

Research Department Report Series 117/2011

CHESTERTON, WARWICKSHIRE: An archaeological evaluation

Sarah Reilly,
Sarah Jennings

CfA Project Number 3590
SP35605834
SAM No 35105
SMR Warwicks 106

© English Heritage

ISSN 1749-8775

The Research Department Report Series incorporates reports from all the specialist teams within the English Heritage Research Department: Archaeological Science; Archaeological Archives; Historic Interiors Research and Conservation; Archaeological Projects; Aerial Survey and Investigation; Archaeological Survey and Investigation; Architectural Investigation; Imaging, Graphics and Survey, and the Survey of London. It replaces the former Centre for Archaeology Reports Series, the Archaeological Investigation Report Series and the Architectural Investigation Report Series.

Many of these are interim reports which make available the results of specialist investigations in advance of full publication. They are not usually subject to external refereeing, and their conclusions may sometimes have to be modified in the light of information not available at the time of the investigation. Where no final project report is available, readers are advised to consult the author before citing these reports in any publication. Opinions expressed in Research Department reports are those of the author(s) and are not necessarily those of English Heritage.

Requests for further hard copies, after the initial print run, can be made by emailing:

Res.reports@english-heritage.org.uk

Or by writing to English Heritage, Fort Cumberland, Fort Cumberland Road, Eastney, Portsmouth PO4 9LD

Please note that a charge will be made to cover printing and postage.

SUMMARY

The Research Department, Archaeological Projects Team; then Centre for Archaeology (CfA) carried out a short programme of fieldwork at Chesterton, Warwickshire between 11 and 22 November 2002. The work, in response to a request from English Heritage West Midlands Region, set out to evaluate an area of the Scheduled Ancient Monument that was being disturbed by rabbit burrowing.

The evaluation established the extent of the rabbit burrowing and produced information that led to a reinterpretation of the site. While there was no evidence of a manorial or any other structure dating to the medieval period, a large feature was recorded which is likely to have formed part of a formal garden arrangement relating to a later, possibly C16th phase of manor.

This report sets out the circumstances behind the request, a description of the site, a summary of the results of the fieldwork and the methodology for protecting the site.

CONTRIBUTORS

The evaluation was managed by Sarah Reilly. Site survey was carried out by Tom Cromwell. On site finds management and reporting was carried out by Sarah Jennings assisted by Eleanor Brook. Processing and reporting of animal bone, Polydora Baker. The glass was reported on by Sarah Brown. Environmental samples were reported on by David Earl Robinson. The conservation was reported on by Karla Graham and Gareth Hutton. The report illustrations by Eddie Lyons (photographs by members of the excavation team).

ACKNOWLEDGEMENTS

Thanks go to David Adams of the Warwickshire Archaeological Research Team for his advice and assistance prior to, and during the fieldwork and for permitting use of his photographs for EH display and report purposes. To John Burman for access to geophysical survey data. To Mr W Warhurst (landowner) for allowing access to the site and for his assistance with backfilling. Thanks also to the excavation team Magnus Alexander, Catherine Chisman, Geoff Morley, and Mathew Town.

ARCHIVE LOCATION

The finds from the evaluation remain the property of the landowner who expressed a wish to have them returned once preliminary processing and quantification had been completed at Fort Cumberland. The glass has been returned to him and is in the care of the WART team in their store at Chesterton. Other finds will be returned on completion of this report with the intention that they will be deposited with Warwick Museums Service. The site archive (paper and digital records, photographs, drawings) will be stored at Fort Cumberland until a suitable agreement is made with Warwickshire Museums Service, although copies of the context and finds records have been given to the WART team for their records.

DATE OF EVALUATION

November 11-22 2002.

KEYWORDS

Type of work: Excavation
Period: Post Medieval
Materials: Inorganic. Glass.
Site Type: ???

CONTACT DETAILS

Sarah Reilly, English Heritage Strategy Department: Local Authority Historic Environment Liaison Team, Fort Cumberland, Fort Cumberland Road, Eastney, Portsmouth PO4 9LD. Tel 02392 856754.
Email: sarah.reilly@english-heritage.org.uk

Sarah Jennings, English Heritage Archaeological Projects, Fort Cumberland, Fort Cumberland Road, Eastney, Portsmouth PO4 9LD. Tel 02392 856715
Email: sarah.jennings@english-heritage.org.uk

Polydora Baker, English Heritage Archaeological Projects, Fort Cumberland, Fort Cumberland Road, Eastney, Portsmouth PO4 9LD. Tel 02392 856774
Email: Polydora.baker@english-heritage.org.uk

Ellie Brook, previously of English Heritage Centre for Archaeology, Fort Cumberland, Fort Cumberland Road, Eastney, Portsmouth PO4 9LD.

Sarah Brown Head of Research Policy for Places of Worship, English Heritage. Room 120, 23 Savile Row, London W1S 2ET. Tel 020 7973 3066
Email: sarah.brown@english-heritage.org.uk

Gill Campbell, English Heritage Archaeological Projects, Fort Cumberland, Fort Cumberland Road, Eastney, Portsmouth PO4 9LD. Tel 02392 856780
Email: gill.campbell@english-heritage.org.uk

Tom Cromwell, English Heritage Archaeological Projects, Fort Cumberland, Fort Cumberland Road, Eastney, Portsmouth PO4 9LD. Tel 02392 856752
Email: tom.cromwell@english-heritage.org.uk

David EarleRobinson, English Heritage Archaeological Projects, Fort Cumberland, Fort Cumberland Road, Eastney, Portsmouth PO4 9LD. Tel 02392 856776
davidearlerobinson@english-heritage.org.uk

Karla Graham, English Heritage Archaeological Projects, Fort Cumberland, Fort Cumberland Road, Eastney, Portsmouth PO4 9LD. Tel 02392 856786
Email: karla.graham@english-heritage.org.uk

Gareth Hutton, previously of English Heritage Centre for Archaeology, Fort Cumberland, Fort Cumberland Road, Eastney, Portsmouth PO4 9LD.

Eddie Lyons, English Heritage Archaeological Graphics Team, Fort Cumberland, Fort Cumberland Road, Eastney, Portsmouth PO4 9LD. Tel 02392 856714
Email: eddie.lyons@english-heritage.org.uk

Contents

1 Introduction	6
2 Site Description and Archaeological Background	8
3 Aims and Objectives	9
4 Original and revised methodology	11
5 Results	12
5.1 Overview	12
5.2 Specific Objectives.....	13
6 Introduction to the artefacts and ecofacts	17
7 Interim report on the window glass	17
7.1 Method of examination	18
7.2 Preliminary observations	19
7.3 Conclusions	20
7.4 Further research potential.....	20
8 Analysis of the came and window glass	21
9 The small finds, pottery and ceramic building materials	21
Table 2: Pottery spot dates and date range	22
10 The animal bone	24
11 The environmental evidence	24
11.1 Summary	25
12 Conservation	26
12.1 Summary	26
12.2 Glass packaging strategy	26
12.3 Metalwork	26
12.4 Glass	26
13 Conclusion	27
14 Protecting the site	28
14.1 Update January 2004.....	28
14.2 Update August 2004	29
15 Bibliography	30
16 Appendices	31

List of figures

Figure 1: Saint Giles' church and the Chesterton landscape

Figure 2: Chesterton evaluation location

Figure 3: The evaluation site from the southeast showing remains of the moat

Figure 4: Example of damage by rabbit burrows

Figure 5: Section drawing through excavated deposits

Figure 6 Site matrix

Figure 7: Painted window glass fragments

Figure 8: Lead came

List of tables

Table 1: Breakdown of Chesterton window glass per context

Table 2: Pottery spot dates and date range

Table 3: Ceramic building materials

Table 4: Results of environmental samples

Table 5: Quantification of ferrous and non ferrous metal work for
X Radiography



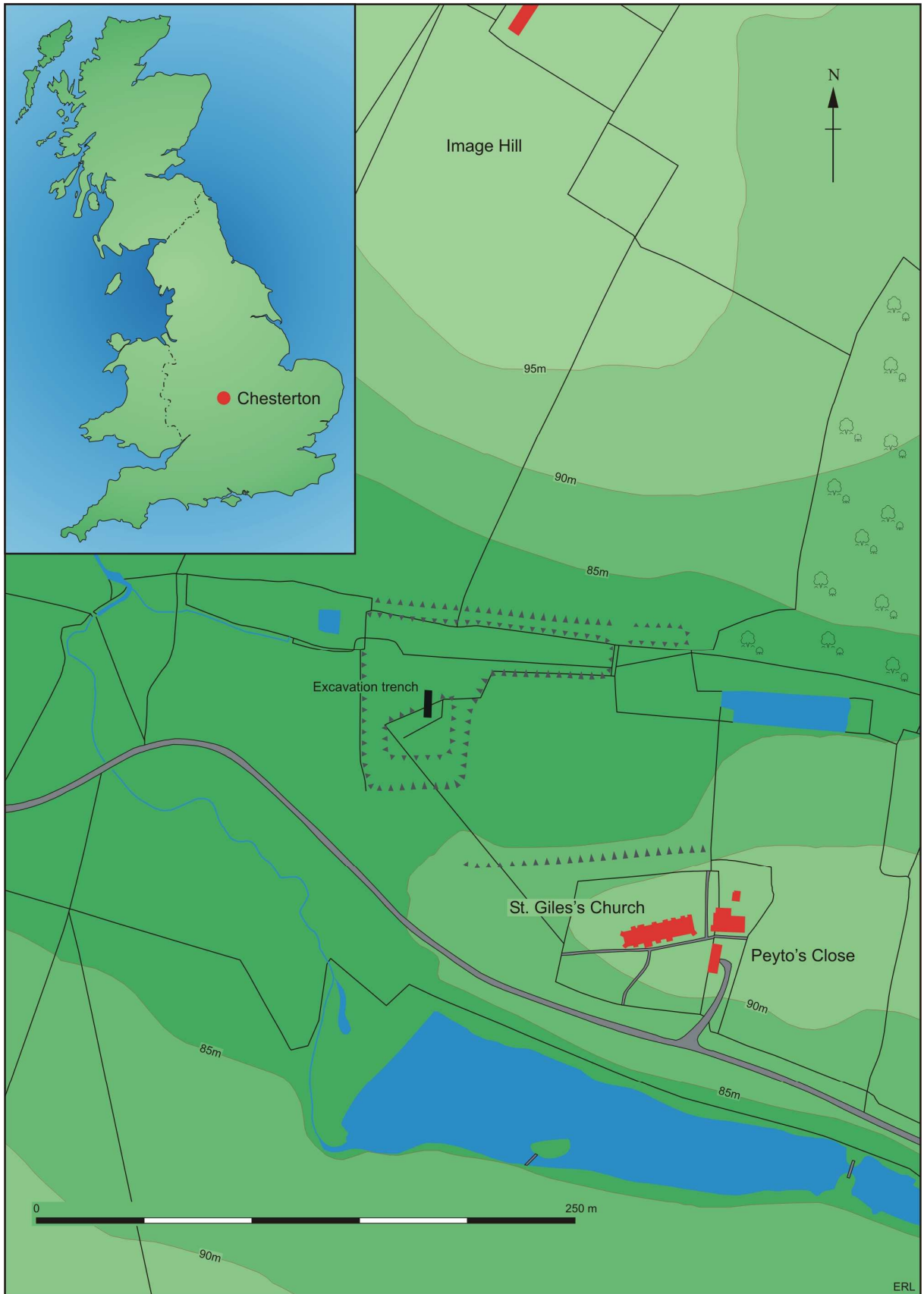
Figure 1 Saint Giles' church and the Chesterton landscape

I Introduction

The site at Chesterton (figure 2) is part of a complex of earthworks, possibly relating to a displaced medieval village known as Church End, Chesterton (SAM no. 35105, Warwicks 106). Among these earthworks is a raised flat platform (the purported site of a fifteenth century manor house) around which an irregular moat survives. During the summer of 2002, the northern bank of the moat was suffering damage through an infestation of rabbits. Large amounts of highly decorated medieval window glass were recovered from the burrows' upcast by the Warwickshire Archaeology Research Team (WART), who alerted the Region to the problem.

CfA undertook the evaluation to assist the West Midlands Region in their efforts to find a solution to this Scheduled Ancient Monument management problem. The results of the evaluation served to inform discussions over the immediate management of the monument as well as assisting in a reinterpretation of the site within the landscape.

The scope of the work was in accordance with current CfA strategic objectives, two of which are to lead English Heritage's research strategy and to undertake research. One focus of these objectives is to assess damage to sites occurring outside of the planning process and to carry out strategic projects to address this.



© Crown Copyright. All rights reserved. English Heritage 100019088. 2008

Figure 2: Chesterton evaluation location

2 Site Description and Archaeological Background

The site (figure 2), was located on a platform measuring approximately 30m east-west, and 30m north- south at the east, tapering to 15m at the west and surrounded by the surviving southern and eastern extents of a shallow moat. Centred (at SP35605834) in the bed of a small valley approximately 65m north of St Giles' Church, Chesterton, the land is currently used for grazing sheep and cattle and the underlying geology comprises lower Lias clays of the Jurassic period.

The moated site was purportedly the location of the medieval Peyto Mansion. There is documentation relating to the ownership of Chesterton Manor from as early as 1043 however there is little mention of the location or construction of an early manor house or buildings other than a supposition that this may have been in the early fourteenth century. A 'manor house' building is recorded as having been 'rebuilt' in the 1470's when Sir John de Peto who 'rebuilt the manor house and adorned it with a quantity of heraldic glass' (Salzman 1949). This manor was abandoned at an unknown date, though certainly by 1650 when a new, classically designed mansion, said to have been influenced by Inigo Jones was built on Image Hill, some distance to the north. 'This, which seems to have replaced the medieval hall towards the end of the 17th century' (Salzman 1949).

The north- west quadrant of the platform and moat has been completely truncated, probably during landscaping work for fishponds in the seventeenth century, leaving a somewhat irregular trapezoidal area of what was potentially undisturbed archaeology that slopes gently down towards the north-west. More recently, the south-west of the moat was filled in by the present landowner. The area of truncated bank at the north was being burrowed into by rabbits and was the primary location of the glass finds. The evaluation therefore targeted the area of disturbance on the bank and sought to establish the depth and extent of the burrowing into the platform.



Figure 3 The evaluation site from the southeast showing remains of the moat

Members of the Warwickshire Archaeology Research Team have been monitoring the site and its environs for at least a decade. Prior to the evaluation, they had retrieved and stabilised disturbed finds from the bank amounting to some 385 fragments of window glass (of which approximately 95% is decorated) and a collection of ceramics of mixed date.

While no previous intrusive excavation had been carried out on the monument, WART had, prior to the evaluation, cleared an accumulation of debris and undergrowth from the moat, and recorded two stone bridge abutments and a stone capped timber box drain. They had also carried out a small programme of geophysical survey on land near to, and directly to the east of the site although at the time of fieldwork this was not extensive enough to definitively inform the actual area of the evaluation.

3 Aims and Objectives

The primary aim of the evaluation was to assess the extent and nature of the damage caused by rabbit burrowing and establish the source and origin of the window glass so that the information could be used to inform discussion on the future management of the monument.

More specifically, the evaluation attempted to:-

- Evaluate the overall damage from a surface survey and establish methodology for future monitoring
- Examine the stratigraphic sequence to the depth of the rabbit burrows and to a level where it is possible to identify the context/s from which the finds are derived
- Characterise the nature and range of archaeological deposits and structures in order to contextualise the finds that are being upcast
- Establish the state of preservation of archaeological remains in order to be able to assess the impact of the damage caused by burrowing
- Produce an interim impact assessment for the West Midlands region, followed by a CfA report disseminating the results of the work

4 Original and revised methodology

The evaluation was conducted as per the methodology set out in the project design for the work (CfA October 2002).

- A surface survey was carried out concentrating on the main area of disturbance and glass fragments removed from the vicinity of the burrow openings.
- A trench measuring just under 10m and 3m wide was located down the slope of the bank and into the plateau. It was located specifically to target the area of high frequency of surface glass retrieval where possible, between trees and vegetation.
- Topsoil and overburden was removed by hand and all surface openings and collapsed burrows planned at a scale of 1:20.
- Archaeological deposits were removed stratigraphically and recorded in accordance with guidelines within the CfA recording manual (CfA 2002, draft).
- Where collapsed burrows were present, these were emptied and cleaned out to avoid the risk of contamination with deposits and planned to demonstrate the extent and depth of damage.
- Due to time constraints, and the unexpected nature of the archaeological deposits, the size of the trench was reduced to half. Following this, and in order to minimise the level of intrusion required to achieve the objectives, a deep sondage was excavated in the southern end of the trench.
- Finds and samples from each context were retrieved and processed in accordance with CfA procedures and specific advice from relevant CfA specialists.
- Each context was photographed in colour and monochrome; pre-excavation and in section. Selected deposits and working shots were digitally photographed.
- All deposits were planned at a scale of 1:20. Both of the long sections of the trench were drawn at a scale of 1:10, as were the north and south facing sections of the sondage.
- The trench was located to Ordnance Survey co-ordinates using a Total Station Theodolite. All site levels were measured from a temporary bench mark sited on the church and converted to metres OD.
- On completion, the trench was backfilled and the bank reinstated (with the kind assistance of the landowner and use of a tractor).

5 Results

5.1 Overview

The scale of rabbit burrowing on the site was unfortunately extensive and occurred at depth across the platform (figure 4). Indeed, stratigraphic evidence demonstrated many further phases of burrowing in antiquity through the presence of collapsed and truncated burrows predating the present activity. The burrowing appeared to be almost specific to a well mixed soil deposit ([016], [012]), quite unlike the rest of the stratigraphic sequence which comprised mainly redeposited natural clays. The burrows could be clearly seen to follow this softer deposit and were not recorded as being any deeper than the lowest level of this layer (c. 1.2m below the surface of the plateau). The rabbits appeared to be entering the site at the level of this deposit in the side of the bank, thus avoiding burrowing through upper dumped deposits of topsoil and clay. It was this deposit that yielded the concentrations of glass fragments, explaining why the glass has initially been observed in piles of spoil at the entrance to the burrows down the edge of the bank.



Figure 4 Example of damage by rabbit burrows

During the evaluation, no evidence of a manor house or any related structures or deposits were found on the platform. The deposits from which the glass was retrieved were not *in situ*; they are fills within a large feature situated towards the centre of the platform. In addition to this, the condition of the window glass (see section 6, below) showed that it came from a redeposited dump and did not represent primary collapse from a building. While the date and status of the glass is not in question, its origin remains somewhat speculative. Despite this, the rabbits were nevertheless a danger to the integrity of the archaeology, particularly the fragile

glass deposits, and it was clear that immediate steps needed to be taken in order to prevent further damage to, and assist in monitoring the site.

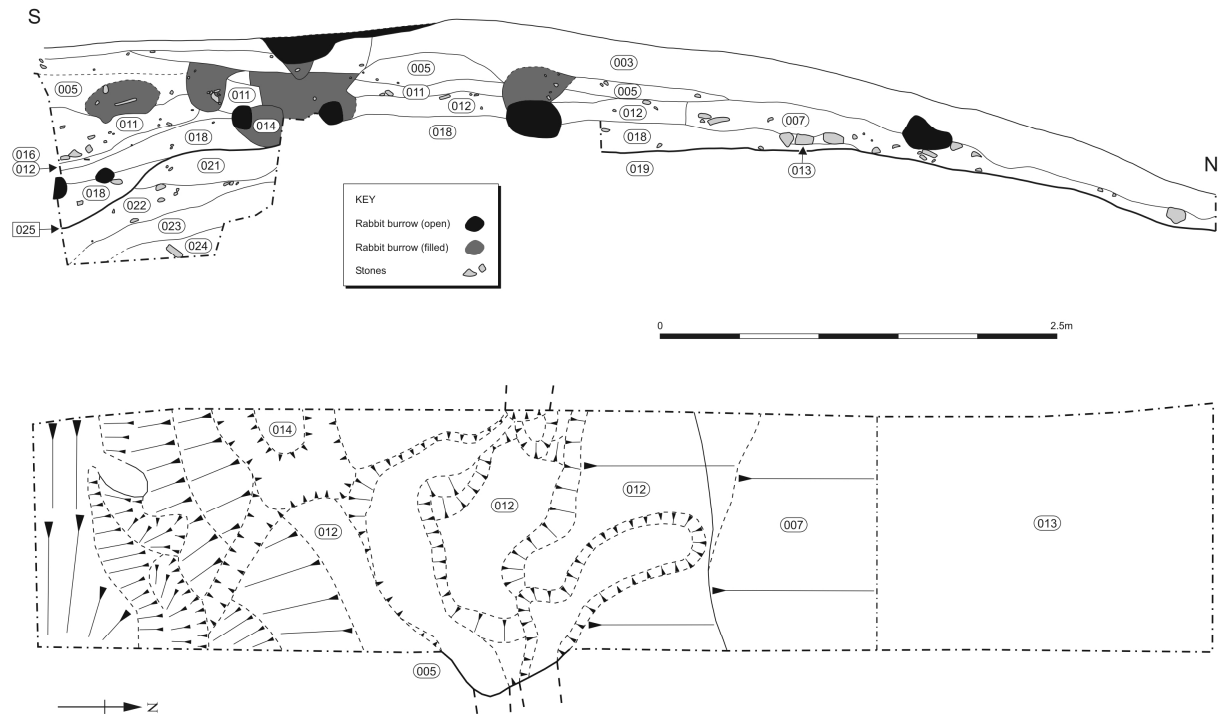


Figure 5 Section through excavated deposits

ERL

5.2 Specific Objectives

- Evaluate the overall damage from a surface survey and establish methodology for future monitoring

As stated in 4 above, a surface survey was carried out and the burrow openings recorded. The methodology proposed (see *Technical Advice Note 16, Burrowing Animals and Archaeology: Historic Scotland, 1999. Appendix IV*) was not fully employed because spoil from the openings had been removed by WART during retrieval of glass and therefore the recommended calculation could not be made. Nevertheless, this method of assessing further damage could be employed in future monitoring.

- Examine the stratigraphic sequence to the depth of the rabbit burrows and to a level where it is possible to identify the context/s from which the finds are derived
- Characterise the nature and range of archaeological deposits and structures in order to contextualise the finds that are being upcast

Following the removal of topsoil and overburden from the plateau and downslope, a series of dumps of redeposited clay was recorded (figure 6). These deposits are described in detail in Appendix I and demonstrated by a Harris matrix in Appendix II.

Downslope, layer [007] comprised fairly clean redeposited natural lias clay averaging 0.18m in thickness and from which no finds were retrieved. It is assumed that this may related to either the cutting of, or the cleaning out of the edge of the fishpond that truncates the plateau and that is presumed to have been cut sometime in the C17. Below this, a shallow dump ([013]) containing a high frequency of tile was recorded. This is dated to late C15, early C16 and may suggest a phase of demolition or refurbishment of a building in the area.

On the plateau, of a similar composition to but very slightly overlain by [007], layer [005] also comprised mixed but fairly clean redeposited clay. This layer averaged 0.3m thick and has been spot dated to late C15- early C16. Lying on top of this layer were three small stone scatters. These were not associated with any structures and are likely to relate to trees which had previously been present on the site. At the southern end of the trench, [005] lay over a thick (0.43m) layer of very clean redeposited natural clay [011]. This sloped down slightly towards the south and appeared to be deliberate infilling of a possible hollow or feature. The date range for the material from this capping is wide and contained residual material (Roman to C15).

At this stage of the evaluation, the stratigraphy that was visible in the section of some of the collapsed burrows, indicated that below these clay dumps was a thick (0.15m) layer of mixed, dark soil [012]. It was apparent that this layer contained numerous fragments of glass and other demolition debris (building material, mortar etc) and it was initially interpreted as an *in situ* demolition layer. As excavation continued however, it became clear that this layer did not represent horizontal stratigraphy, but was sloping down steeply towards the south, to a depth of up to 1.20 below ground surface, towards the middle of the platform and into a large feature.

Excavation of layer [012] confirmed that this well mixed deposit was one of the primary sources of the window glass. Additionally context [016] (which lay at the interface between [012] and [011], very similar in composition to [012] but slightly different in colour) yielded an even higher frequency of glass. Although these deposits were found to be slumping steeply into the large feature, the concentrations of unbroken fragments of glass were found on their upper surfaces. There was also a noticeable concentration at the west side of the trench in the vicinity of the present fence line.

This concurs with WART's observations that greater amounts of glass were being retrieved from burrow openings on the slope slightly to the west of the trench. This may be explained by the fact that because deposits [012] and [016] slope downwards into the large feature towards the southeast, they are therefore much nearer the surface at the northwest, where the rabbits are entering the site.

Based on the presumption that the rabbits would be able to burrow as far as the softer deposits were present and that the glass was present within these layers, a sondage was excavated in the southern end of the trench in order to establish their depth and attempt to understand the nature of the large feature. After excavating to a depth of just over 1.5m, it was established that the lowest level of [012] and [016] was approximately 1.2m below the ground surface of the plateau. The extent to the

south was not determined as the deposits continued outside the limits of the excavation, though this could possibly be established by carrying out a bore hole survey in transects across the plateau at a future date.

Below [012] and [016] was a thick (0.3m) grey silty clay layer [018] containing abundant charcoal flecks and frequent flecks and small fragments of mortar. Only three fragments of glass were retrieved from this layer yet, as with [012] and [016], the inclusions might suggest an association with the demolition of a building. [018] appears to be the primary fill of this large feature [025] and has been spot dated to late medieval (C14-C16). Although the fills were still sloping very slightly outside the edge of excavation, it would appear that the base of this feature is approximately 1.3m below the surface of the plateau.

The overall dimensions of the feature are not fully known although assuming that the fills are levelling out towards its centre, it might be projected to have a diameter of some 8 metres.

The feature appears to be cutting into horizontal layers of fairly clean lias clay. The upper layers [021] and [022] contain tile and stone and are likely to be redeposited natural deposits, but the lower layers are very likely to be natural. No dating material was retrieved from these layers.

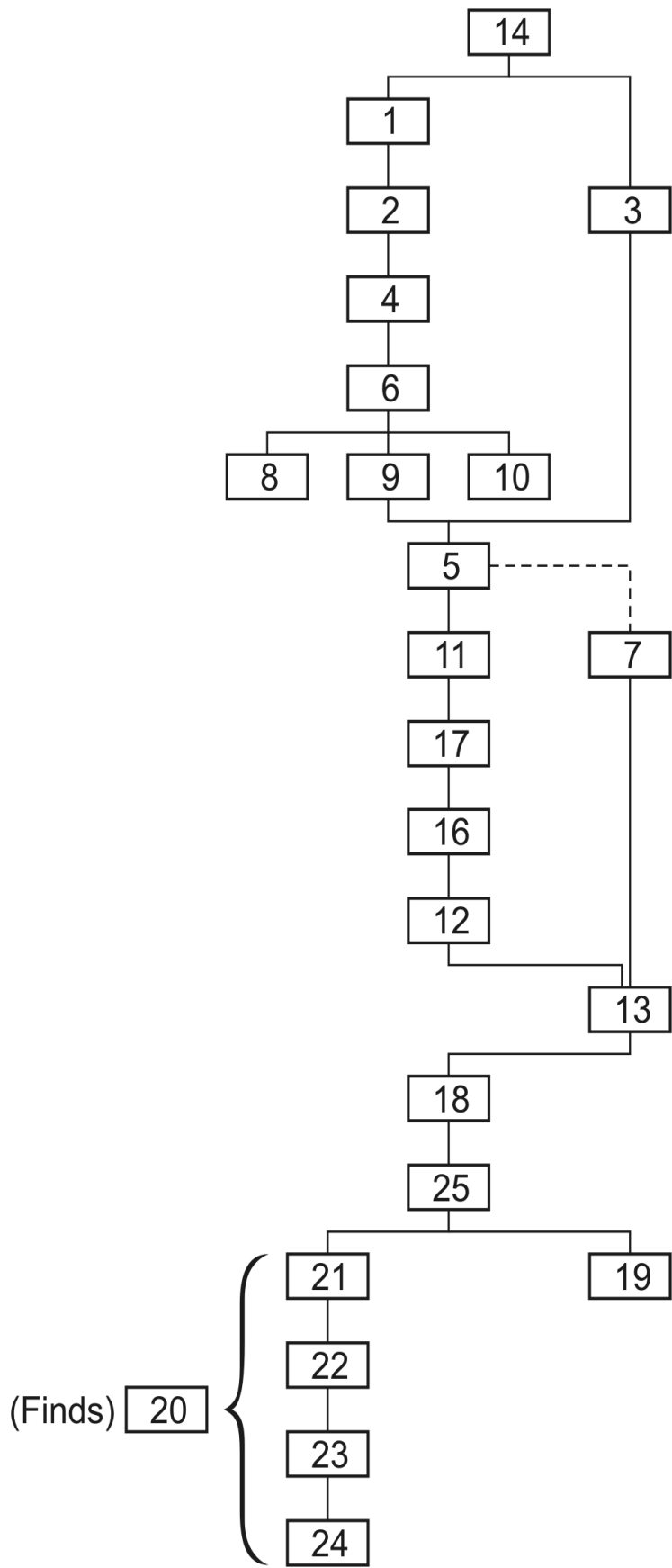


Figure 6 Site matrix

6 Introduction to the artefacts and ecofacts

Sarah Jennings

A total finds retrieval policy was in operation for this site, and all material was processed and recorded as laid down in the Draft CfA Recording Manual. It has all been retained as part of the archive.

Apart from the large quantities of window glass recovered the finds assemblage was small. However, there was sufficient material to draw basic conclusions about the nature of the assemblage which is definitely domestic in origin, as attested by the pins and lace tags, and a bead. The pottery gave a surprising amount of information; the level of imports is very high by any standards, but particularly for a site in this region where even the relatively common forms of German stonewares are rare occurrences (pers comm. Stephanie Ratkai). The presence of a single piece of Italian maiolica indicates contacts and trade well outside the normal pattern, and could be regarded as a sign of wealth and status. The pottery, although slightly later in date than the glass, could well be contemporary with its subsequent destruction and deposition after it had been stripped of its high value components and is of the same general standing, suggesting a wealthy household for a number of generations.

7 Interim report on the window glass

Sarah Brown

A total of 1586 pieces of window glass was recovered from the excavations. There were both large fragments and individual quarries, as well as many small pieces. Many of the fragments were painted. All the pieces from both this excavation and the previously collected glass have been packed on flat trays of corex and plasztazote to maximise visibility with minimal handling. Together with the pieces recovered from the surface by members of WART this brings the total of window glass fragments to over 2000.

Table 1: Breakdown of Chesterton window glass per context

Context	Frag of glass
001	13
002	8
003	32
004	108
005	53
006	5
012	147
014	379
015	15
016	743
017	80
018	3
Total	1586

7.1 Method of examination

The shards of excavated glass were examined on 21 February 2003 and again, following cleaning, on 22 December 2003, at the invitation of Sarah Jennings of the Centre for Archaeology, Fort Cumberland. The archaeological investigation, undertaken in November 2002, was in response to a request from West Midlands Region.

The fragile condition of many of the fragments made handling difficult. The pieces were initially examined on one surface only and within their storage trays under a raking surface (fibre optic) light source. A preliminary selection of the more interesting fragments was made, to assist CfA in prioritising conservation and stabilisation. After cleaning the selected pieces could be examined on both surfaces and were photographed and x-rayed. Some of the best preserved pieces had also been drawn at the behest of the Warwickshire Archaeological Research Team.

The purpose of this brief report is to:

- suggest the date and nature of the excavated glass fragments
- evaluate their significance in interpreting the site
- assess their value to the corpus of medieval window glass in Warwickshire



Figure 7 Painted window glass fragments

7.2 Preliminary observations

The glass fragments have clearly been re-deposited. Only a tiny quantity of lead came (about six short lengths) was recovered with the c.2000 glass fragments, and none of the shards was even partially within window lead. It is clear, however, that the glass had been leaded into window openings and had been subjected to the environment for a significant period before deposit in the ground: many of the fragments bore traces of window cement and their exterior surfaces were lightly covered with corrosion pits resulting from prolonged exposure to moisture in the form of rain and condensation. No single complete shard with all edges grozed (i.e. as trimmed by the glazier), rather than broken, was identified. A small number of pieces have the distinctive 'rolled' edge derived from the edge of the glass muff or cylinder. The majority of pieces are very small. Nearly all shards now lack translucence, but few have deteriorated to such an extent that they have lost their surfaces and paint is recognisable and legible on many.

The vast majority of fragments, whether painted or unpainted, are of uncoloured glass, of a characteristic greenish hue. Only one piece of coloured glass (ruby?) was identified among the shards, although the condition of many of the pieces made definitive conclusions on this point problematic. None the less, the absence of any appreciable quantity of coloured glass is probably significant.

Also of some significance is the relatively large number of short rectangular pieces of unpainted glass, many of them grozed on more than one edge. These pieces probably derive from the 'sacrificial border' typical of many medieval windows, a strip of unpainted glass leaded along the edge of every panel of painted glass. This is the area of glazing that adjoins the glazing groove, and could be sacrificed if ever a window required removal from the masonry opening, a process that usually requires the hacking out of mortar and thus entails risk to the panel.

Of the painted fragments, which are in the majority, few depict recognisable elements of figurative designs and there is no evidence of heraldic decoration. There are a number of pieces derived from depictions of architectural canopies (notably those shown in WART drawings 1, 2, 32, 79). One architectural element incorporates the depiction of a small figure (in armour?), perhaps the remains of a small figure from the side shaft of an architectural canopy (CfA after Cleaning 9a). Another fragment depicts a diminutive hand (WART 29). There is a single fragment depicting a piece of (fringed?) drapery on a larger scale, presumably derived from a draped figure (CfA After Cleaning 13). The pieces are therefore apparently derived largely from the 'margins' of a stained glass window, comprising architectural elements, foliate designs and diaper/rinceau motifs.

Some fragments can be identified as lozenge-shaped painted 'quarries', decorated with quadrilobe foliate motifs and edged with double painted lines of two thicknesses in a tile-like arrangement (e.g. CfA After cleaning 4a). There are also fragments with more free-form naturalistic foliage depicting oak leaves and acorns (e.g. CfA After Cleaning 14a) and another design with a daisy-like flower on a stem (CfA After Cleaning 15a). The collection includes two fragments of inscription in Lombardic lettering (e.g. WART 56).

On stylistic grounds the glass can be assigned to the first half of the 14th century, comprising architectural canopy elements, naturalistic foliage motifs, including partial quarries of a 'trellis' type (stems and leaves climbing through a geometric framework). 'Black-letter' forms replaced Lombardic lettering in stained glass around the middle of the 14th century. The complete absence of any yellow stain might be indicative of a date very early in the century, although the quantity and character of surviving painted glass might also explain its absence. The survival of architectural canopy elements and the presence of the one larger scale drapery fragment mentioned above, confirm that this is the vestige of a scheme that included figures under canopies, perhaps in a 'band window arrangement. By the end of the 13th century the arrangement of figures under architectural canopies filling the width of a window opening defined by the mullions, had become the standard design in parish church and great church alike. In larger windows figures and canopies were arranged in horizontal zones, with one tier of figures separated from the next by lozenge shaped quarries or foliate grisaille (the 'band window').

The quality of the glass-painting is highly competent, executed in the characteristic warm brown glass-paint of the period. All painted ornament is on what would have been the interior face of the glass. In other words, there is no back-painting, which might also be indicative of an early 14th-century date.

There is no immediately recognisable 15th-century material that could be associated with the documented late 15th-century rebuilding of the Peyto mansion believed to have occupied the site.

7.3 Conclusions

The overwhelming preponderance of white glass, the almost complete absence of lead came, the absence of surviving figures or any heraldic decoration and the 'marginal' character of what has been found all suggest that these deposits represent the discarded remains of an 'asset stripping' operation, with valuable lead and coloured glass being salvaged for re-use.

The windows were of a figure and canopy type, with Lombardic inscriptions, dating to the first half of the 14th century. The surviving shards, although only a small proportion of a complete glazing scheme, are suggestive of windows of some complexity and quality.

Insufficient material survives to determine whether the glass was made for a secular or ecclesiastical context. If the former, however, the collection would be of particular interest as very little glass made for a medieval secular or domestic environment has survived in England.

7.4 Further research potential

Relatively little work has been done on medieval stained glass in Warwickshire, with the exception of P A Newton's PhD Thesis on the Midland Counties (Courtauld Institute of Art, London University 1961). The Corpus Vitrearum Medii Aevi (CVMA) hopes to initiate a programme of fieldwork and a campaign of record photography of *in situ* survivals in the near future. This will help establish a context for the Chesterton material.

8 Analysis of the came and window glass

Gareth Hutton and David Dungworth

Samples were taken of the glass and what appeared to be cement adhering to the edges of the panes/quarries. These were examined and analysed using a range of instruments (Scanning Electron Microscope, X-ray Diffraction and X-ray Fluorescence).

The XRF analysis of the 'cement' shows the presence of lead and calcium. The XRD of the material showed lead corrosion products (from the came?) and calcium carbonate.

Samples of glass were examined using the SEM and their chemical composition determined using an energy dispersive X-ray detector. This confirmed that the glass is a forest glass, i.e. high levels of potash and low levels of soda. Forest glass was produced in Britain throughout the medieval period until the late 16th century.



Figure 8 Lead came

9 The small finds, pottery and ceramic building materials

Sarah Jennings

57 finds numbers were allocated to individually recorded items with a further 8 being given to the objects recovered by WART. Some finds numbers cover more than one item. Possibly the most significant find was a silver coin from context 017, but this has yet to be conserved and identified. Remarkably little lead came was found, less than half a dozen small pieces, indicating that the glass had been disposed of after the leading was removed. Many of the individual pieces were obviously broken by or

at the time of deposition. The interpretation of the deposit as a dump layer is reinforced by several pieces of both lead and copper alloy off-cuts.

The majority of the identifiable objects, apart from iron nails, and most of the pottery would suggest the dumped material was deposited in the late 15th or, more likely the early 16th century. Ten lace tags and 6 pins were recovered from context 012. The lace tags are Type I, where this is identifiable (Margeson 1993, 22-4), and the pins all have wound heads (*ibid* 11-13). Both these types were common at this time.

Excluding topsoil contexts a total of 56 sherds was recovered from ten contexts. A surprising percentage of the pottery is imported, mostly Rhenish stonewares from Langerwehe and Raeren, but also one piece of a Cologne-type mug with sprigged oak leaf decoration from context 002 (topsoil). While the Langerwehe and Raeren vessels could date as early as c.1475, the Cologne fragment is unlikely to date before 1520 (Jennings 1981, 116-18, cf cat 785). A single but very distinctive tin-glazed earthenware sherd came from context 016, the source of most of the window glass. This is a shoulder fragment from a jug of Italian origin. These are not common, but are found in such places as the Dissolution deposits of wealthy Abbeys (Jennings, forthcoming). Fragments of several Matincamp flasks of Types I and II were recovered, most notably from contexts 013 and 016. Type I has a date range of 1475-1550, while Type II is common in the 16th century (Hurst *et al*, 1986, 102-4). Both Tudor Green and Cistercian Ware sherds were found, again types dating to the later 15th and earlier 16th centuries. A few fragments of earlier medieval fabrics and some Midlands Purple sherds comprise the local wares. Two possible Roman sherds were also found. No pottery was recovered from contexts below 018.

Table 2: Pottery spot dates and date range

Context	spot date	date range
002	mid to late 17 th cent	13 th /14 th to 17 th cent
003	16 th cent, ?plus	
004	16 th century	late 15 th to 16 th cent
005	late 15 th /early 16 th	late 15 th to 16 th cent
006	mid 17 th – 1640-60	15 th to 18 th cent
011	14 th cent +/-	Roman to 15 th cent
012	early 16 th century	13 th to 16 th cent
013	late 15 th /early 16 th cent	Roman to 16 th cent
014	1 st half 17 th cent	15 th to 17 th cent
015	13 th /14 th cent	medieval
016	early 16 th cent	15 th to 17 th cent
018	late medieval	14 th to 16 th century

Ceramic Building material

A quantity of ceramic building material was recovered, 6 boxes, mostly roof tiles but also some glazed floor tile fragments, both slip-decorated and Flemish-type slip coated. These have only been briefly examined in any detail and a discard policy

could be established for the roof tile fragments once they have been recorded. Generally the fragment size of all the categories of ceramic building materials (CBM) is small and this applies particularly to the roof tiles which are more prone to fragmentation during disturbance than bricks. The state of the CBM also supports the proposition that this material was redeposited.

All the identifiable roof tiles have a central projecting nib; occasional examples also have an additional hole at one side, near the corner. There are insufficient remains of any fragment to establish if there was a hole on either side of the nib. The nibbed roof tiles are of variable thickness. The thicker examples (22mm) have a sandier fabric and rougher feel to the upper surface. The majority of roof tiles made in both fabrics have a width of 16.6cms. No complete long dimension survived.

The single piece of a decorated inlaid floor tile and the several fragments of either Flemish or Flemish-style slipped and glazed attest to the general status of the whole assemblage as these types are normally associated with wealthy households.

Table 3: Ceramic building materials

Context	Hand-made brick	Roof tile	Nib tile	Floor tile	Other
u/s		Glazed roof tile; poss peg tile			
001	x	x			
002	x	x			
003	x			Yellow glaze, some white slip	pamment
004		x			
005	x		x Width 16.2cms	Flemish, yellow glaze 11.5cms square	x pamment
006	x		x	Green glaze, rectangular 5.9cms width, 8.8cms plus long	
007	x		x One + hole; width 16.0cms and 16.6cms		Ridge
012		?; x green glazed edge	x	Complete 11cms square, yellow glaze, diagonal cut	Ridge
013	x		x Width 15.6cms		
014			x; width 16.6cms	Green glaze	
016	?; x		x width 15.6cms		
017	x	x			
018		x ? peg tile	x; plus one hole; Width 16.4cms		
020		x		Inlaid	

10 The animal bone

Polydora Baker

The assemblage of animal bones from Chesterton is very small and is housed in two standard size storage boxes. The remains are mainly from medieval contexts, between the 13th/14th-17th c. One context spans a much wider time range, from the Roman period-15th c. The animal bones are well preserved and include mainly domestic livestock, cattle, sheep/goat and pig. Some of these are from very juvenile animals. One canid bone was observed, and rabbit bones are ubiquitous throughout the contexts, albeit in small numbers. A range of bird species are present, including domestic fowl, possible goose, and juvenile fowl. Fish remains are rare; a pharyngeal tooth indicates the presence of a cyprinid (carp family). Ageing data (mainly bone fusion, but some jaws and isolated teeth also) and measurements are available for mammals and birds, but these are very limited.

11 The environmental evidence

David Earle Robinson

Four soil environmental bulk soil samples were taken: 500, 501, 502 & 503. Samples 500, 502 & 503 were processed by flotation using a 250 micron mesh. Sample 501 has not been processed. Charcoal was also collected by hand during the excavation. The environmental archive comprises the following material:

Table 4: Results of environmental samples

Context	Sample no	Results
001		charcoal
002		charcoal
003		charcoal
004	500	charcoal, 250 micron flot, hand-picked grains & seeds >4mm
005		charcoal
012	503	charcoal, 250 micron flot, hand-picked grains & seeds >4mm (*part of the 250 micron flot has been sorted for plant remains and preliminary i.d.s carried out)
014		charcoal
016		charcoal
018	502	charcoal, 250 micron flot, hand-picked grains & seeds >4mm
US		charcoal

- 50% of the 250 micron flot was taken as a sub-sample using a riffle box. Approximately 75% of this was sorted by a student from Southampton University, revealing mostly carbonised, but also uncarbonised plant remains,

from a wide range of species. The taxa recorded during this analysis are as follows:

Poaceae – large and small-seeded

Typha sp

Avena – some sprouted

Galium tricornutum

Menyanthes trifoliata (cf.)

Luzula sp

Rubus sp

Plantago sp

Crataegus sp

Linum catharticum

Galium aparine

Chenopodium album (apparently modern)

Rubiaceae/Galium sp

Plantago lanceolata

Lapsana communis

Labiatae

Prunella vulgaris

Brassicaceae

Lolium sp

Unidentified organic material and seeds

Brassica nigra

Agrostemma githago

Centaurea cf. nigra

Prunus spinosa

Plantago media

Lithospermum arvense

Geranium sp

Rumex sp.

Anthemis cotula

Epilobium sp

Sambucus sp

Vicia sativa

Fabaceae

Pisum sativum

Triticum cp

Hordeum vulgare – tail grains

Triticum aestivum

Glume wheat

Chaff - diverse

Avena floret bases

Hordeum vulgare var. vulgare

11.1 Summary

The plant material in the samples is generally well preserved and, in the case of sample 503, with a diversity of species being represented. However the material appears to be of very mixed origin and doubts about the age and origin of the

components would always bring the results of any eventual detailed analytical work into question.

12 Conservation

Karla Graham

12.1 Summary

The conservation work undertaken to date has involved:-

- preventive conservation to stabilise the glass and metalwork through packaging and storage
- x-radiography of metalwork as required for the site archive stage.
- investigative conservation of a selection of glass determined by the Finds and Glass Specialist
- consolidation of a selection of glass for the purposes of a display of the Chesterton project at the EH Festival of History 2003

12.2 Glass packaging strategy

It was decided, in conjunction with the Project Finds Specialist, to devise and prepare a packaging strategy prior to the CfA fieldwork phase.

The aims of the packaging strategy were to ensure that the glass was safely recovered from the site, provide physical support to the glass, and to protect the glass from movement during transit, and to be suitable for depositing the glass.

The glass recovered, cleaned and stabilised by WART prior to the CfA fieldwork, was incorporated into this system.

Full details of conservation and packaging can be found in the site archive.

12.3 Metalwork

X-Radiography was undertaken at the Centre for Archaeology of all the ferrous and non-ferrous metal work for site archive completion and use in the Assessment Stage.

Table 5: Quantification of ferrous and non ferrous metal work for X Radiography

Material	Number
Copper Alloy	19
Copper Alloy & Iron	1
Iron	27
Silver	1
Total	48

12.4 Glass

A sample of glass (Box 7) was x-rayed to determine if x-radiography will be a useful imaging technique in the Assessment Phase for assessing condition (internal corrosion) and identifying and recording the presence of painted decoration.

Sarah Brown (then Senior EH Architectural Investigator) visited in February 2003 to examine the glass. Prior to a full assessment of these sherds by Brown in December 2003, they required the removal of overlying soil. This glass has been treated in two phases.

The glass is treated as a bulk find and therefore not assigned small find numbers or EH laboratory numbers. For the purpose of x-radiography, condition assessment and conservation the sherds for Brown have been assigned temporary numbers (1 to 68) to aid in assessing the effectiveness of the conservation strategy and treatment.

The x-rays taken to date suggest that x-radiography is useful in indicating and recording the presence of painted decoration depending on the condition of the glass and the painted decoration. It is also useful for the purpose of assessing condition (internal corrosion).

Documentation. Digital photographs of the glass sherds were taken before and after conservation treatment.

Cleaning. Surface dirt was removed using swabs wetted in a 50:50 solution of distilled water: Industrial Methylated Spirits (IMS). The fragments were covered with a piece of silicone release paper to slow down the rate of evaporation.

Consolidation. Only 2 of the sherds remained wet and required consolidation. The remainder of the glass dried out slowly either in the burial environment or post – excavation.

Ideally, a series of test should have been carried out to test the efficiency of the different methods. The requirement for glass on display meant that one method was selected from a literature review without undertaking laboratory tests (Alten *et al* 2000; Cronyn & Davison 1996, 198-219).

Condition Assessment. The internal and surface condition of the fragments was assessed using an assessment methodology devised by Dillon at the Ancient Monuments Laboratory (Dillon 1994).

13 Conclusion

The stratigraphy within the evaluation trench demonstrated that undisturbed glass was found largely within two fills ([012] and [016]) of a large deep feature [025] and likely to have been deposited sometime in the mid C16. The glass may originate from the stripping out and replacing of windows either of a manorial building, or indeed St Giles' Church. The infilled feature and bank was then consolidated by layers of redeposited clay ([013] upwards).

The presence of building material within some of these fills might suggest a corresponding or associated phase of demolition or refurbishment in the vicinity although no structural evidence was recorded. It remains possible that evidence of the early building has been entirely or partially removed by the excavation of the

fishpond and the large central feature. It is not clear whether there was a phase of earlier landscaping to construct the platform but there is potential in further sampling of the underlying clays.

The function or purpose of the feature is also speculative. During the course of the work, a preliminary survey was carried out by members of English Heritage's Archaeological Investigation Team. Their first impressions were that the landscape showed evidence of at least two phases of garden, one of these has a north-south aligned pattern and is clearly laid out with reference to the C17 house on the hill.

The moat feature differs from the above in that it seems to form part of an arrangement set on a southwest-northeast alignment which may relate to buildings in the area of the church. It is depicted clearly on a map dating to 1600 so it must certainly pre date the newest manor house.

It is likely that there was a middle phase of manorial building between the early and the late but it is not known whether this would have been in a different location. If Dugdale's reference in VCH is correct and the early manor house was 'rebuilt' in the 1470s, one might assume the location remained the same (and geophysical survey subsequently carried out by WART strongly suggests evidence of structures next to the church).

It is likely then, that the area of evaluation formed part of a formal garden layout associated with a C15 manorial building that may have been located near the church. The large feature in the centre of the platform was possibly a garden feature that was subsequently filled in as the gardens changed in function and style.

14 Protecting the site

Following the evaluation, a number of methods of protecting the site were considered. These ranged from encircling the site with rabbit proof fence to covering the site with a wire mesh. The former required excavation within the moat to bury the fencing to some depth and was considered to be unnecessarily intrusive. The latter was not without potential issues, primarily the possibility that the wire would corrode under the current land use and would require replacing. Other sites where this method had been employed were investigated and it was considered that the life of the mesh was longer than originally thought, particularly if the site was fenced off. The WART team were subsequently commissioned by the West Midlands Region to carry out the work and the site was covered and fenced off later in 2003.

14.1 Update January 2004

The site was visited in January 2004 and it was established that this method of protecting the immediate site was a success. Unfortunately however, the areas outside the protected area were being burrowed, indicating that the rabbits had simply moved on.

14.2 Update August 2004

The site and its surrounding landscape has benefited from continued monitoring by the WART team and by the implementation of a comprehensive programme of geophysical survey (report forthcoming). The survey has identified a number of possibly structural features that may assist in the future interpretation of the landscape.

A more detailed survey by English Heritage's Archaeological Investigation team would assist in setting an interpretive landscape framework within which further information and data gathering could be placed.

15 Bibliography

Alten H I, De Laperouse J-F, Little M A, Maish JP, Rees S and Spriggs J A 2000, 'Conservation' in C Pamela Graves *The Window Glass of the Order of St. Gilbert of Sempringham: A York-based Study*. The Archaeology of York 11/3. CBA for York Archaeological Trust. 512-524.

Colvin H 1999, *Essays in English Architectural History*

Cronyn J and Davison S 1996, 'Conservation of Glass. Part I Archaeological and decorative glass', in S Davison and R Newton *Conservation of Glass*. Butterworth & Co Ltd. University Press, Cambridge. 198-219.

Dillon J C 1994, *Techniques for monitoring consolidant penetration in excavated, Forest Window Glass – a preliminary investigation*. Unpub M.A. Dissertation, University of Durham.

Historic Scotland, 1999, Technical Advice Note 16, Burrowing Animals and Archaeology

Hurst J G, Neal D S and van Beuningen H J E 1986, *Pottery produced and traded in North-west Europe 1350-1650*. Rotterdam Papers VI. Museum Boymans-van Beuningen, Rotterdam.

Jennings S 1981, *Eighteen centuries of pottery from Norwich*. East Anglian Archaeol 13, Norwich.

Knight, B. (1996). 'Excavated window glass: a neglected resource?', in A Roy and P Smith (eds) *Archaeological Conservation and its Consequences*. Copenhagen, The International Institute for Conservation of Historic and Artistic Works (IIC), London. 99 -104

Margeson S 1993, *Norwich Households: The Medieval and Post-Medieval Finds from Norwich Survey Excavations 1971-1978*. East Anglian Archaeol 28.

Salzman L F 1949, Warwick V, Kington Hundred. *Victoria County History*

16 Appendices

Appendix I: Context descriptions and spot dates

Context	Description	Dimensions	Spot date	Sample	Interpretation
001	General number ascribed to finds retrieved during removal of turf from platform only. Above 002				
002	Cleaning below turf on platform. V little glass. Above clay patch 004		Mid-late C17		
003	Dark grey sticky clay. Overburden on bank. Waterlogged at north towards edge of fishpond. Incorporates finds from emptying burrows so will be contaminated. Above 005	L5m, D0.3m	C16+		
004	Grey/brown clay layer along west side of trench. Truncated by large burrow hole and subsequently collapsed into it. Above 006.	L32.3m, W1m, Dpth0.2m	C16	500	?
005	Thick, dark grey/brown silty clay predominantly on platform but extending partially downslope where it has an unclear interface with 007 (possibly same). High quantity of tile. High quantity of glass at interface between 005 and 012.	L12m, Dpth0.3m	Late C15/ early C16		Upcast from pond to north, probably for the levelling purpose following infilling of the ?feature 025 below. Presence of tile may have been dumped into the pond.
006	Slightly humic thin layer below 004. Overlies three stoney patches 008,008,010	L2.1m, Dpth0.18m	Mid C17 1640-60		?earlier topsoil horizon?
007	Dark grey/brown silty clay recorded at north end of trench, downslope. Similar to 005 and virtually indistinguishable though section seems to indicate it may be below. Some cbm recovered.	L2.1m, W1.5m, Dpth 0.18m			Similar to 005. Probably upcast from pond or wash downslope from 005.
008	Stone spread. Below 006. Above 005. U/X. Three spreads of rounded stone pebbles	L1.1m, W0.75m			Originally suggested evidence of possible floor/ yard but in p/x, likely to be incidental and part of the dumping/levelling of the platform.
009	Stone spread. Below 006. Above 005. U/X	Diam0.65m			As above
010	Stone spread. Below 006. Above 005. U/X	L1.15, W0.55m			As above
011	Thick layer of light brown/grey (?redeposited) clay lying below layer 005. Thickens towards north. Very clean; few inclusions. Appears to be within a cut.	L3.8m, Dpth0.43m	C14+/-	501	Initially thought to be make up to support a trackway or structure, now is interpreted as a deliberate infilling of a large cut.
012	Very dark grey silty clay, well mixed and contrastingly lighter in composition than the surrounding heavy redeposited clay dumps. Large quantity of glass retrieved from the upper surface/interface. Thicker in south and middle of trench becoming thinner towards the north where fewer frags of glass were noted.	L4m, Dpth0.12m	Early C16	503	This layer appears to be (along with 016), one of the key deposit containing the glass fragments. Its lighter composition means that the rabbits are able to burrow through it, below the heavier clays above, thus the glass found in the spoil outside the burrows. While this is essentially a dumped deposit, it is significant that that majority of the glass was found on its surface.
013	Dark grey/brown silty clay, (limestone, tile and cbm 70%) layer in north of trench and down the slope. Undisturbed at this level by burrowing so fairly secure for dating. High % of building material suggests evidence of demolition.	L3.46m	Late C15/ early C16		Dumped demolition material. Appears to have been dumped in situ rather than dragged up from the pond. Doesn't appear anywhere else so is perhaps consolidation of the bank? As part of the landscaping.
014	Context number ascribed to burrows and the finds retrieved during emptying them in order to reduce potential for contamination of better stratified contexts.		1600- 1650		Finds from burrows.
015	Unstratified finds (from spoilheap)		C13/ C14		Unstratified finds.

016	Very dark grey/brown silty clay. Frequent inclusions of building and demolition debris as well as large quantities of glass. Very similar to 012 and initially thought to be the same context but revealed to be overlying 012.	L2.2m	Early C16		A dumped deposit indicative of demolition of a building. Large quantities of glass were retrieved from this layer. Lighter composition to surrounding deposits has allowed burrowing through it. Rabbit disturbance had obscured the interface between this and 012. By the time it was appreciated that this was a slighter different layer, some quantity of glass had been collected as within 012 thus slightly skewing the quantification. Nevertheless, they remain dumps within a large feature and are contemporary.
017	Dark olive grey thin layer of silty clay above 016.	L1.4m, Dpth0.7m			Tip layer of redeposited clay/topsoil.
018	Dark grey friable silty clay layer with concentration of charcoal and cbm. Thickens towards the south as if slumping into a cut. Overlain at north by rubble layer 013.		C14- C16 Late med	503	Dumped deposit into feature 025. Possibly indicative of demolition.
019	Grey/brown mottled clay layer in northern part of trench. Highly iron stained. Unexcavated in north but excavated in sondage to south as 021. Unexcavated.	L3.9m			Possible redeposited natural making up the mound?
020	General number for finds retrieved from sondage in S end of trench				Finds from sondage.
021	Grey/brown mottled clay layer cut by 025. Seen and recorded in section. Similar to 019. Excavated within sondage so any finds will be under 020.	L1m, W1.1m			Appears to be natural clay but not clear whether it has been redeposited. It may have been laid down originally to create the mound. The Column sample taken from the section of the sondage may have potential to address this. Probably the same as 019.
022	Grey clay layer recorded in section only. Below 021. Inclusions of cbm and stone.	Dpth0.2m			Probably redeposited clay.
023	Mottled grey/brown clay layer recorded in section of sondage below 022. Very occasional evidence of carbon but otherwise clean.	Dpth0.16m			Possibly natural clay.
024	Olive grey clay recorded in section of sondage below 023.	Below level of excavation.			Probably natural clay.
025	Cut. Large feature in middle of platform. Observed in section after the excavation of layers which had apparently been used as deliberate infill. True dimensions unknown; only a small part of the north sloping side visible.				Large feature, possibly relating to an earlier phase of landscaping and subsequently infilled with dumps containing glass and demolition debris then consolidated with redeposited clay layers.

