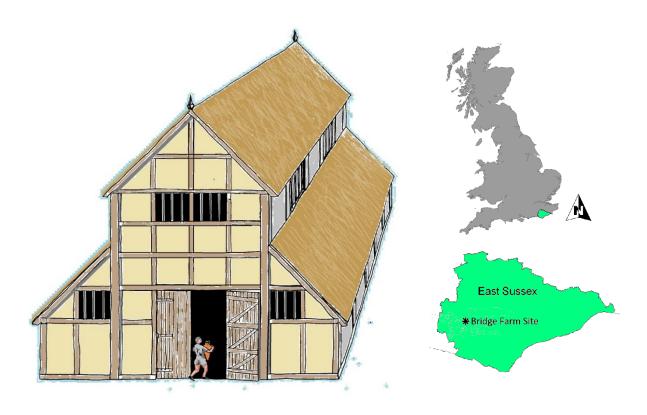
Investigations of the Roman riverside settlement in Five Acres at Bridge Farm, Wellingham, East Sussex 2014 (CAP.BF14)

PART 1: FIELDWORKS & RESULTS



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PART 1: Fieldworks and Results

Report Data

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CAP Project Codes: BRF14 (a.k.a. BF14) & DC4

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Prepared in accordance with CAP reporting procedures

Written by David Millum Jan 2021

Approved by Robert Wallace, Project Director Jan 2021

Front cover shows an imaginative reconstruction of the 13 large postholes as an aisled warehouse (David Millum 2017)

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Non-Technical Summary

This is the post-excavation report of the archaeological investigations undertaken by undergraduate students and volunteers under the supervision of the Culver Archaeological Project in Five Acres on Bridge Farm, Wellingham, Ringmer, East Sussex (TQ4297 1456) in 2014. The site was in a meadow to the west of the Romano-British settlement discovered adjacent to the River Ouse in 2011 (Millum, 2013). This excavation followed on from four trenches excavated in 2013 (Millum & Wallace, 2017).

The investigations comprised surface metal detecting followed by a magnetometer survey in 2011 and a 770sq.m open area excavation in 2014. The excavation trench was located over a rectangular group of circular anomalies, adjacent linear and other features, observed in the geophysical survey.

The excavation revealed 13 postholes, of 1m+ diameter, forming a rectangular grouping 16m by 6.4m, each containing the base of a waterlogged post averaging 0.45m in diameter/width at 0.8m -1m deep. These were interpreted as the principal posts of a building, probably aisled, dated by pottery to the late 3rd century AD.

To the northwest flank of the building was a ditch which ran the complete length of the trench and appeared to be of earlier origin, possibly 2nd century. Adjacent to the ditch was a large 4th century ovoid pit of over 2m wide and 1.3m deep which was interpreted as a sump-well. A similar but shallower feature was also excavated in the southern corner of the trench.

Two hearths were discovered; one of banjo-shape adjacent to the central ditch was probable of 2nd – 3rd century date whilst the hearth in the north corner was dated to the 4th century and found to contain iron slag and magnetic fines. Two further ditches which crossed the trench obliquely and intersected at the southwest baulk were designated to the late 4th century and were possibly still open in the 5th.

There were other isolated smaller pits and post/stake-holes plus a smaller rectangular grouping of smaller postholes suggesting the possibility of an older building at right angles to the main building. If this interpretation is correct then this structure being within the area of the large building had ceased to exist prior to the erection of its larger counterpart. Alternatively, some of these postholes could be an indication of the outer wall and internal division of the aisled structure.

Over 7000 sherds of Roman-period pottery were collected and analysed together with metal finds including coins, a zoomorphic enamelled brooch and an inscribed silver ring bezel. Waterlogged timbers were taken from the sump-well and two of the post holes. The latter included 2 unique worked timbers with ogee-carved ends which had seemingly been used as post-pads and have been interpreted as the truncated ends of rafters. Bulk environmental samples were taken from the lower contexts of the sump-well and the postholes which, being waterlogged provided further organic remains including animal bones and leather shoe fragments. The fills from the two hearths were also sampled for possible charred remains. The timbers, leather items and some metallic artifacts were sent for specialist conservation.

Dedication

This report is dedicated to the memory of our colleague Stuart McGregor who died unexpectedly in October 2018. Stuart was a key member of the CAP team with particular responsibility for site photography and the drawn record; his work and dedication live on within the pages of this report.

1 Introduction

1.1 The Site

- 1.1.1 The site is located at Bridge Farm, on Barcombe Mills Road, Barcombe, Nr. Lewes, East Sussex (1) although parochially it falls within the Wellingham area of Ringmer. The site is centred on National Grid Reference (NGR) 542970 114565 and comprises a permanent grass meadow, known as Five Acres, abutting the east bank of the River Ouse (4) (also see location map in Part 3: 15.1).
- 1.1.2 The site is to the west of the defended Romano-British settlement discovered in 2011 (Millum, 2013) at the Junction of the Roman road from London (Margary 14) and the roads to Chichester (Noviomagus) and Pevensey (Anderidos).
- 1.1.3 The southern extremities of the settlement site had been excavated with four trenches in 2013 revealing a late 1st century date for the smaller rectangular enclosure at the southern end of the road and a late 2nd century date for the double ditches enclosing a larger area to the north, plus other activity continuing well into the 4th century. The



1: Site location in East Sussex

results of the 2013 excavations have been reported (Wallace, 2014) and an interim paper published (Millum & Wallace, 2017).

1.1.4 Details of other results from CAP can be viewed at www.culverproject.co.uk.

1.2 The Scope of the Report

- 1.2.1 This report summarises the archaeological investigations carried out in Five Acres during 2014 by the Culver Archaeological Project under the direction of Robert Wallace PCIfA and David Millum MCIfA.
- 1.2.2 The report covers the excavation of Trench 5 carried out in 2014 (site code BRF14) plus geophysical surveying in 2011 (BF11) and pre-project surface metal detecting (DC4).
- 1.2.3 The report covers the fieldwork undertaken in the following order:

Pre-project metal detecting and surface collection, Sections 5.1 & 6.1.

Geophysical surveys in 2011 & 2014, Sections 5.2 & 6.2.

Open area excavation in 2014, Sections 5.3 & 6.3.

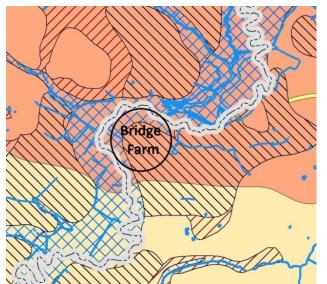
Artefact analysis, Sections 8 & 16.

- 1.2.4 The report discusses the data gained from the fieldwork and how this might be interpreted in the wider landscape context. Sections 6 to 9.
- 1.2.5 The contents of this report will subsequently be reassessed as the wider project proceeds so that it can be integrated into the general body of work with revised conclusions reached from the overall project results.
- 1.2.6 To facilitate the integration of this data with the wider project the Periods denoted in the report for the Bridge Farm 2013 excavation (Wallace, 2014) will be used.

- 1.2.7 These comprise: Period 1: Palaeolithic to Bronze Age: Period 2: Iron Age and Roman Republic: Period 3: Roman AD43-70: Period 4: Roman AD70-150: Period 5: Roman AD150-250: Period 6: Roman AD250-410: Period 7: Saxon: Period 8: Medieval: Period 9: Post Medieval
- 1.2.8 Period 6 will be subdivided into 6A: AD250-300, 6B: AD300-350 & 6C: AD350-410 where it is felt this will aid interpretation.
- 1.2.9 Periods where no significant features or artefacts were found will not be included in the report.

2 Geology and Topography

2.1.1 The underlying geological structure of the site is sedimentary with the Ouse River Valley cutting through east-west bands of Lower Greensand and Weald Clay which are heavily mantled with Head and River Terrace deposits (2).



2: Solid and Drift Geology of the Bridge Farm site in an area of River Terrace Deposits on Weald Clay

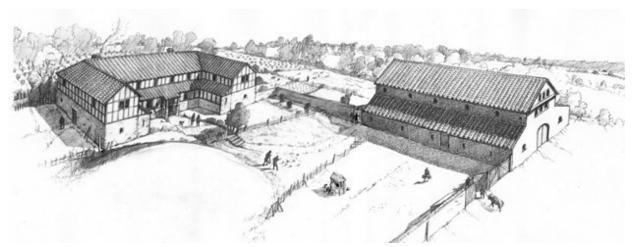


- 2.1.2 The site lies on the eastern bank of the Ouse floodplain, north of Lewes, which comprises deep alluvium flanked by margins of first and second terrace valley gravels. The area supports gleyic argillic brown earths of the Waterstock Association soils on the floodplain.
- 2.1.3 Interpreting the archaeology was complicated by the post-depositional gleying that had taken place on site. This process occurs when fluctuating groundwater tables lead to the oxidation of the ferrous and ferric elements in the soils leading to mottling (strong brown ferruginous speckles in the soil), the formation of iron nodules, weak ferruginous encrustations and concretions and iron panning. These post-depositional processes can affect features and are easily mistaken for separate contexts and/or archaeological events.
- 2.1.4 Dr Mike Allen (Allen, 2013) reporting on the local soil structure highlighted the perpensity of the fine sands and coarse silts of the alluvial surface geology for deep and rapid pedogenisis (soil formation) with soils weathering and developing downwards into the parent material. The formation of deep topsoil over centuries of agricultural use, regular flooding and the shallow depth of the archaeology in this field had truncated, and in some instances damaged, the remaining archaeology. The low ground level of the field at c.4.6m AOD meant that features extending below 3.5m AOD were likely to be permanently waterlogged and therefore retain organic remains. This probability was factored into our environmental sampling procedures.

3 Archaeological and Historical Background

3.1 Associated Projects

3.1.1 In the early 1990's Roman finds had been discovered at Culver Farm, Barcombe, and in 1999 a geophysical survey was carried out at Dunstalls Field on Culver Farm which confirmed the existence of a Roman winged-corridor villa and other associated buildings at TQ41721418 (3). In 2001 a research and training excavation was launched by University College London (UCL) and the Mid Sussex Field Archaeological Team (MSFAT). In 2005 UCL left the project and the University of Sussex, Centre for Continuing Education (CCE) became joint organisers with MSFAT. Excavation of the site continued until 2007 under the direction of Dr David Rudling for CCE and Chris Butler MCIfA for MSFAT.



3: Illustration of how the Barcombe Villa complex may have looked at its zenith

- 3.1.2 In 2004 a ground penetrating radar survey was carried out in Church Field, to the SE of the villa site. The survey revealed another building at TQ41861419. Excavation between 2008 and 2012 by CCE and MSFAT proved this to be a detached multi-phased bathhouse of unusually large proportions for a rural estate.
- 3.1.3 From 2005 the Culver Archaeological Project (CAP), under founding director Robert Wallace, was investigating the wider historical landscape around the villa complex; discovering a substantial Roman road and instigating an extensive programme of geophysical surveys, systematic field walking, evaluation trenching and open area excavation, along the road's corridor, to the west of the River Ouse at Culver and Cowlease Farms, Barcombe (Millum & Wallace, 2012; Millum, 2014). This work identified several new sites of roadside activity, including industrial sites from the Roman period. Research by CAP has also revealed prehistoric activity within the surrounding area, including several instances from the Middle Bronze Age (MBA) activity, one of which in an area known as The Wilderness producing an oak stake which has been radiocarbon dated to 3340+/-40 BP, calibrated to 1680-1530 cal BC, representing one of the earliest waterlogged sites discovered in Sussex (Allen, 2010; 2011).
- 3.1.4 A geophysical survey in 2011 at Bridge Farm on the east bank of the River Ouse to locate the known Roman road from London (Margary, 1933) revealed an unknown Romano-British settlement enclosed with double ditched defences (Millum, 2013).

3.1.5 The southern extremities of this settlement were excavated by CAP in 2013, funded by the Heritage Lottery Fund and managed by the appointed contractor, AOC Archaeology. The four trenches excavated (4) established that the settlement was founded in the late 1st century AD with the earthwork defences added in the late 2nd and further activity continuing into the 4th. Roads, ditches, pits and other features suggesting light industrial activity were revealed (Wallace, 2014; Millum, 2017; Millum & Wallace, 2017).



4: Geophysical survey image from 2011 showing the 2013 and 2014 trenches

3.2 Previous Archaeological Investigations on the Site

3.2.1 Checks on the East Sussex Historic Environment Record and the *Sussex Archaeological Collections* revealed no record of any previous investigations in Five Acres.

3.3 Desk Based Research

3.3.1 A check of old maps revealed that on both the Estate Map of William Newton in 1767 and the 1841 tithe map the field was named as Five Acres and the field boundaries were largely consistent with those of today.

3.3.2 Journal research revealed that in a paper in *Sussex Archaeological Collections* 74, 16-43, entitled 'A new Roman road to the coast', Ivan Margary records a Roman road from London running through Bridge Farm with details the route and of an evaluation trench that he excavated in House Field at Bridge Farm (Margary, 1933) (see also Millum 2013 and 2017).

4 Scope of Aims and Fieldworks

4.1 Scope of Fieldworks

- 4.1.1 Following the pre-project metal detecting and the results of geophysical surveys in 2011 an open area trench of 24m x 32m (770sq.m) was opened over a rectangular group of round anomalies (4 & 7). The excavation of this area commenced on 27th June 2014 and was completed on 24th September 2014. Once the excavation was complete the site was back filled and returned to the land owner.
- 4.1.2 The excavation was directed by Robert Wallace PCIfA and David Millum MCIfA as part of the wider CAP investigations of the Bridge Farm settlement and surrounding area.

4.2 Original Research Aims

- 4.2.1 To establish the nature, date, purpose and state of preservation of the buried features interpreted from the results of the geophysical surveys by targeted excavation (Millum, 2014a)
- 4.2.2 To allow an informed assessment of the archaeological potential of the surrounding area.
- 4.2.3 To promote a greater understanding of the historic landscape.
- 4.2.4 To formulate a prioritised policy for further investigation of the site including more invasive and destructive methods where considered necessary.
- 4.2.5 To actively encourage the involvement of the local community in investigating and understanding their historic environment.
- 4.2.6 To offer opportunities for volunteers and students of all levels to gain practical experience of archaeological field practice in all aspects of the methodology employed on the site during the surveying, excavation and post-excavation stages.
- 4.2.7 To accumulate sufficient data to produce an informed report of the archaeology of the site for both archival and publication purposes.

5 Summary of Fieldworks

5.1 Pre-project metal detecting (DC4)

- 5.1.1 A local metal detectorist, David Cunningham, had permission from the previous owner of the land to undertake surface metal detecting and collection of artefacts for the whole of Bridge Farm including Five Acres. This came to light during a mass detection survey that CAP organised for House Field in 2012 with local metal detecting groups.
- 5.1.2 Contact having been established David offered us unrestricted access to his finds for inspection and recording. He had retained all the artefacts he had collected and kept them separated by a series of field numbers including artefacts gathered from Five Acres, his field number 4 (DC4).

- 5.1.3 The artefacts from Five Acres were weighed, measured, photographed and recorded as per CAP Special Finds procedures.
- 5.1.4 Mr Cunningham subsequently donated many of the artefacts to the project archive and became, with George Read, the long-term authorised metal detectorists for the project.
- 5.1.5 The results are summarised in the Results Section 6.1 with the detailed list in Section 14.3.2.

5.2 Geophysics (BF11)

5.2.1 A magnetometer (MAG) survey in 40m grid squares, using a Bartington Grad601 twin-pole Fluxgate Gradiometer, was undertaken of Bridge Farm, including Five Acres, in 2011 by David Staveley, assisted by CAP volunteers.

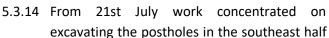
5.3 Open Area Excavation 2014 (BRF14)

- 5.3.1 In late June 2014 the area of the proposed excavation including a reasonable apron was temporarily fenced with split chestnut posts and barbed wire with access via a five-bar gate, to allow the rest of the field to continue to be used as a pasture for cattle. A replacement cattle trough was located in the area outside this enclosure and plumbed back to the water supply at the original trough within the project enclosure, providing a mains water supply for both the cattle and the project.
- 5.3.2 A rectangular open area trench, 24m x 32m (770sq.m), was opened in Five Acres over an area targeting a possible rectangular building and adjacent ditches and pits using a hired 13-ton caterpillar-tracked mechanical digger driven by experienced operators supported with a dumper truck and augmented by a wheeled JCB digger. Removal of the overburden was completed on 28th June 2014 with the removed topsoil consolidated in two linear spoil heaps set at a safe distance from the NE and SE baulks.
- 5.3.3 Mechanical excavation was taken down in spits to a depth of approximately 500mm, comprising 200mm humic turf layer and 300mm alluvial top soil, over the full expanse of the trench before trowelling back the surface by hand to clean and reveal any features.
- 5.3.4 The excavation, designated Trench 5, was located by GPS to between NGRs 542946 114560 (west corner), 542964 114586 (north corner), 542983 114573 (east corner) and 542967 114548 (south corner) with the ground levels being 4.596 AOD in the west, 4.455m AOD in the north, 4.749m AOD in the east and 4.502 AOD in the south.
- 5.3.5 Within the enclosure a marquee was erected **(5)** as a site office and the Environmental Unit, with 2 flotation tanks, was set up adjacent to the water supply and field ditch.
- 5.3.6 A site grid of 5m squares was set out over the trench with grid posts designated in metres east and north from the 100E/200N post in the west corner.
- 5.3.7 A site TBM was established at 4.585m AOD located at NGR 542944.269 114577.742 as a reference for use with a surveyor's (dumpy) level to take site levels.
- 5.3.8 Fieldwork was undertaken by volunteers and university undergraduate students under the supervision of CAP personnel.
- 5.3.9 All features revealed were sectioned using hand tools and recorded using a single context recording method for both features and finds. All works were carried out in accordance with standards and procedures of the MOLAS site manual and as detailed in the Project Design (Millum, 2014a).



5: The site on the 12th July viewed from the south towards the marquee (site office)

- 5.3.10 All excavated features were drawn in half section to a scale of 1:10 and the site was planned at a scale of 1:20. Features were also photographed with scales using a Digital SLR camera with colour slides and monochrome negatives taken with traditional SLR film cameras to provide a photographic archive (as listed in Part 2: 14.6).
- 5.3.11 Features deeper than 3.5m AOD were found to be waterlogged below this depth and in many cases had a hard iron-pan above this level that could initially be mistaken for the base of the feature. Knowledge gained in the 2013 excavations allowed us to recognise this phenomenon and instruct diggers to excavate through the pan into the crucially important deeper contexts.
- 5.3.12 Where below the waterline larger features were continuously pumped out using small submersible electric pumps powered by a petrol generator (6), whilst smaller features were bailed and sponged regularly. In both cases the water level quickly returned hampering continuous excavation and subsequent recording.
- 5.3.13 During the first three weeks excavation concentrated on the northwest half of the site including the main ditch features, two hearths and the large pit designated Feature 9 (F9). The intersection of the two main ditches was quartered with opposing quarters excavated initially in order to try to establish phasing. The two large pits were similarly quartered although this proved problematic in F9 as the pit narrowed and became waterlogged at depth so that excavation was completed in half section after recording the upper layers.





6: Two submersible pumps being used in Feature 9, the large pit/sump well

of the trench. This included the 13 large postholes plus many smaller holes not obviously allied to the main feature. The large 1m+ diameter postholes all proved to have inner post-pipes and to continue below the waterline. This made total excavation of all thirteen postholes impractical and in most cases only the postpipe was half sectioned and then fully excavated down to where

the waterlogged remains of a posts were exposed. The size of the remaining post fragments was established where possible by careful excavation and recorded as a Special Find with all the postpipes being drawn in section. In most cases only the upper layer of the surrounding posthole

was removed to establish its basic diameter. Two postholes, PH1 and PH9, were fully excavated providing an example of an outer posthole in each line of posts. Excepting the above, all other pits, postholes and stake-holes were half sectioned, recorded and then fully excavated. Linear features were sampled by 1m slots at appropriate intervals and/or targeted locations (7).

- 5.3.15 The more complicated nature of these excavations necessitated an extension to the proposed six-week excavation period with works including recording being undertaken by the core CAP team with some experienced volunteers until September 24th.
- 5.3.16 The discovery of so many waterlogged contexts required a change of sampling strategy with greater amounts of environmental samples being taken from these deposits and in specific cases



7: An end of excavation drone shot from the SW. North is top left.(Robin Day)

- the decision to put 100% of the fill through the flotation process to obtain environmental evidence/ecofacts and smaller artefacts not visible in the wet mud.
- 5.3.17 On 15th and 28th July and 2nd September, Robin Day attended the site and undertook aerial photographic surveys of the site using a drone with a mounted remote controlled video camera providing both still colour shots (7) and a video of the site and surrounding area.
- 5.3.18 The trench was finally professionally backfilled using a caterpillar-tracked 13-ton mechanical digger (8) at the end of the season so that the temporary fencing could be removed and the area returned to farming.



8: Back-filling expertly completed, the 13-ton Hitachi ZX130LCN digger awaits collection

5.3.19 The results for BRF14 are discussed in the results section 6.3 with plans and section drawings in Part 3, Section 15.

6 Summary of Results

6.1 Results from the pre-project metal detecting (DC4)

1st -5th century AD, plus residual medieval to Georgian

- 6.1.1 The DC4 assemblage of finds proved to be mainly from the Roman period being mostly coins which ranged from Galba (AD 68-69) to Gratian (AD 375-383), plus a ring key and other bronze items which included two possibly Saxon mounting plates.
- 6.1.2 A catalogue of these finds is included in Section 14.3 in Part 2 with an assessment of the coins by Dr David Rudling in Sections 8.2 and 16.6.
- 6.1.3 The two bronze mounts/dress ornaments, one axe-shaped and one discoid extend the potential activity in this location, close to the river, into the Saxon period.
- 6.1.4 A single Edward 4th groat, a half groat of Elizabeth 1st and two half groats of James 1st probably indicate either casual loss from agricultural workers during the late medieval, Tudor and early Jacobian periods, or possibly an area of specific activity such as a river crossing. A single George 3rd penny represents the Georgian era. Late 19th and 20th century coins had not been retained.
- 6.1.5 These results show the importance of liaising with the local metal detecting community and the potential extent of the Roman-period activity.

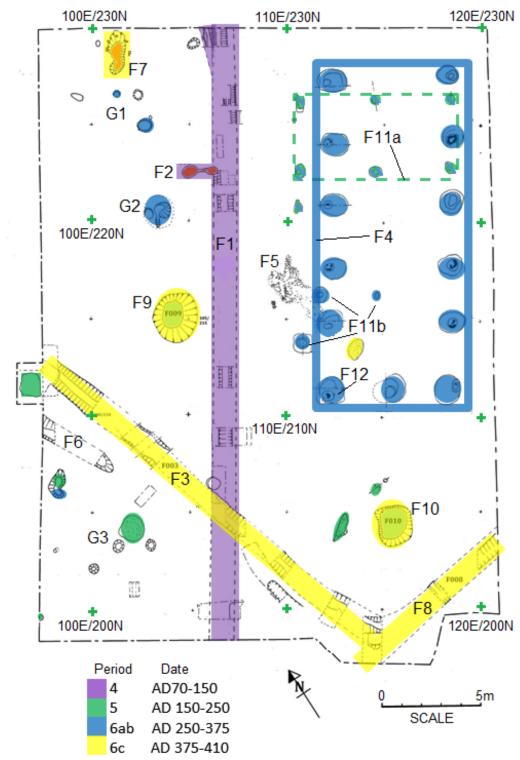
6.2 Results from Geophysical Survey (BF11)

- 6.2.1 The results from the 2011 geophysical survey had shown a potentially interesting feature of 13 round anomalies in a rectangular arrangement in a riverside meadow (Five Acres) to the south west of the main settlement enclosure.
- 6.2.2 A higher resolution image of the targeted area, produced by David Staveley in 2014, made this feature and others surrounding it much clearer and enabled us to accurately target this area for excavation.
- 6.2.3 The geophysical survey image of Trench 5 and composite images from geophysical surveys of the surrounding area can be seen in Section 15.2 in Part 3.

6.3 Results from the Open Area Excavation in 2014 (BRF14)

The main features are listed below in the period suggested by the assessment of the pottery recovered from specific contexts as shown in the phase plan (9).

6.3.1 **Prehistoric Periods 1 & 2 including Iron Age**: A lack of pre-historic pottery and worked flint suggests that this area of the site lacks any significant pre-historic occupation. A single flint tool (SF 5.34) which came from the Late-Roman period ditch F3 was patently residual.



Period	Date	Features			
4	AD 70-150	F1: a ditch running NE-SW possibly part of an enclosure. F2: a hearth/oven			
5	AD 150-250	F11a: if forming separate building. A few scattered pits			
6ab	AD 250-375 F4: a 13 post, possibly aisled building. F11a if part of F4				
6c	AD 375-410	F3 & 8: ditches on N-S & E-W axis. F9 & 10 deep pits/wells. F7 forging hearth			

9: Plan and table showing Feature locations and Phases

6.3.2 Roman Period 4: AD 70-150

F1 the NE-SW orientated ditch (contexts 5001 5002 5005 5006 [5007] 5011 [5012] 5036 5047 [5048] 5066 5083 [5084] 5086 [5087] 5101 5112 [5113] 5114 [5115] [5205] 5210 [5211] [5212]) running centrally through the length of the excavated area is the main feature that has been dated to this period. At the northeast end it divides having a secondary ditch



10: NE face of ditch F1 at 222.36N: (5086)(5101)[5087]

(5032) [5033] heading off to the north. Both ditches are dated to Period 4 by their pottery assemblages although it is suggested that the northern spur might be either later or subordinate to main NE-SW ditch. The main ditch continues to the southwest where a minority of the pottery is dated to Period 5 suggesting its possible survival into this period. Some inconsistencies observed in various slot sections suggest this ditch was recut over time. The geophysical survey shows the ditch continuing beyond the area excavated as described in Section 9.1. The main ditch averages 900mm wide by 500mm deep having mainly fairly steep sloping sides to a concave base (10) with the northern spur averaging 500mm wide by 350mm deep and having a more flowing

concave profile (see Sections in Part 3: 15.4).

F2 the 'Banjo-shaped' Hearth (fills 5017 5064, cut [5173]) (11) located on the NW side of the central ditch (F1) is also likely to be from this period. This feature was excavated as 1700mm long by 600mm at its widest, narrowing to just 100mm in the SE end channel where it was truncated by the ditch (F1) (see section \$13.3 in Part 3: 15.5).

6.3.3 Roman Period 5: AD 150-250

A large pit, (fill 5111), midway down the NW baulk and partially truncated by the late 4th century ditch (F3) would seem to originate from Period 5 despite some later pottery which probably infiltrated the main context when cut by the later ditch. This truncation and its location against the baulk made assessing the dimensions of this feature difficult but it was excavated to a depth of 800mm where it was 2500mm across its NE-SW axis (see section \$33 in 15.6).



11: The 'banjo-shaped' hearth F2

G3: 6 smaller postholes (cuts [5042] [5044] [5046] [5152] [5060] [5062]) plus other features (cuts [5040] [5069] [5073] [5078]) are a loose, possibly unrelated, group in the far west corner of the site some of which could originate from this period although others appear to be later (see sections in Part 3: 15.10.3).

Two **shallow pits** (cuts [5091] [5099]) (see sections in Part 3: 15.8) located just north of the large pit F10 contained pottery from this period.

F11A six smaller postholes had no conclusive dating evidence and could either be of this period

or be contemporary with building F4 of Period 6. The postholes (contexts 5177 [5178], 5179 5254 [5180] [5255], 5183 5258 [5184 5259], 5185 [5186], 5187 [5188], 5235 5267 [5236] [5268]) were observed to form a possible rectangle at right-angles in axis to that of the 13-post building F4 (12 & 13). The edges of some of these postholes were difficult to define as



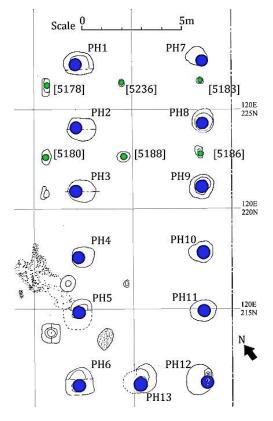
12: The 6 postholes of F11A marked with ranging poles

cutting through river gravels and in most cases it was probably only the postpipe that was observed and excavated. These were in the region of 300-440mm in diameter and whilst

originally thought to be only 300-350mm in depth later excavation beyond the hard ironpan layer on three of the features, [5184], [5186] & [5236], suggested that all may have extended to between 790 and 850mm in depth (see sections in Part 3: 15.7). One of the pipes [5186] was observed to have an outer posthole of 580mm diameter. All these postholes/pipes were devoid of any post remains despite some being excavated to below the water-table. The postholes appeared to be set in two parallel lines 3.7m apart in the NW-SE axis each pair being 4m from the next (13; green dots).

6.3.4 Roman Period 6: AD 250-410

F4, 13 large postholes: structure dependent on the rectangular group of posts (cuts [5117] [5119] [5121] [5123] [5125] [5127] [5129] [5131] [5133] [5176] [5222] [5139] [5223]) was most probably constructed in the late 3rd century **(13**; blue spots). The postpipes and/or post remains averaged between 400-500mm in width and were between 700-900mm below the level of the excavated trench with the top of the remains averaging at



13: Plan of the postholes forming F11A in green and F4 in blue

between 3.30m and 3.55m AOD (see sections in Part 3: 15.11). The posts were aligned in 2 parallel rows of 7 posts each on a NE-SW axis with a single post midway along the SW end. They covered an area 6.4m by 16m. Two of the 1000-1500mm diameter postholes were fully excavated, PH1 [5117] and PH9 [5133], with all timbers being removed for conservation and study. They had overall depths from the trench surface of 950 and 1200mm respectively to the base of the main cuts. In the case of PH9 the area below the remains of the post (SF5.41) included several interesting timbers from the waterlogged fill (5215),



14: Rob Wallace removing the 2nd ogee-carved timber from the largely excavated posthole 9

comprising two ogee carved timbers (SF5.42 & SF5.78), *(14)* a short section of a large beam (SF5.79) and a small stake (SF5.80) (see timber summary in Section 8.2 and conservation reports in Part 4: 16.4). These remains were all fragments of prepared timbers seemingly used as packing for the new posts. Limits on our resources and the decision to leave most of the timbers *in situ* meant that we restricted full excavation to just PH1 & PH9 with timbers extracted from PH1, PH9 and PH11. An interpretation of the structure that these remains represent is discussed in Section 9.

Two large pits, F9 (cuts [5196] [5058] [5154] [5056]) **& F10** (cuts [5095] [5158] [5103] [5156]) included late 4th century pottery sherds indicating that both had been backfilled in the last years of Roman period activity (see sections in Part 3: 15.13).

Pit/sump-well F9 proved to be the larger of the two measuring 2650mm in diameter with a

maximum depth 1560mm, having sloping relatively straight sides with a sharp break to a flattish base; although definition of the base was hampered by constant inflow of water and the river gravel layer in which it appeared to be The waterlogged nature of the lower contexts required that these 100% were sampled and put through



15: The sump-well F9 under excavation and constant pumping

the floatation process to extract the artefacts from the sticky mud. This together with the need for constant pumping of the fast-inflowing water (15) meant that excavation of this pit continued through all 6 weeks of the dig with extra time needed for processing the samples. The lower fills

of **F9** (5226 5198 5212) had pottery dating to c.AD300-370+ and coins c.AD270-376 which indicated a 4th century origin and use.

F10 a large pit (16), measured 1700 to 2000mm across and 650 mm deep. It was less rich in artefacts than F9 but did have pottery in its primary fill (5110) dated to AD.370-420 suggesting that this feature was also from the last Roman period, 6c.

F3 and F8: the two intersecting ditches,

yielded 633 sherds of pottery from the six slots cut across them which suggested a date of c. AD 350/70-400+.

Ditch F3 was excavated as 850mm wide and 500mm deep where it cut the pit at the NW baulk (cut [5014]) becoming wider and shallower as it headed southwards averaging over 1000mm wide and 400mm deep in the central slots (cuts [5104] [5031] [5207] [5019] [5209]) widening to 1600mm at only 300mm deep as it came close to F8 and the SW baulk (cut [5010]). It tended to have fairly steep sides curving to a shallow concave base (17) (see Part 3: 15.15.1)



16: Pit F10 with east [5095] and west [5103] quarters excavated



17: South facing section of Ditch F3 as it nears the NW baulk



18: East face of Ditch F8 midway slot at 118.1E 200.3N

Ditch F8 ranged from 900mm wide and 275mm deep at the SE baulk (cut [5106]) to 1100mm wide and 350mm deep as it got closer to F3 and the SW baulk (cut [5097]). It had a very steep south side and a more gently sloping north side to a gently concave base (18) (see Part 3: 15.15.2).

Hearth F7 (cut [5054]) in the north corner of the excavation trench, had two fills (5004 & 5053) containing 159 sherds of pottery which suggest that this feature was in use until the late 4th century. The irregular ovoid feature measures 2260mm by 960mm overall and has a maximum depth from the trench surface of 310mm *(19)*. Three very adjacent stakeholes (2 individually recorded as cuts [5080] & [5082]) and a possible fourth within the feature are shown in plan P4 as being on the northern edge of the hearth cut [5054] could be part of a possible superstructure of the hearth. A further stakehole or small posthole is also shown just to the NW of the feature (see figure *34* below and section drawings in Part 3: 15.14).



19: The Hearth F7 from the NW during excavation

G1: a group of **4 post holes** (cuts [5023] [5025] [5027] [5050]) just SW of F7 were dated to the general 6th period and could also have some connection to the hearth F7. Another posthole (cut [5066]) from this period was excavated on the NW side of the central ditch F1 close to the NE baulk and so may have a connection to the activity in this area (see sections in Part 3: 15.10.1). **G2:** a group of **2 postholes/small pits** (cuts [5020] & [5074]) just west of F2 contained pottery suggesting a date in the early 4th century, i.e. Period 6b. G2 therefore cannot be chronologically related to the banjo-hearth F2 but could be linked to the G1 group with [5020] possibly being in a direct line with [5027] and [5050] although 5m to the SW **(9)** (see sections in Part 3: 15.10.2). **F11B:** consists of 3 smaller postholes (cuts [5190] [5253] [5239]) in the western corner of F4 adjacent to the flint metalled surface F5 and shallow burnt depression (cut [5174]). The postholes can only be dated to the wider Period 6 and do not seem to form any rational arrangement with the building F4 so as with F11A could relate to a discrete structure/activity (see Part 3: 15.12). A fourth **shallow pit** (cut [5174]) located in the south corner of F11B may also date to this period (see \$4.4 in Part 3: 15.12).

F6: (cuts [5016] & [5046]) a small linear running parallel to F3 at the NW baulk has not been dated. It seems to terminate in this area (see sections in 15.9) but a similar feature (cut [5151]) that appears close to the SW baulk could possibly be a truncated continuation (see Part 3: 15.16.2).

A **small gulley** [5161] (see Part 3: 15.16.1) runs around the NE of an area of flint metalling **F5** and either discharges into ditch F1 or is truncated by it. Neither gulley or flint surface had any dating evidence.

6.3.5 Saxon/post-Roman phase of Period 7 - 5th century AD:

During the early years of this period the ditches F3 and F8 were possibly still in use.

7 Summary of Site Archive

7.1 Work carried out on the Stratigraphic Archive

The site records have been checked and consolidated with those for Features, Contexts, Site Levels, Finds & Special Finds, Environmental Samples and the Drawing and Photographic Registers, have been copied into a computerised database (as per tables in Part 2: Section 14). The contexts have been placed into preliminary phases using stratigraphic information where applicable, adding dating provided by the specialist artefact reports. Illustrations have been produced to accompany the results showing the location and preliminary phasing of the features. Specialist reports have been commissioned on the artefact assemblages and are summarised in Part 1; Section 8 and included in full together with their catalogues in Part 4.

7.2 Stratigraphic Site Archive

Table of original paper records	Quantity
Feature Sheets	12
Feature Register Sheets	1
Context Sheets	272
Context Register Sheets	16
Environmental Sample Sheets	55
Environmental Sample Register	6
Floatation Register	2
Sample Residue Recording sheets	3
Plan Register Sheets	1
Planning drawing film sheets	31
Section Register Sheets	6
Section drawing film sheets	35
Levels Sheets	14
General Finds Register	6
Special Finds Register	6
Special Finds Sheets	106
Photographic Register	18

8 Summary of Finds and Analysis of Potential

8.1 Quantification of Finds

All of the finds collected have been washed, catalogued and marked, where appropriate. The archive has been housed in sealable plastic boxes and deposited in the Culver Archaeological Project archive store at Bridge Farm. The various material assemblages have been quantified, catalogued and assessed by specialists. The iron residue, burnt clay and ceramic building material assemblages have been reduced to appropriate samples after analysis where such procedure was felt appropriate by the specialist consulted.

The following table gives the quantities of each material assemblage collected and assessed and the order in which the following specialist summaries and the full assessments in Part 4 appear. This order has been chosen to be consistent with that established in the 2013 excavation report (Wallace, 2014).

Material	Find Type	Period	Quantity	
Prehistoric flint	Excavation	Residual / derived	1 worked flint	
Pottery	Excavation	Roman period	7184 sherds = 70,184 gms	
Ceramic Building	Excavation	Roman period	916 pieces = 39,073gms	
Material	EXCAVALIOII	Some post-med	7 pieces = 472gms	
Burnt Clay	Excavation	Roman period	511 pieces = 3270gms	
Precious metal	Excavation	Roman period	1 ring fragment <1gm	
Conneralles	Excavation	Roman period	19 = 149gms	
Copper alloy	EXCAVALION	And undefined		
Lead	Excavation	Roman + undefined	19 = 717gms	
Iron	Excavation	Roman period	586 = 5457gms	
lion	EXCAVALIOII	Med/Post-med/undefined	165 = 2070gms	
		Roman period	34 coins (AD 68-383)	
Coins	Excavation	Medieval	3 coins (1279-1470)	
Coms	& surface	Early post-medieval	3 coins (1582-1619)	
		Georgian	3 coins (1770-1806)	
Glass	Excavation	Roman period	106 = 160gms	
Ciass	Excavation	18 th – 19 th century	5 = 32gms	
Clay Pipe	Excavation	17 th century	29 pieces = 88gms	
Iron residues	Excavation	Roman period	2,360 pieces = 81,617gms	
Incl. slag & fines	LXCavation	Post-medieval intrusion	1 piece = 16gms	
Geological material	Excavation	Roman period	1155 pieces = 47,814gms	
incl. burnt flint	LACAVACION	Noman period	1100 pieces - 47,014gilis	
Animal bone	Excavation	Roman period	204 bone fragments	
Timbers	TimbersExcavationRoman period25 conserved		25 conserved pieces	
Plant material	Excavation	Roman period	23 assessed of 48 samples	

8.2 Excavation Finds Summaries

(See Part 4, Section 16 for full specialist assessments and finds catalogues)

8.2.1 Flint – no assessment

Only one prehistoric flint was collected during excavation. It came from a Late Romanperiod context.

8.2.2 Pottery: Dr Malcolm Lyne (2018)

Introduction

The excavation yielded 7,361* sherds (73,026g*) of pottery from 130 contexts dating between c.AD.70/100 and the 5th century, with most belonging to the late Roman period (*includes sherds discovered in CBM assemblage during 2019 which includes 28 sherds of amphora weighing 1346.53g and SFs 5.28 & 5.64 not included in this assessment). A few fresh handmade sherds from a very crude vessel with coarse crushed flint filler were present in the pottery assemblages from the late 4th century ditches F3 and F6 which may be Sub-Roman in date. A further 2204 sherds (4572) of pottery were retrieved from environmental samples which were mostly ground-up and abraded.

The Assemblages

None of the pottery from this trench appears to be prehistoric and an absence of Gallo-Belgic imports suggests that pre-Flavian occupation is also absent.

c.AD.70-270

The most significant pottery assemblages of this date come from the various cuts across Ditch F1. This feature bifurcates at its northern end, indicating a recut during its life. The fills of cuts 5007 and 5048 across the eastern ditch (Contexts 5006 and 5047) yielded 185 sherds (1617 g.) of pottery. This assemblage includes nothing which needs to be later than c.AD.120/150. The fills of cuts 5033 and 5087 across the western ditch (Contexts 5036 and 5086) produced 197 sherds (2964 g) of pottery of very similar date range. On balance, it seems likely that the eastern ditch is the earlier of the two. The fills of the F1 single ditch to the south (Contexts 5101, 5114, 5204 and 5210) yielded a further 284 sherds (5014 g.) of pottery largely datable to c.AD.70-150 but also including a little c.AD.150-250 dated material.

The two fills of furnace F2 fired from the side of Ditch F1 yielded 68 sherds (606 g.) of pottery with a similar c.AD.70-250 date range.

The largest assemblage from the site is the 710 sherds (5733 g.) from a large ill-defined pit below and also cut by Ditch F3 and include material from both features, with that from the pit being of 3rd c. date and including products of the nearby Wickham Barn kilns.

c.AD.270-400+

The pottery dates for post hole structure F4 are ambiguous. The fill of the constructional post pit for Posthole 9 (Context 5132) yielded 10 sherds of pottery, the latest fragment of which came from a coarse-sanded Wickham Barn kilns jar (c.270-350). A somewhat larger, 3rd century, 72 sherd assemblage was retrieved from the post pit for Posthole 13, the latest fragment of which dated to after AD.270. There were no other constructional post pit assemblages but it seems likely that Structure F4 was erected during the last years of the 3rd century. The various post-pipes yielded very little pottery and what there was tended to be 3rd and 4th century in date and not deliberately deposited. The pottery from the post-pipes for Postholes 8 and 10 includes post AD.370 sherds, indicating that the building probably survived until the last years of the 4th century.

The fills of Pits F9 and F10 yielded 568 sherds (5988 g.) and 218 sherds (1771 g.) of pottery respectively. The individual fills in both pits all included late 4th century sherds indicating that both features had been backfilled in the last years of Roman occupation. The waterlogged lowest fill of Pit F9 contained a 46 sherd pottery assemblage dating to c.AD.300-370+.

Cuts 5010, 5031, 5104, 5106, 5207 and 5209 across Ditches F3 and F8, and clearance 5109 over the former, yielded 633 sherds (7560 g.) of pottery between them. The material suggests a late date of c.350/70-400+ for the features, with fresh sherds from one or more handmade pots with coarse crushed-flint and ironstone filler suggesting that pot continued being dumped in them well into the 5th century. The rest of the pottery includes significant quantities of sherds in East Sussex Ware fabric C1P with pre-fired hard siltstone grog, Alice Holt/Farnham greyware, Overwey/ Portchester D, Oxfordshire Red Colour-coat and Pevensey ware.

Structure F7 in the north-west corner of the trench comprises a hearth with two fills (Contexts 5004 and 5053) containing 159 sherds (1719 g.) of pottery, most of which is residual but includes one sherd each from a Thundersbarrow storage-jar (c.350-400+) and an Overwey horizontally-rilled jar. The latter could be as early as AD.325 in date but is more likely to date between c.AD.370 and 420 this far from source.

8.2.3 Ceramic Building Material (CBM and burnt clay): Luke Barber (2020) Introduction

The excavations recovered 1435 pieces of ceramic building material, weighing 42,815g, from 100 individually numbered contexts. Most deposits produced some ceramic building material in small to medium quantities, typically between 10 and 30 pieces, although the largest context group consisted of 294 pieces (12,430g) from general cleaning (5000). The condition of the assemblage is poor; the material is notably fragmented and most shows notable signs of abrasion. The pieces are often too small to be diagnostic of form. The abrasion on these suggests most have been reused and/or reworked. Nearly the whole assemblage is of Roman date, being recovered from a number of contexts spanning the 2nd to 4th centuries (Periods 4 to 6).

Romano-British

The vast majority of the assemblage is of this period (1427 pieces weighing 42,343g). Despite being considerably smaller than the 2013 assemblage the diversity of fabrics in the current assemblage is much greater than the 17, including burnt clays, identified then. Only two of the 2013 fabrics are not present in the 2014 assemblage, however, 10 new fabrics were recognised in the 2014 assemblage. The fabric series is summarised in the full report Part 4: 16.8.

Virtually the entire Roman assemblage was recovered from unstratified or Late Roman (Period 6) deposits. As such the relative lack of early contexts gives little chronological range that may have helped define the date range of certain fabrics. This was also noted, albeit on a lesser scale, in the 2013 assemblage where most of the fabrics were in evidence during the Early Roman period; the degree to which they continued in production and/or were re-used in the Late Roman period being impossible to ascertain. To what extent the 10 new fabrics represent Late Roman types is uncertain due to the few Early Roman deposits. Period 4 and 5 deposits produced a mere 120 pieces (1617g) which did, however, provide a full range of forms, including brick, daub, all roof tile types and box flue. The wide range of fabrics present suggest either more than one workshop was producing the material and/or the material covers a significant chronological span. A number of the fabric variations use similar tempering and could quite easily originate from the same workshop and the suite of inclusions would have been easily available to the Bridge Farm

settlement. It is quite probable that some of this material was made on site, perhaps over a period of time. However, the assemblage may also include demolition material from buildings on or off the settlement site.

Brick fragments (123 pieces weighing 18,944g) are the most common type. This is frequently seen in re-used assemblages as the brick fragment provide the easiest material for re-use in walls and post-packing. The brick fragments all fit within a 29 to 52mm thickness range. There are a number of over-fired examples in this group, some with surface vitrification but no definite wasters are present. Markings are rare but include three examples with a U-shaped batch-mark and one with a criss-cross mark from ditch F3 (5104) Period 6c. Another example has a finger imprint as well as a textile imprint from F9 sump/well (5085) Period 6c.

Tegula tile fragments (possibly up to 120 pieces weighing 7,318g) are also common in the assemblage and range between 14 and 28mm thick. As noted for the brick, there are a number of over-fired examples in the assemblage and at least one probable waster (a mis-formed example in R1 from the pipe of PH10 (5135) of F4). Some 16 examples of flanges are present though a number do not have their full profiles surviving. The complete flanges are of similar types to those seen in 2013: mainly of upright squared type though some have chamfered internal edges. There is no patterning between the form of flange and fabric type. Considering the size of the assemblage there is not a great variation in form though flange heights from the base of the tile range between 32 and 50mm. Several flanges have either the upper or lower cutaway, the latter always being the simple chamfered type. Unlike the 2013 assemblage a couple of the current tiles in fabric R1 do carry batch marks comprising a single arced line from the pit in NW baulk (5111) and a triple arced mark from the trench surface layer (5000).

The 25 **imbrex** tile fragments (weighing 1,778g) range greatly in thickness from 11 to 19mm, but these tiles are notorious for their variable thicknesses depending on which part of the tile is measured. As with other types, there is a range of firing represented, including a few very overfired examples.

The presence of 40 **box flue** tile fragments (weighing 3,206g) is quite notable, particularly in the absence of a building with a heating system. Whether one or more heated buildings were situated within the settlement (most likely baths) remains to be seen. However, the box flue could also derive as wasters from on-site production as some are overfired and/or as material imported from other sources as general hardcore and building material. Thicknesses are as variable as noted for the imbex tiles: 13-24mms. Most pieces have been combed with three, four, five or six-toothed combs. The combing is typically vertical/parallel and in V-patterns, though criss-cross and wavy patterns are also present.

There is a notable quantity of **burnt clay** pieces, some 543 weighing 3,545g. These are usually amorphous in form but a few have flattened faces and a piece from post-pipe (5201) in PH8 has a *c*.15mm diameter wattle impression. As such this material could be oven/hearth lining or daub. It was found in most contexts with 32 amorphous pieces (77g) coming from the F7 forging hearth. Other forms of note include the three small pieces of briquetage from pit fill (5111) and post-hole PH1 (5251). These hint at some contact with salt-production, probably in the lower Ouse valley.

8.2.4 Metal Finds (excluding coins): Luke Barber (2020)

The archaeological excavations recovered 791 pieces of metalwork, weighing 8396g, from 99 individually numbered contexts. This total includes 256 pieces, weighing 1066g, from 37 of the

environmental residues as well as a number of metal detected pieces from the spoil and surrounding ploughsoil. A range of metal types and periods are represented and the combined assemblage is characterised in the Table below.

Period/type	Unstratified	Roman	Early Roman	Late Roman	Totals
		(General)	(Phases 4-5)	(Phase 6 ^h)	
No. contexts	10	12	13	64	99
Iron	104/1669g	71/581g	49/658g	527/4619g	751/7527g
Copper Alloy	16/147g	-	-	3/2g	19/149g
Lead	19/717g	-	-	-	19/717g
Silver	1/1g	-	-	-	1/1g
Pewter	1/2g	-	-	-	1/2g
Totals	141/2536g	71/581g	49/658g	530/4621g	791/8396g

Table 1: Characterisation of metalwork assemblage by spot dated context.

The vast majority is, or is strongly suspected of being, Roman in date. This material is generally in a poor state of preservation, with the few post-Roman pieces being in notably better condition. The ironwork has not survived well, suggesting a slightly acidic burial environment, probably a result of both the natural geology and farm chemical agents. Typically, the lead is in fairly good condition, though with notable coatings of white corrosion products, but the copper alloy items are very poorly preserved/fragmented.

The Roman ironwork is totally dominated by general-purpose nails with circular low-domed heads with diameters between 14-17mm which account for 586 items (5457g). Most are broken but where complete, lengths range between 45 and 75mm. There is no notable difference between the 46 early Roman examples and the 478 late Roman examples. There is also a scatter of large structural nail fragments, often with heads in excess of 20mm across. None are complete though one fragment shows them to have been in excess of 135mm long (posthole PH4, F4 building, fill 5122,). Nails were recovered from virtually all contexts, including 328 pieces from well F9 and 338 examples associated with the F4 building, however, although some of these came out of post-pipes (and could therefore be from the building itself) the majority were from the primary post-hole construction backfills. This suggests that much of the material may represent a background scatter from other earlier timber structures, though whether this was just refuse or deliberately stockpiled for reworking is uncertain. No other definite structural ironwork was recovered.

The assemblage also contains 47 (87g) hobnails, the only diagnostically Roman ironwork in its own right. All are of similar size ranges to the 59 recovered from the 2013 excavations. Hobnails were recovered from 5 unstratified and 2 early Roman deposits, with the remainder being recovered from late Roman or general Roman contexts. They were recovered from all types of context including eight from well F9, two from pit F10 and 29 associated with the post-holes of building F4 with 16 of these were from post-pipes and the remainder from the initial post-hole backfills. As such it is again suspected that most of this material is a general background scatter. However, the general quantities recovered from the site so far indicate hobnail loss was quite high possibly due to the sucking qualities of the clay-rich subsoil.

Other stratified items of dress were very limited: There were a few scraps from a possible brooch in hearth F7 and a plain copper alloy finger ring with adjustable 15-18mm diameter band from sump/well F9 (fill 5225). Unstratified items of Roman dress include an iron pin with spherical copper alloy head, part of a trumpet brooch that can be paralleled to a 1st- to 2nd century example illustrated by Hattatt (1989, No. 954), a zoomorphic plate brooch of the 2nd century in the form

of a hound with red enamel inlay *(20)* (cf Hattatt 1989 No. 1188) and a complete key-ring *(21)*, both from the surrounding field. The spoil from Trench 5 yielded a partial silver ring bezel with inscription ([V]TER [F]ELIX (use with good luck) of 4th century type *(22) (pers comm.* Richard Hobbs). This item was classified as 'Treasure' (2014 T809) and reported to the East Sussex coroner with the Crown's interest disclaimed by The British Museum.

Other Roman metalwork includes what appears to be (prior to x-ray) 10 fragments of knife/tool blades, typically measuring between 22 and 28mm wide. Once again, these pieces have no obvious concentration.

All lead items came from unstratified deposits and thus are of uncertain age. These included two probable spindle whorls; one of disc form measuring 21mm in diameter, 1.4mm thick and with a 3.5mm diameter central perforation. The other is more typically Roman being of low domed profile, with a 30mm diameter, 9mm thickness and 9.7mm diameter central perforation. The assemblage includes six possible weights, some merely sheet discs but the one is a biconical steelyard weight and the largest is of conical form with a 44mm diameter base, a height of 43mm and weighing 283g with a suspension loop at the top and two vertically drilled 6mm diameter holes near the base edge (23). There is also a copper alloy arm fragment possibly from a heavy steelyard balance, though no parallel was established during initial work for this assessment. Nine fragments of lead and copper alloy molten and sheet off-cut waste from unstratified deposits strongly hints at some non-ferrous metalworking at the site which may also have been during the Roman occupation. However, some caution is needed as unstratified deposits have also produced a scatter of post-Roman finds, in particular three pieces of



20: enamel 'hound' brooch



0 30mm **21:** complete key ring



22: silver 'VTER FELIX' ring bezel



23: conical lead weight

decorative mounts with Early Anglo-Saxon style relief decoration from the surrounding field. There are two buckle fragments, part of a frame and a housing plate, that could be of Saxon or medieval date and certainly the key bit from the same ploughsoil appears to be medieval. The presence of potential Early Anglo-Saxon material, even if from the surrounding ploughsoil, is of interest as it hints that activity at the site may have extended into that period.

It is clear from the clay pipe assemblage that the land was being quite intensively used during the 17th century and the metalwork includes at least one probable early post-medieval lead cloth

seal, a simple prick spur fragment and a decorative (bridle?) mount. There is also an 18th century musket ball and pewter Napoleonic military button of the 88th regiment of foot (raised in 1793) as well as a fragmentary toy lead soldier of the later 19th to early 20th century.

8.2.5 Coins: Dr David Rudling (2021)

This assemblage contained 19 previously surface detected by David Cunningham and the 24 coins recovered from the 2014 excavation including 34 Roman coins.

David Cunningham's Coins from Five Acres (DC4)

A total of 19 coins were found in this field prior to excavation. The 12 Roman coins comprise a denarius of Galba (AD 68-9), a sestertius of Antoninus Pius (AD 138-161), a sestertius of Gordian III (AD 238-244), an illegible 1st-early 3rd century sestertius, three 1st-early 3rd century asses/dupondii, an antoninianus of Gallienus (sole reign: AD 260-68), bronze coins of Constantine II as Caesar (GLORIA EXERCITVS type, 2 soldiers and 2 standards: AD 330-335), Constans (VICTORIAE DD AVGG Q NN, two Victories type: AD 347-8) and the House of Valentinian (SECVRITAS REIPVBLICAE, Victory walking left type: AD 364-78), and an unclipped silver siliqua of Gratian (VOT/VX/MVLT/XX in wreath type: AD 375-83). This group of coins, from due west of the main settlement but in an area with intense geophysical survey anomalies, considerably increases the overall date range for the wider site at Bridge Farm, starting with an issue of Galba in the 1st century and ending with a coin of Gratian in the late 4th century (24). The fact that the siliqua of Gratian is unclipped and in very good condition with few signs of wear, shows that it was probably lost before c. AD 390.









Galba AD 68-69 AR denarius

Gratian AD 375-383 AR siliqua

24: the earliest and latest identifiable coins from pre-project metal detecting

Five Acres also yielded six medieval/early post-medieval coins: an Edward I/II (1279-1327) silver penny of Canterbury; part of another, but probably later, silver penny; a silver groat (4d) of London issued by Edward IV (first reign: 1461-70); a silver halfgroat (2d) of Elizabeth I (fifth issue: 1582-1600); and two silver halfgroats of James I (1604-19). The reason for this concentration of medieval and early post-medieval coinage is unknown, perhaps a previously unrecorded site or a river crossing? Another find was a copper penny of George III dated 1806.

Coins from the Excavations in Five Acres in 2014 (BF14)

Only 8 of the 22 Roman coins recovered in 2014 were discovered during actual excavation work, the others having been found with the use of a metal detector, mainly from the spoil heaps but also in four cases during metal detecting in the wider field beyond the excavations (these four coins included two Diva Faustina issues of c. AD 141-161).

Overall, the Roman coin assemblage of 2014 is similar in composition to earlier discoveries in the same field. One difference is that there was no coin which need date to the 1st or early 2nd century (DC4 discoveries included a denarius of Galba dating to AD 68-9). The 1st-early 3rd century generally however is again represented by various possible but illegible Æ coins, and this time identifiable issues dating to the period c. AD 140 to AD 190 were three Æ coins of Faustina

Senior (AD 139-161), one of Faustina Junior (AD 146-175), two coins of Lucius Verus (AD 161-9), and a base/once plated denarius of Commodus (AD 177-192). Whilst some of these coins may have continued in circulation during the first half of the 3rd century, there is perhaps a surprising absence of coins which can definitely be attributed to this period (the DC4 coins included a sestertius of Gordian III: AD 238-244). Even more surprising is the fact that there are only two radiate antoniniani coins (both barbarous issues of c. AD 270-85). This compares with a single antoninianus of Gallienus (AD 260-8) found by Cunningham. Normally both regular and irregular coins of this type are very common. There is then a gap in the coin sequence, as with the DC4 coins, until the 330s/40s, another time of often prolific coin use/loss. Identifiable coin types include: Constantine II as Caesar (GLORIA EXERCITVS type, two soldiers and two standards: AD 333-4) and Constans as Augustus (VICTORIAE DD AVGG Q NN, two Victories: AD 347-8) (both types also in DC4 assemblage). The BF14 Roman coin assemblage ends with two barbarous issues of the House of Constantine (FEL TEMP REPARATIO, soldier spearing a fallen horseman: c. AD 350-60). It thus lacks any coins of the House of Valentinian which is represented by two coins in the DC4 collection.

The stratified coins from the excavations include a commemorative Divus sestertius of Verus (c. AD 169) from the top of the large pit at the NW baulk. Given the worn condition of this coin it

could have remained in circulation until the mid-3rd century, after which such coins ceased to be issued or used. Four coins were recovered from the lower fills of the well (F009) including a Barbarous Radiate of c. AD 270-285 (context 5212), a coin of Constantine II as Caesar of AD 333-4 (context 5212) (25), a barbarous copy of a House of Constantine fallen horseman coin of c. AD 350-360 (context 5198), and another unidentified mid-4th century





25: coin of Constantine II AD333-4 from the base of the well F9

bronze coin (context 5198). The dating range of these four coins, c. AD 270-360, compares favourably with the dating of the pottery assemblage from the waterlogged lowest fill of the well/pit which Malcolm Lyne gives as c. AD 300-370+.

The two Georgian copper coins found in 2014 are both close in date (1770-5 and 1806 or 1807) to that of the DC4 copper penny of George III (1806).

8.2.6 Glass: Luke Barber (2020)

The 2014 excavations recovered 111 pieces of glass, weighing 192g, from 32 individually numbered contexts, of which, 39 pieces (118g) were recovered from unstratified/topsoil deposits with the remainder being recovered from deposits dated to the Roman period. On the whole the material is in good condition, exhibiting no or negligible surface corrosion. This is almost certainly the result of the fact that virtually the whole assemblage appears to be of Roman date and thus of good quality manufacture. Although most pieces are quite fresh in appearance, a few are slightly abraded, suggesting some at least have been subjected to reworking. Typically for a Roman assemblage, at 1.7g, the average size of glass shard is very small and similar to the average of 1.9g from 2013. The only definite post-Roman pieces consist of five shards (32g) from the trench surface (5000) that are from 18th- to 19th- century beer/wine bottles.

Nearly the whole assemblage was recovered from Late Roman deposits, though there are many that currently defy phasing. The range of colour shades and forms is not unusual for the Roman

period and most would be in keeping with the mid/later Roman period. Very few feature shards are present but, quite typically bottles, both square and cylindrical, are the most common recognisable forms. Decoration is very sparse. A 1g fragment from a colourless cylindrical vessel has traces of etched lattice decoration (5000) and two pieces (2g) from another colourless cylindrical vessel, probably a cup or bowl, have embossed knobs (tooled point) decoration came from ditch F3 (5020). This decorative type is typical of the 3rd century. Fineware forms include a scatter of bowl, jug and beaker fragments, including a probable bowl shard in blue-green glass with a diameter of *c*. 160mm and thickened everted rim (post-hole PH04. F4 building (5122). There is also a 2g fragment from the kicked base of a small unguent bottle in pale green glass from pit F10 (5167). The two beads recovered may well be losses rather than material for recycling. The pieces consist of a 4mm long by 3mm diameter green example (unstratified) and a 4.8mm long, 3.4mm diameter example in amber glass from PH2 F4 building (5118). Both mattgloss and gloss-gloss window glass is present demonstrating a wide chronological span.

8.2.7 The Clay Pipe: Luke Barber (2020)

29 pieces of clay pipe, weighing 88g, were recovered. With the exception of a single intrusion in posthole fill (5003) all were from unstratified or ploughsoil contexts and were likely of 17th to early 18th century date.

8.2.8 The Metallurgical Remains: Luke Barber (2020)

The 2014 excavations recovered considerably more slag than the 2013 investigations despite its much smaller footprint with 2360 pieces, weighing 81,617g, from 110 individually numbered contexts. These totals include just over 10.5kg from 48 environmental residues.

The assemblage includes a notable quantity of material that is not really slag at all. The iron concretions are formed from percolating iron oxides washing through the soil profile and forming a concreted layer, often incorporating clasts of flint pebbles and other stone and are natural to the floodplain. The magnetic fines consist of granules of ferruginous stone and clay whose magnetic properties have been enhanced through burning. They are a common fine in environmental residues when they are scanned with a magnet. Although the burning could relate to metalworking, it could equally be caused by domestic hearths, bonfires or stubble burning.

A number of different types of true slag are present in the assemblage, most of which are associated with iron-working. One of the exceptions is the fuel ash slag, a lightweight waste that can be the result of any high temperature process, including domestic hearths. A few of the current pieces have glassy self-vitrified faces but all are of amorphous form. Fuel ash slag is more common in the Late Roman period but this is probably due to the higher number of Late Roman contexts within the excavation. The assemblage is characterised in the table below with non-slag material indicated by italics:

Type Context Period >	Unphased	ERB: Phases 4-5	LRB: phases 6-7	Totals
Iron concretion	160/3320g	18/1034g	812/9122g	990/13,476g
Magnetic Fines	379g	413g	6665g	7457g
Fuel ash slag	9/150g	2/38g	34/429g	45/617g
Iron working materials				
Hearth Lining	18/398g	12/234g	52/788g	82/1420g
Smelting slag (tap)	2/32g	-	7/706g	9/738g
Smelting slag	4/802g	1/200g	7/1604g	12/2606g
Smithing slag (forge bottom)	2/628g	2/748g	-	4/1376g
Hammerscale	3g	1g	19g	23g

Undiagnostic iron slag (dense)	32/3582g	2/452g	18/7186g	52/11,220g
Undiagnostic iron slag (aerated)	361/10,836g	165/10.622g	639/21,210g	1165/42,668g

The 82 pieces of hearth/furnace lining usually have heavy vitrification on at least one of their surfaces, frequently in association with undiagnostic iron slag and most appear to be associated with iron-working. The linings are usually of oxidised silty or sandy clay, though a few reduced examples were present. The material appears in contexts of all periods and indeed is spread throughout most feature groups. The forging hearth (F7) produced just 5 pieces (148g) and 16 pieces (207g) were recovered from the post-hole fills of the building (F4).

A quantity of tap slag from iron smelting was recovered from Late Roman deposits, though most pieces are worn and could be residual/reworked waste from Early Roman activity. Dense iron slag, almost certainly from smelting but without the characteristic 'flow' of tap slag, totalled 12 pieces (2606g). Although one piece came from an Early Roman deposit (phase 5 ditch/pit [5069]) most, where dated, came from Late Roman deposits. The material was recovered from a number of different deposits and being quite worn it is suspected that the whole smelting assemblage is residual, though to which century it belongs is uncertain.

Smithing slag appears to be far more common than in BRF13 and whilst the forge bottoms and hammerscale are the only properly diagnostic pieces, it is strongly suspected that most of the undiagnostic iron slag also relates to smithing activity. Typically, the slag is dark grey and aerated, occasionally with charcoal inclusions, with a rust-brown exterior. The material is present in both Early and, far more commonly, Later Roman deposits. Of note are the remains of four planoconvex forge bottoms ranging in diameter from 80 to 105mm and in thickness from 32 to 54mm. The only securely stratified forge bottoms were recovered from the Period 4, central ditch F1 and Period 5 hearth F2. Their presence suggests smithing was occurring in the Early Roman period. The hearth also included 16 pieces of aerated smithing slag (2106g) as well as iron concretions and magnetic fines. The absence of hammerscale from the hearth is notable and it is uncertain if the presence of the slag is actually just residual material rather than definitely being associated with it. An early date for smithing activity would be in keeping with 6445g of probable iron smithing waste being recovered from 13 of the F4 post-holes. Clearly there was significant quantities of forging waste in the area by the start of the Late Roman period that got accidentally incorporated into cut features. However, given the quantities of smithing waste, including hammerscale, in the Period 6 deposits it is most likely that smithing continued throughout.

8.2.9 Geological Material: Luke Barber (2020)

The excavations at the site recovered 1155 pieces of stone, weighing just over 47.5kg, from 80 individual contexts. These totals include 810 pieces (8815g) from 32 different environmental residues. A significant proportion of the assemblage is composed of unmodified pieces of stone that occur naturally on the site. The most common of these is the ferruginous fine sandstone that is very well represented by heavily water-worn small flat pebbles that have been worked down from the Weald by alluvial action. The silty iron concretions may actually represent iron-panning on the site itself as such deposits are not uncommon in the Head and alluvial deposits of the area. The ferruginous conglomerate was previously thought to derive from fissure fill deposits on the Downs, but the current excavations have provided better examples containing pebbles, showing them to derive from the Ouse valley itself.

Chalk and flint, that must have been brought up-river by man from the Downs, is also present. The lack of these materials in the collected stone assemblage is due to collecting policies but these types were undoubtedly deliberately imported to the site for basic construction tasks. The collected stone includes a significant quantity of flint that has been heat-affected.

Some 83 pieces of stone can be sourced to the Wealden Beds, mainly up-river of the site. Some of these may well have been washed downstream naturally and a number show water-rounding, but much was probably deliberate brought in for construction. This is certainly the case with the Sussex-type marble pieces that were all recovered from the F9 sump/well. The vast majority do not show signs of having been worked but there is the edge from a probable ashlar block in Wealden Clay Ironstone from the trench surface (5000). A weathered Tunbridge Wells sandstone cobble with high wear polish on one concave face from the Period 6 ditch F3 (5021) has clearly been pressed into service as a sharpening stone.

Querns: Fill (5225) of F9 sump/well produced a single fragment from a 32mm thick upper stone of an Upper Greensand rotary quern. As with the 2013 assemblage there are two different types of Lower Greensand (Hythe Beds Sandstone) present, both of which appear to have been used solely for rotary hand-querns. One is the typical Lodsworth type with grey stringers from the West Sussex quarries (Peacock 1987), the other is more common and consists of a slightly softer type with no stringers but denser glauconitic grains, probably from a West Sussex source although a closer one cannot be ruled out. The earliest quern was a 40mm thick Lower Greensand fragment recovered from Period 4 deposits in the F1 central ditch. The remainder of the lower greensand querns were from Period 6 or unstratified deposits. The fragments are notably small and although the presence of upper and lower stones is in evidence no pieces were large enough to establish stone diameter. Thicknesses range between 26 and 75mm and one piece from PH5 (5229) of the F4 building shows edge wear suggesting it was used for sharpening after breakage. Other quern types include a number of amorphous pieces from German lava querns and a 41mm thick fragment of Millstone Grit. All were from Period 6 or unstratified deposits though usually German lava is more common in the earlier part of the Roman period suggesting a high degree of residuality. There is no particular concentration of quern fragments although five came from the examples from the stone layer in F9 sump/well which could indicate a greater number amongst that not retained. Pieces of quern were also recovered from most ditches and the postholes associated with the F4 building. As such, the material is considered to be a dense background scatter of material within the settlement.

The remaining stone consists of two Kimmeridge shale fragments from two separate post-holes of the F4 building, neither with any obvious form, and a few pieces of post-medieval coal/coal shale from the trench surface (5000).

8.2.10 Animal Bone: Dr Ellie Williams (2018)

Introduction

The faunal remains derived from a series of features dated to the Roman period, with the majority recorded from contexts related to a well/pit (F9). Preservation was generally reasonable to good across the different contexts, but there was a high degree of fragmentation, including from modern breaks.

Results

From the 204 bone fragments analysed, elements from the following species were represented: cattle, equid, sheep/goat, pig, and red deer. The small number of bird, fish, amphibian and rodent bones that were also retrieved, predominantly from flotation, will be examined in due course.

Three well preserved equid bones (MNI=1) could possibly indicate that horse meat was being consumed, although no evidence for butchery was recorded to consider processing in more detail. Only four pig bones (MNI=1) were identified (one possible ulna fragment, and three teeth); this relatively low number is unlikely to be a result of differential preservation given that the more robust bones of pigs have a greater chance of survival. However, in considering the findings overall, it should be noted that 50% of the bone fragments were classed as 'unidentified mammal' and 20% only by general size.

The skeletal elements for cattle and sheep/goat were distributed across most areas of the body; this seems to represent the different stages of processing and consumption. Although no cranial elements were recorded for sheep/goat, 13 loose teeth were recovered. It is notable that overall, the more robust skeletal elements are represented; differential preservation is a key factor to consider here when considering human activity and patterns of disposal.

Taxon	NISP	% identified NISP	Minimum No of Individuals
Cattle	32	16	2
Sheep/goat	21	10	1
Equid	3	1.5	1
Pig	4	2	1
Red deer	1	0.5	
Large mammal	16	8	
Medium mammal	24	12	
Unidentified Mammal	103	50	
TOTAL	204		

Table 1: Number of Individual Specimens (NISP) for the mammals.

Butchery

Eight bones exhibited evidence for butchery. These were all rough chop marks; no smaller cut marks were identified. Of particular note was a similar pattern of butchery (chop) marks on two cattle scapulae from different individuals; the base of the spine had been chopped in a comparable position/manner, and suggests specialised carcass processing.

Burning, gnawing, and further modifications

Ten mammal bones showed evidence for burning with only one identified to species as a possible pig ulna.

Carnivore gnawing was recorded on eight bones from cattle (representing different parts of the skeleton), and equid (a humerus). Approaches to waste disposal clearly permitted access to certain faunal remains by dogs and/or foxes, providing some insight into how refuse was managed. It is notable, however, that no clear evidence for rodent gnawing was recorded.

One piece of red deer antler was recorded as chopped and worked; part of the surface was flattened, highly polished, and with regular grooves possibly related to sharpening implements. This could suggest its use as a tool *(26)*. One further piece of sheep/goat bone, likely from a tibial shaft, could have been worked into a point, but this is ambiguous.



26: Worked deer antler (context 5226, SF no. 575).

Conclusion

This small bone assemblage would appear to represent domestic refuse including from food preparation. There are also other discarded bone remains, such as a piece of red deer antler possibly used as a tool, indicating that it is not just the remains of carcass processing/consumption represented within the well/pit feature (F9). The common domesticates (cattle, sheep/goat and pig) are all represented, with the MNI figures suggesting comparably low numbers of each taxon. The number of unidentified mammal remains should however be considered.

8.2.11 Timbers: Dr Damian Goodburn

Introduction

The timbers found due to the waterlogged conditions within the deeper contexts included the remains of posts in each of the 13 large postholes of F4, with further timbers below the posts in postholes 1 and 9 and a large timber and 5 other associated pieces from context (5212) in the well F9. The post remains from postholes 1, 9 and 11, the timbers found below the posts in postholes 1 and 9, and all timbers from the well, were removed and conserved.

As structures of timber, roundwood and earthy materials do not survive well from the period on most sites, the use of timber in Roman construction is still little explored or represented in most areas, so any finds that shed light on these themes are disproportionately important. Examples from rural sites such as Bridge Farm are rare, however material from urban locations, including London, provide a reasonable assemblage of dated structural timbers to allow some comparison.

Specific timbers

The general range of woodwork found at Bridge Farm included the decayed bases of substantial oak posts originally up to c. 0.45m across ('a cubit') and set into the earth at least 1m deep. These imply that the 13 post pits found were part of a moderately large and tall timber building. The oak timbers used as post pads/chocking were generally better preserved than the posts and included a surprising assortment of sizes and forms including 2 timbers with ogival carved ends (27), SF5.42 (460mm x 185mm x 105mm) and SF5.78 (250mm x 90mm x 150mm) and an offcut from a beam SF5.79 (380mm x 250mm x 225mm) (28)



27: The carved timbers used as padding in posthole 9 of F004

The decorative ogival shapes were cut into the timbers end grain and SF5.42 has the truncated remains of a deep cross-halving joint. This halving would presumably have accommodated a timber running at 90 degrees to SF 5.42 in its primary use. Currently these timbers are without

exact parallels from other sites but it would seem possible that they were originally the decorative ends of rafters or joists in a large earlier building local to the site as oak timbers are heavy to transport and are therefore likely to have come from relatively close by. Close inspection suggested that SF5.42 was cut to a boxed half section, probably by manual sawing from a hewn baulk. This suggests that it had been made as part of a pair of similar beams, which could support the timber being part of a principal roof truss. A key indicative feature suggesting a rafter is a 25mm deep diagonal slot or 'housing joint' that survives on one face (27). A plausible interpretation of this diagonal feature is that it may have been used to locate a lintel plank for a window or door opening just under the eaves. If the housing joint marked the location of a horizontal opening then the implied roof pitch for the principal rafter would have been just over 40 degrees. Such a pitch would be suitable for a wide range of roof coverings including forms of thatch, shingles, clap board, stone slates and tegulae.

Timber SF 5.78 was similar to timber SF 5.42, with essentially the same ogival cut end, and partially surviving truncated halving joint. However, it was of smaller cross section and its length was more truncated. It seems likely that this timber was once a decorative lower end of a common rafter from a more lightly built roof area either in the same building as SF 5.42 or a smaller building within the same complex. The beam from which this timber was shaped was weathered and slightly decayed but on one face faint manual saw marks could be seen. The timber was box quartered, probably by sawing an axe-squared baulk in half and then each half being re-sawn to make four small beams in total. This method of timber conversion is very rare in the London corpus of Roman structural timber but has recently been found in the area NW of Cambridge; an area seemingly very 'timber hungry' in the mid Roman period. Very knotty, opengrown oak was widely used there and much of it might have been of open farmland origin from hedgerows, riverside land and/or pasture. The parent oak used for this beam was medium sized, of moderate growth rate and only had c. 40 annual rings.

Another timber from PH 9, SF 5.79, the sawn-off end of a hewn oak baulk *(28)*, provides information about local treescapes and timber conversion practices.



28: 2 photographs of the rectangular hewn baulk off-cut SF5.79

One end was obliquely cut with a cross cut saw or 'serrata', whilst the other end bore clear marks of a 75mm wide blade of an axe (28) used to rapidly cross-cut, or 'buck', the felled tree at the highest possible point in the crown where four major branches met. This is a common axe blade size for the Roman period. The evidence of four hearts (i.e. large knots) at one end means the woodworkers at the felling site were struggling to cut the longest timber possible out of the oak felled, implying that it was a fairly open grown tree and that good-size timber was not very

available locally. Although this timber had 60 annual rings the grain was so distorted that a tree ring sample would be impossible to measure.

Post Hole 1 yielded the moderately well-preserved end of a thick plank of oak, timber SF 5.65, also cut obliquely for which the original purpose is not certain. It is possible that such a timber might have been used to manoeuvre the base of a long heavy post into position.

The waterlogged basal fills of the well F9 yielded a very decayed amorphous piece of oak, timber SF5.36. Curiously when the timber was examined one section was fast grown and the other very slow grown possibly indicating that it was two separate pieces sculpted together by decay.

The timbers in general

Examination of the timbers showed that all were of 'oak' with its classic macroscopic features. Very little sapwood survived and none of the timbers were suitable for tree ring study. This was due to the 'parent trees' being medium to fast grown with less than the required 50 annual rings or having greatly distorted grain from multiple knots. This situation is often the case with mid or later Roman structural woodwork as many of the accessible woodlands had been converted into open woodland or even farm land with hedges and pasture trees. These tend to grow comparatively fast and 'branchy', compared to the older wildwood -type trees more commonly harvested in the early Roman period. The full timber analysis can be seen in Section 16.2.1 with the Durham University conservation reports on the timbers in Section 16.4.2

8.2.12 Plant material and charcoal: Dr Michael Allen and Lisa Gray

An assessment was made of the 44 floated bulk samples and hand-recovered charcoal pieces comprising 45 flots, 24 sorted residues, 24 charcoal items and 2 leather fragments. Despite 44 samples being processed and assessed, charred plant remains were generally sparse and in low quantities and charred cereal grain was only noted in 11 samples. 22 of the bulk samples were selected for analysis of the charred and waterlogged plant material and charcoal.

Charred grains and seeds were found in samples from the hearth F2, the forge F7, the well F9 and the building F4, with most coming from the hearth and the well. Short-lived charcoal taxa were found in samples from the central ditch F1, the well F9 and posthole PH1 of building F4. A single germinated spelt grain came from the well and spelt (*Triticum spelta* L.) was the most frequently occurring grain. Charred seeds were scarce and the absence of chaff in the charred plant material could indicate that cereals arrived on the site fully processed.

Waterlogged material from six samples from the well F9 and seven from the building F4 consisted of wild native plant seeds, fruit stones and nut shell. Plants with edible leaves and berries were present suggesting that these were growing nearby or had been gathered for food. Most seeds were from plants common in waste and disturbed nutrient rich ground, the most frequent being from elderberry (*Sambucus nigra* L) and of the goosegrass family (Amaranthaceae).

Of the charcoal samples analysed the most frequently occurring taxa was oak (*Quercus* sp.) being found in the hearth F2, ditch F1, well F9 and PH1 of building F4. Cherry/plum (*Prunus* sp.), ash (*Fraxinus excelsior* L.), birch (*Betula* sp.) were also quite widely spread with fragments of yew, hazel and alder less frequent.

There was no evidence for slow-burning aerated fires with most plant remains having been preserved by charring under oxygen reducing conditions, such as in charcoal clamps, bonfire centres, ovens, or raised buildings when smothered by roof material.

It is possible that refuse disposal took place in another part of the site and that the well was kept clean for use. Charred grains from the postholes of building F4 are likely to be general background waste rather than from any specific activity.

Charred grain and grass seeds present in the hearth F2 could be the waste used as tinder or possibly are residual plant remains. The only charcoal present in this feature was oak, a high-temperature burning species, suggesting specific selection to fuel an oven or a hearth.

Hammerscale was present in a sample from the forge F7 and from the well F9 suggesting that iron working was being carried out in the vicinity.

No exotic plant remains were found, these being more common in large urban settlements.

Rich blue, cemented fine-grained minerogenic deposits were present in the waterlogged pit/well F9 reminiscent of vivianite and although this normally forms distinct mottles within waterlogged and phosphate-rich deposits rather than minerogenic concretions it is considered that this was an intensive form of vivianite secondary deposition. Vivianite is a crystalline iron phosphate or ferruginous phosphate common in waterlogged conditions as a secondary mineral formation (Goldberg & Macphail 2006, 47, 204, 238). Whilst there was no evidence for cess disposal on the site, vivianite is a secondary phosphate common in night soils rich in phosphate such as organic occupation and faecal material and is typical where occupation, especially faecal, debris accumulates in wet deposits.

8.2.13 Geoarchaeology: Dr Michael Allen (2014)

Bridge Farm lies on Quaternary gravels and sands of the 1st-2nd gravel terrace and is flanked to the north, west and south by deeply stratified Holocene alluvium.

The soils of the Ouse Valley floodplain are predominantly silty as a result of Holocene valley infill and alluviation. The valley terraces (on which the Bridge Farm site lies) are predominantly gravels in a fine sand and coarse silt matrix. At Bridge Farm the main soils are typical (sandy) and colluvial brown earths, and are flanked by sandy pelo-alluvial soils. The gravel parent material ('natural') fines towards the surface and the surface geology is predominantly fine sands and coarse silts, with gravels occurring at depth of 0.5 to 1m (as revealed in the base of many features).

The soft sandy and silty nature of the parent material ('natural') allows deep and rapid pedogenesis (soil formation) with soils weathering and developing downwards into the parent material and bioturbation (physical mixing through soil fauna and roots) essentially obliterating the upper profiles of features and lowering the surface of the parent material ('natural') as it becomes incorporated into the current soil profile.

Consequently, some artefacts reside essentially *in situ* in the lower part of the soil, but the features within which they lie can no longer be detected at this level due to soil formation and weathering. All features have, therefore essentially been truncated by pedogenesis, and may be considerably shallower; some of which may only survive as groups of artefacts in the lower soil as predicted and will have been removed by machined stripping of the trenches. The concentration of artefacts, however, in the upper fills of features is low and only minimal loss would be expected, except where shallow features may occur which now wholly 'exist' in the soil.

Seasonally high ground water tables give rise to occasional locally waterlogged contexts in deeper features and those at lower altitudes nearer the current river course. The presence of gleying in the upper horizons indicates post-depositional effects are likely occur and are commonly misrecorded be archaeologists as depositional horizons.

9 Significance of data

9.1 Summary from Results

- 9.1.1 General summary: During the course of the excavation in Five Acres at Bridge Farm conclusive evidence for settlement activity dating to the Roman Period was uncovered. The results suggested four main phases of activity from a single boundary/drainage ditch and an adjacent banjo-shape hearth in Period 4, a possible NW-SE orientated rectangular building in Period 5, a larger NE-SW orientated rectangular building in Period 6, with two boundary ditches, 2 deep pits/wells and a possible iron-forging hearth in Period 6c. Other less diagnostic features included small pits, postholes and stake-holes, which could not be interpreted as definite structures or for any other specific purpose, still added to the level of activity within this area set between the main settlement and the river.
- 9.1.2 **Prehistory:** The investigations revealed no definitive evidence of prehistoric activity in this area of the site. The odd prehistoric worked flint was clearly residual and/or derived coming from the disturbed soils above Roman-period contexts.
- 9.1.3 Iron Age: The few artefacts that could be assigned to the Late Iron Age came from Roman period contexts and are considered as either conserved, local products in traditional forms or possibly residual evidence from manuring.
- 9.1.4 Pre-Flavian Roman Period 3: AD 43-70
 The absence of any Gallo-Belgic imports in the pottery assemblage suggests that this area was not occupied in the pre-Flavian period. The pre-Flavian coins were of types still in circulation during Period 4.

9.1.5 **Roman Period 4: AD 70-150**

The earliest feature in Trench 5 appears to be a **boundary ditch F1** running NE-SW through the centre of the trench. The geophysical survey image shows this ditch continuing on to the NE to join a possible roadside ditch at approximate right-angles (29). This road, if proven by subsequent



29: Geophysical survey image with the possible boundary ditch in red

excavation, runs on a SE-NW orientation from the main settlement towards the river. Based on the geophysics, ditch F1 also appears to run for a considerable distance to the SW before turning to the NW. This combination of geophysical linears, although obscure on the NW flank, would appear to form the possible boundary of a sub-square area approximately 94m x 92m close to the river (29). The suggested enclosure would be on the same axis and of similar area, being in the region of 0.85ha, to that of the late 1st century grid in the southeast of the settlement. This similarity could support this feature being from the earliest Roman period phase of activity.

The **banjo-hearth F2** has also been dated to Period 4 from the pottery found in its lower fill (5064). Whilst some iron slag and magnetic fines were collected in fills (5017 & 5064) no conclusive evidence was gained as to the use of this hearth. In shape it resembles small iron

smelting hearths from other locations and could therefore be a possible source for the evidence of on-site smelting mentioned in the specialist assessment. The upper fill (5017) contained charred cereal grains and two grass seeds which could suggest an alternative use as an oven but could equally be the result of material used as initial tinder to fire an industrial use, especially as the only charcoal found was from oakwood suggesting the need for a high-temperature fire.

9.1.6 Roman period 5: AD 150-250

It was not possible to fully excavate the **large pit (5111)**, truncated by the NW baulk, despite a modest hand-dug extension to the excavation area. It was therefore not possible to give the full dimensions of this feature or any definitive purpose for its construction. Its location on the line of the baulk also meant that it was not visible in plan prior to excavation which hampered clear identification of its relationship to the ditch F3, although the pottery assemblages and stratigraphy of the respective features clearly suggest that the pit existed prior to the ditch and most likely from Period 5.

The other feature tentatively allotted to Period 5, the **6-posthole group F11A**, also remains something of an enigma due to the scarcity of dating material. The pottery that was obtained from some of the postholes suggests that they may have originated during the late 2nd to early 3rd century. The apparent twin parallel rows of 3 posts at regular intervals and the size of the postpipes could suggest that they could have formed a rectangular building set on NW-SE alignment with a seventh posthole [5182] possibly providing extra support to the west corner. The lack of any waterlogged timbers in the deeper excavated holes could have resulted from a formal clearing of the remains prior to the construction of the larger 13-post building. The smaller postholes of F11A were not clear on the geophysical survey so it is not possible to confirm whether this group continued beyond the SE baulk or was wholly within the excavated area. However, there is an alternative augument for them forming the, non-structural, outer wall framing for the 13 posthole building F4 in Period 6 which is detailed below.

9.1.7 Roman period 6: AD 250-410

Whilst the pottery dating evidence for **13 post-holed F4** is ambiguous, Malcolm Lyne has suggested a late 3rd century date for the erection of a structure that possibly survived quite late into the 4th century (see pottery summary Section 8.2.1). It was hoped to clarify this by dendrodating some of the extracted timbers but none had sufficient rings. The value of the less precise date that might be gained from carbon¹⁴ dating was considered to have no tangible benefit as specialist examination had already indicated a probable mid to late-Roman date from the timbers growth pattern. The presence of late-Roman glass fragments in the constructional backfill of some of the postholes also supports the late-Roman date for the origin of this structure.

Another area of further specialist research was the original purpose of the carved timbers that were found acting as postpadding in posthole 9. These artefacts, SF5.42 and SF5.78 came from a sealed Roman period context, were prepared timbers with an ogee-shaped end and SF5.42 had a possible housing slot and lap joint for other timbers (23).

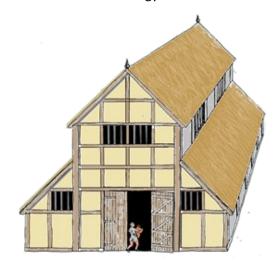
Not having any real *comparanda* for these timbers in the corpus of Roman-period timbers so far found in Britain means that we can only use sound reasoning to speculate on their original purpose which has currently led to their interpretation as the carved ends of rafters from a substantial building or buildings. If this is excepted then they provide unique information about Roman-period roof construction.

Another area of speculation was whether these timbers were just spolia (the reuse of recycled building material) or if there was some more significant meaning in their use by providing closure for a previous nearby structure and/or some continuity with the new.

The footprint of the 13 postholes at around 16 by 6.4 metres and the size of the posts at c.450mm across suggested that we are looking at a substantial building of similar size and configuration (minus one end post) to the 0.8m deep range of foundation holes for the temple building at Springhead, Kent, (Andrews, 2008, p. 52; Andrews, et al., 2011, p. 61). Whilst Springhead is interpreted as a religious centre, the Bridge Farm building, with its location on the outskirts of a settlement close to river, would more likely have been for storage and/or even domestic use. Whilst evidence seems scarce in East Sussex, Kent can supply several closely comparable earthfast post buildings e.g. Westhawk (building D) $14 \times 7m$, Thurnham $15 \times 7m$ (Booth, 2008, p. 377) and Keston (centre timber building) $14.9 \times 6.5m$ (Philp, et al., 1991, p. 298). These buildings have mostly been dated to mid-late 2^{nd} century and were originally thought to be simple rectangular structures. Whilst these *comparanda* appear to be earlier than the Bridge Farm building, where a date of late 3rd century is suggested, such structures are likely to have been ubiquitous for the Romano-British period.

The 13 postholes tell us that we are looking at a timber-framed building apparently without a central post in the north east elevation, suggesting that this was possibly the main access point. The site yielded a relatively small amount of abraded and fragmented Roman tile consistent with use as hardcore rather than construction, suggesting that any structure probably had an organic roof covering, probably thatch but possibly shingle or weatherboarding; unless we choose to suggest that a tiled roof was carefully removed for reuse elsewhere when the building was decommissioned. The probability of an area this close to the river to flood might suggest that any building would have ideally needed a raised floor, although such construction usually involved a mass of closely packed posts which was not indicated in the archaeology of F4. Whilst the

evidence could suggest a simple rectangular design, the surrounding foundations for outer walls were present at an aisled building of similar plan at Crookhorn Farm, Purbrook, Hampshire (Soffe, et al., 1989, pp. 49-56), and at a barn at Wakerley, Northamptonshire (Jackson Ambrose, 1978, p. 139). Jackson and Ambrose (1978, 140) suggest that aisled barns were quite common in the late-Roman period in the Northampton and Peterborough area with examples occurring at sites such as Oakley, Orton Longueville and Castor. They also note that a common feature of these buildings is that the combined width of the 2 aisles equals the width of the nave and that the length of the building is



30: building F4 if posts supported the aisle of a timber-framed structure (Millum 2017)

often twice its width. An aisled building with chalk and flint foundations giving overall dimensions of 40m by 17m wide with a nave c.8m wide, was discovered at the nearby Barcombe villa complex providing a very local example of aisled construction from the late 3rd century (Rudling, 2016, pp. 84-5).

It has been suggested that four of the smaller postholes of F11A and F11B could be interpreted as evidence of a row of outer wall posts running parallel to the main aisle posts, although at only 1m out they would form a much narrower aisle than seen in the examples given above. Even if these postholes are unrelated, the weight of comparable evidence raises the likelihood that the 13 posts at Bridge Farm provided the main aisle supports for a structure rather than the external walls (30). Several similar ground-plans in Surrey, including Flexford, Hengrove (Bird, 2017, p. 124) and Building 6 at Beddington (Howell, 2005, p. 33), have been interpreted as being the central naves of aisled structures despite there being no trace of the flanking exterior walls. If the Bridge Farm example followed the aisle proportions found in the Northants area then its total width would be around 12.8m, but if we take the row of holes 1m from the main posts as signifying one of two matching aisles then a width of 8.4m is derived which may fit better in overall proportions at roughly half the length of c.16m.

A series of stakeholes (5227) observed in the area of posthole PH6 of building F4 seem to run round the inside of southern edge of the outer posthole-cut possibly suggesting some protection for the post (31) although other stakeholes in the area cloud both the purpose and phasing of the stakes.

31: PH6 (F4) showing posthole cut [5127], pipe cuts [5244] & [5257] and 3 excavated stakeholes from context (5227)



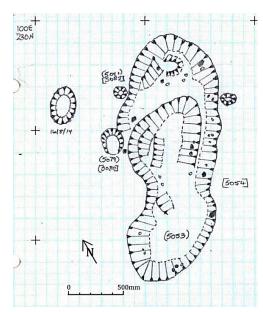
Three stakeholes recorded on the site plan on the northern side of posthole PH13 are even less definable as not being within any archaeological feature. All these stakeholes were very shallow and may represent a few deeper driven stakes of a larger and/or possibly more modern feature (see plan 15.3.7).

9.1.8 Roman period 6c: AD 350-410

The basal fill of the sump-well F9 (5226) had a pottery assemblage dating to c.AD300-370+ indicating a 4th century origin for this feature and its partner large pit F10. The materials extracted from the lower waterlogged fills of this feature were particularly interesting as towards its base was a layer of stones, which although from the general district were mostly foreign to the site, comprising Downland chalk (42%), Paludina limestone (27%), various Wealden sandstones (14%) and Downland flint (12%). Just above this layer was found 6 pieces of waterlogged timber, including SF5.36 (see 8.2.6 timber summary above), together with the blackened bones of domestic animals (see faunal record Part 4: 16.2) and waterlogged roundwood. If this pit was used as a form of shallow well, as suggested by the speedy inflow of surface water during excavation, then both the stone-rich and the roundwood layers may have resulted from the dismantling or collapse of a dry-stone and wattle lining and/or superstructure when the feature was no longer used as a well. The fills surrounding this layer were 100% sampled by floatation with the finds including, 2 House of Constantine coins c.AD330-4, a plain brass wrap-around finger ring and a fine turned disk, probably a small spindle whorl. A rather unpromising lump of earth turned out to be the heel of a leather shoe with in situ hobnails SF5.67 with other fragments/straps of leather appearing via floatation (see conservation report in Part 4: 16.4). The **large pit F10** was less finds-rich but analysis of the pottery from both features indicated a probable contemporaneity with backfilling during the last years of the Roman period or possibly even shortly after.

This coincides with the probable lifespan of the **two ditches F3 and F8** which appeared to join at the SW baulk of the excavation, although here fresh sherds from some handmade pots with coarse crushed-flint and ironstone filler possibly extend the life of these features well into the 5th century. These ditches are on a very different alignment to any others on the site and may represent a very late isolated phase of activity in this area. The **two large pits F9/10** would appear to be on the same alignment supporting a close relationship between these features and the ditches.

The remaining feature designated to this period is the irregular shaped hearth F7 in the northern corner of the excavation (32). As well as the pottery used for dating the feature the fills contained 1860g of undiagnostic iron slag, 2104g of magnetic fines and 32 pieces of amorphous burnt clay that could be hearth lining plus 5 more diagnostic vitrified pieces, suggesting that this shallow pit with signs of intense heat could have been used for secondary forging or a similar ironprocessing use. It would appear reasonable to presume that the 4 stakeholes surrounding the NE end of the hearth were the remains of a superstructure to the hearth with stake/posthole to the NW also being related in some manner. A series of postholes to the SE of the hearth designated Group 1 could also be from the same phase and therefore part of the activity



32: Plan showing the hearth F7 and adjacent stake/postholes.

being undertaken in this area. Samples from the primary fill of the forge F7 and well F9 contained artefactual evidence for black-smithing in the form of hammerscale; their presence indicating metalworking in the vicinity (Gray, Part 4: 16.2.3/4).

9.1.9 **Sub-Roman to Saxon period:**

Pottery obtained from the **2 ditches F3 and F8** suggest that these features may have survived into the 5th century. The only other indications of post-Roman period activity in this area are the 3 pieces of bronze metalwork with Early Saxon style relief decoration (see Part 4: 16.5) collected by David Cunningham during his pre-project surface metal detecting.

9.2 Discussion of Significance & Potential

- 9.2.1 **Prehistory:** The sparse evidence from this period is all of a residual or derived nature with isolated worked flint found in Roman period or later contexts and therefore can tell us little about transitory prehistoric activity in this area although strongly supporting a lack of any prehistoric settlement in the immediate area.
- 9.2.2 **Roman Period Features:** The excavation of this area has proved productive in extending the area of 1st to 4th century activity to a location well to the west of the enclosed settlement, an area in close proximity to the river.

Geophysical evidence suggests that the central ditch F1 was not isolated but joined other such features to provide the boundary of an enclosure between the building F4 and the river in alignment with other features of the main settlement. In contrast the late 4th century ditches, F3 and F8, are set on an entirely different axis to any other recognised features with the exception of the two large pits/wells F9 and F10 excavated in Trench 5, strengthening the suggestion that these features may be concurrent as well as potentially connected by use.

The discovery of a rectangular structure, that has been interpreted as the foundation posts for a large aisled building, with an entrance facing towards a potential road leading to the river has significance to the layout of the settlement and its connections to the wider area. Given its size and location it would seem reasonable to suggest that the building was used as a warehouse or other storage use during the Late Roman period.

The evidence pointing towards the use of the hearth F7 for forging or smithing iron and the possible use of hearth F2 for iron smelting establishes a range of activities undertaken in the immediate area and suggests a difference in activity to the area excavated in 2013.

- 9.2.3 The **Roman-period pottery** assemblage has allowed the approximate dating of the main features excavated and suggested a phasing of activity consistent with the stratigraphic evidence. It adds to the pottery collected in 2013 to eventually form a comprehensive assemblage from throughout the site allowing spatial and chronological comparison of activity in specific areas of the site as well as with other settlements throughout the southeast. When fully quantified it may have potential to determine the status and cultural associations of the occupants.
- 9.2.4 The Roman ceramic building material is of interest as it directly relates to the main phases of activity at the site. However, it consists of generally small and abraded pieces that have clearly been reworked. Where diagnostic of form the full general range of types is present in a wide range of fabrics. The current assemblage does not have the stratigraphic or artefactual refinement to allow closer dating of the fabrics and forms, particularly considering the degree of re-use and reworking. The brick and tile associated with the F4 building totals 314 pieces (6879g) which was recovered from fifteen associated post-holes, mainly from the constructional backfills. This group includes brick, tegula, imbrex and box flue tile fragments in a wide range of fabrics. The fact that the F4 building clearly did not have a hypocaust, yet box flue tile fragments abound within its post-holes and surrounding features, demonstrates that the brick and tile is unlikely to relate to the building's structure. This is confirmed by the absence of any large pieces from its proximity. As such the assemblage probably relates to post-packing or, more likely, just a dense background scatter of general metalling from yards and tracks within the settlement. This suggests that an organic range of materials was used for the structure of building F4, such as wattle and daub, thatch and/or weatherboarding. The assemblage is not considered to hold any potential for further detailed analysis on its own merits but the data should be reconsidered and included in any future publication that aims to draw together all of the excavations at the site. Key pieces and fabric samples have been retained for long-term curation and reference during future ceramic building recording at the site (Barber, Part 4 this report).
- 9.2.5 The **Roman-period metalwork** assemblage from the site is considered to hold a mixed potential for further analysis although relating directly to the activity associated with the excavated features. However, the vast majority of the stratified assemblage consists of nails/nail fragments and there are few diagnostic pieces, whether from stratified or unstratified deposits, that shed new light on the site's economy beyond that of the 2013 and surface assemblages. However, they add to the growing corpus of material that demonstrates the apparently wide economic

- base of the settlement and are therefore worth publishing for that reason. The presence of a number of items associated with weighing and therefore potential trading mirrors the 2013 assemblage and suggests a busy commercial centre. Although much of the metalwork is undatable it is suspected most, if not all, is of Roman date (Barber, Part 4 this report).
- 9.2.6 The **Roman-period coins** collected from this area, whilst of interest and of assistance in confirming dates suggested by the pottery analysis, particularly in the well F9, are not sufficient on their own to give any definitive interpretation of activity on this site. That there are some notable periods where coins are scarce in this assemblage, i.e. the 3rd century and the early 4th, could be significant in confirming the phasing of particular features. Subsequently they will form part of a more valuable assemblage when added to those from other areas of the site, when an overall comparison can be undertaken against results of other individual sites and a British mean.
- 9.2.7 The Roman glass assemblage is not considered to hold significant potential for further analysis beyond that undertaken for the assessment within this report. The presence of a low-level scatter of glass is not unusual on Roman sites and, in the absence of definite part-processed recycled material, does not offer any particular insights into the activities or status of the site's occupants. All pieces are very small with the vast majority not diagnostic of exact form. The presence of the beads and window glass is of a little more interest as they suggest something of the population. Although glass is a frequent find on Roman sites of all levels of society the presence of window fragments, as in the 2013 excavation, suggests the presence of a building of some standing. Both matt-gloss and gloss-gloss window glass were present demonstrating a wide chronological span. Where this building stood is uncertain as it is unlikely that it was the timber-frame building excavated as a piece of matt-gloss glass was recovered from one of its post-holes (PH 13 cut [5233]). Indeed, six of the post-holes forming the F4 building produced a combined total of 21 pieces (29g) of glass, including the bead, window glass and various different vessels. Post-hole PH2 [5119] produced a melted piece of glass waste. Two of these post-holes only produced glass from their post-pipes whilst the remainder did so from the construction backfill.
 - Although the current assemblage of glass contains far more Late Roman material than the 2013 assemblage its interpretation remains the same. It is suspected that the current settlement acted as a collection point for cullet, either to be re-melted on-site or, transported elsewhere for recycling. The fact the glass was recovered from virtually all features demonstrates the wide nature of its distribution. The assemblage can therefore be viewed as a scatter of material for recycling that was collected from an unknown number of households, potentially spread over quite an area, both within the Bridge Farm settlement and further afield (Barber, Part 4 this report).
- 9.2.8 Although the quantity of **metallurgical material** from the 2014 excavations is notably higher than that from 2013, the assemblage is very mixed, both chronologically and spatially. It has confirmed that limited iron smelting was occurring, perhaps in the Early Roman period and that moderate to high levels of iron smithing were occurring throughout the life of the settlement. It is suspected that the quantities indicate smithing was undertaken on a semi-industrial/commercial level rather than purely a domestic one, but the assemblages from future investigations should help confirm or refute this suggestion. It would, however, be surprising if evidence of major iron production was discovered at a location so remote from the source of ore. Overall, the assemblage adds to the view of Bridge Farm as a semi-industrialised settlement. However, the current assemblage of slag does not warrant any further detailed analysis in its own right though it should be considered against future assemblages from the settlement. As the presence of

- Roman smelting and smithing slag does shed light on aspects of the site's economy it should be noted in the final report (Barber, Part 4 this report).
- 9.2.9 The small assemblage of **animal bone** from the deep pit/well, F9, had some evidence of butchery suggesting that specialist carcass processing was practiced in the area during the later phase. Cattle and sheep/goat are represented by the majority of identifiable bone; no significant difference is noted in their relative Number of Individual Specimens (NISP). The lack of any evidence for gnawing by rodents may sway the teeth marks towards dog rather than fox with the possibility that this was part of the feeding regime of domesticated animals. A larger sample of skeletal remains would offer more scope for temporal and spatial patterns to be explored at this site. It is recommended that a full faunal remains analysis, to include the small mammal, bird, fish and amphibian bones, is undertaken when appropriate. There are potentially important questions surrounding food provisioning and processing practices, waste management and sanitation, the use of animal remains in craft practices, and the role of different species in the diet.
- 9.2.10 The **geological material** assemblage represents only a sample of the material excavated, for example in stone-rich fill (5225) of the well F9 only one piece was collected of each type observed by the excavator *(33)*. As some of these subsequently proved to be quern fragments it is regrettable that specialist assessment was not available on site when this took place.

A significant proportion of the assemblage is composed of unmodified pieces of stone from the 10 types that occur naturally on the site. Types from other areas included 8 from the local Weald, 2 from West Sussex, 4 from other regions of Britain and an import of German lava stone. The quern stone fragments are of interest in not only demonstrating on-site processing but also showing the sources of choice for the stones. They will allow direct comparison with the much larger assemblage from Barcombe villa and other areas of the Bridge Farm settlement. The Kimmeridge shale suggests that coastal trade may have reached significantly upriver (Barber, Part 4 this report).



33: Stone from the lower fill (5225) of the well F9 sorted into approximate stone types

9.2.11 The discovery of **Roman-period waterlogged timbers**, especially the post remains and the carved timbers found beneath them, was as unexpected as it was exciting. This small assemblage is important as it is a rare example of the survival of Roman woodwork from Sussex. It also provides a snapshot of aspects of the local woodmanship practices, carpentry and treescapes to add to

that derived from the charcoal and pollen studies. Of wider, national importance are the moulded timber ends, as material evidence of timber architectural features which have not survived elsewhere in Roman Britain, apart for one less defined possibility from a Roman well in Bedfordshire. Timber elements of the upper parts of Roman buildings very rarely survive in contrast to elements of foundations and walls, found in situ or reused in London, Carlisle, Vindolanda and more rarely, at a few other locations. Clearly the two moulded beam ends from posthole 9 that may originally have been rafter ends from a high-status local Roman roof, are the most significant finds from the excavation and are definitely worthy of continued research. The baulk end from the crown of a local oak also sheds some light on local treescapes and is also worthy of some further comparative analysis. The samples will be held in storage pending development of any technique offering reasonably precise dating and the search for *comparanda* for the carved timbers is to be ongoing as this could provide valuable clues as to the origin of these timbers and of previous activity on the site.

- 9.2.12 The plant material has revealed evidence as to the environment of the area at the time of the settlement with plants common to waste and disturbed nutrient rich ground with oak, cherry/plum, ash and birch being the main tree species with lesser indication of yew, hazel and alder. No cess disposal was evidenced and the lack of chaff indicated that any cereals arrived to this part of the site fully processed.
- 9.2.13 **Saxon/sub-Roman period:** The post-Roman assemblage, including items of uncertain date from unstratified deposits, is mainly not considered to hold any potential for further analysis. An exception being the three pieces of Saxon-style decorative metalwork which were collected by surface metal detecting. Whilst their location in a liminal area adjacent to the river may be more pertinent to Saxon activity/occupation within the wider area, the possible connection to the late pottery in ditches F3 and F8 and therefore to activity on site must be considered.
- 9.2.14 Combining the results of 2013 and 2014: at this stage it appears that this settlement having started as a small but planned grid layout in the Flavian period expanded to a status that merited defensive earthworks by the late 2nd century whilst spreading out into former peripheral areas including to the west. Activity in the 3rd and 4th century was evidenced in both the areas so far excavated with the period of the main definable features of the 2014 trench appearing to be from the late 3rd through to the end of the 4th centuries. The assessment of the metallurgical material starts to build a picture of an industrial element to the settlement with the large timber-frame building suggesting commercial and/or continued official activity. The sparse evidence for possible 5th century activity tends to highlight the extreme Roman-period nature of those areas investigated to date and potentially for the entire settlement. It is possible that the intense use of this area over 3 centuries made it less desirable as a permanent base for subsequent occupation and the area seems to have been mainly used for agriculture during later periods and up to the present day.

9.3 Reflections on the results

Preparing this report has provided an opportunity to look critically at some aspects of the 2014 project in order to learn lessons from this excavation to help improve future work undertaken by CAP. It has also pointed out some anomalies in the record that should be considered by any researchers.

9.3.1 In Section 9.2 the lower area formerly taken as being part of the ditch F003 (5013) has been reassigned as (5111), i.e. the corner of the pit [5272], with the depression in the upper context

- (5000) becoming the ditch fill (5013) as its dimensions relate closely to the other nearby F003 contexts (5100) and (5030) on the their context records and in Sections 8.3 and 28.2 respectively.
- 9.3.2 Many other minor errors and misunderstandings have been resolved throughout the archive although it still cannot be guaranteed that some may not have infiltrated into the pages of this report. However, any researcher finding irreconcilable differences between this report and the original site documentation should, on the whole, favour the data in this report and the digital database that was assembled during its preparation.
- 9.3.3 Whilst the theory of fieldwork is an excellent preparation, practical archaeology can only really be learnt and developed in the field. Experience comes both from the results achieved and the realisation of how things might have been improved or undertaken by an alternative method. The act of writing this report and the honest reflection that this process necessitated will have a beneficial effect on all future CAP projects.

10 Review of Research Aims and Results

10.1 Realisation of the Research Aims

- 10.1.1 The nature of the buried features has been established as far as is possible given the damage caused to the shallower elements due to centuries of ploughing and the alluvial nature of the area. Four phases of activity have been established in the Roman period: a boundary ditch and hearth in period 4 (AD 70-150), a possibly aisled building in period 6a-b (250-375) and further boundary ditches, 2 large pits (possibly used as wells) and a metal-working hearth in period 6c (AD 375-410) with the potential of some further activity extending into the 5th century.
- 10.1.2 Recovery of extremely rare timberwork has given some insights into Roman-period building methodology, woodland management and the local environment.
- 10.1.3 Geophysics has established other areas of possible activity that could be significant in facilitating interpretation of the immediate area and that of adjacent fields particularly to the north where a possible road may run from the settlement to the river.
- 10.1.4 The results taken together with investigations in other areas of the Bridge Farm settlement are promoting a greater understanding of the local historic landscape.
- 10.1.5 The results from this investigation have allowed CAP to prioritise a policy for further investigation including invasive methods where deemed necessary. However, on a busy working farm such future plans must always come second to the requirements of the landowner and may also be adversely affected by weather given the annual flood potential of this landscape.
- 10.1.6 As with all CAP projects we have actively encouraged the involvement of the local community in investigating and understanding their rich historic environment.
- 10.1.7 It was an essential part of this project to offer opportunities for volunteers and students of all levels to gain practical experience of archaeological field practice and to offer associated training in all aspects of the methodology employed on the site during the, surveying, excavation and finds processing stages.
- 10.1.8 This report demonstrates the accumulation of sufficient data to produce an informed analysis of the archaeology of the site for both archival and publication purposes. A digital copy of this report has been sent to the County Archaeologist for inclusion in the East Sussex

Historic Environment Record (ESHER) with a copy being available in the Sussex Archaeological Society's library at Barbican House, Lewes. A digital copy is also available for download from the publications page of the project's website, www.culverproject.co.uk.

10.2 Revised Research Aims

Following the completion of the fieldwork and the initial post-excavation assessment of the site it is now possible to identify additional research questions which would ideally be undertaken before the final publication of the site. These are listed below.

- 10.2.1 Further investigation is needed into other targeted areas of the complete site. Such research could alter the interpretation of the current excavation and that of the unusually large detached rural bathhouse and positioning of the adjacent villa complex.
- 10.2.2 Research should continue into the carved timbers recovered from beneath the post in posthole 9 of the rectangular building F4. These may well give important data into a previous phase of this area as well as the building methods in SE Britain during the Roman period.
- 10.2.3 Further analysis of the other various finds that could provide further insight into the status and cultural associations of the occupants should be considered as greater assemblages are gathered from future excavations on the settlement site.
- 10.2.4 The presence or absence of particular artefact types that could indicate the status and socioeconomic development and could provide evidence regarding trade networks and the means of exchange should be explored, although this is likely to be most profitable once further excavation of the whole site has been undertaken.
- 10.2.5 Across site comparison and research to provide a clearer picture of the potential activities undertaken on this site should be explored which in turn could help to target future research aims.

Catalogue of Future Work (subject to resources)

- 10.3 **Documentary Analysis:** A review of published and grey literature of comparable sites is ongoing and a review of this report together with those of CAP's adjacent investigations will be undertaken at an appropriate juncture with the purpose of compiling a comprehensive interpretation of the site for a suitable peer reviewed journal, monograph and/or online publication.
- 10.4 **Specialist reports:** At this stage assessments have been sought from artefact specialists as the investigations into the settlement at Bridge Farm are currently ongoing. It is the intention of CAP to commission specialist reports for each material at a suitable juncture in the investigations or when any of the specialists suggest that such a report would be expedient.
- 10.5 **Illustrations:** Selected sections and site plans have been re-drafted by the author for inclusion in this report but this work may need further refining so that a clear drawn record exists within the project archive for future consultation and publishing. Artefact illustration has been by necessity by photograph and it is a desired aim for a drawn record of important artefacts to be undertaken when resources allow and the opportunity and/or need arises, e.g. for a future published paper.
- 10.6 **Potential Publication:** It is the intention of the project to compile a paper of the 2014 results for submission to the *Sussex Archaeological Collections*, or similar peer reviewed journal, and to include the results from this excavation in a combined monograph with the adjacent investigations on Bridge Farm at a suitable juncture in the future of this ongoing project.

- 10.7 **Paper Archive:** The full original paper archive is currently held by CAP at their headquarters building at Bridge Farm, Barcombe with a digital copy, prepared by the author, held on CD-Rs and/or other suitable digital storage media at CAP HQ and the Barbican House Museum.
- 10.8 **Artefact archive**: All artefact assemblages retained under CAP finds retention procedures are stored at Bridge Farm with some assemblages, notably the ceramic building material, stone and metallurgical material having been been reduced to notable examples by the specialist during the assessment process. Further rationalisation of the artefact archive is awaiting publication of the amended archiving procedures currently being produced by the Sussex Museums Committee so that negotiation with the local museum authorities and/or County Archaeologist can continue for the eventual accession into a suitable long-term storage facility.
- 10.9 **Further Excavation:** The geophysics has shown significant anomalies to the south and west of the site which would merit further investigation by targeted excavation. Damian Goodburn's report on the recovered timbers has highlighted the extreme rarity of the timbers used as post packing highlighting that further investigation of those post pits not fully excavated could be desirable to potentially produce further timbers that could provide evidence of Roman period building methodology and/or be suitable for dendrochronological dating. He has also raised the possible productive results that could come from survey and trial trenching of current and ancient waterfronts of the River Ouse as it loops around the site. However, in undertaking such an evaluation it must be borne in mind that substantial works were undertaken to the river banks in the late 20th century with other possible disruption due to the Upper Ouse Navigation in the late 18th century.

11 Acknowledgements

12.1 Special Acknowledgements

This project would not have been possible without the amazing patience, forbearance and general interest shown by the **Stroude family** in allowing us to trample over and dig vast holes in the middle of their highly productive working farm. It would never have happened without **Rob Wallace**, our inspirational founding director. Thanks also go to **John Kane** for both his practical and technical support. Whilst the project will continue it will not be the same without our dear colleague **Stuart McGregor** who sadly died in October 2018.

12.2 Others that have helped the project and/or the production of this report

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Appendix 1: East Sussex HER Summary Sheet for

HER enquiry number	TDO								
	T.B.C.								
Site code	BRF14 & BF14								
Project code	CAP								
Planning reference	Not applicable								
Site address	Five Acres, Bridge Farm, Barcombe Mills Road, Wellingham, Ringmer, East Sussex. BN8 5BX								
District/Borough	East Sussex, Lewes District, Ringmer Parish								
NGR (12 figures)	542970 114565 (TQ42971457)								
Geology	River Terrace Deposits over Weald Clay								
Fieldwork type	Eval Exca YES YES				HBR* NO		-		Other Metal detecting
Date of fieldwork	Various dates from 2011-2014								
Sponsor/client	Culver Archaeological Project (CAP)								
Project manager	Robert Wallace PCIfA MA BA(Hons)								
Project supervisor	David Millum MClfA MA BA(Hons)								
Period summary	Roman Building post		Mesolithic	:	Neoli	thic	Bro	onze Age	Iron Age
			Anglo-Saxon Bronze Dress ornaments		Medieval Coins		Post-Medieval Coins and clay pipe fragments		Other
Project summary (100 word max)	An open area of 770sq.m was excavated in 2014 revealing 13 large postholes in a 16m x 6.4m rectangle being the remains of a late-Roman-period building with fragmented waterlogged posts with some earlier rare carved timbers (possibly rafter ends) used as post packing. Flanking the building was a 2nd century ditch running and two 4th century ditches running c. N-S & E-W. Two large 4th century pits, possibly shallow wells and 2 hearths possibly for iron processing were uncovered. Geophysics suggests further features surround the excavation with a significant double ditch enclosure and road network to the NE.								
Museum=Accession No.	Finds are held at CAP archive store at Bridge Farm pending further assessment and rationalization in line with revised 2016 Sussex Museums Artefact Archiving policy. Together with the original paper archive and photographic archive.								
Report	A comprehensive post-excavation report, including digitised copies of the written and drawn archive, has been lodged with ESHER and the Sussex Archaeological Society Museum Library at Barbican House, Lewes. It is also available on the CAP website www.culverproject.co.uk . Part 1 only is also available at www.academia.edu and www.researchgate.net								

Appendix 2: OASIS print version of online summary document

To be added