

Medieval to Post-Medieval Settlement, Routeways and Earthworks at Hamerton Sewage Pumping Station



Excavation Report



March 2016

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Medieval to Post-Medieval Settlement, Routeways and Earthworks at Hamerton Sewage Pumping Station

Archaeological Excavation

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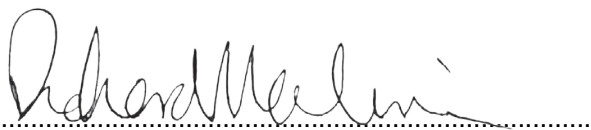
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Summary

The site sits within the shrunken medieval village of Hamerton, Cambridgeshire, 13km northwest of Huntingdon (TL 1365 7985). Alconbury Brook runs through the village with medieval and post-medieval earthworks of closes, ridge and furrow and quarrying surrounding the brook.

An initial 8m evaluation trench in August 2015 uncovered archaeological remains immediately below the turf. Finds spanned the Roman to modern periods from within a 12th century ditch, a Medieval soil layer and a demolition layer associated with stone footings of a 17th century building.

Broader excavation followed, covering the footprint of the proposed Anglian Water pumping station, approximately 16m by 8m in area. Environment Agency LIDAR data was examined to place the site and related earthworks in context.

The 12th century ditch crossed the site west to east, parallel with the road to the north. Later development of the site saw the construction of a post-built structure with a clay floor overlying the filled in ditch. From the thirteenth century, the site was turned over to agriculture and a soil layer built up.

By the 17th century (and potentially much earlier) a north to south hollow way had been cut through the east of the site, truncating the earlier layers and features. This was lined with cobbles and a terrace of structures represented by surviving stone footings was built alongside it. The terrace and hollow way continued southwards as an earthwork, extending towards an old ford across the Alconbury Brook, disused in the 20th century.

A rich finds assemblage was recovered from the demolition layers overlying the 17th century structures including a variety of knives, scissors and whet stones and a collection of pottery of relatively high status for a rural settlement. Evidence for metalworking came in the form of hammerscale and a small quantity of slag.

The terrace of buildings was evidently demolished in the later 17th century. From the earliest detailed maps of the 19th century, the site has been under pasture.

1 INTRODUCTION

1.1 Location and scope of work

- 1.1.1 An archaeological excavation was conducted at School Lane/Alconbury Road, Hamerton (Figure 1), TL 1365 7985.
- 1.1.2 This archaeological excavation was undertaken in accordance with a Brief issued by Andy Thomas of Cambridgeshire County Council (CCC), supplemented by a Specification prepared by OA East.
- 1.1.3 The work was designed to assist in defining the character and extent of any archaeological remains within the proposed redevelopment area, in accordance with the guidelines set out in *National Planning Policy Framework* (Department for Communities and Local Government March 2012).
- 1.1.4 The site archive is currently held by OA East and will be deposited with the appropriate county stores in due course.

1.2 Geology and topography

- 1.2.1 The British Geological Survey indicates that the solid geology of the site at Hamerton comprises Oxford Clay Formation Mudstone with no overlying deposits. Excavation revealed a mixture of Oxford Clay, Gravels and patches of Gault Clay.
- 1.2.2 The site lies at c. 28m OD in the valley of the Alconbury Brook.

1.3 Archaeological and historical background

- 1.3.1 Cambridgeshire Historic Environment Record (CHER) entries within 500m of the site are displayed on Figure 2.

Prehistoric & Roman

- 1.3.2 The CHER records the finding of a Bronze Age palstave (CHER 00742) in the parish in the 19th century. Iron Age and Roman settlement are recorded 2km to the south-southwest of the village at Grove Farm (CHER CB14663) along with a nearby Roman pottery scatter (CHER 11716). In the neighbouring parish of Steeple Gidding, a Roman pottery scatter was found (CHER CB15279), around 2km to the north-northwest of the site.
- 1.3.3 The village lies 2km north of the Godmanchester-Leicester Roman road (via Alconbury, Titchmarsh, Brigstock and Corby), the western reaches of which are known as Gartree Road (Fox 1923, 171; RCHME 1975, Taylor 1979, 188). It is also 5km west of Ermine Street connecting Godmanchester to York (Taylor 1979, 187-8; RCHME 1975).
- 1.3.4 A track, shown on the 1817 Ordnance Survey Drawing for Wellingborough, connected the village southwards to the Godmanchester-Leicester route some 2-300m east of the more major road that survives as a modern road. Part of the track is preserved as School Lane/Church lane running immediately to the west of site and as field boundaries south of Hamerton Church. The age and stone construction of Hamerton Bridge and the diversion of Church Lane (see Post-Medieval, below) suggest this was the original southern communication route for the village and that the structures recorded at the site would have been directly alongside it.

Medieval

- 1.3.5 Hamerton is a shrunken Medieval village and there is clear evidence throughout the area for earthwork survival including moats, trackways, quarries, field patterns, ridge

and furrow and house platforms. It is recorded in the Domesday survey as *Hambertune*, assessed at 15 hides, held by Wulfheah in 1066 and by Eudo the Steward, in chief, in 1086 (Powel-Smith *et al.*).

- 1.3.6 The 14th century All Saints' Church (CHER 04262) stands 200m to the south of Alconbury Brook on a hill around 33mOD (around 15m above the site). Mention is made of an earlier church in 1130 (Page *et al.* 1936). A medieval cross base survives in the church yard (CHER 00749).
- 1.3.7 A windmill is depicted for the village on the map of the Fens in 1603. A 1617 map of Huntingdonshire depicts buildings both north and south of Alconbury Road. However, this may be a stylistic representation of the settlement, those to the south (potentially within the excavation area) are not shown on later maps.
- 1.3.8 The CHER mentions earthworks around the shrunken village (CHER 02974), most of which are probably of medieval origin: to the west (CHER 11295) and to the south around Hamerton Bridge (CHER 00746A).
- 1.3.9 The village was subject to an earthwork survey, organised by the Leicester University Adult Education Department and reported on in PCAS Volume LXVIII, 1978:

The earthworks in and around the village are extensive, but form little coherent pattern. In the centre of Hamerton, along both sides of the Alconbury Brook, is a continuous spread of low banks, scarps, and ditches, none of which have any clear overall form though the remains of one or two former closes can be identified. It is possible that all these earthworks are the sites of former houses and gardens which once lined the brook and that subsequently the village moved both north and south on to the higher ground.

(Brown & Taylor 1978)

- 1.3.10 The plan (*ibid.* Fig. 3) shows a possible raised area at the location of the development, which could relate to structures associated with the shrunken village. It also identified a scatter of medieval pottery spread parallel to and south of Sawpit Lane (see Figure 2).

Post-medieval

- 1.3.11 The Royal Commission (RCHM1926) noted 17th century cottages and a range to the west and north of Alconbury Road. Some of these were demolished in December 1973 (CRO KHAC2/2402).
- 1.3.12 Immediately northwest of the Church, the Rectory (CHER 12180) stood in 1838 but was demolished by 1887.
- 1.3.13 Hamerton Bridge (CHER 00746/SAM 1006803) stands 90m to the south of site, spanning Alconbury Brook. It is probably of 16th or 17th century date, incorporating stone of possibly 14th century origin; a bridge is recorded having been repaired in the reign of Edward VI (1547-1553; Page *et al.* 1936).
- 1.3.14 Fords are shown further upstream (now a bridge on Main Street) and adjacent to Hamerton Bridge on the 1887 and 20th century Ordnance Survey six inch maps. After 1927 Hamerton Bridge is labelled as Church Bridge. A 20th century photograph shows part of the ford immediately next to the bridge (RCHME 1926, Plate 131). The ford is no longer present and the banks of the brook appear to have been built back up, with the construction of an environment agency monitoring station on the northern side, east of the bridge.

- 1.3.15 The present bridge appears to divert the line of School Lane westwards. South of the church, Rectory House, built around 1851 (CHER 00745), stands on the site of the former 17th century Manor House.
- 1.3.16 The lands within the village core probably always belonged to the manor. A map of 1838 is thought to be a copy of the inclosure map of the parish, but no inclosure is known (KDMC/465; Figure 3). At that time the site sat within 'Long Close', the boundaries of which have not changed.
- 1.3.17 Manor Farm (CHER 00743) is a brick-built, tiled 16th and 17th century structure lying 250m west of the site.
- 1.3.18 A number of the earthworks around the village are of post-medieval date. The 16th/17th century gardens south of the old Manor House survive as earthworks (Hamerton Park: CHER 12324) including a moat and a mound constructed of 17th century brick rubble (CHER 00839). A depression adjacent to the Alconbury Brook on its southern side, just east of the line of Church Lane is shown as a pond on the 1838 map and recorded in the HER (CHER 00741).

Evaluation

- 1.3.19 A single evaluation trench was excavated in the centre of the development area in August 2015 (Plate 1). This revealed a sequence of a Roman or early medieval ditch, medieval soil, a post-medieval building and associated cobbles. Only a brief summary report was produced, in anticipation of a mitigating excavation. The fuller results of the evaluation trench are incorporated and discussed in this report.

LIDAR Survey

- 1.3.20 The Environment Agency's LIDAR data, recently made public, covers the site at 1m resolution. The digital surface model (with buildings and vegetation present) has been coloured according to height with an additional shadow cast from the northwest. This is shown on Figure 2.
- 1.3.21 A clearer pattern of enclosures and ridge and furrow to the east and southeast of the site was visible. The area surrounding the site was indistinct but clearly subject to a variety of earthworks. The site itself appeared to lie on a linear rise, roughly aligned with Church Lane to the south of Alconbury Brook. This led to the suggestion that Church Lane may have continued (perhaps atop a headland) through the site, being diverted as School Lane after construction of the current bridge over the brook.
- 1.3.22 Fuller analysis of this data is included in the results and discussion sections of this report.

1.4 Acknowledgements

- 1.4.1 The following OA East Staff worked on site:
Stuart Ladd
Mary Andrews
Richard Higham
Lindsey Kemp
Toby Knight
Rebecca Pridmore
- 1.4.2 Initial evaluation and final excavation machining was undertaken by Philip Hall Plant Hire Ltd, with the first excavation stage being undertaken by Anthill Plant Hire Ltd.

-
- 1.4.3 Pole photographs and photogrammetric processing were undertaken by Lindsey Kemp using Agisoft Photoscan.
- 1.4.4 The work was commissioned by Jo Everitt and Claire Wootton of Anglian Water. It was managed by Richard Mortimer. Gemma Stewart and Andy Thomas of Cambridgeshire HET monitored the site.

2 AIMS AND METHODOLOGY

2.1 Aims

- 2.1.1 The original aims of the project were set out in the Brief and Written Scheme of Investigation (Stewart 2015; Ladd 2015).
- 2.1.2 The main aims of this excavation were
- To mitigate the impact of the development on the surviving archaeological remains. The development would have severely impacted upon these remains and as a result a full excavation was required, targeting the areas of archaeological interest highlighted by the previous phases of evaluation.
- 2.1.3 The aims and objectives of the excavation were developed with reference to Regional and Local Research Agendas:
- Research and Archaeology: A Framework for the Eastern counties: 1. Resource Assessment (Glazebrook 1997, East Anglian Archaeology Occasional Papers 3);
 - Research and Archaeology: A Framework for the Eastern counties: 2. Research Agenda and Strategy (Brown & Glazebrook 2000, East Anglian Archaeology Occasional Papers 8)
 - Research and Archaeology Revisited: A Revised Framework for the East of England (Medlycott 2011, East Anglian Archaeology Occasional Papers 24)

2.2 Site Specific Research Objectives

- 2.2.1 Following the initial evaluation trench, the following objectives were defined:
- Characterize any Roman occupation in this part of Hamerton
 - Contribute to the understanding of the Anglo-Saxon and Medieval settlement of Hamerton
 - Contribute to the understanding of the development of Medieval rural settlements in Cambridgeshire
 - Establish the nature and date of the soil recorded during evaluation in order to characterise this part of site
 - Characterise the structure(s) on site, establish dates of construction and when use changed or when it was abandoned
 - Conduct an earthwork survey prior to excavation in order to record surface variations that might be lost during topsoil stripping
 - Preserve unexcavated earthwork surfaces

2.3 Methodology

- 2.3.1 The methodology used followed that outlined in the Brief (Stewart, 2015) and detailed in the Written Scheme of Investigation (Ladd 2015).
- 2.3.2 Prior to excavation, earthwork surveys were carried out with a Leica 1200 GPS and also by georeferenced photogrammetry. In addition Environment Agency LIDAR data was examined.
- 2.3.3 Machine excavation was carried out by a rubber tracked 360 type excavator using a 2m wide flat bladed ditching bucket under constant supervision of a suitably qualified and

experienced archaeologist. Spoil was placed on a layer of terram overlying the grass to the sides of the excavation area to enable preservation of the existing surface.

- 2.3.4 Spoil, exposed surfaces and features were scanned with a metal detector. All metal-detected and hand-collected finds were retained for inspection, other than those which were obviously modern. Due to the frequency of iron nails found, only a representative selection were retained.
- 2.3.5 All archaeological features and deposits were recorded using OA East's *pro-forma* sheets. Trench locations, plans and sections were recorded at appropriate scales and colour and monochrome photographs were taken of all relevant features and deposits.
- 2.3.6 Following a small evaluation trench (results incorporated in this report), a two-stage excavation was planned. Initial machine excavation removed little more than topsoil and grass roots. Hand cleaning of the exposed stones proceeded and finds from cleaning were separated according to broadly distinct areas on site. The post-medieval building layers were then hand excavated and recorded. At the same time, test pits were excavated through late/post-medieval features and soil. The area to the south was later stripped to explore the extents of the post-medieval buildings.
- 2.3.7 A second phase of machine excavation removed the post-medieval features and medieval soil to expose an area of natural subsoils to investigate earlier cut features seen during the evaluation.
- 2.3.8 Site conditions varied from hot and sunny during the earlier phases to occasional heavy showers, although the ground drained well.

3 RESULTS

3.1 Introduction

- 3.1.1 Results are discussed in order of period, starting with the earliest. Residual Roman pottery was found in a number of contexts, but there were no Roman features on site.

3.2 Period 1: 12th century

- 3.2.1 The 12th century features are shown in plan on Figure 4.

Ditch

- 3.2.2 The earliest feature record was a ditch (**18**) containing earlier and later 12th century (and residual Roman) pottery. The ditch, partially exposed in the evaluation trench was aligned east-west. Two slots were excavated through it, one completing the evaluation slot (**18**; Section 1) and another partial slot further east (**88**, Plate 2; Section 17). It was up to 0.9m wide and 0.3m deep with sides approaching 45 degrees and a base that varied from flat to concave.
- 3.2.3 It extended westwards beyond the excavation area. If it extended eastwards it would have been truncated by the later hollow way, where bare clay had been exposed.
- 3.2.4 Environmental samples were taken from the upper and lower fills within Slot **17**, although there was no visible distinction between them. The earlier fill (77) contained a quantity of cereals and legumes with a small amount of metalworking residue (hammerscale). The upper fill produced more magnetic residues – all these potentially intrusive given the greater presence of metalworking residue in the post-medieval layers overlying the area. Finds included a residual Roman sherd and sherds dating from 1100-1200.

Building 1

- 3.2.5 A series of postholes formed the remains of a 12th century building in the centre of the site (Building 1). One posthole (**90**) appeared to cut Ditch **17**, although the intersection was small (Section 17). This shared a north-south line with four more postholes (**95**, **97**, **122**, **110**). They were 0.12-0.23m in diameter and all less than 0.15m deep. Two additional postholes (**103**: 0.38m dia.; **101**: 0.38m) extended eastwards on a perpendicular line and may be related. Three more lay to the west (**116** 0.3m dia.; **120** 0.4m long, 0.2m wide; and **118** 0.4m dia.).
- 3.2.6 Further west was a small sub-square pit or posthole (**93**) with a v-shaped profile 0.6m across and 0.28m deep. This lay 5.5m to the west of Postholes **90** etc. so may not be directly related.
- 3.2.7 Three features (**93**, **101**, **118**) produced pottery dating from 1150-1200. They lacked post-1200 fabrics (present in overlying deposits) so have been dated to 1150-1200.

Clay/Cobbled Surface

- 3.2.8 A possible floor surface lay directly on the natural clayey silts and gravel, probably also overlying Ditch **17**, although later disturbance made this unclear.
- 3.2.9 The surface comprised a thin layer of cobbles (114) and several larger stones (115) with a thin, clean, blue clay layer overlying it (112) up to 0.05m thick.
- 3.2.10 Clay Surface 112 survived in a small strip around 0.7m wide extending 0.6m from the southern baulk to the north where it was truncated. The underlying cobbles (114) extended further northwards covering an area around 1.8m from south to north and

1.3m wide. One post-hole (**120**) sat within its footprint, near to a shallow hearth (**106**). Hearth **106** was around 0.5m by 0.6m across and lined on its northern side with pitched stones (**107**). The hearth's charcoal-rich fill (**108**) was sampled and produced a small quantity of weed seeds and cereal.

- 3.2.11 Surface 112 was heavily disturbed by an irregular cut (**109**), with an overlying deposit of apparently slightly burnt gravel (92=105=113). This burnt material may represent the remains of a hearth or a demolition event overlying the surface.
- 3.2.12 Posthole **116** contained similar clay (**117**) to the floor surface (**112**), possibly as a result of the building's demolition. The burnt gravelly deposit (92) was present across the whole area.
- 3.2.13 Three pieces of pottery from Surface 112 have been dated to between AD1200 and AD1400, potentially somewhat later than the postholes of Building 1. These could however be intrusive and the date ranges for all the fabrics associated with Building 1's postholes and Surface 112 overlap.

Oven

- 3.2.14 To the west of Building 1, the demolished remains of an oven survived against the western baulk. It may have had a key-hole shape in plan with the flu to the north and a length of 2.2m and (assuming symmetry) a width of around 1.6m (Plate 4). It was cut (**50**) into the natural silts to a depth of less than 0.1m. Its side was lined with chalky clay (**51**) and its centre was filled with demolished material (**52**) comprising burnt natural clayey silts and crushed chalky clay superstructure fragments.
- 3.2.15 Two pots were buried in small cuts within Oven **50**: one in Pit **53** (0.25m diameter; pot: **54**); and one in Pit **78** (0.35m diameter; pot: **79**). Both contained single vessels *in situ* although parts were lost during machining. Both were of a Lyveden/Stanion 'A' ware dating from 1150 to perhaps 1400. So the oven may be contemporary with Building 1, or slightly later. No other pottery was recovered from the oven's deposits.
- 3.2.16 Fill **55** (within Pot **54** in Pit **53**) was a deposit primarily of ash. The pots may have been embedded in the oven to make secondary use of its heat. Environmental processing of Fill **55** produced charred cereals and legumes. Within the demolished structure was a quantity of magnetic residue indicative of metalworking – however given the shallowness of the deposit and the later metalworking activity these are probably intrusive.

Ditch

- 3.2.17 To the east of Building 1's posthole line (**90** etc.), was a truncated, shallow irregular ditch (**82**). This was near-parallel with the postholes, and (perhaps coincidentally) perpendicular with the early 12th century Ditch **17**, which it truncated. It extended 3m north from the southern baulk and was up to 0.9m wide, with a depth of only 0.1m, perhaps slightly truncated by the later holloway. With its position next to the later holloway, it could have marked and drained an earlier track or the eastern side of the building.

3.3 Period 2: 13th-14th Centuries

- 3.3.1 The later stratigraphic layers were uncovered over a larger area (see Figure 5) in order to define the extents of the later buildings.

Medieval soil

- 3.3.2 During the 13th-14th centuries, a drop in activity was apparent, based on the absence of fabrics of that date (see Appendix B.3Pottery). The site may have been turned over to agriculture at this time.
- 3.3.3 Overlying the remains of Building 1 was a deposit of soil (4=5=13=57=58=60=63=71; Figure 5), generally consisting of mid-dark greenish brown clayey silt. This contained material dating from the mid 15th-mid 16th centuries as well as a large proportion of residual 12th-13th century material. A particularly abraded piece of 14th-15th century dripping dish may indicate that the soil was being ploughed and built-up by manuring. Although Oven **50** just appeared to cut the soil (57, Section 9), the pottery contradicts this, indicating re-working of soil some of which may have been present at an earlier date.
- 3.3.4 The soil varied in thickness (Sections 9 & 22): it thinned out 1m from the western baulk and was around 0.25m thick across the centre of the site, being protected by the later buildings in this area. It was truncated to the east by the later hollow way. However, if the hollow way originated in the 12th century or earlier, as thought, the soil may never have built up here.

3.4 Period 3: 15th-Mid 16th Centuries

Culvert Drain

- 3.4.1 A culvert drain sitting within a ditch (**74**) extended 3.1m southwards from the northern baulk, cutting Soil Layer 4 and truncating Building 1's remains (Figure 5; Plate 5). There was no stone covering the 2m to its southern terminus – either it had been removed or this was the open inflow/outflow of the culvert. Against the northern baulk, two horizontal slabs remained, collapsed between the upright slabs that had formed the sides of the channel (Section 16). No finds came from below the slabs, but a single sherd of late medieval pottery came from the dark brown silt (**75**) overlying the slabs. This feature lay perpendicular to Alconbury Road, some 3m to the north but no associated structures or features are known.

Ditch

- 3.4.2 To the west of Culvert Drain/Ditch **74**, a late medieval linear ditch or gully (**84**) extended northwest for 2.8m; it was 0.5m wide, 0.25m deep with steep sides and a flat base.
- 3.4.3 An undated (and potentially modern) sub-square post-hole (**86**; 0.4m x 0.35m) filled with light brown silty clay cut the top of Ditch/Gully **84**.
- 3.4.4 Both the culvert drain and the ditch contained material dating from 1400-1500, towards the end of the range of fabrics found within Soil 4, suggesting they cut through it later in its buildup. However, they were not identified until the soil was machined away so their recorded dimensions are truncated.

Possible Late Medieval Building

- 3.4.5 A thin, dark, apparently organic layer (36) underlay much of the post-medieval building footprint in the centre of the excavation, sitting immediately on the late medieval soil (4 etc.) This could represent a rush floor of a late medieval building – a single late medieval sherd was recovered from Layer 36. The surface's extents were unclear, but it was only found under the footprint of the later buildings. Had it extended further it may well have been disturbed.

- 3.4.6 Two post-holes (72 and 99) appeared to cut through Surface 36, being filled (73 & 100 respectively) with clay from a later, post-medieval floor layer (see below), suggesting the posts were removed shortly before the laying down of the 17th century building floor (below). This suggests the post-medieval buildings were re-constructed over an existing structure and that the earlier structure may have been deliberately demolished for redevelopment.
- 3.4.7 Despite being sealed by a later clay layer (33, see below), a quantity of hammerscale was recovered within this layer. This suggests metalworking may have been happening within the area at an earlier date than the construction of the post-medieval buildings (see below).

3.5 Period 4: Mid 16th-17th century

- 3.5.1 The post-medieval site can be divided into three parts: a central terrace of buildings (Buildings 2, 3 and 4) aligned north-south; a parallel hollow way to the east; and a 'back yard' area to the west (Figure 6).
- 3.5.2 Post-medieval finds were mainly collected by cleaning the sub-soil from the tops of cobbled surfaces, wall foundations, demolition and surviving medieval soil. As such they are unstratified and few came from sealed contexts. Analysis of the pottery (see Appendix B.3) suggests occupation from the mid 16th century until the end of the 17th century.

Possible Surfaces

- 3.5.3 Overlying Soil 4 were occasional thin patches of cobbles or loose stones (3=37=38=39=61; not shown in plan). As so much post-medieval activity had taken place, it was unclear whether these were intrusive or represented a late medieval or post-medieval surface. Confidently identifying finds with a surface is also difficult, but a small number of late medieval finds were associated with these deposits.

Cobble Surfaces

- 3.5.4 Two more densely packed areas of cobble also produced late medieval finds (27, 28). Surface 28 was a hard packed layer of rounded gravel generally 0.02-0.05m in size in the southwestern corner of site. This was at least 5m long and 1.5m wide. Deposit 27 was a small isolated ashy deposit on Surface 28. Again, this may have represented a late medieval surface or could be associated with the post-medieval buildings.

Buildings 2, 3 and 4

- 3.5.5 In the later 16th century, a line of buildings was constructed. This was approximately 3.5m wide with frontages facing east onto the hollow way, and backing west onto a common yard area. Partitions within the buildings were clear, but it is not clear whether they represent a single unit with internal divisions or separate units. For clarity they are numbered separately but should be considered as potentially a single unit with access between rooms or parts of two separate units:
- Building 2 (extending under the northern baulk; at least 1.8m long)
 - Building 3 (in the centre of the area; 4m long)
 - Building 4 (extending southwards beyond the site limits; at least 4.7m long)
- 3.5.6 A blue-brown clay layer (33) provided a foundation layer for Buildings 2 and 3 (Section 3). It had a length of 5m, width of 3.3m from front to back and was generally 0.25m thick. As well as underlying the foundations this provided either a floor surface or a sub-floor, but there was no evidence of tiling or paving. Layer 33 did not fully extend to the

front (east) of the buildings, falling 0.8m short of the front wall. This gap could once have been filled with flag stones. Another layer composed of yellow clay with frequent chalk inclusions (35; approx. 1.8m x 4.6m, 0.2m thick; Section 13) appeared to have a similar function, within the north of Building 4. Both Surfaces 33 and 35 had retained magnetic residues associated with metalworking.

- 3.5.7 Unless otherwise stated, all the walls described below comprised irregular angular limestone slabs typically 0.2-0.3m in size. Some more regular pieces (possibly robbed from Culvert Drain **74**) and occasional rounded cobbles were encountered as well as one piece of mill stone (SF 49, Wall Foundation 11).
- 3.5.8 Wall Foundation 14 took the form of a line of stones 0.2-0.4m wide extending from north to south across the whole excavation area above Layers 33 and 35 (Plate 6; Section 3). It formed the back wall foundation of the three buildings. It was broken only by the 0.65m gap of a possible back doorway at the junction of Buildings 3 and 4. It extended from the northern baulk next to Alconbury Road at least 11m southwards (Plate 7).
- 3.5.9 The only surviving part of the frontage wall foundation (11) was a line 2.7m long and 0.6m wide at the front of Building 3 parallel with Wall Foundation 14. This comprised stone, but also with a quantity of red and yellow peg tile fragments, randomly positioned, probably packed with (or sitting on) a clay deposit (42). At its southern end was part of an interior return westwards, marking the division with Building 4, while at its northern end was a doorway c. 1.3m wide containing Threshold **64**.
- 3.5.10 Threshold (**64**) cut into Soil 4 (Section 11) between Wall Foundations 11 and 32 (see below). A circular spread of compact light yellow clay (65) with frequent chalk inclusions filled a shallow circular pit (**64**) 0.8m across. Its centre was slightly reddened from heat (66). This represents the foundation layer for a threshold flagstone at the main entrance to the building, since removed.
- 3.5.11 Dividing Buildings 2 and 3 was a thinner line of stones and occasional bricks (32) forming an interior wall foundation, perpendicular to Wall Foundation 14. This was 4.6m in length with its eastern end in line with the front (east) of Wall Foundation 11 (Section 13). Wall Foundation 11's northern end fell 1.4m short of Wall 32, potentially forming a doorway.
- 3.5.12 With the exception of Wall Foundation 11 with its possible clay packing, all these walls lacked bonding and comprised only a single course. The stones may have been set within/upon the ground with timber super-structures resting on top.
- 3.5.13 Fragments of an internal chimney stack (80) survived *in situ* between Buildings 3 and 4. These were aligned east-west and north-south, surrounding a hearth area. These comprised half bricks set into Layers 33 and 35. They surrounded a hearth (56; Section 56) with small limestone slabs (pitched vertically) and bricks (62) set into Layer 35 (Plate 8), cutting into the soil beneath. Hearth 56 appears to sit within Building 4 but could also have served Building 3. A shared chimney stack with hearths either side might have been the arrangement, but no hearth survived within Building 3.

Hollow Way

- 3.5.14 To the east of the buildings, parallel with Wall Foundations 11 and 14, was a shallow hollow way (**125**). This cut through to natural clays and gravels, with a base 0.3-0.6m deeper than the top of the late medieval soil on which Buildings 2, 3 and 4 were constructed. It was perhaps 5m wide with no perceptible breaks of slope. Aligned north-south it extended southwards as a partial earthwork towards the Alconbury Brook.

- 3.5.15 The hollow way was stabilised with large irregular cobbles (67), overlain with finer, more densely packed cobbles (44). Cobble Layer 44 may represent maintenance or a structure designed to produce a smoother surface. Finds from amongst these cobbles date primarily to the late 17th century with a large quantity of residual late medieval material.
- 3.5.16 Along the northern baulk of site were deposits of similarly large, coarse cobbles (49 west of Building 2; and 124 to the east). These may relate to Alconbury Road, which now runs east-west 3-4m north of the excavation area. However, lying either side of Building 2 they are more likely to represent associated external surfaces rather than parts of a road.

Yard

- 3.5.17 The area to the west of the buildings appeared to form a yard, or series of yards, backing onto the buildings. No structural divisions survived, but Cobble Layer 49 lay north of the line of Wall Foundation 32, suggesting the buildings' internal divisions might be extended westwards into the back yard.
- 3.5.18 Further south, Cobble Layer 29 may have corresponded with the back of Building 4, although its northern extent was irregular. Dating of surfaces (especially coarse ones) is problematic and in fact these may have remained in use for a long period of time. It is possible Cobbles 29, 49 and 67 were present in the early 16th century, prior to the construction of Buildings 2, 3 and 4 and that the lines evident in the back yard area are a result of later truncation or clearance. Finds assigned to Cobbled Surface 29 were exclusively 12th-13th century in date while those from Surfaces 44 (probably post-demolition) and 67 (in the hollow way) were post-medieval. The majority of finds from immediately above the surface were retained as unstratified 'cleaning' layers and range in date from 13th century to modern.

Working Surfaces

- 3.5.19 A similar problem of dating arose with working surfaces within the back yard area.
- 3.5.20 A rectangular surface of neatly set, rounded cobbles (34) overlay Oven **50**. The stones were typically 0.1-0.2m in size and set one stone thick over a roughly square area approximately 1.2m across, continuing into the baulk section over the oven (Plate 4). They clearly post-dated the demolished 12th century Oven, but are only assumed to relate to Buildings 2-4.
- 3.5.21 Immediately to the northeast, but with no clear relationship to Surface 34 was surface (47). This was a sub-square deposit of yellowish brown clayey silt with frequent chalk inclusions, around 1.9m by 2.1m in size and 0.15m thick. It had a reddened, cracked limestone slab east of the centre and a second piece in its northwest corner. These may have been taken from Culvert **74**.
- 3.5.22 It overlay the medieval soil, abutting Surface 49 (the cobbles parallel to Alconbury Road). The surface partly straddled the speculative line that would separate the backs of Buildings 2 and 3, suggesting the area was common to both buildings. Environmental sampling from the clay surface itself (47) provided a quantity of hammerscale, both flat and spheroid,, which was also found in other nearby deposits, including the building floors, the underlying medieval soil and earlier features. There are small to medium quantities of hammerscale across the excavation, with this area potentially representing a possible source of the material.
- 3.5.23 Datable material from within the surface included four earlier medieval and one late medieval sherds, but these are probably residual. It is unlikely that much contemporary

or later pottery would intrude into a heat-hardened clay deposit so an early post-medieval date, contemporary with Buildings 2-4 has been assigned.

3.6 Demolition and disuse

- 3.6.1 Around the turn of the 18th century, the buildings were demolished (Figure 7). By the time of the 1848 inclosure map (Figure 3), there was no sign of the structures. A fine gravel surface (8=44) overlay the eastern side of the buildings and western side of the hollow way. To the south of Hearth 56 and Chimney Stack 80 in Building 4 was a concentration of red brick rubble (81); the demolished remains of the chimney stack. Part of a quern stone (SF 47) came from the demolition deposits within Building 2 (7), likely having been used in a wall foundation.
- 3.6.2 A single pit (**68**; Section 12) lay at the base of the hollow way, against the southern baulk (Plate 9). It was 1.6m wide, with a 1.3m length against the baulk, although the ground surface was depressed for around 2m further to the south, suggesting a total length of around 3.5m. It had near-vertical sides, gradually sloping to a flat base. The western side appeared to mark the transition from a blue clay natural deposit to a sand/gravel/silt deposit, suggesting that clay extraction may have been the purpose. Its lower ashy fill (69) contained seven whet stones (SF50-56) of near-uniform size.
- 3.6.3 The pit's lower fill also contained an architectural stone fragment (SF57) and several large chunks of a glazed red earthenware vessel. It's upper fill (70) contained cobbles, bricks and a mixture of pottery, much the same as the unstratified cleaning contexts, resulting from surface and demolition material being tipped or subsiding into the back-filled pit.
- 3.6.4 The broad date range for material found in Pit **68** and the possibility of residuality mean it is dated by its situation. It cuts through the centre of the hollow way, suggesting it post-dates the abandonment of Buildings 2-4 and the holloway i.e. it is somewhat later than c.1700. An environmental sample also produced a small quantity of magnetic residue.

Subsoil

- 3.6.5 During initial cleaning of the site (Plate 10), finds from immediately below the turf, overlying the remains of wall foundations and demolition layer were assigned to unstratified 'cleaning' layers (2=19=20=21=22=23=24=25=26). Context 2 represented finds retrieved during cleaning of the evaluation trench. Contexts 19-24 divided the cleaning into six areas according to the broad layout of the site (see Table 1 & Figures 7 & 8).

	Yard area	Buildings 2-4	Hollow Way 125
North	19	21	23
South	20	22	24

Table 1: Unstratified cleaning area contexts

- 3.6.6 Analysis of pottery recovered from the cleaning layers and demolition layers has contributed to the dating assigned to Buildings 2-4 and associated features (see Appendix B.3)
- 3.6.7 Although all the post-medieval ceramic phases were represented in cleaning layers, the majority of the material came from Contexts 23 and 24 – that is from the east of the site within Hollow Way **125**. Modern material has contributed to a later spot date for Contexts 19-21, reflecting the shallower soils and proximity to the modern field edge

and Alconbury Road. Context 25 represents cleaned material over a small darker spread of silt (30) in the centre of the hollow way between Contexts 23 and 24. It produced finds of the same date as the cleaning layers and may just represent an area of slightly deeper erosion or a concentration of burnt material. Similarly Context 26 was an isolated patch of darker silt in the south-west corner of the site, but does not appear to have been remarkable.

- 3.6.8 In addition to the pottery, finds included a large quantity of clay tobacco pipe, iron knives, some with bone handles, one with a carved ivory handle and three pairs of scissors (see Appendix B.1). All these finds were concentrated on the hollow way area (Contexts 23 and 24).

3.7 Earthworks

Earthwork Survey

- 3.7.1 To augment the 1970s earthwork survey (Brown & Taylor 1978), an additional survey was undertaken on site using an RTK GPS.
- 3.7.2 The small area involved meant that only the sharp changes of slope could be detected. These were caused by: a depression in the southeast corner (overlying Pit **68**); generally lower ground along the eastern side (the remnants of Hollow Way **125**); and higher ground across the west of the site (the building remains and the back yard). There was a localised peak in the centre-south of the site, roughly corresponding to the demolition rubble (81) of the chimney stack between Buildings 3 and 4.

LIDAR Data

- 3.7.3 The LIDAR data was processed to render colour according to height with added shadows cast from the northwest (Figure 3). This brings a starker relief to the earthworks and shows details missing from the 1978 survey (Brown & Taylor, fig. 3.)
- 3.7.4 The line of Buildings 2, 3 and 4 is recorded as an area of raised ground, with a particular ridge, perhaps following Wall Foundation 14. Evidently the row of buildings continued further south and will survive in a similar condition below the turf there. Although there are variations, the area immediately to the east of this line, the hollow way, continues southwards to Alconbury Brook and aligns well with Church Lane on the southern side of the brook. To the north of site, across Alconbury Road, a linear depression is visible. This is potentially the continuation of the hollow way but it is much less clear in the field beyond. It did, however, appear there as a crop mark in 2006 (Google Earth).
- 3.7.5 The complex of rectilinear medieval closes and ridge and furrow to the south and east of site is clearly shown. Although the majority of the earthworks immediately east of the site are indistinct, linear trends paralleling the hollow way and the enclosure system are evident. These may be crofts fronting onto Alconbury Road. North of Alconbury Road, a number of such strips are clearer.
- 3.7.6 Around Hamerton Bridge are a number of sunken features, potentially ponds, including that mapped in 1838 (CHER 00741; see Figure 3). The field east of Church Lane (Rectory Close on the 1838 map) contains little detail and no sign of the old Rectory.
- 3.7.7 Stable Close on the 1838 map contained a rectangular platform and a possible pond on Brown's plan (1978, fig. 3). The LIDAR image looks more like a rectangular arrangement of banks – possibly the remains of the stables?
- 3.7.8 Northeast of the church, within the bend of Alconbury Brook as it turns from east to south, there is a rectangular arrangement of banks with an external ditch and a break

on the western side around 60m wide and long. It is more clearly reminiscent of a moat than on Brown's plan (*ibid.*). The ditches of the Rookery, the tree-filled enclosure either side of the brook clearly cut the earlier features.

- 3.7.9 Along the eastern slopes, a number of irregular large depressions cut across the medieval ridge and furrow earthworks. These could be ponds or more likely extraction pits, following the contour of the hill.
- 3.7.10 To the south of the church, the layout of Hamerton Park (CHER 12324) is clearly visible with the mound (CHER 00839) and cloistered garden and a moat surviving as depressed features.
- 3.7.11 Outside the immediate sweep of Alconbury Road and Alconbury Brook, and south of Hamerton Park few preserved earthworks are visible, a result of the more intensive arable land usage.

3.8 Finds Summary

- 3.8.1 Finds are detailed in Appendix B. Nine copper alloy objects were found and four lead objects. Amongst 49 retained pieces of ironwork were four pairs of iron scissors and 11 iron knives (two with bone handles). Non-metallic small finds included eight whetstone fragments, a spindlewhorl and a fragment of architectural stone.
- 3.8.2 A total of 1,201 sherds of pottery with a total weight of 22,386kg were recovered from the site (including the evaluation trench). A number of sherds were recommended for illustration and should be included at publication. In addition 2.07kg of clay tobacco pipe was collected.
- 3.8.3 A limited selection of ceramic building material was retained, totalling 5.27kg.

3.9 Environmental Summary

- 3.9.1 Animal bone totalling 5kg was recovered both from unstratified post-medieval surface cleaning and to a lesser extent, sealed medieval deposits. There was evidence for butchery of cows and sheep, but no sign of industrial use.
- 3.9.2 Twenty-eight environmental bulk samples were taken from ditches, pits and surfaces. Evidence for metal working was widespread, despite limited amounts of slag, in the form of magnetic residues (hammerscale). Cereals and legumes were common in sealed medieval deposits, but less so in surfaces within the post-medieval Buildings.

4 DISCUSSION AND CONCLUSIONS

4.1 Roman

- 4.1.1 Residual Roman pottery occurred in only four contexts and does not appear to indicate the presence of Roman settlement in the immediate vicinity of the site. The nearest recorded scatters of Roman finds are at least 2km away.

4.2 Hollow Way Origins

- 4.2.1 The line of Hollow Way **125** and Church Lane are certainly medieval or earlier in date. The line can be traced further across the landscape as pre-enclosure field boundaries, parish borders and tracks on the 1817 Ordnance Survey Drawing for Wellingborough. This extends north-eastwards for 2.5km, towards Sawtry. South-west-wards it can be traced for approximately 22km (Figure 9):
- From Hamerton past the church the line crosses the Godmanchester-Leicester Roman Road where it is lost, near Salem Lodge. This section was a track in 1817, with only the northern portion remaining a track by 1887.
 - From just south of Salem Lodge the line is resumed by the road to Leighton Bromswold, which dog-legs to the west before continuing southwards to Little Catworth. This appeared on the 1817 map.
 - On the slopes south of Little Catworth it is lost. South of the farm track connecting Mount Pleasant in Spaldwick to the B660, it continues on to Tilbrook. It was mapped as the Tilbrook/Kimbolton parish boundary and field boundaries in 1817 – some of the field boundaries are now lost.
 - From Tilbrook, the line follows the track, Sandy Lane (also the parish boundary) around Honey Hill Wood and Tilbrook Bushes ('Tilbrook Grove' in 1817) into Bedfordshire and onto Swineshead. The woods appear to be a later intrusion forcing a diversion. Approaching Swineshead, Sandy Lane doglegs west from the parish boundary becoming a road. It was mapped as a more major road in 1817. The line continues as the modern road to Riseley. A more easterly alternative is the parish boundary between Riseley and Bolnhurst and Keysoe.
 - South or southwest of Riseley the line may survive as the line of the road passing north of Bourne End or further east paralleling the boundary between Bletsoe and Thurleigh parishes.
- 4.2.2 The parish boundary between Tilbrook and Kimbolton and Stoneley and between Swineshead and Pertenhall parallel the described line and may, at times, have formed an alternative route. These boundaries were entities in the medieval landscape. Some must have been medieval roads between villages but marking parish boundaries suggests at least Mid-Late Saxon origins, although more detailed work on individual parishes would be needed to establish this more confidently.
- 4.2.3 The medieval road known as Bullock Way/Road offers some comparison. It was in use in the 14th century (Taylor 1979, 120-1 & fig. 57) and survived into the 19th century as a cattle droving route (Ordnance Survey Drawings for Wellingborough and Oundle), supplanting the more easterly Roman Ermine Street. Parallel tracks with Lodges and Cold Harbours marked its variations in the 19th century.
- 4.2.4 There is insufficient evidence to prove an earlier date. However, a similar pattern of long regular boundaries observed in the Bourn valley west of Cambridge has been

suggested to have pre-Roman origins, being re-used for major coaxial land divisions and parish boundaries in the Late Saxon and Medieval periods (Oosthuizen 2006).

Hollow Way Archaeological Evidence

- 4.2.5 Hamerton Bridge was reconstructed in the 16th or 17th century. This diverted the line of Church Lane/Hollow Way 125 westwards onto the line of School Lane. The present structure also re-used 14th century stonework. It was probably easiest to rebuild next to the old structure. The 14th century bridge was probably adjacent to the current location, serving the route later marked by Hollow Way **125**, on the straight line from Church Lane. If one assumes the bridge replaced (or augmented) a pre-existing ford (both existed in parallel during the 19th and 20th centuries), then the route may well have been in use during the earlier Medieval period. A truncated 12th century ditch and Building 1's postholes would respect this suggested route.

4.3 Middle and Late Saxon

- 4.3.1 A single 5g sherd of Ipswich Ware (AD720-850) was recovered from the medieval soil layer, indicating a presence in the area. Blinkhorn (2012, 87) notes that towards and beyond western Cambridgeshire, Ipswich ware is rare and associated with high status sites or confluences of trade routes. No doubt the loop of the Alconbury Brook and the shallow slopes surrounding the hill, now the site of the church, represented an opportune site 2km north of a Roman Road, on a fording point and potentially at a crossroads.
- 4.3.2 One of the objectives of the project was to seek evidence for the Anglo-Saxon origins of Hamerton, being listed as it is in Domesday. The settlement's name (*Hambertune* in the 11th century) suggests Late or probably Middle Saxon origins. A small number of Late Saxon and 11th-12th century pottery sherds were recovered but there were no features likely to pre-date AD1150 within the site.

4.4 12th century

- 4.4.1 Although earlier 12th century pottery was present in Ditch **18**, the small quantity is uncharacteristic of the period, suggesting it may represent residual, or even intrusive material (Blinkhorn, Appendix B.3, 41). The ditch almost parallels Alconbury Road and may mark the southern boundary of the road prior to the development of the area. Due to the erosion of the later hollow way and the limits of excavation, it is unclear whether Ditch **18** respected the postulated early hollow way line, however, as the north-south route is likely to have been in existence at this time it could be presumed to have done so.
- 4.4.2 Occupation in the later 12th century is represented by Building 1, comprising a rectangular arrangement of postholes and a clay surface (although this may be later). These appear to post-date Ditch **18**, with Posthole **90** potentially cutting the top of the ditch, and with the line of postholes meeting the ditch obliquely. It is possible that the Alconbury Road became formalised at this time, becoming narrower and lined with buildings as the village expanded.
- 4.4.3 The common alignment shared by the line of postholes (**90** etc.) in Building 1 and the hollow way show that the line of the hollow way existed in the 12th century, potentially (though not necessarily) as a trackway. Ditch **82** may post-date the building but is coincidentally at the edge of the hollow way (resulting in its near-total truncation) and hence may mark it as a track in the early 13th century.

4.5 13th century disuse

- 4.5.1 There was a decline in activity during this time within the excavation area. Evidently Building 1 and Oven **50** were abandoned and a soil layer built up over the top of them through the 13th and 14th Centuries. There is some evidence in the pottery assemblage that the site was also ploughed during this period. However, this is limited and, although the ground level may have been reduced since, the earlier features did survive reasonably well below Soil 4. Furthermore, there is clear earthwork evidence for ridge and furrow elsewhere in the village and if it had occurred around the site it would probably still be visible.
- 4.5.2 There are various reasons why a settlement, or part of a settlement, might decline during the 13th century, frequently linked to changes driven by the ecclesiastical or manorial authorities within the area (Lewis *et al* 1997).
- 4.5.3 However, this excavation was on a very limited scale, and little context can be established in terms of what was happening across the village and parish at the same time. The village church's earliest parts – its window arches – date to the 13th century and were reused in the early 14th century reconstruction (Page *et al* 1936). As noted, the earlier bridge was probably built in the 14th century. These constructions do not seem to suggest a village in decline in those centuries – perhaps a minor reorganisation within that part of the village is more likely.

4.6 Early 16th century

- 4.6.1 No definite activity was recorded on the site in the early 16th century. The culvert drain (**74**) may date from this time – it probably cut the medieval soil but was sealed below 16th/17th century foundations. It has been noted (see Appendix B.3) that the quantity of residual late 15th-early 16th century pottery within later deposits (at least two thirds of it) is probably a result of later construction disturbing earlier deposits – this may have truncated 16th century features or deposits.
- 4.6.2 There is a record of the repair of Hamerton Bridge during the reign of Edward VI (1547-1553) and it is perhaps at this date that the bridge's present position was established. However, the older route of Hollow Way **125** remained in use through the 17th century, but School Lane must have begun to be used at this time. A ford remained in use immediately east of the bridge into the 20th century, long after the original, straight route must have been abandoned.

4.7 Buildings 2,3 and 4

- 4.7.1 Based on the pottery assemblage, the line of buildings along the hollow way appear to have been constructed in the late 16th or early 17th century. This may have related to the reconstruction of the bridge. Hamerton Park (CHER 12324) south and southeast of the church was laid out at a similar time.
- 4.7.2 The buildings correspond with a slight scarp running southwards in the field to the brook, suggesting the total length of the terrace may be as much as 45m. The scarp there could however be a result of erosion along the route of the hollow way rather than a rise over preserved foundations.
- 4.7.3 The buildings were constructed on shallow stone footings. Little brick was recovered from the demolished structures, suggesting the frames were of timber except for the chimney stacks. A layer of clay provided a floor foundation to Building 3 and 4, though a gap between it and the front (eastern) wall might have taken flag stones and the foundation pad for the flagstone threshold can clearly be seen.

- 4.7.4 The number of scissors, knives and whetstones found in the demolition surrounding the buildings and in the hollow way are probably indicative of a specific industry. Metalworking residues in many of the environmental samples may support this – although the small quantities of slag suggest that any metal-working was on a small scale, probably not at the level expected within a smithy. Perhaps some of the structures along the line were workshops. The working surface to the rear (west) of Building 1 with its heat-reddened patch and cracked limestone slab might have related to the production or maintenance of metal tools and the number of knives, scissors, whetstones etc. could suggest that general repair and maintenance work was being conducted.
- 4.7.5 Curiously, the pottery assemblage (Appendix B.3) from the buildings suggests occupants of somewhat greater wealth than expected for an ordinary rural household, perhaps an indication of ties to the manor, or of the work being undertaken being of cash-producing value. The decorated bone handle of a knife found on the site (SF1) was also an item of relatively high value and the clay pipe (Appendix B.8) and glass (Appendix B.4) assemblages contain items indicative of some status.

4.8 The Shrunken Village Earthworks

- 4.8.1 The ridge and furrow system and some rectilinear enclosures along the brook to the north and east of the church probably date from the 13th century or later reorganisation.
- 4.8.2 There is too little evidence from excavation to expand much upon the potential dates of, reasons for and magnitude of village reorganisation. The excavation and background research has however identified a number of occasions when a some clearance and/or reorganisation may have taken place:
- The 16th century rebuilding of Hamerton Bridge and establishment of Buildings 2-4. Hamerton Park south and southeast of the Manor House was probably initially laid out around this time.
 - Late 17th century when the old Manor House was constructed (c.1669 or earlier). This probably preceded the demolition of Buildings 2-4 by a few decades. The mound in Hamerton Park is composed of 17th century brick rubble (CHER 12324; Brown & Taylor 1978, 67).
 - Around 1851 when the Manor House was demolished and the present Rectory House was constructed on its site (CHER00745). No doubt this came with some alterations to Hamerton Park.
- 4.8.3 A series of apparent quarry pits truncated the ridge and furrow to the east of the church and may be related to the landscaping of Hamerton Park, or to a period of construction in the village. Similar extraction pits can be seen in the northwest of the village, and potentially immediately southwest of the site, though on a smaller scale.
- 4.8.4 Brown & Taylor (1978) speculated flooding might have been a factor in the shift 'north and south on to the higher ground'. However, even structures further up the slopes such as the stables in Stable Close and the Old Rectory (shown on the 1838 map) were demolished at various times. The unexpected wealth indicated by the pottery from Buildings 2-4 may point to their association with the Manor and in turn highlight the Manor's influence on the development and preservation of the village core.

APPENDIX A. CONTEXT SUMMARY

Context	Same as	Cut	Trench	Category	Feature Type	Note	Length	Breadth	Depth	Orientation	Date Range
1			1	layer	topsoil	topsoil/turf			0.15		Unstratified
2			1	layer	cleaning	overburden/subsoil (unstratified)			0.1		Modern
3			1	layer	cobbles	patchy, overlying med soil			0		1200-1550
4			1	layer	soil	Late Med. soil upper subdivision			0.2		1200-1550
5			1	layer	soil	Late Med. soil lower subdivision			0.1		1200-1550
6			1	layer	natural	geology					
7			1	layer	demolition	demolition					1700-1750
8			1	layer	surface (external)	later cobbles			0.05		1700-1750
9 2			1	layer	soil layer	cleaning/overburden			0.05		1550-1600
10			1	layer	demolition	demolition					1700-1750
11			12 1	masonry	wall foundation	Building 3,4	2.7	0.7	0.15	N-S	1550-1700
12			12 1	cut	wall foundation	Building 3,4				N-S	1550-1700
13 4			1	layer	build-up	Late Med. Soil			0.4		1200-1550
14			15 1	masonry	wall	Building 2,3,4	10.9	0.4	0.15	N-S	1550-1700
15			15 1	cut	wall	Building 2,3,4				N-S	1550-1700
16 33			1	layer	surface?	(uncleaned equivalent to 33)	3.7	5.5			1550-1700
17			18 1	fill	feature		0				1100-1200
18			18 1	cut	ditch	boundary?	12.8	0.7	0.4	E-W	1100-1200
19 2			A	layer	disuse	Unstratified cleaning (NW, back yard)			0.1		Modern
20 2			A	layer	disuse	Unstratified cleaning (SW, back yard)			0.1		Modern
21 2			A	layer	disuse	Unstratified cleaning (N, building 2,3,4)			0.1		1700-1900
22 2			A	layer	disuse	Unstratified cleaning (S, building 2,3,4)			0.1		1700-1900
23 2			A	layer	disuse	Unstratified cleaning (NE, hollow way 125)			0.1		1700-1900
24 2			A	layer	disuse	Unstratified cleaning (SE, hollow way 125)			0.1		1700-1900
25 2			A	layer	disuse	Unstratified cleaning (over 30, in hollow way)			0.1		1700-1900
26 2			A	layer	disuse	Unstratified cleaning (over SW burning/slag)			0.1		1700-1900
27			A	layer	disuse	deposit containing occ. Slag			0.1		1450-1550
28			A	layer	surface (external)	packed cobble surface	5.6	2.5	0.1		1450-1700
29			A	layer	surface (external)	large cobble dump (SW)			0.2		1450-1700
30			A	layer	deposit	burnt material in hollow			0.05		1700-1750
31			32 A	cut	wall foundation	Building 2,3				E-W	1550-1700
32			32 A	masonry	wall foundation	Building 2,3 (internal?)	4.6	0.2	0.1	E-W	1550-1700
33			A	layer	floor	Floor Buidling 2,3	5.1	3.5			1550-1700
34			A	layer	surface (external)	set cobble working surface, over oven 50	1.2	1.2			1550-1700
35			A	layer	surface (internal)	floor/foundation under Wall 14	4.7	2.4	0.25		1550-1700
36			A	layer	surface?	?Surface below Building 2,3,4			0.03		1450-1550
37			A	layer	surface (external)	patchy cobbling under Building 2, =3?					1450-1550
38			A	layer	surface (external)	patchy cobbling under Building 3, =3?					1450-1550
39			A	layer	residue	charcoal/ash deposit =36?			0.03		1450-1550
40 35			A	layer	surface (internal)	floor/foundation under Wall 14 = 35			0.15		1650-1700
41			A	layer	demolition	=8?					1700-1900
42			A	layer	wall foundation	packing clay around Wall 12					1700-1900
43 42			A	layer	demolition	=8?					1650-1700
44 8			A	layer	surface (external)	later cobbling over demolition	9.1	5.7	0.1		1550-1700
45 67			A	layer	surface (external)	loose cobbles, in hollow way			0.2		1550-1700
46			A	layer	surface (external)	packed cobbles, base of hollow way					1550-1700
47			A	layer	surface (external)	clay&flag working surface	2.1	2			1550-1700
48				void	void		0				

Context	Same as	Trench	Category	Feature Type	Note	Length	Breadth	Depth	Orientation	Date Range
49		A	layer	surface (external)	coarse cobbling, north side	6.2	1.2			1450-1700
50		50 A	cut	oven		2.2	1.1	0.1		1150-1200
51		50 A	fill	structure	(demolished) lining	0				1150-1200
52		50 A	fill	backfill	demolished oven	0				1150-1200
53		53 A	cut	pit	cut for whole pot within Oven 50		0.23	0.06		1150-1200
54		53 A	fill	pit	pot (single vessel)	0				1150-1200
55		53 A	fill	pit	ashy fill of pot	0				1150-1200
56		A	layer	hearth base	within hearth 62	0.68	0.5	0.18		1550-1700
57 4		A	layer	soil	test pit, med soil =4			0.15		1200-1550
58 4		A	layer	soil	test pit, med soil =4, under 47			0.1		1450-1550
59		A	layer	demolition?	chalk lens, extents unknown			0.03		1450-1550
60 4		A	layer	soil	test pit, med soil =4			0.08		1200-1550
61 3		A	layer	surface (external)	patchy cobbles on soil					1450-1550
62		A	masonry	hearth	hearth lining/chimney base	1.06	0.67			1550-1700
63 4		A	layer	soil	Probably compressed med soil			0.35		1200-1550
64		64 A	cut	threshold	threshold, cutting med soil	0.88	0.89			1450-1550
65		64 A	fill	threshold	base	0				1450-1550
66		64 A	fill	threshold	heated clay	0				1450-1550
67 45		A	layer	surface (external)	large loose cobbles, hollow way	6.3	3.6			1550-1700
68		68 A	cut	pit	quarry? Cuts hollow way	1.3	1.6		N-S	1700-1750
69		68 A	fill	pit	basal fill	0				1700-1750
70		68 A	fill	pit	upper fill	0				1700-1750
71 4		A	layer	soil	test pit, med soil =4, under 47			0.35		1200-1550
72		72 A	cut	post hole	cuts soil 4		0.33			1450-1650
73		72 A	fill	post hole		0				1450-1650
74		74 A	cut	culvert	foundation cut/ditch	3.18	0.93		N-S	1400-1450
75		74 A	fill	culvert	overlying fill	0				1400-1450
76		74 A	fill	culvert	flagstone lining & culvert	0				1400-1450
77		18 A	fill	ditch	lower subdivision	0				1100-1200
78		78 A	cut	pit	cut for whole pot in oven 50		0.23			1150-1200
79		78 A	fill	pit	pot (single vessel)	0				1150-1200
80		A	masonry	chimney?	internal division/chimney stack bricks	2		0.11	E-W	1550-1700
81		A	masonry	demolition	demolished chimney stack			0.15		1700-1750
82		82 A	cut	ditch	boundary? Side of hollow way?			0.15	N-S	1200-1400
83		82 A	fill	ditch		0				1200-1400
84		84 A	cut	ditch	Assoc. Building 1.			0.27	SE-NW	1400-1450
85		84 A	fill	ditch		0				1400-1450
86		86 A	cut	pit	possibly modern			0.27		
87		86 A	fill	pit		0				
88 18		88 A	cut	ditch	Boundary? = 18			0.28	E-W	1100-1200
89		88 A	fill	ditch		0				1100-1200
90		90 A	cut	post hole	Building 1			0.2		1150-1200
91		90 A	fill	post hole		0				1100-1150
92		A	layer	hearth	burnt clay/gravel over floor. Demolition Building 1?			0.08		1200-1400
93		93 A	cut	pit	Building 1			0.28		1150-1200
94		93 A	fill	pit		0				1150-1200
95		95 A	cut	post hole	Building 1		0.17			1150-1200
96		95 A	fill	post hole		0				1150-1200
97		97 A	cut	post hole	Building 1		0.13			1150-1200
98		97 A	fill	post hole		0				1150-1200

Context	Same as	Trench	Category	Feature Type	Note	Length	Breadth	Depth	Orientation	Date Range
99		99 A	cut	post hole	Cuts soil 4		0.99			1450-1650
100		99 A	fill	post hole		0				1450-1650
101		101 A	cut	post hole	Building 1		0.35			1150-1200
102		101 A	fill	post hole		0				1150-1200
103		103 A	cut	post hole	Building 1		0.2			1150-1200
104		103 A	fill	post hole		0				1150-1200
105	92	109 A	layer	demolition?	burnt clay/gravel over floor. Demolition of Building 1					1200-1400
106		106 A	cut	hearth?	assoc. Building 1	0.58	0.56			1200-1400
107		106 A	fill	hearth	stone lining	0				1200-1400
108		106 A	fill	hearth	contents	0				1200-1400
109		109 A	cut	demolition?	cuts 112	1	1			1200-1400
110		110 A	cut	post hole	assoc. Building 1		0.21			1150-1200
111		110 A	fill	post hole		0				1150-1200
112		A	layer	floor	assoc. Building 1					1200-1400
113	92	A	layer	demolition?	burnt clay/gravel over floor	3.6	1.2			1200-1400
114		A	layer	floor	cobble layer assoc. Building 1	1.4	1.3			1200-1400
115		A	masonry	foundation	Large stones assoc. Building 1					1200-1400
116		116 A	cut	post hole	Building 1		0.36			1150-1200
117		116 A	fill	post hole		0				1150-1200
118		118 A	cut	post hole	Building 1		0.41			1150-1200
119		118 A	fill	post hole		0				1150-1200
120		120 A	cut	post hole	Building 1		0.37			1150-1200
121		120 A	fill	post hole		0				1150-1200
122		122 A	cut	post hole	Building 1		0.22			1150-1200
123		122 A	fill	post hole		0				1150-1200
124		A	layer	surface (external)	Large cobbles, north end of hollow way 125					1700-1900
125		125 A	cut	road/track	hollow way		4.8	0.4	N-S	1550-1650

Table 2: Context Summary

APPENDIX B. FINDS REPORTS

B.1 Metal and Glass Small Finds

By Andrew Brown

- B.1.1 A total of 174 small finds were recovered from excavation at Hamerton (Cambridgeshire), nine of which are copper-alloy, 157 iron (including 113 nails), seven lead, and one glass (Table 3). The objects come from a range of archaeological contexts, although the majority are from subsoils and cleaning layers of Post-Medieval to Modern date.
- B.1.2 The assemblage as a whole has a chronological range spanning the Medieval to Modern periods, with nothing identifiably earlier. Those more clearly Medieval in date span the c.13th-15th centuries and although small in number are from more secure Medieval contexts. The bulk of the material is Post-Medieval and later, c.16th century onwards, and largely from unstratified cleaning layers.

Copper-alloy	9
Iron	157
Lead	7
Glass	1

Table 3: Relative numbers of objects by material type

- B.1.3 All objects were examined by hand, with details and preliminary descriptions entered into a basic catalogue (see below). These are discussed below by material type, with brief conclusions drawn with respect to their interpretations.
- B.1.4 All finds are well packaged and labelled, and in many cases in a relatively good state of preservation. However, many of the iron objects, notably a series of whittle tang knives retaining original handles (SF1, SF7, SF19) and four pairs of scissors (SF20, SF27, SF34, SF64), demonstrate varying degrees of iron corrosion and encrustation. These in particular would warrant further conservation work or at least x-ray analysis, especially one knife with decorated handle (SF1) that is in increasingly fragmentary condition. More detail from two possible copper-alloy coins or jettons (SF35, SF36) might be revealed through x-ray given their poor state of preservation.

Copper Alloy

- B.1.5 The copper-alloy objects within the assemblage span the end of the Medieval to Post-Medieval periods, the majority being personal possessions and dress accessories. Only four items are from discernible Medieval features, the remainder from later subsoils and cleaning layers.
- B.1.6 From Medieval contexts come four dress accessories typical of the later Medieval period and with good parallels in a number of contemporary assemblages. A small bar mount (SF77) of at least c.13th-14th century AD date was recovered from the fill of a Medieval post hole (**90**), while a simple buckle plate (SF48) of probable similar date is apparent from a Medieval ditch fill (Context 83, Ditch **82**). The fragmentary pin with small globular head (SF76), and possible second shaft fragment, from a late Medieval layer (39, equivalent to Layer 4) marks the transition to the Post-Medieval period. Their comparative fineness indicates a likely c.15th-16th century or later date range when pins of this form became increasingly common as dress accessories (Margeson, 1993: 11-12; Egan and Pritchard, 1991: 297-304).

- B.1.7 The subsoil (context 2) and cleaning layers (context 25 etc.) contained the remainder of the copper-alloy objects, all of which are Post-Medieval to Modern. Two heavily corroded coins (SF35, SF36), or more plausibly jettons, are likely to date to the 16th or 17th centuries AD if not slightly later, although their close identification is uncertain given their state of preservation. Activity into later periods is represented by a late-17th to 18th century shoe buckle (SF16) and a machine made thimble (SF4) of c.18th or 19th century date. What may be a simple copper-alloy weight(?) (SF5) is, given its context, in all probability contemporary with the Post-Medieval metalwork although not closely paralleled.

Iron

- B.1.8 Ironwork represents the bulk of the metalwork and comprises a range of objects that might reasonably be expected in association with post-medieval and later occupation. Few of the iron objects can securely be dated earlier than the end of the medieval period and in all likelihood reflect the final phases of activity at the site.
- B.1.9 Perhaps the most interesting element of the ironwork assemblage is a group of twelve whittle tang knives recovered from post-medieval and later contexts, all of which are fragmentary and suffer from post-depositional corrosion. The majority are characterised by blades that are triangular in cross-section, with straight backs and cutting edges, and an integral disc-shaped or rectangular bolster. This form of knife had a long life span, making close dating problematic, and probably served a largely utilitarian function (Goodall, 1981; Goodall, 2002: 63). Bolsters separating the blade and tang are seen on a total of eight examples (SF7, SF9, SF10, SF11, SF12, SF19, SF58, SF59), two of which (SF7, SF19) retain incomplete handles paralleled in a number of excavated contexts (e.g. Brown, 2006: pp.58-60; Crummy, 1988: nos. 3069, 3071). A knife with decorated handle (SF1) may be of similar form, although this is less certain due to its state of preservation. The presence of bolsters on iron blades is a feature that first appears in the 16th century, becoming increasingly popular in the 17th century and later (Goodall, 2002: 63; Margeson, 1993: pp. 124-125; Margeson, 1995: 72; Biddle, 1990: no. 2837; although cf. Ottaway and Rogers, 2002: p. 2579 for two examples in 11th century contexts at York). Given their recovery from post-medieval and later contexts, this group of knives is likely to be of similar date range and certainly no earlier than the c.16th century.
- B.1.10 Of particular interest amongst the knives with bolsters are the three examples that preserve bone or ivory(?) handles (SF1, SF7, SF19). Most notable is an incomplete handle (SF1) with detached end cap and carved decorative elements formed from multiple joining spirals interspersed by oval motifs filled with diagonal lines. Parallels for the decorative elements in particular indicate a probable late-16th to 17th century date range for the knife, although a close comparison for the end cap is not apparent in the published comparanda (e.g. two examples from the Thames foreshore on the PAS database: LON-C00AF2 and LON-762383; Margeson, 1993: no. 766; Crummy, 1988: no. 3090; Biddle, 1990: no. 2916). This is clearly a more elaborate knife of far less utilitarian function than the majority of examples within the assemblage.
- B.1.11 Three other knives (SF8, SF23, SF25), all from Post-1700 AD contexts, differ through their lack of integral bolster. A potential earlier date range might be plausible for two of these examples (SF8, SF25), both of which have slightly tapering blades that parallel Medieval to Post-Medieval knives from Norwich (Margeson, 1993: pp. 124-128). The third blade (SF23) may also be earlier in date, although its form might point to a differing function.

- B.1.12 In addition to the knives, a small group of four incomplete pairs of scissors (SF20, SF27, SF34, SF64) were recovered from cleaning layers (Contexts 23, 24, 25 etc.). Scissors become increasingly common in post-medieval contexts, the examples noted here all having loops that are eccentrically set rather than centrally set in line with the handles. This is a feature apparent in later scissors, from the 16th century onward, with the straight arms suggesting a likely date range extending at least into the c.17th-18th centuries (Griffiths et al., 2007: 201; Shelley, 2005: 120, no. SF282; Brown, 2006: 40, no. 17; Margeson, 1993: pp. 135-136; Goodall, 2002: 63). One pair with sharp pointed blades (SF20) may be indicative of household activities such as sewing or needlework, the others perhaps serving a variety of functions.
- B.1.13 Iron dress accessories are thinly represented by two probable post-medieval buckles (SF14, SF30) and a possible strap fitting or ring (SF15) from cleaning layers and subsoil deposits of post-1700 AD date. To these can be added a possible fragment from a c.18th century boot iron (SF71) (see Brown, 2006: 39, no. 9; Margeson, 1993: no. 395).
- B.1.14 Several objects of structural metalwork are apparent amongst the iron objects, including an L-shaped hinge pivot (SF45), or pintle, with parallels in both Medieval and Post-Medieval assemblages (Margeson, 1993: nos. 1149-1162; Egan, 1998: nos. 5-30). To this can be added two iron staples (SF63, SF72) and a possible staple or beam stirrup(?) (SF13) of long lived forms that span the Medieval and later periods. A total of 113 complete and fragmentary nails are evident from Post-Medieval to Modern contexts, with nine different nail forms demonstrating a range of functions or usage in the latter stages of occupation at the site. Several less securely identified objects might reasonably be interpreted as internal fasteners or fittings from buildings. These include two possible hinges or binding strips (SF62, SF73), a possible swivel (SF33), two loops (SF39, SF40), and two hooks of uncertain function (SF24, SF31). All are from late contexts and therefore most plausibly resultant from Post-Medieval occupation (c.16th-17th centuries?) and subsequent activity at the site.
- B.1.15 The remaining iron objects are undiagnostic or of uncertain function and all from Post-Medieval to Modern subsoil or cleaning layers.

Lead

- B.1.16 Seven fragments of lead were recovered from post-medieval cleaning layers (Context 25) and surfaces (Contexts 35 and 44). The six diagnostic fragments (SF32, SF41, SF65) are all from lead window came, one of which (SF41) is formed from three joining lengths creating a triangular field that retains a small fragment of the original window glass. All have typical H-shaped cross-sections with slight ribs at the edges of the flanges, and in form and size they appear as King's type E or G post-medieval window came (King, 1987: 39-40). Although the lack of visible reeding characteristic of post-medieval production is problematic, and perhaps suggestive of slightly earlier manufacture, their form and context is indicative of a post-medieval date range, c.17th century AD or later.

Glass

- B.1.17 A single undiagnostic fragment of heavily corroded glass was identified from a cleaning layer (Context 26) of post-medieval to modern date.

Discussion

- B.1.18 Considered in its entirety, the metalwork assemblage reflects occupation at Hamerton spanning the later medieval through modern periods (c.13th-19th centuries), with an apparent post-medieval (c.16th-17th/18th centuries) emphasis.
- B.1.19 The medieval period, c.13th-15th centuries, is only sparsely represented, and largely by the few copper-alloy objects recovered from secure medieval contexts (SF48, SF76, SF77). While indicative of activity during the medieval period, they offer little insight into the nature of occupation or the domestic activities at the site, and instead reflect the kinds of metalwork typical of contemporary assemblages.
- B.1.20 Although some objects within the ironwork assemblage, notably the pintle (SF45) and staples (SF13, SF63, SF72), are of forms known from both medieval and later contexts, the bulk of the material that can be securely dated points to more intensive activity in the post-medieval and subsequent periods. Domestic activity is highlighted by the range of knives, scissors, and dress accessories that extend chronologically into at least the 17th century. Indeed, a degree of affluence might even be hinted at in the decorated knife handle (SF1). Whether the scissors represent anything more than household industry is uncertain, but the iron fixtures and fittings, in addition to the lead window came, are indicative of at least a period of focused post-medieval occupation in the 16th-17th centuries or later.
- B.1.21 Evidence for continued activity at the site into the 18th century and later is provided by a number of more closely datable objects, notably the late thimble (SF4) and shoe buckle (SF16). However, these are largely from subsoil contexts and small in quantity, perhaps pointing to relatively sparse or sporadic use of the site.
- B.1.22 Given that many of the objects within the metalwork assemblage are from comparatively late post-medieval to modern contexts, a degree of residuality, or indeed later intrusion, cannot be ruled out entirely. This is particularly the case for much of the undiagnostic or incomplete ironwork. However, where closer date ranges can be suggested, the focus of the assemblage appears to be in the early post-medieval periods spanning the 16th-17th/18th centuries AD. Most plausibly, this reflects domestic activity at the site towards the end of its lifetime leading up to the abandonment of the surviving structures in c.1700 AD.

B.2 Slag

- B.2.1 Ironworking (smithing) slag was recovered from unstratified contexts (2, 23, 24 and 26) and from Contexts 4 and 71 of the medieval soil layer. In total 810g were recovered, of which 130g came from stratified medieval soil, although intrusion is a possibility. This represents small scale smithing (Sarah Percival, pers. comm.).

B.3 Pottery

By Paul Blinkhorn

Analytical Methodology

- B.3.1 The pottery was initially bulk-sorted and recorded on a computer using DBase IV software. The material from each context was recorded by number and weight of sherds per fabric type, with featureless body sherds of the same fabric counted, weighed and recorded as one database entry. Feature sherds such as rims, bases and lugs were individually recorded, with individual codes used for the various types. Decorated sherds were similarly treated. In the case of the rimsherds, the form, diameter in mm and the percentage remaining of the original complete circumference was all recorded.

This figure was summed for each fabric type to obtain the estimated vessel equivalent (EVE).

- B.3.2 The terminology used is that defined by the Medieval Pottery Research Group's Guide to the Classification of Medieval Ceramic Forms (MPRG 1998) and to the minimum standards laid out in the Minimum Standards for the Processing, Recording, Analysis and Publication of post-Roman Ceramics (MPRG2001). All the statistical analyses were carried out using a DBase package written by the author, which interrogated the original or subsidiary databases, with some of the final calculations made with an electronic calculator. Any statistical analyses were carried out to the minimum standards suggested by Orton (1998-9, 135-7).

The Pottery

- B.3.3 The pottery assemblage comprised 1201 sherds with a total weight of 22,386g. The estimated vessel equivalent (EVE), by summation of surviving rimsherd circumference was 12.71. The following fabric types were noted:
- B.3.4 **F95: Ipswich Ware Group 1 fabric**, AD720-850 (Blinkhorn 2012).
1 sherd, 5g, EVE = 0.
- F100: St Neots Ware type T1 (1)**, c AD900-1100 (Denham 1985).
1 sherd, 5g, EVE = 0.
- F102: Thetford-type ware**, 10th-12th century (Rogerson and Dallas 1984).
8 sherds, 43g, EVE = 0.
- F200: St. Neots Ware type T1(2)**, c AD1000-1200 (Denham 1985).
8 sherds, 17g, EVE = 0.
- F205: Stamford Ware**, c AD900-1200 (Kilmurry 1980).
4 sherds, 10g, EVE = 0.
- F302: Bourne 'A' Ware**, 13th-14th century (McCarthy and Brooks 1988, 259).
2 sherds, 26g, EVE = 0.
- F319: Lyveden/Stanion 'A' Ware**, c AD1150-?1400 (McCarthy 1979).
167 sherds, 2154g, EVE = 0.64.
- F320: Lyveden/Stanion 'B' Ware**, c AD1200-1350 (Steane and Bryant 1975).
24 sherds, 328g, EVE = 0.
- F322: Lyveden/Stanion 'D' Ware**, c AD1350-1450 (ibid.).
5 sherds, 214g, EVE = 0.
- F324: Brill/Boarstall Ware**, c. AD1200-1600 (Mellor 1994).
4 sherds, 25g, EVE = 0.
- F327: Hedingham Ware**, late 12th-14th century (Walker 2012).
1 sherd, 4g, EVE = 0.
- F329: Potterspury Ware**, AD1250-1600 (Mynard 1970).
1 sherd, 11g, EVE = 0.
- F330: Shelly Coarseware**, AD1100-1400 (McCarthy 1979).
22 sherds, 181g, EVE = 0.32.
- F331: Developed Stamford Ware**, AD1150-1200 (Kilmurry 1980).
1 sherd, 3g, EVE = 0.
- F333: Hertfordshire Grey ware**, mid 12th-14th century (Turner-Rugg 1993).
2 sherds, 7g, EVE = 0.
- F365: Late Medieval Reduced Ware**, 15th-16th century (Blinkhorn 2007). 61 sherds, 379g, EVE = 0.18.
- F366: Late Medieval Hedingham-type Ware**, mid 14th – 15th century (Cotter 2000).
9 sherds, 31g, EVE = 0.10.
- F400: Lyveden/Stanion 'E' Ware**, 15th-16th century (Steane and Bryant 1975).

11 sherds, 189g, EVE = 0.05.

F401: Late Medieval Oxidized ware, mid 15th-16th century (Johnston 1997).

69 sherds, 1229g, EVE = 0.30.

F404: Cistercian Ware, c AD1470-1550 (Mayes 1968; Hall 2001, 7).

28 sherds, 145g, EVE = 0.59.

F405: Frechen/Cologne Stoneware, 1550-1750 (Gaimster 1997).

24 sherds, 413g, EVE = 0.69.

F406: Midland Yellow Ware, 1550-1700 (McCarthy and Brooks 1988, 433).

35 sherds, 932g, EVE = 0.40.

F407: Midland Purple ware, mid 15th–mid 17th century (McCarthy and Brooks 1988, 427).

107 sherds, 2900g, EVE = 0.60.

F410: Anglo-Dutch Tin-glazed Earthenware, 17th – 18th century (Orton 1988).

88 sherds, 1196g, EVE = 1.41.

F411: Metropolitan-type Slipware, 17th–18th century (Davey and Walker 2009).

20 sherds, 452g, EVE = 0.28.

F412: Midland Blackware, mid 16th-17th century (Brears 1969).

73 sherds, 685g, EVE = 0.32.

F413: Cologne/Westerwald Stoneware, 17th century+ (Gaimster 1997).

6 sherds, 64g, EVE = 0.31.

F418: Creamware, c 1740-1880 (Towner 1978).

1 sherd, 6g, EVE = 0.04.

F424: White-slipped Red Earthenware. Fairly hard orange-red fabric with sparse white clay pellets up to 0.5mm and rare red iron up to 3mm. Thick white slip covering on inner surface of bowls and outer of closed forms, clear lead glaze over. Bourne 'D' variant?

9 sherds, 195g, EVE = 0.14.

F425: Glazed Red Earthenware, mid 16th-19th century (Brears 1969).

334 sherds, 9665g, EVE = 4.67.

F426: Iron-glazed Earthenware, late 17th-18th century.

5 sherds, 121g, EVE = 0.15.

F428: Staffordshire Slipware, AD1640-1750.

54 sherds, 610g, EVE = 1.62.

F438: English Stoneware, 1680+ (Mountford 1971).

4 sherds, 28g, EVE = 0

F1000: Miscellaneous 19th and 20th century wares. Mass-produced white earthenwares, stonewares etc.

5 sherds, 60g.

F1001: All Roman-British.

7 sherds, 53g.

- B.3.5 The pottery occurrence by number and weight of sherds per context by fabric type is shown in Table 4 and 5. The range of fabric types is fairly typical of sites in the region, with the medieval wares mainly being types which were made in the north of Northamptonshire such as at Lyveden, Stanion, Glapthorn and Higham Ferrers. Overall, it appears that there was activity at the site from the 12th – mid/late 17th century, although there appears to have been considerable disturbance of the post-medieval by activity in the 18th and 19th centuries (see below).
- B.3.6 Some of the post-medieval wares, particularly the Tin-glazed Earthenwares and Staffordshire Slipwares, suggests that this site was occupied by persons of greater than normal wealth in the mid-late 17th century. The collection of the former is perhaps

unusually large for a rural site, and includes fairly good quality painted dishes and plates. There are a few sherds with purple-speckled manganese glaze, dateable to AD1640-80 (Orton 1988, 321), with the bulk of the assemblage being plain white wares, made from around 1640 to the end of the century (*ibid.* 327). The painted plates are somewhat fragmented, and the overall design difficult to ascertain, but a few fragments appear to have *Chinoise*-style decoration, suggesting a date in the 1680s (*ibid.*).

- B.3.7 The Staffordshire Slipware assemblage represents a small number of high-quality vessels with figurative and/or geometric painting in three colours of slip. They appear to have a similar chronology as the Tin-glazed Earthenwares. There is one with 'jewelling', the addition of dots of slip in a contrasting colour placed on the trailed design. Such vessels were some of the most sophisticated vessels produced by the Slipware potters from the mid 17th to mid/late 18th century (Brears 1969, 45). A few sherds from the more common feathered plates and cups were also noted. The dearth of common late 17th-mid 18th century wares, such as Iron-Glazed Earthenwares, Staffordshire Manganese Wares and English Stonewares at the site suggests that the site was abandoned in the late 17th century, probably at some point in the final two decades.

Chronology and Pottery Occurrence

- B.3.8 Each context-specific assemblage was given a ceramic phase date (CP) based on the range of pottery types present, and adjusted with reference to the site stratigraphy. The dating scheme and defining wares is shown in Table 4. The pottery occurrence per ceramic phase, major fabrics only, by weight, expressed as a percentage of the phase assemblage is shown in Table 4. The data in Table 4 suggest that there was something of a drop in activity at the site at some time between the 13th – 14th centuries until the mid-15th century, as pottery deposition at the site was very low at that time. This is further enhanced by the data in Table 5, which shows that most of the pottery from ceramic phase M5 is residual (c 65% by weight), suggesting that there was a major reorganization of the site at that time, and that earlier deposits were disturbed. This seems likely to have been the result of the construction of the post-med building in ceramic phase PM1. This suggests that the site was largely abandoned for the whole of the later medieval period, and is enhanced by the fact that pottery types such as F400, F404 and F407 are entirely absent from CP M5 contexts.
- B.3.9 The complete lack of pottery dating to CP PM2 may be simply due to the large amount of post-abandonment disturbance at the site. Certainly, large amounts of pottery which could be of such a date are present as residual material in CP PM5 and MOD deposits, and suggests that the site was heavily disturbed from the 18th century onwards. Certainly, over half the pottery from CP PM5 contexts is residual, as is 98% of the material from MOD contexts. Conversely, very little of the CP PM4 material is residual, reinforcing that the site was heavily disturbed after that time. Another factor may be that, as noted above, the pottery which would in theory define CP PM2, Tin-glazed Earthenware, was not in fact arriving at the site until the mid-late 17th century, CP M3.

Ceramic Phase	Date	Defining Wares	No Sherds	Wt Sherds (g)
M1	1100-1150	F330	4	11
M2	1150-1200	F319, F333	80	1162
M3	1200-1400	F302, F320, F324	23	349
M4	1400-1450	F365, F400, F407	9	76
M5	1450-1550	F401	157	1462
PM1	1550-1600	F405, F406	138	2237
PM2	1600-1650	F410, F411, F413	0	0
PM3	1650-1700	F428	126	2655
PM4	1700-1750	F426, F438	127	2830
PM5	1750 - 1800	F418	390	7360
MOD	1800+	F1000	123	2952
U/S	Topsoil	-	24	1292
		Total	1201	22386

Table 4: Ceramic Phase Dating Scheme and Pottery Occurrence per Phase

Fabric	M2	M3	M4	M5	PM1	PM3	PM4
F102	1.0%	0%	0%	0.3%	1.2%	1.1%	0
F200	0.2%	0%	0%	0.1%	0.6%	0%	0
F330	1.2%	19.5%	7.9%	0%	3.0%	0%	0
F319	93.8%	31.5%	0%	55.7%	3.6%	1.1%	0
F320	-	46.4%	9.2%	8.7%	0.3%	0%	0
F365	-	-	71.1%	10.3%	2.6%	0.2%	0
F400	-	-	10.4%	0.4%	0.8%	0%	0
F401	-	-	-	6.3%	16.7%	0%	0.1%
F407	-	-	-	0	1.5%	12.4%	3.4%
F404	-	-	-	0	0.7%	0.7%	0.9%
F405	-	-	-	-	1.6%	3.2%	0.4%
F406	-	-	-	-	0	3.0%	2.9%
F425	-	-	-	-	55.5%	61.8%	75.1%
F412	-	-	-	-	6.6%	0.1%	1.2%
F410	-	-	-	-	-	5.1%	5.3%
F411	-	-	-	-	-	5.0%	5.8%
F413	-	-	-	-	-	0.9%	0.1%
F428	-	-	-	-	-	2.2%	3.8%
F426	-	-	-	-	-	-	0.7%
F438	-	-	-	-	-	-	0
F418	-	-	-	-	-	-	-
F1000	-	-	-	-	-	-	-
Total	1162	349	76	1462	2237	2655	2830

Table 5: Pottery Occurrence per ceramic phase, major fabrics only, by weight, expressed as a percentage of the phase assemblage

Cross-fits

B.3.10 The following cross-fits were noted:

- 1 = 23, F425, jug rim
- 24 = 25, F428, highly decorated plate
- 21 = 25 = 33, F425, shallow dish

The Assemblages

Ceramic Phase M1, 1100-1150. 4 sherds, 11g, EVE = 0

- B.3.1 The only pottery from the site which may date to this phase is a single context, (89). It consists of three very small bodysherds (each of 2g or less) of Stamford Ware, Thetford Ware and Shelly Coarseware, and a Romano-British sherd weighing 6g. Given that the last-named is larger than the other three, it seems very likely that all the pottery from this feature, part of Ditch **18** (Slot **88**) is residual. The relatively small amounts of Shelly Coarseware from the site generally further suggest that there was little activity here before CP M2. This pottery type is usually very common at sites dating to the first half of the 12th century in this area (eg. Blinkhorn 2010).

Ceramic Phase M2, 1150 – 1200. 80 sherds, 1162g, EVE = 0.03

- B.3.2 This phase is dominated (93.8% by weight) by the products of local pottery industries, namely the unglazed shelly coarsewares (fabric F319) of the Lyveden and Stanion industries. The only other pottery types present were all similarly unglazed wares, with Shelly Coarseware (fabric F330) making up 1.2%, two sherds each of T1(2) type St Neots Ware (F200) and Thetford Ware (F102), and single sherds of T1(1) St Neots Ware (F100), Hedingham-type Coarseware (F327) and Hertfordshire Greyware (F333). Four sherds of residual Roman-British material were also noted. The only rimsherd present was from a bowl in fabric F319.
- B.3.3 The bulk of the F319 assemblage (by weight) comprised two large fragments of bases of jars which occurred in the fill of Oven **50**. One of these is complete, with a very heavily scorched and burnt base, and may have been used in the oven. It appears to have an almost horizontal break along a coil-join in the body, meaning it certainly could have functioned as a shallow bowl or dish, and re-use of pots in such a manner in the medieval period is known (eg. Blinkhorn 2012a, fig. 66). The other fragment is far from complete, and is likely to have been introduced as backfill. It is from a fairly large vessel, and the calcareous inclusions in the inner surface have dissolved away, a pattern typical of vessels used to store slightly acidic liquids such as ale or soured milk (Perry 2011).

Ceramic Phase M3, 1200 - 1400. 23 sherds, 349g, EVE = 0.04

- B.3.4 Just four contexts produced pottery assemblages of this date. Again, most of the pottery was local, with the products of the Lyveden and Stanion industries dominating, with, fabric F330 apart, the only other pottery present being single sherds of glazed Brill/Boarstall Ware (fabric F324) and Developed Stamford Ware (F331), and another, unglazed, of Hertfordshire Greyware. Just a single rimsherd was noted, from a bowl in fabric F330. The sherds of fabric F320 were all from glazed jugs, as was typical of the industry at this time.

Ceramic Phase M4, 1400 – 1450. 9 sherds, 76g, EVE = 0.04

- B.3.5 Only three contexts produced pottery of this date, and all the sherds were fairly small. A single rimsherd from a bowl in fabric F365 was present, with the rest of the material being plain bodysherds from jars and glazed jugs.

Ceramic Phase M5, 1450 – 1550. 157 sherds, 1462g, EVE = 0.44

- B.3.6 This represents the largest CP assemblage from the medieval period, but around two-thirds of the pottery (by weight) is residual, and includes Saxo-Norman material such as St Neots Ware and Stamford Ware. The only sherd of middle Saxon Ipswich Ware from the site also occurred in a context of this date (60). This indicates that there was

considerable disturbance of earlier strata at this time, probably due to the construction of the post-medieval building.

- B.3.7 The contemporary material mainly comprised Late Medieval Reduced and Oxidized Wares (fabrics F365 and F402), as is typical of late medieval sites in the region. The only possibly stratified pottery present was a small sherd of Lyveden "E" Ware, a few sherds of late Heddingham-type Ware and a large fragment of a dripping dish in Lyveden 'D' ware (fabric F322). The dripping dish is somewhat abraded, and seems to be residual, suggesting that there may have been a period of agricultural activity at the site between the abandonment of the medieval building and the construction of the post-medieval structure, with the medieval soil layer being a plough-soil, and the dripping dish the result of manuring rather than occupation. The dripping dish aside, the only possibly contemporary rimsherds present were both from bowls, in fabric F365.

Ceramic Phase PM1, 1550 - 1600. 138 sherds, 2237g, EVE = 0.89

- B.3.8 The assemblages of this Ceramic Phase are typical of the region in the early post-medieval period, being dominated by utilitarian Glazed Red Earthenwares (55.5% by weight), mainly in the form of large bowls, along with a few fragments of jars, pipkins (handled cooking pots) and jugs. The rest of the material is largely drinking vessels in Cistercian Ware (fabric F404), Midland Blackware (F412) and German Stonewares (F405), along with bowls and jars in Midland Purple Ware (F407).

- B.3.9 Residuality is relatively low, with around 12% of the pottery (by weight) being of medieval or earlier date.

Ceramic Phase PM3, 1650 - 1700. 126 sherds, 2655g, EVE = 1.32

- B.3.10 This ceramic phase appears to represent the final period of occupation of the post-medieval building, with, as discussed above, the presence of high-quality tablewares in the form of Tin-glazed Earthenware and Staffordshire Slipware bowls, dishes and plates, suggesting that the inhabitants at this time were of somewhat greater wealth than might be expected for an ordinary rural household.

- B.3.11 The assemblage is still dominated by utilitarian pottery in the Glazed Red Earthenware (61.8% by weight), Midland Purple Ware (12.4%) and also Midland Yellow Ware (3%), again mainly in the form of bowls along with a few jars and pipkins, and, the high-quality table wares aside (fabrics F410 and F428), the rest of the assemblage is once again mainly drinking pottery in the same range of fabrics, apart from a few vessel in Metropolitan-type Slipware (fabric F411), which are also likely to have been tablewares.

- B.3.12 Residuality is extremely low during this ceramic phase, with just 2.4% of the assemblage comprising medieval or earlier pottery. Some strata of this date were disturbed by later activity; a sherd from a highly decorated Staffordshire Slipware plate occurred in Layer 67 with others fragments of the same vessel being noted in contexts 24 and 25, which are unstratified contexts. The plate has a suspension hole, showing that it was intended to be used primarily for display, and thus further suggesting that the occupants of the post-medieval structure were of greater than normal status.

Ceramic Phase PM4, 1700 - 1750. 126 sherds, 2655g, EVE = 1.32

- B.3.13 The pottery assemblage from this phase is fairly large, but comes from just three contexts, (25), (30), and (46), all of which are soil horizons in the hollow way, suggesting very strongly that most, if not all the pottery from this phase is redeposited, despite some of it being, in theory, contemporary. This is supported by the fact that common utilitarian pottery types of the period, particularly Iron-Glazed Earthenware

(fabric F426) and English Stoneware (F438) are virtually absent, with just one sherd of the former and none of the latter occurring in contexts of this phase date. Fabric F426 usually invariably occurs in large quantities on 18th and 19th century sites in the region. Thus, it seems very likely that these groups of pottery were, in the main, scattered domestic middens which were originally deposited during CP PM3. Certainly, some of the pottery is in very good condition, with some vessels surviving to a full profile, although other vessels have fragments quite widely scattered across the site.

- B.3.14 The range of vessels is more or less exactly the same as in the previous ceramic phase, although a fragment of an unusual candlestick in “negative” Staffordshire Slipware was also present.

Ceramic Phase PM5, 1750-1800. 390 sherds, 7360g, EVE = 5.77

- B.3.15 Only two contexts produced pottery of this date, the unstratified cleaning sub-soil contexts 23 and 24, and similar comments apply to this assemblage as that from CP PM5. Common contemporary wares, such as F426 (two sherds), F438 (four sherds) and F418 (one sherd) are very rare. Around a third of the pottery is definitely residual. The range of vessel types is broadly the same as the previous two CP assemblages. As with the previous phase, sherds of the same vessel were found scattered throughout the horizon.

Ceramic Phase MOD, 1800+. 123 sherds, 2952g, EVE = 0.79

- B.3.16 Nearly all the pottery from this ceramic phase (98% by weight) is residual. Fabrics F418 (zero sherds), F426 (two sherds) and F438 (zero sherds) are still very rare, however, showing that their dearth in earlier ceramic phase assemblages is not due to 18th century strata being removed by later activity, despite much earlier pottery being present. Furthermore, a total of 8% (by weight) of this phase assemblage is medieval material, showing that much earlier deposits were disturbed by modern activity. There is a cross-fit from the topsoil to context 23, which is of CP M5 date.

B.4 Glass

By Carole Fletcher

Introduction

- B.4.1 The excavation produced an assemblage of 14 shards of vessel glass, representing a minimum of four bottles, including possible 17th century vessels, and seven shards of window glass which is in poor condition and could not be closely dated although its association with post-medieval pottery and the vessel glass suggests its origins are the 16th-17th century buildings (Buildings 2, 3 and 4) identified during the excavation.

Methodology

- B.4.2 The glass was examined, fragments counted, weighed, fully described and recorded using Jones and Sullivan (1985) as a guide, in conjunction with Van den Bossche, W. (2001), the results are recorded in Table 6.

Assemblage

- B.4.3 The condition of much of the glass is moderate to poor, however cleaning layer, context 2, produced an unabraded, lightly patinated, complete neck and rim in olive green-glass. The whole fragment is approximately 85 mm high. The neck itself is approximately 75 mm high. The lip has a straight finish, although several slightly rough areas suggest it was cracked off, the rim is flared, the neck tapered and the string rim is

that of a rounded trail. The shard is most likely from a small 17th century globular bottle, examples of which can be seen on the Museum of London website (1 <http://archive.museumoflondon.org.uk/>) and although the neck on this bottle is slightly longer than those illustrated on the Museum web page, it seems most likely that this is a 17th century vessel.

- B.4.4 Contexts 9, 20, 23 and 24 are, like context 2, unstratified cleaning contexts across various areas relating mainly to the hollow way. These contexts produced a wide variety of material discussed elsewhere alongside the glass recorded here. Context 9 produced only a single sherd of heavily patinated and opaque vessel glass, the poor quality of the glass suggests it is English forest or potash glass and may be medieval or early 17th century. Context 20 produced two shards of window glass, of these one has a blue greenish tint but appears to have lost much of its original surface which has flaked away. The second shard is completely covered in a pale gold iridescent patina, one sherd may be grozed and it is possible that both fragments of glass were originally part of diamond quarries. Both shards of glass are approximately 2 mm thick and in poor condition and they are possibly 16th or 17th century and may relate directly to the buildings recorded in the excavation.
- B.4.5 Context 23, from the north eastern part of the hollow way, produced two shards of bottle glass. Both shards are covered with an iridescence bronze gold patina. It is unclear if both shards come from the same vessel, however they appear to be of similar date and although not closely datable are likely to be early 17th century. Context 24, which represents cleaning over the south-eastern section of feature **125**, produced five shards from a minimum of four glass bottles. These included rims from two pale blue-green glass short necked, small bottle or phials which most likely used to contain medicines, potions or oils. Examples of these types of bottle can be seen on the Museum of London website (2 <http://archive.museumoflondon.org.uk/> and date from the 17th-18th century. Also present was the heavily patinated basal shard from a glass bottle, on the underside of the base is a shallow kick-up which retains a pontil mark, although it is unclear what type of pontil mark it is. The angle of the base shard and its relatively small size, the heel being approximately 67 mm in diameter, suggests that the base is from a shaft and globe-type bottle. This form was produced from the early 17th century till approximately 1640/1660 (Van den Bossch 2001 p66 plate 1), the level of patination on the base shard also suggest this is likely to be an early-mid 17th century bottle.
- B.4.6 Context 30, a layer of burnt material in a hollow, produced only 1 single shard of window glass, which is not closely datable. Pottery from this layer is dated to the 18th century, however it seems likely that the glass is earlier due to its poor condition. Context 35 also produced a single shard of window glass, however, the pottery dates the context to the mid 16th-end of 17th century. Context 44, an external surface which also produced pottery dating from the mid 16th to the end of the 17th century produced only three small irregular shards of window glass that could not be closely dated, however, their condition indicates that they are perhaps 16th or 17th century.
- B.4.7 The cobbles in the hollow way, Context 67 produced two moderately sized shards from two natural black glass bottles. The first, a body shard from a shaft and globe or onion bottle, is not closely datable beyond the early 17th-early 18th century, however the second shard which is heavily patinated offers more clues to its age. The vessel would originally have had a tapered neck, which has broken just below the string rim, above which is a flared, fire polished lip. The form is quite distinctive and is most likely from a shaft and globe type bottle c.1632-1680, which fits well with the pipe bowl recovered from the same context identified as an Oswald Type 6 and dating to c.1660-1680.

- B.4.8 The final fragments of glass were recovered from pit **68**, of which context 70 is the upper fill. This produced three shards of glass, none of which are particularly closely datable, however the largest sherd which is covered in highly iridescent patination and in poor condition comes from a globular bottle, suggesting it is early 17th to early 18th century in date. This pit also produced 14 complete or near complete clay pipe bowls, the earliest of which dates from c.1640-70, and the latest c.1660-80, firmly dating the finds within of this feature to the 17th century, although the material may have been redeposited from elsewhere.

Discussion

- B.4.9 The majority of the glass was recovered from cleaning contexts within the hollow way, feature **125**, and as such as most are likely redeposited, becoming incorporated into the hollow way after the demolition of the buildings and it is from these buildings that the bottles most likely originate. The presence of two pharmaceutical-type bottles alongside wine bottles, support a proposal by Paul Blinkhorn (see Appendix B.3) that the occupants of the post-medieval buildings (c.1650-1700) were of higher than usual status.
- B.4.10 Most rural sites produce small glass assemblages of undiagnostic body sherds. This assemblage is unusual yet the picture it reveals is still unclear. The glass assemblage if considered alongside the clay pipe assemblage and other material recovered, may indicate that the assemblage recovered from the excavation is not entirely domestic in character.



Context	Category	Phase	Material	Form	Count	Weight (kg)	Description	Date
2	Layer	4	Glass	Bottle	1	0.038	Unabraded, lightly patinated complete neck and rim in olive green-glass. The whole fragment is approximately 85mm high. The neck itself is approximately 75mm high. The lip has a straight finish, although several slightly rough area suggest it was cracked off, the rim is flared, the neck tapered and the string rim is that of a rounded trail. The shard is most likely from a small 17th century globular bottle (May be a small shaft and globe type or a small onion type bottle) examples of which can be seen on the Museum of London website (1 http://archive.museumoflondon.org.uk/) and although the neck on this bottle is slightly longer than those illustrated on the Museum webpage. It seems most likely that this is a 17th century vessel.	17th century
9	Layer	2	Glass	?Vessel	1	0.004	Roughly triangular shaped shard of curved glass, most likely from a vessel. The glass is heavily patinated, opaque and slightly iridescent. The patination runs across all the breaks indicating that they are old, one small area of the shard has a more recent break and the small area of glass revealed indicates that it was originally clear with a greenish tint. The poor quality of the glass suggests it is English forest or potash glass. Although not closely datable it is possibly early 17th century.	?Early 17th century
20	Layer	4	Glass	Window	1	0.007	Irregular fragment of originally clear glass with a blue-greenish tint. One surface is completely iridised, which is flaking off, the other surface is partially iridised, much of which is flaked off, leaving a rough pitted surface. A single edge may be grozed but this is uncertain. Possibly this fragment was originally part of a rectangular or diamond quarry. Surviving glass is approximately 2mm thick and the shard 63mm at its longest, 30mm at its widest. Very poor condition.	Not closely datable
			Glass	Window	1	0.003	Irregular shard of window glass, which may originally have been clear, but is now completely covered in pale iridescent patina. There appears to be no evidence of grozing and the iridescence covers all of the breaks. The glass is 1.7mm thick, suggesting it has already lost some of its surface. Very poor condition.	Not closely datable
23	Layer	4	Glass	Bottle	2	0.027	Two curved shards from a bottle of what may originally have been natural black glass, both shards are completely covered with an iridescent bronze-gold patina. One shard appears to have come from the base of the neck of the bottle, the other shards probably comes from the body of the bottle. The levels of patination suggest they are of the same age, although not necessarily from the same vessel. Although not closely datable, they are likely to be early 17th century.	?Early 17th century
24	Layer	4	Glass	Bottle	1	0.012	Complete rim and part of shoulders from a pale blue-green glass short necked bottle. The glass has a highly iridescent patina, although much of this has flaked or is flaking off. Small bottle or phial in pale blue-green glass, short relatively upright neck with an uneven, flared fire polished lip. Similar vessels are present on the Museum of London's ceramics and glass pages (2 http://archive.museumoflondon.org.uk/). The glass is less than 2mm thick.	17th-18th century

Context	Category	Phase	Material	Form	Count	Weight (kg)	Description	Date
			Glass	Bottle	2	0.017	Two curved shards from an olive green bottle, slightly more heavily patinated than the bottle fragment recovered from context 2. The glass appears near opaque and might be described as natural black glass. the term commonly used to describe utility glass bottles of the 17th to 19th century (Van den Bossch 2001 p30 fig 2). The shards vary from 3 to 5mm thick.	17th century
			Glass	Bottle	1	0.073	Basal shard from a relatively small glass bottle, the glass is heavily iridised and completely opaque. A small more recent chip on one edge reveals the glass to be olive green when held to the light, but originally may have been described as a natural black glass. The base has a shallow kick, giving it a shallow domed basal profile, the pontil mark on the underside of the kick is clearly visible and completely covered in patination and it is unclear exactly what type of pontil mark it is. The small size of the base, the heel being approximately 67mm in diameter, and the level of patination suggest this is an early vessel no later than 1680. The angle of the base sherd suggests it may be a shaft and globe bottle, which were produced from c.1632 until 1640/1660 (Van den Bossch 2001 p 66 plate 1).	Early-mid 17th-century
			Glass	Bottle	1	0.005	Near complete rim and shoulder from a small short necked bottle or phial, of pale blue-green glass. The body, from the shape of the shoulders, appears to be sub-rectangular with rounded shoulders, a short neck, with a flared or everted lip that has been fire polished. The vessel is lightly covered with iridescence and, although the rim is badly cracked overall, is in reasonable condition. Similar vessels are present on the Museum of London's ceramics and glass pages (2 http://archive.museumoflondon.org.uk/). The glass is less than 2mm thick on the shoulders and approximately 2.5mm thick elsewhere.	17th-18th century
30	Layer	4	Glass	Window	1	0.001	Irregular shard of clear, slightly blue-green glass with iridescent petrol sheen like surfaces. The glass is fractionally over 1mm thick and appears to have lost some of its surface patination that must once have covered it. Having flaked away, some of the breaks are recent others have light level of patination. The glass has small bubbles and faults and is not closely datable.	Not closely datable
35	Layer	3	Glass	Window	1	0.003	Irregular shard of window glass, which may originally have been clear, but is now completely covered in pale gold iridescent patina. There appears to be no evidence of grozing and the iridescence covers all of the edges. The glass is 1.7mm thick, suggesting it has already lost some of its surface and is in very poor condition.	Not closely datable
44	layer	3	Glass	Window	3	0.001	Three small irregular shards of window glass. Each is completely covered with patination and the result is totally opaque. All are less than 2mm thick and in very poor condition, no evidence of grozing survives and all of the breaks are covered in patination, indicating that they are old.	Not closely datable

Context	Category	Phase	Material	Form	Count	Weight (kg)	Description	Date
67	Layer	3	Glass	Bottle	1	0.043	Moderately large body shard from a natural black glass (dark olive-green) bottle. The curved body shard varies in thickness, and the thicker edge may come from towards the base of the bottle. The curvature suggests it comes from a shaft and globe or onion bottle, rather than from a case bottle or later cylindrical bottle. This would indicate that the bottle dates between the early 17th and early 18th century. The condition of the glass suggests it is most likely not at the earlier end of this range.	Early 17th-early 18th century
			Glass	Bottle	1	0.026	Natural black glass covered with lightly iridescent patina that is relatively stable. The neck has been broken after the string rim and the break is recent showing that the glass is pale to mid olive-green. Narrow, slightly flared lip, internal diameter approximately 18 mm external diameter approximately 27 mm. Possibly fire polished with string rim, which has possibly been rounded and flattened, at least on the upper surface to slightly less clear on the lower surface. The distance between the lip and rim is approximately 30 mm. This type of rim is present on bottles by the 18th century. The gap between string rim and lip is very shallow, most likely from a shaft and globe bottle <i>circa</i> 1632-1680, more likely 1675.	Early-late 17th century
70	68 Pit	4	Glass	Bottle	1	0.005	Small body shard from a natural black glass bottle, completely opaque and covered with a dull patina. A modern break shows the glass is degrading and where thinnest becoming granular. Although not closely datable, the condition of the glass suggests it may be 17th century but could be as late as 18th.	17th-early 18th century
			Glass	Bottle	1	0.035	Body shard from a bottle. The shard is covered in highly iridescent patination, which is flaking off revealing poor state of the olive green glass underneath. The shard is curved and thicker on one edge indicating, as with the shard in context 67, that it comes from somewhere close to the base angle of the bottle. The curvature suggests the bottle was not large, perhaps with a diameter in the region of 14 cm and was of a globular form, rather than the later cylindrical forms, suggesting it is early 17th to early 18th century in date, although the state of the patination suggests it might be relatively early in this date range.	Early 17th-early 18th century
			Glass	Bottle	1	0.015	Body shard from a natural black glass (dark olive green) bottle. The glass is in relatively poor condition, patinated and, although not closely datable, is likely to be 17th or 18th century.	17th-early 18th century

Table 6: Glass catalogue

B.4.11

B.5 CBM

B.5.1 A small sample of ceramic building materials were retained from the site. This is summarized in Table 7.

B.5.2 The tile fragments all appear to be of peg tile, although one piece from Context 19 had the remains of a flange – a possible pan tile. Larger fragments of brick and tile from Contexts 30 and 67 are consistent with an early post-medieval date for the structures on site (Rob Atkins, pers. comm.).

Context	Tile fragments	Weight (g)	Brick Fragments	Weight (g)
9	3	98		
10	6	896		
19	1	21		
21	1	361		
23	1	48		
24	4	145		
25	1	54		
26	4	63		
28			1	7
30				
33	3	138		
44	5	46	4	60
49	13	320		
63			1	8
67	1	273	1	835
70	1	246		
85			1	21
89			1	15
106			1	7

Table 7: Ceramic Building Material

B.6 Stone Roof Tile

B.6.1 Four pieces of stone roof tile were retained from Context 10, the demolition layer within the evaluation Trench.

Weight (g)	Thickness	Note
31	7mm	Fragment. Limestone.
241	14	Drilled hole. Limestone.
476	25	Limestone.
502	14	Drilled hole. Limestone.

Table 8: Stone roof tile

B.7 Architectural Stone Fragment

B.7.1 An architectural stone fragment (SF 57) was recovered from Fill 69 of Pit **68**. It consists of oolitic limestone weighing 2.14kg. In total it is 165mm in length, 130mm wide and 117mm thick. It survives in a T-shaped profile with flat faces around 60mm deep either side of the vertical. The vertical corners are bevelled to flat interior/exterior faces 30mm wide.

B.7.2 This is most likely the base or top of a window mullion, of potentially late medieval date and most likely from a stone building (James Fairbairn, pers. comm.). Reddening of one

vertical face may indicate contact with an iron frame. Much of the base (or head) is heavily damaged although the remains of a possible socket are present.

- B.7.3 It is very unlikely to relate to the structures recorded on this site, which had shallow stone foundations and were most likely timber framed and probably comes from structures associated with the church, rectory or manor farm in the village.

B.8 Clay Tobacco Pipe

By Carole Fletcher

Introduction and methodology

- B.8.1 During the excavation a total of 275 fragments of clay tobacco pipe weighing 2.042kg, representing a minimum of 66 clay tobacco pipes (based only on complete and near complete pipe bowls) were recovered from a single pit and a number of layers including topsoil. The majority of the pipes date to c.1660-80, with a small number of outliers either side of this group. The bulk of the pipe fragments are in reasonable condition having undergone only moderate levels of reworking and in some cases very little abrasion, with many of the breakages possibly relating to the pipes' original disuse and discard.
- B.8.2 Terminology used in this assessment was taken from Oswald's simplified general typology (Oswald 1975, 37–41) and Crummy and Hind (Crummy 1988, 47-66). A full quantification table (Table 9) for the clay pipes, including separate counts for complete bowls, bowl fragments, heels and pipe stems and marked or decorated fragments, can be found at the end of this report, based on the recording methods recommended by the Society for Clay Pipe Research (<http://scpr.co/PDFs/Resources/White%20BAR%20Appendix%204.pdf>). Stem bore hole diameter recording has not been undertaken on this assemblage as the pipes form a relatively tightly dated group based on bowl typology. The earliest material in the assemblage dates to c.1640-70 and the latest c.1680-1710.

Assemblage

- B.8.3 This is a moderately sized assemblage, in good condition and relatively closely dated by typology. Unfortunately there are no makers' marks present which makes a discussion of provenance somewhat difficult, and the presumption is that the pipes represent local production. There is a known pipe maker in Peterborough in the 17th century Nicholas Hardy c.1660 (Oswald 1975, 174). The clay pipes are all made from white ball clay, presumably sourced from Devon.
- B.8.4 There are a number of decorated bowls, using the 'mulberry' or 'orange tree' motif Oswald (1975: 90). The design is relatively simple and is present on both sides of the bowls. All of the mulberry designs are slightly different, indicating these decorated pipes came from a number of different moulds and possibly different makers (Plate 12). The quality of the design is highly variable and in some cases it would appear that the moulds are either worn or were badly made resulting in indistinct image.
- B.8.5 A number of bowls are rouletted or lined around the rim and this is noted in the catalogue, as is, where possible, the presence of burnishing. The quality of the pipes varies considerably as does the rouletting or lining around the rim. The most common forms present are Oswald Types 6 and 7, which are present in almost equal numbers. A number of the pipes more closely resemble those illustrated in Crummy (Hind and Crummy 1988, 47-66) than the original illustrations in Oswald (Oswald 1975, 37–41);

where this is the case it is noted in the catalogue. Overall, with the exception of a single Oswald Type 9 clay tobacco pipe bowl dating to c.1680-1710, all the clay tobacco pipes fall within a 17th century date range, with a small group of c.1640-60 and c.1640-70 pipes, alongside the relatively large group of c.1660-80. Stems, where present on their own, have been described as not closely datable. Diameter analysis has not been undertaken on this assemblage due to its limited size, so the dates that pipe stem analysis might have offered are not available and, although the stems are mainly in association with relatively closely dated pipes, they have been given the broadest date of c.1580-1910. However, for the purpose of this report, the majority of the stems are likely to be 17th, possibly early 18th, century, this later date being due to the presence of a pipe bowl with a production range into the early 18th century.

Assemblage in relation to archaeological features

- B.8.6 A small number of pipe fragments were recovered from the topsoil and these included a complete Oswald Type 7 pipe bowl and partial stem c.1660-80.
- B.8.7 Relatively large number of pipe bowls and stem fragments were recovered from unstratified cleaning contexts 2, 19, 20, 21, 22, 23, 24, and 25, and 26. Together, these produced more than a kilogram of material, consisting of more than 100 pieces of clay pipe. Although all of these contexts represent cleaning, they do relate to different areas of the site and, with the exception of context two, which represents overburden subsoil within the evaluation trench, the remaining contexts will be briefly discussed below on a context by context basis.
- B.8.8 Context 19 produced only fragments of pipes, including the upper portion of a pipe bowl with traces of rouletting, which is most likely a 17th century Oswald Type 7 (c.1660-80). By contrast Contexts 20 and 21 produced only fragments of pipe stem that are not closely datable. Context 22 also produced a complete 17th century pipe bowl, an Oswald Type 7 (c.1660-80), alongside a fragment of stem and a fragment of heel.
- B.8.9 Context 23, which represents cleaning across the north-east part of the hollow way, produced a moderate assemblage of clay pipe material weighing 0.533kg, which includes 13 complete or near complete pipe bowls with and without attached length of stem. The majority of the bowls are Oswald Type 6, followed by Oswald Type 7, both pipe types have the same date range c.1660-80. Also present were two complete bowls and a partial bowl from three Oswald Type 17 pipes dating to c.1640-70, some of the earliest clay pipe material recovered from the site. This context also produced the latest pipe recovered – the heel and lower part of the pipe bowl were tentatively identified as Oswald Type 9, dating to c.1680-1710. The material from this context is slightly more broken and fragmentary, and possibly abraded, than the majority of material recovered from the site. It is likely that this material built up over a slightly longer period of time than that found elsewhere. The pottery recovered from this context is dated 1700-1900.
- B.8.10 From Context 24, which represents cleaning over the south-east section of the hollow way, 0.396kg of clay pipe material was recovered, representing 19 complete or near complete pipe bowls, alongside a number of heel, bowl and stem fragments. The majority of the complete bowls are Oswald Type 7, followed by Oswald Type 6 (c.1660-80). Of these, two of the Type 7 bowls have mulberry decoration, both produced in different moulds – on one bowl the decoration is somewhat flattened and indistinct, on the other the decoration is well formed and sharp. This context also produced a complete bowl from an Oswald Type 5, with flat round heel and moderate length of stem, lightly burnished and well formed, being slightly discoloured or fire reddened. This

pipe form dates to c.1640-60 and is another of the assemblage's early outliers. The material recovered from this context is in better condition than that recovered from context 23, suggesting less post-depositional reworking.

- B.8.11 Context 25, which represents cleaning above Context 30, produced four near complete and partial pipe bowls, the majority of which were Oswald Type 6, with a single example of an Oswald Type 7, c.1660-80. From Context 30 the pipes recovered included two Oswald Type 6 bowls, one complete and one near complete, an Oswald Type 7 bowl, a near complete Oswald Type 5 bowl (c.1640-60). Also recovered were fragments of other pipe bowls, and 41 fragments of pipe stem (0.137kg) of which two are tapering and come from the section close to the mouthpiece of a pipe.
- B.8.12 Layer 33, which forms part of the floor of buildings two and three, produced a small number of pipe fragments including partial pipe bowls, both Oswald Types 6 and 7. Pottery from this context dates from the mid 16th century to the end of the 17th century, which fits well with the 17th century date for the clay pipe material.
- B.8.13 The floor or foundation below Wall 14, Context 35, produced a partial pipe bowl tentatively identified as an Oswald Type 6 (c.1660-80) and eight fragments of pipe stem, which again fits with the ceramic dates for the pottery recovered, mid 16th century to the end of the 17th century.
- B.8.14 From demolition Context 43 a single fragment of pipe stem which is not closely datable was recovered, and from Context 44 a sub-square heel fragment which, although not closely datable, is likely to be 17th century, and 11 fragments of pipe stem. Pottery from Context 43 dates from the mid to the end of the 17th century, while that from Context 44 dates from the mid 16th to the end of the 17th century.
- B.8.15 Material recovered from the cobbles packed in the base of the hollow way, Context 46, include 16 fragments of pipe stem and two pipe bowls, a complete Oswald Type 5 and a partial Oswald Type 6, dating from c.1640-60 and c.1660-80 respectively. These fit with the pottery dates for this context, which are suggested to be mid 16th to end of the 17th century. Further material was recovered from amongst the cobbles on the hollow way, Context 67, again the pottery dates from the mid 16th to the end of the 17th century and the clay pipe material recovered suggests a date towards the end of this period, with a single complete pipe bowl of an Oswald Type 6 c.1660-80, identified alongside fragments of pipe stem that could not be closely dated.
- B.8.16 Pit **68** produced a number of clay pipe fragments from its upper fill, Context 70, including nine complete and three near complete pipe bowls. Within this pit assemblage are four mulberry decorated pipes, three of which have been identified as Oswald Type 7, c.1660-80, the fourth is an earlier dated bowl, an Oswald Type 17 c.1640-70. The fill contained eight examples of Oswald Type 7, alongside five examples of Oswald Type 6 pipes and the single example of the Type 17 decorated bowl. From the pit's basal fill was recovered another complete Oswald Type 6 pipe bowl. The pottery recovered from this pit is dated to the 18th century (c.1700-1750).

Discussion

- B.8.17 The pottery present in the assemblages containing clay pipe material often have a broader date range than the clay pipe itself and it is hoped that the presence of more closely datable material has narrowed the dating of these contexts. The majority of the pipe bowls identified in the assemblage date to the 17th century, specifically, c.1660-80, with few outliers. It has been suggested by Pearce that the active life of clay pipe is

relatively short, that the fragility of the material and the likelihood of the stem becoming clogged with tar, limit its period of usage. She suggests that the pipes in her assemblage may have had an average life from a few days to a few weeks. (Pearce 2007 <http://www.geog.qmul.ac.uk/victorianlondon/pdf/ClayPipe.pdf>) and although it is possible to place your pipe in the fire and burn out the deposits of tobacco and tar, few of the pipe bowls appear to have been burnt in such a way. The majority of the pipe bowls appear to have been used, with most showing relatively light to moderate use, displaying only small areas of discolouration on the external surfaces around the rim, and, where broken, demonstrate only slight to moderate greying of the stem or bowl, with many showing almost no discolouration. This may also support their short lived nature.

- B.8.18 Paul Blinkhorn (see Appendix B.3) suggests that the site was unusual for a rural site and that the presence of tin-glazed earthenwares and Staffordshire slipwares suggests the site was occupied by persons of greater than normal wealth in the mid to late 17th century. The presence of a number of mulberry decorated pipes may link with this suggestion as, although not necessarily uncommon, there are few decorated pipes available to the populace of this period and to find seven examples in a small-moderate rural assemblage could be considered uncommon, in comparison with other rural assemblages observed by the author.
- B.8.19 With the exception of the material in Context 23, which does appear more fragmented than other contexts, the pipes and stems show little reworking, suggesting they were not much disturbed after deposition, and although their location does not appear to be primary deposition, they may have been redeposited a relatively short time after their initial deposition.
- B.8.20 It is possible that these clay pipes relate to the last phase of use of the 17th-century structure, the excavator having indicated that the terrace of buildings were demolished around the turn of the 18th century. However, it is feasible that these pipes, all being relatively closely dated, the majority of which are within an approximate 20 year period, may date the end of the building's life.

Context	Cut/Feature	Phase	Weight (kg)	No of complete or near complete pipe bowls	No of bowl fragments	No of heel fragments	No of pipe stem fragments	Description	Decorative Motif and location	Form	Date Range
1	Topsoil	4	0.022	1				Complete pipe bowl with flat sub-rounded and stem, there are traces of lining on the bowl below the rim, the majority of which is towards the side of the bowl. Mould seams have been trimmed. Most closely resembles pipes illustrated by Hind and Crummy, (Hind and Crummy 1988, 47-66)		Oswald Type 6	c.1660-80
			0.007			1		Fragment of pipe stem with complete slightly sub-rounded flat heel and small amount of surviving bowl, the form of which cannot be identified.			Not closely datable
			0.006			1		Fragment of pipe stem with complete small oval, flat heel and small amount of surviving bowl, the form of which cannot be identified.			Not closely datable
			0.026				4	Fragments of pipe stem.			Not closely datable
2	Cleaning	4	0.016	1				Complete bowl with flat sub-oval heel. Bowl has been trimmed to remove mould seams. mulberry decorated on both sides of the bowl.	Botanical: mulberry on bowl both left and right sides	Oswald Type 7	c.1660-80
			0.025	1				Complete bowl with rouletting below rim, on back of bowl, somewhat absent on the front. Complete flat oval heel. Lightly burnished.		Oswald Type 7	c.1660-80
			0.006				1	Fragments of pipe stem.			Not closely datable
			0.005	1				Partial bowl fragment, the angle of the bowl suggests may be an Oswald Type 6, but this is uncertain. There is a faint trace of an incised line below the rim.		?Oswald Type 6	c.1660-80



Context	Cut/Feature	Phase	Weight (kg)	No of complete or near complete pipe bowls	No of bowl fragments	No of heel fragments	No of pipe stem fragments	Description	Decorative Motif and location	Form	Date Range
			0.017				2	Fragments of pipe stem, the longest of which is 108 mm long.			Not closely datable
9	Layer	2	0.011				2	Fragments of pipe stem.			Not closely datable
19	Layer	4	0.011			1		Fragment of pipe stem with a partial flat heel oval in shape.			Not closely datable
			0.010				2	Fragments of pipe stem.			Not closely datable
			0.008	1				Upper portion of bowl with traces of rouletting on the reverse and trimmed mould lines. The angle of rim and body suggest an Oswald Type 7, however this is uncertain.		?Oswald Type 7	c.1660-80
20	Layer	4	0.003				1	Fragment of pipe stem.			Not closely datable
21	Layer	4	0.025				6	Fragments of pipe stem.			Not closely datable
22	Layer	4	0.018	1				Complete pipe with bowl, flat oval heel and surviving length of stem, mould lines have been trimmed, although roughly traces of lining below the rim which has been somewhat chipped.		?Oswald Type 7	c.1660-80
			0.003				1	Fragment of pipe stem.			Not closely datable
			0.005			1		Fragment pipe stem and flat oval heel.			Not closely datable

Context	Cut/Feature	Phase	Weight (kg)	No of complete or near complete pipe bowls	No of bowl fragments	No of heel fragments	No of pipe stem fragments	Description	Decorative Motif and location	Form	Date Range
23	Cleaning NE, hollow way	4	0.011	1				Complete bowl and sub-rounded flat heel with neatly trimmed moulds seen on back of pipe, although visible on front of pipe especially towards the heel. Neatly rouletted below the rim, almost completely around the bowl, missing a small area on the right side.		Oswald Type 7	c.1660-80
			0.013	1				Complete pipe bowl with sub-rounded flat heel, well trimmed mould lines on front and back of bowl and faint traces of line on back of bowl, which has broken close to the join with the stem. May be an Oswald Type 6.		?Oswald Type 6	c.1660-80
			0.004				1	Fragment of pipe stem, broken at junction of heel and stem with slight flaring indicating presence of heel but not enough to give any kind of description.			Not closely datable
			0.009			1		Fragment of pipe stem with small amount of large oval heel, not enough survives to type, but likely to be 17th century.			Not closely datable
			0.012	1				Near complete pipe bowl, with just a small chip out of the rim, neatly trimmed mould lines on front and back of bowl. Possible traces of lining below bowl, near complete sub-rounded flat foot, no surviving stem. Bowl has broken at junction between stem and bowl.		Oswald Type 6	c.1660-80
			0.012	1				Near complete pipe bowl, part of the lower bowl and flat heel are broken away so there is no surviving stem. Rouletted below rim, although the actual grooves of the rouletting only show on the right-hand side of the bowl and the rest appears to be a smooth groove.		Oswald Type 6	c.1660-80

Context	Cut/Feature	Phase	Weight (kg)	No of complete or near complete pipe bowls	No of bowl fragments	No of heel fragments	No of pipe stem fragments	Description	Decorative Motif and location	Form	Date Range
23			0.020	1				Near complete pipe bowl with slightly less than half of the rim missing. Mould seams on front and back and across the foot can still be seen, trimmed poorly on the front and on both surfaces of the stem. The heel is flat and sub-rounded and a short length of rouletting survives below the rim on the back. A relatively tall bowl most closely fits an Oswald Type 7.		Oswald Type 7	c.1660-80
			0.005			1		Partial heel, sub-rounded or oval flat heel not enough surviving to determine type of pipe, although most likely 17th century.			Not closely datable
			0.013	1				Complete bowl and spur but broken at junction with stem. Moderately well trimmed mould seam on back of the pipe, less well trimmed on front of pipe and very obvious at rim.		Oswald Type 17	c.1640-70
			0.012	1				Complete bowl rim with only one slight nibble on the inside of rim edge. Neatly trimmed mould seam on back of pipe with traces still visible on front of pipe, especially at joint. Rim lined on the back of pipe, bowl has broken at junction with stem and much of the heel has also been lost, but enough survives to suggest it was flat and oval.		Oswald Type 7	c.1660-80
			0.015	1				Complete bowl with oval flat heel and short length of stem. The two halves of the clay pipe mould have not fitted well and the trimming of the mould lines is poor on both the front and back of the pipe. A fragment of line is present on one side of the bowl. Most closely resembles an Oswald Type 6 pipe illustrated by Hind and Crummy, no 2272 (Hind and Crummy 1988, p49-50, fig 55: nos 2634-2635).		Oswald Type 6	c.1660-80
			0.022	1				Complete bowl with large sub-rounded flat heel, poorly trimmed seam behind heel, although the seams on the bowl are neatly trimmed. Traces of line around bowl below rim is indistinct, appears to be a large version of the Oswald Type 6.		Oswald Type 6	c.1660-80

Context	Cut/Feature	Phase	Weight (kg)	No of complete or near complete pipe bowls	No of bowl fragments	No of heel fragments	No of pipe stem fragments	Description	Decorative Motif and location	Form	Date Range
23			0.011	1				Complete pipe bowl with slight chipping of rim, which has resulted in a cracked bowl. Neatly trimmed mould lines on front and back of bowl with an angled but flat broad oval base and there is no surviving stem, having broken at the joint between stem and bowl.		Oswald Type 6	c.1660-1680
			0.014	1				Complete pipe bowl with spur and short length of stem neatly trimmed mould seam on the back of pipe, more obvious and poorly trimmed at the spur and rim on the front of bowl.		Oswald Type 17	c.1640-70
			0.008		1			Fragment of back of bowl and stem with clear fine rouletting below the rim and neatly trimmed bowl seam.		Oswald Type 6	c.1660-80
			0.008			1		Fragmentary heel and small surviving amount of bowl with short attached pipe stem. The heel is large, sub-rounded with an obvious mould seam running across the base and poorly trimmed behind the base. Unclear exactly what the form is but it is likely an Oswald Type 6 or 7.		?Oswald Type 6	c.1660-80
			0.245				54	Fragments of pipe stem.			Not closely datable
			0.010			1		Fragment of pipe stem with damaged, originally flat, heel and lower part of pipe bowl. The heel may originally have been heart-shaped but what may be a poor quality mould or poor removal from the mould has distorted it and the mould line can still be clearly seen and felt running across it. All seams on the front and back of the bowl are otherwise mostly removed. It is unclear what the form of this pipe is, although the surviving angles of the bowl suggest it might be an Oswald Type 9.		?Oswald Type 9	c.1680-1710
			0.011		1			Incomplete bowl from a spurred pipe, the spur and a short length of stem survive. Neatly trimmed seams on the upper surface of the pipe, can still be seen on the lower part of the bowl and behind the spur although trimmed to some degree on the stem.		Oswald Type 17	c.1640-70

Context	Cut/Feature	Phase	Weight (kg)	No of complete or near complete pipe bowls	No of bowl fragments	No of heel fragments	No of pipe stem fragments	Description	Decorative Motif and location	Form	Date Range
23			0.004		2			Incomplete bowl, approximately half survives broken into two fragments. The back and right-hand side of the bowl survived having broken at junction with stem. No surviving heel. The pipe appears relatively well used and has a relatively small diameter with traces of lining below the rim. The way the bowl has broken makes it difficult to be precise about its form, but it is likely to be an Oswald Type 6.		?Oswald Type 6	c.1660-80
			0.014		1			Incomplete bowl, the majority of the upper part having been lost, however the small length of stem and the overall flat heel survive. Neatly trimmed mould seams on bowl, some burnishing, however the seams are still clearly visible and can be felt on the stem. The relatively straight sides of the bowl suggest an Oswald Type 7.		Oswald Type 7	c.1660-80
			0.010		1			Incomplete bowl with sub-rounded flat heel and broken at junction between bowl and stem. Much of the upper part of rim is also missing. Neatly trimmed mould seams, slight trimming on edge of bowl. Unclear if Type 6 or 7.		Uncertain	17th century
			0.015	1				Near complete bowl, only a small fragment missing from the rim with rounded flat heel and short surviving length of stem. Mould seams front and back neatly trimmed and lightly burnished, lined on back of bowl below rim.		Oswald Type 6	c.1660-80
			0.016	1				Near complete pipe bowl, large chunk having been removed from the rim. Lining below rim on back of pipe, it may have been present on the front but that part of the pipe is missing. Flat sub-square heel, traces of mould seam behind heel, stem having been lost. Appears to be a large Oswald Type 6.		Oswald Type 6	c.1660-80
			0.008			1		Partial bowl with complete sub-square flat heel. The bowl has broken at join with stem and all the upper part of the bowl has broken away. The exact form of the pipe is unclear, although it is likely to be 17th century.		Uncertain	Not closely datable



Context	Cut/Feature	Phase	Weight (kg)	No of complete or near complete pipe bowls	No of bowl fragments	No of heel fragments	No of pipe stem fragments	Description	Decorative Motif and location	Form	Date Range
			0.011			1		Short length of stem with rounded flat heel and partial bowl which appears very heavily burnt internally. Mould seams on stem and body have been neatly trimmed although there are traces on the back of the heel. The pipe bowl has broken in such a way that form is uncertain, however it most closely matches an Oswald Type 7.		?Oswald Type 7	c.1660-80
24	Cleaning SE, hollow way	4	0.020	1				Complete bowl and moderate length of stem, there is a small amount of damage to the rim. The mould seams are neatly trimmed on the back of the bowl, less so on the front and the heel which is round and flat, shows the seam line. Faint traces of lining on the back of the bowl over a short length below the rim.		Oswald Type 7	c.1660-80
			0.012	1				Complete bowl with a few nibbles missing from the rim, oval flat heel and the pipe has broken from the stem at the join between them. Relatively neat trimming of mould seams on front and back of the pipe with a little piece of mould seam surviving on the rim.		Oswald Type 7	c.1660-80
			0.017	1				Complete bowl with large oval heel and short remaining length of stem. Neatly trimmed mould seams on the stem, only slightly visible behind the heel. Lines below the rim scar on bowl might be post-depositional damage.		Oswald Type 7	c.1660-80
24			0.012	1				Complete bowl with surviving small rounded flat heel, the pipe has broken close to the joint between stem and bowl, moderately well trimmed mould seams on front of pipe neatly trimmed on back. Bowl is slightly burnished and there is a line of rouletting below the rim, above which is untrimmed overspill of clay from the mould, protruding above the rim line on the front of the bowl.		Oswald Type 7	c.1660-80
			0.013	1				Complete pipe bowl with sub-rounded flat heel and short surviving length of stem. Neatly trimmed mould lines back and front and faint line of rouletting below rim, marks on base indicate knife trimming.		?Oswald Type 6	c.1660-80

Context	Cut/Feature	Phase	Weight (kg)	No of complete or near complete pipe bowls	No of bowl fragments	No of heel fragments	No of pipe stem fragments	Description	Decorative Motif and location	Form	Date Range
			0.014	1				Near complete pipe bowl, mainly small areas of rim have been broken away. Oval flat heel, neatly trimmed mould line, very short amount of stem still attached to pipe bowl.		Oswald Type 7	c.1660-80
			0.013	1				Near complete pipe bowl, having broken at junction with stem, only small amount of heel survives on which is an obvious mould seam. On front and back of bowl, the mould seams have been neatly removed and the bowl is lightly burnished with possible traces of lining close to rim edge.		?Oswald Type 7	c.1660-80
			0.016	1				Semi-complete bowl, a small part of the rim survives below which is a line of rouletting. The heel is flat and sub-rounded and the mould seam can be felt and seen running across it on the body and stem, a short length of which survives. The mould seam has been moderately well trimmed and removed. Enough of the bowl remains to indicate that it was an Oswald Type 6.		Oswald Type 6	c.1660-80
			0.014	1				Complete pipe bowl with broad oval flat heel. Neatly trimmed seam lines front and back. A large chunk of the relatively tall bowl has spalled away or been broken, revealing thick walls.		Oswald Type 6	c.1660-80
			0.010		1			Incomplete bowl, the upper half of which is completely missing and the bowl has broken at junction with stem, although the sub-square flat heel survives. All seams are neatly trimmed. The slightly bulbous nature of the surviving bowl wall suggests it might be Oswald Type 6.		?Oswald Type 8	c.1660-80
			0.020	1				Complete bowl with flat round heel, neatly trimmed mould seams, lightly burnished and with an uneven line of rouletting below the rim. A moderate length of stem survives and the bowl is slightly discoloured from heat.		Oswald Type 5	c.1640-60

Context	Cut/Feature	Phase	Weight (kg)	No of complete or near complete pipe bowls	No of bowl fragments	No of heel fragments	No of pipe stem fragments	Description	Decorative Motif and location	Form	Date Range
24			0.015	1				Complete bowl, apart from some nibbles around the rim, oval flat heel, relatively neatly trimmed mould seams almost flattened on the stem. Possibly burnished, traces of lining on back of rim and small hole in the surface of the rim front which may be a mould fault. A short length of stem survives.		Oswald Type 7	c.1660-80
			0.013	1				Complete bowl with moderately well trimmed mould seams on front and back of bowl. Oval flat heel, mould seam behind and on the heel and poorly trimmed moulded decoration on both sides of the bowl. Well formed mulberry moulding is relatively sharp, suggesting the mould was not particularly worn.	Botanical: mulberry on bowl both left and right sides	Oswald Type 7	c.1660-80
			0.020	1				Complete bowl with oval flat heel and moderate length of surviving stem. Well trimmed mould seams with only small areas on front rim where the seam is still visible. Behind the heel what appear to be trimming marks can be seen. Lightly burnished, mainly in the areas close to the trimming, faint traces of rouletted line below the rim and mulberry decoration on right and left sides of bowl. On both sides the decoration is somewhat flattened and indistinct, with only a small part of the raised decoration area standing proud of the bowl, suggesting the mould used is somewhat worn.	Botanical: mulberry on bowl both left and right sides	Oswald Type 7	c.1660-80
			0.014	1				Complete bowl with overall flat heel, neatly trimmed mould seams and a clear line of rouletting below the rim. Short length of surviving stem.		Oswald Type 6	c.1660-80
			0.020	1				Complete bowl with two small nicks out of the rim, large sub-square heel, neatly trimmed mould seams below the rim. Sight traces of burnishing on bowl, which is moderately large.		Oswald Type 6	c.1660-80
			0.020	1				Complete bowl with various small breaks around the rim, oval flat heel and neatly trimmed mould seams, lined unevenly below rim.		Oswald Type 7	c.1660-80



Context	Cut/Feature	Phase	Weight (kg)	No of complete or near complete pipe bowls	No of bowl fragments	No of heel fragments	No of pipe stem fragments	Description	Decorative Motif and location	Form	Date Range
24			0.011			1		Complete flat oval heel, neatly trimmed mould seams, slight flattening on the upper surface of the short surviving length of stem and small section of surviving seam and marks at base of heel. Pipe is lightly burnished. The bowl that survives suggests the bowl might be an Oswald Type 7.		?Oswald Type 7	c.1660-80
			0.015			1		Complete moderately sized oval flat heel and moderate length of stem attached to the pipe bowl, the upper part of which is completely broken away. The form of the pipe is not entirely clear but is likely to be an Oswald Type 6.		Oswald Type 6	c.1660-80
			0.011	1				Complete pipe bowl which has broken at junction with stem. Complete circular flat heel survives with mould seam, which can be seen running across it. The mould seams on the bowl are moderately well trimmed with a fragment surviving on the back of the bowl. On the front of the bowl at the junction with the rim an even line of rouletting runs around the bowl below the rim.		Oswald Type 7	c.1660-80
			0.004		1			Fragment of pipe bowl, angle of rim suggests it is the front the pipe bowl. Well trimmed mould seams and a line of rouletting below the rim. The angle of the bowl suggests it may be from an Oswald Type 7.		?Oswald Type 7	c.1660-80
			0.006		1			Fragment of pipe bowl, the upper part of the rim and the left side of the bowl have been lost and it is broken at joint with the stem, although a complete sub-square flat heel survives. It is unclear which Oswald form it most closely matches however it is likely to be 17th century.		?Oswald Type 7	17th century
			0.009			1		Incomplete sub-square flat heel and lower portion of bowl with short length of stem attached. Mould seams appear to have been neatly trimmed, except behind the heel and the seam line across the heel can be seen and still felt. The pipe may have been lightly burnished. The form is uncertain although it is likely to be 17th century.			17th century



Context	Cut/Feature	Phase	Weight (kg)	No of complete or near complete pipe bowls	No of bowl fragments	No of heel fragments	No of pipe stem fragments	Description	Decorative Motif and location	Form	Date Range
24			0.017	1				Near complete bowl, although slightly more than half of the rim is missing. Sub-square flat foot, short length of surviving stem, very neatly trimmed mould seams, lightly burnished. Where rim survives there is a fine line of rouletting below it.		Oswald Type 7	c.1660-80
			0.007			1		Near complete heel, fragments of bowl and short length of stem. Mould seam is visible across the sub-rounded heel but has been neatly trimmed and the pipe is lightly burnished. Uncertain form but likely to be 17th century.		Uncertain	17th century
			0.019	1				Near complete pipe bowl, with overall flat heel, approximately 50% of the rim missing. Rouletted line on back of bowl below rim, moderately well trimmed mould seams on front and rear of bowl, although more obvious behind the heel and on the stem, no evidence of it on the front of the relatively tall bowl.		Oswald Type 6	c.1660-80
			0.023				2	Pipe stem fragments.			Not closely datable
			0.011			1		Semi-complete bowl, the majority of the rim has been lost but the flat rounded heel survives. The mould seams have been neatly trimmed although the scar across the heel can still be felt and seen. The bowl is broken at the joint with the pipe stem. There is enough of the bowl surviving to indicate that it is likely to have been an Oswald Type 7.		Oswald Type 7	c.1660-80
25	Cleaning over layer 30	4	0.011	1				Near complete bowl, broken at joint with stem, partial small sub-rounded flat heel. Mould seams have been trimmed on the bowl, although poorly on the front with fine, if somewhat uneven rouletting on the right side of the bowl. A relatively small Oswald Type 7.		Oswald Type 7	c.1660-80
			0.010	1				Near complete bowl, broken at joint with stem, partial sub-rounded flat heel lines below the rim, the majority of which is on the back the bowl. Mould seams have been trimmed.		Oswald Type 6	c.1660-80

Context	Cut/Feature	Phase	Weight (kg)	No of complete or near complete pipe bowls	No of bowl fragments	No of heel fragments	No of pipe stem fragments	Description	Decorative Motif and location	Form	Date Range
			0.016	1				Partial bowl with complete small sub-rounded flat heel and moderate length of stem. Traces of fine rouletting below rim on back of bowl, all of the mould seams have been trimmed except that on the stem. Lightly burnished. The form is a little uncertain, but most likely an Oswald Type 6, it most closely matches a pipe illustrated by Hind and Crummy (Hind and Crummy 1988, p49-50, fig 55: no 2272).		Oswald Type 6	c.1660-80
			0.011	1				Partial pipe bowl with coarse rouletting around the bowl below the rim, which has been poorly finished. Most closely resembles a pipe illustrated by Hind and Crummy, a Type 7, fig 55: nos 2634. The Type 7 pipes are described as a larger version of Type 6, which in turn is the equivalent of Oswald's Type 6 (Hind and Crummy 1988, p49-50, fig 55: nos 2634-2635).		Oswald Type 6	c.1660-80
30	Layer	4	0.002				2	Fragments of pipe stem from close to the mouthpiece, one is slightly finished and might actually be a mouthpiece.			Not closely datable
			0.014					A near complete pipe bowl which is split in half, a short section of pipe stem survives. The sub-rounded flat heel also survives, although it is badly trimmed, the mould lines of the pipe been trimmed and the bowl is intermittently rouletted below the rim.		Oswald Type 6	c.1660-80
			0.010	1				Complete pipe bowl which has broken at junction with stem, leaving the flat heel, which appears to be round and complete. The mould seams have been trimmed relatively neatly, being visible only on the front of the bowl. Below the rim is a faint line of rouletting, most clearly visible on the front of the bowl. The bowl most closely resembles one illustrated by Hind and Crummy, (Hind and Crummy 1988, p49-50, fig 55: nos 2269).		Oswald Type 6	c.1660-80
30			0.005		3			Fragments from possibly three separate pipe bowls.			Not closely datable

Context	Cut/Feature	Phase	Weight (kg)	No of complete or near complete pipe bowls	No of bowl fragments	No of heel fragments	No of pipe stem fragments	Description	Decorative Motif and location	Form	Date Range
			0.135				39	Fragments of pipe stem.			Not closely datable
			0.015	1				Near complete pipe bowl, a small area of rim is missing. It has a broad oval flat heel and short length of stem attached. The mould lines have been trimmed neatly although there are some rough areas on the stem, indicating the mould may be slightly worn and the trimming behind the heel is a little rough. No rouletting or line is visible on the surviving area of rim, although a small indentation at the point of break suggests it was present in part on the front of the bowl. The bowl itself does not appear bulbous enough to be an Oswald Type 6 and is therefore most likely a small to medium Oswald Type 7.		Oswald Type 7	c.1660-80
			0.014	1				Near complete small to moderately sized pipe bowl, small area of the rim is missing. It has a complete flat round heel and length of pipe stem attached. The mould seams are neatly trimmed and the pipe is lined below the rim most clearly showing on the back of the bowl. The profile suggests it is an Oswald Type 5.		Oswald Type 5	c.1640-60
			0.006	1				Partial pipe bowl with complete heel and short length of stem. The pipe is split into two fragments, but allows for a near full profile. Mould seams appear to have been trimmed and the heel is sub-square. The surviving profile suggests a small Oswald Type 7.		Oswald Type 6	c.1660-80
33	Layer	3	0.008			1		Fragment of pipe stem and semi-complete heel sub-square in shape and flat. Mould seam at the back of the heel is poorly trimmed and dating is uncertain, although it is likely to be 17th century			Not closely datable
			0.031				6	Fragments of pipe stem, the longest of which is 78mm.			Not closely datable



Context	Cut/Feature	Phase	Weight (kg)	No of complete or near complete pipe bowls	No of bowl fragments	No of heel fragments	No of pipe stem fragments	Description	Decorative Motif and location	Form	Date Range
33			0.015	1				Incomplete pipe bowl, the upper part of the bowl and rim having been lost, short length of stem and complete round flat heel. The sides of the pipe are relatively straight and it is most likely an Oswald Type 7.		?Oswald Type 7	c.1660-80
			0.010	1				Partial pipe bowl with complete, relatively large, round heel and short length of attached stem. Appears to be lined below the rim on the back of the bowl. Relatively small pipe, it may be an Oswald Type 6.		Oswald Type 6	c.1660-80
35	Layer	3	0.027				8	Fragments of pipe stem.			Not closely datable
			0.006	1				Partial pipe bowl. Traces of mould seam on front of pipe and rouletting on back of bowl below rim. Form is unclear although it is similar to the pipe bowl recovered from context 1, which most closely resembles pipes illustrated by Hind and Crummy, a Type 7 pipe, fig 55: nos 2634-2635. The Type 7 pipes are described as a larger version of Type 6, which in turn is the equivalent of Oswald's Type 6 (Hind and Crummy 1988, p49-50, fig 55: nos 2634-2635).		?Oswald Type 6	c.1660-80
43	Layer	4	0.004				1	Fragment of pipe stem.			Not closely datable
44	Layer	3	0.041				11	Fragments of pipe stem.			Not closely datable
			0.006			1		Partial sub-square heel and fragment of bowl. Heel angle of bowl suggests either Oswald Type 5 or 7, both place it mid to late 17th century.			17th century
46	Layer	3	0.006			1		Fragment of pipe stem with partial heel and bowl. Not enough present to decide on form.			Not closely datable



Context	Cut/Feature	Phase	Weight (kg)	No of complete or near complete pipe bowls	No of bowl fragments	No of heel fragments	No of pipe stem fragments	Description	Decorative Motif and location	Form	Date Range
			0.009	1				Complete bowl and flat heel, with traces of rouletting below the bowl rim.		Oswald Type 5	c.1640-60
			0.011			1		Complete sub-rectangular flat heel and fragment of bowl and stem, broken in such a way as to be unable to establish form.			Not closely datable
			0.078				16	Fragments of pipe stem, the longest being 91 mm. A single fragment shows significant tapering, suggesting it is towards the mouthpiece end of the pipe stem.			Not closely datable
			0.010	1				Partial bowl with stem and near complete flat heel, with surviving mould seam on heel. Incised or lined below rim.		Oswald Type 6	c.1660-80
67	Layer	3	0.011			1		Fragment of pipe stem with the beginnings of heel, but not enough to discern a shape, mould seams somewhat poorly finished at joint of stem and heel.			Not closely datable
			0.017	1				Complete pipe bowl with rounded flat heel and short length of stem. Somewhat uneven rouletting below rim, clearest on the back of the bowl. The mould seams have all been neatly trimmed. This pipe bowl most closely resembles an Oswald Type 6.		Oswald Type 6	c.1660-80
			0.041				6	Fragments of pipe stem.			Not closely datable
69	68 pit fill	4	0.018	1				Complete pipe bowl with slightly oval flat heel. Mould seams have been trimmed, although a small traces still visible on the front of the bowl below the rim, and the pipe bowl is lined rather than rouletted below the rim, but it is intermittent, the majority is visible on the back of the bowl. Most closely resembles the Oswald Type 6 pipes illustrated by Hind and Crummy.		Oswald Type 6	c.1660-80

Context	Cut/Feature	Phase	Weight (kg)	No of complete or near complete pipe bowls	No of bowl fragments	No of heel fragments	No of pipe stem fragments	Description	Decorative Motif and location	Form	Date Range
			0.020				4	Fragments of pipe stem.			Not closely datable
			0.001		1			Small fragment of pipe bowl.			Not closely datable
			0.003				2	Small fragments of pipe stem.			Not closely datable
70	68 pit fill	4	0.017	1				Complete pipe bowl with oval flat heel and short length of stem. Mould seams have been neatly trimmed, although the trimming of the heel is slightly uneven. A faint line can be seen below the rim on the back of the bowl. The bowl is slightly bulbous, suggesting a Type 6 rather than the Type 7.		Oswald Type 6	c.1660-80
			0.017	1				Complete pipe bowl with sub-rectangular flat heel and moderate length of stem. Mould seams have been neatly trimmed, although can still be felt on the upper part of the bowl on the front. The bowl is slightly bulbous, suggesting a Type 6 rather than the Type 7, although the bowl appears neither lined or rouletted.		Oswald Type 6	c.1660-80
			0.020	1				Complete pipe bowl with sub-square flat heel and moderate length of stem. Mould seams have been neatly trimmed. The bowl is rouletted below the rim, visible on the back and sides of the bowl. The bowl is slightly bulbous, suggesting an Oswald Type 6 rather than Type 7.		Oswald Type 6	c.1660-80
			0.021	1				Complete pipe bowl with sub-square flat heel and moderate length of stem. Mould seams have been neatly trimmed, although a small fragment of mould seam survives below the rim on the front and back of the bowl. The bowl is lined below the rim, only visible on the back of the bowl. The bowl is slightly bulbous, suggesting a Type 6 rather than the Type 7.		Oswald Type 6	c.1660-80

Context	Cut/Feature	Phase	Weight (kg)	No of complete or near complete pipe bowls	No of bowl fragments	No of heel fragments	No of pipe stem fragments	Description	Decorative Motif and location	Form	Date Range
			0.009		1			Incomplete bowl, having broken above join with heel and stem. Neatly trimmed mould seams. A short section of rouletting survives below the rim on the back of the bowl. The angle and shape of the bowl suggest a Type 7.		Oswald Type 7	c.1660-80
			0.022	1				Near complete pipe bowl, small area of rim is missing, with sub-rounded flat heel, and surviving length of stem. The mould seams have been trimmed, although still visible on the upper surface of the stem, towards the rim on the front of the pipe and behind the heel. There is an uneven line of rouletting around the pipe rim, visible most clearly on the back of the bowl. A medium sized bowl from an Oswald Type 7 pipe.		Oswald Type 7	c.1660-80
			0.022	1				Near complete pipe bowl with only a small nibble out of the rim, and a short surviving length of stem, however the flat heel is almost completely missing. Mould seams have been neatly trimmed, although a small fragment of seam survives on the rim at the front of the bowl and a short area of lining can be seen on the back of the bowl.		Oswald Type 7	c.1660-80
			0.013	1				Near complete pipe bowl, with small nibbles out of the rim, broken at junction with stem, sub-rounded flat heel. Possibly lined or rouletted very close to the edge of the rim, so only a small section can be seen on the right side of the pipe bowl.		?Oswald Type 7	c.1660-80
			0.027	1				Near complete bowl with only a small area of missing rim, sub-rounded flat heel and moderate length of stem attached. The heel has been poorly trimmed, although the mould seams on the bowl and stem have been neatly trimmed. On the left and right sides of the bowl is a large mulberry tree. On the left side of the bowl, the mulberries have been slightly flattened and are somewhat indistinct at the top of the tree and on the right-hand side of the bowl many of the mulberries on the tree are indistinct, suggesting the mould was somewhat worn. The pipe is moderate to large in size.	Botanical: mulberry on bowl both left and right sides	Oswald Type 7	c.1660-80

Context	Cut/Feature	Phase	Weight (kg)	No of complete or near complete pipe bowls	No of bowl fragments	No of heel fragments	No of pipe stem fragments	Description	Decorative Motif and location	Form	Date Range
			0.013	1				Complete pipe bowl and sub-rounded flat heel with the stem having broken at join with bowl. Traces of rouletting below the rim of visible on the back of the bowl. The mould seams have been moderately well trimmed, although the knife trimming is obvious and the trimming behind the heels poor. To the right and left sides of the bowl is a mulberry tree, that on the left side is very flattened and indistinct and on the right side the mulberries towards the top of the tree have become somewhat flattened and indistinct suggesting that the mould was worn.	Botanical: mulberry on bowl both left and right sides	Oswald Type 7	c.1660-80
			0.012	1				Complete pipe bowl, having broken slightly after junction between bowl and stem, with complete relatively small oval heel. Lined or rouletted below the rim, which survives only on the back of the bowl. Relatively straight sided bowl.		Oswald Type 7	c.1660-80
			0.015	1				Complete pipe bowl with slightly oval flat heel. Mould line on the back of the bowl and stem is neatly done. However the seam is still obvious on the front of the bowl, behind the heel and on the stem. A short line of rouletting survives below the rim on the back of the bowl but runs at an angle to the bowl rim. A short length of rouletting above this line survives on the front of the bowl though there are no traces of rouletting on the right side of the pipe bowl. To the right and left sides of the bowl is a mulberry tree, on the left side of the bowl part of the mulberries have become flattened and on the right side of the bowl several appear to be missing completely and are also somewhat flattened with the stem being almost non-existent, indicating that the mould was possibly worn. Small to moderate sized Oswald Type 7 bowl.	Botanical: mulberry on bowl both left and right sides	Oswald Type 7	c.1660-80

Context	Cut/Feature	Phase	Weight (kg)	No of complete or near complete pipe bowls	No of bowl fragments	No of heel fragments	No of pipe stem fragments	Description	Decorative Motif and location	Form	Date Range
			0.013	1				Complete pipe bowl with spur and short length of stem attached to bowl. Mould seams have been moderately well trimmed on the bowl, although they are visible towards the base of the bowl at the front where it reaches the spur and on the back of the bowl towards the rim and on the stem. Below the rim is a band of neat rouletting, which is visible for almost the entirety of the rim circumference. The decoration is relatively well executed, although the mulberry tree is somewhat unclear on the right side of the pipe bowl, there being apparently extraneous clay between the mulberries.	Botanical: mulberry on bowl both left and right sides.	Oswald Type 17	c.1640-70
			0.009		1			Incomplete bowl, having broken above join with heel and stem. Neatly trimmed mould lines, although a lump survives on the front of the bowl and the bowl is rouletted below the rim, visible only on the back of the bowl and towards the sides. The angle and shape of the bowl suggests a Type 6 or possibly a Type 7.		Uncertain	17th century
			0.018	1				Near complete pipe bowl, small areas of the rim are missing, with complete sub-rounded flat heel and short length of stem. Mould lines have been neatly trimmed, although a small area survives at the back of the heel and a faint line of rouletting can be seen below the rim, the majority of which survives on the right side and front of the bowl. The curve of the bowl suggest a Type 6 rather than Type 7 form.		Oswald Type 6	c.1660-80
			0.019				3	Pipe stem fragments, one of which is tapering as if towards the mouthpiece of the pipe and the longest of which is slightly curved and 127 mm long.			Not closely datable

Table 9: Clay pipe catalogue

B.9 Whetstones

- B.9.1 The whetstones all appear to be of the same material and manufactured to a common size. Most were square in cross-section despite evident use causing smooth, tapered and concave sides. Only one (SF54) was slightly larger with bevelled down edges. Although all were broken, wear would probably be concentrated near the centre so it is suggested they were little more than 200mm in length originally. Their dimensions are recorded in Table 10.
- B.9.2 All came from an 18th century pit (**68**) but may have become mixed in with the backfill. They were probably originally deposited in the hollow way and within the demolition layers surrounding 17th century Buildings 2, 3 and 4. They almost certainly relate to the occupation of the buildings, being used for honing metal blades. A number of knives and scissors were found in association with the buildings, including two iron knives from Pit **68** (SF58 & SF59).
- B.9.3 The prevalence of square edged whetstones collected may result from sampling bias. More heavily used, rounded whetstones may have been mistaken for natural stones within deposits containing so many cobbles.

	Context	Weight (kg)	Material	Colour	Dimension LxWxT (mm)	Comment
SF50	70	0.157	Fine micaceous Sandstone, ferrous inclusions, larger grains protruding from one surface	Mid-grey, red particles, also ferrous inclusions.	95 x 32 x 32	Partial. Square cross-section. One (original) end slightly rounded. Opposite end broken following use. Smooth and slightly concave on all four sides. Some grooves visible within the cavities. Blackened on 3 sides and original end.
SF51	70	0.099	Fine micaceous Sandstone, some quartz crystals up to 1mm. Ferrous inclusions one side	Mid-dark grey	85 x 31 x 25	Partial. Bevelled cuboid shape; one end bevelled over original break, opposite end broken following use. 6x parallel grooves at break on bevelled side, max. 12mm long. Modern damage near bevelled end.
SF52	70	0.074	Fine micaceous Sandstone	Mid-dark grey to reddish grey	63 x 30 x 27	Partial. Sub-square cross-section. Smooth & flat all 4 sides, both ends broken following use.
SF53	70	0.072	Fine micaceous Sandstone, some quartz crystals up to 1mm, larger grain protruding from one surface	Mid-grey to grey-green, reddish band running throughout at acute angle	79 x 24 x 24	Partial. Square cross section. Slight bevel towards one end, tapers to opposite end (22x22mm) which was broken following use. Smooth on all four sides.
SF54	70	0.107	Fine micaceous Sandstone, some quartz crystals up to 2mm. Ferrous inclusions one side	Mid-grey to greenish grey	92 x 39 x 38	Partial. Cuboid, square cross section, slightly tapering to 25x25mm at clean break, presumably original end. Opposite has rounded irregular break. Whole is broken into two refitting pieces, 50mm and 47mm in length; missing fragment from central break. Worked smooth on 3 sides, avoiding side with ferrous inclusions.
SF55	70	0.045	Fine micaceous Sandstone	Mid-grey to greenish grey. Red & yellow grains in modern broken surface.	47 x 28 x 27	Fragment. Square cross section. Smooth & flat on 4 sides and on original end which must have been used.
SF56	69	0.097	Fine micaceous Sandstone, some quartz crystals up to 2mm. Ferrous inclusions visible at broken end.	Mid-grey to greenish grey	94 x 28 x 26	Rectangular cross-section, slightly bevelled at one end. Opposite end is a clean break following use. Central portion tapered from use on all sides to 24x24mm. Modern damage to bevelled end.

Table 10: Whetstones

B.10 Stone Spindle Whorl Fragment

B.10.1 A broken spindle whorl (SF 2) was recovered from Context 5, part of medieval soil Layer 4. It is 22mm in length and would originally have been 12-15mm in diameter with a 6mm hole drilled through its centre. The fragment represents approximately 1/3 of the whole and weighs 6g.

B.11 Fired Clay Object

B.11.1 A fired clay object (SF 3) was recovered from Context 17, the upper fill of Ditch 18. Little surface survives on the fragment which is 30mm long, 25mm wide and 22mm thick. One flattish face may be an original surface. Opposite this is a more polished, concave surface. The object may be a spindle whorl or weight.

B.12 Worked Bone Object

B.12.1 Small Find 42 was a worked bone object (Plate 11). It was recovered from Context 63, part of medieval soil Layer 4. It is 59mm in length, 17mm wide and 8.5mm thick. It is punctuated by a hole near its widest point. A notch near the end meets a hole drilled from the same end, allowing a cord to pass through the end and the notch. The

opposite end is broken. Both sides are decorated with three sets of three parallel lines and the surface is polished throughout with use. A groove running the length of one side has a rougher finish.

- B.12.2 The object will be examined properly for publication. Its broken end may originally have tapered to a point and other examples are thought to be used for cordage (Ian Riddler, pers. comm.). Examples come from Iron Age to Anglo-Saxon contexts, but they are more common in Europe and are associated with high status settlements, often well-made and decorated (Ian Riddler, pers. comm.).

APPENDIX C. ENVIRONMENTAL REPORTS

C.1 Faunal Remains

By Zoe Ui Choileain

Introduction

- C.1.1 A total weight of 4.996kg of animal bone was recovered from the site at Hamerton.
- C.1.2 The majority of the bone was recovered from post-medieval demolition layers and floor layers with a small percentage being recovered from medieval ditches and postholes.

Methodology

- C.1.3 All identifiable elements were recorded using a version of the criteria described in Davis (1992). Completeness was assessed in terms of percentage and zones present (Dobney and Reilly 1988). Identification of the assemblage was undertaken with the aid of Schmid (1972) and France (2009). No measurements were taken as no bones were complete. Taphonomic criteria including indications of butchery, pathology, gnawing activity and surface modifications as a result of weathering were also recorded where evident using the 0-5 scale devised by Behrensmeyer (1978).

Results

- C.1.4 The results are summarised in Table 11 below.

Cut	Context	Feature	Unit	Sheep/ Goat	cow	Horse	Pig	Dog	Bird	Fish	Small mammal	Tiny mammal	Medium mammal	Large mammal	N.O.I
	4	layer		1									2		1
	5	layer	3												1
	7	Demolition layer				28									1
	10	Demolition layer									1		1	14	2
	13	Buildup layer	3		4	1	1				8		1	11	5
18	17	feature		1						4		4	1		3
	19	Disuse layer		1	1		1						5		3
	20	Disuse layer			1										1
	21	Disuse layer		6	3	1	2		3		2		15	1	5
	23	Disuse layer	1	12	36				2		7		29	1	7
	24	Disuse layer			1									12	1
	30	deposit	34	10	26		2				7	15	16	4	4
	33	Layer floor		4	9		2		10		4		27	1	4
	35	Layer internal surface			2		2	1		1	2	3	6		6
	36	Residue layer	4						1				3		1
	39	Residue layer	2												1
	44	External layer		8	5		1				5	1	12	1	4
	46	External layer		2	2						1		1		3
	47	External layer	4	1	1		7							1	3
	49	External layer		2	7		3				2		18		4
50	52	oven	3												1
53	55	pit	1												1
	56	Layer hearth base	3												1
	57	soil											3		1
	58	soil		1									8	1	2
	60	soil									1				1
	63	soil											3		1
64	65	hearth													1
68	69	pit	93	3			1				4				2
	70				2										1
	71	soil		2			1						5		1
18	77	ditch	5						1			7	3		3
78	79	pit									1				1
84	85	ditch	9		1				1				4		2
88	89	ditch	1		1										2
90	91	posthole	11						1						1
	92	burnt layer	2							1					1
93	94	pit	8							2					1
101	102	posthole	3												1
116	117	posthole			1										1

Table 11: Identifiable animal bone fragments

- C.1.5 While the fragmentation level was high the overall surface condition of the bone was good (Behrensmeyer grade 2, 1978). Some detail was masked by erosion and root activity. A large proportion of the bone recovered was still, however, identifiable to species.
- C.1.6 The most strongly represented species were cattle and sheep which were distributed evenly throughout contexts. Horse bone and pig bone appeared primarily from the post-medieval contexts and showed no sign of butchery. Bird and fish bone make up the lowest percentage of this assemblage. A single dog vertebra appears in Context 35.
- C.1.7 In general the average age of both cattle and sheep was young adult although the teeth from the horse bone in Context 23 suggest an older animal (Hillson 2005, 320).

C.1.8 Butchery marks were noted primarily on cattle bones and sheep bones. The butchery marks present were represented by parallel short fine lines with a v shaped profile cut marks as are created by a knife and wider chop marks as would be created by an axe or cleaver (O'Conner 2000, 46). A single fragment of possible worked bone was retrieved from Context 23. This was a small mammal bone approx 3cm long which appeared to be slightly polished and has a single flattened facet on one side with evidence of faint diagonal tool marks.

Cut	Context	Feature	Butchery	Pathology	Burnt bone
	4	layer	fine cut marks on sheep metapodial		
	7	Demolition layer		Poss. infection around tooth line	
	13	Soil layer		fine cut marks on cow femur	
	21	Disuse layer		fine cut marks on med mammal bone, cut mark on cow rib	
	23	Disuse layer		chop marks on cow foot bones, fine cut marks on ribs, fine cut marks on sheep metapodial and mandible	1 frag unid burnt bone
	30	Deposit		chop marks on cow bones	3 frags calcined bone large mammal, 9 frags calcined unid
	33	Layer floor		chop marks on cow bones- humerus	
	39	Residue layer			2 frags unid burnt bone
	44	External layer		cut marks on cow rib and metapodial, chop mark on med mammal frag	
	46	External layer		cut marks on cow ribs	1 frag burnt medium mammal bone
	47	External layer		Cut marks on cow bone	
	56	Layer hearth base			3 frags calcined bone
68	69	pit			15 frags unid calcined bone
18	77	ditch			1 frag burnt bone
88	89	ditch		fine cut marks on cow femur	
90	91	posthole		9 frags burnt bone	

Table 12: Summary of butchery and burnt bone

Discussion and conclusion

C.1.9 The assemblage primarily represents domestic animals. Cattle and sheep are the most commonly represented with horse bone and pig bone appearing in the post-medieval contexts. The identifiable bone is primarily that of younger adult animals (Hillson 2005 320) with the exception of the horse bone which represents an older adult. The bone would appear to primarily represent domestic waste with butchery marks being evident on cattle and sheep bones. There is no evidence of any industrial use. The quantity of fish bone present is so minimal that no further identification is required. There is little evidence for any pathology on any of the bone and in total there is no further information that this assemblage can provide.

C.2 Environmental samples

By Rachel Fosberry

Introduction

- C.2.1 Twenty-eight samples were taken from features within the excavated areas at Hamerton, Cambridgeshire in order to assess the quality of preservation of plant remains and their potential to provide useful data as part of further analysis.
- C.2.2 Features sampled include ditches and pits dating from the medieval through to the post-medieval period with some residual Roman pottery.

Methodology

- C.2.3 For the initial assessment, one bucket (approximately 10 litres) of each bulk sample was processed by water flotation (using a modified Siraff three-tank system) for the recovery of charred plant remains, dating evidence and any other artefactual evidence that might be present. The samples were soaked in a solution of sodium carbonate prior to processing to deflocculate the clay matrix. The floating component (flot) of the samples was collected in a 0.25mm nylon mesh and the residue was washed through 10mm, 5mm, 2mm and a 0.5mm sieve. Both flots and residues were allowed to air dry. A magnet was dragged through each residue fraction prior to sorting for artefacts. Any artefacts present were noted and reintegrated with the hand-excavated finds. The dried flots were subsequently sorted using a binocular microscope at magnifications up to x 60 and a list of the recorded remains are presented in Table 13. Identification of plant remains is with reference to the Digital Seed Atlas of the Netherlands and the authors' own reference collection. Nomenclature is according to Zohary and Hopf (2000) for cereals and Stace (1997) for other plants. Carbonized seeds and grains, by the process of burning and burial, become blackened and often distort and fragment leading to difficulty in identification. Plant remains have been identified to species where possible. The identification of cereals has been based on the characteristic morphology of the grains and chaff as described by Jacomet (2006).

Quantification

- C.2.4 For the purpose of this initial assessment, items such as seeds, cereal grains and legumes have been scanned and recorded qualitatively according to the following categories: # = 1-10, ## = 11-50, ### = 51+ specimens #### = 100+ specimens
- C.2.5 Items that cannot be easily quantified such as charcoal and magnetic residues have been scored for abundance: + = rare, ++ = moderate, +++ = abundant

Results

- C.2.6 Plant remains are preserved by carbonisation with no evidence of any mineralised material that would indicate 'cess'. The plant remains recovered are predominantly cereal grains which can be identified as predominantly free-threshing wheat (*Triticum aestivum/turidum*) with smaller amounts of barley (*Hordeum vulgare*) and oats (*Avena* sp.). Chaff (cereal stem fragments) are notably absent and weed seeds are rare. The flots were silty and contained numerous modern rootlets.
- C.2.7 The results are discussed by Period:

Period 1: 12th century

- C.2.8 Samples were taken from two slots in Ditch 18 both contain moderate quantities of charred grain; Fill 17 (Sample 2) contains charred wheat and barley grains and Fill 77

(Sample 15) contains wheat, barley and oats in addition to a significant quantity of charred peas (*Pisum cf. Sativum*).

- C.2.9 Building 1 is thought to be near-contemporary with Ditch **18**; Samples were taken from five post holes: **90** (Sample 19), **101** (Sample 20), **116** (Sample 26), **118** (Sample 27) and **122** (Sample 21) and found to be largely devoid of preserved remains other than a few scarce charred grains. Sample 18 was taken from Fill 94 of associated Pit **93** and produced a moderate assemblage of charred wheat grains.
- C.2.10 Two samples were taken from layers that possibly represent floor surfaces; Sample 25, Layer 112, does not contain any preserved remains and Sample 24, Layer 113, contains occasional grains of wheat and single specimens of pea and bean and Sample 22 (taken from Layer 92, that is equivalent to Layer 113) contains occasional charred wheat and barley grains mixed with a larger quantity of corn gromwell (*Lithospermum arvense*) seeds. This sample contains only sparse charcoal despite being described on excavation as a 'burnt gravel' which probably suggests that it is a levelling layer of imported material. Sample 23 was taken from Cut 109 that cut through surface 112 and contains occasional charred grains. Posthole **116** was devoid of preserved remains.
- C.2.11 Sample 11 taken from the demolished structure 52 of Oven **50** contains only a single barley grain and sparse charcoal fragments and clearly is not representative of the function of the oven. Two pots were found in cuts within the oven; Sample 10, fill 55 of pot 54 in pit 53 contains only occasional wheat and peas which, due to the scarcity of the preserved remains and the similarity of the contents to other samples from this site, are presumed to represent a general scatter of charred remains within the context rather than specific pot contents.

Period 2: 13th-14th Centuries

- C.2.12 Sample 1, medieval soil Layer 13, contains numerous small fragments of vitrified charcoal in addition to occasional barley and wheat grains and a small fragment of charred hazelnut (*Corylus avellana*) shell.

Period 3: 15th-Mid 16th Centuries

- C.2.13 Sample 16, Fill 75 of Culvert **74**, contains a small fragment of charred bean only. Sample 17, Fill 85 of a late medieval linear ditch or gully (84) to the west of the culvert contains charcoal fragments and a single wheat grain.
- C.2.14 Sample 7 was taken from a layer of dark material that lay below floor Surface 33 (also beneath a possible post-medieval structure) and contains only sparse charcoal and single fragments of a wheat grain and a bean.

Period 4: Mid 16th-17th century

- C.2.15 Sample 8 contains a moderate amount of charcoal and three wheat grains. The sample was taken from Layer 39 which was a surface or floor of unclear date. Similarly, Layer 27 was a surface that may be of medieval or post-medieval date; Sample 3, taken from this layer, contains a moderate assemblage of charred wheat with several peas and beans and a single charred seed of dandelion (*Lolium* sp.)
- C.2.16 Layer 33 was comprised of clay and provided a footing for Buildings 2 and 3. The single sample (5) did not contain any preserved remains. A similar layer 35 (Sample 6) beneath Building 4 contains a single charred culm node of a straw fragment. Layer 56 (Sample 12) from Hearth 62, set within Layer 35, was also devoid of preserved plant remains.

C.2.17 Sample 9 was taken from a working surface (47) in the back yard of Building 2 and contains sparse charcoal and a single indeterminate charred grain. Sample 13, Fill 65 of threshold (64) did not contain any preserved remains.

Sample	Context	Cut	Feature Type	Date Range	Sample size (L)	% context sampled	Volume processed (L)	Flot Volume (ml)	Cereals	Legumes	Weed Seeds	Charcoal <2mm	Charcoal > 2mm	Magnetic residues
19	91	90	post hole	1100-1150	10	100	6	30	#	0	0	++	++	0
2	17	18	ditch	1100-1200	20	<5	9	80	##	0	0	++	++	++
15	77	18	ditch	1100-1200	10	<10	8	60	##	###	0	+++	++	+
10	55	53	pit	1150-1200	Bag	100	1	30	##	#	0	++	++	0
11	52	50	backfill	1150-1200	10	<20	9	120	#	0	0	+	+	+++
18	94	93	pit	1150-1200	20	40	9	30	###	0	0	++	++	0
20	102	101	post hole	1150-1200	10	100	6	20	##	0	0	++	+	+
21	123	122	post hole	1150-1200	10	100	6	15	#	0	0	+	+	0
26	117	116	post hole	1150-1200	10	50	6	10	0	0	0	+	0	+
27	119	118	post hole	1150-1200	20	50	9	25	#	0	0	+	0	0
22	92		hearth	1200-1400	20	30	8	140	##	0	###	++	+	0
23	105	105	layer	1200-1400	20	<10	8	30	##	0	0	+	+	+
24	113		floor	1200-1400	10	30	8	10	#	#	0	+	+	+
25	112		floor	1200-1400	10	20	9	1	0	0	0	0	0	+
28	108	106	hearth	1200-1400	10	100	8	40	#	0	#	+	+	0
1	13		build-up	1200-1550	20	<1	9	80	##	0	0	++	++	+++
16	75	74	culvert	1400-1450	20	30	8	15	0	#	0	+	0	0
17	85	84	ditch	1400-1450	20	<10	9	50	#	0	0	+	++	0
3	27		disuse	1450-1550	10		10	100	###	0	#	+++	+++	0
7	36		residue	1450-1550	10	<10	9	60	#	#	0	++	+	+++
8	39		residue	1450-1550	10	50	1	30	#	0	0	+++	+++	++
13	65	64	threshold	1550-1650	20	50	8	30	0	0	0	+	+	0
5	33		floor	1550-1700	20	<10	9	10	0	0	0	+	0	++
6	35		surface (internal)	1550-1700	20	<10	8	30	0	#	0	+	0	++
9	47		surface (external)	1550-1700	20	<10	10	60	#	0	0	+++	++	+++
12	56		hearth base	1550-1700	20	100	8	15	0	0	0	+	+	++
4	30		deposit	1700-1750	20	<10	8	130	###	##	#	+++	+++	++
14	69	68	pit	1700-1750	10	<10	8	110	##	0	0	++++	++++	+

Table 13: Environmental Samples

Discussion

C.2.18 The environmental samples from the site at Hamerton are comprised of mixed detritus that includes domestic and culinary waste. The majority of the samples contain charred cereal grains that are present in small quantities and are poorly preserved suggesting that the remains have degraded prior to deposition. Free-threshing wheat and barley are the two main cereal types represented; wheat would have been predominantly used for grinding into flour and barley can either be used for brewing or used as food for both human and animal consumption. Occasional oats are present but it is not possible to determine whether these were of the cultivated or wild variety. Seeds of weeds that commonly grow amongst cereals under cultivation are scarce, occurring in only three samples suggesting that the grain was not being processed on site. Corn gromwell produces a large seed that is a similar size to a cereal grain and is therefore difficult to

sieve out of threshed grain. It is stone-like in both appearance and texture and would be unpleasant to consume even if it was ground with wheat into flour. It is possible that the collection of corn gromwell seeds found in hearth Layer 92 represents seeds that have been picked out of the grain by hand and tossed into the fire.

- C.2.19 Legumes are fairly frequent within the assemblages, especially considering that they are usually under-represented in the archaeobotanical record as they are less likely to be exposed to fire than cereals were. Legumes were usually consumed as a dried product and they could also be ground to produce flour as an additive for making bread.
- C.2.20 There doesn't seem to be any distinction between the plant remains recovered from different periods. The density and diversity of the charred plant assemblages suggests a general scatter of material that is likely to have been re-worked during the period of occupation of the site. The flots all contained numerous roots of modern plants that could also have caused movement of material within and between contexts. Many of the samples contain hammerscale in both flake and spheroidal form that similarly does not show any pattern with regard to period or distribution across the site that can probably also be explained as intrusive through the reworking of earlier deposits. The presence of both flakes and spheroids of hammerscale indicates that blacksmithing activities, including welding, were taking place on site at some point.
- C.2.21 The assessment of the initial processing of sub-samples has shown that there is a general scatter of poorly-preserved plant remains distributed across the entire site. It is not considered that further processing of the remaining soil of the samples will significantly add to these results and no further work is recommended.

APPENDIX D. HISTORIC MAPS AND AERIAL PHOTOGRAPHS CONSULTED

1360	Linguistic Geographies: Gough's Map of Britain	http://www.goughmap.org/map/
1603	The Fens	http://britishlibrary.georeferencer.com/map/AFg7QM0H4qzF04strZnrH2/201311081448-Orwu77/ [accessed 22/10/2015]
1749	"An accurate map of the county of Huntingdon [Kartenmaterial] / by Eman: Bowen geog:r to His Majesty	http://aleph.unibas.ch/F/?local_base=DSV01&func=find-b&find_code=SYS&con_lng=GER&request=994101 [accessed 03/11/2015]
1808	Huntingdon (William Hyett)	http://www.bl.uk/onlinegallery/onlineex/ordsurvdraw/h/002osd000000003u00193000.html Ordnance Survey Drawings: Huntingdon (OSD 234 pt 1) [accessed 21/01/2016]
1817	Oundle (Boyce)	https://commons.wikimedia.org/wiki/File:Ordnance_Survey_Drawings_-_Oundle,_Northamptonshire_(OSD_269).jpg Ordnance Survey Drawings: Oundle, Northamptonshire (OSD 269) [accessed 21/01/2016]
1817	Wellingborough (William Hyett)	https://commons.wikimedia.org/wiki/File:Ordnance_Survey_Drawings_-_Wellingborough,_Northamptonshire_(OSD_252).jpg Ordnance Survey Drawings: Wellingborough, Northamptonshire (OSD 252) [accessed 03/11/2015]
1821	Whittlesey (T. Yeakel)	https://commons.wikimedia.org/wiki/File:Ordnance_Survey_Drawings_-_Whittlesey_(OSD_270).jpg Ordnance Survey Drawings: Whittlesey [accessed 21/01/2016]
1838	Plan of the Parish of Hamerton in the County of Huntingdon. All the field names are recorded. Thought to be a copy of the inclosure map, but no inclosure is known.	HRO KDMC/465
1887	Ordnance Survey Huntingdonshire XIII.SW	http://maps.nls.uk/view/100890527 [accessed 03/11/2015]
1887	Ordnance Survey Huntingdonshire XIII.SE	http://maps.nls.uk/view/100890539 [accessed 03/11/2015]
1/1/1945	Google Earth aerial image 1945	Google Earth 52°24'20.88" N 0°20'20.69" W [accessed 03/11/2015]
1/1/2006	Google Earth aerial image 2006	Google Earth 52°24'24.64" N 0°19'39.48" W [accessed 21/01/2015]
10/17/2008	Google Earth aerial image 2008	Google Earth 52°24'20.88" N 0°20'20.69" W [accessed 03/11/2015]

APPENDIX E. BIBLIOGRAPHY

Behrensmeyer	1978	Taphonomic and Ecologic information from bone weathering <i>Palaeobiology</i> 4(2) 150-62
Biddle, M.	1990	<i>Object and Economy in Medieval Winchester</i> . Oxford: Oxford University Press, 1990.
Blinkhorn, P.	2007	Late medieval pottery kilns in A Hardy, BM Charles and RJ Williams <i>Death and Taxes. The archaeology of a Middle Saxon estate centre at Higham Ferrers Northamptonshire</i> , 100-111 Oxford Archaeology Monograph
Blinkhorn, P.	2010	The Saxon and medieval pottery, in A Chapman <i>West Cotton, Raunds. A study of medieval settlement dynamics: AD450-1450. Excavation of a deserted medieval hamlet in Northamptonshire, 1985-89</i> Oxbow, Oxford, 259-333
Blinkhorn, P.	2012	<i>The Ipswich ware project: Ceramics, trade and society in Middle Saxon England</i> Medieval Pottery Research Group Occasional Paper 7
Blinkhorn, P.	2012a	Pottery in AM Chadwick, DR Gilbert and J Moore (eds) "...Quadrangles Where Wisdom Honours Herself". <i>Archaeological investigations at Tom Quad, Peckwater Quad and Blue Boar Quad, Christ Church, Oxford</i> JMHS Monograph 1, 112-41
Brears, P.C.D.	1969	<i>The English country pottery: its history and techniques</i> . Newton Abbot: David & Charles
Brown, N.R.	2006	A Medieval Moated Manor by the Thames Estuary: Excavations at Southchurch Hall, Southend, Essex. <i>East Anglian Archaeology</i> 102, 2006.
Brown, A.E. & Taylor, C.C.	1978	Cambridgeshire Earthwork Surveys III. <i>PCAS</i> 68: 59-76.
Brown and Glazebrook	2000	Research and Archaeology: A Framework for the Eastern counties: 2. <i>Research Agenda and Strategy</i> , East Anglian Archaeology Occasional Papers 8
Cappers, R.T.J. Bekker, R.M. Janes, J.E.A.	2006	Digital Seed Atlas of the Netherlands <i>Groningen Archaeological Studies</i> 4, Barkhuis Publishing, Eelde, The Netherlands. www.seedatlas.nl
Cotter, J.	2000	<i>Post-Roman pottery from excavations in Colchester, 1971-85</i> Colchester Archaeological Report 7
Crummy, N.	1998	The post-Roman small finds from excavations in Colchester 1971-1985. Colchester Archaeological Trust, 1988.
Davies, S. J.	1995	<i>Teh Archaeology of Animals</i> Routledge
Davey, W Walker, H	2009	The Harlow Pottery Industries Medieval Pottery Research Group Occasional Paper 3
Denham, V.	1985	The Pottery in JH Williams, M Shaw and V Denham <i>Middle Saxon Palaces at Northampton Northampton Development Corporation Monog Ser 4</i> , 46-64
Dobney, K, Reilly, K.	1988	A method for recording archaeological animal bones: the use of diagnostic zones <i>Circaea</i> 5 (2) 79-96
Egan, G.	1998	<i>The Medieval Household, Daily Living c.1150-c.1450</i> . London: HMSO, 1998
Egan, G.	2005	<i>Material culture in London in an age of transition: Tudor and Stuart period finds c1450-1700 from excavations at riverside sites in Southwark</i> . London: Museum of London Archaeological Service Monograph 19, 2005.
Emery, P.	2007	Norwich Greyfriars: Pre-Conquest Town and Medieval Friary. <i>East Anglian Archaeology</i> 120, 2007.
Fox, C.	1923	<i>Archaeology of the Cambridgeshire Region</i> Cambridge University Press
Fox, R.	1831	<i>The History of Godmanchester in the County of Huntingdonshire</i> London: Baldwin and Cradock
France, D.L.	2009	<i>Human and Non-human Bone Identification. A colour Atlas</i> Taylor and Frances
Gaimster, D.	1997	German Stoneware British Museum Publications
Glazebrook	1997	Research and Archaeology: A Framework for the Eastern counties: 1. <i>Resource Assessment</i> , East Anglian Archaeology Occasional Papers 3
Goodall, I.	2002	'Iron' in Dallas, C. and Sherlock, D. <i>Baconsthorpe Castle, Excavations and Finds, 1951-1972. East Anglian Archaeology</i> 102, 2002.
Griffiths, D. Philpott, R. Egan, G.	2007	<i>Meols: The Archaeology of the North Wirral Coast: Discoveries and observations in the 19th and 20th centuries, with a catalogue of collections</i> . Oxford: Oxford University School of Archaeology, Monograph 68, 2007.
Hall, D.	2001	Medieval Pottery from Forehill, Ely, Cambridgeshire <i>Medieval Ceramics</i> 25, 2-21
Hindle, P.	1982	<i>Medieval Roads and Tracks</i> Oxford: Shire Publications
Hillson, S.	2005	<i>Teeth</i> . Cambridge University Press

Holmes, E.F.	1991	<i>Sewing Thimbles</i> . Finds Research Group Datasheet 9, 1991: 1-4.
Huddle, J.	2005	'Copper alloy objects' in Shelley, A. Dragon Hall, King Street, Norwich: Excavation and Survey of a late Medieval Merchant's Trading Complex. <i>East Anglian Archaeology</i> 112, 2005.
Jacomot, S.	2006	<i>Identification of cereal remains from archaeological sites</i> . Second edition. IPNA, Universität Basel / Published by the IPAS, Basel University.
Johnston, G.	1997	The Excavation of two Late Medieval Kilns with Associated Buildings at Glapthorn, near Oundle, Northamptonshire <i>Medieval Ceramics</i> 21, 13-42
Kilmurry, K.	1980	<i>The Pottery Industry of Stamford, Lincs. c. AD850-1250</i> British Archaeol. Rep. British Ser 84
King	1987	'The Window glass and lead' in Rogerson et al., Three Norman Churches in Norfolk. <i>East Anglian Archaeology</i> 32, 1987: 34-40.
Ladd, S.	2015	Archaeological Excavation: Sawpit Lane Hamerton (Project Number 18486), OA East WSI
Lewis, C. Mitchell-Fox, P. Dyer, C.	1997	<i>Village, Hamlet and Field: Changing Medieval Settlements in Central England</i> Manchester University Press
Margeson, S.	1993	Norwich Households: Medieval and Post-Medieval Finds from Norwich Survey Excavations 1971-1978. <i>East Anglian Archaeology</i> 58, 1993.
Margeson, S.	1995	'The Iron Objects' in Rogerson, A. A Late Neolithic, Saxon and Medieval site at Middle Harling, Norfolk. <i>East Anglian Archaeology</i> , 74, 1995.
McCarthy, M.	1979	The Pottery in JH Williams <i>St Peter's St, Northampton. Excavations 1973-76</i> Northampton Development Corporation Monog Ser 2, 151-242
McCarthy, M.R. Brooks, C.M.	1988	<i>Medieval Pottery in Britain AD900-1600</i> Leicester University Press
Mayes, P.	1968	A seventeenth century kiln site at Potterspury, Northamptonshire <i>Post-Medieval Archaeology</i> 2, 55-82
Medlycott	2011	Research and Archaeology Revisited: A Revised Framework for the East of England, <i>East Anglian Archaeology Occasional Papers</i> 24
Mellor, M.	1994	Oxford Pottery: A Synthesis of middle and late Saxon, medieval and early post-medieval pottery in the Oxford Region <i>Oxoniensia</i> 59, 17-217
Mould, Q.	2005	'Ironwork' in Shelley, A. Dragon Hall, King Street, Norwich: Excavation and Survey of a late Medieval Merchant's Trading Complex. <i>East Anglian Archaeology</i> 112, 2005.
Mountford, A.R.	1971	<i>The Illustrated Guide to Staffordshire Salt-Glazed Stoneware</i> Barrie and Jenkins, London
MPRG	1998	<i>Guide to the Classification of Medieval Ceramic Forms</i> Medieval Pottery Research Group Occasional Paper 1
MPRG	2001	<i>Minimum Standards for the Processing, Recording, Analysis and Publication of post-roman Ceramics</i> Medieval Pottery Research Group Occasional Paper 2
Mynard, D.C.	1970	Medieval Pottery of Potterspury type <i>Bulletin of the Northamptonshire Federation of Archaeology Societies</i> , 69-74
O'Connor, T.	2004	<i>The Archaeology of Animal Bones</i> Sutton Publishing
Orton, C.	1988	Post-Roman Pottery in P Hinton (ed.) <i>Excavations in Southwark 1973-76 and Lambeth 1973-79</i> . MoLAS and DGLA Joint Publication 3, 295-364
Orton, C.	1998-99	Minimum Standards in Statistics and Sampling <i>Medieval Ceramics</i> 22-23, 135-8
Oswald, A.	1975	<i>Clay Pipes for the Archaeologist</i> British Archaeological Reports No. 14 British Archaeological Reports, Oxford.
Page, W. Proby, G. Inskip Ladds, S. (eds.)	1936	'Parishes: Hamerton', in A History of the County of Huntingdon: Volume 3, pp. 66-69, London http://www.british-history.ac.uk/vch/hunts/vol3/pp66-69 [accessed 2 November 2015].
Pearce, J.	2007	http://www.geog.qmul.ac.uk/victorianlondon/pdf/ClayPipe.pdf [accessed 5th March 2016]
Perry, G.	2011	Beer, Butter and Burial <i>Medieval Ceramics</i> 32, 9-22

Powel-Smith, A. Slater, J. Palmer, G.		Open Domesday, Hamerton (http://opendomesday.org/place/TL1379/hamerton/ Accessed 02/11/2015)
RCHME	1926	'Hamerton', in <i>An Inventory of the Historical Monuments in Huntingdonshire</i> (London, 1926), pp. 126-128 http://www.british-history.ac.uk/rchme/hunts/pp126-128 [accessed 21 January 2016].
RCHME	1975	'Appendix: Roman Roads', in <i>An Inventory of the Historical Monuments in the County of Northamptonshire, Volume 1, Archaeological Sites in North-East Northamptonshire</i> (London, 1975), pp. 116-123 http://www.british-history.ac.uk/rchme/northants/vol1/pp116-123 [accessed 21 January 2016].
Rogerson, A Dallas, C	1984	<i>Excavations in Thetford 1948-59 and 1973-80</i> . E Ang Archaeol 22
Rogerson, A. Ashley, S. Williams, P. Harris, A. (eds.)	1987	Three Norman Churches in Norfolk. <i>East Anglian Archaeology</i> 32, 1987.
Schmid, E	1972	<i>Atlas of Animal Bones</i> Elsevier Publishing Company
Steane, J.M. Bryant, G.F.	1975	<i>Excavations at the Deserted Medieval Settlement at Lyveden, Northants</i> J Northampton Mus 12
Stace, C.	1997	<i>New Flora of the British Isles</i> . Second edition. Cambridge University Press
Stewart, G.	2015	Brief for Archaeological Excavation: New Pumping Station, Alconbury Road, Hamerton (CHET)
Talbot, L.	1999	'The Finds' in Andrews, P. and Penn, K. Excavations in Thetford, North of the River, 1989-90. <i>East Anglian Archaeology</i> 87, 1999.
Taylor, C.	1979	<i>Roads and Tracks of Britain</i> London
Turner-Rugg, A.	1993	<i>Medieval Pottery in Hertfordshire: a gazetteer of the principle collections</i> <i>Hertfordshire Archaeol</i> 11, 30 – 53
Walker, H.	2012	<i>Heddingham Ware: A Medieval Pottery Industry in North Essex; its Production and Distribution</i> East Anglian Archaeology 148
White, S.D.	2004	<i>The Archaeology of the Clay Tobacco Pipe XVIII The Dynamics of Regionalisation and Trade: Yorkshire Clay Tobacco Pipes c1600-1800</i> BAR British Series 374 p487-490 http://scpr.co/PDFs/Resources/White%20BAR%20Appendix%204.pdf [accessed 5th March 2016]
Zohary, D. Hopf, M.	2000	<i>Domestication of Plants in the Old World – The origin and spread of cultivated plants in West Asia, Europe, and the Nile Valley</i> . 3rd edition. Oxford University Press

APPENDIX F. OASIS REPORT FORM

All fields are required unless they are not applicable.

Project Details

OASIS Number	oxfordar3-240783		
Project Name	Hamerton Sewage Pumping Station		
Project Dates (fieldwork)	Start	08-09-2015	Finish 25-09-2015
Previous Work (by OA East)	Yes	Future Work No	

Project Reference Codes

Site Code	HAMSAW15	Planning App. No.	n/a
HER No.	ECB4535	Related HER/OASIS No.	

Type of Project/Techniques Used

Prompt	Direction from Local Planning Authority - PPG15
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Please select all techniques used:

<input type="checkbox"/> Field Observation (periodic visits)	<input checked="" type="checkbox"/> Part Excavation	<input type="checkbox"/> Salvage Record
<input type="checkbox"/> Full Excavation (100%)	<input type="checkbox"/> Part Survey	<input type="checkbox"/> Systematic Field Walking
<input checked="" type="checkbox"/> Full Survey	<input type="checkbox"/> Recorded Observation	<input type="checkbox"/> Systematic Metal Detector Survey
<input type="checkbox"/> Geophysical Survey	<input type="checkbox"/> Remote Operated Vehicle Survey	<input type="checkbox"/> Test Pit Survey
<input checked="" type="checkbox"/> Open-Area Excavation	<input type="checkbox"/> Salvage Excavation	<input type="checkbox"/> Watching Brief

Monument Types/Significant Finds & Their Periods

List feature types using the [NMR Monument Type Thesaurus](#) and significant finds using the [MDA Object type Thesaurus](#) together with their respective periods. If no features/finds were found, please state "none".

Monument	Period	Object	Period
Building	Medieval 1066 to 1540	Pottery	Medieval 1066 to 1540
Hollow Way	Medieval 1066 to 1540	Pottery	Post Medieval 1540 to 1901
Building	Post Medieval 1540 to 1901	Knives	Post Medieval 1540 to 1901

Project Location

County	Cambridgeshire	Site Address (including postcode if possible)	
District	Huntingdonshire		
Parish	Hamerton		
HER	Cambridgeshire		
Study Area	0.14ha	National Grid Reference	TL 13645 7985

Project Originators

Organisation	OA EAST
Project Brief Originator	Gemma Stewart
Project Design Originator	Stuart Ladd
Project Manager	Richard Mortimer
Supervisor	Stuart Ladd

Project Archives

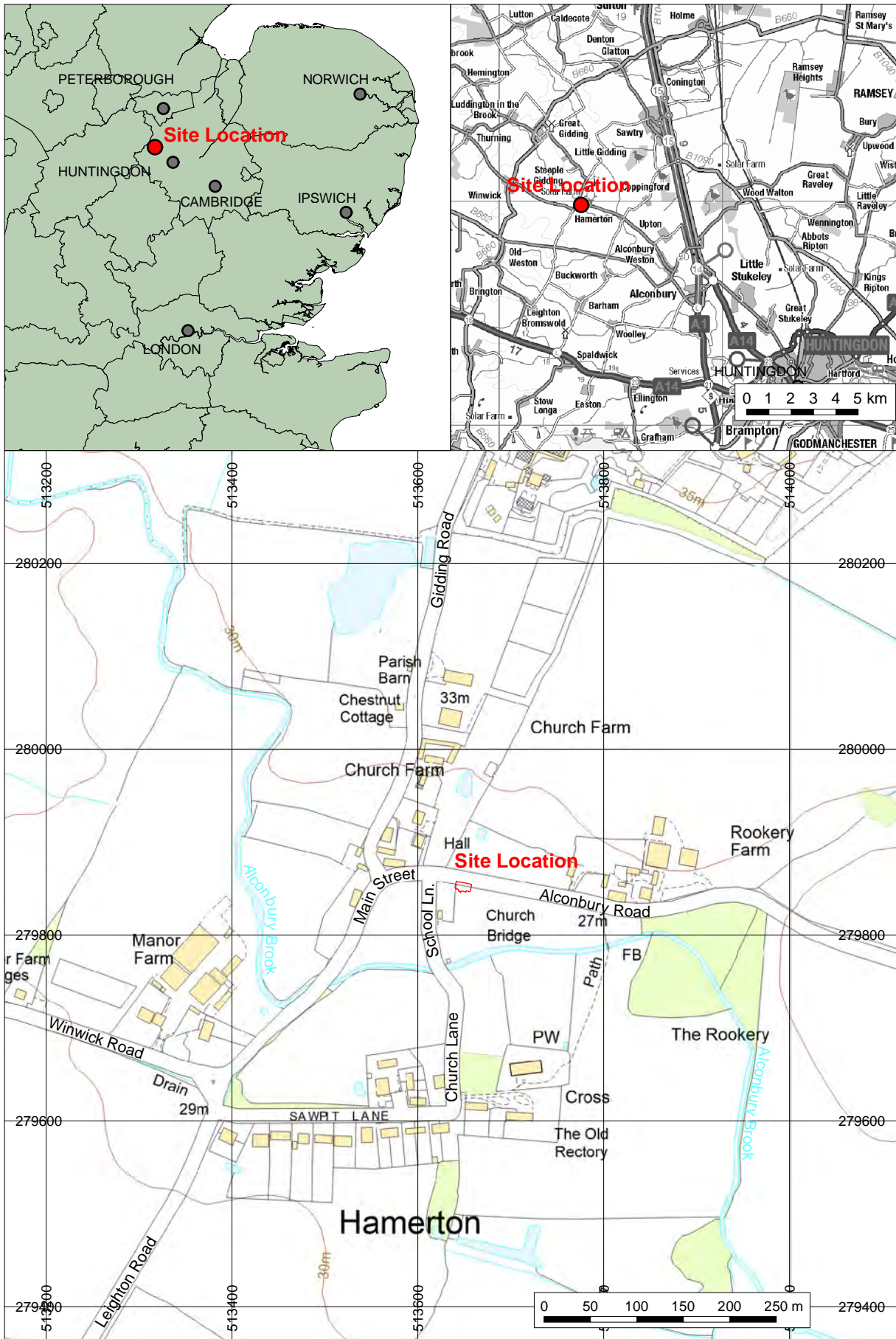
Physical Archive	Digital Archive	Paper Archive
OA East	OA East	OA East
HAMSAW15	HAMSAW15	HAMSAW15

Archive Contents/Media

	Physical Contents	Digital Contents	Paper Contents
Animal Bones	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ceramics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environmental	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Glass	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Human Bones	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Industrial	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Metal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stratigraphic		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Survey		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Textiles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wood	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Worked Bone	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Worked Stone/Lithic	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
None	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Digital Media	Paper Media
<input checked="" type="checkbox"/> Database	<input type="checkbox"/> Aerial Photos
<input checked="" type="checkbox"/> GIS	<input checked="" type="checkbox"/> Context Sheet
<input type="checkbox"/> Geophysics	<input type="checkbox"/> Correspondence
<input checked="" type="checkbox"/> Images	<input type="checkbox"/> Diary
<input checked="" type="checkbox"/> Illustrations	<input checked="" type="checkbox"/> Drawing
<input type="checkbox"/> Moving Image	<input type="checkbox"/> Manuscript
<input checked="" type="checkbox"/> Spreadsheets	<input type="checkbox"/> Map
<input checked="" type="checkbox"/> Survey	<input type="checkbox"/> Matrices
<input checked="" type="checkbox"/> Text	<input type="checkbox"/> Microfilm
<input type="checkbox"/> Virtual Reality	<input type="checkbox"/> Misc.
	<input type="checkbox"/> Research/Notes
	<input type="checkbox"/> Photos
	<input checked="" type="checkbox"/> Plans
	<input checked="" type="checkbox"/> Report
	<input checked="" type="checkbox"/> Sections
	<input type="checkbox"/> Survey

Notes:



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Additional Road names from OpenStreetMap.org

Figure 1: Site location showing excavation area (red)

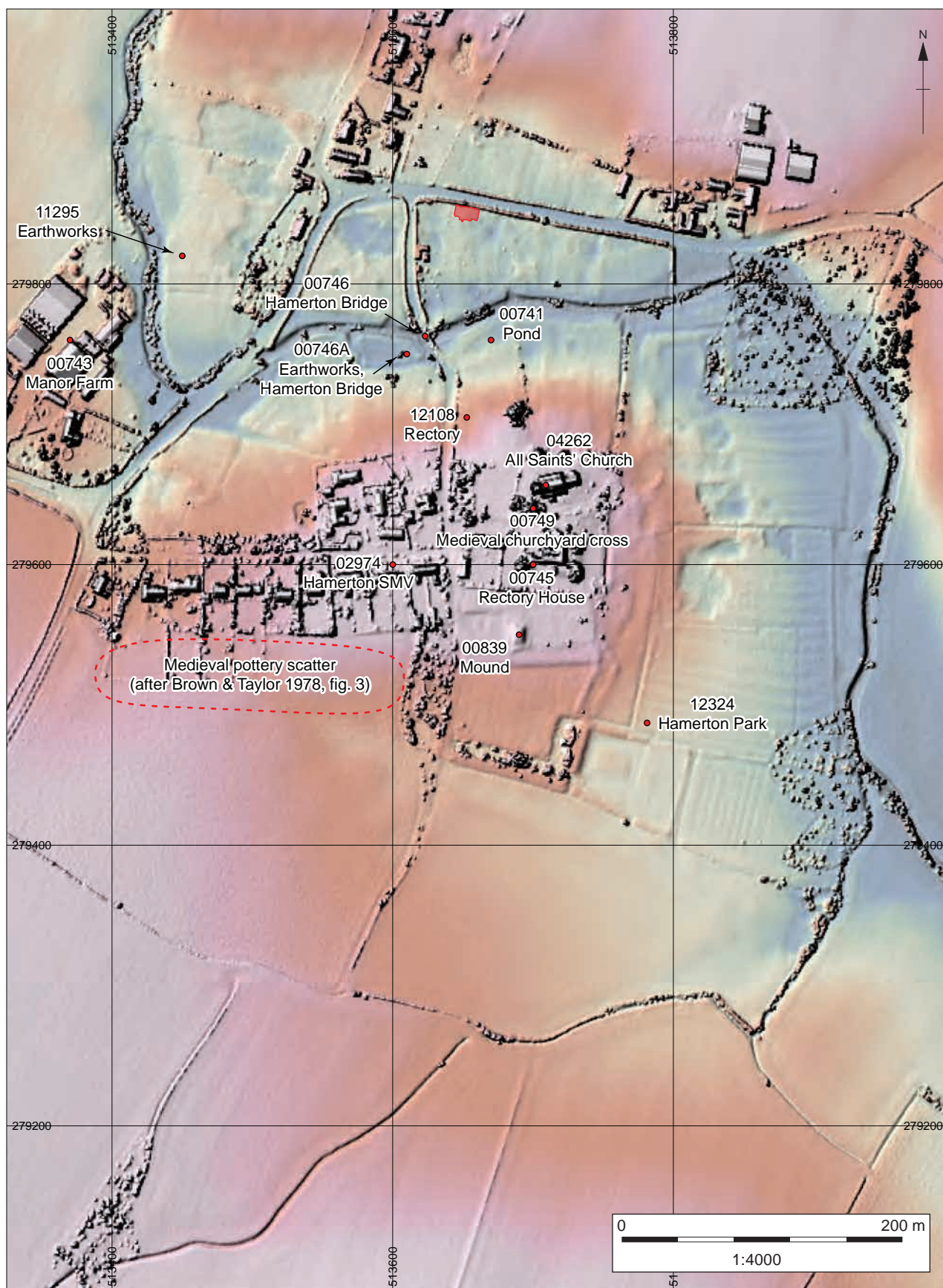


Figure 2: Cambridgeshire HER entries within 500m of the site mentioned in the text, overlaid on Environment Agency LIDAR data



Figure 4: 12th Century

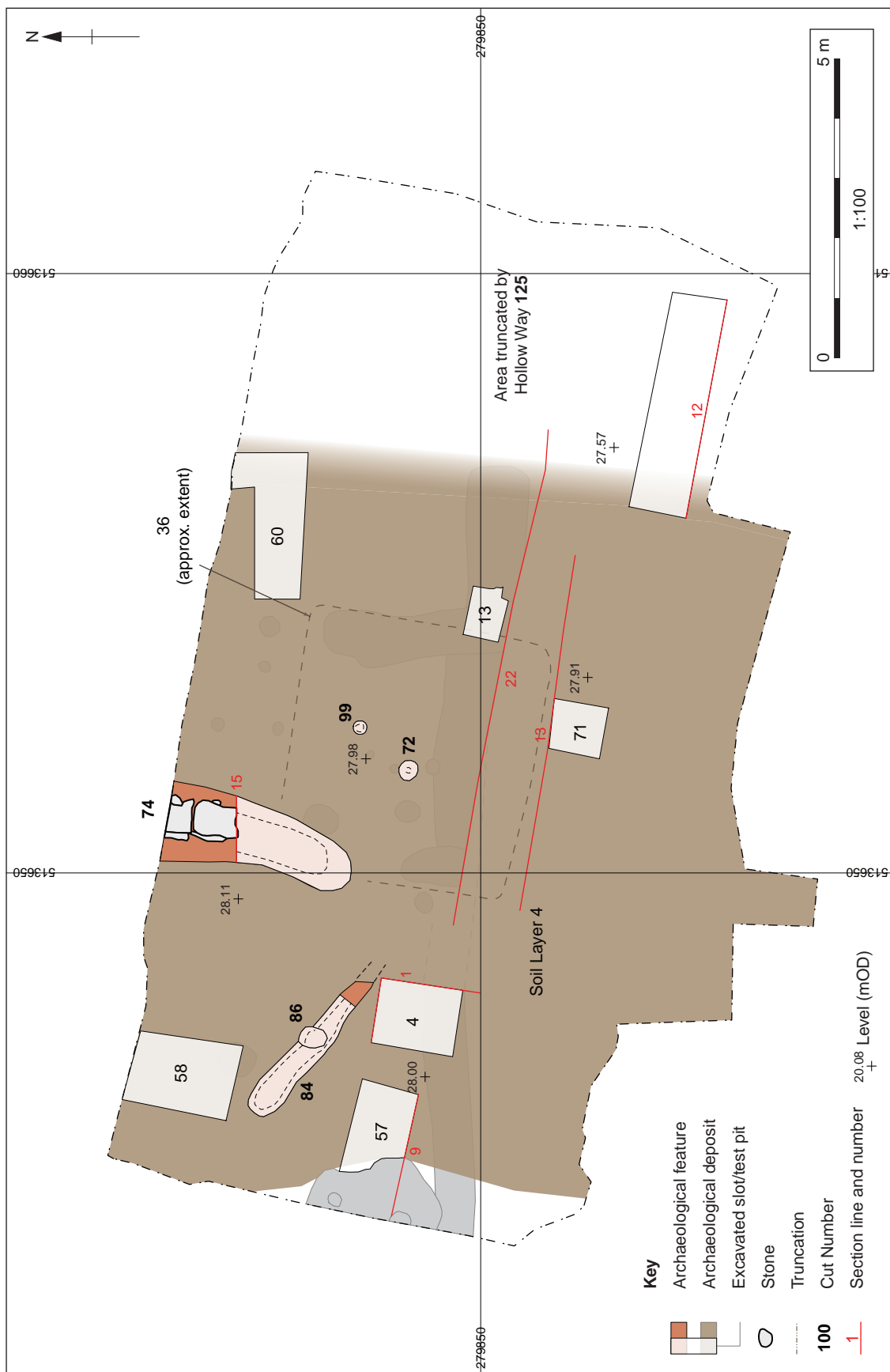


Figure 5: 13th-14th Century Soil and Possible 15th Century Features



Figure 6: Mid 16th-17th Century

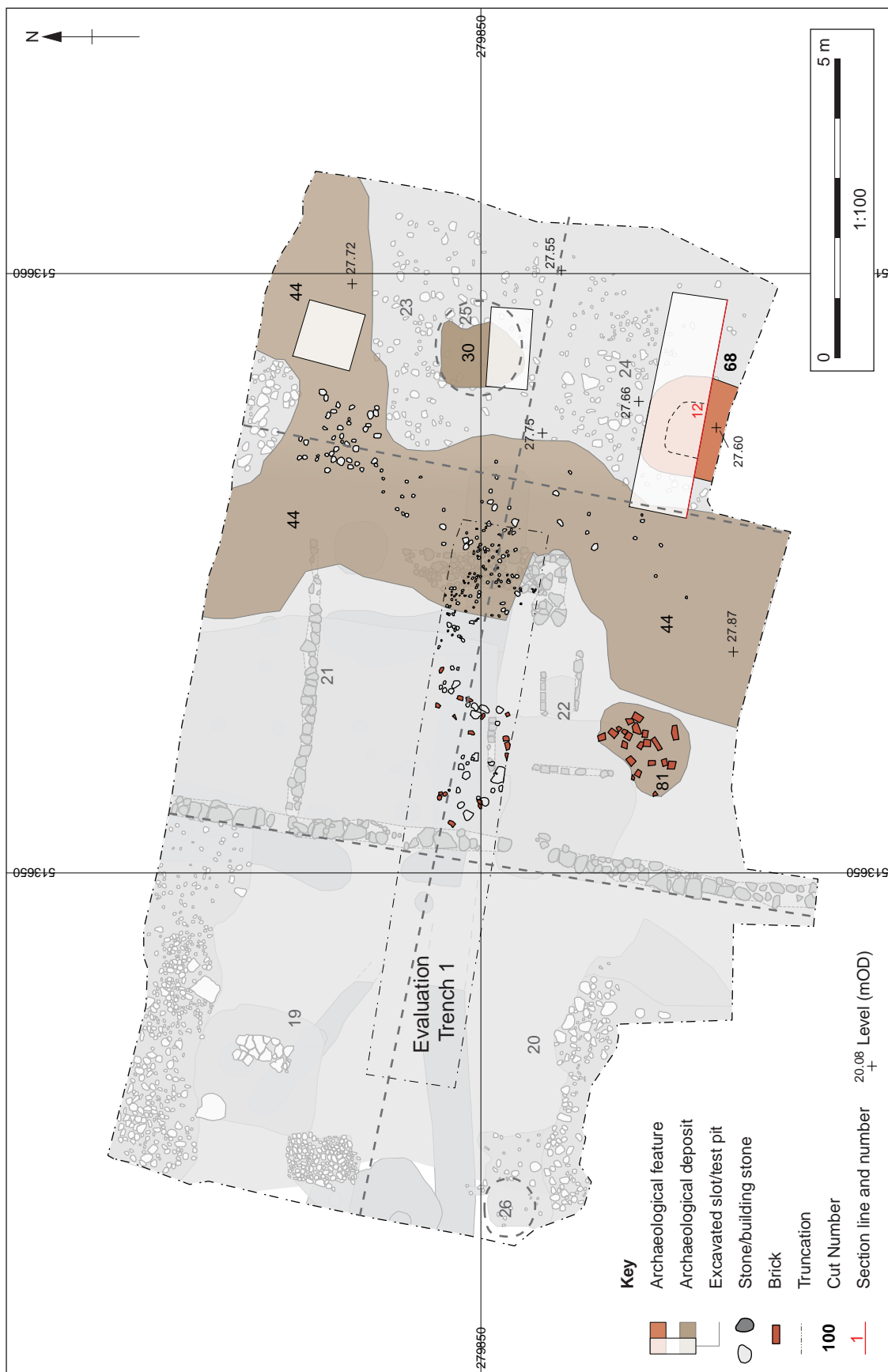
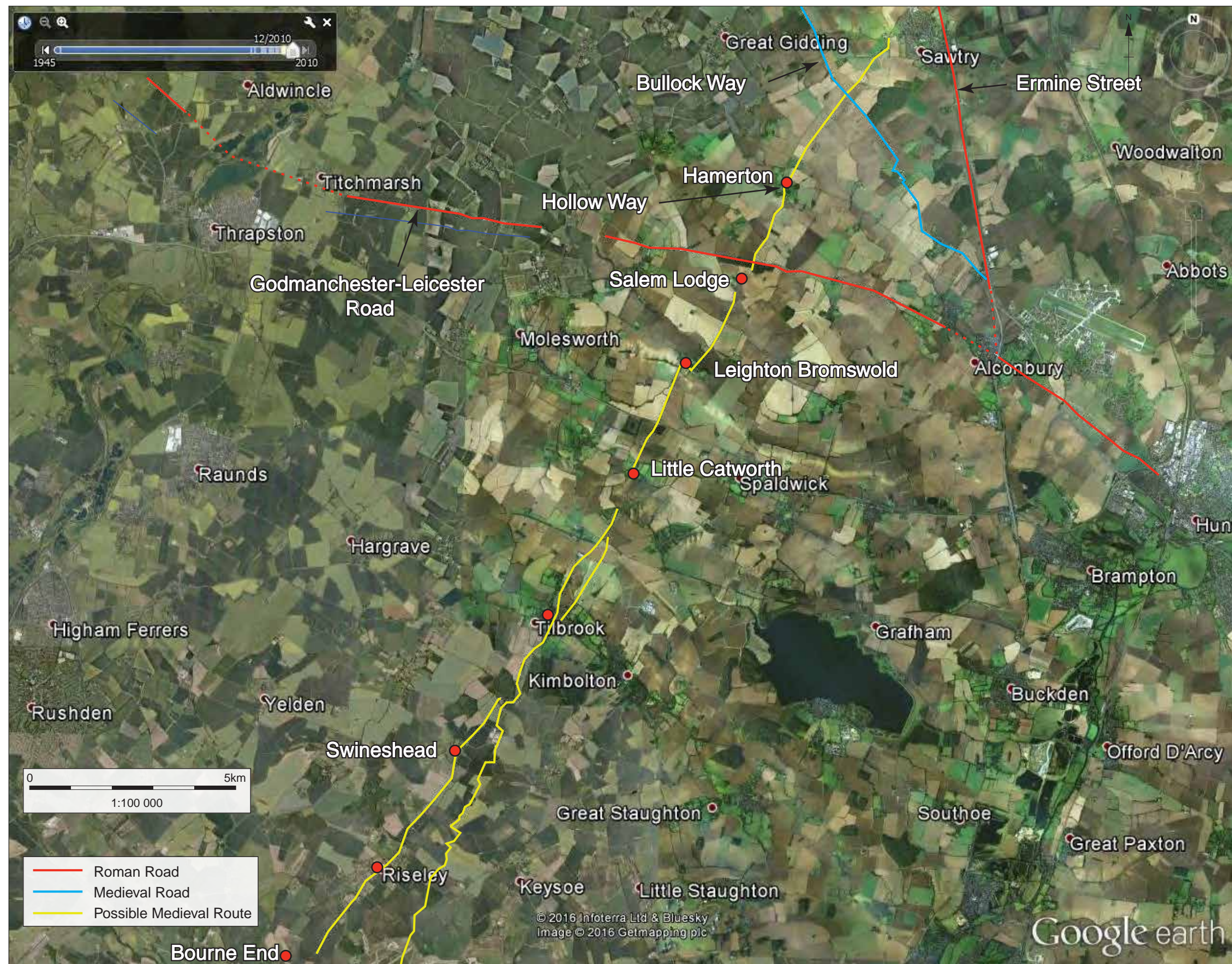


Figure 6: 17-18th Century and sub-soil/cleaning contexts



Figure 8: Pre-excavation derived aerial image



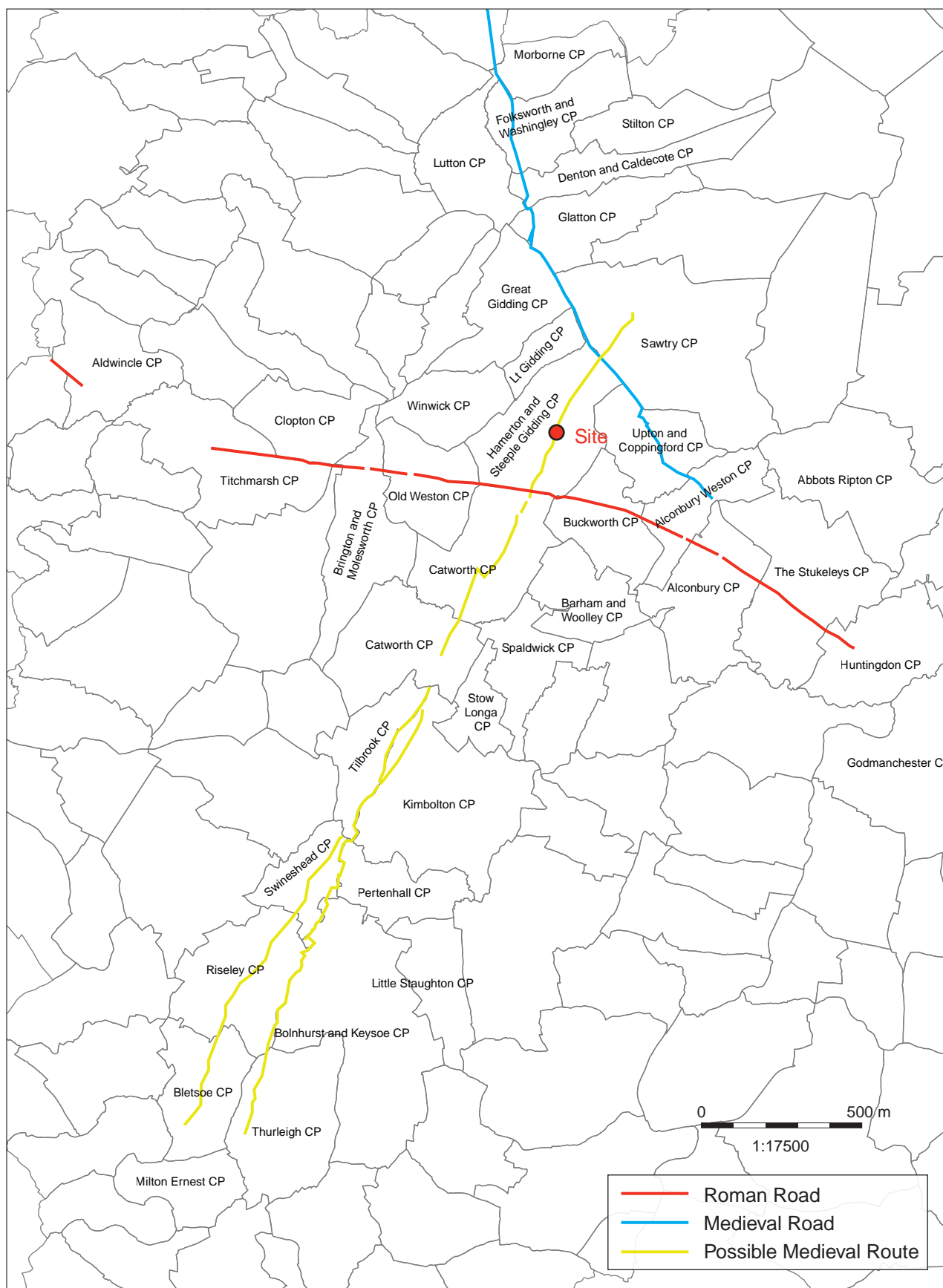


Figure 10: Possible medieval route overlaid on modern parish boundaries

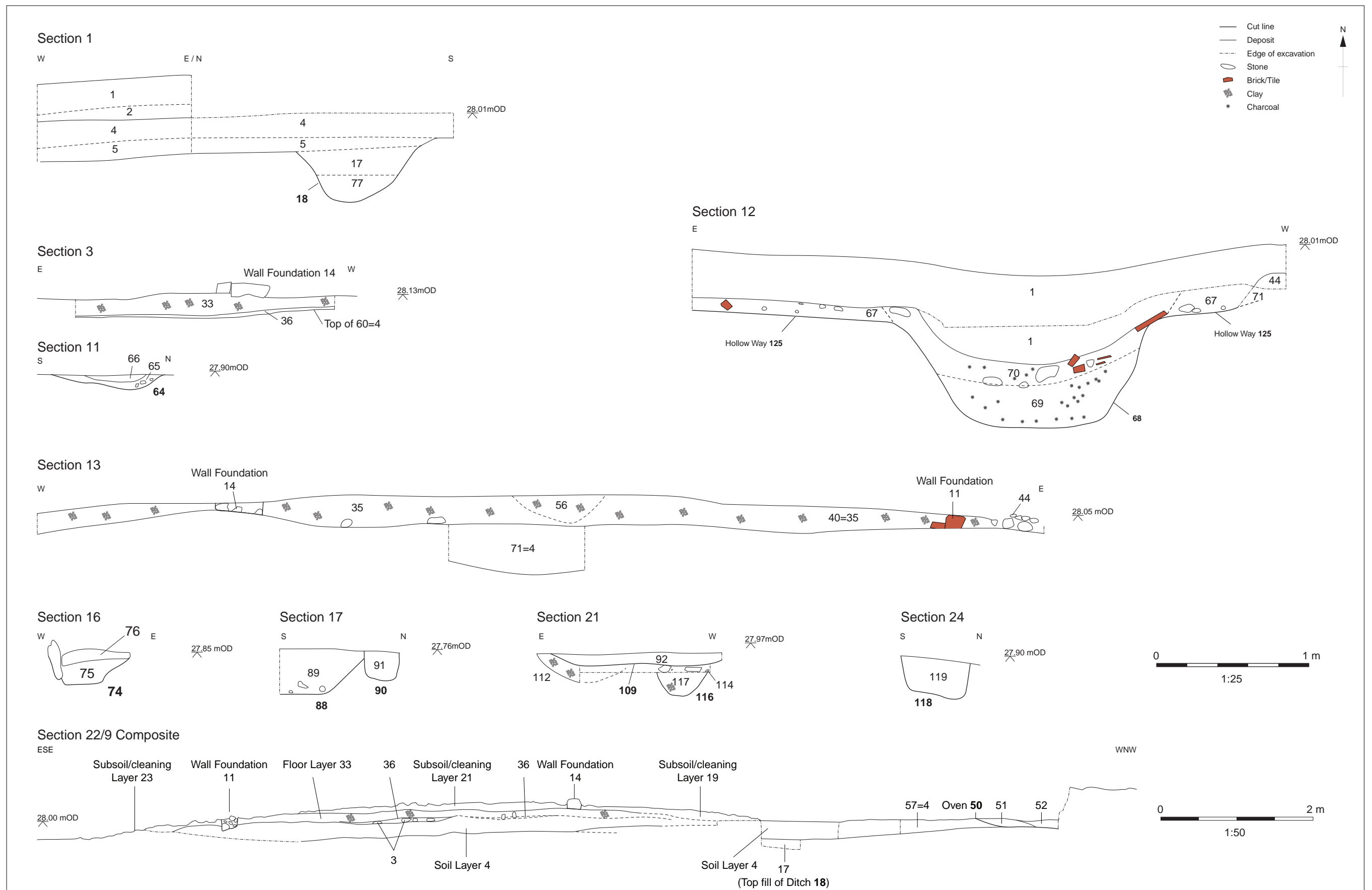


Figure 11: Sections



Plate 1: Evaluation Trench 1. View east.



Plate 2: Ditch slot 88 (Ditch 18). View west.



Plate 3: Clay surface 112 overlying cobble layer 114. View south.



Plate 3: Oven 50, Pot 54 in Cut 53 and Cobble Surface 34. View west.



Plate 5: Collapsed Culvert Drain **74**. View north.



Plate 6: Detail of Wall Foundation 14 and part of Floor 35 (left). View east.



Plate 7: Southern continuation of Wall Foundation 14. View east.



Plate 8: Hearth 56 (centre), Lining 62 (foreround) and remains of Chimney Stack 80 (background left). View north.



Plate 9: Pit **68** cut at the base of Hollow Way **125**, surrounded by cobbling (67). View south.



Plate 10: Cleaning of the 17th and 18th century layers and buildings. View east.



Plate 11: SF42 Worked bone object



Plate 12: Clay pipes from Pit 68 with mulberry decoration on the bowl



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