group no. 305	Checklist: 1. Type (post,plank etc.) 2. Orientation & angle 3. Condition/preservation 4. Conversion 5. Dimensions (mm) 6. Tool-marks 7. Joints/fixings 8. Sketch 9. Other comments 10. Methods & conditions
Section/elevation no. ~~/~~	Within layer: 310	
Colour film/slide no.	Cuts layer:	
B/W film/neg. no. } Dig. 1	Joined to other timber?	
	Overlies other timber?	
	Overlain by other timber?	
Levels:	STRATIGRAPHIC MATRIX: 309 / This context 315 / 310	WOOD CROSS-SECTION: ☐ Heartwood ☐ Sapwood ☐ Bark — Tick boxes and draw cross-section
Co-ordinates:		



Description (see check-list)

1. vertical stake
2. E
3. Oak
4. whole piece
5. 300 mm / 20 mm
6. Cut end
7. none
8.
9. none



Interpretation/discussion

part of 305 possible fish trap.

If identified as Oak, tick box ☐ Initials:

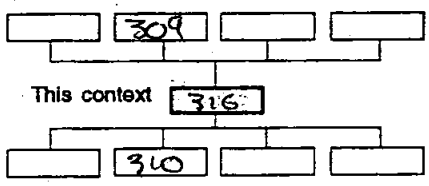
Wood Sample No.s	Species	Dendro	Retained Whole	Recorded by:	Date:	Checked by:
			✓			

Oxford Archaeological Unit

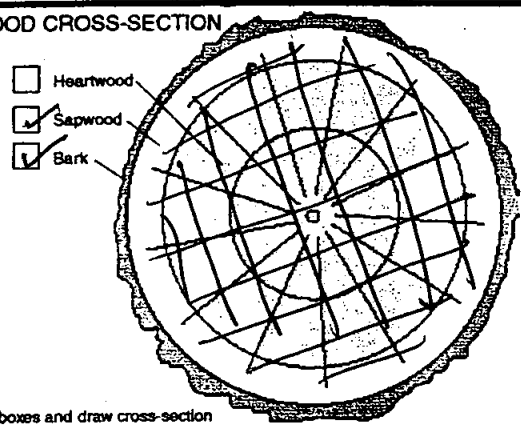
SITE WINCMAY234	**WOOD RECORD**	Context No. 316
Area: Trench No: 3	Additional sheets:	Type: WOOD

Plan no. 300	Structure/group no. 305	Checklist: 1.Type (post,plank etc.) 2.Orientation & angle 3. Condition/preservation 4. Conversion 5. Dimensions (mm) 6. Tool-marks 7. Joints/fixings 8. Sketch 9. Other comments 10. Methods & conditions
Section/elevation no. ~~Plan~~	Within layer: 310	
Colour film/slide no. Dig.1	Cuts layer:	
B/W film/neg. no.	Joined to other timber?	
Levels:	Overlies other timber?	
Co-ordinates:	Overlain by other timber?	

STRATIGRAPHIC MATRIX



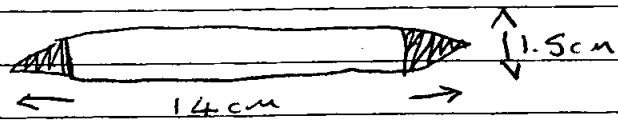
WOOD CROSS-SECTION



Tick boxes and draw cross-section

Description (see check-list)

(1) Horizontal shake / Lathe
(2) E-W
(3) Good
(4) whole piece
(5) 140 mm / 15 mm
(6) Both Ends cut & fashioned into sharpened point
(7) None
(8)
(9) whole piece



Interpretation/discussion

part of 305 possible fish trap

Wood Sample No.s	Species	Dendro	Retained Whole
			✓

If identified as Oak, tick box ☐ Initials:

Recorded by:	Date:	Checked by:

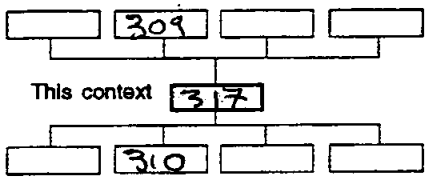
Oxford Archaeological Unit

SITE: WINCMAY 234	WOOD RECORD	Context No.: 317
Area: Trench No: 3	Additional sheets:	Type: WOOD

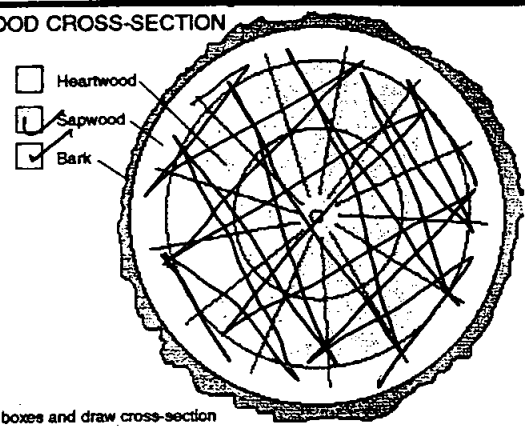
Plan no.: 300	Structure/group no.: 305
Section/elevation no.: /	Within layer: 310
Colour film/slide no.:	Cuts layer:
B/W film/neg. no.: Dig. 1	Joined to other timber?
Levels:	Overlies other timber?
Co-ordinates:	Overlain by other timber?

Checklist:
1. Type (post,plank etc.)
2. Orientation & angle
3. Condition/preservation
4. Conversion
5. Dimensions (mm)
6. Tool-marks
7. Joints/fixings
8. Sketch
9. Other comments
10. Methods & conditions

STRATIGRAPHIC MATRIX



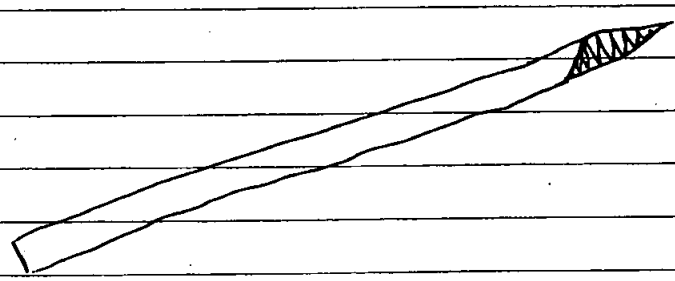
WOOD CROSS-SECTION



Tick boxes and draw cross-section

Description (see check-list)

1. Vertical Stake
2. E
3. Good
4. whole piece
5. 300 mm / 20 mm
6. Cut end
7. none
8.
9. NONE



Interpretation/discussion

Part of 305 possible fish trap

If identified as Oak, tick box ☐ Initials:

Wood Sample No.s	Species	Dendro	Retained Whole	Recorded by:	Date:	Checked by:
			✓			

Oxford Archaeology

CONTEXT RECORD

Context No. 318

SITE WINCMAY 234

ADDITIONAL SHEETS:

TYPE LAYER

Trench 3	Context Type: Deposit / ~~Cut / Structure~~
Site sub-div	Overlain by: 308
Structure No.	Abutted by:
Plan No. SKETCH	Cut by:
	Filled by:
Section No. 300	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies: 309
Level	Butts:
Slide No.	Cuts:
Neg No.	Fill of:
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

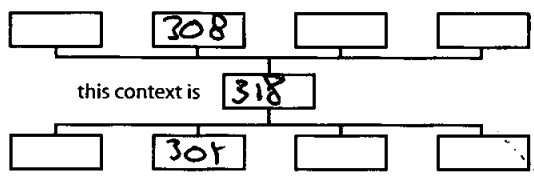
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

1. FIRM
2. MID ~~BROWN~~ ~~GREY~~ GREENY BROWN
3. SILT
4. OCC. SLATE FRAG.
5. 0.15m THICK
6. IN BOTH SLOTS EAST & WEST TR 3

STRATIGRAPHIC MATRIX



Interpretation/Discussion

CHANNEL SILT, FINE SILT

POST DATING PEAT 309

Finds (tick): None [ ] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples 21, 22, 23, 35, 36, 38, 44, 45

⌂ Building Materials

Recorder GUY

Date 29/8/05

Initials

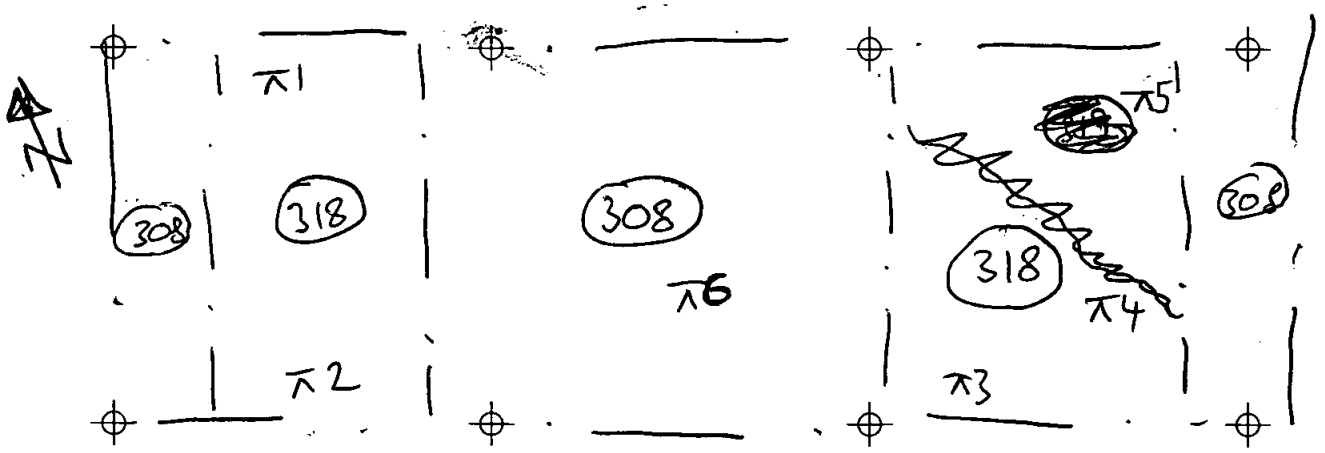
Oxford Archaeology

CONTEXT RECORD ADDITIONAL SHEET

Context No. 318

SITE CODE | SITE NAME | SHEET NO. 1

SKETCH PLAN OF 308
NOT TO SCALE



1 31.62 m OD
2 31.49
3 31.54
4 31.44
5 31.36
6 31.78

Oxford Archaeology

CONTEXT RECORD

Context No. 319

SITE LINCMAY 23

ADDITIONAL SHEETS:

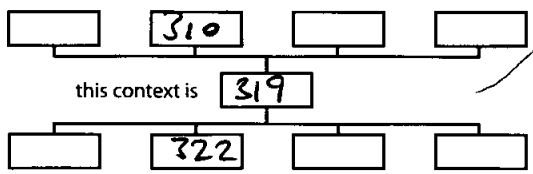
TYPE LAYER

Trench 3	Context Type: Deposit / ~~Cut / Structure~~	Check Lists:
Site sub-div	Overlain by: 310	DEPOSIT: 1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions
Structure No.	Abutted by:	
Plan No. 301 302	Cut by:	
	Filled by:	
Section No. 300	Same as:	CUT: 1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments
Co-Ordinates	Part of:	
	Consists of:	
	Overlies: 322	
Level	Butts:	MASONRY: 1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments
Slide No.	Cuts:	
Neg No.	Fill of:	
Matrix location	Relationships uncertain	

Description (See check lists):

1. loose
2. light grey
3. 50% sand + grit, 30% silt
4. 20% flint nodules/CBM/mortar, occassional charcoal
5/6. 0.28m thickness
7. A.28
8. waterlogged, trowel/mattock.

STRATIGRAPHIC MATRIX



Interpretation/Discussion

ROMAN DEMOLITION LAYER
COMPRISING OF FLINT NODULES, MORTAR,
CBM + BUILDING STONE FRAGMENT
50% sand + grit 30% silt

Finds (tick): None [ ] Pot [✓] Bone [✓] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ]
CBM [✓] Wood [✓] Leather [✓]

△ Small Finds 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 23, 24, 9, NB 6

◇ Samples (7) 4 boxes, 12, 13, 14, 15, 36, 37, 40, 41, 38

⌂ Building Materials

Recorder Anne Ross

Date 30-08-05

Initials R.M.S

Oxford Archaeology

CONTEXT RECORD

Context No. 319

SITE Wroxeter 2006 | ADDITIONAL SHEETS: | TYPE

Trench 3	Context Type: Deposit / Cut / Structure
Site sub-div	Overlain by: 310
Structure No.	Abutted by:
Plan No.	Cut by:
	Filled by:
Section No. 300	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies:
Level	Butts:
Slide No.	Cuts:
Neg No.	Fill of:
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

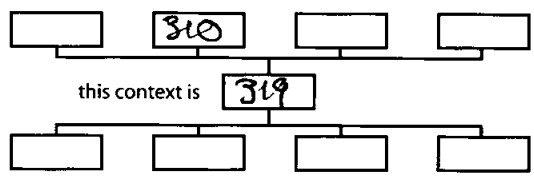
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

1. [redacted] HARD
2. [redacted] LIGHT GREY YELLOW
3. [redacted] SANDY GRIT / DEMOLITION
4. much flint & chalk 15%-18% larger rubble
5. 20cm / 200mm
6. 2m / 2000mm - THROUGHOUT TRENCH (7)
8. v wet / rain by trowell / hand

STRATIGRAPHIC MATRIX



Interpretation/Discussion

ROMAN DEMOLITION LAYER

Finds (tick): None [ ] Pot [✓] Bone [✓] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [✓] CBM [✓] Wood [ ] Leather [ ]

△ Small Finds	Recorder
◇ Samples 7, 12, 13, 14, 15, 36, 37, 40, 41, 38	Date
⌂ Building Materials	Initials

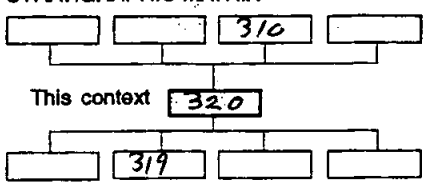
Oxford Archaeological Unit

SITE Wihcmay 234	**WOOD RECORD**	Context No. 320
Area: Trench No: 3	Additional sheets:	Type: WOOD

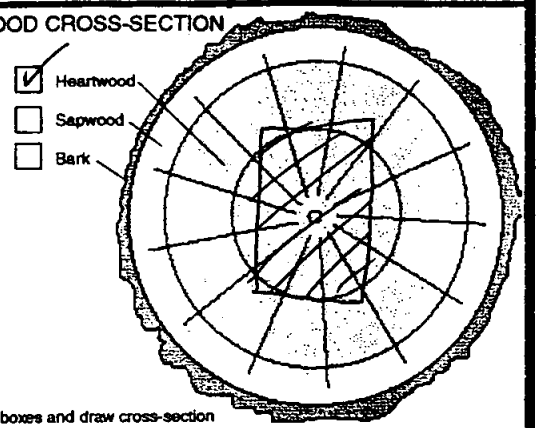
Plan no. 301	Structure/group no. 325
Section/elevation no. —	Within layer:
Colour film/slide no.	Cuts layer: 319
B/W film/neg. no.	Joined to other timber? N
Levels: 31.06	Overlies other timber? N.
Co-ordinates:	Overlain by other timber? N

Checklist:
1. Type (post,plank etc.)
2. Orientation & angle
3. Condition/preservation
4. Conversion
5. Dimensions (mm)
6. Tool-marks
7. Joints/fixings
8. Sketch
9. Other comments
10. Methods & conditions

STRATIGRAPHIC MATRIX



WOOD CROSS-SECTION

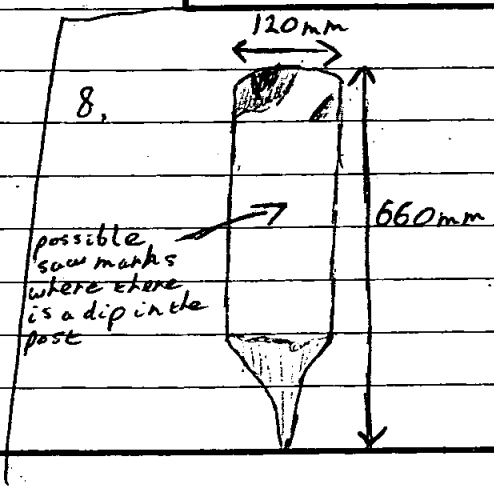


Tick boxes and draw cross-section

Description (see check-list)

1. Post
2. Vertical
3. Good
4. ? Sawn → To tapered end
5. - see sketch
6. - see sketch
7. - None
9. —
10. Trowel, sunny waterlogged.

8.



Interpretation/discussion

Possible revetment post to northwest of w(321)
see grp. 325 for discussion
It was possible to remove this post and as a result the whole end end part of the post was preserved but it shows signs of decay (tapered end).

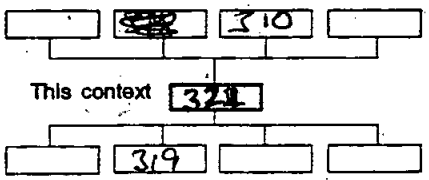
If identified as Oak, tick box ☐ Initials:

Wood Sample No.s	Species	Dendro	Retained Whole	Recorded by:	Date:	Checked by:
			✓	R. McGowan	30-08-05	

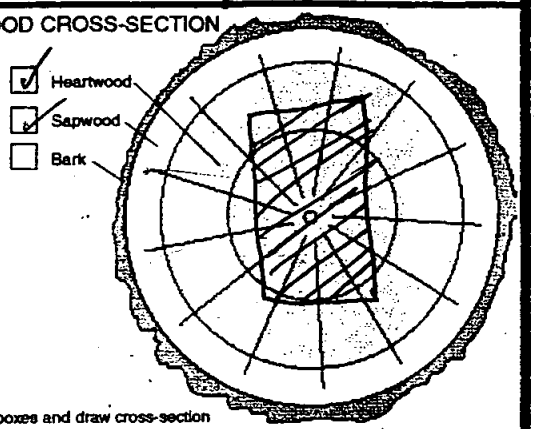
Oxford Archaeological Unit

SITE LINCMAY214	WOOD RECORD	Context No. 321
Area: Trench No: 3	Additional sheets:	Type: WOOD
Plan no. 301	Structure/group no. 325	Checklist: 1.Type (post,plank etc.) 2.Orientation & angle 3. Condition/preservation 4. Conversion 5. Dimensions (mm) 6. Tool-marks 7. Joints/fixings 8. Sketch 9. Other comments 10. Methods & conditions
Section/elevation no. —	Within layer: ~~321~~	
Colour film/slide no.	Cuts layer: 319	
B/W film/neg. no.	Joined to other timber? N	
Levels: 31.10 (approx.) at top of post.	Overlies other timber? N	
Co-ordinates:	Overlain by other timber? N	

STRATIGRAPHIC MATRIX



WOOD CROSS-SECTION

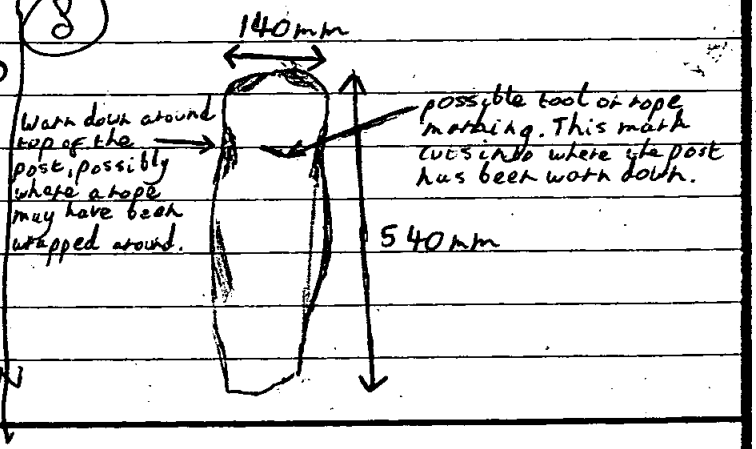


Tick boxes and draw cross-section

Description (see check-list)

(1) POST
(2) VERTICAL
(3) GOOD
(4) ? SAWN + TO TAPERED END
(5) – see sketch
(6) – see sketch
(7) NONE
(9) UNSURE WHETHER WAS DRIVEN THRU. 310 10.–

(8)



Interpretation/discussion

POSSIBLE REVETMENT POST TO ~~NORTH~~ SOUTH EAST OF W(320)
SEE GRP. 325 FOR DISCUSSION

Worn sapwood on outside of post.

Before the post could be removed it was forced out of the ground by the water-pressure and as a result the ~~post could not be removed~~ tapered end was lost

If identified as Oak, tick box ☐ Initials:

Wood Sample No.s	Species	Dendro	Retained Whole	Recorded by:	Date:	Checked by:
			✓	R.M.McGowan	30-08-05	

Oxford Archaeology

CONTEXT RECORD

Context No. 322

SITE WINCMAY 234

ADDITIONAL SHEETS:

TYPE LAYER

Trench 3	Context Type: Deposit / ~~Cut / Structure~~
Site sub-div	Overlain by: 319
Structure No.	Abutted by:
Plan No.	Cut by:
	Filled by:
Section No. 300	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies: 323
Level	Butts:
Slide No.	Cuts:
Neg No.	Fill of:
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

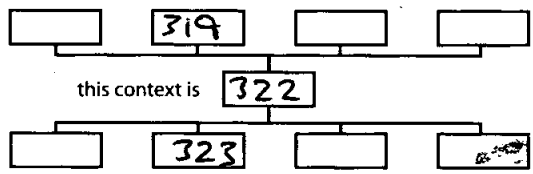
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4 coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

1. FIRM
2. MID GREENY GREY
3. SILT + SAND
4. 25% FLINT NODULES
5. 0.12 M THICK
6. THROUGHOUT SLOT (~~EAST~~)

STRATIGRAPHIC MATRIX



Interpretation/Discussion

SILTING ABOVE SAND - POSS SAND BAR (323)

* NB MAY BE SOME MIXING OF FINDS BETWEEN (319) (322) + (323) - AS CONDITIONS MAKE IT VERY DIFFICULT TO KNOW EXACTLY WHERE THINGS ARE FROM

Finds (tick): None [ ] Pot [✓] Bone [✓] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [✓] Wood [ ] Leather [✓]

△ Small Finds 21, 22	Recorder GUY
◇ Samples 8, 11, 42, 43, 37, 38	Date 30/8/05
⌂ Building Materials	Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 323

SITE WINCMAY 234

ADDITIONAL SHEETS:

TYPE LAYER

Trench 3	Context Type: Deposit / ~~Cut / Structure~~
Site sub-div	Overlain by: 322
Structure No.	Abutted by:
Plan No. -	Cut by:
	Filled by:
Section No. 300	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies: NAT GRAVEL 324
Level	Butts:
Slide No.	Cuts:
Neg No.	Fill of:
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

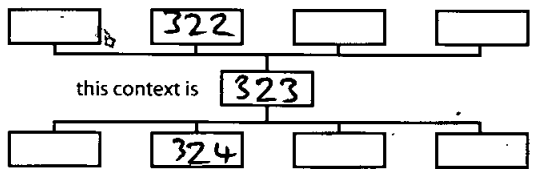
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

(1) LOOSE
(2) MID GREY
(3) SAND + GRIT
(4) OCC. SHELL, CBM FRAGMENT
(5) 80mm THICK
(6) THROUGHOUT SLOT (EAST)
(7)

STRATIGRAPHIC MATRIX



Interpretation/Discussion

NATURAL SAND BAR MATERIAL WITH CBM, OVERLIES CLEAN GRAVEL NATURAL (324)

Finds (tick): None [ ] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds 25

◇ Samples 9, 10, 37, 38, 39,

⌂ Building Materials

Recorder GW

Date 30/8/05

Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 324

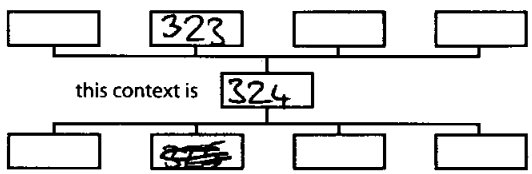
SITE WINCMAY 234 | ADDITIONAL SHEETS: | TYPE LAYER

Trench 3	Context Type: Deposit / Cut / Structure	Check Lists:
Site sub-div	Overlain by: 323	DEPOSIT: 1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions
Structure No.	Abutted by:	
Plan No. —	Cut by:	
	Filled by:	
Section No. 300	Same as:	CUT: 1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments
Co-Ordinates	Part of:	
	Consists of:	
	Overlies: 325	
Level	Butts:	MASONRY: 1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments
Slide No.	Cuts:	
Neg No.	Fill of:	
Matrix location	Relationships uncertain	

Description (See check lists):

1. FIRM - HARD
2. LIGHT GREYISH ORANGE
3. SAND + GRAVEL
4. NONE
5. > 0.1M THICK
6. THROUGHOUT EASTERN SLOT TR 3
8. PUMP ON CONTINUALLY - WATER RUSHING IN DUG BY HAND

STRATIGRAPHIC MATRIX



Interpretation/Discussion

NATURAL RIVER GRAVELS

Finds (tick): None [ ] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder GUY

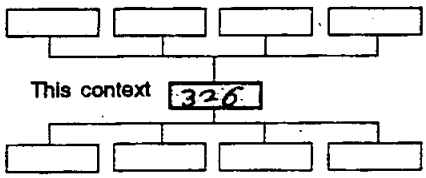
Date 2/8/05

Initials

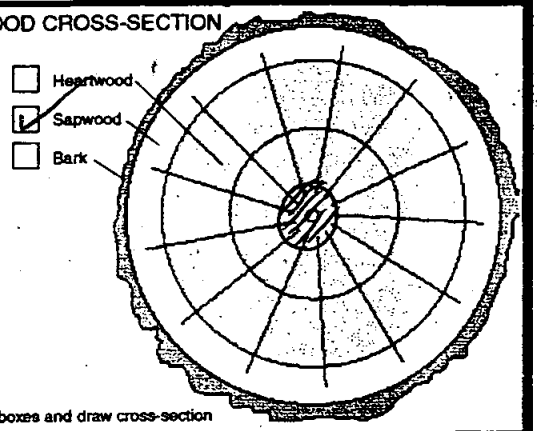
Oxford Archaeological Unit

SITE Wichmay 234	**WOOD RECORD**	Context No. 326
Area: Trench No: 3	Additional sheets:	Type: WOOD
Plan no. 300	Structure/group no.	Checklist: 1.Type (post,plank etc.) 2.Orientation & angle 3. Condition/preservation 4. Conversion 5. Dimensions (mm) 6. Tool-marks 7. Joints/fixings 8. Sketch 9. Other comments 10. Methods & conditions
Section/elevation no.	Within layer:	
Colour film/slide no.	Cuts layer:	
B/W film/neg. no.	Joined to other timber? N	
Levels: 31.40 (approx)	Overlies other timber? N	
Co-ordinates: see plan 301	Overlain by other timber? N	

STRATIGRAPHIC MATRIX



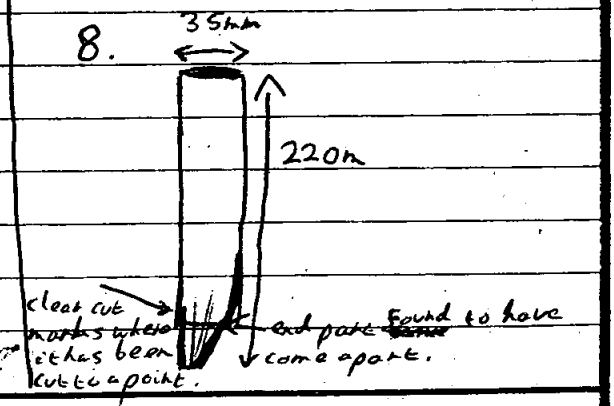
WOOD CROSS-SECTION



Tick boxes and draw cross-section

Description (see check-list)

1. Stack
2. Horizontal
3. Good
4. N
5. see sketch
6. Yes - the end has been cut to a point
7. N
9. -
10 -



Interpretation/discussion

A branch that has had its end cut to a point. It was 0.5m south of group 305 and it was discovered post-excavation.

If identified as Oak, tick box ☐ Initials:

Wood Sample No.s	Species	Dendro	Retained Whole	Recorded by:	Date:	Checked by:
			✓	R.M.S	1-09-05	

Oxford Archaeology

CONTEXT CHECKLIST

SITE CODE AY234 SITE NAME The Pilgrims' School, Winchester

Context number	Type	Excavated within segments	Relationships	Drawn		Matrix	Comments	Recorder initials
				Section	Plan			
400	LAYER		O/L 402	400			Topsoil / Turf	SCT
401	"		O/L 403	"			Tarmac	"
402	"		O/L 401	"			Buried Topsoil	"
403	"		O/L 404	"			Garden Soil	"
404	"		O/L 405	"			Post-med rubble	"
405	"		O/L 406	"			? Garden Soil	"
406	"		LOE	"			pale silty layer.	SCT AMJG

Oxford Archaeology

CONTEXT RECORD

Context No. 400

SITE AY234

ADDITIONAL SHEETS:

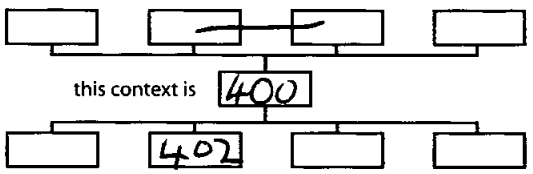
TYPE LAYER

Trench 4	Context Type: Deposit / Cut / Structure	Check Lists:
Site sub-div	Overlain by: —	DEPOSIT: 1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions
Structure No.	Abutted by:	
Plan No.	Cut by:	
	Filled by:	
Section No. 400	Same as:	CUT: 1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments
Co-Ordinates	Part of:	
	Consists of:	
	Overlies: ~~(400)~~ (402)	
Level	Butts:	MASONRY: 1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments
Slide No. 5/1-12	Cuts:	
Neg No. 5/1-12	Fill of:	
Matrix location	Relationships uncertain	

Description (See check lists):

1. Fairly loose / friable
2. Dark Grey
3. Silty Sandy loam
4. Rare flecks chalk (<5%), occ small pebbles (<1%)
5. 0.38m
8. Machined

STRATIGRAPHIC MATRIX



Interpretation/Discussion

Modern Topsoil / Turf.

Finds (tick): None [✓] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder SCT

Date 30/5/06

Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 401

SITE AY234

ADDITIONAL SHEETS:

TYPE LAYER

Trench 4	Context Type: Deposit / Cut / Structure
Site sub-div	Overlain by: ~~400~~ 402
Structure No.	Abutted by:
Plan No.	Cut by:
	Filled by:
Section No. 400	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies: ~~402~~ 403
Level	Butts:
Slide No. 5/1-12	Cuts:
Neg No. 5/1-12	Fill of:
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

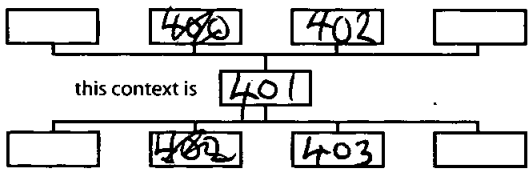
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

1. Mid Grey/Brown
2. Friable
3. Silty Sandy loam
4. Rare chalk flecks (<5%) occ small pebble
5. 0.22m

STRATIGRAPHIC MATRIX



Interpretation/Discussion

Similar to 400 - Base of modern topsoil (separated by Earlier layer 402)

Finds (tick): None [ ] Pot [✓] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder SCT

Date 30/5/06

Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 402

SITE AY234

ADDITIONAL SHEETS:

TYPE LAYER

Trench 4

Site sub-div

Structure No.

Plan No.

Section No. 400

Co-Ordinates

Level

Slide No. 5/1-12

Neg No. 5/1-12

Matrix location

Context Type: Deposit / ~~Cut / Structure~~

Overlain by: (400)

Abutted by:

Cut by:

Filled by:

Same as:

Part of:

Consists of:

Overlies: (402)

Butts:

Cuts:

Fill of:

Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

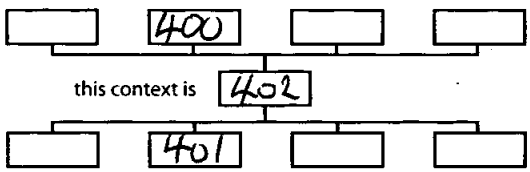
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

Thin layer spread at N-end of trench

STRATIGRAPHIC MATRIX



Interpretation/Discussion

Buried layer surface (modern) -

Finds (tick): None [✓] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder SCT

Date 30/5/06

Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 403

SITE AY234 | ADDITIONAL SHEETS: | TYPE LAYER

Trench 4	Context Type: Deposit / Cut / Structure
Site sub-div	Overlain by: (401)
Structure No.	Abutted by:
Plan No.	Cut by:
	Filled by:
Section No. 400	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies: (404)
Level	Butts:
Slide No. 5/1-12	Cuts:
Neg No. 5/1-12	Fill of:
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT: 1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

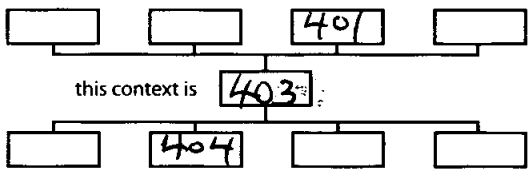
CUT: 1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY: 1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

1. Fairly compact but friable
2. Mid Greyish Brown
3. Silty loam
4. Frequent (20-30%) chalk flecks, occ small flints & slate fragments - very small chalk lumps
5. ≤0.45m 6. whole trench
8. Machined

STRATIGRAPHIC MATRIX



Interpretation/Discussion

Upper part of post-medieval garden soil or possibly dilapidated dump.

Finds (tick): None [ ] Pot [✓] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder SR

Date 3/5/16

Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 404

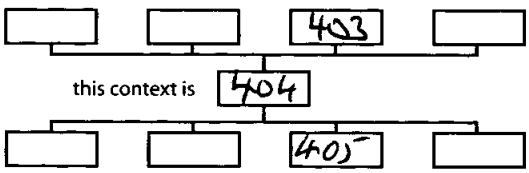
SITE A-1220 | ADDITIONAL SHEETS: | TYPE LAYER

Trench 4	Context Type: Deposit / Cut / Structure	Check Lists:
Site sub-div	Overlain by: (403)	DEPOSIT: 1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions
Structure No.	Abutted by:	
Plan No.	Cut by:	
	Filled by:	
Section No. 400	Same as:	CUT: 1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments
	Part of:	
Co-Ordinates	Consists of:	
	Overlies: (405)	
Level	Butts:	MASONRY: 1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments
Slide No. 5/1-12	Cuts:	
Neg No. 5/1-12	Fill of:	
Matrix location	Relationships uncertain	

Description (See check lists):

1. Loose
2. Pale yellowish buff
3. Mortar
4. Fragmnt small chalk lumps (50-60%), occ flint nodules and CBM/brick frags
5. ≤0.37m 6. occurs alongside E-edge of trench only
7. Machined

STRATIGRAPHIC MATRIX



Interpretation/Discussion

Post-medieval Rubble dump/levelling up?
Similar to dumping (17-18th C) seen in TR2 & 3. - and within chalk pit immediately to W.

Finds (tick): None [ ] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [✓] Metal [ ] CBM [✓] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder SCT

Date 30/5/06

Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 405

SITE AY234

ADDITIONAL SHEETS:

TYPE LAYER

Trench 4	Context Type: Deposit / Cut / Structure
Site sub-div	Overlain by: (404)
Structure No.	Abutted by:
Plan No.	Cut by:
	Filled by:
Section No. 400	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies: (406)
Level	Butts:
Slide No. 5/1-12	Cuts:
Neg No. 5/1-12	Fill of:
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

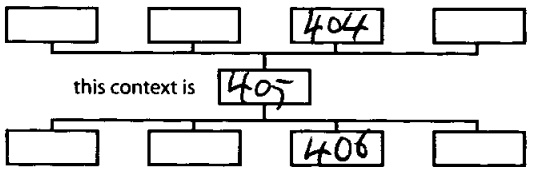
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

1. Fairly firm
2. Mid Grey
3. Silty clay
4. Frequent small chalk lumps/flecks (20%) - occ small flints and slate fragments
5. 0.47m
6. Wholly Trench
7. Machined

STRATIGRAPHIC MATRIX



Interpretation/Discussion

Later medieval garden soil?

Finds (tick): None [ ] Pot [✓] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ]
CBM [✓] Wood [ ] Leather [ ] Slate ✓

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder SC

Date 30/5/06

Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 406

SITE AY234

ADDITIONAL SHEETS:

TYPE LAYER

Trench 4	Context Type: Deposit / ~~Cut / Structure~~
Site sub-div	Overlain by: (405)
Structure No.	Abutted by:
Plan No.	Cut by:
	Filled by:
Section No. 400	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies: LOE
Level	Butts:
Slide No. 5/13-15	Cuts:
Neg No. 5/13-15	Fill of:
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

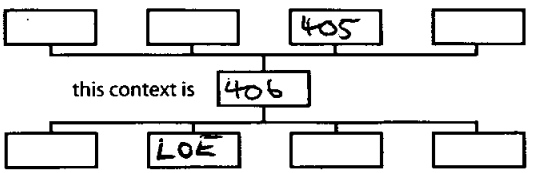
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

1. Firm but friable
2. ~~Black~~/pale grey
3. Silty clay
4. Calcium carbonate (precipitate)
5. At least 0.17m (not fully excavated)
6. Unknown - seen in W half of trench.
7. Calcium carbonate precipitated from groundwater (8) Hand, sunny.

STRATIGRAPHIC MATRIX



Interpretation/Discussion

Finds (tick): None [ ] Pot [✓] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [✓] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder MDG

Date 31/5/06

Initials

Oxford Archaeology

CONTEXT CHECKLIST

SITE CODE AY234 SITE NAME The Pilgrims' School, Winchester

Context number	Type	Excavated within segments	Relationships	Drawn		Matrix	Comments	Recorder initials
				Section	Plan			
500	LAYER	–	–				Topsoil (Site Area)	AM
501	LAYER			501	501		Topsoil (Not Site)	AM
502	LAYER		B/L 500	502	–		Garden Soil (P. med)	SCT
503	LAYER		B/L 502	502	–		Mortar Rubble (P. med)	SCT
504	"		B/L 500	503			" " (L.–med)	SCT
505	"		B/L 504	504			Mortar Dump rubble (P. med)	"
506	"		B/L 505	504			(clayey mixture ~~Garden Soils~~ (?)	"
507	"		B/L 506	504			Garden Soil (?)	"
508	"		B/L 500	505			Chalk rubble (modern)	"
509	Layer?		B/L 508	505			Mortar rubble	"
510	Layer		B/L 509	505			Garden Soils (P. med)	"
511	"		B/L 500	506			chalk rubble (modern)	"
512	"		B/L 511	506			Buried topsoil?	"
513	"		B/L 512	506			Mortar rubble	"
514	"		B/L 513	506			Garden Soils (?)	"
515	"		B/L 514	506			Firm brown clay	"
516			B/L 514	507			Clay/mortar dump?	"
517			B/L 516	507			Mod Garden soil?	"
518			B/L 500	508			P. Med Mortar rubble	SCT
519			B/L 518	508			Garden Soils	"
520			B/L 500	508			Grey-brown	"
521			B/L 520	508			Mortar rubble	SCT

Oxford Archaeology

CONTEXT RECORD

Context No. 500

SITE AY 234

ADDITIONAL SHEETS:

TYPE LAYER

Trench WHOLE SITE.	Context Type: Deposit / ~~Cut / Structure~~
Site sub-div	Overlain by: —
Structure No.	Abutted by:
Plan No.	Cut by:
	Filled by:
Section No.	Same as: 501
	Part of:
Co-Ordinates	Consists of:
	Overlies: 504
Level	Butts:
Slide No.	Cuts:
Neg No.	Fill of:
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

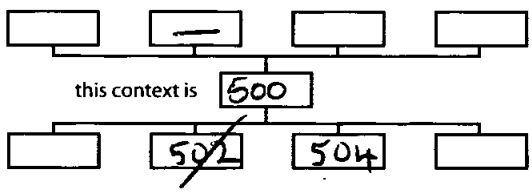
~~CUT:~~
~~1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos. 7. other comments~~

~~MASONRY:~~
~~1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments~~

Description (See check lists):

1. LOOSE 2 DARK BROWN
3. RICH LOAM SOIL
4. COMMON FLINT + GRAVEL - 5% UP TO 10CM.
5. >0.5m
6. WHOLE SITE.
8. SCHAEFF 360°

STRATIGRAPHIC MATRIX



Interpretation/Discussion

RICH GARDEN SOIL/TOPSOIL ACROSS WHOLE SITE. MOSTLY LOAMY GARDEN SOILS. SEEMS MODERN BUT SOME RESIDUAL FINDS MAY BE OLDER. SOME AREAS ARE MORE ORGANIC THAN OTHERS. THIS SEEMS TO EQUATE TO PROXIMITY TO BUILDINGS. AWAY FROM BUILDINGS SOIL IS MORE HUMIC + SLIGHTLY DARKER (IE. UNDISTURBED) WHEREAS NEAR BUILDING FOOTPRINT IT APPEARS DRIER AND MORE GRAVELLY.

Finds (tick): None [ ] Pot [✓] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [✓] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder AM

Date 7/8/06

Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 501

SITE SY234

ADDITIONAL SHEETS:

TYPE LAYER

Trench QUADRANGLE AREA

Site sub-div

Structure No.

Plan No. 2

Section No.

Co-Ordinates

Level

Slide No.

Neg No.

Matrix location

Context Type: Deposit / ~~Cut / Structure~~

Overlain by: —

Abutted by:

Cut by:

Filled by:

Same as: 500

Part of:

Consists of:

Overlies: ?

Butts:

Cuts:

Fill of:

Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

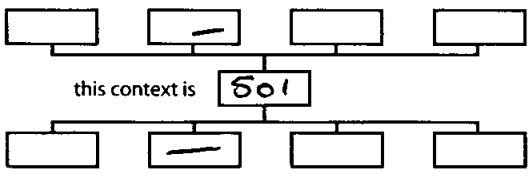
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

1. LOOSE 2. DARK BROWN
3. SILT LOAM 4. COMMON CBM, SLATE FLINT AND STONE UP TO 10CM - 50%
5. >0.6 6. WHOLE AREA
8. 360° - DIG BEFORE ARCHAEOLOGIST ON SITE.

STRATIGRAPHIC MATRIX



Interpretation/Discussion

TOPSOIL AND MODERN MAKE UP IN SCHOOL QUADRANGLE AREA - CUT THROUGH BY DRAIN RUN 'A', NOT DEEP ENOUGH TO ENCOUNTER ARCHAEOLOGY

Finds (tick): None [ ] Pot [/] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder AM

Date 25/8/06

Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 502

SITE A4234

ADDITIONAL SHEETS:

TYPE LAYER

Trench	Context Type: Deposit / ~~Cut~~ / ~~Structure~~
Site sub-div	Overlain by: ~~(500)~~ (504)
Structure No.	Abutted by:
Plan No.	Cut by:
	Filled by:
Section No. S.502	Same as: (507) (510)
	Part of:
Co-Ordinates	Consists of:
	Overlies: (503)
Level	Butts:
Slide No.	Cuts:
Neg No.	Fill of:
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

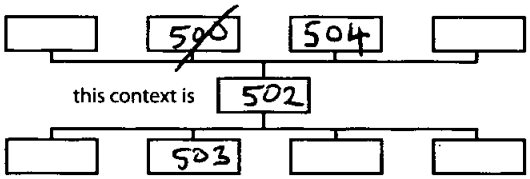
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

1. Unknown
2. Mid Grey - Brown
3. Silty Clay ?
4. Occ chalk flecks, CBM frags (small) & slate frags
5. ~1.05m 6. Whole of Trench
7. Close inspection not possible - interface with 500 blurred.
8. Contractors excavation

STRATIGRAPHIC MATRIX



Interpretation/Discussion

Undoubtedly the post-medieval garden soil encountered in earlier evaluation work - although appears even more homogeneous.

Finds (tick): None [✓] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder JCT

Date 14/9/06

Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 503

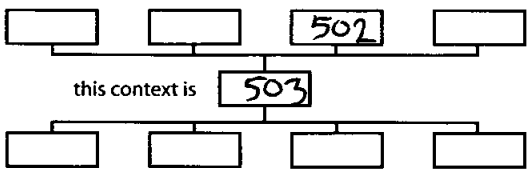
SITE AY234 | ADDITIONAL SHEETS: | TYPE LATER

Trench	Context Type: Deposit / ~~Cut / Structure~~	Check Lists:
Site sub-div	Overlain by: (502)	DEPOSIT: 1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions
Structure No.	Abutted by:	
Plan No.	Cut by:	
	Filled by:	
Section No. S502	Same as:	CUT: 1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments
Co-Ordinates	Part of:	
	Consists of:	
	Overlies: (Not seen)	
Level	Butts:	MASONRY: 1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments
Slide No.	Cuts:	
Neg No.	Fill of:	
Matrix location	Relationships uncertain	

Description (See check lists):

1. Unknown (looks fairly loose)
2. Pale buff
3. Mortar
4. Mortar rubble with tile frags & small flints
5. ~ 0.33m + 6. extends whole of trench
7. Fairly clean & homogeneous
8. Contractors excavation - close inspection not possible (few finds retrieved from spoil).

STRATIGRAPHIC MATRIX



Interpretation/Discussion

Earliest deposit revealed within new manhole. Occurs at a depth of c. 1.87m (@ 31.70m aOD). This is c. 0.25m above the level of the latest of the 'organic silts' in TR3 evaluation. Therefore probably represents early post-med dumping. Recovery of lump sherd of 'Tudor' pot appears to support this.

Finds (tick): None [ ] Pot [✓] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [✓] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder SCF

Date 14/9/00

Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 504

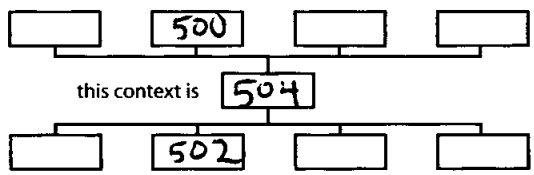
SITE A4234 | ADDITIONAL SHEETS: | TYPE LATER?

Trench	Context Type: Deposit / ~~Cut / Structure~~	Check Lists:
Site sub-div	Overlain by: (500)	DEPOSIT: 1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions
Structure No.	Abutted by:	
Plan No.	Cut by:	
	Filled by:	
Section No. S503	Same as:	CUT: 1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments
Co-Ordinates	Part of:	
	Consists of:	
	Overlies: (502)	
Level	Butts:	MASONRY: 1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments
Slide No.	Cuts:	
Neg No.	Fill of:	
Matrix location	Relationships uncertain	

Description (See check lists):

1. Friable / loose
2. Pale yellowish buff
3. Mortar
4. Mortar, occ brick/CBM frags
5. 0.50m+ 6. See plan 503
7. Becomes less clean along Eastern ground beams with dumps of tile/brick - sharp interface with (502).

STRATIGRAPHIC MATRIX



Interpretation/Discussion

Deliberate dumping of building debris towards east of development area - overlay post-med 'Garden Soil' 502 and can be equated with 17TH/18TH C+ dumping revealed in TR2 eval. Trench. Could be filling a large negative feature since 502 dips rapidly at interface (see S503)

Finds (tick): None [ ] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder SCT

Date 28/9/06

Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 505

SITE A-1234

ADDITIONAL SHEETS:

TYPE FILL?

Trench	Context Type: Deposit / ~~Cut~~ / ~~Structure~~
Site sub-div	Overlain by: (500)
Structure No.	Abutted by:
Plan No.	Cut by:
	Filled by:
Section No. S504	Same as: (504)
	Part of:
Co-Ordinates	Consists of:
	Overlies: (506)
Level	Butts:
Slide No.	Cuts:
Neg No.	Fill of:
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT: 1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

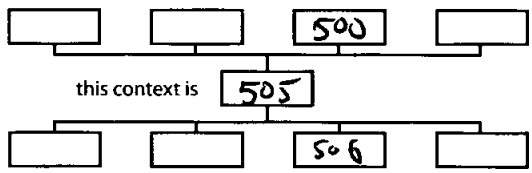
CUT: 1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY: 1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

1. Loose
2. Pale Yellow
3. Mortar
4. Mortar lumps, freq chalk lumps, occ CBM/Tile frags (post-med)
5. 0.84m+ 6. uncertain
7. Very clean with little evidence for lenses suggesting rapid deposition 8. As revealed in Ground-clearing.

STRATIGRAPHIC MATRIX



Interpretation/Discussion

Appears to be infilling a large 'cut' that runs alongside the E-part of the new changing rooms (W-extent only - Extent beyond boundary of new building - Edge not revealed)
Infilling Fish-pond / meadow drainage ???? (discuss)
Very similar to (504) - same deposit probably.

Finds (tick): None [✓] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder SCT

Date 17/10/06

Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 506

SITE AY134

ADDITIONAL SHEETS:

TYPE FILL?

Trench	Context Type: Deposit / ~~Cut / Structure~~
Site sub-div	Overlain by: (505)
Structure No.	Abutted by:
Plan No.	Cut by:
	Filled by:
Section No. S504	Same as: (~~502~~)
	Part of:
Co-Ordinates	Consists of:
	Overlies: (507)
Level	Butts:
Slide No.	Cuts:
Neg No.	Fill of:
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

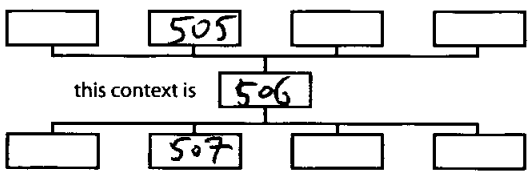
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

1. Fairly loose
2. Light grey/brown
3. Mortar rubble / silt
4. Mortar rubble, occ chalk lumps & tile frags
5. 0.33 6. unknown
7. Dirty mortar rubble
8. As revealed in side of ground beams

STRATIGRAPHIC MATRIX



Interpretation/Discussion

Earlier more dirty dump of mortar rubble (see 505 above)

Finds (tick): None [✓] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder SCT

Date 17/10/06

Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 507

SITE AY234 | ADDITIONAL SHEETS: | TYPE LAYER

Trench AY234	Context Type: Deposit / ~~Cut / Structure~~
Site sub-div	Overlain by: (506)
Structure No.	Abutted by:
Plan No.	Cut by:
	Filled by:
Section No. S504	Same as: (502) (510)
	Part of:
Co-Ordinates	Consists of:
	Overlies: —
Level	Butts:
Slide No.	Cuts:
Neg No.	Fill of:
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT: 1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

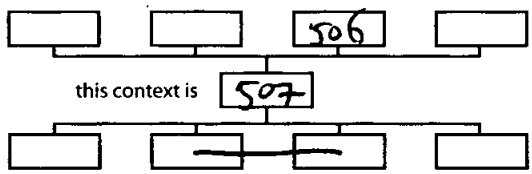
CUT: 1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY: 1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

1. Fairly firm / friable.
2. Mid Grey-brown
3. Silty clay loam
4. Occ small chalk flecks, occ pebbles & CBM frags
5. 0.32m+ 6. unknown - across whole site?
7. Homogeneous and clean
8. Constructed foundation trench.

STRATIGRAPHIC MATRIX



Interpretation/Discussion

The homogenous late - med → post-med 'garden soil' prevalent across the whole site (see 502) and TR 3 (east). Base of deposit (i.e. underlying archaeological levels) not reached throughout the foot-print of new School building (i.e. base of soil is below 32.30 aOD).

Finds (tick): None [ ] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder SCT

Date 17/10/06

Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 508

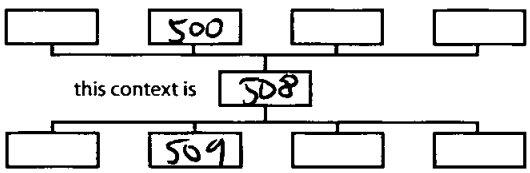
SITE AY234 | ADDITIONAL SHEETS: | TYPE LAYER

Trench	Context Type: Deposit / Cut / Structure	Check Lists:
Site sub-div	Overlain by: (500)	DEPOSIT: 1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions
Structure No.	Abutted by:	
Plan No.	Cut by:	
	Filled by:	
Section No. 5505	Same as:	CUT: 1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments
Co-Ordinates	Part of:	
	Consists of:	
	Overlies: (509)	
Level	Butts:	MASONRY: 1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments
Slide No.	Cuts:	
Neg No.	Fill of:	
Matrix location	Relationships uncertain	

Description (See check lists):

1. Fairly loose
2. Quite grey-brown
3. Silty loam
4. Frequent chalk frags / occ pmcd tile frags / CBM frags
5. 0.23m 6. unknown
7. Mixed deposit - fairly recent?

STRATIGRAPHIC MATRIX



Interpretation/Discussion

General levelling deposit? (post-med - modern)

Finds (tick): None [ ] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder SCT

Date 18/10/06

Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 509

SITE A-1234

ADDITIONAL SHEETS:

TYPE Fill?

Trench	Context Type: Deposit / ~~Cut / Structure~~
Site sub-div	Overlain by: (508)
Structure No.	Abutted by:
Plan No.	Cut by:
	Filled by:
Section No. 5505	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies: (510)
Level	Butts:
Slide No.	Cuts:
Neg No.	Fill of:
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT: 1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

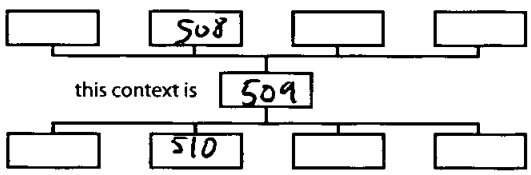
CUT: 1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY: 1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

1. Loose
2. Pale light brown
3. Mortar
4. Mortar rubble, occ chalk lumps & tile frags (pmed)
5. 0.60m+ 7. Alongside west edge of New changing room.

STRATIGRAPHIC MATRIX



Interpretation/Discussion

Substantial deposit infilling a large (N-S aligned) feature to the west of the new changing room. (See Similar deposit to (505) that fills a ? similar feature alongside E part of new building. Probably 17/18th C in date (see TR 2 eval for similar deposit)

Finds (tick): None [ ] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder SLT

Date 18/10/06

Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 510

SITE A71234

ADDITIONAL SHEETS:

TYPE LATER

Trench	Context Type: Deposit / Cut / Structure
Site sub-div	Overlain by: (509)
Structure No.	Abutted by:
Plan No.	Cut by:
	Filled by:
Section No. 5505	Same as: (507), (502)
	Part of:
Co-Ordinates	Consists of:
	Overlies: (—)
Level	Butts:
Slide No.	Cuts:
Neg No.	Fill of:
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

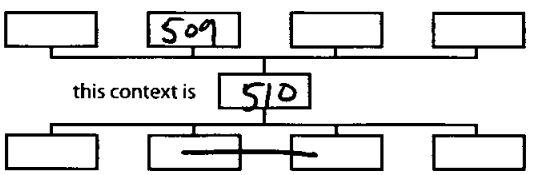
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

1. Fairly thin but friable
2. Dark grey-brown
3. Silty clay loam
4. Occ small chalk flecks, CBM frags (rare), pebbles (rare)
5. 0.65m+ 6. Throughout the site.
7. Homogenous & clean deposit.

STRATIGRAPHIC MATRIX



Interpretation/Discussion

The homogeneous 'Garden Soil' as prevalent across the whole site - Late med+ in date (but pre-dating ?17/18C+ Mortar rubble dumping) Base of deposit (i.e. archaeology) not breached through footprint of new changing room

Finds (tick): None [ ] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder SCT.

Date

Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 511

SITE AH234 | ADDITIONAL SHEETS: — | TYPE LAYER

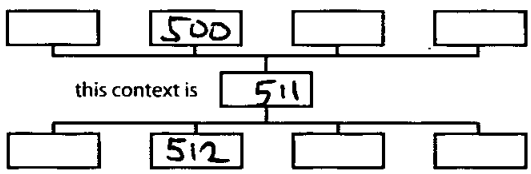
Trench	Context Type: Deposit / Cut / Structure	Check Lists:
Site sub-div	Overlain by: (500)	DEPOSIT: 1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions
Structure No.	Abutted by:	
Plan No.	Cut by:	
	Filled by:	
Section No.	Same as:	CUT: 1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments
	Part of:	
Co-Ordinates	Consists of:	
	Overlies: (512)	
Level	Butts:	MASONRY: 1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments
Slide No.	Cuts:	
Neg No.	Fill of:	
Matrix location	Relationships uncertain	

Description (See check lists):

1. Loose
2. White
3. chalk frags
4. chalk frags
5. 0.09m

8. Contractors excavation only

STRATIGRAPHIC MATRIX



Interpretation/Discussion

Recent levelling deposit?

Finds (tick): None [✓] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder SCF

Date 21/11/06

Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 512

SITE AY234

ADDITIONAL SHEETS:

TYPE LATER

Trench	Context Type: Deposit / ~~Cut / Structure~~
Site sub-div	Overlain by: (511)
Structure No.	Abutted by:
Plan No.	Cut by:
	Filled by:
Section No.	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies: (513)
Level	Butts:
Slide No.	Cuts:
Neg No.	Fill of:
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

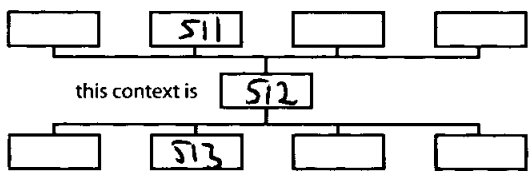
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

1. Fairly firm
2. mid-dark grey
3. Silty clay
4. Clean with rare chalk flecks
5. 0-20m
7. Contractors excavation

STRATIGRAPHIC MATRIX



Interpretation/Discussion

Buried soil (topsoil? / clay?) - post-med. or modern.

Finds (tick): None [ ] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder SCT

Date 21/11/06

Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 513

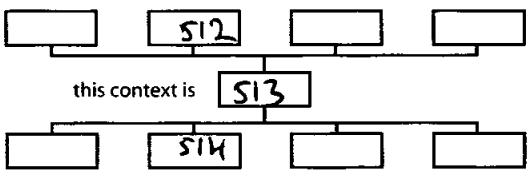
SITE AY234 | ADDITIONAL SHEETS: | TYPE LAYER

Trench	Context Type: Deposit / ~~Cut / Structure~~	Check Lists:
Site sub-div	Overlain by: (512)	DEPOSIT: 1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions
Structure No.	Abutted by:	
Plan No.	Cut by:	
	Filled by:	
Section No.	Same as:	CUT: 1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments
	Part of:	
Co-Ordinates	Consists of:	
	Overlies: (514)	
Level	Butts:	MASONRY: 1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments
Slide No.	Cuts:	
Neg No.	Fill of:	
Matrix location	Relationships uncertain	

Description (See check lists):

1. Loose
2. Mod. Yellowish / buff
3. Mortar
4. Mortar, chalk lumps, occ flints
5. 0.22m +

STRATIGRAPHIC MATRIX



Interpretation/Discussion

Dumping - possibly derived from repair/ demolition etc of close / city wall.
- Post-med.

Finds (tick): None [ ] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder SCT

Date 21/11/06

Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 5184

SITE AY220

ADDITIONAL SHEETS:

TYPE Layer?

Trench	Context Type: Deposit / Cut / Structure
Site sub-div	Overlain by: (513)
Structure No.	Abutted by:
Plan No.	Cut by:
	Filled by:
Section No.	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies: (5184) (515)
Level	Butts:
Slide No.	Cuts:
Neg No.	Fill of:
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

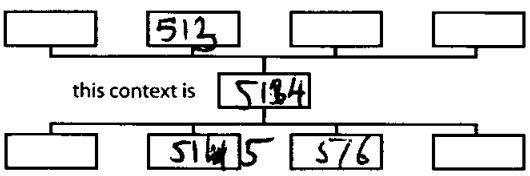
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

1. Friable - loose
2. Mid - dark grey-brown
3. Silty clay loam
4. Frequent chalk flecks/small lumps
5. 0.72m

STRATIGRAPHIC MATRIX



Interpretation/Discussion

Homogeneous soil accumulation - probably post-medieval garden soils

Finds (tick): None [ ] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder SCT

Date 21/11/06

Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 515

SITE A4234

ADDITIONAL SHEETS:

TYPE LATER

Trench	Context Type: Deposit / Cut / Structure
Site sub-div	Overlain by: (514)
Structure No.	Abutted by:
Plan No.	Cut by:
	Filled by:
Section No.	Same as:
	Part of:
Co-Ordinates	Consists of:
	Overlies: —
Level	Butts:
Slide No.	Cuts:
Neg No.	Fill of:
Matrix location	Relationships uncertain

Check Lists:

DEPOSIT:
1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions

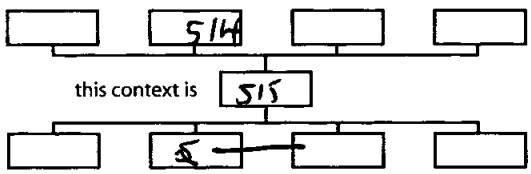
CUT:
1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments

MASONRY:
1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments

Description (See check lists):

1. Compact | firm
2. Mid Brown
3. Silty clay
4. occ flint nodules
7. Clean.

STRATIGRAPHIC MATRIX



Interpretation/Discussion

Pre-dates late med | post-med garden soil
→ dump.
→ could this be rampart material (Roman) as revealed in 1999 (crane pit)??

Finds (tick): None [ ] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder SCT

Date 21/11/06

Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 516

SITE A7234

ADDITIONAL SHEETS:

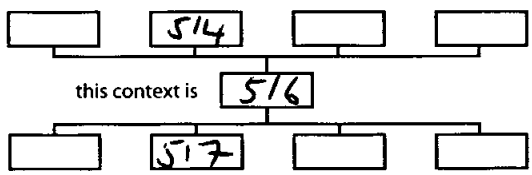
TYPE LAYER

Trench	Context Type: Deposit / Cut / Structure	Check Lists:
Site sub-div	Overlain by: (514)	DEPOSIT: 1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions
Structure No.	Abutted by:	
Plan No.	Cut by:	
	Filled by:	
Section No.	Same as:	CUT: 1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments
	Part of:	
Co-Ordinates	Consists of:	
	Overlies: (517)	
Level	Butts:	MASONRY: 1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments
Slide No.	Cuts:	
Neg No.	Fill of:	
Matrix location	Relationships uncertain	

Description (See check lists):

1. Compact
2. Light Brown
3. Clay
4. Pulling of mortar
5. 0.12m

STRATIGRAPHIC MATRIX



Interpretation/Discussion

Dump? - possibly surface? - possibly associated with repairs to Close/City wall.

Finds (tick): None [ ] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder SCT

Date 27/11/06

Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 517

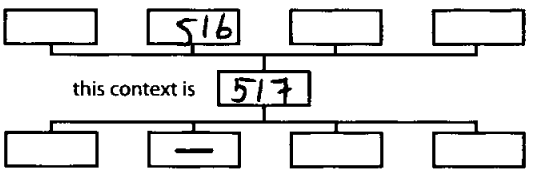
SITE A4234 | ADDITIONAL SHEETS: | TYPE LATER

Trench	Context Type: Deposit / Cut / Structure	Check Lists:
Site sub-div	Overlain by: (516)	DEPOSIT: 1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions
Structure No.	Abutted by:	
Plan No.	Cut by:	
	Filled by:	
Section No.	Same as:	CUT: 1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments
	Part of:	
Co-Ordinates	Consists of:	
	Overlies: (—)	
Level	Butts:	MASONRY: 1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments
Slide No.	Cuts:	
Neg No.	Fill of:	
Matrix location	Relationships uncertain	

Description (See check lists):

1. Fairly firm
2. Dark grey-brown
3. Silty clay.
4. Lenses of small mortar rubble + occ small flint / pebbles
5. 0.37m +

STRATIGRAPHIC MATRIX



Interpretation/Discussion

An accumulated deposit - possibly medieval garden soils - lenses of mortar possibly derived from repairs to City Wall c. 2m to the South?

Finds (tick): None [ ] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder SC

Date 27/4/06

Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 518

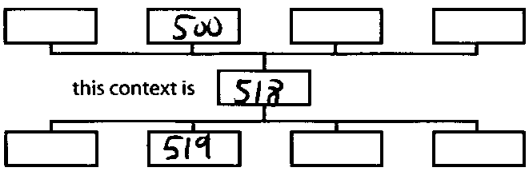
SITE A7234 | ADDITIONAL SHEETS: | TYPE LATER

Trench	Context Type: Deposit / ~~Cut~~ / Structure	Check Lists:
Site sub-div	Overlain by: (500)	DEPOSIT: 1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions
Structure No.	Abutted by:	
Plan No.	Cut by:	
	Filled by:	
Section No. S.508	Same as:	CUT: 1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments
Co-Ordinates	Part of:	
	Consists of:	
	Overlies: (519)	
Level	Butts:	MASONRY: 1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments
Slide No.	Cuts:	
Neg No.	Fill of:	
Matrix location	Relationships uncertain	

Description (See check lists):

1. Loose
2. Yellowish brown
3. Mortar
4. Mortar, flint nodules, CBM frags, chalk
5. 6. Delimited to W (see S.508)

STRATIGRAPHIC MATRIX



Interpretation/Discussion

Substantial dumping during post-med period to build up level of garden.
Or infilling some large feature (fish pond!?)

Finds (tick): None [ ] Pot [Y] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [Y] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder SCT

Date 26/1/07

Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 519

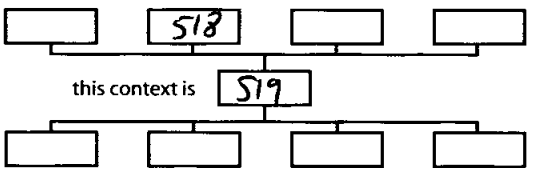
SITE A7234 | ADDITIONAL SHEETS: | TYPE LATER

Trench	Context Type: Deposit / Cut / Structure	Check Lists:
Site sub-div	Overlain by: (518)	DEPOSIT: 1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions
Structure No.	Abutted by:	
Plan No.	Cut by:	
	Filled by:	
Section No. S. 508	Same as:	CUT: 1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments
Co-Ordinates	Part of:	
	Consists of:	
	Overlies:	
Level	Butts:	MASONRY: 1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments
Slide No.	Cuts:	
Neg No.	Fill of:	
Matrix location	Relationships uncertain	

Description (See check lists):

1. Fairly firm but friable
2. Mid - dark grey-brown
3. Silty clay loam
4. occ small flint, chalk frags
5. 6.
7. Homogeneous

STRATIGRAPHIC MATRIX



Interpretation/Discussion

Late Med - post-Med 'garden soil'

Finds (tick): None [ ] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder SJT

Date 24/1/07

Initials

Oxford Archaeology

CONTEXT RECORD

Context No. 520

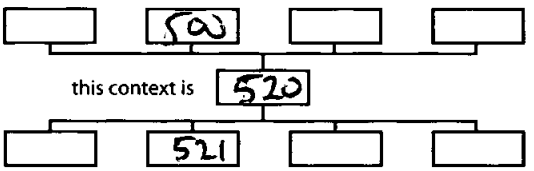
SITE A7234 | ADDITIONAL SHEETS: — | TYPE FILL?

Trench	Context Type: Deposit / Cut / Structure	Check Lists:
Site sub-div	Overlain by: (500)	DEPOSIT: 1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions
Structure No.	Abutted by:	
Plan No. —	Cut by:	
	Filled by:	
Section No. S.8	Same as:	CUT: 1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments
Co-Ordinates	Part of:	
	Consists of:	
	Overlies: (521)	
Level	Butts:	MASONRY: 1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments
Slide No.	Cuts:	
Neg No.	Fill of:	
Matrix location	Relationships uncertain	

Description (See check lists):

1. Fragmt
2. Mid Grey Brown
3. Silty clay loam
4. Occ mortar flecks, small fl/tile/chalk
5.
7. Fairly mixed compact with clean 'garden soil'
8. Machined wg.

STRATIGRAPHIC MATRIX



Interpretation/Discussion

Pump? filling depression (backfill of? Fish pond?

Finds (tick): None [ ] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds

◇ Samples

⌂ Building Materials

Recorder JS

Date 26/11/07

Initials

Oxford Archaeology

CONTEXT RECORD

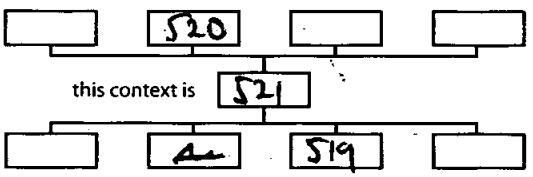
Context No. 521

SITE AY234	ADDITIONAL SHEETS:	TYPE Fill?
Trench	Context Type: Deposit / ~~Cut~~ / ~~Structure~~	Check Lists:
Site sub-div	Overlain by: 520	DEPOSIT: 1. compaction 2. colour 3. composition 4. inclusion 5. thickness 6. extent 7. comments 8. method & conditions
Structure No.	Abutted by:	
Plan No.	Cut by:	
	Filled by:	
Section No. S. 8	Same as:	CUT: 1. shape in plan 2. base/sides/top profile 3. dimension and depth 4. sketch 5. truncation 6. fill nos 7. other comments
	Part of:	
Co-Ordinates	Consists of:	
	Overlies: — (519)	
Level	Butts:	MASONRY: 1. materials 2. size of bricks etc 3. finish of stones 4. coursing/bond 5. form 6. faces 7. bond 8. dimensions as found 9. other comments
Slide No.	Cuts:	
Neg No.	Fill of:	
Matrix location	Relationships uncertain	

Description (See check lists):

1. Loose & friable
2. Pale yellowish / Grey
3. Mortar
4. Mortar, occ small frag CBM, & chalk lumps
5 6. Confirmed to N- extent of new pool
7. Probably several dumps of rubble
8. Machine

STRATIGRAPHIC MATRIX



Interpretation/Discussion

Dump / infilling possible fish pond - post-medieval - very similar and likely to be contemporary with mortar rubble infill identified elsewhere on site - post-date late med - post-med dark 'garden' soils.

Finds (tick): None [✓] Pot [ ] Bone [ ] Flint [ ] Stone [ ] Burnt stone [ ] Glass [ ] Metal [ ] CBM [ ] Wood [ ] Leather [ ]

△ Small Finds	Recorder SCT
◇ Samples	Date 26/1/07
⌂ Building Materials	Initials