

# 169-173 High Street, Chesterton Cambridge

An Archaeological Excavation



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**University of Cambridge**  
**Division of Archaeology**  
March 2014  
Report No. 1226  
**ECB 4035**

## Summary

*Following on from an earlier trench-based evaluation, an open-area excavation extending over 307sqm was conducted at the Chesterton High Street site. This encountered an intensive and long-lived archaeological sequence. Firstly, during the Roman and Middle-Late Saxon periods the site appears to have been situated within a broader agricultural hinterland. Then, c. 1200, three long-lived burgage-type plots were established (only one of which lay predominately within the area of investigation). Linear in form, and with a distinctive bend or twist at their head, each plot appears to represent the occupation of two amalgamated strips within the preceding open field. Their establishment marks the culmination of a wider process of village nucleation, whereby an earlier pattern of dispersed, polyfocal nuclei was gradually superseded by a linear settlement focused along the route of the present High Street. Occupation continued in this form until c. 1550, when an extensive redevelopment was undertaken; this was most probably precipitated by the dissolution of Barnwell Priory and the sale of its former demesne land. As part of this redevelopment the ground-surface was raised and eight narrow tenements constructed. These were then occupied in turn until c. 1875, when a much more substantial brick-built structure was erected. Finally, in 1891 this building was converted into the Dog & Pheasant public house.*

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## - Introduction -

The Cambridge Archaeological Unit (CAU) undertook excavations at 169-73 High Street, Chesterton, between the 5<sup>th</sup> of November and the 6<sup>th</sup> of December 2013. This followed on from a trench-based evaluation, which was conducted at the site between the 20<sup>th</sup> and 25<sup>th</sup> of May 2013 (Timberlake 2013). The results of both projects are reported upon within the following text. Geographically, the development area is located on the suburban outskirts of Cambridge (Figure 1). It is bounded to the south-southeast by the High Street and to the east-northeast, west-northwest and south-southwest by extant commercial/residential buildings and gardens. In total it extends over 1700sqm in extent, part of the southern portion of which (centred on TL 4645 5999) was subject to excavation. This latter area measured 307sqm in extent. In addition, four evaluation trenches totalling 68sqm extended partially or completely outside of the excavated zone, thereby giving a combined total of 375sqm (22%) investigated. The project followed a specification issued by the CAU (Dickens 2013) and approved by Dan McConnell, Development Control Archaeologist at Cambridgeshire County Council's Historic Environment Team. The work was commissioned by Januarys on behalf of Mr N. Cook and Mr D. Brown.

### Landscape and Geology

The site is located a little over 0.8km to the east of the historic centre of the city of Cambridge, within the medieval *vill* of Chesterton. Here, it is situated upon the southern periphery of the floodplain of the River Cam. This river rises from springs situated along a northwest-southeast aligned Cretaceous chalk ridge that is located to the southeast of the town. Geologically, valley gravels and alluvium cover the valley bottoms while the surrounding terraces are formed from drift deposits. The site itself lies on 2<sup>nd</sup> Terrace river gravels overlying Gault clay (British Geological Survey 1976). Prior to the commencement of the investigation the site was principally occupied by the Saigon City Vietnamese restaurant and an adjacent hairdressing salon. Following the demolition of these buildings, the ground surface varied between 7.08m and 7.22m OD, while the uppermost horizon of the 2<sup>nd</sup> Terrace gravels lay at 6.18m to 6.32m OD. Gault clay was encountered at 4.55m OD.

### Methodology

Modern deposits and overburden – including layers of concrete and hardcore – were broken out and removed by a 360° mechanical excavator using a 2.0m wide toothless bucket. A two-stage machining strategy was employed. Stage one comprised reduction down to the stratified Post-Medieval horizon; stage two involved a second reduction to the height of the natural geology. At each stage, all identified archaeological features were excavated by hand and recorded using the CAU-modified version of the MoLAS system (Spence 1994); base plans were drawn at a scale of 1:20, whilst sections were drawn at a scale of 1:10. Where required, multiple stages of machining were undertaken in order to provide safe access to deep features such as wells. Where practicable, all such features were bottomed (the principal exceptions being where close proximity to standing buildings prohibited detailed investigation). Context numbers are indicated within the text by square brackets (*e.g.* [001]), and feature numbers are denoted by the prefix F. (*e.g.* F.03); all stratified contexts have been assigned feature numbers. A table of concordance, providing more detailed information on each individual feature, is presented at the end of this report

(Appendix 1). The photographic archive consists of a series of digital images. All work was carried out with strict adherence to Health and Safety legislation and within the recommendations of FAME (Allen & Holt 2010). The sitecode for the excavation was **OSC13(2)** and the event number was **ECB 4035**.

## **Historical and Archaeological Background**

The historical and archaeological background of Chesterton has been covered in depth in a recent desktop assessment (Cessford & Appleby 2011) and has also been discussed in a number of recent publications (Wright 1989; Taylor 1999, 121-26; Cessford with Dickens 2004; Mackay 2009). For this reason, the information will not be reiterated in detail here. Nevertheless, it is necessary to briefly outline the background of the area in order to place the site securely within its wider context.

Historically, the royal *vill* of *Cestretone* was most probably founded in the 8<sup>th</sup> century when the area was subdivided from the newly established *burh* of Cambridge (Wright 1989, 5; Cessford with Dickens 2004, 125-26). A polyfocal settlement then appears to have developed; dispersed foci have been identified to both the east and west of the present site, complementing a postulated core situated in the vicinity of St Andrew's Church (*ibid.*, 127; Figure 1, **13**). Subsequently, during the Post-Conquest period, the level of occupation expanded markedly. At the same time, the dispersed pattern of occupation appears to have given way to a nucleated settlement, which by the 13<sup>th</sup> century had coalesced into a linear arrangement oriented parallel to the River Cam (*ibid.*, 127-30). Concomitantly, a three-field system developed in association with the *vill* that was separate from the larger Liberty of Cambridge (Oosthuizen 2010). Chesterton's principal manor, which was assessed at 30 hides at Domesday (Otway-Ruthven 1938, 361), remained a royal demesne until c. 1200. It was then granted in fee farm by King John to Barnwell Priory (Clark 1907, 75) and remained in the hands of the priory until the Dissolution; the occupants of the *vill* nevertheless insisted on their rights as tenants of ancient demesne as late as the 16<sup>th</sup> century (Harmon 2006). A second, smaller manor was also present in Chesterton. This was appropriated by the abbey of St Andrew, Vercelli (Italy) in 1227, and was maintained by them as a rectory until 1440 (Wright 1989, 17; Figure 1, **12**). Following the dissolution of Barnwell Priory in 1538, their former demesne lands were dispersed amongst several private and collegiate landowners (*ibid.*, 13-15). The *vill* nevertheless continued to expand during the Post-Medieval period and the rate of expansion increased exponentially following the enclosure of the area in 1838, as at this time a new and substantial suburb was established (Blackmore 1981; Bryan 1999).

Archaeologically, in addition to a number of small-scale evaluations and watching briefs, four moderately-sized excavations have been undertaken in the Chesterton area. The first of these was undertaken at the junction of Scotland Road and Union Lane (Mackay 2009; Figure 1, **11**). The second, at the former Sargeants Garage site (Figure 1, **6**), was situated on the western side of the junction of High Street and Union Lane (Alexander 1998; Hall 1999; Cessford with Dickens 2004) and the third, at the former Wheatsheaf public house (Figure 1, **7**), was situated on the eastern side of the same junction (Masser 2000; Armour 2001b; Cessford with Dickens 2004). Finally, the fourth, at the former Yorkshire Grey public house (Figure 1, **8**), was located some 450m to the northeast, on the northern side of the High Street (Mackay 2001a; Mackay 2001b; Cessford with Dickens 2004).

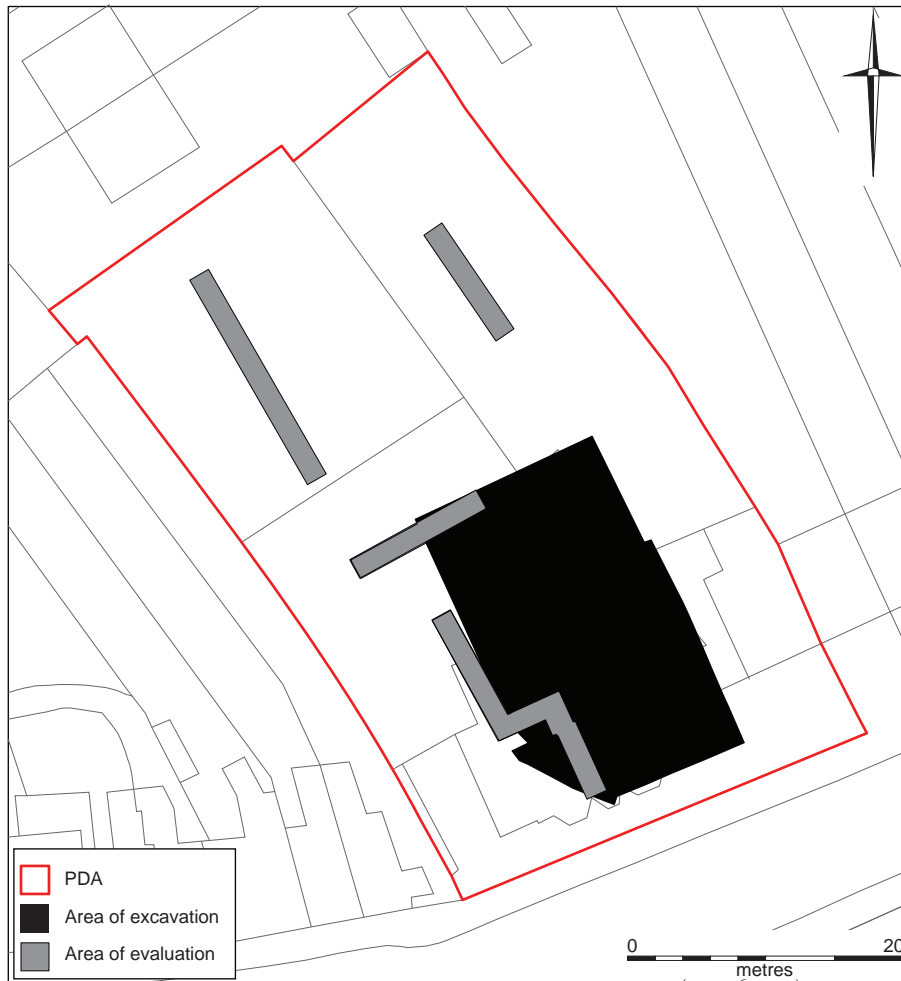
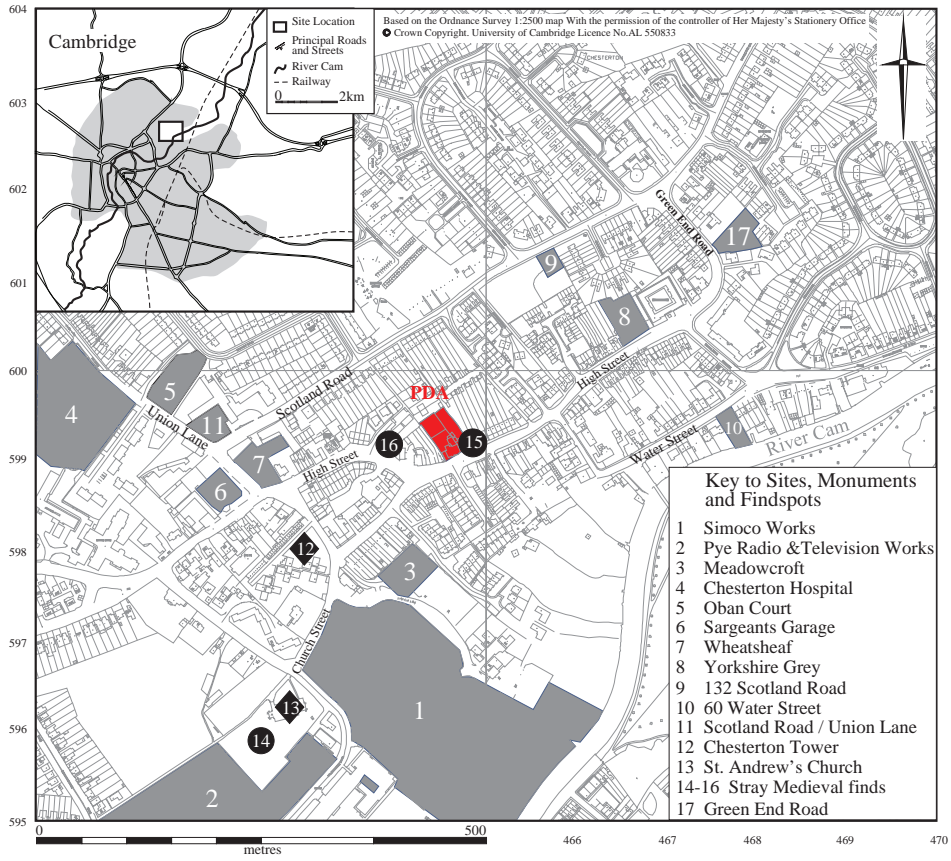
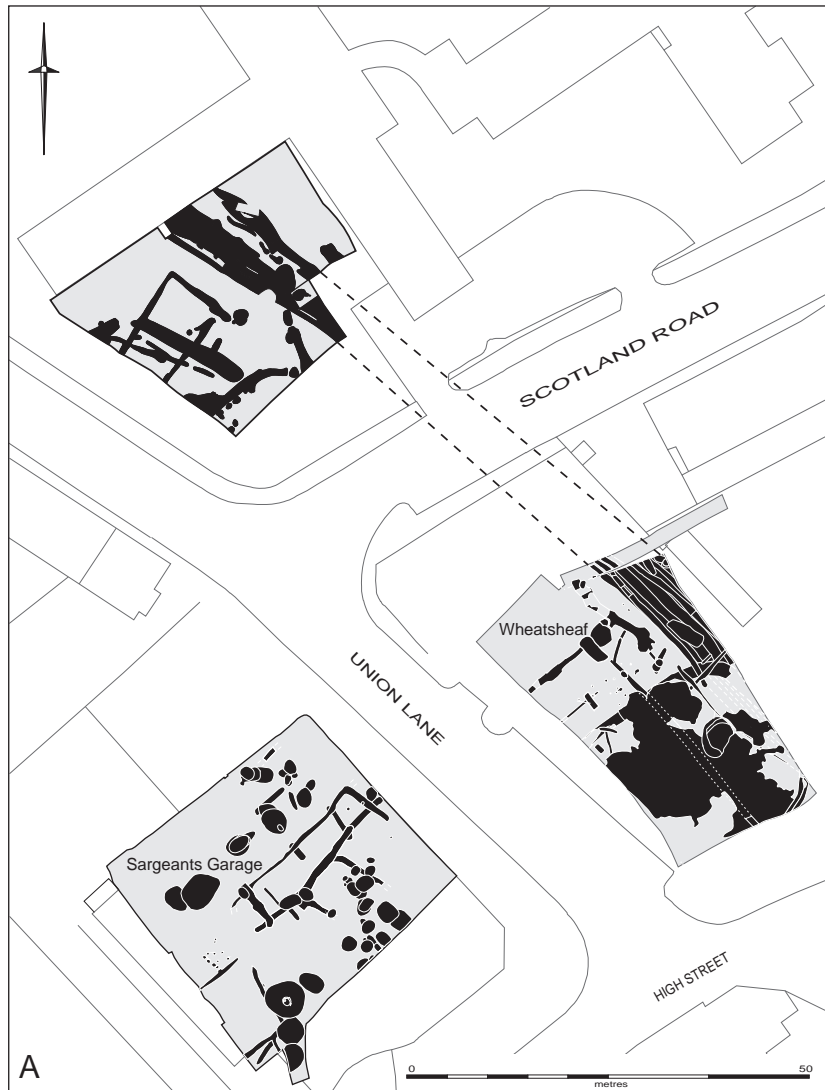


Figure 1. Previous areas of investigation (top) and extent of excavation (bottom).





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Figure 2. Exposed archaeology at nearby excavations.

A. Union Lane / Scotland Road junction. Multiphase features, predominately Medieval and later, in date.

B. Former Yorkshire Grey Public House, High Street (note the truncation of earlier features by Post-Medieval pitting / quarrying)

Each of these four excavations revealed the presence of a relatively intensive archaeological sequence (Figure 2). Although small quantities of Prehistoric and Roman material were recovered, the earliest evidence of intensive settlement activity was Late Saxon/Saxo-Norman in date. Principally consisting of ditches, gullies, pits and postholes, the majority of the features that were encountered pertained to a long-lived sequence of medieval and Post-Medieval occupation (the details of which will be discussed, where pertinent, below). When taken in conjunction with the results of a number of additional small-scale watching briefs, evaluations and isolated find spots – whose locations are also shown in Figure 1 – this work has allowed a general model of the history of the village to be adduced (Cessford with Dickens 2004). In direct relation to the present site, however, the closest previous discoveries comprise only a few sherds of unstratified medieval pottery (Browne 1974, Map 14; Figure 1, **15-16**).

## **- Results -**

### **Evaluation Trenching**

A trench-based evaluation was conducted at the site between the 20<sup>th</sup> and 25<sup>th</sup> of May 2013 (Timberlake 2013). This was undertaken following the demolition of the Saigon City Vietnamese restaurant, which had formerly occupied the majority of the front portion of the development area. A total of six trenches were excavated at this time, although three of these (Trenches 3, 4 and 5) were combined in a staggered arrangement to form a single, cohesive entity. The disposition of the various trenches, and their relationship to the subsequent area of excavation, is shown in Figure 1. Two key results were obtained from the evaluation. The first comprised the identification of a well-preserved archaeological sequence, consisting of numerous features of predominately medieval and Post-Medieval date, situated towards the frontage of the plot; a limited degree of stratigraphic survival was also noted in this area. The information derived from these features has been fully integrated into the following text. The second result comprised the identification of a relatively high degree of disturbance towards the rear portion of the site. This discovery influenced the selection of the area of subsequent, detailed investigation.

### **Site Sequence**

The archaeological sequence encountered at the Chesterton High Street site was relatively intensive in nature (Figure 4) and can be subdivided into four phases (Table 1). Of these, the first and last are of limited importance; they essentially serve to ‘bookend’ the principal period of occupation at the site, which occurred between *c.* 1200 and the late-19<sup>th</sup> century. Compositionally, each phase broadly corresponds to a discrete historical period (such as medieval, Post-Medieval *etc.*). In order to reflect the more discrete historical sequence relating to this particular site, however, the phasing takes account of significant events that directly pertained to its development. These include the mid-late 16<sup>th</sup> century reorganisation of the area following the dissolution of Barnwell Priory and the subsequent re-amalgamation of many of the plots in *c.* 1875. Although chronologically precise events cannot necessarily be identified with certainty via the imprecise medium of archaeological dating (which, especially in this instance, principally relies upon ceramic association), it is nevertheless felt that such an approach provides a more nuanced, site-specific framework within which to chart the overall developmental sequence. Where ambiguities of phasing occur, they will be discussed in light of the dating evidence available.



Figure 3. Views of excavation in progress, showing (left) well F.139 and (right) pit F.259 etc.

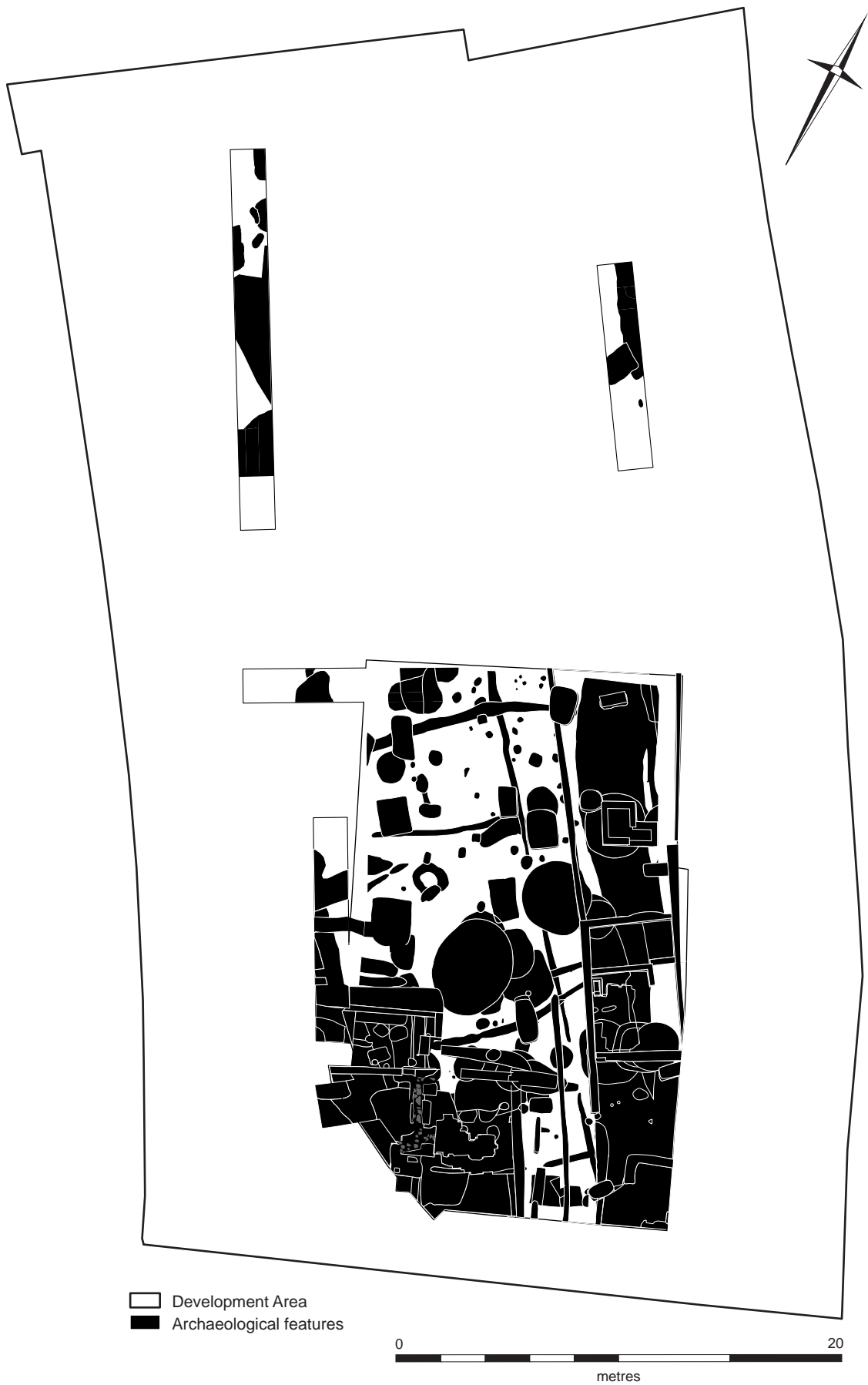
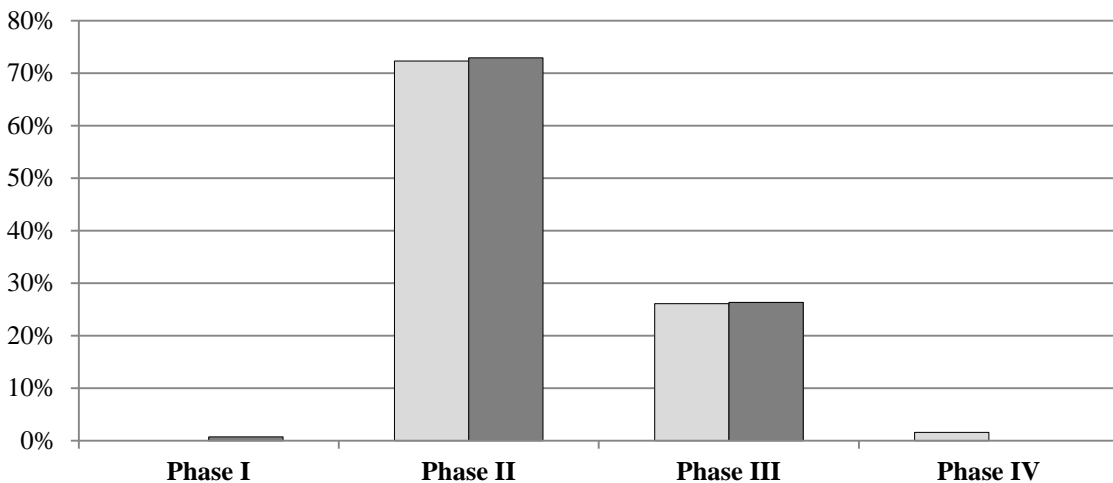


Figure 4. Plan of all features (excluding layers)

	Date Range	Number of Features	Percentage of Total
Phase I	Pre c. 1200	Residual finds only	0
Phase II	c. 1200-1550	180	72.3
Phase III	c. 1550-1875	65	26.1
Phase IV	c. 1875-2013	4	1.6

**Table 1:** Number of features by phase.

As Chart 1 demonstrates, the majority of features at the site were created – and, concomitantly, the greatest quantity of material culture deposited – during Phase II. Subsequently, during Phase III, although occupation continued (and, by some measures – such as the degree of building coverage – potentially increased in intensity) changes in the pattern of use of the site resulted in a diminution of this period’s archaeological visibility. The relative significance of each of the four phases is reflected in the constitution of the following report.



**Chart 1:** The relative percentage of features created (pale grey) and pottery deposited (dark grey) per phase. A close correlation is apparent between the two.

### Phase I: Pre-settlement Activity

Limited evidence of Prehistoric, Roman and Middle Saxon activity was encountered at the site. This entirely consisted of residual material culture that could not be linked to any contemporary features; the level of activity therefore appears to have been low. In the first instance a general, background anthropogenic presence during the Prehistoric period was indicated via the recovery of residual worked flints spanning the Mesolithic to the Late Bronze Age/Iron Age (see Beadsmoore & Billington, below). In addition, a single, abraded sherd of Middle Bronze Age pottery – along with four Roman and four Middle Saxon sherds – was also recovered. All of these fragments appear most likely to have been introduced to the site via manuring associated with agricultural activity (see Hall & Newman, below). Although residual, it is the Middle Saxon sherds – which exclusively consisted of Ipswich ware – that are of the greatest significance. This is because the presence of such material reinforces the probability that Middle Saxon occupation occurred in the general vicinity (most probably in the area of St Andrew’s Church; see Cessford with Dickens 2004, 127).

## Phase II: A Successful Nucleated Vill (c. 1200-1550)

This phase represents the most substantial and archaeologically the most significant of the four identified periods of activity at the site; it corresponds to the commencement of long-lived domestic occupation. As Table 2 demonstrates, a large number and wide variety of feature-types were created during this phase (see Figures 5 and 6). As is typical for the period, the most common of these were pits and postholes (which accounted for 78.9% of all Phase II features). Also present were ditches, gullies, hedgerows, wells, cesspits and structural remains.

Feature Type	Number of Features	Percentage of Total
Cesspit (wattle-lined?)	1	0.6%
Ditch	13	7.2%
Gully	11	6.1%
Hedgerow	2	1.1%
Layer	4	2.2%
Pit	64	35.6%
Pit/posthole	4	2.2%
Posthole	74	41.1%
Robber cut	2	1.1%
Structural (beamslot)	1	0.6%
Well (stone-lined)	2	2.2%
Well (lining unknown)	2	

**Table 2:** Phase II features by type.

Settlement activity most probably commenced at the site at sometime around the end of the 12<sup>th</sup> or very beginning of the 13<sup>th</sup> century. This can be demonstrated via the proportion and distribution of the diagnostically 12<sup>th</sup> and 13<sup>th</sup> century ceramics that were encountered. Although limited in quantity, 10<sup>th</sup>-12<sup>th</sup> century material – which included St. Neots-type ware, Thetford-type ware and Stamford ware – was principally encountered within ditches **F.142-46**; stratigraphically, these comprised the earliest features to be identified at the site. Yet in no instance did Saxo-Norman material occur in isolation. The sherds were predominately found in direct association with diagnostically 13<sup>th</sup> century fabrics – which included Pink Shelly ware, Developed St Neots-type ware and Developed Stamford ware – whilst a small number also occurred residually within later features. This evidence strongly suggests that occupation commenced at approximately the same time that the transition in ware types occurred. This event is difficult to date precisely, but is likely to have taken place between c. 1175 and 1225 (centring with the highest degree of probability on c. 1200). Notably, a near-identical pattern of *de novo* settlement expansion also appears to have occurred contemporaneously on the opposite bank of the Cam at Barnwell (Newman 2013b, 14), thereby suggesting that this event formed part of a much broader phenomenon (see further the discussion section).

Within the present development area a minimum of three long-lived property plots were established at this time, although only one of these – *Plot II* – lay predominately within the area of investigation (Figure 6). Each of the plots was defined by a series of boundary features that varied in both type and form over time (Figure 7). In addition, a variety of feature-types – such as wells and cesspits, for example – were also present; these pertained to the array of occupational activities that were undertaken concomitantly at the site during the medieval period.

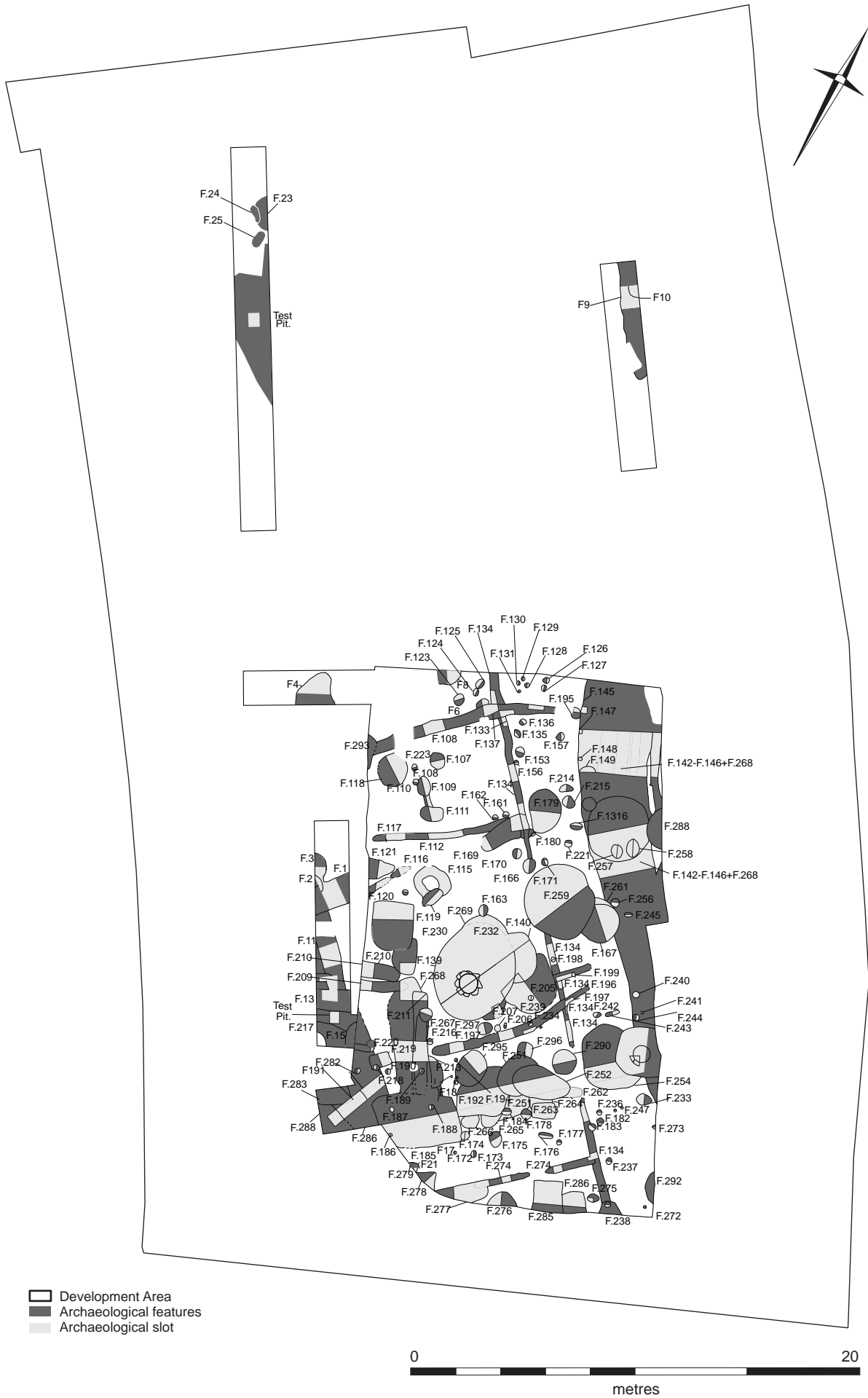


Figure 5. Plan of all features in Phase II



Figure 6. Phase II plot boundaries and key feature-types





Figure 7. Boundary development sequence, *Plot II*

### *Plot development sequence*

Due to the unusually well-preserved nature of the relatively ephemeral features that constituted the boundaries and associated sub-divisions of the property plots at the site – a circumstance that primarily resulted from substantial ground-raising activity undertaken at the commencement of Phase III – their temporal development can be reconstructed with some certainty (Figure 7). Unfortunately, because of the relative disposition of the excavated areas, detailed discussion can only be undertaken in relation to *Plot II*. As Figure 6 reveals, *Plot II* was relatively narrow in form with a distinctive bend, or twist, at its head (the head being defined as that portion situated in closest proximity to the street frontage). Significantly, this closely equates to the pattern generated by the individual strips – known as *lands* – that are characteristic of medieval open field agriculture in the period c. 850-1150 (see Ault 1972; Astill & Langdon 1997; Oosthuizen 2005; Gardiner & Rippon 2007). The systematic and repetitive practice of ploughing these lands generated a distinctive, elongated ‘S’ shape. Although subject to regional variation, the most common land-width was typically around 7m (Hall 1982, 5). This implies that at the Chesterton High Street site, where the original plots measured approximately 14m across, two *lands* were combined to form a single property. Consequently, the plot was also c. 2 perches wide (a perch being the standard medieval unit of measurement in relation to property). In terms of length, the original strips most probably extended from the High Street all the way to Scotland Road, with these two routeways first developing as headlands within the open-field system. While it is possible that the property plots into which they were subsequently converted occupied the entirety of this space, it is perhaps more likely that they extended only around half this distance; that is, they terminated approximately 20m to the northwest of the present development area’s boundary. Were this indeed to have been the case then they would have measured approximately 90m in length, thereby producing a length to width ratio of c. 6.5:1 (which is broadly consistent with the ratio at other Cambridge sites).

Initially, from around the 8<sup>th</sup> century onwards, the site lay within the agricultural zone associated with the newly founded royal *vill* of *Cestretone*; this subsequently appears to have developed into a classic three-field system (Oosthuizen 2010). From c. 1200 – when the nucleated settlement was becoming firmly established, and the property-plots at the present site appear to have been laid out – these fields also provided demesne lands for Barnwell Priory. Despite the absence of definite traces of agricultural activity, such as furrows, it is notable that the earliest features at the site contained a relatively pale, subsoil-like fill (which included occasional residual sherds of Prehistoric, Roman and Saxon pottery) that may well have corresponded to a relict plough-soil. This corroborates the aforementioned topographical evidence and persuasively indicates an initial agrarian use for the site.

In form, *Plot II* – and thus, almost certainly, the adjacent *Plots I* and *III* that appear to have been established contemporaneously at the Chesterton High Street site – closely resembled a ‘burgage-type’ plot; a long, thin property-type that occurred almost ubiquitously in urban and suburban contexts across England during the Middle Ages (see further Conzen 1960; Slater 1981). When situated in a borough, ownership of one of these plots of land conveyed various legal, trading and financial privileges. Within a typical burgage plot the head of the property was occupied by the primary domicile or dwelling house, which was frequently oriented at right-angles to the street. Behind this structure lay any potential accessory buildings – such as a kitchen or workshop, for example – which also serviced the household. Finally, extending to the rear of these buildings was the tail of the property. This portion of the plot was itself frequently sub-divided into an ‘innerland zone’, within which a variety of domestic or craft-based activities may have been undertaken, and a ‘backland zone’ that was often reserved primarily for horticultural use. At the present site, the primary dwellings themselves – along, quite possibly, with any ancillary structures that may have been situated immediately to their rear – lay outside the area of investigation beneath the present pavement and adjacent road surface. This is a very common pattern at many British sites, where gradual road-widening schemes undertaken over the past few centuries have frequently intruded into areas of former domestic occupation. Nevertheless, despite this caveat, the sequence at the Chesterton High Street site was very revealing. Within the innerland zone, for example – to the rear of the plot’s principal buildings – a variety of boundary-related features were present that pertained to the increasing century-on-century sub-division of this heavily utilised space.

The sequence commenced c. 1200 with the establishment of ditches that defined both the western and eastern boundaries of *Plot II*. Subsequently, over the course of the 13<sup>th</sup> century, the original ditches were frequently recut (a minimum of five times), leading to the eventual development of

dense, semi-sinuuous ribbon-like clusters of gullies along each boundary (Figure 7). At any one time, however, the active boundary division itself appears to have measured a maximum of 1.2m in width and 0.7m in depth. Accordingly, any associated bank, should such a feature have been present, would also have been of limited size. Excavation revealed that in relation to both plot boundaries the pattern of ditch recutting occurred in a broadly unilinear sequence, extending gradually from east to west. This was most clearly demonstrable at the eastern boundary, where **F.142** was succeeded in turn by **F.143-45**. One consequence of this unilinear pattern of progression was that the width of the original property plots remained relatively consistent over time (although they did shift incrementally to the west by some 3-5m during the course of the 13<sup>th</sup> century). The employment of ditches, as opposed to more ephemeral features such as fences or hedges, to define the plot's perimeter is also suggestive. This is because ditches were rarely employed to demarcate the boundaries of medieval properties situated in a more densely occupied urban or suburban milieu as they would have been rapidly infilled by the repeated generation of upcast deposits. Ditches also occupied valuable space, which was at a premium in a densely built-up environment. Consequently, the utilisation of this particular feature-type – especially when taken in combination with the incorporation of two *lands* as opposed to one into the original layout – indicates that the Chesterton High Street plots were initially semi-rural in character. That they were not fully rural is demonstrated by the adoption of a linear, burgage-type format in contrast to the open enclosure layout that was employed contemporaneously at other Cambridgeshire villages (such as Cherry Hinton; Cessford & Slater *forthcoming*). Yet no further evidence of internal organisation or sub-division was identified at this date. Indeed, the original pattern of open, ditch-defined plots appears to have predominated throughout the majority of the 13<sup>th</sup> century.

Subsequently, by the early-14<sup>th</sup> century, a number of changes occurred (Figure 7). Firstly, the ditched boundaries went out of use and were replaced by fence-lines. This was a relatively common pattern of development that has been noted at many other sites (*e.g.* Hall & Hunter-Mann 2002, 807-10), though such a transition is usually inferred via the absence rather than the presence specific boundary-related features. Moreover, whilst it is by no means definitive, this development is nevertheless strongly indicative that the usage of the plot had increased in intensity by this date. Consonant with such an interpretation, a rectilinear system of internal subdivisions was also set out at this time. Consisting of gullies **F.112**, **F.134** and **F.274**, these subdivisions created a north-south oriented access route parallel to *Plot II*'s eastern boundary, adjacent to which were situated a minimum of three separate 'cell-like' sub-enclosures. These latter areas are likely to have represented discrete spatial zones wherein different types of activity were conducted. The sub-enclosures were segregated by relatively ephemeral shallow gullies that measured a maximum of 0.38m wide by 0.20m deep; they were thus relatively permeable spaces, whose boundaries were perhaps as much psychological as they were physical. Nevertheless, the individuation of different zones of activity is a typical characteristic of a fully developed burgage-type plot. Subsequently, during the 15<sup>th</sup> century, this pattern of increasingly intensive spatial subdivision developed still further. By this date the gullies themselves had passed out of use. They were replaced instead by irregular, partially curvilinear hedgerows **F.133** and **F.197** (Figure 7). Hedgerows such as these represent a boundary-type that is again frequently encountered, or at least inferred, in urban and suburban contexts (*e.g.* Bowsher *et al.* 2007, 23). In this instance, the hedgerows appear to have been utilised in association with fence-lines to define a series sub-enclosures that were markedly similar to their 14<sup>th</sup> century predecessors, albeit with no indication of an associated north-south access route. The most striking development of this period, however, comprised the establishment of a smaller sub-plot partially carved out from the frontages of *Plots I* and *II* (Figure 7). Rectified to a linear alignment perpendicular to the street frontage – and defined by a sequence of frequently recut gullies including **F.209-11** and **F.267-68** – this sub-plot represents a marked increase in the density of occupation at the site. Unfortunately, due to its location relative to the principal area of excavation, few details of the sub-plot's subsequent usage could be determined.

#### *Patterns of activity: the character of occupation*

A gradual pattern of increasingly intensive occupation and associated sub-division has been identified in relation to the boundary features pertaining to *Plot II*. What then of the character of the activities that were undertaken contemporaneously within the interior of this property? This issue can be examined most effectively via an analysis of the additional, non-boundary related feature-types and material culture assemblages that were present at the site. As Table 1 and Figure 6 demonstrate, a dense array of intercutting 13<sup>th</sup> to mid-16<sup>th</sup> century features were present.



Figure 8. Views of Phase II features, pre- and mid- excavation, facing northwest.



Figure 9. View of Phase II features, facing southeast. Pit F.167 and well F.139 are in the foreground.



Figure 10. Well F.139, facing northwest, showing robber cut F.270 (top) and the four surviving courses of the original clunch lining (bottom).

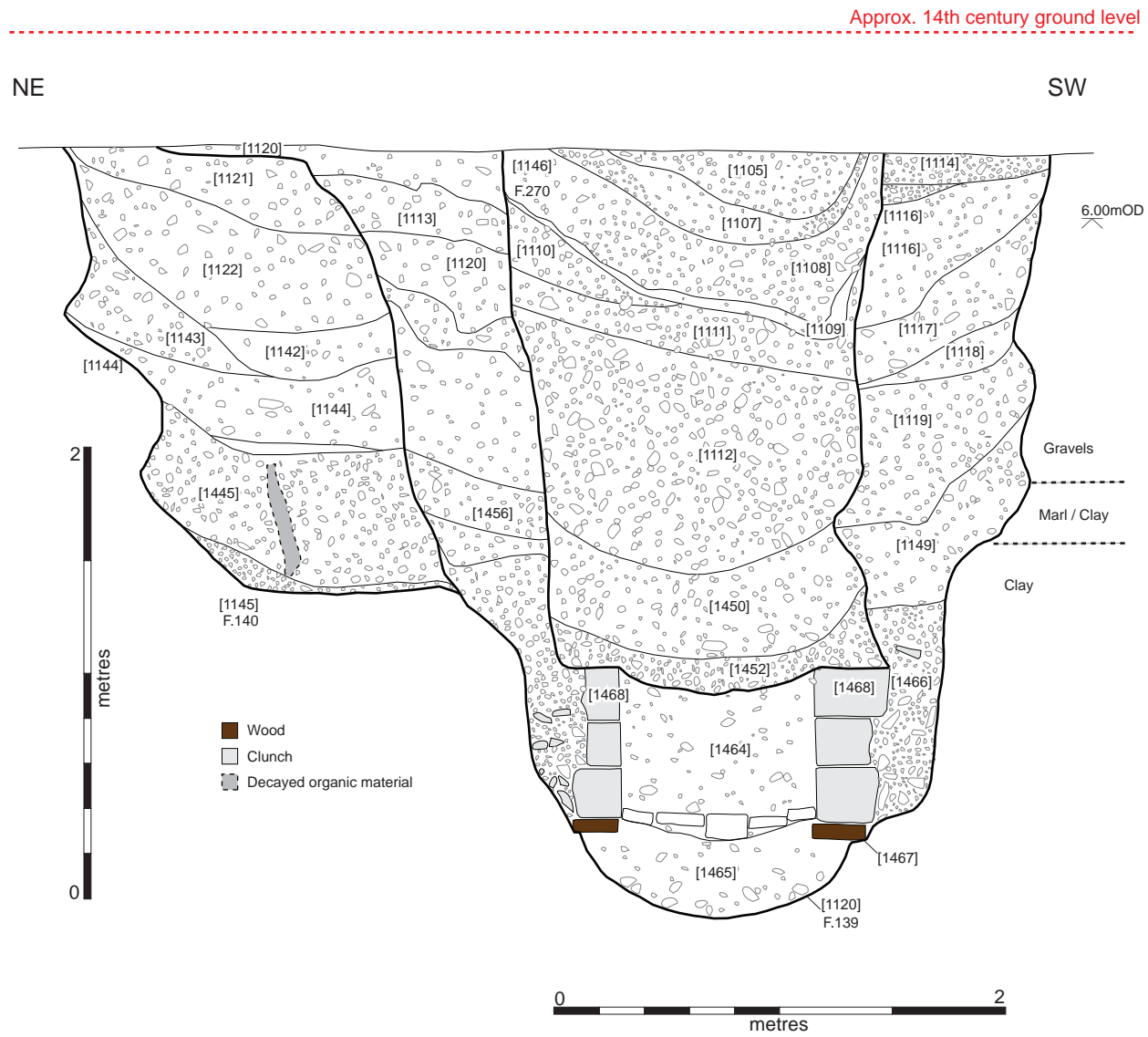


Figure 11. Section of well F.139, with photographs of *in situ* stone lining (top) and timber baseplate (bottom)



Figure 12. Photograph of well F.271, facing northwest. Although not bottomed, remnants of the original clunch lining are visible towards the base. Above these lies robber cut F.255, which is overlain in turn by footing F.310 of **Building 3**. Finally, this is capped by a made-ground deposit introduced at the commencement of Phase IV



Recent studies of medieval housing (such as Grenville 1997; Quiney 2003; Pearson 2005; Grenville 2008; Johnson 2010) have demonstrated that the plot-head comprised the primary location for the principal dwelling in most contemporary properties. Unfortunately, the head of *Plot II* lay outside the area of investigation (Figure 7); consequently, no details pertaining to the main building's form or method of construction could be determined. Nevertheless, these same studies have also shown that the most common form of non-rural housing during the medieval period consisted of a two storied timber-framed structure with a shop or working area on the ground floor and a *solar*, or sleeping chamber, above (e.g. Schofield 1997, 132 & 142). Thus, by the 14<sup>th</sup> century – when *Plot II* appears to have become increasingly 'suburban' in form – it is likely that a relatively similar building was present at its head. In addition, within the majority of burgage-type plots it was also typical for at least one accessory building to be present to the rear of the principal dwelling. Such buildings are most frequently identified via the presence of intensive, intercutting clusters of postholes. This is a consequence of their most common form of construction, since the lifespan of a medieval building that employed an earth-fast post-built technique was typically only around twenty to forty years (Bowsher *et al.* 2007, 317–18; Horsman *et al.* 1988). Yet at the present site, no such concentration of postholes was identified. A second medieval construction technique was sometimes utilised, however. This involved the employment of relatively ephemeral horizontal earth-fast sill beams; a technology that was first utilised c. 1180 (Walker 1999; Schofield & Vince 2003, 109). Because sill beams generate a less substantial archaeological footprint than postholes, their remains are consequently more susceptible to truncation. Nevertheless, buildings of this type can sometimes be identified via the presence of 'areas of absence', blank spaces fringed by features whose alignment and orientation were determined by the perimeter of an otherwise archaeologically-invisible structure. Once again, however, no such pattern was identified. This does not of course preclude the possibility that an accessory building (or buildings) were originally present at the site, but does strongly suggest that no such structure lay within the investigated area.

To the rear of the frontage buildings, within the 'innerland zone' of the plot, were often situated an array of easily accessible features related to everyday, practical necessities. Prime amongst these were wells and cesspits. Within *Plot II*, for example, a tight cluster of these feature-types was present (Figure 6). This included two immediately adjacent 14<sup>th</sup> century features – timber-lined well **F.140** and cesspit **F.269** – which were both succeeded towards the end of the 14<sup>th</sup> century by stone-lined well **F.139**. In the case of the two former features, the precise nature of their original lining could not be determined due to the absence of anaerobic, waterlogged fills. The presence of several discrete vertical organic stains towards the base of **F.140** (Figure 11), however, indicates the presence of sails, the vertical timbers used to support the horizontal rods that constitute a wattle lining. It is very probable that cesspit **F.269** was also revetted in a similar fashion, although in this instance no residual trace of a lining remained. Nevertheless, despite the investment in their linings, both features were relatively short-lived. Towards the end of the 14<sup>th</sup> century they were superseded by the construction of a much more robust and substantial well. The creation of this feature, **F.139**, commenced with the excavation of a large, sub-oval construction cut. When this reached the level of the underlying Gault Clay a narrower shaft was inserted, at the base of which purpose-made timber base-plate [**1467**] was set down (Figures 11 and 17A). This then acted as a raft upon which the principal dressed-clunch lining was constructed (Figures 10 and 11). The well subsequently remained in use until the end of Phase II, around the middle of the 16<sup>th</sup> century. Its longevity was in part a result of its increased robusticity in comparison to its predecessor and in part a result of its increased depth, which rendered it volumetrically much more productive. Within the first few decades of its use, however, repeated cleaning appears to have resulted in the partial undermining of the baseplate. Consequently, this lower portion of the feature was infilled around the beginning of the 15<sup>th</sup> century and a layer of hardcore introduced in order to form a solid base. The former material included an assemblage of 36 fragments of leather waste, including portions of two turnshoes and two straps, as well as part of a wooden comb, a wooden composite knife handle and a copper-alloy strap end. The hardcore included several 15<sup>th</sup> century bricks and quernstone fragments, plus a near-complete, lathe-turned grindstone (see further the specialist report section, below).

Also present within **F.139**'s waterlogged basal infill was a relatively well-preserved assemblage of botanical remains (see Fryer, below). This included some evidence for the inclusion of sewage along with seeds indicative of rough, poorly maintained grassland (although it must be borne in mind that this material was not necessarily derived from the immediate environs in which it was deposited). The presence of both grape seeds and walnut shell fragments is indicative of somewhat higher status consumption, however; a pattern that is commensurate with the construction of an

expensive stone-lined well within the property. Although no other cesspits pertaining to this phase were identified, two additional medieval wells were present (**F.271** and **F.292**). Both were situated on the eastern boundary of *Plot II*, so that it is not clear whether they were utilised by the occupants of that property or by their neighbours; though the presence of a contemporary stone-lined well in the core of *Plot II* itself suggests that the latter option is the more likely. Due to their proximity to extant standing buildings, these features could not be excavated in their entirety. Indeed, the investigation of **F.292** was almost entirely restricted to augering, with the result that the nature of its lining, and the date of its construction, could not be determined. By way of contrast, **F.271** could be investigated more intensively (Figure 12). Although it was not bottomed, the presence of a stone-lining exceedingly similar in form to that of **F.139** – and thus most probably of a similar date – was identified. This again implies that this feature was most probably associated with *Plot III* as opposed to *Plot II*. Interestingly, no evidence of either a well or a cesspit of 13<sup>th</sup> century date was identified within the excavated area. Such features almost certainly existed – they comprised a basic requirement of domestic occupation at this date – but they were not situated in that portion of the plot that was subsequently to become so heavily utilised during the 14<sup>th</sup> and 15<sup>th</sup> centuries.

Throughout the remainder of *Plot II* the most numerous – and, in many instances, the most ambiguous – of the remaining feature-types comprised pits. Their ambiguity arises from the fact that fewer than half of these features could be assigned an identifiable function. Initially, the majority of pits are likely to have been utilised as gravel quarries (although the extracted material may only have comprised a by-product of their primary objective). Similar extraction-type activity probably continued throughout much of the period, but would have become increasingly inhibited by two factors. The first is a gradual build-up of horizontal strata overlying the natural gravel, thereby rendering access increasingly problematic. The second is a gradual increase in the overall number of pits; by the mid-14<sup>th</sup> century, for example, a pit excavated at random at the site would have been highly likely to encounter an existing feature. Indeed, as Figure 6 shows a relatively high proportion of pits did intercut, thereby implying that the later examples were not primarily extraction-related. Overall, therefore, it appears that quarries account for less than 25% of the total corpus of pits. A second function that can be identified in relation to certain pits is refuse disposal. Although very few features contained large deposits of ‘robust’ refuse – such as ceramics or faunal material – these artefacts would have been dwarfed in quantity relative to the amount of contemporary organic material that required disposal (see Brothwell 1982). Nevertheless, the majority of refuse appears to have been deposited ‘opportunistically’ within the backfill of features whose primary purpose had already been fulfilled. Primary refuse disposal probably accounted for only around 10% (or less) of the pits investigated. Finally, one further pit-category can also be individuated. This consists of pits of ‘specialised function’; that is, features that were created in order fulfil a particular role or purpose (most often as part of a larger craft- or industrial-based process).

Within *Plot II*, three pits of specialised function have been identified (**F.167**, **F.185** and **F.259**). These features shared a number of otherwise unique characteristics. Each was substantial in size and had a similar profile, consisting of near-vertical sides leading to a flat base; thus, although they were relatively shallow – varying between 0.15m+ and 0.53m in depth – they almost certainly required some form of revetment in order to prevent their rapid collapse. In addition, all three features demonstrated evidence of staining/mineralisation of the natural gravels that underlay them (this is visible in relation to **F.167** in Figure 9). Such staining is consistent with their use in water-based activities, wherein material was either being immersed or rinsed on a frequent basis (though, due to the nature of the underlying geology, none of these features would have been capable of retaining standing water). These water-based activities, which primarily appear to have taken place during the 15<sup>th</sup> century, were most probably craft/industrial in nature. Unfortunately, the precise nature of the process (or processes) that were being undertaken at this time is hard to determine. This is because it was common for a small number of generic feature-types – including specialised-pits of this kind – to be utilised for a wide range of differing purposes (Schofield & Vince 2003, 122). Moreover, no distinctive groups of associated material – such as a large concentration of metapodia, for example, or evidence of fuller’s earth – which might shed further light upon the process were recovered; the primary exception being a small quantity of metalworking debris that may not even have been derived from the site itself (see Timberlake, below). Nevertheless, this limited evidence of probable craft/industrial activity is significant as it comprises one of the primary indices for assessing the economic character of a settlement (see further Blair & Ramsay 1991; Schofield & Vince 2003, 121-50; Córdoba & Müller 2011).

Although relatively little horizontal stratigraphy survived from this period – due principally to the intensity of the levelling/demolition activity undertaken at the commencement of Phase III, combined with the degree subsequent horticultural/backyard activity – some indication of the medieval ground height was identified. In *Plot II*, for example, the surface level towards the end of the period appears to have lain at 6.65m OD or higher. This indicates that an overall deposit build-up of *c.* 0.5-1.0m occurred during Phase II (with the depth of accumulation varying dependent upon its location within the plot, and the nature and intensity of the activities that were undertaken there). To the rear of the frontage zone, within the innerland and especially backland areas, the additional material is likely to have principally consisted of a ‘garden-soil’ type layer. Deposits of this kind are frequently encountered at contemporary urban and suburban sites, where they represent an amalgamation of topsoil, upcast material and the disturbed upper horizons of underlying features (*e.g.* Coleman 2004, 303-04).

### Phase III: Post-Dissolution Redevelopment (*c.* 1550-1875)

This phase commenced with a dramatic reorganisation of the plot layout at the site. The pattern of increasing sub-division previously identified during the 15<sup>th</sup> century was given substantial impetus at some time between *c.* 1540 and 1580, when *Plots I-III* were eradicated and *Plots A-H* established in their place (Figures 13 and 14). Consonant with the increased level of occupation at the site, a much higher percentage of the features that were created during this phase comprised structural remains (Table 3). Additional feature-types included a brick-lined well and cesspit, plus pits, layers and postholes.

Feature Type	Number of Features	Percentage of Total
Cesspit (brick-built)	1	1.5
Layer	5	7.7
Pit	25	38.5
Posthole	9	13.9
Soakaway (barrel-lined)	1	1.5
Structural (beampad)	1	35.4
Structural (beamslot)	3	
Structural (foundation)	12	
Structural (surface)	7	
Well (brick-lined)	1	1.5

**Table 3:** Phase III features by type.

The date at which the reorganisation of the plots occurred is difficult to determine precisely due to the absence of closely-datable material culture. Nevertheless, the presence of Glazed Red Earthenware – a fabric-type that was manufactured in great quantities on the Isle of Ely from the mid-16<sup>th</sup> century onwards (Cessford *et al.* 2006, 48-71) – within the robber-cuts of medieval stone-lined wells **F.139** and **F.271** indicates that their backfilling is unlikely to have predated *c.* 1540. Similarly, the presence of 17<sup>th</sup> century material in contexts that postdated the reorganisation demonstrates that it most probably occurred before the close of the 16<sup>th</sup> century. It is also notable that the period 1538-80 was one of great change in Chesterton, following the dissolution of Barnwell Priory and the dispersion of its former demesne (see further the discussion section, below). At the present site, this process of transition appears to have precipitated the demolition of the preceding medieval buildings and the introduction of ground-raising deposit **F.331**. A series of eight narrow tenement plots were then established, each of which measured less than a third of the width of its Phase II predecessors.

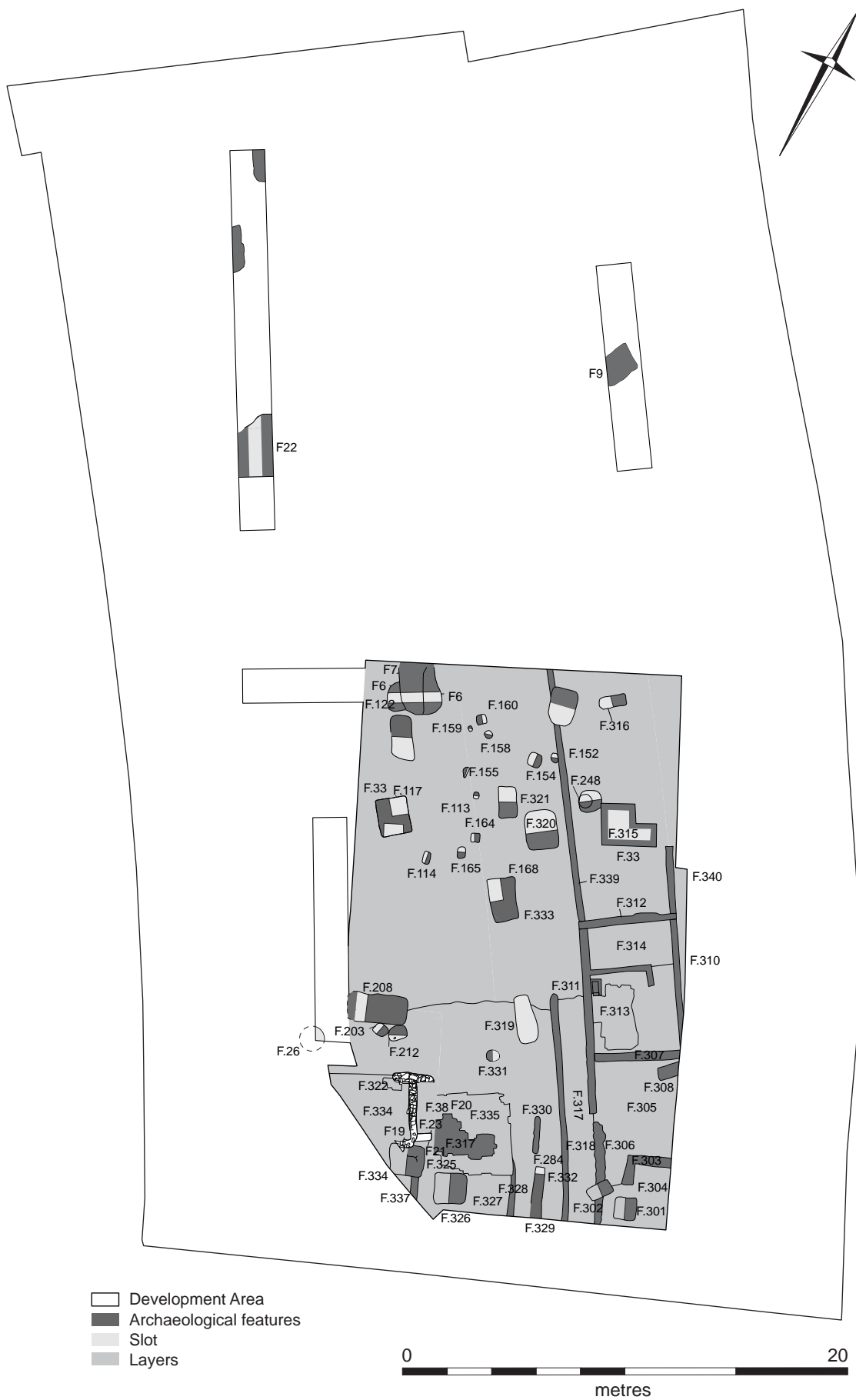


Figure 13. Plan of all features in Phase III

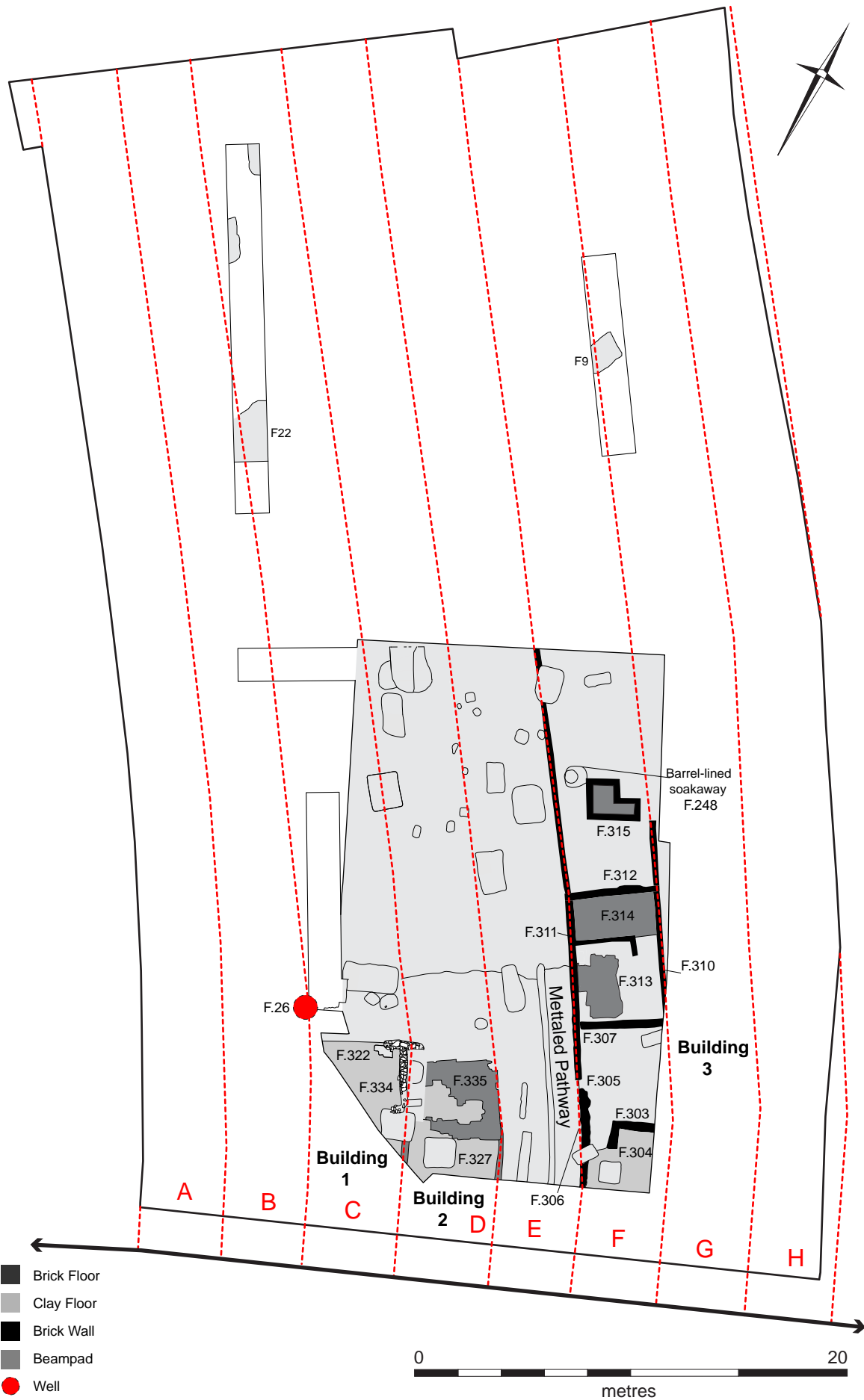


Figure 14. Plan of Phase III plot boundaries and key feature types

Topographically, although broadly following the original layout of the earlier properties at the site, *Plots A-H* partially rectified their alignment relative to the street frontage – reducing the sharpness of the bend that is so characteristic of medieval agricultural practice – with the result that the present boundaries of the development area largely comprise a remnant of this episode of 16<sup>th</sup> century reorganisation (Figure 14). It also appears likely that the High Street itself was partially widened at this time, with the resultant loss of some 2-4m from the heads of the former plots. Archaeologically, perhaps the most striking element of the Phase III sequence comprises the number and density of buildings that were now established. Overall, the degree of building coverage – or relative percentage of the site covered by buildings (Conzen 1960, 123) – was much greater at this time than it had been previously (Figure 14); consequently, the area was now much more characteristically ‘urban’ in form. In all, three long-lived buildings – **Building 1** in *Plot C*, **Building 2** in *Plot D* and **Building 3** in *Plot F* – were identified (Table 4; see also Figure 14), each of which had been redeveloped on several occasions throughout the succeeding 17<sup>th</sup>, 18<sup>th</sup> and 19<sup>th</sup> centuries. Two of the structures appear to have remained timber-framed throughout; only one, **Building 3**, was rebuilt in brick.

Building Number	No. of Rooms	No. of Phases	Construction Type	Construction Date	Plot Number
<b>B1</b>	2+	1	Timber-framed	Later 16 <sup>th</sup> century?	C
<b>B2</b>	2+	1	Timber-framed	Later 16 <sup>th</sup> century?	D
<b>B3</b>	4+	2	<i>Phase 1: Timber-framed</i> <i>Phase 2: Brick-built</i>	Later 16 <sup>th</sup> century? Later 17 <sup>th</sup> century?	F

**Table 4:** Post-Medieval buildings (see Figure 14).

All three buildings initially appear to have been of relatively uniform design (thus further underlining the potentially ‘organised’ or ‘planned’ nature of the redevelopment). Each consisted of a timber-framed structure that rested upon earth-fast timber sill beams. A minimum of two, and probably three, rooms were present on the ground floor of all three buildings; although the degree of later remodelling/extension, allied with the fact that their front portions lay outside the area of investigation, precludes absolute certainty as regards their original layout. All of the rooms that were investigated contained an initial sequence of rammed clay floor surfaces (which lay between 6.57m and 6.85m OD). As these surfaces were located within the rearmost portion of the structures, however, it is possible that other forms of flooring – such as bricks, tiles or suspended timbers – were utilised further towards the frontage; indeed, in this context, it is of note that several of the earliest bricks recovered from the site had polished surfaces indicative of their usage in floors (see Newman & Timberlake, below). Overall, this general, standardised layout represents one of the most common forms of vernacular architecture of the period (see especially Johnson 2010). Nevertheless, a number of differences were apparent between the three buildings. Firstly, **Building 1** included a substantial, ‘I-shaped’ footing along the eastern wall of its rearmost room (**F.17=F.18=F.19=F.323**). Composed of roughly-worked clunch blocks overlain by an upper surviving course of fragmentary red handmade bricks, this footing most probably represents the foundation of a substantial, brick-built chimney. Its location is consistent with most common position of the kitchen within contemporary tenement buildings (though it is not clear whether this room comprised an original part of the build or a later addition). No such chimney was identified in relation to either **Building 2** or **Building 3**.

In contrast to **Building 1**, **Building 2** did demonstrate convincing evidence of extension. Of the two rooms within this building that were available for investigation, only the first – that lying in closest proximity to the frontage – contained evidence for the use of earth-fast sill beams (in the form of beamslots **F.328** and **F.337**). The second room, which was identified via the presence of compacted clay floor **F.327**, contained no below-ground foundations. This implies that here the timber-frame rested upon above-ground pads. Such supports could be constructed from a variety of materials. The most robust, and archaeologically the most visible, comprised masonry or brick-built sill walls. Clay beampads were also frequently employed, however, and the ephemeral traces of just such a pad (**F.103**) were identified in association with this rear portion of this building. By raising the sill-beams above the ground surface the lifespan of the constituent timbers was greatly prolonged. But the presence of two different construction techniques within two adjoining areas indicates that these elements of **Building 2** were almost certainly built at different times. Unfortunately, no evidence pertaining to the usage of either space was identified.



Figure 15. View of Phase III features, facing northwest (top) with detail of the rear portion of **Building 3**, facing southwest (bottom)

Due to the extent of its later modification, few details of the original form of **Building 3** could be discerned; nevertheless, the presence of compacted clay floor surface **F.304** indicates that, in its initial phase, it was most probably of near-identical construction to its neighbours. At some time during the 17<sup>th</sup> century, however – and in direct contrast to **Buildings 1** and **2** – **Building 3** was converted into a brick-built structure. Its rebuild employed the same lime-mortared, handmade red bricks that were used almost ubiquitously throughout the wider Cambridge area during this period. Yet this process of conversion also formed part of a much more widespread, national pattern of rebuilding that has been identified in many other towns and cities across Britain, such as Norwich, Kings Lynn, Taunton and Exeter (Schofield & Vince 2003, 104-9; see also Brunskill 1990; Johnson 2010, 87-112). Locally, in the Barnwell Gate suburb – at the Christ’s Lane site – the earliest building to have been reconstructed in brick had employed material imported from the Low Countries during the 16<sup>th</sup> century (Newman 2007, 64-5). But such transitions – which have been referred to as comprising a ‘Brick Threshold’ (Lucas 1997) – were much more common during the 17<sup>th</sup> century, with particularly intensive episodes of ‘great rebuilding’ occurring both before and (particularly) after the English Civil War (Platt 1994). This is also very much the most likely date for the conversion of **Building 3** at the present site, based upon both its constituent building materials and the presence of reused fragments derived from a 17<sup>th</sup> century or earlier millstone within the footings of wall **F.307** (Figure 17B; see also Timberlake, below).

In its rebuilt form, **Building 3** was substantially larger than its neighbours at the site. Four separate rooms lay within the investigated area, the most northerly of which was partially cellared (Figure 15). Commensurate with its increased size and more costly method of construction, **Building 3** also appears to have been remodelled/updated more frequently than its neighbours during the 18<sup>th</sup> and 19<sup>th</sup> centuries. Despite this, it nevertheless appears that the building was laid out to its full extent at the time of its conversion; no evidence of subsequent expansion was identified. At its rear, the partially sunken cellar – whose brick floor-surface, **F.314**, lay at 6.26m OD – was bounded to the north by clunch-built wall **F.312**. This contained several fragments of reused medieval masonry, including a voussoir derived from a Romanesque arch of probable 12<sup>th</sup> century date (see Newman, below). The use of masonry as opposed to brick as the principal constituent of its construction indicates that the cellar was relatively early in origin (although it does not appear to have predated the 17<sup>th</sup> century). Adjacent to the cellar, the neighbouring room was bounded to the south by wall **F.307**. Little evidence of the earliest usage of this space was identified, although by the 19<sup>th</sup> century – when brick and tile floor-surface **F.313** was introduced – it appears to have functioned as a kitchen; the neighbouring cellar may well have been used as a storeroom or larder at this time. To the south of **F.307**, layer **F.305** probably comprised bedding material for a robbed brick or tile surface; this floor also appears to have continued into the fourth and final room, which was situated in closest proximity to the street frontage. Overall, therefore, this evidence demonstrates that **Building 3** was both larger and more impressive in appearance than the contemporary houses situated in *Plots C* and *D*. Nevertheless, by the mid-19<sup>th</sup> century all three buildings had internal brick and or tiled floors (as represented by **F.322** in **Building 1**, **F.335** in **Building 2** and **F.313** in **Building 3**); their respective heights varied between 6.79m and 6.93m OD, indicating that a general build-up of around 0.2m+ in internal floor level had occurred in each instance since the mid-16<sup>th</sup> century.

Within *Plots C*, *D* and *F* the patterns of activity that were undertaken during this phase appear to have been entirely domestic in nature. A small number of pits and postholes were present to the rear of these plots that are indicative of general backyard activity, but no large features or significant dumps of material were encountered. In addition, to the rear of **Building 3** a small ancillary brick-built structure of 17<sup>th</sup>/18<sup>th</sup> century date was present – **F.315** – which most probably functioned as a latrine. Somewhat unusually, however, especially given the intensity of occupation during this period, only one well was identified; **F.26**, which was situated in *Plot B* (Figure 14). This was brick-built in form with an original domed cap, thereby indicating that water was extracted via a hand-pump. The nature of the well’s constituent materials, which consisted of lime-mortared unfrogged pink and yellow bricks, indicate that it was constructed during the late 18<sup>th</sup>/early 19<sup>th</sup> century; it probably continued in use into Phase IV. The absence of additional wells is unusual. It may be that in *Plots C-F* any wells were situated either to the front or the rear of the investigated zone. Alternatively, a more co-operative arrangement may have prevailed, with residents at the site sharing water from a small number of communal wells. In addition to these long-lived domestic households, some limited evidence of potential non-domestic activity was also encountered. In *Plot E*, for example, no trace of a frontage structure was identified (although this may have lain outside



the area of excavation). A metalled pathway was also present (F.317), providing access to the property tail. Immediately beside this path lay shallow gullies/beamslots F.318, F.329 and F.330, which were probably associated with a series of ephemeral timber-built structures that took the form of lean-to's or sheds. Finally, to the rear of these structures pit F.319 contained a relatively substantial group of late 17<sup>th</sup> century clay pipes; a relatively unusual deposit in a domestic context (see Cessford, below). Therefore, although this evidence is by no means definitive, it does suggest that additional non settlement-related activities may have been undertaken contemporaneously with domestic occupation at the site.

#### Phase IV: Plot Amalgamation and the Dog & Pheasant (c. 1875-2013)

During the 1870s the majority of the former tenement dwellings at the site were demolished and a substantial new frontage building was erected (Figure 16). Yet this dramatic transformation did not represent a single, one-off event; instead, it marked the culmination of a long-term process of plot dispersion and amalgamation that had commenced at least 30 years earlier. In 1838, for example, the site was auctioned as part of the broader process of Chesterton's inclosure – an event which itself occurred some 30 years after that of the majority of Cambridge (see Bryan 1999) – it already consisted of three separate plot-units (whose boundaries are depicted in Figure 16). The first of these equated to Phase III *Plot A*, the second to amalgamated *Plots B-E* and the third to amalgamated *Plots F-H*. But despite the gradual appropriation of the plots into multiple ownership, there is no definite evidence prior to the extensive demolition event of c. 1875 that any of the tenement buildings at the site were abandoned/demolished. Rather, it seems that the pattern of individual household occupation remained consistent throughout Phase III but that the number of landholders steadily increased over time, as the formerly cohesive development became increasingly subdivided. Archaeologically, very few features were identified that pertained to the final, amalgamated phase of the site's history (Table 5). Those that were encountered primarily consisted of structural remains.

Feature Type	Number of Features	Percentage of Total
Layer	1	25
Structural (foundation)	3	75

**Table 5:** Phase IV features by type.

As in previous phases, during Phase IV the eastern and western plot-units predominately lay outside the area of investigation (Figure 16). Within the central plot-unit, however – formerly Post-Medieval *Plots B-E* – a large proportion of the frontage building was encountered. This primarily consisted of footing F.336, which was composed of mixed frogged and unfrogged red, pink and yellow bricks bonded with coarse sandy mortar. To the north was situated cellar F.324, whose quarry-tiled floor surface lay at 6.37m OD – and within which Phase III well F.26 was incorporated – whilst further north still lay concrete footing F.289. Due to the extent of recent demolition activity, however, no evidence of internal subdivisions or surviving floor surfaces was present within main portion of the structure (although it was determined that the bay windows depicted upon subsequent editions of the Ordnance Survey map did indeed comprise later additions). Across the site as a whole extensive levelling deposit F.341 was set down as part of the transition from Phase III to Phase IV. Primarily consisting of 'garden-soil' material, this layer increased the general surface height a minimum of 0.4m above that of the preceding, tenement-period floor level (to c. 7.2m+ OD). To the rear of the frontage building itself, little or no evidence of backyard activity was identified. This is somewhat surprising given that a smithy was depicted in the cartographic sources lying immediately to the north of the limit of excavation (Figure 16); typically, such businesses generate a large quantity of metalworking debris. Nevertheless, the present site appears to have remained remarkably clear. The absence of pits or even garden-related features implies that the period of domestic occupation may have been relatively short-lived (see further the discussion).

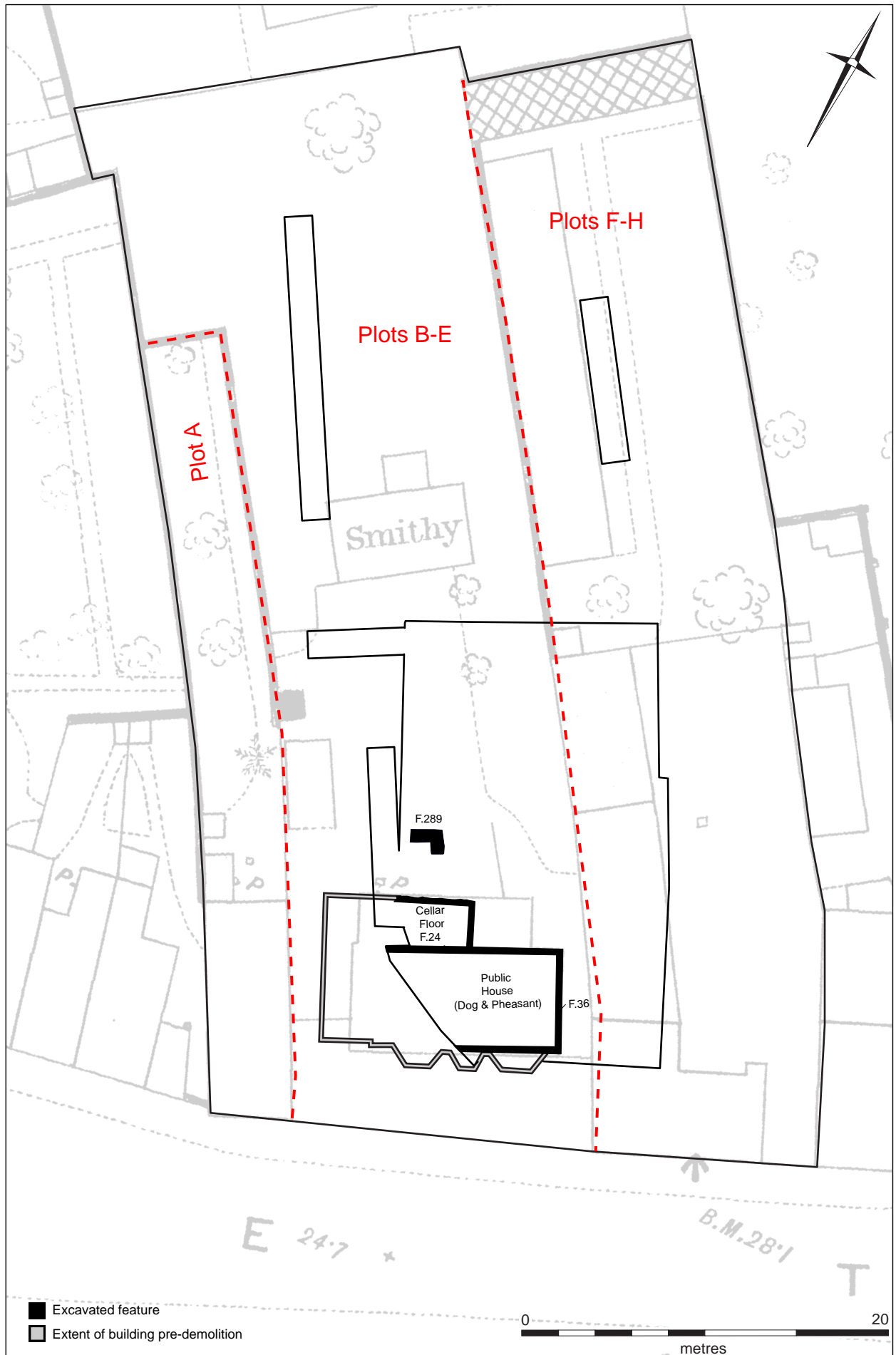


Figure 16. Plan of Phase IV features overlain on 1st Edition 1:500 OS map of 1885

## - Material Culture -

A relatively substantial material culture assemblage – comprising 2,153 items, weighing in excess of 111kg – was recovered during the excavation conducted at the Chesterton High Street site. This assemblage – which includes metalwork, metalworking debris, wood and timber, leather, pottery, clay tobacco pipe, worked stone, moulded stone, flint and miscellaneous materials – has been subdivided by material type and is discussed in detail below.

### **Metalwork** (Richard Newman)

A relatively small metalwork assemblage – comprising 93 items, weighing 1038g – was recovered from the Chesterton High Street site (incorporating material from both the evaluation and excavation phases). This assemblage included artefacts composed of copper alloy, lead and iron. The group has been subdivided by material-type and is discussed in detail below.

#### *Copper alloy items*

A total of nine copper alloy items, weighing 14g, were recovered. These included:

**F.18 [048] <085> (mid-late 16<sup>th</sup> century):** A complete pin with a globular head. It measures 49mm in length and weighs 1g.

**F.18 [050] <086> (mid-late 16<sup>th</sup> century):** A cast bar or pin derived from a simple buckle. It measures 38mm in length and weighs 3g.

**F.139 [1465] <191> (early 15<sup>th</sup> century):** A cast but broken pin measuring 17mm in length and weighing <1g. It has four faces, each surmounted by a central ridge, and appears to have originally comprised part of a simple buckle or brooch.

**F.139 [1465] <196> (early 15<sup>th</sup> century):** Three items. Firstly, a short aiglet measuring 11mm in length and weighing 1g. Secondly, half a small crotal bell rumbler, measuring c. 18mm in diameter and weighing 1g. Such finds are common on rural sites, where they are often interpreted as animal bells for sheep/goats. Finally, a near-complete strap-end or chape, measuring 35mm in length and weighing 1g. Tapering in form, with central embossed ridge decoration, it was attached via four copper alloy pins.

**F.251 [1433] <179> (14<sup>th</sup>-15<sup>th</sup> century):** Two small indeterminate scraps of copper alloy sheet, weighing <1g. Their original form and function are unclear.

**F.270 [1108] <159> (mid-16<sup>th</sup> century):** A blank disc measuring 30mm in diameter and weighing 6g. Although it is of the appropriate size, and composed of the appropriate material, to have formed a jetton or token, no trace of a design was present (Martin Allen *pers. comm.*). Its function is uncertain.

#### *Lead items*

A total of 11 lead items, weighing 11g, were recovered; all of which were derived from basal fill [1465] in well F.139. They comprised:

**F.139 [1465] <196> (early 15<sup>th</sup> century):** 11 fragments of lead waste/casting spill, weighing 11g. All were of indeterminate form.

#### *Iron items*

A total of 73 iron items, weighing 1013g, were recovered. The vast majority of these items comprised undiagnostic nails, sheet fragments and corroded lumps. More significant artefacts included:

**F.7 [017] <084> (Late 18<sup>th</sup>/early 19<sup>th</sup> century):** Part of a small horseshoe with two nail holes. It measures 105mm long by 18mm wide, and weighs 32g.

**F.117 [1048] <154> (19<sup>th</sup> century):** Part of a curvilinear band/strap from a bucket or tub. It measures 135mm long by 25mm wide and weighs 58g.

**F.314 [003] <152> (19<sup>th</sup> century):** A large but heavily corroded key. It measures 105mm long by a maximum of 35mm wide and weighs 70g.

**F.320 [001] <151> (19<sup>th</sup> century):** The partially complete head of a rake. It measures 244mm long (originally c. 320mm) with tines 46mm in extent; it weighs 326g.

### Metalworking Debris (Simon Timberlake)

In total some 2.2kg of iron slag or metalworking-related debris was recovered from this site (Table 6); all of which was derived from Phase II contexts.

Feature Number	Context Number	Cat. Number	Count	Weight (g)	Magnetic (scale: 0 - >4)	Iron smith slag	Fe concretion (N= natural S?= smith)	Date	Notes
139	1465	190	8	8	1+2 +4	Y (x1)	N	15 <sup>th</sup> -16 <sup>th</sup> century	Mostly frags of concretion around Fe, but x1 small piece (9mm) of glassy slag (VHL)
141	1139	073	1	60	0-4	Y		13 <sup>th</sup> century (intrusive?)	Probably fuel ash slag from iron smithing using coal
146	1131	170	6	22	1 +4	Y		13 <sup>th</sup> century (intrusive?)	Small frags FC, VHL(2) and melted iron (or possibly corroded nail head)
167	1182	079	7	203 6	2-4 (SH B =5)	Y	S	15 <sup>th</sup> century	1975g of this is iron-rich concretion with some visible hammerscale, occ-rare broken glassy slag, and more common charcoal = possibly the floor of a smithy or dump thereof. Also a small <i>proto-SHB</i> c. 550mm diameter (62g)
249	1383	115	1	64	0-3	Y		14 <sup>th</sup> -15 <sup>th</sup> century	Mixture of fuel ash slag with coal and smithing slag lump
249	1433	175	8	4	1-4	Y	S	14 <sup>th</sup> - 15 <sup>th</sup> century	Includes small lump of melted iron and corroded hammer scale and spheroidal hammerscale as concretion
252	1442	183	2	4	4+3	Y?		14 <sup>th</sup> -15 <sup>th</sup> century	x2 small fragments of Fe-rich glassy slag (drips), one with inclusion of burnt flint

**Table 6:** Catalogue of metalworking debris.

Some 1975g of this assemblage consisted of an iron concretion formed (most likely) as a result of the oxidation of iron hammerscale present within a floor or feature-fill deposit – **F.167** – located somewhere in the vicinity of a medieval forge (its presence nearby is also suggested by the only appearance of a small proto-smithing hearth base (SHB)). No trace of the use of coal was found,

which contrasts with other 15<sup>th</sup> century features containing slag on the site, such as **F.141** and **F.249**. This low level of material is relatively typical for the period and indicates that secondary smithing operations were undertaken in the general vicinity, although probably not at the site itself. The use of coal in 15<sup>th</sup>-century Cambridge, or in satellite villages such as Chesterton, presents no particular problem as regards dating; coal was being mined underground in some quantity within the coalfield at Coleorton, near Ashby-de-la-Zouche in Leicestershire as early as the 15<sup>th</sup> century (Hartley 1994). Nevertheless, at this period the use of charcoal as a fuel in secondary smithing as well as in the primary forging of iron bloom was the norm rather than the exception. However, the availability, and thus import of coal into Cambridge might reflect a growing shortage of woodland, and hence coppiced charcoal, within the Fenland area. Alternatively this might indicate an affordable preference for coal within the fireplaces of some of the Cambridge colleges, and as a result some of their service workshops and smithies (see Timberlake in Newman 2008), but equally town house houses and commercial areas (see Timberlake in Cessford 2007), and perhaps also religious institutions. Good quality high temperature smithing operations such as might have involved the production of composite iron objects will undoubtedly have been made easier using quality coals. Late Medieval import of coal seem to be supported by documentary sources which suggest that Cambridge was involved in the east coast coal trade from Newcastle to King's Lynn during the 14<sup>th</sup> century; coal arriving by barge along the existing river network (Hatcher 1993).

### **Wood & Timber** (Richard Darrah & Richard Newman)

A small wood and timber assemblage – consisting of only three items – was recovered from the Chesterton High Street site. All of this material was derived from mid-14<sup>th</sup> century well **F.139**. It included the baseplate that was employed as a primary element in the well's construction as well as a comb fragment and a broken knife handle that were incorporated into its partial infilling during the early 15<sup>th</sup> century. In detail, the items comprised:

**F.139 [1467] <001>**: A complete, moderately well-preserved baseplate composed of three purpose-cut oak timbers. Overall, the baseplate measures 1.57m in length by 1.20m in width and a maximum of 0.08m thick. It is illustrated within this report both *in situ* (Figure 11) and *ex-situ* (Figure 17A). Two of its constituent timbers represent portions of the same, sharply bent branch that has been sawn longitudinally. The two halves were then conjoined via a simple square-pegged lap joint; somewhat unusually – and uniquely for the remainder of the baseplate – this joint shows traces of toolmarks characteristic of an adze. The third timber represents a portion derived from a forked branch. It had two square-pegged joints, one a simple lap and the second a notched lap (the reason for the use of this latter joint is unclear; it served no apparent purpose that would not have been fulfilled by an un-notched lap). The pegs were composed of oak and measured 25mm across. All three timbers demonstrate evidence of sap wood on their outer surfaces; consequently, given their small diameter, insufficient growth rings are present to permit dendrochronological analysis. Nevertheless, the item is of significance. For instance, two baseplates of relatively similar form – consisting in this case of two curved and two straight timbers – were encountered at the Grand Arcade site (within 17<sup>th</sup> century well **F.3457** and 18<sup>th</sup> century well **F.6037** respectively; Cessford & Dickens *in prep.*). The present example is however significantly earlier in origin.

**F.139 [1465] <147>**: A fragment derived from a double-sided wooden comb. It measures 47mm long by 26mm wide and 5mm thick; the teeth measure 3.5mm wide on one side and 1mm wide on the other. Although fragmentary it appears to be of a common, utilitarian form that most closely conforms to Ashby's Type 14 (dated c. 1400-1700; Ashby 2011).

**F.139 [1465] <195>**: The terminal of a composite knife handle. The incomplete fragment measures 22mm in length, 18mm in width and 10mm in thickness. The two wooden scales were affixed via a copper alloy suspension loop, while the terminal was completed via the addition of a copper alloy end cap with simple, corrugated 'ridge' decoration.

No further recording of this assemblage is required. However, all three items merit inclusion in any forthcoming publication. In particular, as well as providing a useful addition to the known corpus of such features, timber baseplate [1467] also contributes to the overall regional chronology for Cambridge; it should therefore be illustrated and discussed accordingly.



Figure 17. 14th century timber baseplate [1467] from well F.139 (A) and rejoining fragments of a pre-1700 millstone utilised in footing F.307 (B)

## Leather (Quita Mould)

The assessment has been made following examination of the leather on 17/02/2014. The leather was identified and diagnostic pieces dated. A basic record (as defined in the RFG & FRG Guidelines 1993) of the assemblage was made, including measurement of relevant dimensions and species identification where possible. The basic record in the form of an object catalogue is provided below. All measurements are given in millimetres (mm); + indicates an incomplete measurement. No allowance has been made for shrinkage. Shoe sizing has been calculated according to the modern English Shoe-Size scale. Leather species were identified by hair follicle pattern using low powered magnification. Shoes soles and sole repairs are assumed to be of cattle hide unless stated otherwise. The shoe terms employed are those in common use in the archaeological literature; seams and construction are fully described by Grew & Neergaard 1988, amongst others.

### *Condition and conservation requirements*

The leather was wet and washed when examined. The leather is currently stored in double, self-sealed polythene bags with some supporting Polyethylene foam. It should be kept cool with the light excluded. Photographs would ensure a permanent record should the material deteriorate in storage. The group does provide independent dating evidence for the context and may be considered a candidate for conservation by freeze-drying to permit long term storage, further examination and illustration if necessary, depending on the publication requirements and storage of the site archive. The opinion of the eventual repository of the site archive should be sort regarding the method employed. The group can be allowed to air-dry under controlled conditions which will allow long term storage, but its condition should be regularly checked for any microbial action. The method is briefly described below, but see English Heritage Waterlogged Organic Artefact Guidelines (Karsten *et al.* 2012) for further information. If illustration by line drawing is required the leather should be flattened where possible.

It may be possible to carefully air dry the leather under controlled conditions to permit long term storage. The leather should be placed on newspaper in a cool place with a good circulation of air and allowed to dry out very slowly. Newspaper should also be placed on top of the leather to ensure that the drying process is as slow and even as possible, the leather should be turned and the newspaper changed regularly. The resulting dry leather will be hard and the shape may be slightly distorted but it can be re-wetted and conserved by freeze-drying at a later date if desired.

### *Results*

A small group of leather <146> was recovered from a single fill [1465] at the base of a stone-lined well F.139 along with a small quantity of pottery and part of a wooden comb. This deposit was most probably inserted during the early 15<sup>th</sup> century, with the intention of partially infilling the basal portion of the well. The group comprises the remains of two turnshoes (2, 3, 6) and two straps (1, 5). The leather appears to be the result of the disposal of domestic rubbish, as no secondary cutting was present that would indicate the recovery of leather for recycling. The larger shoe (2), of Adult size 9 (43), has a sole with a slightly, outward-curving, pointed toe with a small (*c.* 30mm) toe extension. While it has a small hole worn at the toe, the rest of the sole is relatively unworn though it had repair patches (clumps) originally sewn to both the tread and seat and attached to the rand with tunnel stitching. These features suggest a date in the late 14<sup>th</sup>/early 15<sup>th</sup> century, contemporary with the use of the well and not associated with its later backfilling. Part of the calfskin upper survives indicating an ankle shoe with principally one-piece upper, the fragment with an oval fastening suggesting it may have laced up the instep, a style popular at that time (Grew & de Neergaard 1988, 66-7 no 100-1, for example). As the upper is incomplete its exact cutting pattern is uncertain.

The second turnshoe sole (3), to fit a child no smaller than a child size 9 (27), is of the same date, with fragments of shoe upper (6) of a thicker leather (cattle hide) likely to come from it. A small clump sole repair piece (4) may come from either of the two shoe soles (2, 3) as both had been

repaired before being eventually thrown away. The remains of two straps of cattle hide were also present. One comprised a strap 30mm (c. 1 ¼ ins.) wide with a series of buckle pin holes running down the centre, which may come from harness or a belt. The second strap was narrower, being only 10mm (less than ½ inch) wide, suggesting it may be a spur leather. The leather provides dating evidence to compliment that of the ceramic finds. All the leather has been examined and a basic record is provided below. A working drawing has been made of the turnshoe (2) and a summary provided for any future publication or site narrative. No further work is considered necessary.

*Catalogue (all <146> from context [1464] F.139)*

**1) Strap**, broken at each end and now torn into two pieces, with a line of five round buckle pin holes running along the centre, each 4-5mm in diameter, and spaced between 30-47mm apart. Leather delaminating cattle hide 3.50mm thick. Surviving length 289+mm, width 30mm (c. 1 ¼ inch wide).

**2) Turnshoe, ankleshoe, right foot, adult size.** Complete turnshoe sole with a short pointed toe curving slightly outward and with a short toe extension c. 30mm long. The sole has a petal-shaped tread, medium waist and seat. Edge/flesh seam, stitch length 7mm. Worn stitching from repairs to the tread and seat; repaired at least twice at both areas. Small hole worn at the great toe but no pronounced wear elsewhere. Sole length 285mm; width tread 97mm, waist 34mm, seat 47mm. Estimated Adult size 9(43). Four matching fragments of rand running around most of the perimeter with stitching to attach repairs present, max width 19mm. Part of the right side and back part of a one-piece upper surviving to a height of c. 120mm at the front opening and at centre back. The toe area and the left side are torn away and a single, straight, butted edge/flesh side seam, stitch length 4mm, survives placed relatively far back on the medial (left) side of the foot in line with the lower waist/upper seat area of the sole. Stitching for a large, wide heel stiffener is present at centre back. Leather fine bovine, probably calfskin, less than 2mm thick, delaminating in places. The lasting margin broken from the heel stiffener of worn bovine leather 2.88mm thick survives. Other fragments of torn shoe upper of similar leather to the upper (143+x60+mm; 105+x39+mm) with no distinguishing features are likely to come from it. Also a triangular piece with a short butted edge/flesh seam and a large oval fastening hole, diameter 5mm, may also come from it.

**3) Turnshoe sole, right foot, child size.** Turnshoe sole broken at the toe, along the lateral (right) side at the tread and waist, and worn away at the edge of the seat. The toe shape is unknown, petal-shaped tread, medium waist and seat. Edge/flesh seam, stitch length 6-7mm. Worn through at the exterior tread area. Stitching for repair at the tread and seat. Sole surviving length 155+mm; width tread 57+mm, waist 30mm, seat 41mm. Estimated child size 9 (27)+.

**4) Complete, narrow, tapering 'strap-shaped' clump repair** with worn tunnel stitching present, may come from the left side of the tread area of the sole above. Length 105mm; max width 23mm.

**5) Narrow strap.** Plain strap with 'tooled' edges, broken at each end, now in two pieces. Leather Cattle hide 3mm thick. Length 370+mm; 10mm wide.

**6) Upper fragments:** small fragments of shoe upper, two with small areas of lasting margin present, others with all edges torn. Leather cattlehide 2.80mm thick. Fragment broken from the lasting margin of the right side of a heel stiffener of cattle hide 2.03mm thick. Apparently associated with the small turnshoe sole (3) above.

## **Pottery (Craig Cessford, David Hall, Mark Knight & Richard Newman)**

A moderately-sized ceramic assemblage – comprising 1096 sherds, weighing c. 18.2kg – was recovered (this includes 122 sherds, weighing 1.85kg, which were recovered during the evaluation phase). The assemblage was composed of a wide variety of material, spanning the Middle Bronze Age to Modern periods (Table 7), and is assessed on a period-by-period basis.

*Middle Bronze Age (Mark Knight)*

A single abraded sherd of Middle Bronze Age pottery, weighing 28g, was recovered from a residual context. This fabric-type dates to 1500 to 1000BC; no particular details of the vessel's form could be determined.



Period	Count	Weight (g)	MSW (g)
Middle Bronze Age (1500 to 1000BC)	1 (0.1%)	28 (0.1%)	28
Roman (43 to 410 AD)	4 (0.4%)	9 (<0.1%)	2.2
Middle Saxon (725-900 AD)	4 (0.4%)	67 (0.4%)	16.7
Saxo-Norman (1000 to 1200 AD)	43 (3.9%)	519 (2.7%)	12.0
Medieval (1200 to 1500 AD)	764 (69.7%)	7452 (41.4%)	9.7
Post-Medieval (1500-1700 AD)	78 (7.1%)	5668 (31.2%)	72.7
Modern (1700-Present)	202 (18.4%)	4403 (24.2%)	21.8
<b>Total</b>	<b>1096</b>	<b>18186</b>	<b>16.6</b>

**Table 7:** The overall ceramic assemblage by period.

*Roman* (David Hall & Richard Newman)

Four sherds of indeterminate Roman greyware, weighing 9g, were recovered. All of these fragments are small and heavily abraded, and occurred residually within later features. They therefore appear most likely to have been introduced during manuring associated with agricultural activity, either during the Roman period itself or later, when the area comprised part of the medieval open field system associated with *vill* of Chesterton.

*Middle Saxon* (David Hall & Richard Newman)

Four sherds of Ipswich ware, weighing 67g, were recovered; two of which were rim sherds derived from small jars. Ipswich ware probably began to be used in Cambridgeshire between 725 and 740 AD and continued in use until the middle or late 9<sup>th</sup> century (Blinkhorn 2012). Unfortunately, the date range of this small group cannot be tied down more precisely due to the absence of additional fabric-types. The material was probably introduced to the site via a similar process to the small Roman assemblage outlined above.

*Saxo-Norman* (David Hall & Richard Newman)

Relatively few Saxo-Norman ceramics were recovered (43 sherds, weighing 519g), especially when this group is contrasted with the size of the succeeding medieval assemblage. Nevertheless, the Saxo-Norman material is dominated by the usual triumvirate of 10<sup>th</sup>-12<sup>th</sup>-century wares that are found ubiquitously on sites across southern Cambridgeshire (Table 8).

Ware	Count	Weight (g)	MSW (g)
St Neots-type	31 (72.1%)	282 (54.3%)	9.1
Thetford-type	10 (23.3%)	209 (40.3%)	20.9
Stamford	2 (4.6%)	28 (5.4%)	14.0
<b>Total</b>	<b>43</b>	<b>519</b>	<b>12.0</b>

**Table 8:** Saxo-Norman ceramics by fabric.

As Table 8 demonstrates, the Saxo-Norman assemblage is dominated by St. Neots-type ware (Denham 1985; Hurst 1956; Hurst 1976, 320–23), with a smaller quantity of Thetford-type ware (Hurst 1957; Hurst 1976, 314–20; Rogerson & Dallas 1984, 117–23) and Stamford ware (Hurst 1958; Hurst 1976, 323–36; Kilmurry 1980) also present. The disproportionate dominance of St. Neots-type ware is relatively unusual, as Thetford-type ware is most often approximately equal in quantity within other contemporary Cambridgeshire groups. The small size of the assemblage may however serve to exaggerate an otherwise minimal distinction. Although one pre-Conquest St Neots-type rim sherd, with impressed decoration, was identified, the remainder of the material was not closely datable. Because the Saxo-Norman sherds were exclusively encountered in direct association with diagnostically 13<sup>th</sup> century or later wares, however, it is probable that the majority of the material was deposited towards the end of the 12<sup>th</sup> century. Around this time, a transition in ware-types occurred between characteristically ‘Saxo-Norman’ and ‘medieval’ fabrics. This transition is typically dated to *c.* 1200, but more probably took place within the period spanning *c.* 1175–1225. Given this association, the predominance of St. Neots-type ware within the assemblage may indicate that this ware comprised the longest lived of the dominant 12<sup>th</sup> century fabric types (although once again the small size of the assemblage renders any such identification tenuous). Much of the Saxo-Norman assemblage could have been introduced to the site during agricultural activity that predated the establishment of domestic occupation.

#### *Medieval* (David Hall, Craig Cessford & Richard Newman)

A moderately-sized assemblage of medieval pottery – comprising 764 sherds, weighing 7452g – was recovered. This was composed of the typical range of coarsewares, finewares and material that is intermediate between the two (Table 9).

Type	Count	Weight (g)	MSW (g)
Coarsewares	521 (68.2%)	5864 (78.7%)	11.3
Intermediates	15 (2.0%)	243 (3.3%)	16.2
Finewares	228 (29.8%)	1345 (18.0%)	5.9
<b>Total</b>	<b>764</b>	<b>7452</b>	<b>9.8</b>

**Table 9:** Medieval ceramics by type.

Much the most significant constituent of the medieval ceramic assemblage were the coarsewares (Table 10). However, the majority of coarsewares found in Cambridge are poorly understood and come from a range of as yet unidentified sources in southern Cambridgeshire, Essex and the Fenland region (Spoerry 2005; Spoerry *in prep.*). Although a range of brown, buff, grey pink and red fabrics have been identified, it is unlikely that these bear any relation to individual centres or even methods of production.

Ware	Count	Weight (g)	MSW (g)
Coarse Brown	5	36	7.2
Coarse Buff	11	307	27.9
Coarse Grey	441	4577	10.4
Coarse Pink	10	331	33.1
Coarse Red	17	221	13.0
Medieval Ely	37	392	23.0
<b>Total</b>	<b>521</b>	<b>5864</b>	<b>11.3</b>

**Table 10:** Medieval coarsewares by fabric.

The principal coarseware fabric that can be provenanced with any degree of certainty is Medieval Ely ware, which was manufactured at Potters Lane and elsewhere in Ely from at least the early 12<sup>th</sup> century onwards (Hall 2001; Spoerry 2008). Temporally, although Medieval Ely ware does occur in

a limited number of 15<sup>th</sup> century contexts it appears to have declined in significance after the 14<sup>th</sup> century. In total, Medieval Ely ware constituted 7.1% of the coarseware assemblage by count and 6.7% by weight. This is somewhat lower than its relative proportion at Grand Arcade (16–20% by count), Christ’s Lane (23% by count) and Eastern Gate (25% by count) (Cessford and Dickens *in prep.*; Newman 2013b, 69), but compares closely with the only previously published assemblage from central Cambridge where it totalled around 8% (Edwards & Hall 1997, 157). Cambridge represents something of a transitional zone for Medieval Ely ware, as further to the south it is much less common and is indeed absent entirely from some sites (Spoerry 2008, 72). Lying somewhere between the utilitarian coarsewares and the finer table wares, the intermediate wares (Table 11) included Pink Shelly ware from Northamptonshire, which represents a late development of the Saxo-Norman St. Neots-type tradition during the 13<sup>th</sup> century. Similarly, contemporary developed forms of both St. Neots-type ware itself and contemporary Developed Stamford ware were also identified. Also present were several sherds of Grimston ware from Norfolk (Leah 1994), which occurred alongside a small number of sherds that were produced at Ely in imitation of Grimston ware (Ely-Grimston).

Ware	Count	Weight (g)	MSW (g)	Date range	Source
Grimston	6	48	6	12 <sup>th</sup> to 15 <sup>th</sup> century, with a 14 <sup>th</sup> century <i>floruit</i>	Norfolk
Ely-Grimston	2	63	31.5	14 <sup>th</sup> century	Cambridgeshire
Pink Shelly Ware	2	27	13.5	13 <sup>th</sup> century	Northamptonshire
Developed Stamford	3	49	16.3	13 <sup>th</sup> to 14 <sup>th</sup> century, with a 13 <sup>th</sup> century <i>floruit</i>	Lincolnshire
Developed St Neots	2	56	28	13 <sup>th</sup> to 14 <sup>th</sup> century, with a 13 <sup>th</sup> century <i>floruit</i>	Various sources
<b>Total</b>	<b>15</b>	<b>243</b>	<b>16.2</b>		

**Table 11:** Medieval intermediate wares by fabric.

By the end of the 14<sup>th</sup> century Essex redwares, and to a lesser extent Essex greywares, had become the most common types of fineware in use in Cambridge (Table 12).

Ware	Count	Weight (g)	MSW (g)	Date range	Source
Brill/Boarstall	3	65	21.7	13 <sup>th</sup> to 15 <sup>th</sup> century, with a 13 <sup>th</sup> century <i>floruit</i>	Buckinghamshire
Essex redware	222	1263	5.7	Late 13 <sup>th</sup> to 15 <sup>th</sup> century, with a 15 <sup>th</sup> century <i>floruit</i>	Essex
Lyveden/ Stanion	2	15	7.5	13 <sup>th</sup> to 14 <sup>th</sup> century, with a 13 <sup>th</sup> century <i>floruit</i>	Northamptonshire
Cambridge-type Sgraffito	1	2	2	15 <sup>th</sup> century?	North Essex or South Cambridgeshire
<b>Total</b>	<b>228</b>	<b>1345</b>	<b>5.9</b>		

**Table 12:** Medieval finewares by fabric.

At the present site, Essex redware accounts for a massive 97.4% of the total fineware assemblage by count and 93.9% by weight; however, this total includes a large number of sherds derived from a single fragmentary vessel. If this group is counted as one, then the relative percentage is reduced to 85% by count; thus rendering it more comparable to other contemporary Cambridgeshire

assemblages. The growth in the Essex redware industry reflects its significant role in supplying London (Pearce *et al.* 1982), and there is archaeological evidence that such wares were reaching Cambridge prior to *c.* 1370 (Newman & Evans 2011, 190). This included small quantities of material from Harlow (Davey & Walker 2008) and Mill Green (Pearce *et al.* 1982; Cotter 2000, 180–82), but the most common fabric that can easily be distinguished is Hedingham ware (Cotter 2000, 75–80; Walker 2012). Somewhat unusually, only a small quantity of Hedingham material was identified at the site. Additional finewares identified within the medieval assemblage included Brill/Boarstall ware (Farley 1982; Ivens 1981; 1982; Jope 1954; Jope & Ivens 1981) and Cambridge-type Sgraffito ware. The latter is broadly a form of Essex redware; it is relatively uncommon, and its fabric and inclusions do not match known Essex fabrics (Cotter 2000, 166–70). Although it is unlikely to have been produced in Cambridge, this is the location where it was initially identified and from which it is best known (Bushnell & Hurst 1952; Dunning 1950; Edwards & Hall 1997, 158). Its distribution suggests a North Essex or South Cambridgeshire origin. Overall, the range of finewares present was relatively low, especially in comparison to that encountered at suburban sites such as Grand Arcade and Eastern Gate Hotel (Cessford & Dickens *in prep.*; Newman 2013b), although this may simply reflect the limited sample size as opposed to a true pattern of consumption.

*Post-Medieval* (David Hall, Craig Cessford & Richard Newman)

In the first half of the 16<sup>th</sup> century the pottery types in use throughout the country underwent what has been referred to as a ‘Post-Medieval ceramic revolution’ (Gaimster 1994; Gaimster & Nenck 1997; Perace 2007), which consisted of radical changes in form, fabric and glaze. In Cambridge itself, local products from Ely changed markedly and were supplemented by significant quantities of German stoneware, plus smaller amounts of tin-glazed earthenware and a few other wares. The Post-Medieval assemblage from the site (Table 13) is largely typical of the wares found at other sites in Cambridge, and the bulk of the material does not merit detailed consideration.

Provenance	Ware	Count	Weight (g)	MSW (g)
Ely Products	Babylon-type Iron-Glaze	5	49	9.8
	Glazed Red Earthenware	69	5490	79.6
Other Sources	Frechen Stoneware	2	99	49.5
	Iron-glazed	1	4	4
	Tin-glazed Earthenware	1	26	26
	<b>Total</b>	<b>78</b>	<b>5668</b>	<b>72.7</b>

**Table 13:** Post-Medieval ceramics by fabric.

Post-Medieval coarsewares were produced at a range of relatively local sites; the most common forms were jars, jugs and bowls. A substantial proportion of the material was either produced at kilns near the river Great Ouse in Ely (Cessford *et al.* 2006, 46–71, 81–85) or is of similar forms and fabrics and was presumably produced relatively locally. Although some Glazed Red Earthenware most probably arrived at the site during the early 16<sup>th</sup> century, production at Ely increased markedly from the mid-16<sup>th</sup> century onwards (*ibid.*, 46–54). Glazed Red Earthenware comprises a red bodied coarseware with a shiny glaze and was the commonest form of coarse pottery regionally during the 16<sup>th</sup> to mid-19<sup>th</sup> centuries (*ibid.*, 53–54, figs. 39–46). It occurs in a wide range of forms; the products found include bowls, jugs, cisterns, pancheons, basting dishes and pipkins. In the 17<sup>th</sup> century Glazed Red Earthenware produced at Ely was increasingly slip-decorated, often in imitation of Staffordshire-type slipware (*ibid.*, 81–85). Babylon-type ware comprises a red earthenware with a black iron-based glaze. Much of the material found in Cambridge was manufactured in Ely (*ibid.*, 56–58, fig. 49), but a significant quantity has a browner fabric and a lighter, browner-coloured glaze indicating that it comes from a different source. Babylon ware probably ceased production in the late 16<sup>th</sup>–early 17<sup>th</sup> century but other kilns in East Anglia continued to produce similar iron-glazed vessels.

It is only in the 16<sup>th</sup> century that significant quantities of German stoneware appeared in Cambridge. In the early 16<sup>th</sup> century products from Langerwehe and particularly Raeren began to arrive, while

later in the 16<sup>th</sup> century Frechen overtook these sources in significance. As is usual for Cambridge, the only forms present were jugs. The tin-glazed earthenware encountered in Cambridge comprises a mixture of material from the Low Countries and England that occurs in small quantities from the late 16<sup>th</sup> century onwards (Archer 1997; Crossley 1990, 259-60 and 264-66). Only a single sherd was identified at the present site. Indeed, the Post-Medieval assemblage as a whole was markedly small, especially when contrasted with the quantity of the preceding medieval material. This paucity is probably attributable to a combination of factors. Firstly, a much greater number of buildings were present at Chesterton High Street site during the Post-Medieval period, thereby reducing the space available for depositional activity. Secondly, following the excavation of two exploratory hand-dug test pits the majority of the stratigraphic layers pertaining to Phase III were removed by machine, thereby reducing the overall quantity of material recovered.

#### *Modern* (Craig Cessford & Richard Newman)

A relatively small amount of 18<sup>th</sup>–20<sup>th</sup> century pottery was recovered from the Chesterton High Street site, totalling 202 sherds weighing 4.4kg (Table 14). As no large or significant groups were identified, and no individually important vessels or sherds were uncovered, this assemblage does not require a detailed fabric-by-fabric discussion. Instead, the material will be summarised in tabular form. As is typical for groups of this date, the assemblage was dominated by 19<sup>th</sup> century refined white earthenware; it is also notable, however, that a moderately-sized 18<sup>th</sup> century component was present (this included creamware, Staffordshire-type white salt-glazed stoneware, Staffordshire-type slipware and tin-glazed earthenware).

<b>Fabric</b>	<b>Count</b>	<b>Weight (g)</b>	<b>MSW (g)</b>
Bone china	10	55	5.5
Bristol-type stoneware	2	160	80
Creamware	31	855	27.6
Iron glaze	7	77	11
Mocha	10	288	28.8
Nottinghamshire/Derbyshire-type stoneware	2	11	5.5
Red-bodied stoneware	2	5	2.5
Staffordshire-type slipware	5	45	9
Staffordshire-type white salt-glazed stoneware	1	4	4
Tin-glazed earthenware	3	86	28.7
Utilitarian English stoneware	6	406	67.7
Westerwald stoneware	1	8	8
Whiteware	84	1532	18.2
White-bodied stoneware	1	36	36
<b>Total</b>	<b>202</b>	<b>4403</b>	<b>21.8</b>

**Table 14:** Modern ceramics by fabric.

#### **Clay Tobacco Pipe** (Craig Cessford)

The archaeological investigations produced a small assemblage of clay tobacco pipe, totalling 113 pieces weighing 544g (consisting of 12 pieces, weighing 38g, from the evaluation phase and 102 pieces, weighing 506g, from the excavation phase), which is of limited usefulness beyond providing dating evidence for the archaeological features. In total at least 20 clay tobacco pipes are represented (MNI). The presence of clay tobacco pipe fragments in a context indicates a date of the late 16<sup>th</sup> to early 20<sup>th</sup> centuries (*c.* 1580–1910). The bowls were classified according to Oswald's simplified general typology (1975) and an attempt has been made to assign dates to stems based upon thickness where only these are present, although these are not entirely trustworthy. All the pipes recovered are probably of local manufacture and two makers' marks are represented; one relating to James or Anne Pawson and one

probably relating to Thomas Cleaver. The only individual assemblage of note derived from pit **F.19**, which contained at least 15 pipes (MNI). Although not exceptional, this is a relatively large group for a single feature of this date. It is greater than would be expected for a typical domestic assemblage and may indicate the presence of some form of commercial premises where smoking occurred, such as an inn or tavern.

### Catalogue of Material

#### *Evaluation*

<011> [064]: stem only, based upon thickness this is probably 17<sup>th</sup>–18<sup>th</sup> century (MNI 0).

<019> [067]: stem only, based upon thickness this is probably 19<sup>th</sup> century (MNI 0).

<077> [057] **F.22**: stem only, based upon thickness this is probably 17<sup>th</sup>–18<sup>th</sup> century (MNI 0).

#### *Excavation*

<008> [002] **F.019**: seven heels plus eight bowls with heels (MNI 15) plus two mouthpieces. Although a range of variation is apparent, the identifiable bowls (MNI 8) all belong to type 6 c. 1660–80 and it is likely that all the pipes from this feature are type 6. The pipes are relatively crude, although not exceptionally so, and are undecorated although the rims and in at least one instance the bowl/stem junction are rouletted.

<011> [003] **F.020**: two mouthpieces and a stem fragment with text PAWSON CAMB within a circle. This mark relates to James Pawson who was active in Cambridge c. 1786–1813 or his widow Anne Pawson active c. 1813–23. This style of mark probably dates to c. 1800–23. One type 12 bowl of c. 1730–80 and one mid–late 19<sup>th</sup> century bowl form with oak leaves on the front and rear of the bowl (MNI 2).

<033> [1048] **F.117**: One bowl of type 06, c. 1660–80 (MNI 1).

<075> [1167] **F.160**: stem only, based upon thickness this is probably 17<sup>th</sup>–18<sup>th</sup> century (MNI 0).

<085> [1188] **F.168**: One mid–late 19<sup>th</sup> century bowl form with fluting on sides of bowl and oak leaves on the front and rear and initials ‘TC’ on sides of spur, this is probably Thomas Cleaver, who was active in Cambridge c. 1839–52. One spur and base of bowl fragment with similar fluting and oak leaves but no initials on spur, (MNI 2).

<089> [1192] **F.170**: stem only, based upon thickness this is probably 19<sup>th</sup> century (MNI 0).

### Worked Stone (Simon Timberlake)

Approximately 20.5kg of worked stone – including quernstone, millstone and grindstone fragments – was recovered from the Chesterton High Street site (Table 15). This total includes a sample derived from a larger, refitting group of millstone fragments recovered from Post-Medieval foundation **F.307**, the majority of which was not retained.

#### *Millstone*

A single fragment derived from the rounded rim of a large diameter millstone found re-used within foundation **F.307** of Post-Medieval **Building 3** was examined. This fragment comprised one of five conjoining elements of the same millstone (Figure 17B), only one of which was retained. These came from a millstone of about 2.1m diameter and 0.12m+ thick, which was composed of Pennine Millstone Grit; the rounded edge, considerable width and much-reduced thickness of this stone (when compared to later examples) suggesting a pre-1700 date both for its quarrying and on-site manufacture (see Johnson, 2010). These millstone dimensions conform with the ‘old type’ millstone as defined by Radley (1963-4) or the ‘early form’ of Tucker (1985). It seems likely this was brought as an intact millstone, or else in broken-up form from a nearby mill (such as those watermills that are known to have been present along the Cam at this date); this then became a quarry source of hard rubble for the construction of foundations.

Cat. No.	Feature	Context	Weight (kg)	Size (mm) L x W x D	Original size (m)	Worked surface (mm <sup>2</sup> )	Geology	Use	Date
18	307	0009	15	450x250 (D) x120	2.1m diam	Rounded edge & convex top	Millstone Grit (Peak District?)	Millstone; 'old type' (Radley 1963-4) or 'early form' (Tucker 1985)	pre-1700
143	139	1465	0.95	175x145 x 30	0.48?	120x100 radial segment grooving	Niederm lava	Large hand quern?	Medieval ?
082	167	1184	0.35	80 x 60 x 55 (thick)		6x40 pecked grind surface	Niederm lava	Rotary quern with groove for rhynd – upper stone?	Medieval ?
056	139	1108	0.24	60 x 60 x 41 (thick)	0.48?	40x30 radial segment grooving	Niederm lava	Rotary quern upper stone	Medieval ?
070	140	1122	0.06	55 x 60 x 20			Niederm lava	Rotary quern	Medieval ?
193	139	1465	3.90	205 diam x 55-80 thick	0.2	Edge	Carbonif CM grindston grits?	Grinding wheel, for metal knives/ tools	Late Medieval

**Table 15:** Catalogue of worked stone.

#### *Lava quern*

Four pieces of Niedermendig rotary quern (fragments from the stones of hand mills) were recovered from later medieval features **F.139**, **F.140** and **F.167**, although it is uncertain as to whether these represent fragments of re-deposited Roman stones, or else fragments of medieval (post-1000 AD) pot quern types (Horter *et al.* 1950). However, the presence of quite complex radial segmented grooving on the grinding surfaces of at least two of these confirms that they are certainly not Saxon in date, the latter typically having no furrow dressing at all (Watts 2002). The largest fragment, from well **F.139** (<143>), appears to be from one of the larger diameter hand mills, yet this is ambiguous given that the furrow dressing seems little worn, although the stone is quite thin (at only *c.* 30mm). However, given the clear presence of a grain-feed axle hole, it would seem that this must be an upper stone, possibly for a medieval pot quern. Two small fragments from **F.139** (<056>) and **F.167** (<082>) are from slightly thicker stones, thus are more representative of potential upper stones of pot quern types, in particular <082> which has the faint survival of a narrow curved handle slot on its upper surface, thus resembling the general arrangement we see illustrated on the pot quern from Rievaulx Abbey, North Yorkshire (illustrated in Watts 2002, 42). It is worth noting here that none of the quern examined seemed worn. This could be significant if the fragments represent purposeful destruction rather than the discard of worn stones, for by the 14<sup>th</sup> century both the confiscation and requested destruction of household querns are recorded (*ibid.*, 40). Also by this date the tolls charged for the use of the watermill (such as existed within the village of Chesterton) had become an important source of manorial income. Many were thus compelled to have their grain ground at the manorial mills, although freemen were still allowed to own and use hand mills, so long as it could be proved to be for domestic consumption (*ibid.*, 41).

### Grindstone wheel

Within Late Medieval well **F.139** was found a near-complete knife or tool sharpening wheel made of micaceous sandstone grit. Examination of this rock type suggests a ganister-type rock, perhaps one of the thin sandstone beds locally referred to as the ‘grindstone’ grits found within the shale-sandstone sequences within Upper Carboniferous Coal Measures of Derbyshire/South Yorkshire. These beds were quarried at such locations as Overton, Ashover, Beeley, Buxton and other sites and were worked from Late Medieval times onwards to supply the early Sheffield knife and tool making industry, and perhaps also for export further afield. The small size of this wheel (205mm diameter) compared to the large size of the square axle hole (70mm by 70mm) that took a hand-turned square wooden shaft and handle is almost certainly symptomatic of the early date of this grinding wheel. These types of grindstone would have changed very little from the Late Medieval to early Post-Medieval period, and thus can’t be accurately dated on the form of the stone alone. However, as regards the mechanism for its use, the Luttrell Psalter dating to around 1340 describes a grindstone which was rotated by two cranks, one at each end of its axle (White 1962, 110). Then, around 1480, the early medieval rotary grindstone was improved with a treadle and crank mechanism (*ibid.*, 162). This particular grindstone shows a fairly considerable amount of even wear, suggesting the habitual sharpening of a wide or long bladed object – perhaps a long knife, sword or axe.

### Moulded Stone (Richard Newman)

Five fragments of moulded stone, weighing 62.8kg, were recovered from the site (Table 16). All five were medieval in origin but were recovered Post-Dissolution contexts. Therefore, although all of the pieces appear most likely to have been ecclesiastical in origin, their original provenance cannot now be determined; such blocks are known to have moved large distances following the extensive demolition engendered by the Reformation (Morris 2003).

Feature Number	Context Number	Catalogue Number	Building Stone	Notable Patterns	Component element	Major element	Date range	Geological Provenance
303	1017	019	Limestone	-	Basin	Stoup/piscina?	Medieval	Purbeck?
307	009	018	Limestone	Hollow chamfer	Mullion	Window	Medieval	Barnack
312	001	015	Limestone	Chevrons	Voussoir	Arch	c. 1080-1220	Barnack
312	004	013	Clunch	Hollow chamfer	Jamb & springer	Door	Medieval	Totternhoe or Burwell
314	-	015	Limestone	Steep chamfer	Sill	Door/window	Medieval	Barnack

**Table 16:** Catalogue of moulded stone from the Chesterton High Street site.

Two types of building stone were present at the site: limestone and clunch. The limestone blocks were predominately composed of hard bioclastic ooidal Barnack Stone. During the Middle Ages, Barnack Stone is known to have been quarried from the banks of the river Welland near Stamford (Gallois 1988; Alexander 1995, 115-6). This material was first used in Cambridge during the early to mid-12<sup>th</sup> century – at Holy Sepulchre Church and Stourbridge leper chapel – and was in frequent use in the town from the late 13<sup>th</sup> century onwards (Purcell 1967, 29-34). Its robusticity made it an excellent, hard-wearing though coarse-grained building material. The second material-type present within the moulded stone assemblage is clunch. This is a fine-grained chalk with a relatively high



silica content. The quarrying and carving of clunch within the Cambridgeshire village of Burwell, as well as the neighbouring settlements of Reach and Isleham, was a significant local industry during the 14<sup>th</sup> and 15<sup>th</sup> centuries. Fresh clunch, especially that which was derived from the Totternhoe Stone or Burwell Rock horizon of the Lower Chalk, was relatively soft and grey when quarried but would rapidly harden and turn white upon exposure to air. At the quarry sites themselves the material was initially soaked in pits before being crudely cut into ashlar blocks for transport by barge (Garrow 2000; Newton 2010). Finer moulding work was then usually undertaken either at or close to the final site of construction, once the clunch had hardened sufficiently. Much more tractable than limestone, clunch was typically employed for detailed or intricate mouldings such as tracery. As such, therefore, this material was widely used throughout the region, especially at religious houses including Anglesey Abbey, Denny Abbey and Ramsey Abbey – the latter of whom owned at least one of the Burwell quarries during the late 14<sup>th</sup> century (Lethbridge 1929, 97-8) – as well as numerous religious and secular buildings in Cambridge (Purcell 1967, 24-8).

The most notable fragment within the present assemblage comprised a Romanesque voussoir with chevronic decoration that was recovered from 17<sup>th</sup> century foundation **F.312**. This had originally been employed within a rounded-arched Norman doorway of late 11<sup>th</sup> to early 13<sup>th</sup> century date (see Moss 2009). Also of note was basin fragment <019> that was reused in foundation **F.303**. This basin originally measured c. 0.22m in diameter and probably comprised a stoup for holy water; it may well originally have been semi-circular as opposed to fully circular in form. The three remaining fragments were heavily fragmented and abraded, such that they revealed few diagnostic characteristics. None of the material appears to have originated at, or indeed necessarily very close to, the site itself.

### **Flint** (Emma Beadsmoore & Lawrence Billington)

In total, seven worked flints were recovered (Table 17). All of these comprised unretouched flake removals made on good quality fine-grained flint. Cortical surfaces survived on three pieces and all were thin, hard and smooth and appear to have derived from small gravel cobbles. The flints are all in a similar condition with edge damage in the form of chipping and edge rounding suggesting they have seen some post-depositional disturbance.

Feature	Context	Secondary Flake	Tertiary Flake	Core Rejuvenation Flake	Total
12	31	1	-	-	<b>1</b>
8	19	1	-	-	<b>1</b>
3	6	-	1	-	<b>1</b>
11	27	1	-	-	<b>1</b>
15	37	1	-	-	<b>1</b>
185	1231	-	-	1	<b>1</b>
-	1025	1	-	-	<b>1</b>

**Table 17:** Quantification of the worked flint assemblage by type.

None of the flints were strongly chronologically diagnostic. The tertiary flake fragment from **F.3** was blade-like in morphology and is likely to be of Neolithic date, but the remainder of the flakes were hard hammer struck secondary removals and could conceivably date to any period from the Late Neolithic to the Iron Age.

### **Ceramic Building Materials** (Richard Newman & Simon Timberlake)

A relatively small quantity of ceramic building materials was encountered at the Chesterton High Street site. The majority of this material pertained to Phase III, but as this group was composed of the standard range of form and fabric types for the period

it will not be discussed in detail here. Of greater interest was the small quantity of material recovered from Phase II deposits:

**F.139 (1465) <142> (early 15<sup>th</sup> century):** A nearly complete hand-made brick of almost identical fabric to <052>. Dimensions 170 x 130 x 50mm (6 ½ inches x 5 ¼ inches x 2 inches); weight 1404g. This 15<sup>th</sup> century handmade brick is crudely shaped compared to later (16<sup>th</sup> -17<sup>th</sup> century) examples. The two phases of mortar adhering to it indicate that this was probably re-used.

**F.270 [1106] <052> (mid-16<sup>th</sup> century):** x1 broken end. Dimensions 50 x 50 x 56mm (2 ¼ inch brick thickness). Weight 180g. Part of an early (probably 15<sup>th</sup> century) hand-made brick. Red clay with flint and straw inclusions.

**F.270 [1108] <055> (mid-16<sup>th</sup> century):** Fragment of 16<sup>th</sup> century brick composed of a hard-fired yellow-white clay fabric throughout, with little evidence of inclusions. A slightly more worn/polished surface on one of the faces suggests that it might also have formed part of an (internal) brick floor. Dimensions 145 x 95 x 50; weight 676g.

**F.270 [1110] <061> (mid-16<sup>th</sup> century):** Fragments of two different sorts of handmade 16<sup>th</sup> century brick: (1) End of brick similar to <052> and <063>: 105mm wide x 60mm long (broken) x 50mm deep; 440g. (2) End of brick; 100 mm wide x 80mm long (broken) x 60mm deep; 564g. Fabric soft, red and sandy with inclusions of angular and weathered flint.

**F.270 [1111] <063> (mid-16<sup>th</sup> century):** End of a 16<sup>th</sup> century brick. Dimensions: 100mm(4 inches) wide x 120mm long (broken end) x 48mm (2 inches) deep. Weight 662g. Mortar adheres to one side and bottom, yet the upper surface is worn and polished through use, suggesting that this formed part of an (internal) brick floor.

The presence of this small Late Medieval assemblage indicates the potential utilisation of brick at the site prior to the extensive reorganisation of the plots in the mid-16<sup>th</sup> century. Moreover, several of these fragments bear evidence of their employment as flooring rather than as structural elements; a pattern that may have resulted from the material's relatively high value at this date (see Lucas 1993).

### **Miscellaneous Materials (Richard Newman)**

In addition to the above categories, a small assemblage of other material types was recovered from the site. In each instance, however, the quantity of material recovered – allied with the undiagnostic nature of the assemblage's component elements – renders full analysis unwarranted. The relevant material-types comprise glass, shell and burnt clay:

The glass assemblage consisted of 17 shards weighing 1427g; however, all of these fragments were derived from generic utility bottles of 19<sup>th</sup> century date. Similarly, the small shell assemblage consisted of 26 oyster shell fragments weighing 92g. Although entirely derived from Phase II contexts, no feature produced more than five individual shells; the analytical potential of this group is therefore extremely limited. Finally, the burnt clay assemblage consisted of only one fragment weighing 44g; this piece was of indeterminate form or origin.

## - Economic and Environmental Data -

In addition to the material culture discussed above, a moderately-sized assemblage of economic and environmental material was also recovered. This assemblage – which includes faunal remains and bulk environmental samples – has been subdivided by material type and is discussed in detail below.

### Faunal Remains (Vida Rajkovača)

A range of feature-types and occupation layers were investigated during the excavation, with just over 80 contexts generating faunal material. Using the methods outlined below, from the assemblage with a raw count of 1049 fragments some 635 assessable specimens were recorded, weighing 11,153g. Of this figure, 225 specimens (or 35.4% of assemblage) were identifiable to species or family level. The assemblage is comprised of the material recovered during the normal course of hand-excavation and the material from the heavy residues following the processing of the environmental bulk soil samples. Though four distinct phases were identified, fauna came only from the two most substantial (Phases II and III) and the assemblage has been quantified and studied accordingly.

#### *Identification, quantification and ageing*

The zooarchaeological investigation followed the system implemented by Bournemouth University with all identifiable elements recorded (NISP: Number of Identifiable Specimens) and diagnostic zoning (amended from Dobney & Reilly 1988) used to calculate MNE (Minimum Number of Elements) from which MNI (Minimum Number of Individuals) was derived. Identification of the assemblage was undertaken with the aid of Schmid (1972), and reference material from the Cambridge Archaeological Unit and Grahame Clark Zooarchaeology Laboratory, University of Cambridge. Ageing of the assemblage employed both mandibular tooth wear (Grant 1982; Payne 1973) and fusion of proximal and distal epiphyses (Silver 1969). Where possible, the measurements have been taken (Von den Driesch 1976). Sexing was only undertaken for pig canines, based on the bases of their size, shape and root morphology (Schmid 1972, 80). Taphonomic criteria including indications of butchery, pathology, gnawing activity and surface modifications as a result of weathering were also recorded when evident.

#### *Preservation, fragmentation and taphonomy*

There were no notable differences in between the two phases, with both sub-sets having the majority of the material recorded as moderately to quite well-preserved. The numbers corresponding to each of the preservation categories are given in Table 18. Categories such as ‘poor’ were not recorded from the assemblage. The fragmentation was not high and only two complete specimens were available for biometrical data.

Preservation Category	Phase II		Phase III	
	NISP	% of sub-set	NISP	% of sub-set
Good	4	1.2	.	.
Quite good	103	31	45	40.2
Moderate	212	63.9	66	58.9
Quite poor	7	2.1	1	0.9
Poor	.	.	.	.
Mixed	6	1.8	.	.
<b>Total</b>	<b>332</b>		<b>112</b>	

**Table 18:** Number of Identified Specimens and percentages – breakdown by preservation category.

Burning was recorded on *c.* 2% of the Phase II and *c.* 6% of the Phase III sub-sets (Table 19). Gnawing was present although relatively rare and suggested that bone waste was deposited relatively quickly. Butchery marks were particularly common throughout, and especially in Phase III, with over 20% of the sub-set being affected. Marks corresponding to disarticulation, meat and marrow removal were recorded, and ribs were often cut to pot sizes.

Taphonomy	Phase II		Phase III	
	NISP	% of sub-set	NISP	% of sub-set
Burnt	6	1.8	7	6.3
Butchered	47	14.2	24	21.4
Gnawed	16	4.8	10	9
Porous	4	1.2	2	1.8

**Table 19:** Aspects of taphonomy: Number of Identified Specimens and the percentages, broken down by phase.

*Hand-recovered material: overview of results*

The two sub-sets generated somewhat different faunal ‘signatures’. Sheep/goat appear to have been the favoured species during the earlier, medieval phase (Phase II) and this is reflected in the NISP and MNI counts, as well as in the high numbers of sheep-sized unidentifiable specimens (Table 20). This sub-set also produced a single red deer metacarpus fragment. The skeletal element count for the three main ‘food species’ showed all parts of carcasses were present on site, the only caveat being a clear over-representation of sheep/goat metatarsi. Though sheep metapodials had a wide range of uses, it could be suggested the high counts here correspond to the tanning waste, indicating the presence of a nearby tannery. Only a small number of mandibles were possible to age: two sheep/ goat mandibles were aged to 1-2 and 3-4 years, a pig mandible gave the age at death between 21-27 months, and one cow mandible showed the animal was killed as an adult.

Taxon	Phase II			Phase III		
	NISP	% NISP	MNI	NISP	% NISP	MNI
Cow	49	34.3	3	26	44.8	2
Sheep/ goat	69	48.3	9	15	25.9	1
Pig	11	7.7	3	8	13.8	1
Horse	7	4.8	1	4	7	1
Dog	1	0.7	1	.	.	.
Rabbit	.	.	.	2	3.4	1
Red deer	1	0.7	1	.	.	.
Chicken	2	1.4	1	.	.	.
Domestic goose	.	.	.	1	1.7	1
<i>Galliformes</i>	1	0.7	1	1	1.7	1
<i>Anseriformes</i>	1	0.7	1	1	1.7	1
Frog/ toad	1	0.7	1	.	.	.
<b>Sub-total to species/ family</b>	<b>143</b>	<b>100</b>	<b>.</b>	<b>58</b>	<b>100</b>	<b>.</b>
Cattle-sized	80	.	.	23	.	.
Sheep-sized	100	.	.	28	.	.
Mammal n.f.i.	2	.	.	.	.	.
Bird n.f.i.	7	.	.	3	.	.
<b>Total</b>	<b>332</b>	<b>.</b>	<b>.</b>	<b>112</b>	<b>.</b>	<b>.</b>

**Table 20:** Number of Identified Specimens and the Minimum Number of Individuals for all species from all features, broken down by phase (the abbreviation n.f.i. denotes that the specimen could not be further identified).

The majority of butchery marks were consistent with gross disarticulation or splitting for marrow removal, mainly on large domesticates. In addition to the butchery, a fragment of highly polished bone point was recorded, fashioned from a sheep-sized limb bone fragment. The point of interest from this sub-set was the well preserved and complete pig skeleton recovered from **F.25 ([78])**. The animal was a female, aged between 2 and 7 months of age at death. An abnormal and irregular in shape bone growth was recorded on the lingual side of one of the mandibles, similar to swelling recorded in abscesses. Perhaps surprisingly, it was not possible to observe any butchery marks and this may be taken to suggest the animal was not eaten. Some authors argue, however, that a skilled butcher does not have to leave a mark, and this is especially the case with juvenile individuals such as the one we have here (Krish Seetah *pers. comm.*). The quantity of bone generated during Phase III was much smaller, with cattle being the prevalent species. In keeping with the period, butchery marks were characterised by the heavy use of the saw as a multipurpose tool. A number of cattle-sized vertebrae were chopped down the sagittal plane, implying carcasses were hung and split into left and right portions; that said, fine knife marks consistent with meat removal were not rare.

#### *Fauna from heavy residues*

Aside from three fish specimens, and a few more amphibian remains, the bone recovered from the heavy residues was rather similar to that from the main assemblage (Table 21). The lack of avian remains and microfauna is a testimony to a good recovery, as well as a confirmation that these species only made an occasional contribution to the diet.

Taxon	Heavy Residues - Phase II		
	NISP	% NISP	MNI
Cow	4	16.6	1
Sheep/ goat	5	20.8	1
Pig	1	4.2	1
Frog/ toad	13	54.2	2
Cod	1	4.2	1
<b>Sub-total to species/family</b>	<b>24</b>	<b>100</b>	.
Cattle-sized	2	.	.
Sheep-sized	122	.	.
Rodent-sized	6	.	.
Mammal n.f.i.	35	.	.
Fish n.f.i.	2	.	.
<b>Total</b>	<b>191</b>	.	.

**Table 21:** Faunal remains from heavy residues: Number of Identified Specimens and the Minimum Number of Individuals for all species from all features (the abbreviation n.f.i. denotes that the specimen could not be further identified).

Aside from the relative importance of the two main domesticates and the quantities of recovered bone, it was not possible to note many changes in husbandry practices between the two major phases of occupation. Although sheep dominated the earlier phase, and cattle were more common in the later phase, the marginal decrease in the numbers of sheep does not necessarily indicate a change in economy. Despite there being much variation in faunal remains between sites of different social status during the Middle Ages (*e.g.* Albarella & Davis 1996), one could argue that these two species were of broadly equal importance during the period. Moreover, Albarella's studies have shown that whilst urban sites typically had a higher prevalence of cattle and rural sites a more dominant sheep component, the differences between these two types of site were rarely clear-cut (Albarella 1999, 868; see especially Albarella 2005). This is particularly well-demonstrated in a local, Cambridge context via the excavated assemblages from Grand Arcade (a large suburban site with a clear

prevalence of sheep; Cessford & Dickens *in prep.*) and Neath Farm (a nearby rural village site where a dominant cattle component was identified; Slater 2012).

Thus, although the faunal ‘signature’ of the Chesterton High Street site would most closely correspond to that from a rural milieu, this does not accord with the plot layout and other material culture encountered. Quantitatively small, with a limited range of species and a near absence of wild fauna, the assemblage is especially comparable to that recovered from Neath Farm (Slater 2012). It should be noted that the area of the present excavation was over seventeen times smaller, however, such that only around half of a single plot was investigated; consequently, variations in the spatial distribution of the material may have resulted in a partial skewing of the data. Nevertheless, the faunal assemblages from Chesterton High Street and Neath Farm contrast markedly with those from two other Cambridge excavations; Grand Arcade (Cessford & Dickens *in prep.*) and Eastern Gate Hotel (Newman 2013b). The latter sites, which were fully suburban in character, produced assemblages that were quantitatively much more substantial and contained an incredibly varied range of species. It therefore appears that a genuine distinction existed in relation to both the number and types of animals that were being exploited in these locations.

At present, there is insufficient economic data to warrant a detailed discussion of Cambridge’s urban/rural hinterland faunal supply network. Given the even distribution of all parts of beef, mutton and pork carcasses, however, allied with the general abundance of bone accumulated in urban spaces, the current picture seems to suggest there were areas with a focus on food production located within or very closely adjacent to the medieval town.

### **Bulk Environmental Remains** (Val Fryer)

Samples for the retrieval of the plant macrofossil assemblages were taken from across the excavated area at the site. Fourteen were submitted for assessment, all of which pertained to Phase II of the site sequence. Although most samples were bulk floated by CAU, the waterlogged fill of well **F.139** (sample 14) was processed by the author using manual water flotation/washover. All flots were collected in a 300 micron mesh sieve. As waterlogged macrofossils were present within the assemblage from sample 14, the flot was stored in water prior to sorting. Both dried flots and wet retents were scanned under a binocular microscope at magnifications up to x 16 and the plant macrofossils and other remains noted are listed in Table 21. Nomenclature within the table follows Stace (1997). Charred, waterlogged, de-watered and mineral replaced plant remains were recorded, with the waterlogged/de-watered remains being denoted within the table by a lower case ‘w’ suffix and the mineral replaced remains by a lower case ‘m’. Modern roots, seeds and arthropod remains were also recorded. The non-floating residue from sample 14 was collected in a 1mm mesh sieve. A single cockle (*Cerastoderma edule*) shell was noted, but other artefacts/ecofacts were not recorded.

#### *Results*

Cereal grains, chaff, seeds of common weeds and wetland plants and tree/shrub macrofossils were recorded at a low to moderate density within all fourteen assemblages. Preservation was variable. The charred grains were generally poorly preserved, with most being puffed and distorted, probably as a result of combustion at very high temperatures. However, most of the charred seeds were moderately well preserved, although many were heavily coated within fine silt/small grits and/or

mineral concretions. It is unclear whether the latter may have precluded full retrieval of the macrofossils during processing. The waterlogged/de-watered remains were mostly well preserved, although some distortion had occurred as a result of the compaction of the deposits. Oat (*Avena* sp.), barley (*Hordeum* sp.), rye (*Secale cereale*) and wheat (*Triticum* sp.) grains were recorded along with numerous cereals and cereal fragments which were too poorly preserved for close identification. Wheat occurred most frequently. Chaff was generally scarce, but bread wheat (*T. aestivum/compactum*) type rachis nodes were recorded within six assemblages and individual barley/rye type rachis nodes were noted within three samples. A single cultivated oat (*A. sativa*) floret base, with a characteristic straight basal abscission scar, was recovered from sample 2 (medieval gully **F.142**). Rare fragments of waterlogged cereal bran were recorded from the fill of well **F.139** (sample 14). Other potential food plant remains were scarce, but did include charred bean (*Vicia faba* type) seeds and waterlogged grape (*Vitis vinifera*) 'pips'.

Weed seeds were generally scarce, with most occurring as single specimens within an assemblage. Segetal species were predominant, and taxa noted included stinking mayweed (*Anthemis cotula*), brome (*Bromus* sp.), small legumes (Fabaceae), black bindweed (*Fallopia convolvulus*), knotgrass (*Polygonum aviculare*), wild radish (*Raphanus raphanistrum*) and dock (*Rumex* sp.). Grassland and ruderal species occurred less frequently, but included dead-nettle (*Lamium* sp.), medick/clover/trefoil (*Medicago/Trifolium/Lotus* sp.), greater plantain (*Plantago major*) and nettles (*Urtica* sp.). Waterlogged/de-watered fragments of corn cockle (*Agrostemma githago*) testa were noted within both well fills, with well **F.139** also including Brassica testa and cereal bran. Such materials were common contaminants of wholemeal flour, and as such often appear within deposits containing human ordure. De-watered seeds of henbane (*Hyoscyamus niger*), a plant which thrives on nitrogen rich soils, were common within the assemblage from cess pit **F.269** (sample 12). Wetland/aquatic plant macrofossils were recorded, mostly as single specimens, within ten of the assemblages studied. Taxa noted included sedge (*Carex* sp.), spike-rush (*Eleocharis* sp.), rush (*Juncus* sp.), dropwort (*Oenanthe* sp.) and bur-reed (*Sparganium* sp.). Tree/shrub macrofossils occurred less frequently, but did include hazel (*Corylus avellana*) and walnut (*Juglans regia*) nutshell fragments and elderberry (*Sambucus nigra*) seeds. Charcoal/charred wood fragments were present at a low to moderate density throughout, but other plant macrofossils were generally scarce. However, the waterlogged assemblage from sample 14 did include a number of quite well-preserved moss fronds.

Fragments of black porous and tarry material were present within all but sample 14. Whilst some were possible residues of the combustion of organic remains (including cereal grains) at very high temperatures, most were hard and brittle and it was thought most likely that these were bi-products of the combustion of coal, small fragments of which were also noted within most assemblages. Fish bones/scales and small mammal/amphibian bones were also present at a low density within most of the assemblages studied. Other remains occurred less frequently, but did include small fragments of bone, ferrous spherules and mineralised/waterlogged arthropod remains. Although specific sieving for molluscan remains was not undertaken, occasional shells of terrestrial and freshwater obligate species were noted within five assemblages. Most were of little note, but the sample from well **F.271** (sample 11) did include a number of shells of *Armiger crista*, a snail common within small bodies of water (Macan 1977). These possibly indicated that the feature had been relatively undisturbed and open for a sufficient period to form a microhabitat suitable for limited colonisation by this species.

## Discussion

Although the recovered assemblages are mostly small (*i.e.* <0.1 litres in volume) and relatively limited in composition, it is possible to make the following broad statements about the materials which are recorded:

- I. Although the samples of medieval date were taken from a range of features which, at the time of writing, cannot readily be functionally or spatially associated, the recovered assemblages are very uniform in composition, possibly suggesting that at least some of the remains have a common source. Given the nature of the site, *i.e.* a single, well-defined domestic property plot which was subsequently sub-divided but still retained its domestic/occupation purpose, it is, perhaps, most likely that the

remains are largely derived from midden waste. Although little (if any) of this waste appears to have been systematically disposed of, the intensive use of the site over a number of years almost certainly resulted in the gradual dispersal of the refuse until it became incorporated within most features across the site.

- II.** Cereals were definitely of importance to the occupants of the site. The low density of chaff and weed seeds recovered from the samples may indicate that much of the grain was arriving in a semi-cleaned or prime state, although it should be noted that the high temperatures at which many of the materials were obviously burnt would have destroyed some of the more delicate macrofossils including chaff elements and seeds. Assuming that the remains are indicative of the importation of cereals, similar grain dominant assemblages, which appear to have been processed elsewhere, are also recorded from contemporary features at the Eastern Gate Hotel site (de Vareilles 2013), possibly indicating that a dependence on imported grain was a common pattern within the medieval suburbs of Cambridge. Wheat, which was well suited to production on the local clay soils, appears to have been used most frequently, but as it is the most versatile of the cereals, this is probably not that surprising. Barley, which was often used whole in soups and stews, is also present within most assemblages, but rye and oats occur less frequently. However, it is possibly of note that the oat grains are predominantly large, suggesting that they are present as a crop in their own right and not simply as contaminants of the main wheat crop. How the cereals came to be burnt is not known, but it is presumed that many were accidentally charred during culinary preparation, including the toasting of grains to form groats.
- III.** As only one waterlogged assemblage was available for study, little can be said about the immediate environment of the site itself. As stated above, some of the material within the well appears to be derived from sewage, which was presumably dumped after the feature fell into disuse. Similarly, the composition of the seed assemblage suggests that the immediate area was covered in rough, poorly maintained grassland, which again is more likely to be indicative of dereliction than regular site use. However, it is of interest that both grape seeds and walnut shell fragments are recorded, and whilst these too may be derived from sewage, they do suggest that the occupants of the site possibly had some status.

### *Conclusions and recommendations for further work*

In summary, much of the material noted within these assemblages is either derived from dispersed midden waste or is probably indicative of a later phase in the history of the site, when most of the features were abandoned and being used for the small scale deposition of refuse and sewage. The refuse appears to be primarily domestic in nature, although the occurrence of ferrous spherules may indicate that some limited smithing activity was occurring within the near vicinity. As none of the current assemblages contain a sufficient density of material for quantification (*i.e.* 100+ specimens), no further analysis is recommended. However, a summary of this assessment should be included within any publication of data from the site.

*(Table 21 follows)*



Sample No.	1	2	3	4	5	6	7	8	9	11	12	13	14	15
Context No.	1081	1123	1125	1127	1131	1406	1433	1433	1442	1459	1448	1184	1465	1475
Feature No.	132	142	143	144	146	261	249	251	252	271	269	167	139	280
Feature type	Pit	Gully	Ditch	Ditch	Ditch	Pit	Pit	Pit	Pit	Well	Cess pit	Pit	Well	Ditch
Sample volume (litres)	6	11	12	12	15	8	10	10	12	7	12	10	32	10
Volume of flot (litres)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.3	<0.1
% flot sorted	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	50%	100%
<b>Cereals and other food plants</b>														
<i>Avena</i> sp. (grains)	xcf	x	x	x	xx		x	x	xcf		x			
<i>A. sativa</i> L. (flore base)		x												
<i>Hordeum</i> sp. (grains)	xcf	x	x	xcf	x	x	xcf	x		x		x		x
<i>Hordeum/Secale cereale</i> type (rachis nodes)							x		x			x		
<i>Secale cereale</i> L. (grains)	x		x	x	x			x						xcf
<i>Triticum</i> sp. (grains)	xx	xx	xx	xx	xx	x	xx	xx	x	x	x	x	x	x
(rachis node frag.)								x						
<i>T. aestivum/compactum</i> type (rachis nodes)		x	x	x	x				x					x
Cereal indet. (grains)	xx	xxx	xx	xx	xx	x	xx	xx	x	x	x	xx	xcffg	x
(detached embryos)								x						
(pericarp)													xw	
<i>Vicia faba</i> L.			x					x						
Large Fabaceae indet.									xcffg					
<i>Vitis vinifera</i> L.													xw	
<b>Herbs</b>														
<i>Aethusa cynapium</i> L.											xw			
<i>Agrostemma githago</i> L.										xw			xxfw	
<i>Anthemis cotula</i> L.		x	x	x	x			x	x			x	xw	

Sample No.	1	2	3	4	5	6	7	8	9	11	12	13	14	15
Apiaceae indet.													xw	
Asteraceae indet.													xw	
<i>Atriplex</i> sp.					x				x					
Brassicaceae indet.													xtfw	
<i>Bromus</i> sp.		x	xcf	x	x		x							
<i>Centaurea</i> sp.					xfg			x					xcfw	
<i>C. nigra</i> L.													xw	
<i>Chenopodium album</i> L.										xw				
Chenopodiaceae indet.				x					x		xw			
<i>Cirsium</i> sp.							xcffg						xw	
<i>Conium maculatum</i> L.			xm											
Fabaceae indet.		x	x		x	xcf	x	xcf						x
<i>Fallopia convolvulus</i> (L.)A.Love	x	x	x										xtfw	
<i>Galium aparine</i> L.				x										
<i>Hyoscyamus niger</i> L.											xxw			
<i>Lamium</i> sp.											xw			
<i>Lapsana communis</i> L.													xw	
<i>Leontodon</i> sp.													xw	
<i>Malva</i> sp.				x										
<i>Medicago/Trifolium/Lotus</i> sp.	xcf					x		xcf						
<i>Medicago lupulina</i> L.													xcfw	
<i>Papaver argemone</i> L.											xw			
<i>P. dubium</i> L.													xw	
<i>Plantago lanceolata</i> L.									x					
<i>P. major</i> L.													xxw	xcf

Sample No.	1	2	3	4	5	6	7	8	9	11	12	13	14	15
Small Poaceae indet.							x						xw	x
<i>Polygonum aviculare</i> L.	x						xcf				xw		xw	
<i>Ranunculus</i> sp.													xw	
<i>R. acris/repens/bulbosus</i>													xw	
<i>Raphanus raphanistrum</i> L. (siliqua/frags.)			x										xxw	
<i>Rumex</i> sp.						x			x				xw	
<i>Silene</i> sp.										xw			xw	
<i>Sinapis</i> sp.													xcftfw	
<i>Sonchus asper</i> (L.) Hill													xw	
<i>S. oleraceus</i> L.													xw	
<i>Stellaria graminea</i> L.													xw	
<i>Taraxacum</i> sp.													xw	
<i>Urtica dioica</i> L.											xw			
<i>U. urens</i> L.													xw	
<b>Wetland plants</b>														
<i>Carex</i> sp.				x	xcf			x	x		xw			
<i>Eleocharis</i> sp.						x								xcf
<i>Juncus</i> sp.													xw	
<i>Luzula</i> sp.			xcf											
<i>Oenanthe</i> sp.													xw	
<i>Sparganium</i> sp.		x												
<i>Typha</i> sp.													xcfw	
<b>Tree/shrub macrofossils</b>														
<i>Corylus avellana</i> L.													xw	x
<i>Juglans regia</i> L.													xw	

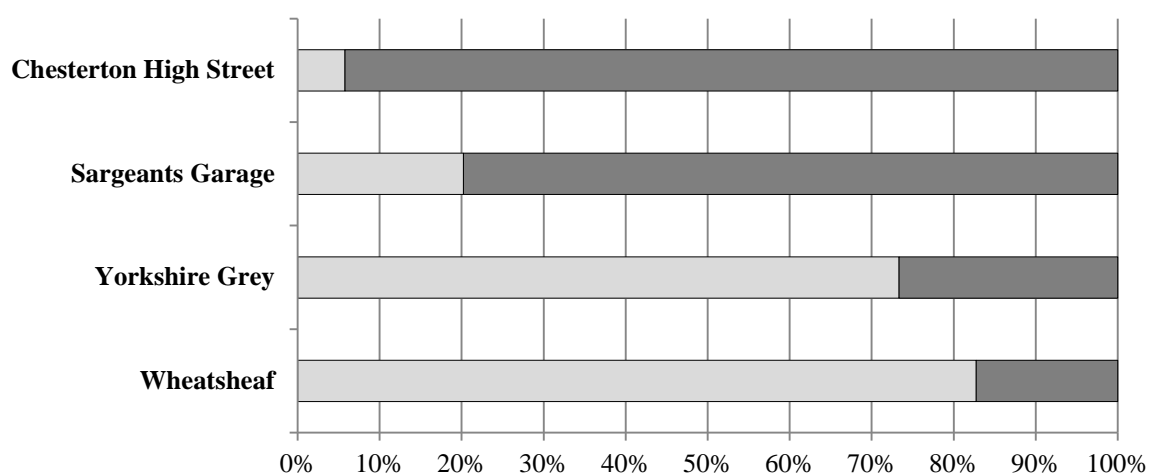
Sample No.	1	2	3	4	5	6	7	8	9	11	12	13	14	15
<i>Prunus</i> sp. (fruit stone frags.)					xm									
<i>Rosa</i> sp.					xcfm									
<i>Sambucus nigra</i> L.					xm					xw	xw			
<b>Other plant macrofossils</b>														
Charcoal <2mm	xx	xx	xx	x	xx	x	x	x	x	x	x	xx	x	xx
Charcoal >2mm	xx	x	x	xx	xx	x	x	x	x		x	x	x	x
Charcoal >5mm	x	xx	xx	xx	x	x	xx		x		x	x		x
Charcoal >10mm		x			x									
Charred root/stem		x	x					x			x		x	
Waterlogged/de-watered root/stem											x		xxxx	
Indet.culm nodes		x	x											
Indet.fruit stone/nutshell													xw	
Indet.inflorescence frags.					x			x						
Indet. moss													xxw	
Indet.seeds	x	x		x			x	x	x		x		x xw	
Indet.thorns ( <i>Prunus</i> type)													xw	
Indet.twig frags.													xw	
Wood frags. >5mm													xw	
<b>Other remains</b>														
Black porous 'cokey' material	xx	x	x	x	x	x	x	x	x		x	x		xx
Black tarry material	x	x	x	x	x	x	x		x	xx	x			x
Bone	x xb				x		x	x	x		x			x
Burnt/fired clay	x							x			x			x
Burnt stone	x													
Cladoceran ephippia													x	

Sample No.	1	2	3	4	5	6	7	8	9	11	12	13	14	15
Ferrous globules	x						x	x						x
Ferrous hammer scale	x													
Fish bones	x	x	x	x	x		x	x		x	x			x
Mineralised arthropod remains			x		xx				x					
Waterlogged arthropod remains													xxx	
Ostracods										x			xx	
Small coal fragments	xxx	xx	x	x	x		x			x				xx
Small mammal/amphibian bones	x	x	x	x		x			x	x	x	x		
Vitreous material		x				x		x	x					
<b>Molluscs</b>														
<b>Woodland/shade loving species</b>														
<i>Oxychilus</i> sp.										x				
Zonitidae indet.					x									
<b>Open country species</b>														
<i>Pupilla muscorum</i>										x				
<i>Vallonia</i> sp.			x											
<i>V. costata</i>			x							x				
<b>Catholic species</b>														
<i>Trichia hispida</i> group		x	x	x						x				
<b>Freshwater obligate species</b>														
<i>Armiger crista</i>										xx				
<i>Pisidium</i> sp.										x				

**Table 21:** Plant-remains and other finds from the bulk soil samples (Key: x = 1 – 10 specimens; xx = 11 – 50 specimens; xxx = 51 – 100 specimens; xxxx = 100+ specimens; cf = compare; fg = fragment; w = waterlogged/dewatered; tf = testa fragments; m = mineral replaced).

## - Discussion -

It is clear from the above results that this investigation makes a substantive contribution to the wider understanding of Chesterton's medieval and Post-Medieval development. In direct contrast to other excavations previously undertaken in the area, for example, little or no evidence of pre-13<sup>th</sup> century occupation was identified. This dearth can be demonstrated graphically via a comparison of the ratio of Saxo-Norman to medieval ceramics that were recovered from the four principal excavations so far undertaken within the *vill* (Chart 2; see Figure 1 for locations).



**Chart 2:** The relative percentage of Saxon and Saxo-Norman (pale grey) versus medieval (dark grey) fabric types recovered from nearby Chesterton sites (additional data from Cessford with Dickens 2004).

Whilst ceramic evidence alone cannot be regarded as definitive, the polyfocal pattern of Saxo-Norman settlement that was previously identified at the Yorkshire Grey and Wheatsheaf sites (Cessford with Dickens 2004) also gave way in the early 13<sup>th</sup> century to a nucleated, linear arrangement focused along the newly emergent High Street. This gradual developmental sequence was initially suggested by the results of the previous excavations and is now conclusively confirmed by the newly recovered evidence. A very similar process of nucleation frequently occurred at villages located within a broad north-south swathe termed the 'Central Province' of England during the 12<sup>th</sup> and early 13<sup>th</sup> centuries (Roberts & Wrathmell 2000), although it is of note that many of the key discussions of this process have been centred on case-studies taken from the Cambridgeshire region (*e.g.* Taylor 1977; Taylor 1982; Taylor 2002). At Chesterton itself, it appears that former *lands* situated within the dispersed settlement's open fields were converted into property plots around the turn of the 13<sup>th</sup> century. The plots at the present site were most probably two strips in width, with their head fronting onto the High Street whilst their rear portions were offset at a characteristic angle of some 20°. Although the presence of the High Street was not recorded documentarily until 1293 (Wright 1989, 7), it is probable that a routeway following this same alignment originally connected the earlier, dispersed elements of the polyfocal settlement. To the plots' rear, present-day Scotland Road most probably developed from a headland into a backlane providing a secondary frontage (this may well have occurred during the 14<sup>th</sup> or possibly 15<sup>th</sup> century, although the roadway was not officially recorded until 1600; Wright 1989, 7). To the south of the High Street, Water Street is likely to have performed a similar backlane function.

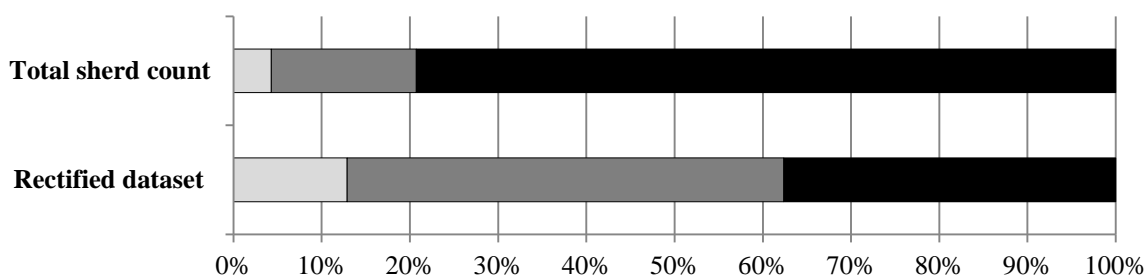
1086	1225	1279	1563	1676	1728	1794	1801	1821	1841
24	c. 50	85	69	c. 100	c. 100	116	150	216	316

**Table 22:** Number of recorded households in Chesterton. Note that there is a significant paucity of data for the Late Medieval period (data from Otway-Ruthven 1938; Illingworth 1818; Wright 1989).

Historically, the growth and expansion of the *vill* of Chesterton can be charted numerically via the number of recorded households over time (Table 22). The data commences at Domesday – when the settlement was still polyfocal in form – and continues through until the 19<sup>th</sup> century. Yet because it results from a piecemeal process of agglomeration as opposed to a concerted and consistent record, the surviving information contains several significant gaps, the most notable of which pertains to the later Middle Ages. For this latter period, however, a number of additional sources can be adduced. In 1279, the *Rotuli Hundredorum* (or Hundred Roll) recorded 80 *messuages* and five crofts in the village (Illingworth 1818, 402-05). A *messuage* is defined as a dwelling house together with its outbuildings and each *messuage* can therefore be reasonably equated to an individual property plot similar in form to *Plot II* at the Chesterton High Street site. A *vill* containing 80 such properties was unusually large for the period (even in Cambridgeshire, where contemporary villages were generally larger than the national average). By way of comparison, the Hundred Roll recorded 380 *messuages* within Cambridge itself at this date, with c. 60 additional *messuages* split between the town’s Barnwell Gate, Trumpington Gate and Newnham suburbs respectively (Cam 1959, 109-10). Yet a very close parallel does exist. Situated close by, on the opposite bank of the Cam, the *vill* of Barnwell contained 95 *messuages* at this time (Illingworth 1818, 393-401). Moreover, this latter *vill*, established immediately outside the gates of the eponymous Barnwell Priory, also underwent marked expansion c. 1200 (Newman 2013b, 14). The similarities, and differences, between these two settlements will be discussed further below.

Further conforming to the pattern indicated by the archaeological evidence, a study of onomatological (surname) data from late-13<sup>th</sup> to early-14<sup>th</sup> century Chesterton suggests a pattern of rapid expansion augmented by outside immigration. This is because, between 1275 and 1325, a little under a third of the recorded surnames in the *vill* – from a total of some 320 – indicate an origin outside the immediate Cambridge area (Clarke 1985, 160-1). Despite the marked size and success of the settlement at this time, however, few details are known of Chesterton’s later medieval population. Although 80 people contributed to the Lay Subsidy of 1327, for example, it is not clear what percentage of the *vill*’s residents this number represents (Wright 1989, 7). Moreover, whilst the Great Mortality also had a significant impact – on the *vill*’s principal manor, the death rate in 1349 rose from less than ten a year to at least 32, and perhaps as many as 70 (*ibid.*) – this may only have resulted in a temporary diminution. Fortunately, additional light can now be shed on this period via the results of the recent excavation. In this regard, the ceramic assemblage is particularly informative. For although it is broadly typical of contemporary material recovered from other urban and suburban sites in the Cambridge region (*e.g.* Edwards & Hall 1997; Cessford *et al.* 2006; Cessford 2012; Cessford & Dickens *in prep.*), the assemblage contained a number of closely-datable fabric types whose *floruits* can be defined on a century-by-century basis (Chart 3). Caution must be exercised when viewing this data because relatively few fabric-types can be dated with sufficient precision to be included in such an assessment, and the bulk of the assemblage has

therefore been excluded. Nevertheless, the technique provides a valuable ‘guideline’ indication.



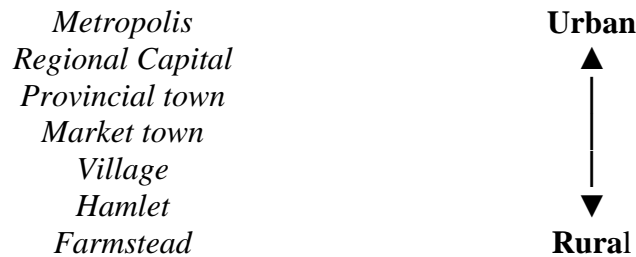
**Chart 3:** The percentage of diagnostically 13<sup>th</sup> century (pale grey), 14<sup>th</sup> century (dark grey) and 15<sup>th</sup> century (black) fabric types at the Chesterton High Street site. Two versions of the data are presented; the uppermost represents the unmodified total sherd count, whereas the lowermost counts a large group of sherds derived from a single vessel as one entry. The latter is therefore the most reliable.

When the ceramic data has been rectified – with the statistical imbalance engendered by the presence of a near complete, but highly fragmentary, Essex redware jug removed – a relatively standard pattern is revealed. Following on from a low quantity of 13<sup>th</sup> century material (in part a result of the much rarer occurrence of finewares during this period), both the 14<sup>th</sup> and 15<sup>th</sup> centuries are strongly represented. Indeed, whilst there are slight differences between the latter periods, there is little apparent evidence of a reduction or diminution in activity during the later Middle Ages. Yet this result is, in part, counterintuitive. Following the cumulative impact of the agrarian ‘crisis’ of 1315-22 and the Black Death of 1348-49, the population of the country as a whole is known to have declined sharply during the 14<sup>th</sup> century and a general pattern of diminution was relatively common all across rural England (Hinde 2003, 25; Dyer 2010). A comparable pattern of Late Medieval ‘urban decline’ also appears to have been replicated at the majority of English towns (see Dyer 1991; Britnell 1993, 166-7; Swanson 1999, 17; Astill 2000). This does however presuppose that such a reduction is detectable within the archaeological record. For whilst numerous rural settlements were abandoned at this time, thereby providing a clear empirical signature, the situation in many urban and suburban contexts was more complex. At some sites, for example, it has been noted that the overall number of features declined during the 15<sup>th</sup> century but that the quantity of material culture being deposited increased, and several new and innovative feature types were introduced. A very similar pattern of change and development appears to have occurred at the present site. On the fringes of the *vill*, however, at both the Yorkshire Grey and Wheatsheaf sites, a degree of 14<sup>th</sup> century decline followed by 15<sup>th</sup> century recovery was identified (Cessford with Dickens 2004), while at the Union Lane site little activity post-dating the 14<sup>th</sup> century was identified (Mackay 2009). This implies that although the core of the settlement remained relatively stable, its periphery comprised a more liminal zone that was susceptible to fluctuation.

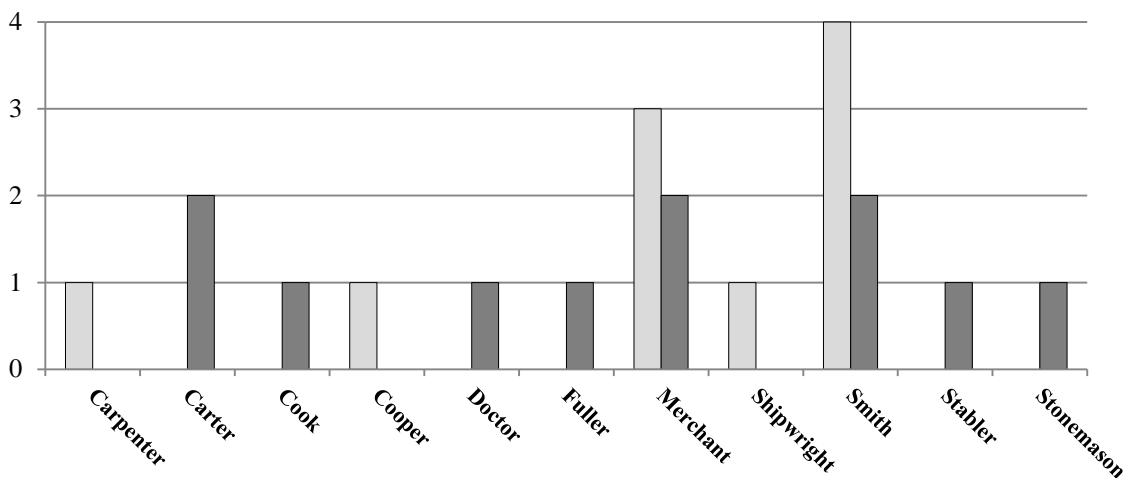
In addition to its chronological development, some consideration should also be given to the *vill*'s composition. Subtle differences existed in the hierarchy of settlements during the Middle Ages and determining the nature of the *vill* allows its place within this hierarchy to be discerned. Unfortunately, this issue is obfuscated by the original medieval terminology. The term *villa* was widely employed at this time, in association with settlements ranging in size from small rural villages to large towns such as



Durham and Winchester. Nevertheless, a number of archaeological and historical indicators can be employed. These include the presence/ absence of a marketplace, the number of burgage-type plots, the density of building coverage along the principal frontage and the occupations of the inhabitants (see Conzen 1960; Holt & Rosser 1990; Dyer 2003; Dyer & Lilley 2011). In simplified form (following Dyer & Lilley 2011, 83) the hierarchy of medieval settlements can be expressed as follows:



Yet these categories were by no means absolute. Cambridge itself, for example, fell partway between the definition of a provincial town and a regional capital (though it was closest to the latter). Indeed, such was its importance it is likely to have strongly influenced any lesser settlements located within its immediate hinterland. Accordingly, whilst Chesterton met many of the diagnostic criteria for a village – and would most probably have been regarded as such by most contemporary visitors – it also demonstrated several of the characteristics of a higher-order settlement (see further Dyer 2003, 102-105). These included the size of its population (probably in excess of 200 individuals in 1279), the presence of burgage-type plots (as typified by those identified at the present site) and the range and density of the material culture that was recovered (which compares favourably with that previously encountered at suburban sites situated in much closer proximity to the urban core; an issue that will be discussed further below). Perhaps the most important determinant of a *vill*'s character, however, comprised the occupations of its inhabitants (Holt & Rosser 1990, 4; Dyer & Lilley 2011, 83). This is because only a relatively successful settlement, with a solid economic foundation, would have been capable of supporting a substantially non-agrarian population. At Chesterton, some indication of the occupations of the *messuages*' principal tenants can be obtained via onomatological evidence contained within the Hundred Roll of 1279; this data can also be compared to that derived from the adjacent *vill* of Barnwell (Chart 4).



**Chart 4:** Occupations of principal tenants in Chesterton (pale grey) and Barnwell (dark grey) as indicated by onomatological evidence contained within the 1279 Hundred Roll (Illingworth 1818).



Figure 18. 13th to 16th century features at Grande Arcade (top left), Eastern Gate Hotel (top right) Chesterton High Street (bottom left) and Neath Farm (bottom right)

This comparison is rendered particularly apposite due to the close physical and temporal connections between the two settlements. Situated a little way to the northeast of Cambridge, on opposing banks of the Cam, both *vills* underwent marked expansion *c.* 1200. By 1279, however, Barnwell had emerged as the more successful of the two (see Newman 2013b). Not only was it physically larger, it was also explicitly referred to in the Hundred Roll as a suburb of Cambridge – “*suburbium pertinens ad burgum Canterbr*” (Illingworth 1818, 393) – thus rendering it distinct from its compatriot, which was simply referred to as “*villam de Cesterton*” (*ibid.*, 402). Notably, however, in both settlements the percentage of principal tenants whose occupation could be determined onomatologically was a little under 12%. Moreover, in each instance the most commonly cited occupations were smith (*faber*) and merchant (*mercator*); additional occupations included carter, cook, doctor, fuller, stabler and stonemason at Barnwell and carpenter, cooper and shipwright at Chesterton (Chart 4). The two *vills* were thus closely comparable, although the wider spectrum of occupations at Barnwell may be indicative of a broader-based economy.

Topographically, a number of additional parallels can be observed via a comparison of the layout of the contemporary medieval occupation at the Chesterton High Street, Eastern Gate Hotel, Grand Arcade and Neath Farm sites (Figure 18). These four excavations covered a broad spectrum of settlement-types, all of which were located within Cambridge’s immediate hinterland; they include a ‘typical’ suburb, situated immediately adjacent to the town boundary (Grand Arcade, the Barnwell Gate suburb; Cessford & Dickens *in prep.*), a ‘dislocated’ suburb, situated some half-a-mile distant (Eastern Gate Hotel, Barnwell; Newman 2013b), a village with some suburban characteristics (the present site in Chesterton) and, around a mile outside Cambridge, a rural village (Neath Farm, Cherry Hinton; Slater 2012; Cessford & Slater *forthcoming*). By 1561 all four sites officially comprised part of the Cambridge’s suburban fringe, as this was defined as extending “one English mile around the town in every direction” (Cooper 1852, 168). Nevertheless, a number of differences in their medieval plot layout are immediately apparent. The most striking comprises the contrast between the regular, linear disposition of burgage-type plots at the Grand Arcade, Eastern Gate Hotel and Chesterton High Street sites versus the more haphazard network of sub-rectangular enclosures at Neath Farm. This is indicative of the subsistence-related activities that were undertaken at the latter site, where proximity to the street frontage formed a lesser priority. A second contrast is also discernable between the three remaining sites. For whilst the burgage-type plots at Grand Arcade were rectilinear in form and, in many instances, of considerable length, those at Eastern Gate Hotel and Chesterton High Street were both ‘twisted’ in shape and shorter in extent. These differences were in part temporal in origin. This is because occupation commenced at Grand Arcade during the 11<sup>th</sup> century – a time when plot-forms were often very elongated (Palliser *et al.* 2001, 169-70) – whereas the latter two sites represent *de novo* developments of the early 13<sup>th</sup> century. Indeed, occupying former agricultural strips as they did may potentially have endowed these later foundations with a misleadingly regular, ‘planned’ appearance.

The scale of the recent investigations conducted within Cambridge’s hinterland also provides scope for an empirical assessment of the material culture that was employed at the various settlement-types represented. Although a detailed study of this data lies well outside the scope of the present report, some preliminary observations may be drawn. When the density of material is compared by hectare (Table 23), a clear

pattern emerges. This highlights the paucity of remains encountered in a rural context (Neath Farm) as opposed to the wealth of material deposited in a ‘suburban’ setting.

Site	Investigated Area (Hectares)	Prehistoric Worked Flint (Count)	Saxon Pottery (Count)	Saxo-Norman Pottery (Count)	Medieval Pottery (Count)	Animal Bone (kg)	Fired Clay (kg)	Lava Quern (kg)	Wells (Count)	Buildings (Count)
<b>Chesterton High Street</b>	0.03	8 <i>242.4</i>	4 <i>121.2</i>	43 <i>1303</i>	764 <i>23151.5</i>	11 <i>333.3</i>	0.05 <i>1.5</i>	1.6 <i>48.5</i>	4 <i>121.2</i>	1 <i>30.3</i>
<b>Eastern Gate Hotel</b>	0.19	21 <i>110.5</i>	19 <i>100</i>	43 <i>226.3</i>	3195 <i>16815.8</i>	94 <i>494.7</i>	55.9 <i>294.2</i>	6.4 <i>33.7</i>	19 <i>100</i>	7 <i>36.8</i>
<b>Grand Arcade</b>	0.70	25 <i>35.7</i>	-	3558 <i>5082.9</i>	12775 <i>18221.4</i>	479.2* <i>684.9</i>	0.5 <i>0.7</i>	13.3 <i>19.0</i>	37 <i>52.9</i>	16 <i>22.9</i>
<b>Neath Farm</b>	0.57	25 <i>43.9</i>	10 <i>17.5</i>	240 <i>421.1</i>	746 <i>1308.8</i>	23.2 <i>40.7</i>	29.6 <i>51.9</i>	0.9 <i>1.6</i>	7 <i>12.3</i>	8 <i>14.0</i>

**Table 23:** Quantities and densities per hectare (italicised) of selected medieval materials and feature-types from four comparable Cambridge sites (\* = estimated from percentage by count assigned to this phase).

It is also apparent that the quantities of medieval ceramic and faunal remains at the Chesterton High Street, Grand Arcade and Eastern Gate Hotel sites are broadly comparable; the differences in size between the assemblages are primarily attributable to variations in the relative scale, location and methodology of the respective investigations. This is most especially the case in the present instance. Chesterton High Street, which displayed the greatest disparity between the quantities of ceramic and faunal material, was also by far the smallest of the four investigations. Consequently, slight variations in material and/or feature distribution – between the innerland and backland portions of the plot, for example, where differing levels of investigation were undertaken – are likely to have become highly magnified; thereby distorting the resultant data. This does not of course take account of variations within the composition of the various assemblages themselves, which also show some degree of patterning (see *e.g.* Rajkovača, above). Thus, it is clear that the agglutinative assemblage – incorporating material from both these and earlier investigations undertaken in and around the immediate Cambridge area – has a great deal of potential for future research. Patterns of quantitative, spatial and temporal variation could all be investigated.

It is demonstrable that the medieval sequence at the Chesterton High Street site is of regional significance. What then of the succeeding Post-Medieval sequence? This most probably commenced within the half-century following the dissolution of Barnwell Priory in 1538; the absence of closely datable material culture within the associated made-ground horizon precludes a more precise determination. It was during this period that the dispersion of the Priory’s former holdings provided an opportunity for speculative redevelopment. That just such an event occurred at the present site is indicated by the fact that a uniform, *en masse* transformation was undertaken at this time across a minimum of three adjacent plots. A development that crossed multiple property boundaries in this way was highly unusual; it strongly implies that the stimulus for the transformation arose from an external (*i.e.*

landowner) as opposed to internal (*i.e.* tenant) source. The regularity of newly-established *Plots A-H*, and the apparent uniformity of the timber-framed frontage buildings they contained, are both consistent with such an interpretation. Indeed, the latter – being a single room wide and yet occupying a full plot's width – are typical of the standard tenement-form of the period. Notably, a small number of comparable 16<sup>th</sup> and early 17<sup>th</sup> century timber-framed tenement buildings remain extant on nearby Water Street (RCHM(E) 1959 II, 385). Although somewhat larger than the examples identified at the present site, and almost certainly unrelated to their particular redevelopment event, these structures are nevertheless highly comparable. The majority included a substantial brick-built chimney, for example, of a type that would have required a foundation similar to that identified in association with **Building 1**.

Two particular questions arise in relation to the Post-Dissolution plot redevelopment undertaken at the Chesterton High Street site: what was the extent of this reorganisation, and who was responsible for its implementation? Pertaining to the first of these issues, a minimum of eight new plots were identified archaeologically (*Plots A-H*), each of which measured a little under  $\frac{1}{3}$  the width of its medieval predecessors. Given the scale of work that was required in order to realise their transformation, which included the demolition of earlier structures and the introduction of a substantial ground-raising deposit, it seems unlikely that a development restricted to only eight such plots would have been considered sufficiently remunerative. This suggests that the redevelopment area probably exceeded the boundaries of the present site. Conversely, however, the cost and disruption that would have been engendered by redeveloping the entire *vill* would almost certainly have been prohibitive. As there is no evidence for a dramatic trebling of the number of households recorded in Chesterton during the second half of the 16<sup>th</sup> century (see Table 22), only a more generalised pattern of gradual expansion, it can reasonably be assumed that the redevelopment comprised a relatively localised event. Usefully, some indication of its extent can be gained via a consideration of the 1<sup>st</sup> Edition Ordnance Survey map of the area (Figure 19). Although this plan was surveyed in 1885, some three centuries after the transformation occurred, a number of relict topographical 'blocks' can nevertheless be discerned. Most significantly, to the west of the present development area lay a cluster of plots that contained a characteristic bend or twist at their head. These appear to represent residual traces of the original medieval plot layout, which – along with *Plots I-III* – may well have become 'fossilised' within the landscape via their partial incorporation into a series of Post-Medieval tenements. Only one other comparable cluster can be identified, situated immediately to the south of the excavated area (Figure 19); throughout the remainder of the *vill*, a much more organic pattern of plot development appears to have predominated.

Whilst the cartographic evidence is by no means conclusive, it is nevertheless strongly suggestive of a discrete zone of mid-16<sup>th</sup> century property speculation. It would thus appear that somewhere between eight and forty plots were redeveloped at this time (either in a single phase, or as part of the incremental expansion of a successful venture). This compares favourably with the scale of similar property developments known to have been taken elsewhere in Cambridge during this period. At St Clement's Gardens, for example – a site located immediately inside Cambridge's medieval town boundary – St John's College established ten narrow tenement plots upon a property they acquired for the purpose in 1533 (Faber 2006, 88-89; Newman 2013a, 10-11). Rental incomes were then derived from these tenements until 1791.

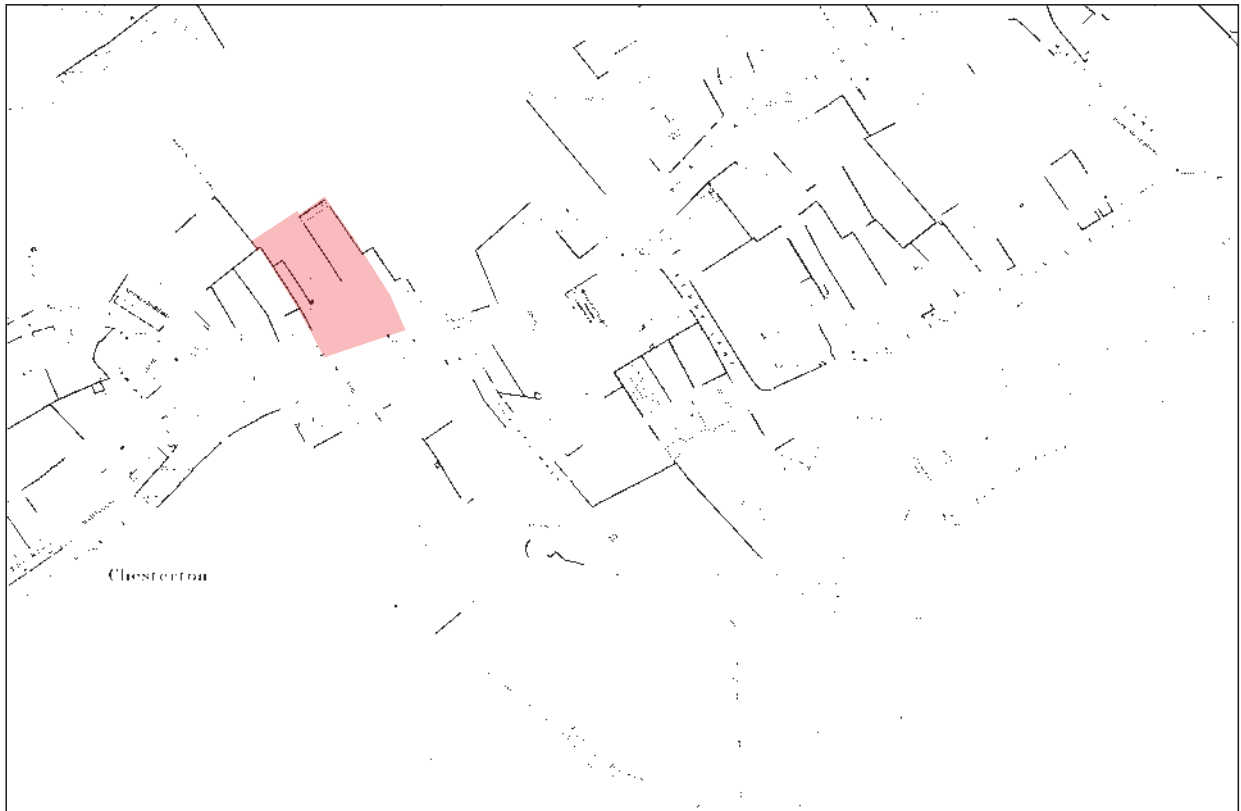


Figure 19. 1st Edition 1:500 OS map of 1885 (top) with detail of partial relict medieval plots (bottom)

In the present instance, one potential instigator of the development comprised the new occupant of Chesterton's principal manor. Sold by the Crown in 1540 following the dissolution of Barnwell Priory, the manor and its demesne – which included the majority of the adjacent *vill* – was purchased by one Thomas Brakyn, three-time mayor of Cambridge (Wright 1989, 13). Although Thomas himself died in 1545, his son and heir Richard continued to control the estate. It is thus possible that the redevelopment comprised an early attempt to increase the rental income derived from the *vill*. Subsequently, during the 1560s and 1570s, the majority of the demesne was split-up and alienated to a variety of lessees (*ibid.*); alternatively, therefore, this latter event might have precipitated a programme of localised redevelopment. Finally, a number of additional, smaller estates – some of which were also styled as manors by the 15<sup>th</sup> century – were also present in Chesterton at the Dissolution. Their owners included wealthy families such as the Cooks and the Batisfords as well as the Cambridge College King's Hall, which had acquired the estate formerly held by St Andrew's Abbey, Vercelli, in 1440 (*ibid.*, 17). A number of potential developers were therefore present around the middle of the 16<sup>th</sup> century for whom a small-scale property speculation may have appeared an attractive proposition.

The final phase of activity at the site – Phase IV – commenced *c.* 1875. At this time, a substantial new brick-built structure was erected while the narrow Post-Medieval tenements that had preceded it were almost entirely eradicated (although *Plot A* appears to have remained largely unchanged). Yet this event represents the culmination of a more gradual process of plot amalgamation that can be traced back at least as far as the inclosure of Chesterton in 1838. For the Inclosure Award map of 1840 reveals that *Plots B-E* were all acquired (as Lot 119) by a single individual – named David Wray – at this time. Wray also purchased the remainder of the land stretching back to Scotland Road, an event that may well have paved the way for the establishment of the smithy that was recorded in 1885 lying immediately to the north of the excavated area (Figure 19). The gradual amalgamation of the earlier tenements represents part of a wider phenomenon wherein the majority of historic buildings in Chesterton were demolished during the late 19<sup>th</sup>/early 20<sup>th</sup> century as part of a widespread process of expansion and redevelopment (Wright 1989, 7; see also Figure 20). Given the cramped living conditions that had previously prevailed at the site, such a transformation no doubt represented a substantial improvement. A much more spacious building was now established, set back a short distance from the street front; this occupied a plot three-times the width of its predecessors. Nevertheless, the period of domestic occupation was short-lived. In 1891, the newly-erected building was converted into a public house (Figure 20). Known as the Dog & Pheasant, its first tenant landlord was one Harry Pell.

By 1891, when the Dog & Pheasant opened, the total number of public houses in Chesterton was beginning to decline. A rapid escalation had initially occurred following the enclosure of the area in 1838; three had been established during the 1830s, eight during the 1840s and ten between 1850 and 1855 (Wright 1989, 11). By 1871 there were 12 public houses situated along the High Street alone. In 1910 the village still contained a total of 13 public houses, but by the 1930s this number had fallen to only six; two more were lost during road-widening works undertaken in the 1970s. The Dog & Pheasant itself also succumbed to closure, being converted into the Saigon City Vietnamese restaurant in the early 2000s. The present redevelopment will now return the site to its previous pattern of long-lived domestic occupation.



Figure 20. Views of the Dog & Pheasant public house, facing northeast, taken c.1920 (top; B.Chest.K2.7653) and c.1925 (bottom; B.Chest.K25.3923). Note the extent of contemporary housing development.



## - Conclusion -

The Chesterton High Street excavation was undertaken on a relatively limited scale. Nevertheless, it produced results in two important areas. The first of these pertains to the establishment of a nucleated settlement that had developed from a more dispersed, polyfocal pattern of occupation around the year 1200. This discovery not only confirms a developmental sequence that had, until now, remained primarily hypothetical in nature, but also provides a secure date for the transition. This is of importance locally, as it allows the Chesterton sequence to be contrasted with those of comparable nucleated settlements such as Cherry Hinton (Cessford with Dickens 2005; Cessford & Slater *forthcoming*), Madingley (Gdaniec 1991; Gdaniec 1992; Hunter 1991; Regan 1998) and Cottenham (Mortimer 2000), as well as contemporary Cambridge suburbs such as Barnwell Gate (Cessford & Dickens *in prep.*) and Barnwell (Newman 2013b). Nationally, it also has the potential to contribute to a broader discussion of the ‘village moment’; that point at which, across much of the Central Province of England, a cohesive nucleated village layout superseded the previous pattern of polyfocal nuclei (see Lewis *et al.* 1997; Jones & Page 2006). The second important result comprises the identification of speculative Post-Dissolution redevelopment at the site. During the mid to late 16<sup>th</sup> century, the site was cleared – thereby producing an effective *tabula rasa* – and a much denser array of tenement-style plots introduced. This event is of significance because it demonstrates the continued economic importance of the *vill* into the Post-Medieval period. Unlike nearby Barnwell, for example – where the Post-Dissolution period saw a marked decline in population level (Newman 2013b, 126-30) – at Chesterton a gradual century-on-century increase occurred (Table 22). Significantly, many of the concomitant tenement plots also became more, not less, recognisably urban in form than their medieval predecessors.

Modern development-led archaeological practice is predominately iterative in nature. A piecemeal process of excavation ensues, such that it is typically the cumulative results of multiple projects – as opposed to a single, defining ‘type-site’ – which provides the clearest insight into patterns of past activity. This is demonstrated very clearly in the present instance. The Chesterton High Street site lies towards the centre of the nucleated settlement; it reveals nothing of contemporary activities that were undertaken on the fringes of the *vill*, nor even of those that occurred within nearby plots located outside the immediate area of investigation. In the absence of large-scale open-area excavation, it is by combining the evidence recovered from multiple sites that a more nuanced understanding can be developed. Moreover, the empirical strengths of the archaeological record are augmented by the addition of multiple datasets, thereby allowing a more detailed, multi-vocal picture to emerge (see further Johnson 2007). The present investigation makes a valuable contribution to this wider process, and illuminates an important aspect of medieval Cambridge’s suburban/rural hinterland development.

### *Acknowledgments*

The project was commissioned by Januarys on behalf of Mr N. Cook and Mr D. Brown, and was monitored by Dan McConnell of Cambridgeshire County Council's Historic Environment Team; it was managed for the CAU by Alison Dickens. The fieldwork was directed by Richard Newman and undertaken in the field with the assistance of Tony Baker, Rose Calis, Craig Cessford, Selina Davenport, Tim Lewis, Ben Saunders, Daniel Sharman and Chris Wakefield. The finds processing was managed for the CAU by Justin Wiles, whilst specialists who considered material from the site included Emma Beadsmoore (flint), Lawrence Billington (flint), Craig Cessford (medieval, Post-Medieval and modern pottery, plus clay tobacco pipe), Richard Darrah (wood and timber), David Hall (Saxon, medieval and Post-Medieval pottery), Val Fryer (environmental remains), Mark Knight (Prehistoric pottery), Quita Mould (leather), Vida Rajkovača (faunal remains) and Simon Timberlake (worked stone, moulded stone, ceramic building materials and metalworking debris). Site and studio photography was principally undertaken by Dave Webb. Survey work was conducted by Jonathon Møller and the graphics for the report were produced by Bryan Crossan. The staff of the Cambridgeshire Records Office provided helpful, friendly assistance with regard to the historical and cartographic sources, while the staff of the Cambridgeshire Collection kindly digitised the images of the Dog & Pheasant public house. Finally, particular thanks are due to Grahame Appleby for commenting upon a draft of this text.

## Bibliography

- Albarella, U. 1999. 'The Mystery of husbandry': medieval animals and the problem of integrating historical and archaeological evidence', in *Antiquity* 73, 867-75.
- Albarella, U. 2005. 'Meat Production and Consumption in Town and Country', in Giles, K. & Dyer, C. (ed's) *Town and Country in the Middle Ages: Contrasts, Contacts and Interconnections, 1100-1500*. London: Society for Medieval Archaeology Monograph 22, 131-49.
- Albarella, U. & Davis, S. J. M. 1996. 'Mammals and birds from Launceston Castle, Cornwall: decline in status and the rise of agriculture', in *Ciracea* 12(1), 1-156.
- Alexander, J. S. 1995. 'Building stone from the East Midlands quarries: sources, transportation and usage', in *Medieval Archaeology* 39, 106-35.
- Alexander, M. 1998. *Archaeological Evaluation at the former Sargeants Garage, High Street, Chesterton, Cambridge*. Cambridge Archaeological Unit Report No. 291.
- Allen, J. L. & Holt, A. 2010. *Health and Safety in Field Archaeology*. FAME.
- Archer, M. 1997. *The Tin-Glazed Earthenware of the British Isles*. London: Victoria and Albert Museum.
- Armour, N. 2001a. *An Archaeological Evaluation at the former Chesterton Workhouse, now Chesterton Hospital, Union Lane, Chesterton, Site 2*. Cambridge Archaeological Unit Report No. 438.
- Armour, N. 2001b. *An Archaeological Investigation on the Wheatsheaf Public House site, Chesterton*. Cambridge Archaeological Unit Report No. 441.
- Ashby, S. P. 2011. 'An Atlas of Medieval Combs from Northern Europe', in *Internet Archaeology* 30 [intarch.ac.uk/journal/issue30/3/toc.html].
- Astill, G. 2000. 'Archaeology and the late-medieval Urban Decline', in Slater, T. R. (ed.) *Towns in Decline, AD 100-1600*. Aldershot: Ashgate, 214-34.
- Astill, G. & Langdon, J. 1997. *Medieval farming and technology: the impact of agricultural change in northwest Europe*. Leiden: Brill.
- Ault, W. O. 1972. *Open-field farming in medieval England*. London: Allen and Unwin.
- Bayley, J., Dungworth, D. & Paynter, S. 2001. *Archaeometallurgy: Centre for Archaeology Guidelines No.1*. English Heritage.
- Blackmore, D. 1981. *New Chesterton, Cambridgeshire: a study in suburban expansion*. Unpublished BA dissertation, University of Cambridge.
- Blair, J. & Ramsay, N. (ed.'s) 1991. *English Medieval Industries: Craftsmen, Techniques, Products*. London: The Hambledon Press.
- Blinkhorn, P. 2012. *The Ipswich Ware Project: Ceramics, Trade and Society in Middle Saxon England*. London: Medieval Pottery Research Group Occasional Paper 7.
- Bowsher, D., Dyson, T., Holder, N. & Howell, I. 2007. *The London Guildhall: An Archaeological History of a Neighbourhood from Early Medieval to Modern Times*. London: Museum of London Archaeology Service Monograph 36.
- British Geological Survey. 1976. *Cambridge: Sheet 188*. Southampton: Ordnance Survey.
- Britnell, R. H. 1993. *The Commercialisation of English Society, 1000-1500*. Cambridge: Cambridge University Press.

- Brothwell, D. 1982. 'Linking Urban Man With his Built Environment', in Hall, R. A. & Kenward, H. K. (ed.'s) *Environmental Archaeology in the Urban Context*. Council for British Archaeology Research Report 43, 126-29.
- Browne, D. M. 1974. 'An archaeological gazetteer of the city of Cambridge, 1973', in *Proceedings of the Cambridge Antiquarian Society* 65, 1-38.
- Brunskill, R. W. 1990. *Brick Building in Britain*. London: Victor Gollancz & Peter Crawley.
- Bryan, P. 1999. *Cambridge: the shaping of the city*. Cambridge: privately published.
- Bushnell, G. H. S. & Hurst, J. G. 1952. 'Some Further Examples of Sgraffito Ware from Cambridge', in *Proceedings of the Cambridge Antiquarian Society* 46, 21–26.
- Cam, H. 1959. 'The City of Cambridge', in Roach, J. P. C. (ed.) *A history of the County of Cambridge and the Isle of Ely, volume III: the City and the University of Cambridge*. Oxford: Oxford University Press, 1-149.
- Cessford, C. 2007. *Grand Arcade, Cambridge: An Archaeological Excavation*. Cambridge Archaeological Unit Report No. 800.
- Cessford, C. 2012. *The Old Divinity School, St John's College, Cambridge: an archaeological excavation*. Cambridge Archaeological Unit Report No. 1094.
- Cessford, C. & Appleby, G. 2011. *169-173 High Street, Chesterton, Cambridge: an Archaeological Desk Based Assessment*. Cambridge Archaeological Unit Report No. 992.
- Cessford, C. with Dickens, A. 2004. 'The Origins and Early Development of Chesterton', in *Proceedings of the Cambridge Antiquarian Society* 93, 125-42.
- Cessford, C. with Dickens, A. 2005. 'The manor of Hintona: the origins and development of Church End, Cherry Hinton', in *Proceedings of the Cambridge Antiquarian Society* 94, 51–72.
- Cessford, C. & Mortimer, R. 2004. *Land adjacent to 63 Church End, Church End, Cherry Hinton: an archaeological excavation*. Cambridge Archaeological Unit Report No. 607.
- Cessford, C., Alexander, M. & Dickens, A. 2006. *Between Broad Street and the Great Ouse: waterfront archaeology in Ely*. East Anglian Archaeology 114.
- Cessford, C. & Slater, A. Forthcoming. 'Beyond the Manor of Hintona; further thoughts on the origins and development of Church End, Cherry Hinton', in *Proceedings of the Cambridge Antiquarian Society* 103.
- Cessford, C. & Dickens, A. in prep. *From King's Ditch to Department Store: investigations of an 11th–20th-century suburb and the town ditch of Cambridge*. East Anglian Archaeology.
- Clark, J. W. 1907. *Liber Memorandum Ecclesie de Bernewelle*. Cambridge: Cambridge University Press.
- Clarke, C. A. 1985. *Peasant Society and Land Transactions in Chesterton, Cambridgeshire*. Unpublished D. Phil Thesis, University of Oxford.
- Coleman, R. 2004. 'The archaeology of burgage plots in Scottish Medieval towns: a review', in *Proceedings of the Society of Antiquaries of Scotland* 134, 281-323.
- Conzen, M. R. G. 1960. *Alnwick, Northumberland: a study in town plan analysis*. London: Institute of British Geographers Publication No. 27.
- Cooper, C. H. 1852. *Annals of Cambridge: Volume I*. Cambridge: Warwick & Co.
- Cordóba, R. & Müller, U. 2011. 'Manufacture and Production, Part 1: Craft into Industry', in Carver, M. & Klápště, J. (ed.'s) *The Archaeology of Medieval Europe, Volume 2 – Twelfth to Sixteenth Centuries*. Aarhus: Aarhus University Press, 277-87.

- Cotter, J. 2000. *Post-Roman Pottery from Excavations in Colchester 1971–85*. Colchester: Colchester Archaeological Report 7.
- Crossley, D. 1990. *Post-Medieval Archaeology in Britain*. London: Leicester University Press.
- Davey, W. & Walker, H. 2008. *The Harlow Pottery Industries*. London: Medieval Pottery Research Group Occasional Report 3.
- de Vareilles, A. 2013. 'Bulk environmental samples', in Newman, R. *The Eastern Gate Hotel Site, Cambridge An Archaeological Excavation*. Cambridge Archaeological Unit Report No. 1176, 100-10.
- Denham, V. 1985. 'The Pottery', in Williams, J. H., Shaw, M. & Denham, V. (ed.'s), *Middle Saxon Palaces at Northampton*. Northampton Development Corporation Archaeological Monograph No. 4, 46–64.
- Dickens, A. 2013. *A Specification for Archaeological Excavation at 169-73 High Street, Chesterton, Cambridge*. Unpublished Cambridge Archaeological Unit document.
- Dobney, K. & Reilly, K. 1988. 'A method for recording archaeological animal bones: the use of diagnostic zones', in *Circaea* 5, 79-96.
- Dunning, G. C. 1950. 'Notes on the Trinity College jug', in *Proceedings of the Cambridge Antiquarian Society* 44, 49–50.
- Dyer, A. 1991. *Decline and Growth in English Towns, 1400-1640*. Basingstoke: Macmillan Education.
- Dyer, C. 2003. 'The archaeology of medieval small towns', in *Medieval Archaeology* 47, 85-114.
- Dyer, C. 2010. 'Villages in crisis: social dislocation and desertion, 1370-1520', in Dyer, C. & Jones, R. (ed.'s) *Deserted Villages Revisited*. Hertford: University of Hertfordshire Press, 28-45.
- Dyer, C. & Lilley, K. 2011. 'Town and Countryside: relationships and resemblances', in Christie, N. & Stamper, P. (ed.'s) *Medieval Rural Settlement: Britain and Ireland, AD 800-1600*. Macclesfield: Windgather Press, 81-99.
- Dunning, G. C. 1950. 'Notes on the Trinity College jug', in *Proceedings of the Cambridge Antiquarian Society* 44, 49–50.
- Edwards, D. & Hall, D. 1997. 'Medieval pottery from Cambridge', in *Proceedings of the Cambridge Antiquarian Society* 86, 153–68.
- Evans, C. & Hodder, I. 2006. *Marshland Communities and Cultural Landscape: The Haddenham Project Volume II*. Cambridge: McDonald Institute for Archaeological Research.
- Faber, T. E. 2006. *An Intimate History of the Parish of St Clement in Cambridge, 1250-1950*. Cambridge: privately published.
- Farley, M. 1982. 'A medieval pottery industry at Boarstall, Buckinghamshire', in *Records of Buckinghamshire* 24, 107–17.
- Gaimster, D. 1994. 'The Archaeology of Post-Medieval Society, c.1450–1750: Material Culture Studies in Britain since the War', in Vyner, B. (ed.), *Building on the past*. London: Royal Archaeological Institute, 281–311.
- Gaimster, D. & Nenk, B. 1997. 'English Households in Transition c. 1450-1550: the ceramic evidence', in Gaimster, D. & Stamper, P. (ed.'s) *The Age of Transition: The Archaeology of English Culture 1400-1600*. The Society for Medieval Archaeology Monograph 22, 171-96.
- Gallois, R. W. 1988. *The Geology of the Country around Ely* (British Geological Survey Memoir for Sheet 173). London: HMSO.

- Galloway, J. A. 2005. 'Urban Hinterlands in Later Medieval England', in Giles, K. & Dyer, C. (ed.'s) *Town and Country in the Middle Ages: Contrasts, Contacts and Interconnections, 1100-1500*. The Society for Medieval Archaeology Monograph No. 22, 111-130.
- Gardiner, M. F. & Rippon, S. 2007. *Medieval Landscapes*. Macclesfield: Windgather Press.
- Garrow, D. 2000. *A Trench-based Archaeological Evaluation at Mill Lane, Burwell*. Cambridge Archaeological Unit Report No. 383.
- Gdaniec, K. 1991. *An Archaeological Assessment at Madingley Hall, Madingley, Cambridgeshire, 1991*. Cambridge Archaeological Unit Report 35.
- Gdaniec, K. 1992. *Archaeological Excavations at Madingley Hall, Madingley, Cambridgeshire, 1992*. Cambridge Archaeological Unit Report 51.
- Grant A. 1982. 'The use of tooth wear as a guide to the age of domestic animals', in Wilson, B., Grigson, C. & Payne, S. (eds.), *Ageing and sexing animal bones from archaeological sites*. British Archaeological Reports British Series No. 109, 91-108.
- Grenville, J. 1997. *Medieval Housing*. London: Leicester University Press.
- Grenville, J. 2008. 'Urban and rural houses and households in the Late Middle Ages: a case study from Yorkshire', in Kowaleski, M & Goldberg, P. J. P. (ed.'s) *Medieval Domesticity: Home, Housing and Household in Medieval England*. Cambridge: Cambridge University Press, 92-123.
- Grew, F. & de Neergaard, M. 1988. *Shoes and Pattens. Medieval Finds from Excavations in London: 2*. London: HMSO.
- Hall, C. 1999. *The Former Sargeants Garage site, High Street Chesterton Cambridge: Post Excavation Assessment*. Cambridge Archaeological Unit Report No. 328.
- Hall, C. P. & Ravensdale, J. R. 1976. *The West Fields of Cambridge*. Cambridge: Cambridge Antiquarian Records Society Volume III.
- Hall, D. N. 1982. *Medieval Fields*. Buckingham: Shire Publications.
- Hall, D. N. 2001. 'The pottery from Forehill, Ely, Cambridgeshire', in *Medieval Ceramics* 25, 2-21.
- Hall, R. A. & Hunter-Mann, K. 2002. *Medieval urbanism in Coppergate: refining a townscape*. *Archaeology of York* 10/6.
- Harmon, J. 2006. 'The Royal Demesne issue: Barnwell Priory and the men of Chesterton', in *Cambridgeshire Local History Review* 15, 3-9.
- Hartley, R. F. 1994. 'Tudor Mines of Coleorton, Leicestershire', in Ford, T. D. & Willies, L. (eds.) *Mining Before Powder, Bulletin of the Peak District Mines Historical Society* 12(3), 91-101.
- Hatcher, J. 1993. *The History of the British Coal Industry: Volume I: Before 1700: Towards the Age of Coal*. Oxford: Clarendon Press.
- Hatherley, C. 2001. *An Archaeological Evaluation at the Former Chesterton Hospital, Union Lane, Chesterton, Site 3*. Cambridge Archaeological Unit Report No. 460.
- Hillson, S. 1999. *Mammal Bones and Teeth: An introductory Guide to Methods of Identification*. London: University College of London, Institute for Archaeology.
- Hinde, A. 2003. *England's Population: A History Since the Domesday Survey*. London: Bloomsbury Academic.
- Holt, R. & Rosser, G. 1990. *The Medieval Town 1200-1540*. London: Longman.

- Horsman, V. Milne, C. & Milne, G. 1988. *Aspects of Saxo-Norman London 1: Building and street development near Billingsgate and Cheapside*. London: London and Middlesex Archaeological Society Special Paper 11.
- Horter, F., Michels, F. X. & Röder, J. 1950. 'Die Geschichte der Basalt Lava Industrie von Mayen und Niedermendig', in *Vor und Friihgeschichte, Jahrbuch fur Geschichte und Kultur des Mittelrheins und seiner Nachbargebieten* II-III, 1-32.
- Hunter, J. 1991. *Madingley Hall 1991: An Archaeological Watching Brief*. Cambridge Archaeological Unit Report No. 15.
- Hurst, J. G. 1956. 'Saxo-Norman Pottery in East Anglia: Part I St. Neots Ware', in *Proceedings of the Cambridge Antiquarian Society* 49, 43–70.
- Hurst, J. G. 1957. 'Saxo-Norman Pottery in East Anglia: Part II Thetford Ware', in *Proceedings of the Cambridge Antiquarian Society* 50, 29–60.
- Hurst, J. G. 1958. 'Saxo-Norman Pottery in East Anglia: Part III Stamford Ware', in *Proceedings of the Cambridge Antiquarian Society* 51, 37–65.
- Hurst, J. G. 1976. 'The Pottery', in Wilson, D.M. (ed.), *The Archaeology of Anglo-Saxon England*. Cambridge: Cambridge University Press, 283–348.
- Illingworth, W. (ed.) 1818. *Rotuli hundredorum temp. Hen. III & Edw. I. in Turr' lond' et in curia receptae scaccarij Westm. Asservati: Volume II*. London: G. Eyre & A. Strahan.
- Ivens, R. J. 1981. 'Medieval pottery kilns at Brill, Buckinghamshire: preliminary report on excavations in 1978', in *Records of Buckinghamshire* 23, 102–06.
- Ivens, R. J. 1982. 'Medieval pottery from the 1987 excavations at Tempse Farm, Brill', in *Records of Buckinghamshire* 24, 144–70.
- Johnson, M. 2007. 'Making a home: archaeologies of the medieval English village', in Fawcett, C., Habu, J. & Matsunaga, J. (ed's) *Evaluating Multiple Narratives: Beyond Nationalist, Colonialist, Imperialist Archaeologies*. New York: Springer, 45-55.
- Johnson, D. 2010. *Limestone industries of the Yorkshire Dales*. Stroud: Amberley.
- Johnson, M. 2010. *English Houses, 1300-1800: Vernacular Architecture, Social Lives*. London: Longman.
- Jones, R. & Page, M. 2006. *Medieval Villages in an English Landscape: Beginnings and Ends*. Macclesfield: Windgather Press.
- Jope, E. M. 1954. 'Medieval Pottery Kilns at Brill, Buckinghamshire. Preliminary Report on Excavations in 1953', in *Records of Buckinghamshire* 16, 39–42.
- Jope, E. M. & Ivens, R. J. 1981. 'Some early products of the Brill pottery, Buckinghamshire', in *Records of Buckinghamshire* 23, 32–38.
- Karsten, A., Graham, K., Jones, J., Mould, Q. & Walton Rogers, P. 2012. *Waterlogged Organic Artefacts. Guidelines on their Recovery, Analysis and Conservation*. Swindon: English Heritage.
- Kilmurry, K. 1980. *The Pottery Industry of Stamford type, Lincs. c. AD 850–1250*. British Archaeological Reports British Series 84.
- Leah, M. 1994. *The Late Saxon and Medieval Pottery Industry of Grimston, Norfolk: Excavations 1962–92*. East Anglian Archaeology 64.
- Lethbridge, T. C. 1929. 'The Anglo-Saxon Cemetery, Burwell, Cambridgeshire', in *Proceedings of the Cambridge Antiquarian Society* 30, 97-109.
- Lewis, C., Mitchell-Fox, P. & Dyer, C. 1997. *Village, hamlet and field: changing medieval settlements in central England*. Manchester: Manchester University Press.

- Lilley, K. D. 2005. 'Urban Landscapes and their Design: Creating Town from Country in the Middle Ages', in Giles, K. & Dyer, C. (ed.'s) *Town and Country in the Middle Ages: Contrasts, Contacts and Interconnections, 1100-1500*. The Society for Medieval Archaeology Monograph 22, 229-49.
- Lucas, R. 1993. 'Ely bricks and roof-tiles and their distribution in Norfolk and elsewhere in the sixteenth to eighteenth centuries', in *Proceedings of the Cambridge Antiquarian Society* 82, 157-62.
- Lucas, R. 1997. 'When did Norfolk cross 'The Brick Threshold'?', in *Vernacular Architecture* 28, 68-80.
- Macan, T. T. 1977. *A Key to the British Fresh- and Brackish-Water Gastropods, with Notes on their Ecology* (4<sup>th</sup> edition). Ambleside: Freshwater Biological Association Scientific Publication 13.
- Mackay, D. 2000. *The Former Chesterton Hospital Site, Chesterton, Cambridgeshire*. Cambridge Archaeological Unit Report No. 408.
- Mackay, D. 2001a. *The Former Yorkshire Grey Public House, High Street, Chesterton, Cambridgeshire*. Cambridge Archaeological Unit Report No. 434.
- Mackay, D. 2001b. *Archaeological Investigations on the Site of the Former Yorkshire Grey Public House, High Street, Chesterton, Cambridge*. Cambridge Archaeological Unit Report No. 457.
- Mackay, D. 2009. 'Excavations at Scotland Road/Union Lane, Chesterton', in *Proceedings of the Cambridge Antiquarian Society* 98, 77-88.
- Masser, P. 2000. *Archaeological Evaluation at High Street/Union Lane, Chesterton: Phase II Site*. Cambridge Archaeological Unit Report No. 377.
- Morris, R. K. 2003. 'Monastic Architecture: Destruction and Reconstruction', in Gaimster, D. & Gilchrist, R. (ed.'s) *The Archaeology of Reformation, 1480-1580*. Society for Post-Medieval Archaeology Monograph 1, 235-51.
- Mortimer, R. 2000. 'Village Development and Ceramic Sequence: The Middle to Late Saxon Village at Lordship Lane, Cottenham, Cambridgeshire', in *Proceedings of the Cambridge Antiquarian Society* 89, 5-53.
- Moss, R. 2009. *Romanesque chevron ornament: the language of British, Norman and Irish sculpture in the twelfth century*. Oxford: Archaeopress.
- Newman, R. 2007. *The Christ's Lane Development at Bradwell's Court, Cambridge: an archaeological excavation*. Cambridge Archaeological Unit Report No. 775.
- Newman, R. 2008. *St John's Triangle, Cambridge: An Archaeological Excavation and Watching Brief*. Cambridge Archaeological Unit Report No. 851.
- Newman, R. 2013a. *1-8 St Clements Gardens, Cambridge: An Archaeological Desk-based Assessment and Deposit Model*. Cambridge Archaeological Unit Report No. 1168.
- Newman, R. 2013b. *The Eastern Gate Hotel Site, Cambridge: An Archaeological Excavation*. Cambridge Archaeological Unit Report No. 1176.
- Newman, R. & Evans, C. 2011. 'Archaeological Investigations at the Old Schools, University of Cambridge', in *Proceedings of the Cambridge Antiquarian Society* 100, 185-96.
- Newton, A. S. 2010. 'A medieval clunch-processing site at Fordham Road, Isleham, Cambridgeshire', in *Proceedings of the Cambridge Antiquarian Society* 99, 103-112.
- Oosthuizen, S. 2005. 'New light on the origins of open-field farming?', in *Medieval Archaeology* 49, 165-93.



- Oosthuizen, S. 2010. 'The distribution of two- and three-field systems on south Cambridgeshire before about 1350', in *Medieval Settlement Research* 25, 21-31.
- Oswald, A. 1975. *Clay Pipes for the Archaeologist*. British Archeology Report British Series 14.
- Otway-Ruthven, J. 1938. 'Translation of the Text of the Cambridgeshire Domesday', in Salzman, L. F. (ed.) *A History of the County of Cambridge and the Isle of Ely: Volume 1*. Oxford: Oxford University Press, 358-99.
- Palliser, D. M., Slater, T. R. & Dennison, P. E. 2001. 'The topography of towns, 600-1300', in Palliser, D. M. (ed.) *The Cambridge Urban History of Britain: Volume 1*. Cambridge: Cambridge University Press, 153-86.
- Patten, R. 2003. *132 Scotland Road, Chesterton; an Archaeological Evaluation*. Cambridge Archaeological Unit Report No. 549.
- Payne, S. 1973. 'Kill-off patterns in sheep and goats: the mandibles from Asvan Kale', *Anatolian Studies* 23, 281-303.
- Pearce, J. I. 2007. *Pots and Potters in Tudor Hampshire*. London: Guildford Museum and Museum of London Archaeology Service.
- Pearce, J. I., Vince, A. G., White, R. & Cunningham, C. 1982. 'A dated type series of London Medieval Pottery 1: Mill Green Ware', in *Transactions of the London and Middlesex Archaeological Society* 33, 266-98.
- Pearson, S. 2005. 'Rural and urban houses 1100-1500: 'urban adaptation' reconsidered', in Giles, K. & Dyer, C. (ed's.) *Town and Country in the Middle Ages: Contrasts, Contacts and Interconnections, 1100-1500*. London: Society for Medieval Archaeology Monograph 22, 43-63.
- Platt, C. 1994. *The Great Rebuildings of Tudor and Stuart England: Revolutions in Architectural Taste*. London: Routledge.
- Purcell, D. 1967. *Cambridge Stone*. London: Faber.
- Quiney, A. 2003. *Town Houses of Medieval Britain*. London: Yale University Press.
- Radley, J. 1963-4. 'Peak millstones and Hallamshire grindstones', in *Transactions of the Newcomen Society* 36, 165-73.
- RCHM(E). 1959. *An Inventory of the Historical Monuments in the City of Cambridge* (two volumes). London: HMSO.
- Regan, R. M. 1998. *An Archaeological Watching Brief, Madingley Hall, Cambridgeshire, 1998*. Cambridge Archaeological Unit Report No. 269.
- RFG & FRG. 1993. *Guidelines for the Preparation of Site Archives and Assessments for All Finds Other Than Fired Clay Vessels*. Roman Finds Group and the Finds Research Group AD700-1700.
- Roberts, B. K. & Wrathmell, S. 2000. *An Atlas of Rural Settlement in England*. London: English Heritage.
- Rogerson, A. & Dallas, C. 1984. *Excavations in Thetford 1948-59 and 1973-80*. East Anglian Archaeology 22.
- Schmid, E. 1972. *Atlas of animal bones*. Amsterdam: Elsevier.
- Schofield, J. 1997. 'Urban Housing in England, 1400-1600', in Gaimster, D. and Stamper, P. (ed.'s) *The Age of Transition: the archaeology of English culture 1400-1600*. Oxbow Monograph No. 98, 127-44.

- Schofield, J. & Vince, A. 2003. *Medieval Towns: the Archaeology of British Towns in their European Setting* (2<sup>nd</sup> edition). London: Equinox Publishing.
- Silver I. A. 1969. 'The ageing of domestic animals', in Brothwell, D. & Higgs, E. S. (ed's), *Science in archaeology* (2<sup>nd</sup> edition). London: Thames and Hudson, 283-301.
- Slater, T. R. 1981. 'The Analysis of Burgage Patterns in Medieval Towns', in *Area* 13, 211-16.
- Slater, A. 2012. *Excavations at Neath Farm, Cherry Hinton, Cambridge*. Cambridge Archaeological Unit Report No. 1108.
- Spence, C. 1994. *Archaeological Site Manual* (3<sup>rd</sup> edition). London: Museum of London Archaeology Service.
- Spoerry, P. 2005. 'Town and Country in the Medieval Fenland', in Giles, K. & Dyer, C. (ed.'s) *Town and Country in the Middle Ages: Contrasts, Contacts and Interconnections, 1100-1500*. The Society for Medieval Archaeology Monograph 22, 85-110.
- Spoerry, P. 2008. *Ely Wares*. East Anglian Archaeology 122.
- Spoerry, P. in prep. *Medieval Pottery in Cambridgeshire*. East Anglian Archaeology.
- Stace, C. 1997. *New Flora of the British Isles* (2<sup>nd</sup> edition). Cambridge: Cambridge University Press.
- Swanson, H. 1999. *Medieval British Towns*. London: Palgrave.
- Taylor, A. 1999. *Cambridge: the Hidden History*. Stroud: Tempus.
- Taylor, C. C. 1977. 'Polyfocal settlement and the English village', in *Medieval Archaeology* 21, 189-93.
- Taylor, C. C. 1982. 'Medieval market grants and village morphology', in *Landscape History* 4, 21-28.
- Taylor, C. C. 2002. 'Nucleated settlement: a view from the frontier', in *Landscape History* 24, 53-71.
- Timberlake, S. 2013. *169-173 High Street, Chesterton, Cambridge: An Archaeological Evaluation Assessment*. Cambridge Archaeological Unit Report No. 1173.
- Tucker, D. G. 1985. 'Millstone making in the Peak District of Derbyshire: the quarries and the technology', in *Industrial Archaeology Review* 8, 42-58.
- Von den Driesch, A. 1976. *A guide to the measurement of animal bones from archaeological sites: Peabody Museum Bulletin No. 1*. Cambridge: Harvard University.
- Walker, J. 1999. 'Twelfth and Early-Thirteenth-Century Aisled Buildings: a comparison', in *Vernacular Architecture* 30, 21-53.
- Walker, H. 2012. *Heddingham Ware: A Medieval Pottery Industry in North Essex; Its Production and Distribution*. East Anglian Archaeology 148.
- Watts, M. 2002. *The Archaeology of Mills and Milling*. Stroud: Tempus.
- White, L. J. 1962. *Medieval Technology and Social Chang*. Oxford: Clarendon Press.
- Wright, A. P. M. 1989. 'Chesterton', in Wright, A. P. M. (ed.) *The Victoria County History of the Counties of England: A History of Cambridgeshire and the Isle of Ely, Volume IX*. Oxford: Oxford University Press, 5-39.

## Appendix 1: Feature Concordance Table

The following table provides detailed information on each individual feature that was investigated during both the evaluation and excavation phases at the Chesterton High Street site. A key to the categories of phasing used is also provided.

Key to Phasing	
<b>II</b>	Certain date, based upon material culture, stratigraphy, <i>etc.</i>
<b>II</b>	Probable date, based upon association, fill type, <i>etc.</i>
<i>II</i>	Likely date, based upon spatial pattern, location, <i>etc.</i>

Feature Number	Cut Number	Fill Numbers	Type	Form	Length (m)	Width (m)	Depth (m)	Spotdate	Phase
<b>1</b>	3	1, 2	Ditch	Linear NE-SW	0.8+	1.32	0.41	13 <sup>th</sup> century	<b>II</b>
<b>2</b>	5	4	Pit	Sub-oval	0.5+	0.5+	0.3+		<b>II</b>
<b>3</b>	7	6	Pit	Sub-oval	1.5	0.55+	0.38		<b>II</b>
<b>4</b>	12	8, 9, 10, 11	Pit	Sub-oval	1.5+	1.2+	1.05	13 <sup>th</sup> -14 <sup>th</sup> century	<b>II</b>
<b>5</b>	14	13	Pit	Sub-circular	0.55	0.52	0.2	18 <sup>th</sup> century	<b>III</b>
<b>6</b>	16	15	Pit	Sub-oval	2.5	1.5+	0.7	16 <sup>th</sup> /17 <sup>th</sup> century	<b>III</b>
<b>7</b>	18	17	Pit	Sub-rectangular	1.5+	1.03	1.2	Late 18 <sup>th</sup> /early 19 <sup>th</sup> century	<b>III</b>
<b>8</b>	20	19	Pit	Sub-oval	1.0+	0.7+	0.65	13 <sup>th</sup> century	<b>II</b>
<b>9</b>	24	21, 22, 23	Ditch	Linear NW-SE	1.1+	0.8+	0.25+		<b>II</b>
<b>10</b>	26	25	Pit	Sub-oval	0.55	0.4+	0.35		<i>II</i>
<b>11</b>	28, 30	27, 29	Ditch	Linear NW-SE	2.0+	0.83+	0.27+		<b>II</b>
<b>12</b>	32	31	Structural (beamslot)	Linear WSE-ENE	0.84+	0.34	0.17		<i>II</i>
<b>13</b>	34	35	Gully	Linear WSW-ENE	1.8+	0.86	0.22	14 <sup>th</sup> century	<b>II</b>
<b>14</b>	36	35	Pit	Sub-oval	1.0+	0.5+	0.23+	16 <sup>th</sup> century	<b>II</b>
<b>15</b>	38	37	Pit	Sub-oval	0.6+	0.5+	0.34		<b>II</b>
<b>16</b>	41	39, 40	Pit	Sub-circular	0.5+	0.5+	0.2+		<i>II</i>
<b>17 = 18 = 19 = 323</b>	89, 90, 95	42, 43, 44, 46, 48, 49, 50, 86, 87, 88	Structural (foundation)	'I' shaped	4.25	0.84+	0.32+		<b>III</b>
<b>20 = 338</b>	92	91	Pit	Sub-square	0.95	0.87	0.16+		<i>II</i>
<b>21</b>	84	82, 83	Pit	Sub-oval	0.5+	0.25	0.22+		<i>II</i>
<b>22</b>	63	57, 58, 59, 60, 61, 62	Pit	Sub-rectangular	2.1+	1.5+	1.12	18 <sup>th</sup> century	<b>III</b>
<b>23</b>	74	70, 71, 72, 73	Pit	Sub-rectangular	1.5+	0.74+	0.6+		<i>III</i>

Feature Number	Cut Number	Fill Numbers	Type	Form	Length (m)	Width (m)	Depth (m)	Spotdate	Phase
24	76	75	Pit	Sub-oval	0.82	0.33	0.2		<i>II</i>
25	79	77, 78	Pit	Sub-oval	0.83	0.44	0.15		<i>II</i>
26	/	/	Well (brick-lined)	Circular	1.0+	1.0+	5.0+		<i>III</i>
100	1002	1000, 1001	Posthole	Circular	0.3	0.3	0.32		<i>III</i>
101	1004	1003	Pit	Sub-rectangular	1.2+	0.78+	0.13		<i>III</i>
102	1006	1005	Pit	Sub-rectangular	0.96	0.6	0.32		<i>III</i>
103	1012	1011	Structural (beampad)	Linear, NW-SE	2.6+	0.31	0.04		<i>III</i>
104	1016	1015	Structural (beamslot)	Linear, NW-SE	3.12+	0.2	0.15		<i>III</i>
105	1022	1018	Pit	Sub-oval	1.76	1.32	0.55		<i>II</i>
107	1028	1029	Pit	Sub-oval	1.1	0.65	0.08		<i>II</i>
108	1030	1031	Posthole	Circular	0.25	0.25	0.31		<i>II</i>
109	1032	1033	Pit	Sub-oval	0.72	0.64	0.03		<i>II</i>
110	1034	1035	Pit	Sub-rectangular	0.8	0.25	0.04		<i>II</i>
111	1036	1037	Pit	Sub-oval	0.92	0.56	0.22		<i>II</i>
112	1038, 1084	1039, 1083	Gully	Linear NE-SW	6.1+	0.24	0.2		<i>II</i>
113	1041	1040	Posthole	Sub-circular	0.3	0.26	0.3		<i>III</i>
114	1043	1042	Posthole	Sub-rectangular	0.54	0.36	0.18	Late 18 <sup>th</sup> /early 19 <sup>th</sup> century	<b>III</b>
115	1045	1044	Pit	Circular	1.5	1.5	0.07	15 <sup>th</sup> century	<b>II</b>
116	1047, 1059	1046, 1058	Ditch	Linear WSW-ENE	0.72	0.38	0.05		<i>II</i>
117	1049, 1086	1048, 1085	Pit	Rectangular	1.58	1.54	0.85+	19 <sup>th</sup> century	<b>III</b>
118	1051	1050	Pit	Circular	1.31	1.1	0.39	16 <sup>th</sup> century	<b>II</b>
119	1053	1052	Pit	Sub-oval	0.8	0.6	0.15		<i>II</i>
120	1055	1054	Posthole	Circular	0.3	0.3	0.03		<i>II</i>
121	1057	1056	Ditch	Linear ENE-WSW	0.75+	0.72	0.23		<i>II</i>
122	1061	1060	Pit	Sub-circular	0.63	0.34	0.16	19 <sup>th</sup> century	<b>III</b>
123	1063	1062	Posthole	Sub-circular	0.49	0.43	0.11		<i>II</i>
124	1065	1064	Posthole	Sub-circular	0.31	0.22	0.05		<i>II</i>

Feature Number	Cut Number	Fill Numbers	Type	Form	Length (m)	Width (m)	Depth (m)	Spotdate	Phase
125	1067	1066	Posthole	Sub-circular	0.41	0.3	0.07		II
126	1069	1068	Posthole	Sub-circular	0.3	0.26	0.15		II
127	1071	1070	Posthole	Sub-circular	0.3	0.24	0.08		II
128	1073	1072	Posthole	Sub-circular	0.23	0.22	0.04		II
129	1075	1074	Posthole	Sub-circular	0.23	0.2	0.07		II
130	1077	1076	Posthole	Sub-circular	0.2	0.2	0.05		II
131	1079	1078	Posthole	Sub-circular	0.13	0.12	0.1		II
132	1082	1080, 1081	Pit	Sub-rectangular	1.78	1.64	0.57	13 <sup>th</sup> -14 <sup>th</sup> century	II
133	1026, 1092, 110, 1230	1027, 1091, 1099, 1229	Hedgerow	Irregularly curvilinear	8.49+	0.55	0.15		II
134	1098, 1102, 1104, 1230, 1160, 1226, 1228, 1260, 1268, 1272, 1274, 1377, 1489	1097, 1101, 1103 1229, 1159, 1225, 1227, 1259, 1267, 1271, 1273, 1378, 1488	Gully	Linear, NW-SE	24.1+	0.38	0.17		II
135	1088	1087	Posthole	Sub-oval	0.4	0.24	0.12		II
136	1090	1089	Posthole	Sub-circular	0.32	0.22	0.12		II
137	1094	1093	Posthole	Sub-oval	0.3	0.18	0.18		II
138	1096	1095	Posthole	Sub-circular	0.28	0.28	0.15		II
139	1120	1113, 1114, 1115, 1116, 1117, 1118, 1119, 1149, 1156, 1157, 1158, 1164, 1165, 1465, 1466, 1467, 1468	Well	Sub-oval	4.14	3.28	3.42+	14 <sup>th</sup> century	II
140	1145	1121, 1122, 1142, 1143, 1144, 1445, 1446	Well	Sub-circular	2.21	1.44+	2.05+	14 <sup>th</sup> century	II
142	1124	1123	Ditch	Linear NW-SE	18.9+	0.45	0.13+	13 <sup>th</sup> century	II
143	1126, 1422	1125, 1423	Ditch	Linear NW-SE	18.9+	0.7	0.5+	13 <sup>th</sup> century	II
144	1128, 1424	1127, 1425	Ditch	Linear NW-SE	18.9+	0.9	0.45	13 <sup>th</sup> century	II
145	1130, 1426	1129, 1427	Ditch	Linear NW-SE	18.9+	0.5	0.35	13 <sup>th</sup> century	II
146	1132, 1428	1131, 1429	Ditch	Linear NW-SE	18.9+	1.1	0.35	13 <sup>th</sup> century	II
147	1134	1133	Posthole	Sub-circular	0.21	0.2	0.35		II
148	1136	1135	Posthole	Sub-circular	0.25	0.24	0.25		II

Feature Number	Cut Number	Fill Numbers	Type	Form	Length (m)	Width (m)	Depth (m)	Spotdate	Phase
149	1138	1137	Pit	Sub-circular	1.05	1.02	0.56		II
150	1141	1140	Posthole	Sub-oval	0.24	0.17	0.09		II
151	1148	1147	Pit	Sub-oval	1.12	0.6+	0.09		II
152	1150	1149	Posthole	Sub-square	0.35	0.25	0.1		III
153	1152	1151	Posthole	Sub-square	0.3	0.3	0.06		II
154	1154	1153	Pit	Sub-square	0.74	0.62	0.14		III
155	1156	1155	Posthole	Sub-oval	0.55	0.32	0.35		III
156	1158	1157	Posthole	Sub-square	0.25	0.25	0.04		II
157	1162	1161	Posthole	Sub-circular	0.25	0.22	0.06		II
158	1164	1163	Posthole	Sub-oval	0.35	0.33	0.18		III
159	1166	1165	Posthole	Sub-oval	0.22	0.22	0.08		III
160	1168	1167	Posthole	Sub-square	0.45	0.43	0.35	Late 18 <sup>th</sup> /early 19 <sup>th</sup> century	III
161	1170	1169	Posthole	Sub-square	0.25	0.25	0.12		II
162	1172	1171	Posthole	Oval	0.25	0.25	0.08		II
163	1174	1173	Posthole	Sub-circular	0.52	0.45	0.08		II
164	1176	1175	Pit	Sub-square	0.42	0.35	0.2	14 <sup>th</sup> -15 <sup>th</sup> century	II
165	1178	1177	Pit	Sub-square	0.55	0.32	0.15		III
166	1180	1179	Pit	Sub-oval	0.65	0.6	0.12		II
167	1186	1181, 1182, 1183, 1184, 1185	Pit	Sub-circular	3.23	3.17	0.53	15 <sup>th</sup> century	II
168	1188	1187	Pit	Rectangular	1.9	1.1	1.4m	19 <sup>th</sup> century	III
169	1190	1189, 1191	Pit	Sub-rectangular	2.55	0.72	0.22		II
170	1193	1192	Posthole	Sub-square	0.3	0.38	0.08		II
171	1195	1194	Posthole	Sub-oval	0.33	0.27	0.21		II
172	1197	1196	Posthole	Sub-circular	0.15	0.14	0.03		II
173	1199	1198	Posthole	Sub-circular	0.3	0.25	0.03		II
174	1201	1200	Posthole	Sub-circular	0.4	0.35	0.06		II
175	1203	1202	Pit	Sub-oval	0.6	0.55	0.16		II

Feature Number	Cut Number	Fill Numbers	Type	Form	Length (m)	Width (m)	Depth (m)	Spotdate	Phase
176	1204	1205	Pit	Sub-rectangular	0.68	0.37	0.11	14 <sup>th</sup> century	II
177	1206	1207	Posthole	Sub-circular	0.22	0.2	0.09		II
178	1209	1208	Posthole	Sub-circular	0.46	0.46	0.17		II
179	1211	1210, 1224	Pit	Sub-oval	1.69	1.41	0.92	15 <sup>th</sup> century	II
180	1213	1212	Posthole	Sub-circular	0.33	0.21	0.1		II
181	1215	1214	Posthole	Heavily truncated	0.5+	0.37+	0.23		II
182	1218	1219	Posthole	Heavily truncated	0.31	0.29	0.25		II
183	1120	1221	Pit/posthole	Sub-circular	0.37	0.33	0.1		II
184	1123	1122	Posthole	Sub-oval	0.31	0.3+	0.12		II
185	1232	1231, 1233	Pit	Sub-rectangular	3.65	2.04	0.24	15 <sup>th</sup> century	II
186	1235	1234	Posthole	Sub-circular	0.21	0.16	0.3+		II
187	1237	1236	Posthole	Sub-circular	0.17	0.15	0.3		II
188	1240	1238, 1239	Posthole	Sub-circular	0.2	0.2	0.05		II
189	1243	1241, 1242	Posthole	Sub-circular	0.27	0.23	0.09		II
190	1246	1244, 1245	Posthole	Sub-circular	0.24	0.23	0.11		II
191	1249	1247, 1248	Posthole	Sub-circular	0.25	0.21	0.1		II
192	1252	1250, 1251	Posthole	Sub-circular	0.25	0.25	0.28		II
193	1254	1253	Posthole	Sub-circular	0.15	0.12	0.06		II
194	1256	1255	Posthole	Sub-circular	0.15	0.11	0.11	15 <sup>th</sup> century	II
195	1258	1257	Pit/posthole	Sub-circular	0.51	0.45	0.39		II
196	1266	1265	Gully	Linear NE-SW	1.91+	0.21	0.07		II
197	1270, 1312, 1345, 1347, 1349	1269, 1311, 1344, 1346, 1348	Hedgerow	Irregularly curvilinear	7.68+	0.31	0.06		II
198	1262	1261	Posthole	Sub-circular	0.24	0.22	0.12		II
199	1264	1263	Posthole	Sub-circular	0.17	0.12	0.18		II
203	1276	1275	Pit	Sub-rectangular	0.7+	0.6+	0.12		III
204	1278	1277	Posthole	Circular	0.08	0.08	0.06		II
205	1279	1280	Posthole	Sub-circular	0.2	0.19	0.09		II
206	1281	1282	Posthole	Sub-circular	0.23	0.19	0.08		II

Feature Number	Cut Number	Fill Numbers	Type	Form	Length (m)	Width (m)	Depth (m)	Spotdate	Phase
207	1283	1284	Posthole	Sub-circular	0.3	0.3	0.16	15 <sup>th</sup> century	II
208	1285, 1334	1286, 1333	Pit	Sub-rectangular	2.64+	1.4m	0.34	17 <sup>th</sup> /18 <sup>th</sup> century	III
209	1287	1288	Gully	Linear E-W	1.78+	0.4	0.09		II
210	1289	1290	Gully	Linear E-W	1.84+	0.6	0.08		II
211	1294, 1340	1291, 1292, 1293, 1339	Gully	Linear N-S	4.66+	0.76	0.45		II
212	1296	1295	Posthole	Sub-oval	0.96	0.72	0.12		III
213	1298	1297	Pit	Sub-oval	1.65	0.68	0.12	14 <sup>th</sup> -15 <sup>th</sup> century	II
214	1300	1299	Posthole	Sub-oval	0.58	0.32	0.07		II
215	1302	1301	Posthole	Sub-circular	0.58	0.49	0.11		II
216	1304	1303	Posthole	Sub-circular	0.2	0.2	0.06		II
217	1305, 1472	1306, 1471	Ditch	Linear NW-SE	3.1+	0.62	0.38		II
218	1308	1307	Posthole	Circular	0.25	0.25	0.1		II
219	1310	1309	Pit	Sub-rectangular	0.95	0.6	0.12		II
221	1314	1313	Posthole	Sub-square	0.3	0.22	0.17		II
222	1316	1315	Pit/posthole	Sub-oval	0.54	0.27	0.11		II
223	1318	1317	Posthole	Sub-circular	0.3	0.22	0.17		II
224	1320	1319	Pit	Sub-rectangular	1.24+	0.62+	0.11		II
225	1322	1321	Pit	Sub-oval	0.81	0.55	0.14		II
226	1324	1323	Pit	Sub-square	1.04+	0.72	1.07+		II
227	1326	1325	Pit	Sub-oval	0.82+	0.65+	0.24	14 <sup>th</sup> century	II
228	1328	1327	Posthole	Sub-circular	0.15	0.12	0.05		II
229	1330	1329	Posthole	Sub-circular	0.15	0.12	0.06		II
230	1332	1331	Posthole	Circular	0.52	0.52	0.32		II
232	1336	1335	Pit	Sub-square	1.54	1.52	0.21		II
233	1338	1337	Pit	Sub-rectangular	0.45	0.25	0.04+		II
234	1343	1341, 1342	Posthole	Sub-circular	0.22	0.22	0.08		II
235	1351	1350	Pit	Sub-oval	1.34	1.06+	0.05	14 <sup>th</sup> century	II
236	1353	1352	Posthole	Circular	0.18	0.18	0.17		II



Feature Number	Cut Number	Fill Numbers	Type	Form	Length (m)	Width (m)	Depth (m)	Spotdate	Phase
237	1355	1354	Posthole	Sub-circular	0.24	0.22	0.34		II
238	1357	1356	Posthole	Sub-circular	0.25	0.23	0.13		II
239	1359	1358	Pit	Sub-oval	2.55+	2.15	0.08		II
240	1361	1360	Posthole	Sub-circular	0.3	0.3	0.32		II
241	1363	1362	Posthole	Sub-circular	0.18	0.15	0.07		II
242	1365	1364	Posthole	Sub-circular	0.3	0.3	0.32		II
243	1367	1366	Gully	Linear E-W	0.65+	0.2	0.2		II
244	1370	1368, 1369	Posthole	Sub-circular	0.25	0.25	0.13		II
245	1372	1371	Posthole	Sub-circular	0.31	0.27	0.1		II
246	1374	1373	Posthole	Sub-circular	0.12	0.12	0.03		II
247	1376	1375	Posthole	Sub-circular	0.1	0.1	0.03		II
248	1380	1379, 1381	Soakaway (barrel-lined)	Sub-circular	0.94	0.94	0.86		III
249	1384, 1435	1382, 1383, 1430, 1431, 1432, 1433, 1434	Pit	Sub-oval	1.88	1.62	0.92	14 <sup>th</sup> century	II
250	/	1385	Layer	Heavily truncated	2.22+	1.52+	0.05	14 <sup>th</sup> -15 <sup>th</sup> century	II
251	1387, 1438	1386, 1436, 1437	Pit	Sub-oval	1.64+	1.1+	0.38	14 <sup>th</sup> -15 <sup>th</sup> century	II
252	1389, 1444	1388, 1439, 1440, 1441, 1442, 1443	Pit	Sub-circular	2.07	1.98	1.24	14 <sup>th</sup> -15 <sup>th</sup> century	II
253	/	1390	Layer	Heavily truncated	3.44+	3.22+	0.24	14 <sup>th</sup> -15 <sup>th</sup> century	II
254	1392	1391, 1462, 1463	Pit	Sub-circular	3.02	2.87	1.54	15 <sup>th</sup> century	II
255	1393	1453, 1454, 1455	Robber cut	Sub-circular	1.85	1.76	2.54+	16 <sup>th</sup> century	III
256	1396	1394, 1395	Posthole	Sub-circular	0.4	0.35	0.15		II
257	1398	1397	Pit	Sub-circular	0.72	0.7	0.07		II
258	1400	1399	Pit	Sub-circular	0.75	0.75	0.08		II
259	1402	1401	Pit	Sub-circular	3.02	2.93	0.15		II
260	1404	1403	Pit	Sub-oval	1.65	1.22	0.37	15 <sup>th</sup> century	II
261	1407	1405, 1406	Pit	Sub-oval	1.36	0.7+	0.35		II
262	1409	1408	Pit	Sub-rectangular	0.58	0.42	0.35+		II

Feature Number	Cut Number	Fill Numbers	Type	Form	Length (m)	Width (m)	Depth (m)	Spotdate	Phase
263	1411	1410	Pit	Sub-rectangular	1.08	0.62	0.22		II
264	1413	1412	Pit	Sub-circular	1.08	1.02	0.2+		II
265	1415	1414	Pit	Sub-oval	0.99	0.82	0.32		II
266	1417	1416	Pit	Sub-oval	0.82	0.42	0.31		II
267	1419	1418	Gully	Linear N-S	3.2+	0.32	0.15		II
268	1421	1420	Gully	Linear N-S	18.9+	0.4+	0.32		II
269	1447	1448	Cesspit	Sub-oval	2.2+	1.25+	1.88+	14 <sup>th</sup> century	II
270	1146	1105, 1106, 1107, 1108, 1109, 1110, 1111, 1112, 1450, 1451, 1452	Robber cut	Sub-circular	1.7+	1.7+	2.44+	16 <sup>th</sup> century	III
271	1461	1459, 1460, 1461	Well	Sub-circular	2.05+	1.85+	3.2+		II
272	1484	1485	Posthole	Sub-circular	0.14	0.14	0.08		II
273	1487	1486	Posthole	Sub-circular	0.22+	0.10	0.10		II
274	1491, 1493, 1497, 1499	1490, 1492, 1496, 1498	Gully	Linear NE-SW	6.3+	0.28	0.19+		II
275	1495	1494	Pit/posthole	Sub-oval	0.58	0.47	0.32		II
276	1501	1500	Pit	Sub-oval	1.36	0.82	0.46		II
277	1503	1502	Pit	Sub-rectangular	0.68	0.51	0.28	15 <sup>th</sup> century	II
278	1505	1504	Pit	Sub-square	0.52	0.49	0.08		II
279	1507	1506	Pit	Sub-circular	0.18	0.18	0.03		II
280	1476	1473, 1474, 1475	Ditch	Linear NW-SE	8.22+	0.64+	0.65	15 <sup>th</sup> century	II
281	1478	1477	Ditch	Linear NW-SE	8.22+	0.5+	0.35		II
282	1483	1481, 1482	Posthole	Sub-circular	0.3	0.3	0.16		II
283	1480	1479	Pit	Sub-circular	1.34	0.42	/		II
284	1514	1513	Structural (foundation)	Linear N-S	2.2+	0.28	0.16		III
285	1512	1508, 1509, 1510, 1511	Pit	Sub-rectangular	3.03	1.78	0.79		II
286	1516	1515	Pit	Sub-rectangular	0.73	0.61	0.22		II
287	/	/	Pit	Sub-oval	0.89	0.56	/		III
288	/	/	Pit	Sub-circular	2.28+	1.76+	/		II

Feature Number	Cut Number	Fill Numbers	Type	Form	Length (m)	Width (m)	Depth (m)	Spotdate	Phase
289	/	/	Structural (foundation)	'L' shaped	4.1+	0.58	/		IV
290	/	/	Pit	Sub-oval	1.12	1.08	/		II
291	/	/	Pit	Sub-oval	0.56+	0.38+	/		II
292	/	/	Well	Sub-circular	1.42+	0.38+	3.76		II
293	/	/	Pit	Sub-oval	1.38+	0.48+	/		II
294	/	/	Posthole	Sub-circular	0.22	0.20	0.12		II
295	/	/	Pit	Sub-oval	1.56	1.12	0.48		II
296	/	/	Pit	Sub-oval	1.12	0.78	0.32		II
297	/	/	Posthole	Sub-oval	0.18	0.18	0.09		II
301	/	/	Pit	Sub-square	0.92	0.92	0.5		III
302	/	/	Pit	Sub-rectangular	1.04	0.7	0.58		III
303	/	1017	Structural (foundation)	'L' shaped	2.15	0.53	0.72		III
304	/	1019, 1020, 1021	Structural (surface)	Sub-rectangular	2.95	2.76	0.22	15 <sup>th</sup> century (residual)	III
305	/	/	Layer (garden soil)	Extends beyond limits of area	15.9+	13.7+	0.78+	15 <sup>th</sup> century	II-III
306	/	/	Structural (foundation)	Linear NW-SE	4.6+	0.52	0.38+		III
307	/	/	Structural (foundation)	Linear NE-SW	3.8+	0.48	0.66+		III
308	/	/	Pit	Sub-rectangular	1.05+	0.56	0.15m		III
309	/	/	Layer (capping)	Sub-circular	2.05+	1.85+	0.28		III
310	/	/	Structural (foundation)	Linear NW-SE	5.89+	0.33	0.22+		III
311	/	/	Structural (foundation)	Linear NW-SE	8.22	0.34	0.32+		III
312	/	4	Structural (foundation)	Linear NE-SW	4.42	0.48	0.78+		III
313	/	/	Structural (surface)	Sub-rectangular	2.88	1.84	0.22		III
314	/	1	Structural (surface)	Rectangular	3.74	1.90	0.14	19 <sup>th</sup> century (backfill)	III
315	/	/	Cesspit (brick-built)	Sub-rectangular	2.52	1.88	0.37+		III
316	/	/	Pit	Sub-rectangular	1.18	0.49	0.67+		III
317	/	/	Layer (surface)	Sub-rectangular	10.5+	1.12	0.36+		III

Feature Number	Cut Number	Fill Numbers	Type	Form	Length (m)	Width (m)	Depth (m)	Spotdate	Phase
318	/	/	Structural (beamslot)	Linear NW-SE	9.2+	0.3	0.15		III
319	/	2	Pit	Sub-oval	2.15	0.92	0.4+	17 <sup>th</sup> century	III
320	/	3	Pit	Sub-square	1.71	1.62	0.78+	19 <sup>th</sup> century	III
321	/	5	Pit	Sub-rectangular	1.35	0.78	0.56+	Late 18 <sup>th</sup> /early 19 <sup>th</sup> century	III
322	/	/	Structural (surface)	Sub-rectangular	0.85	0.45	0.22		III
324	/	/	Structural (foundation)	Rectangular	5.38+	2.68	0.68+		IV
325	/	/	Pit	Sub-square	1.5	1.4	0.45		III
326	/	/	Pit	Sub-square	1.5	1.5	0.56		III
327	/	/	Structural (surface)	Sub-rectangular	4.34	4.04	0.18+		III
328	/	/	Structural (foundation)	Linear NW-SE	2.58+	0.34	0.21		III
330	/	/	Structural (beamslot)	Linear NW-SE	1.85+	0.3	0.15		III
331	/	/	Pit	Sub-circular	0.49	0.47	0.32		III
332	/	/	Layer (levelling)	Heavily truncated	15.4+	9.6+	0.44+		III
333	/	/	Layer (garden soil)	Extends beyond limits of area	24.5+	15.3+	0.68+		II-III
334	/	/	Structural (surface)	Rectangular	3.98+	3.2+	0.17+		III
335	/	/	Structural (surface)	Sub-rectangular	3.5+	3.32+	0.22		III
336	/	/	Structural (foundation)	Rectangular	10.3+	6.1	0.52+		IV
337	/	/	Structural (foundation)	Linear NW-SE	1.8+	0.32	0.12		III
339	/	/	Structural (foundation)	Linear NW-SE	11.35+	0.33	0.41+		III
340	/	/	Structural (foundation)	Linear NW-SE	2.88+	0.34	0.34+		III
341	/	/	Layer (levelling)	Heavily truncated	39.9+	15.3+	0.42+		IV

## Appendix 2: Oasis Form

OASIS ID: cambridg3-176549	
Project Details	
Project name	169-173 High Street, Chesterton, Cambridge
Short description of the project	Following on from an earlier trench-based evaluation, an open-area excavation extending over 307sqm was conducted at the Chesterton High Street site. This encountered an intensive and long-lived archaeological sequence. Firstly, during the Roman and Middle-Late Saxon periods the site appears to have been situated within a broader agricultural hinterland. Then, <i>c.</i> 1200, three long-lived burgrave-type plots were established (only one of which lay predominately within the area of investigation). Linear in form, and with a distinctive bend or twist at their head, each of these plots appears to represent the occupation of two amalgamated strips within the preceding open field. Their establishment marks the culmination of a wider process of village nucleation, whereby an earlier pattern of dispersed, polyfocal nuclei was gradually superseded by a linear settlement focused along the route of the present High Street. Occupation continued in this form until <i>c.</i> 1550, when an extensive redevelopment was undertaken; this was most probably precipitated by the dissolution of Barnwell Priory and the sale of its former demesne land. As part of this redevelopment the ground-surface was raised and eight narrow tenements constructed. These were then occupied in turn until <i>c.</i> 1875, when a much more substantial brick-built structure was erected. Finally, in 1891 this building was converted into the Dog and Pheasant public house.
Project dates	Start: 05-11-2013 End: 06-12-2013
Previous/future work	Yes / Not known
Any associated project reference codes	ECB 4035 - HER event no.
Any associated project reference codes	OSC13(2) - Sitecode
Type of project	Recording project
Site status	None
Current Land use	Residential 1 - General Residential
Monument type	BUILDINGS Post Medieval
Monument type	PITS Medieval
Monument type	DITCHES Medieval
Significant Finds	POTTERY Medieval
Significant Finds	LEATHER Medieval
Significant Finds	GRINDSTONE Medieval
Investigation type	"Open-area excavation"
Prompt	Direction from Local Planning Authority - PPG16
Project Location	
Country	England
Site location	CAMBRIDGESHIRE CAMBRIDGE CAMBRIDGE 169-173 High Street, Chesterton, Cambridge

Postcode	CB4 1NL
Study area	375.00 Square metres
Site coordinates	TL 4645 5999 52.2182014946 0.144038786017 52 13 05 N 000 08 38 E Point
Height OD / Depth	Min: 6.18m Max: 6.32m
<b>Project Creators</b>	
Name of Organisation	Cambridge Archaeological Unit
Project brief originator	Local Authority Archaeologist and/or Planning Authority/advisory body
Project design originator	Alison Dickens
Project director/manager	Alison Dickens
Project supervisor	Richard Newman
Type of sponsor/funding body	Developer
Name of sponsor/funding body	Januarys
<b>Project Archives</b>	
Physical Archive recipient	Cambridgeshire County Archaeology Store
Physical Archive ID	OSC13(2)
Physical Contents	"Animal Bones", "Ceramics", "Environmental", "Glass", "Industrial", "Leather", "Metal", "Wood", "Worked stone/lithics"
Digital Archive recipient	Cambridgeshire County Archaeology Store
Digital Archive ID	OSC13(2)
Digital Contents	"Animal Bones", "Ceramics", "Environmental", "Glass", "Industrial", "Leather", "Metal", "Survey", "Wood", "Worked stone/lithics"
Digital Media available	"Spreadsheets", "Survey", "Text"
Paper Archive recipient	Cambridgeshire County Archaeology Store
Paper Archive ID	OSC13(2)
Paper Contents	"Animal Bones", "Ceramics", "Environmental", "Glass", "Industrial", "Leather", "Metal", "Survey", "Wood", "Worked stone/lithics"
Paper Media	"Context sheet", "Map", "Photograph", "Plan", "Report", "Section", "Survey "

<b>Project Bibliography</b>	
Publication type	Grey literature (unpublished document/manuscript)
Title	169-173 High Street, Chesterton, Cambridge: An Archaeological Excavation
Author(s)/ Editor(s)	Newman, R.
Other bibliographic details	Cambridge Archaeological Unit Report No. 1226
Date	2014
Issuer or publisher	Cambridge Archaeological Unit
Place of issue or publication	Cambridge
Description	An A4 wire-bound document with a plastic laminate cover. It is 96 pages long and has 20 illustrations.
Entered by	Richard Newman (rn276@cam.ac.uk)
Entered on	3 April 2014