

# **Cattle Hill Roman Villa, Hadspen House, Bratton Seymour, Somerset**

## **Archaeological Excavation Report**

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# Cattle Hill Roman Villa, Hadspen House, Bratton Seymour, Somerset

## *Archaeological Excavation Report*

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## Summary

Oxford Archaeology carried out archaeological investigations between 2015 and 2017, at Cattle Hill, Hadspen House, Bratton Seymour, Somerset, on the site of a known Roman villa, first recorded in the 19th century and partially excavated in the 1960s. A geophysical survey was undertaken in 2015, which was followed by trial-trench evaluation in 2016 and then open-area excavations in the summer of 2016 and spring of 2017.

The 3rd–4th-century AD villa complex, positioned on high ground within a productive agricultural landscape, was substantial, comprising an arrangement of well-preserved structures, outlying buildings and enclosures. Three buildings were identified, along with an open central area and external areas. The investigations demonstrated multiple phases of construction, occupation, alteration, and disuse. Polychrome mosaic floors were uncovered in three rooms (4, 6 and 7), pointing to high-status habitation. Two of the mosaics, the so-called ‘Diana mosaic’ and the ‘geometric mosaic’, were approximately 50% complete.

Six broad phases were identified:

- **Phase 1:** Pre-villa activity. There were hints of prehistoric presence and a suggestion of low-level 2nd-century occupation.
- **Phase 2:** Initial construction of villa buildings during the mid–late 3rd century AD. The phase encompasses the construction of Building 3 and the probable hypocaust structure of Room 11.
- **Phase 3:** Apogee of the villa complex between the late 3rd and late 4th centuries. Two sub-phases were recognized: an initial phase of construction and use (Phase 3a), followed by alterations and additions, suggesting a rapid expansion (Phase 3b).
- **Phase 4:** Period of deterioration, repair, and changes in use between the late 4th to 5th centuries AD. Mosaic floors required repairs, while other floors were replaced. Rooms originally of high status appear to have become more utilitarian.
- **Phase 5:** Further deterioration during the 5th–6th centuries AD, although occupation and activity, albeit of a lower intensity and possibly intermittent nature, persisted. This phase was characterised by the deliberate dismantling of walls, the collapse of roofs and the accumulation of detritus.
- **Phase 6:** Continued robbing of building materials from the 6th century onwards. The area reverted to an open field with medieval or later drainage and field systems being established.

There is a moderate assemblage of finds including almost 7000 sherds of Roman pottery, 100 copper-alloy objects (approximately half of them being coins), over 1000 iron nails, shale objects, worked bone, glass fragments, numerous fragments of painted wall plaster and a large amount of worked

stone, both as objects and building materials. A significant amount of charred plant remains, animal bones and industrial residues was retrieved through palaeoenvironmental sampling.

## Acknowledgements

Oxford Archaeology was appointed to undertake the excavation by Sue Seager, representing Koos Bekker of Emily Estate Ltd, which funded the project. Both are thanked for their help and engagement throughout. Thanks are also owed to Steve Membery, the Archaeological Officer for Somerset County Council, who monitored the work and provided invaluable guidance and advice.

The fieldwork was conducted by Vix Hughes assisted by Paddy Lambert, Isobel Bentley, Ben Slader, Vicky Green, Denis Sami, Toby Knight, David Pinches, Emma Powell, Steve Wadeson, Sophie Bojadzieva, Anne-Laurie Bollen, Emma Winter, Ana-Maria Lutsecu-Jones, Joanna Nastaszyc, Patricia Merienuk, Dan Firth, Stuart Ladd and James Fairbairn.

The project was managed for Oxford Archaeology by Stephen Macaulay. Finds were processed under the management of Leigh Allen. Environmental sample processing and reporting were managed by Rebecca Nicholson and Natasha Dodwell. Site survey data were processed by Gary Jones and Anne Kilgour. Matt Bradley provided geomatics management. Graphics work was managed by Magdalena Wachnik. The archive was prepared for deposition under the management of Nicola Scott. The project to disseminate the results of the fieldwork and post-excavation assessment was managed by Edward Biddulph.

## 1 INTRODUCTION

### 1.1 Background

- 1.1.1 Oxford Archaeology (OA) was commissioned by Koos Bekker in 2015 and subsequently in 2016 and 2017 to undertake archaeological investigations on the site of a Roman villa at Cattle Hill, Bratton Seymour, Somerset (ST 6673 2994), part of the holding of Emily Estates Ltd. The work was undertaken as a privately funded research project to excavate and provide information for an eventual display, reconstruction and presentation of the remains to the wider public.
- 1.1.2 A report on the first phase of work, an evaluation carried out in 2015, was issued in 2015 (Fairbairn 2016). A post-excavation assessment (PXA) report, which presented the preliminary analysis of the stratigraphic sequence of the 2016 and 2017 excavations, assessed the artefactual and environmental evidence from that work, and made recommendations for further analysis and publication, was prepared in 2018 (Hughes 2018).
- 1.1.3 The purpose of this current report is to review the stratigraphic narrative and specialist reports presented in the PXA and make the findings more widely available. It should be stressed, however, that very limited additional post-excavation work has been carried out and that there remains the potential to enhance understanding of the site through further study and analysis of the site records and finds and environmental assemblages. This report mainly describes the results of the 2016 and 2017 phases of excavation, though refers to the results of the evaluation where relevant.

### 1.2 Location, geology and topography

- 1.2.1 The site lies to the south-east of the historic market town of Castle Cary and south of Hadspen House. It is in a field to the west of Cattle Hill, approximately 150m north of the junction with the A371 (Fig. 1). The field that contains the greater part of the villa is in a slightly concave setting at the head of a valley which runs north to Shepton Montague. A tributary of the River Pitt is situated less than 1km north of the site, while the River Cam flows c 0.5km south of the site.
- 1.2.2 The site covers approximately 4ha, with the Roman villa located within a c 1ha area. The land was under arable cultivation in 2015, although since then the area of Roman remains has been removed from cultivation. The site has undergone damage and truncation as a result of ploughing over a long period of time; in places the topsoil cover is very shallow (<0.2m).
- 1.2.3 The solid geology of the area is Fuller's Earth Members consisting of both mudstone and limestone formed approximately 165 to 168 million years ago in the Jurassic period. To the east of the site is Frome Clay Mudstone formation (BGS 2020). The site lies towards the top of rising ground with a fine view to the north, and is generally flat at an average height of c 130m above Ordnance Datum.
- 1.2.4 The Somerset Historic Environment Record (HER) records the site as a Roman villa with mosaic and tessellated pavement, thought to be occupied in the 3rd and 4th centuries AD (SHER 53569 also 32052, 32053, 34698, 34754 and 36216).

## 1.3 History of archaeological work

### *Discovery*

- 1.3.1 In 1834, foundations of a small Roman building were discovered at Cattle Hill, along with stone roofing tiles and two coins of Constantius II (Phelps 1836, 221). In the 1960s, the then landowner (Mr P Hobhouse) excavated and unearthed a fragment of a mosaic floor, roof tiles, iron nails, samian ware and other pottery dating to the 3rd and 4th centuries AD. The mosaic was recorded during that intervention and subsequently published (Cosh and Neal 2005), the site being referred to as Bratton Seymour.

### *The 1960s excavations*

- 1.3.2 After the discovery of the site in the 19th century, no further investigations occurred at Cattle Hill until a chance find of a mosaic pavement (the so-called Diana mosaic) in 1967 led to a limited excavation by Crystal Bennett in 1968. She revealed a larger multi-phased villa building which the excavators suggested had burnt down in the 4th century AD (Fig. 2). Three seasons of excavations were conducted, revealing two buildings on the same alignment, part of a 'wing'. Associated coinage ranged from the early 3rd to late 4th centuries AD. The final season identified at least four phases of extensions and alterations to the stone foundations of the villa buildings, the final phase being represented by a cobbled floor. There were no traces of early Roman or Saxon occupation.
- 1.3.3 The results of the excavations were presented in two reports (Staples 1970; 1971), but there is no known archive or records pertaining to the fieldwork. Several boxes of tesserae and pottery have been retrieved from storage at Hadspen House itself. This material is now kept with the artefacts collected during the excavations since 2015.

### *The 2015 geophysical survey*

- 1.3.4 Bartlett-Clark Consultancy carried out a geophysical survey (magnetometry followed by earth resistance and electromagnetic conductivity) on the site in August 2015. The survey produced results consistent with the presence of a villa but little evidence of identifiable wall footings or rooms. It also revealed that the villa lay within a system of ditched enclosures (some of which appeared to pre-date the villa buildings), which extended into the adjacent field to the west.

### *The 2016 evaluation*

- 1.3.5 OA subsequently undertook an archaeological evaluation in February 2016 and opened 11 trenches (Fig. 2). Two of the trenches revealed building remains seen in 1969–70. The remaining nine trenches discovered new parts of the villa complex, uncovering substantial stone walls, floor surfaces, tesserae, tessellated pavements, several fragments of painted wall plaster, culverts/drains, pits and ditches. The work confirmed the villa's multi-phased development and putative 3rd and 4th century date. There was, however, evidence of significant plough damage and also of robbing of the stone walls, perhaps in antiquity.

### *The 2016 excavation*



- 1.3.6 The 2016 excavation phase, undertaken during July and August, uncovered a number of structures, which consisted of two main areas of buildings, Southern Building 1 and the Northern Building 2 (Plate 1; Fig. 3). The work covered an L-shaped area 50m by 30m and was undertaken over nine weeks, consisting of 1.5 weeks of machine stripping, three weeks of manual cleaning and then archaeological excavation of targeted areas. The probable location of the Diana mosaic seen in the 1960s was confirmed and its full extent uncovered.
- 1.3.7 Work was also initiated in the area around the mosaic room, between the main buildings, to investigate how the structures related. This part of the site is referred to as the Central Area. Excavation work also took place in an open area to the west. This revealed an extensive area of formal cobbled surfaces.

### *The 2017 excavation*

- 1.3.8 After the 2016 excavation, it was proposed to erect a temporary building over the remains to protect them, rather than backfill the site. The structure was designed to minimize variations in temperature, light and moisture with the aim of short-term preservation of the exposed remains. It was necessary to excavate pits for the concrete foundation pads of the building and the work was undertaken by archaeologists in conjunction with the groundworks team. This took place sporadically between October 2016 and February 2017, and most foundations were located in areas external to the villa buildings.
- 1.3.9 A 10m-wide area was also carefully machined to the top of the archaeological level, within the footprint of temporary building, along the southern edge of the previous 2016 excavations. This allowed the projected end of the Southern Building to be uncovered (Fig. 2; Plate 2).
- 1.3.10 The work was carried out over 10 weeks (March–May), consisting of 0.5 weeks of machine stripping, one week of manual cleaning and archaeological excavation of targeted areas. The targeted manual excavation took place within constrained areas and was concentrated on the interior of villa rooms. The main foci were Southern Building 1 and Northern Building 2.

### *Wessex Archaeology excavation*

- 1.3.11 Recent mitigation work carried out by Wessex Archaeology revealed some further buildings and, underlying these, the truncated walls belonging to an earlier phase of building (S Membery, pers. comm.).

## **1.4 Aims and objectives**

- 1.4.1 The key aim of the project was to identify the location of the villa's bathhouse and to investigate the remains uncovered with the intention of preserving, presenting and perhaps reconstructing the archaeology. The investigation also sought to establish the character, date, state of preservation, and extent of any other archaeological remains within the investigation area.
- 1.4.2 The objective of the investigation was to:

- determine if the remains survived to a sufficiently high quality that exposure and display may be an option
- to determine if reconstruction of some or all of the villa may be possible
- to consider what, if any, further investigations might be required to support the above plans or to discover more about the site

## 1.5 Fieldwork methodology

- 1.5.1 Excavation followed Chartered Institute for Archaeologists' standards (CIfA 2014a) and written schemes of investigation prepared by Oxford Archaeology in consultation with the Emily Estate and the South West Heritage Trust (Macaulay 2016a and b; 2017). All machine excavation took place under the constant supervision of a suitably qualified and experienced archaeologist. A 20-tonne, 360-degree mechanical excavator fitted with either a 2m- or 0.6m-wide toothless bucket was used for the 2016 excavations. A smaller 8-tonne, 360-degree mechanical excavator fitted with a toothless bucket was used for the 2017 excavations. Mechanical excavation ceased at either undisturbed natural deposits or when archaeological features were identified.
- 1.5.2 Topsoil, subsoil, and archaeological deposits were kept separate during excavations to allow for sequential backfilling if required. Exposed surfaces were cleaned by trowel and hoe to clarify located features and deposits. Excavation spoil was scanned visually and with a metal detector to aid recovery of artefacts.
- 1.5.3 Each feature was individually documented. Hand-drawn sections and plans were linked to written descriptions recorded on pro-forma context sheets, comprising factual data and interpretative elements. A Harris Matrix was compiled to demonstrate the stratified nature of the deposits and the site sequence. Detailed plans of individual features or groups were drawn at an appropriate scale (usually 1:20). The site grid was accurately tied into the Ordnance Survey National Grid and located on the 1:2500 or 1:1250 map of the area. Sections of features and short lengths of trenches were drawn at 1:10, and a register of these was kept. The photographic record comprised high-resolution digital photographs from various sources including the site camera, a camera on an elevated pole (polecam) and a camera mounted on a drone.
- 1.5.4 All registered finds were processed and packaged according to current standards of good practice. To the east and north of the temporary building, stone and tile piles were created for each significant context. To the north-west a single area was set aside for worked stones, including tiles and other dressed stones too large to remove from site.
- 1.5.5 Suitable deposits were sampled for retrieval of palaeoenvironmental remains. Upon encountering human remains, the client and the county archaeologist were immediately informed. Excavation was required as the remains were under imminent threat. Having obtained a Home Office licence, excavation proceeded in accordance with all appropriate environmental health regulations.
- 1.5.6 Metal-detector searches took place at all stages of the excavation by an experienced detectorist. No finds were made that might constitute 'Treasure' under the definition of the Treasure Act (1996).

## 2 STRATIGRAPHY

### 2.1 Introduction

2.1.1 The excavations uncovered a number of archaeological structures and deposits across the entire site and revealed over 150m of stone walling. The zones of archaeological remains were not excavated as contiguous areas but were defined as walls became visible and buildings and rooms were identified (Fig. 3). The rooms were given unique numbers as they were revealed. The zones of archaeology are as follows:

- Southern Building 1 – Rooms 1, 2, 3, 9, 10, 11, 12, and 14
- Northern Building 2 – Rooms 6, 7, 8 and 13
- Southern Building 3 (south of Building 1)
- Central Area – Rooms 4 and 5
- External Areas

2.1.2 Buildings 1 and 3 and the Central Area had been partially revealed and disturbed by work in the 1960s. In these areas there was often a hiatus in the stratigraphic record. Building 2 and the External Areas were almost totally untouched by previous investigations and provided fuller, intact stratigraphic sequences.

#### *Southern Building 1*

2.1.3 Building 1 (Figs 3 and 4; Plate 3) is a rectilinear building, aligned approximately NW-SE and measuring 18.85m in length and 8.4m in width, located in the southern part of the exposed villa complex. It is a highly complex, multi-phase building with numerous alterations and wholesale rebuilding evident from excavation. There appear to be three or four principal phases and changes of use across the whole building, with numerous sub-phases.

2.1.4 Excavation work was carried out to the full depth of deposits in rooms 1, 2, 3, 10 and 14. The walls of all phases remain intact and *in situ*. The full extent of Room 11 was unclear, and it may continue to the south below Room 12 (Plate 4). The deposits visible were fully excavated but the structures left intact. Rooms 9 and 12 remain intact and unexcavated.

2.1.5 The exterior stone walls and in some areas the lower foundations were revealed. The stones of both the foundations and the walls are generally faced on one side and are squared or triangular in plan. They are arranged so that the walls were faced on both sides with a small amount of core material. There are variations in the details of construction which are related to the different phases.

2.1.6 The best-preserved walls were in Rooms 1 and 11 where three to six courses of stonework survive. The walls were in general approximately 0.6m wide and there is almost no surviving mortar between the stones.

#### *Northern Building 2*

2.1.7 The north-western part of this building, Room 6 and part of Room 7, was revealed in 2016. The 2017 investigation fully exposed Room 7 and revealed Rooms 8 and 13 to the south. The building, as revealed, was essentially square and measures 13.75m by 11.6m (Figs 3 and 6). The plan of the rooms within the building is asymmetrical. Rooms

6 and 7 form the northern end of the villa complex with no buildings north of this. The rooms may not all have been built at the same time and it is likely that Rooms 8 and 13 pre-date Rooms 6 and 7.

2.1.8 The building as currently understood has been fully exposed, but it is possible that the area to the south-east was also internal, with additional rooms. This is supported by the findings in evaluation trench 9 (see Fig. 2) and the sondage dug to the south of the rooms in 2016, which showed that the deposits in these areas were consistent with debris found within the rooms of the northern building.

2.1.9 The northern building's walls were constructed with a foundation consisting of a single course of stones forming a wider base on which the wall above is offset. The stones of both the foundations and the external walls are faced on one side and are sometimes triangular in plan. The walls were faced on both sides with a small amount of core material. There were also stretches of wall built in herringbone style, formed by setting the stones on edge at an inclined angle. Up to six courses survived and the walls were mostly 0.6–0.8m wide. There was almost no surviving mortar between the stones.

### *Southern Building 3*

2.1.10 The north wall of Building 3 is located at the southern limit of the excavated area, with the rest of the structure extending beyond it (Figs 3 and 4). The suggested plan is derived mainly from the 1960s investigations and it has been possible to partly corroborate this during the current excavation. The 1960s work indicated that the building would have been part of an extensive self-contained structure extending over 30m to the south-east, possibly with a plan suggestive of a winged villa. No excavation was undertaken within the interior of Southern Building 3.

### *The Central Area*

2.1.11 In this area are the remains of at least two rooms (Rooms 4 and 5), with traces of walls suggesting a further room between them and deposits to the south-west suggesting that there was another room adjacent to Room 5 to the south-west (Figs 3 and 5; Plate 5). Room 4 lies north of Southern Building 1 and measures 4.85m by 3.5m. The NE and SW sides of the room are formed by two parallel NW–SE walls. The NW and SE walls were much less well preserved than the NE and SW walls. Within the confines of the walls was the finely made Diana mosaic, which was approximately 50% intact. Outside the NE wall, an area of large stones formed a flagged surface.

2.1.12 Room 5 comprised two poorly preserved walls on the room's north-eastern and south-eastern sides, with an internal area measuring at least 6.4m by 4.2m. The internal surface was recorded as a partially heat-affected area of rough cobbling or possible building platform.

2.1.13 A 13.8m stretch of NW–SE aligned walling, of both block and herringbone construction, extended SW from the southern corner of Building 2 to the NW side of Room 4. This could have served as a boundary wall or may have formed part of a veranda or portico to allow access between Rooms 4 and 5 and Building 2. A small area of large, flagged stones was uncovered immediately adjacent to the NE-facing wall of Room 4.

## *External Areas A and B*

- 2.1.14 The southern and western parts of the excavated area were cleaned to reveal extensive areas of external cobbling (Fig. 3; Plates 6 and 7; Area A, 2057; Area B, 2951). These zones are part of the villa forecourt or courtyard area. The overall extent of the cobbled areas is estimated to be 22.75m by 19.5m for Area A and 15.5m by 13.4m for Area B. Overlying deposits contained occupation debris and it is possible that there were ancillary structures in these areas.
- 2.1.15 Where the cobbles were removed for the temporary building foundations they showed some variation in size, in the way they had been laid (some were horizontal and others had been set on their sides), and in the amount of wear shown by their roundedness. There was some evidence to indicate that there may have been two layers of cobbles and patching of the surfaces.

## **2.2 Phasing**

2.2.1 Stratigraphic relationships were established for all archaeological features and deposits. The main phases of activity, from earliest to most recent, are as follows:

- Phase 0 Natural deposits
- Phase 1 Pre-villa (prehistoric period to the end of the 2nd century AD)
- Phase 2 Early villa construction and use (mid–late 3rd century AD)
- Phase 3a Main period of villa occupation (late 3rd–early 4th century AD)
- Phase 3b Main period of villa occupation (mid–late 4th century AD)
- Phase 4 Later villa occupation (late 4th–5th century AD)
- Phase 5 Late and post-villa occupation (?5th–6th century AD)
- Phase 6 Medieval, post-medieval and modern (?6th century AD onwards)

## **2.3 Phase 1: Pre-villa**

- 2.3.1 A small assemblage of worked flint indicates that there was a limited presence in the area during prehistory. Of the deposits from which worked flint objects were recovered, just one—a silty clay subsoil—pre-dated the villa; the remaining occurrences were residual in later deposits. Nevertheless, the probable Mesolithic or early Neolithic assemblage most likely represents casual losses and abandoned tools and debitage left during intermittent visits to the locality.
- 2.3.2 The earliest recorded feature was a pit (2271), which was sealed by the foundation layer of a floor surface of Room 2 in Building 1, and was cut by Phase 2 wall 2574, indicating that the feature existed prior to the building's construction (Fig. 5). The feature contained fragments of structural fired clay and charred plant remains, including grains of barley, and is likely to have served as an oven. A fragment of black-burnished ware from one of the fills points to a 2nd-century or later date for deposition. The pit had been cut into a clay layer from which a disarticulated skull was recovered.
- 2.3.3 There are hints from the pottery assemblage—the quantity and range of samian, for example—of mid/late 2nd-century activity, though most of this was found as residual occurrences in later later deposits.

## 2.4 Phase 2: Early villa construction and use

- 2.4.1 The earliest villa phase includes the construction of Building 3, and in Building 1, the hypocaust structure of Room 11, walls of Room 1 and features within Room 10.
- 2.4.2 Building 3 is located at the southern limit of the excavation area, with most of the structure extending beyond it. A small gap between this building and the southern end of Building 1 suggests that Building 3 was detached from the range to the north. Building 3 is defined by the remains of three walls, one of which (2943) was an external wall aligned NE–SW. The other two walls (2503 and 2513) appear to represent internal divisions. The remains largely match the plan obtained during the previous excavation of the building in 1968–70. It is not certain from the stratigraphic evidence that Building 3 is earlier than the more-northerly structures and its phasing remains tentative, but black-burnished ware of 2nd-century or later date was recovered from deposits associated with the walls.
- 2.4.3 Room 11 of Building 1 was of one continuous build, forming an L-shape with an apsidal end to the south-west (2810, 2862, 2901 and 2929). There is evidence of a suspended floor consisting of two buttresses (2928) and eight square cuts (2919–2926). The cuts were probable sockets for a system of pillared supports for a suspended floor (Plate 8). The supports may have been composed of stacked material in the manner of *pilae*, the remains of an example of which (using stone rather than tiles) survive (2771), abutting the south-east wall (2789) at the south end of the structure. Alternatively, the supports were constructed using solid stone uprights, such as the examples used in the Phase 4 corndryer in Room 10.
- 2.4.4 On present evidence, the elements of the room above formed a small heating system (hypocaust), with the integral apsidal structure to one side and a narrow flue opening in the south-east wall. The structure appears to continue to the south-east but its extent is unknown as Room 12 was not fully excavated. The shape of the apsidal projection suggests a vaulted ceiling, and it is possible that the room formed part of a bath building, possibly part of a larger bathing suite, which remains unexcavated. The room area contained a highly charred deposit of dark black silty clay, as well as small quantities of painted wall plaster, charred plant remains, eggshells and animal bones, including frog bones.
- 2.4.5 Wall 2574 was uncovered within the west side of Building 1. It was aligned SW–NE (2574) before turning at right-angles and continuing south-eastwards (wall 2933). Both walls were truncated or dismantled before the construction of later walls defining Rooms 1, 2 and 10, while wall 2574 is also on a slightly different alignment to the overlying walls, such as 2608 (Plate 9). The walls may have been related to Room 11 to the south, perhaps forming the northern edge of the Phase 2 building.
- 2.4.6 Two pit-like features (2900 and 2912) within Room 10 have also been phased in this period. Feature 2900 contained charred plant remains and fragments of fired-clay oven structure (Plate 10), while feature 2912 contained deposits rich in charcoal. Both features are interpreted as ovens. Feature 2912 appeared to pre-date Phase 3a wall 2934. The latest pottery from feature 2900 was identified as black-burnished ware dating to the 3rd or 4th century AD. A radiocarbon date of cal AD 130–330 (95.4%

probability) or cal AD 145–322 (68.2% probability) was obtained from cereal grain taken from a fill (2913) of the oven (1790 ± 30 BP; Beta-563968) (Table 29; Fig. 11).

- 2.4.7 Similar features were recorded west of Building 1 in Area A. Feature 2400 was cut into the natural clay (Plate 11). It was oval in plan and orientated ENE–WSW. It was not clay-lined, but the heat from the fire had altered the surrounding clay, partly baking it a deep red. Within the feature there were deposits rich in burnt material. The upper part of the feature was backfilled with clay. Into this clay was cut a second, later feature (2393). It had the same oval shape, form and construction and contained burnt plant remains and structural fired-clay fragments. Given their form and contents, the features can be interpreted, like 2900 and 2912, as a sequence of ovens. Pottery of 2nd-century AD or later date was recovered from feature 2393.
- 2.4.8 Pit 2383, found close to the ovens, contained the remains of small mammals. Another probable rubbish pit (2361), further west, contained burnt material, as well as pottery of 2nd-century date. Pit 2634, to the north, was also assigned to this phase.
- 2.4.9 Patches of cobbling (for example 2343, 2348 and 2530), representing external surfaces, were recorded across Area A. Pottery of 2nd century or later pottery was recovered from some areas.

## 2.5 Phase 3a: Main period of villa occupation

- 2.5.1 Phase 3 represents the apogee of the villa complex, when most buildings had been constructed and were in use for their primary function. Phase 3a relates to first phase of structures before they were expanded in Phase 3b.
- 2.5.2 Wall construction within Building 1 indicates the continued use and adaptation of Room 11 and the addition or remodelling of Room 1. The walls of Room 1 (2071, 2608, 2890 and possibly 2072) were constructed on top of the earlier walls (2754 and 2933) or incorporated the earlier stonework (Plate 12). In this phase, Room 1 may have been used as a cellar, as the floor level is lower than that of the adjacent rooms and it is situated in a corner of the building. The floor comprised a sequence of earth, clay and mortar surfaces with occupation layers in between of dark, redeposited material and a layer of probable rubbish. These were sealed by a stone floor (2270 and 2653). Pottery recovered from the floor layers spanned the 3rd and 4th centuries AD.
- 2.5.3 Wall 2934 extended on a SW–NE alignment from the east corner of Room 1 (the junctions of walls 2072 and 2890) before turning at right angle to the south-east (2196), following the alignment of earlier Room 11. The wall appears to post-date Room 11, but pre-dates wall 2073, a phase 3b wall of Room 1. In addition, the wall was cut by Phase 4 corndryer, 2930, in Room 10.
- 2.5.4 Rooms 4 and 5 in the Central Area to the north of Building 1—defined by walls 2150/2336, 2152/2339, 2154/2338, 2333, 2142/2318, and 2152—have been assigned to Phase 3a, although the phasing is tentative, owing to truncation by the 1960s investigations. The rooms may represent a separate suite of reception rooms, possibly approached from the east across an open area of stone flagging within the Central Area. Room 4 was paved by a mosaic (2050) believed to depict Diana.

- 2.5.5 The western corner of Room 4 has a slightly irregular construction at its junction with the NW–SE-aligned wall 2065/2119/2116. The wall may have been a later addition after Rooms 4 and 5 were completed, but the restricted nature of the archaeological investigation means that this could not be verified. Wall 2065/2119/2116 may have formed part of a veranda or corridor connecting Rooms 4 and 5 to Building 2 to the north. The remains of a surface of stone slabs (2287) was recorded on the east side of the wall. It is not clear whether the surface was an external or internal one. The remains of a wall (2427) further to the east may represent the boundary of this paved area (Fig. 3).
- 2.5.6 An extensive area of external cobbling (2057), forming part of a courtyard area for the villa, was uncovered to the south of Rooms 4 and 5 and west of Building 2. The dating of material from above the cobbles shows that the surface was in use by Phase 3b, but, overlying Phase 2 ovens, it is suggested that the surface had been laid earlier.
- 2.5.7 In Northern Building 2, the two southern rooms, Room 8 and 13, appear to have been constructed earlier than Rooms 6 and 7 (see below). Two features, pits 2941 and 2853, may relate to the construction of Room 8 or perhaps pre-dated it.
- 2.5.8 The walls of the rooms (2298/2581, 2878, 2322, 2323, 2842) were constructed within a shallow cut dug into the natural clay. As a result of the wall construction, the stripped and exposed natural clay was subject to trample and its upper part perhaps became an informal surface. One of the trampled layers (2794) contained pottery dating to the late 3rd/4th century AD.
- 2.5.9 There was variation in construction technique. Wall 2322 at the east corner of Room 8 was built of squared blocks, but wall 2323, which met 2322 at the corner, was built with 'herring bone'-style courses (Plate 13). The same treatment is seen in the segment of wall in the north-west corner of the room where it adjoined Room 7 (2297/2734/2638; Plate 14). This variation in the construction technique, perhaps for decorative effect, is seen elsewhere in the region, for example at Catsgore (eg Leech 1982, plate 36) and Halstock (Lucas 1993, plate 46).
- 2.5.10 Once the walls had been constructed, a stone floor was laid in Room 8 and a similar floor (2600) was laid in Room 13 (Plate 15), although this may have been contemporary with a second floor (2721; see below). The flooring of irregular stone flags suggests that Room 8 was of utilitarian function, contrasting with the adjoining high-status Room 7. The floor surface was sealed by deposits of dark humic debris resulting from occupation and trample. The deposits, which contained pottery dating from the late 3rd to 4th century AD, probably accumulated, not as a single event, but gradually over time during a prolonged period of occupation. The remains of a second, and better preserved, stone-flagged floor (2721) lay above floor 2822/2841 (Plate 16). This was overlain by occupation and trample debris deposits that contained humic material and charred flecks, as well as a pottery assemblage dating to the 3rd or 4th century AD.
- 2.5.11 It is possible that the stone flooring had not covered the room entirely, as patches of a clay and mortar surface (2751 and 2824) were recorded in places. In addition, on the eastern side of the room, where the stone flooring had not extended or had not survived, a hearth or oven (2801) had been cut into trampled clay (Plate 17). The fire within the feature had been sufficiently hot to alter the colour and texture of the



surrounding clay. There was no lining to the fire-pit, which was filled with a sequence of disused fuel waste, occupation debris and backfill; 4th-century pottery was recovered from the top fill. There was a spread of rake-out and trample deposits around the feature. Above the initial trample there were areas of occupation deposits, from which fragments of pottery of 4th-century date were recovered. It was difficult to determine on stratigraphic grounds whether the feature was earlier than the stone floor or whether it was a later feature that had been inserted into a partial or denuded floor surface. The pottery collected from the fire-pit and trample deposits, however, suggests that it is a later feature.

- 2.5.12 The presence of small plaster fragments in the deposits above the floor surfaces suggests that the walls of Room 8 were plastered.
- 2.5.13 The floor surface of Room 13 (2600) was sealed by deposits of dark humic debris resulting from occupation and trample. The deposits probably represent a period of occupation, gradually accumulated over time; pottery recovered from them span the 3rd and 4th centuries. One of the deposits was cut by the robber trench (2601) for the south-west wall.
- 2.5.14 Above these layers were further occupation and trample debris deposits that contained humic material and charcoal flecks and other burnt material, consistent with a mixed general use of the room.

## 2.6 Phase 3b: Main period of villa occupation

- 2.6.1 Phase 3b saw the continuing development of the villa complex. In Building 1, Room 11 was infilled and Rooms 2, 3, 10 and 14, as well as Rooms 9 and 12 (which remain unexcavated) were constructed. Activity continued in Room 1, which became incorporated into the new arrangement. In Room 1, the uppermost part of the north-east wall (2073) was altered, creating a space that may have served as a storeroom. The walls of Room 2 (2063, 2064, 2075, 2122 and 2608) were in contemporary use, although there is some indication that walls 2063 and 2064 were constructed after wall 2608 (Plate 18). This suggests that Room 2 had been added onto Room 1. A short length of wall (2123), built perpendicular to north wall 2075, separated Rooms 2 and 3. It appears to have a faced finish on its south-eastern end, which probably marked a point of access between the rooms.
- 2.6.2 The walls defining Room 3 (2075, 2123, 2062, 2579=2745 and 2064) were, again, probably all contemporary, although there is some indication that south-east wall 2579/2745 (Plate 19) was constructed or rebuilt after the north-east exterior wall 2062 (Plate 20). This suggests that the division between Rooms 3 and 10 might be a later alteration.
- 2.6.3 Room 9 was defined by wall 2944, while Room 12 was defined by walls 2456, 2942, 2458 and 2789. Neither room was investigated in detail.
- 2.6.4 Room 10 was defined by walls 2062, 2579/2745 and 2064/2073 (Plate 21). There was no south-east wall to separate the room from Room 14 (wall 2934 being attributed to Phase 3a Room 1), but alterations in eastern external wall 2062 may mark where such a wall may have existed. A skeleton (2895) tentatively identified as a neonate was found in the upper fill of an oven or firepit (2894; not shown on plan) within Room 10.

- 2.6.5 Room 14 joined the south-east side of Room 10 and was enclosed by walls 2062, 2940, 2789 and 2788 (Plate 22). At some point, the entire Phase 2 apsidal structure (Room 11) was built over. Wall 2788, marking the south-western side of the room, was constructed on top of Phase 2 wall 2901 (Room 11), but on a slightly different alignment. The construction methods were different in both walls, reflecting the different construction date and possibly the different functions of the rooms.
- 2.6.6 The flooring within Room 14 consisted of rammed clay surfaces. Successive surfaces were interleaved with layers of trampled occupation debris. A floor surface (2226) comprising stone roof tiles was laid in Room 1 (Plate 23). In Room 2, the flooring contained small fragments of painted plaster (Plate 24). The recycling of plaster indicated that part of the villa had been remodelled or altered. In Room 3, the floor deposits were associated with numerous small postholes. The size and nature of the postholes suggest that they held supports or fixtures for trivets, racks, benches and so on, rather than being structural elements of the room itself. In Rooms 10 and 14, the floors were only partly preserved. In Room 10, a series of trampled floor and occupation deposits was overlain by a stone floor (2837). This is turn lay below further occupational debris. In Room 14, rammed stone or cobble floors with charcoal trample and occupation layers were sealed by a stone floor (2772). Above this was a mortared stone platform-like feature, of which only the base appeared to survive (2773).
- 2.6.7 In Northern Building 2, Rooms 6 and 7 were added to Rooms 8 and 13. Room 6 was defined by external walls 2101, 2102, 2301, 2202/2296 and 2297. The westernmost wall (2102/2301) appears to have abutted the northern wall (2101/2295), but how it joined the southern wall (2202/2296) is not clear, although there are hints in the stonework that the western wall was later than the southern wall (placing the southern wall in Phase 3a as the northern wall of Room 13) or had been altered. The walls of Room 7 walls (2295, 2696, 2697=2713, 2616, and 2297/2734/2638) showed evidence of being extensively robbed, particularly on the north-east side. The rooms were divided by internal wall 2100/2099. The south-east end of wall 2100 was faced in stone, indicating that a doorway existed here.
- 2.6.8 Mosaic floors were laid across each room. The presence of plastered walls (suggested by the plaster in the overlying debris layers) and mosaic floors suggests that the rooms were not utilitarian but had a social function. In Room 7, the geometric mosaic (2639) was preserved mostly around the perimeter and the eastern side of the room (Plate 25), whereas the mosaic in Room 6 had been almost entirely worn away or replaced, leaving only small patches of tesserae (2307 and 2315) *in situ*.
- 2.6.9 An area of whole and fragmented tesserae and what might be tessera offcuts (2058) was recorded south of Building 2 in External Area B (Plate 26). The deposit may be a dump from the dismantling of a mosaic floor (although no mortar was seen) or a workshop where tesserae were manufactured to repair or lay a floor.

## 2.7 Phase 4: Later villa occupation

- 2.7.1 From the late 4th century AD, the villa saw episodes of repair and replacement, and the once high-status rooms became more utilitarian.

- 2.7.2 In Building 1, the main rooms continued to be used and adapted. In Room 1, a pillar stack or support (2609), made of reused building material, was laid over the floor of stone roof tiles inserted in Phase 3b. The feature may have been used to support a wooden staircase or upper floor level.
- 2.7.3 Rooms 2 and 3 show evidence of subdivision. In Room 2, a row of three stone-packed postholes (2156, 2158 and 2164) were cut into underlying deposits (Plate 27). Floors continued to be laid in respect to the partition and debris was trampled onto the fills of the postholes. A hearth (2645) was placed above one of the floors, a surface of cobbles and clay (2180). The hearth was defined by a baked clay base filled with charcoal-rich deposits and surrounded by a spread of trampled charcoal-rich occupation debris. The feature was probably the remains of an open fire within the room, presumably for heating, light and cooking.
- 2.7.4 In Room 3, a row of postholes (2664, 2666 and 2668) was cut into occupation deposits and surfaces. A charcoal-rich occupation layer (1005, 2620), from which 4th-century pottery was recovered, accumulated around them. Another row of postholes was then cut into the layer. The postholes (2550, 2621, 2623, 2625, 2672) were packed with stone and may have been related to a wooden screen or partition (Plate 28). Several floor surfaces were recorded, notably one constructed of re-used stones and laid as a somewhat irregular flagstone surface (2252; Plate 29). This was laid on a levelling deposit, which incorporated a relatively high volume of fragments of painted wall plaster.
- 2.7.5 A T-shaped, stone-built corndryer or malting oven (2930), defined by walls 2739 and 2740, was inserted into Room 10 (Plate 30). The feature was built on top of Phase 3b floor surface 2837 and against the east (2062) and north (2579/2745) walls. Two dressed stone pillars formed supports within the small arms of the corndryer. The pillars were squared in profile with clear tool marks and may be reused pilae from an earlier hypocaust. Another dressed pillar of the same type was located on the south-western corner of the structure. The stokehole or furnace for the corndryer was located at its south-eastern end. The corndryer was in use for some time, with successive deposits of charred plant remains, including fuel, cereals, detached sprouts and germinated grain, recorded inside the structure. A radiocarbon date of cal AD 140–345 (95.4% probability) or cal AD 230–330 (68.2% probability) was obtained from cereal grain recovered from a fill (2806) of the corndryer (1770 ± 30 BP; Beta-563969) (Table 29; Fig. 12).
- 2.7.6 Later activity in Room 10 is represented by pit 2954, which was cut into the top of the eastern part of the corndryer. Immediately south of the corndryer was another pit (2216), in which a fragment of millstone (SF 820) and a sheep (or goat) burial was found (Plate 31).
- 2.7.7 Deposits rich in charred material, almost certainly raked-out fuel waste, occupational trample and debris from the use of the corndryer (eg 2093), were recorded in Room 14 (Plate 32), overlying the Phase 3b stone platform 2773, suggesting that the room was used as the principal area for fuelling and stoking the corndryer. Another pit, 2769, was cut into Phase 3b floor surface 2768.

- 2.7.8 The mosaic floor in Room 6 in Building 2 was largely replaced by a rough surface of stones (2233; Plate 33). There may have been more than one phase of flooring or a subdivision within the Room 6 during this later phase: the area of later flooring on the north side of the room generally comprised larger stones laid with a more consistently flat finish, while the flooring on the south side was less even and generally comprised smaller irregular blocks, stone tile fragments and fewer flagstones. There was also a relatively distinct NE–SW-orientated line extending from the edge of the probable doorway marked by the end of wall 2100. The junction between the two sides coincides with the location of the remaining patch of mosaic floor. This suggests that the north and south parts of the room served different functions or belonged to different phases of activity.
- 2.7.9 The flagstone floor over the mosaic suggests that the room changed function, possibly acquiring a more utilitarian purpose. It is unclear whether the floors on the north and south sides of the room were contemporary with late activity in other parts of the villa or represent a period of reoccupation after disuse or abandonment.
- 2.7.10 Hearths built with reused red sandstone tiles were inserted into Rooms 7 and 8. In Room 7, the tiles (2312) forming the hearth (2791) had been laid directly over the mosaic border, which had been discoloured through proximity to heat (Plate 34). In Room 8, a hearth (2755) was built against south-east wall 2323 (Plate 35). The area around the hearth contained charcoal and pottery, including a complete but fragmented mortarium of late 3rd or 4th century date. There was a second area of scorching from heat in Room 8 and a thin spread of charcoal-rich trampled soil and fuel debris. A row of postholes (2775, 2777, 2779 and 2781) and another posthole (2783) set at right angles to the north end of the row were inserted into the mosaic in Room 7. The postholes may represent an internal division of the room or the presence of a structure.
- 2.7.11 In Room 13, there were layers forming an area of uneven flooring (2299/2580/2584), which overlay 2600. The flooring may have been contemporary with the later stone floor in Room 6. In the north end of the room, a sequence of deposits that were a mix of trampled, charred material and occupation debris was recorded.

## 2.8 Phase 5: Late and post-villa occupation

- 2.8.1 Phase 5 saw more widespread deterioration across the villa complex but there is also evidence of continued activity. Occupation may have been at a much lower level and was possibly intermittent. There was some deliberate dismantling of walls, collapse of roofs and the accumulation of detritus.
- 2.8.2 In Building 1, there was an accumulation of dark organic deposits and a greenish organic layer within Room 3. Pottery of late 3rd- or 4th-century date was recovered from the deposits. Similar layers were recorded in Rooms 10 and 14 and also represented the disuse of the room. There was no clear evidence of robbing of the walls of this building. The upper part of the sequence of deposits within all rooms comprised stone-rich rubble fills that presumably resulted from decay, collapse and demolition. This material included a substantial fragment of a column shaft found in Room 1.

- 2.8.3 In the north-east corner of Room 2, the burial of a neonatal skeleton (2074), first revealed in the 1960s, was re-exposed and excavated to current standards. The skeleton was on a north–south alignment, respecting the adjacent wall (2123). The cut and associated deposit of the burial were removed during the 1960s. However, a bone sample was taken from the right femur and provided a radiocarbon date of cal AD 380–537 (92% probability, 1626 ± 30; SUERC-69735 (GU42066); Table 29).
- 2.8.4 Building 2 appeared to have been occupied for a period in this phase prior to the walls being robbed. All the rooms contained a sequence of occupation debris, followed by . The later deposits may reflect a phase of post-occupation activity inside a gradually decaying building. Further deposits above these may represent the last stage of occupation and eventual abandonment. These contained rubble and abundant broken stone roof tiles, many with the nail holes and several still with iron nails through them. The area of tile sloped downwards from west to east, suggesting the roof had collapsed.
- 2.8.5 Robbing of the walls was evident in Room 7 along the north-western and north-eastern sides. A robber trench (2703) was recorded along the southern wall of Room 8 (2878), and dumps of stone from the wall core were recorded within the room. The wall debris had presumably been dumped in piles and over time settled or was spread by ploughing. In Room 8, a deposit containing a large quantity of building stone, roof tiles, mortar and plaster was recorded. The deposit may have been the result of a rapid wall collapse, as there was little accumulation of soil that might have derived from open conditions or a prolonged period of decay, or a deliberate demolition of a small area of surviving building.

## 2.9 Phase 6: Medieval, post-medieval and modern

- 2.9.1 In Phase 6, activity probably involved the continued robbing of building materials. The area gradually became an open field and later drainage and field systems were installed.
- 2.9.2 There were two features of this phase in Building 1. Both were east–west aligned narrow linear feature that cut the upper rubble deposits.
- 2.9.3 To the north, extending across Building 2, was an unusual feature (2649), which measured c 12.5m by 2.8m and was aligned roughly NNW–SSE. The feature cut the latest deposits in Rooms 7 and 8 and had a steep U-shaped profile. The feature had two fills, the upper one consisting of redeposited natural clay. Interpretation of the feature is difficult. It may have been a large pit for the extraction of material, soil or stone.
- 2.9.4 An extensive later medieval to post-medieval culvert or drain (2084/2213/2577/2646) traversed the entire site. The culvert reused some of the Roman period stones.

### 3 ARTEFACTS

#### 3.1 Roman pottery by Paul Booth

##### *Introduction*

- 3.1.1 The 2016 and 2017 excavations produced some 6843 sherds (71,991g) of Roman pottery from some 300 context groups, further to the 686 sherds (9482g) from the 2015 evaluation. Thirty-six sherds (328g) of post-medieval pottery were also recovered from a small number of later features or in some cases occurred as intrusive material in the top of Roman deposits. The pottery was scanned rapidly, primarily for the purpose of providing spot dating for the context groups to facilitate phasing of the site and assessment of its overall chronological range. The principal fabrics present in each context group were noted in an Excel spreadsheet, using codes in the OA South system for recording later prehistoric and Roman pottery (Booth 2016), mainly at an intermediate level of precision (eg R30 – a general code for moderately sandy reduced coarse wares), although specific fabric codes, for example for fine wares and black-burnished ware, were used where possible. Equivalents of these codes defined in the national Roman fabric reference collection (Tomber and Dore 1998), where used, are given in bold.
- 3.1.2 The assemblage is in moderate condition, with a mean sherd weight (MSW) of only 10.5g and variable, though generally reasonable, preservation of surfaces. The relatively low MSW is in part a consequence of the large amount of black-burnished ware in the assemblage, as jars in this fabric tend to be thin walled and therefore fragment very readily (MSWs for black-burnished ware across a range of assemblages in the writer's experience are almost invariably below the MSW for the assemblages as a whole).

##### *Fabrics, forms and chronology*

- 3.1.3 As already indicated, Dorset black-burnished ware (fabric B11, DOR BB 1) was the dominant fabric type in the assemblage. Most fabrics have not been quantified in detail, but black-burnished ware totalled 54.4% of sherds (47.7% of weight) in the evaluation assemblage, and this level of importance is likely to be reflected in the excavation assemblage. Potential black-burnished ware variants (B10 and B30, the latter a wheel-thrown fabric) were additional to the main Dorset fabric; no certain examples of 'south-western' black-burnished ware (SOW BB 1) were seen. The other principal coarse wares were fine and moderately sandy, reduced coarse wares, R10 and R30 respectively. These are not confidently assigned to known sources at present. Fabric groups O10 and O30, potentially the direct oxidised counterparts of R10 and O30, were a relatively minor component of the assemblage and other coarse wares were even less significant in numerical terms.
- 3.1.4 A range of 'fine and specialist' wares amounted to 6.7% of the total sherds, a very similar figure to that seen in the evaluation material (5.7%). As before, these consisted mainly of samian ware (c 50 sherds), mainly of Central Gaulish (LEZ SA 2) origin, and Oxford and New Forest fine (colour-coated) wares (OXF RS and cf NFO CC respectively) and mortaria (OXF WH and RS, NFO PA). Inevitably the larger assemblage contained a slightly wider range of material, including a couple of amphora sherds (one probably

Baetican and the other, from an uncertain source, reused as a rubber), white and white-slipped wares, the last perhaps the 'south-western white slip' fabric Q22 (SOW WS). Additional fine ware fabrics were from the Nene Valley (LNV CC, probably only from two beakers, including multiple fragments of one of these) and both central Gaulish and Mosel valley dark slipped ('Rhenish ware') vessels (CNG BS, MOS BS). Mortaria were very largely in the range of fabrics from the Oxford industry (51 out of 57 sherds). Amongst these the white ware forms M17 and M22 (Young 1977) were present, but the majority were in the red colour-coated ware and amongst these it is notable that Young's type C100, dated exclusively to the 4th century, was more common than type C97 which has a wider AD 240–400 date range. By contrast with the situation with regard to mortaria, the few white ware sherds were perhaps all of New Forest origin (NFO WH 1 and 2), amongst which a candlestick of Fulford (1975) type 82 was notable.

### *Chronology*

- 3.1.5 Overall the pottery covers the period from the 2nd to 4th centuries AD, but context groups simply assigned a 2C+ (2nd century or later) date range in the spreadsheet (76 in total, including groups defined as mid 2C+ or late 2C+) are expressed in these terms mainly because they are small and typically lack closely diagnostic material. Many of these consist largely or entirely of sherds of black-burnished ware which lack distinctive features and therefore could date to any point within that overall range. On balance it is likely that many of these groups will be of later Roman date (broadly mid-3rd-4th century), but it is not possible to establish this.
- 3.1.6 There are, however, some indications of earlier activity. The quantity of samian ware is sufficient to suggest that not all of it was used only in the late Roman period, even though most of it was recovered from contexts of that date, and a few black-burnished ware vessel types can be dated to the later 2nd or early/mid-3rd century. In total there are nine context groups (2191, 2227, 2357, 2377, 2389, 2412, 2421, 2439 and 2444) for which a mid- to later 2nd century date is possible, though it is emphasised that some of the groups are small and that the dating is on ceramic criteria alone. Nevertheless, on present evidence the pottery suggests that activity on the site commenced in the second half of the 2nd century AD.
- 3.1.7 Nevertheless, the range of forms in the dominant black-burnished ware strongly suggests a late Roman emphasis in the occupation of the site. The jars are relatively difficult to date on the basis of rim forms alone if little of the shoulder and lower body profile is present, but the burnished lattice decoration is often more indicative of date. The great majority of such sherds here have obtuse angle decoration indicative at the very least of a date in the 3rd century. In most cases the angle seems more consistent with dating in the late 3rd and 4th centuries rather than earlier, but a note of caution may be necessary since, contra Gillam (1976), some examples of vessels with this obtuse angle lattice decoration can certainly be dated earlier than the middle of the 3rd century (eg Farrar 1981; Lyne 2012, 208). Here, however, usually only sherds with markedly obtuse-angle lattice have been used in assigning a later 3rd century or later date. A single black-burnished ware sherd with burnished oblique lines rather than lattice decoration was noted in context 2549. This characteristic is very occasionally

seen on 'cooking pot'-type jars in this fabric as early as the 3rd century, but is typical of the so-called Type 18 bowls. These are considered to be a particular feature of late black-burnished ware production with a significant distribution in this region, and are now thought not likely to date before about AD 360 at the earliest, while there is unusually good evidence for seeing the type as characteristic of the early 5th century (Gerrard 2016). An almost certain example of a vessel of this type was identified in the evaluation, strengthening the likelihood that the sherd from 2549 was also of this type.

3.1.8 Bead and flanged bowls are also characteristically late components of the black-burnished ware form repertoire and are the dominant variant of this type here. Again, aspects of decoration can be useful in assessment of date. Relatively few of the bead and flanged bowls are noted as having any kind of burnished arcade decoration. While in some cases this will simply be because the sherds were insufficiently large to show such decoration, the frequency of this absence is notable. The proposed dating of undecorated bowls of this type to AD 270/300–370, with a 4th-century emphasis (Lyne 2012, 212) supports the general interpretation of the late dating of BB1 here. Black-burnished ware bowls with earlier rim forms are present, but in much smaller numbers; the bead and flanged types were present in a minimum of 62 of the 300 context groups. Overall, therefore, a significant majority of vessels in the commonest fabric in the assemblage are likely to have dated after about AD 250 at the earliest.

3.1.9 The same was true of the great majority of all the fine wares. By definition, the Oxford colour-coated wares date after *c* AD 240, and the New Forest fine wares will have been no earlier, even though Fulford's date of *c* AD 270 for their inception is thought by some scholars to be a little late (Fulford 1975, 111; M Lyne pers. comm.). It is less clear how many of the vessels in these fine wares can be dated to the later 4th century. The most common Oxford colour-coated ware forms are the bowl C51 and the dish C45, both with the overall date range for this fabric, AD 240–400. Examples of Oxford type C46 (Young 1977) and New Forest fine ware type 82 (Fulford 1975), however, are both assignable to the second half of the 4th century. A jar in late Roman shell-tempered ware (HAR SH, context 2028) can also be assigned to the second half of the 4th century but, like the fine ware vessel types just mentioned, is just a single example. The number of vessels that are certain indicators of a later 4th-century date may therefore be quite small.

### *General discussion*

3.1.10 As noted in relation to the pottery from the 2015 evaluation, the Cattle Hill assemblage is unremarkable in terms of content, with a minimal component of imported pottery, some perhaps residual, a component of oxidised and reduced coarse wares probably of relatively local origin and a very significant component of south-east Dorset black-burnished ware. These are supplemented by modest quantities of fine and specialist wares, mostly samian ware for the middle Roman period and then from the two principal late Roman fine ware industries supplying the region, Oxford and the New Forest. Together these components indicate activity on the site in the late Roman period, and the majority of the pottery can be assigned to the second half of the 3rd century and the 4th century, although some earlier material is present and as



discussed above it is likely that this represents activity from the mid to later 2nd century onwards.

- 3.1.11 The excavation assemblage appears no different in character from the pottery recovered from the 2015 evaluation, which was recorded in more detail. That assemblage was also compared with the rather larger collection from the excavations of 1968, 1969 and 1970, which was not significantly different from that recovered in the evaluation, though it is just possible that the collection has been 'weeded' and selected items removed. The total site assemblage, therefore, presents a fairly consistent picture of ceramic use with no clear indications of significant variation in the chronological profile or general character of the assemblage across the site.
- 3.1.12 What is less clear is the extent to which the composition of the assemblage is representative of what might be expected from a villa in this region and period. There are no large well-recorded villa assemblages from the immediately surrounding region that can be used for comparative purposes.
- 3.1.13 In terms of assessment of site character and status it is generally accepted that in lowland Roman Britain at least a broad correlation can be expected between site character as indicated by the structural evidence and that of the related finds, including pottery, though the assumption has not often been tested using quantified data. On this basis, however, pottery assemblages from villa sites would often be expected to be distinct from those in other rural settlements, and this distinction would typically be characterised by higher proportions of pottery defined as fine and specialist wares—material that was not essential to perform the most basic functions for which pottery could be used. Work in the Upper Thames Valley region (eg Booth 2004) has demonstrated the complexity of these correlations, and their changing character through time. In the rural contexts examined there (including villas and 'small towns') the demonstrated trend is for a general increase in the proportion of these wares through time, particularly in the later Roman period. Compared to the evidence derived from that region, the fine and specialist ware value for Cattle Hill quoted above (6.7% of sherds) appears very low, but its significance is uncertain since there appear to be no comparable systematic analyses for this region (though there is some discussion of the question in relation to Shepton Mallet; Evans 2001, 162). It is clear that there could have been considerable variation in the dynamics of pottery supply from one region to another, and the patterns observed in the Upper Thames region may not be applicable here. Regional benchmark fine and specialist ware values against which the Cattle Hill assemblage might be viewed are therefore unknown. This could be a significant area for further work.
- 3.1.14 Other comparative data come from the site at Lamyatt Beacon, only c 7km north of the present site (Leech 1986). The parallels are not exact because this is a temple site, but the late Roman emphasis is the same as at Cattle Hill. Moreover, the broad proportions of the main components of the assemblage (59.7% black-burnished ware and 30.5% reduced coarse wares by sherd count; Leech 1986, 285) are likely to be closely comparable to those from Cattle Hill, and the fine and specialist ware proportion (6.7% of sherd count) is identical. These figures suggest a consistent pattern of supply of the principal pottery types for this immediate area, one which contrasts on the one hand with the picture for Shepton Mallet, a little to the north-

west which has, in particular, a significantly lower representation of black-burnished ware, perhaps partly owing to its wider chronological range (Evans 2001, 112) and, on the other, with late Roman assemblages from Catsgore and Bradley Hill further south-west which are completely dominated by black-burnished ware (see Leech 1986, 285).

### 3.2 Post-Roman pottery and clay pipe *by Paul Booth*

- 3.2.1 Thirty-six sherds (328g) of post-medieval pottery were recovered from a small number of later features or in some cases occurred as intrusive material in the top of Roman deposits. The pottery was scanned rapidly, primarily for the purpose of providing spot dating for the context groups to facilitate phasing of the site and assessment of its overall chronological range.
- 3.2.2 Fifteen fragments (50g) of post-medieval clay pipe were recovered from a small number of post-Roman features.

### 3.3 Ceramic building materials *by Cynthia Poole*

#### *Introduction*

- 3.3.1 Excavations at the villa produced a modest assemblage of ceramic building material amounting to 289 fragments weighing 9kg. Apart from nine fragments (215g) of 19th–20th-century field drain and brick fragments in backfill or cleaning layers, the assemblage is entirely of Roman date, comprising roofing material, flue tile and tesserae. The post-Roman material is not considered further but is recorded in the archive. The Roman tile was found in Buildings 1, 2, and 3 as well as in areas between and around the buildings. No complete tiles were recovered, and the only complete dimension surviving is thickness. Abrasion is generally absent or low for three quarters of the assemblage. The mean fragment weight (MFW) is very low at 31g and even excluding tesserae, this only rises to 43g.
- 3.3.2 The assemblage has been fully recorded on an Excel spreadsheet in accordance with guidelines set out by the Archaeological Ceramic Building Materials Group (ACBMG 2007). The record includes quantification, and details of fabric type, form, surface finish, forms of flanges and cutaways, markings and evidence of use/reuse (mortar, burning etc). The terminology for Roman tile follows Brodribb (1987); coding for markings, tegula flanges, etc. follows that established by OA for the recording of CBM and tegula cutaway types are linked to those classified by Warry (2006). Fabrics were characterised with the aid of x10 hand lens.

#### *Fabrics*

- 3.3.3 A range of fabric types were identified, though the predominant characteristic of nearly all is a fine sandy texture and they are predominantly red-orange in colour. The fabrics are quantified in relation to form in Table B.1 (see Appendix B). Fabric D dominated the assemblage (67.5% by count, 54% by weight). This was a very fine sandy-silty smooth clay with rare coarser inclusions of quartz sand. This was followed in almost equal quantities by fabrics E, F and J. Fabric E was very similar, only differentiated by fine cream laminations within the clay. Fabric F contained a moderate density of fine-medium quartz sand up to 0.4mm and was speckled with fine black iron inclusions. Fabric J contained a high density of fine quartz sand less than 0.2mm. Other

fabrics formed only a small percentage of the assemblage. Most had a fine sandy matrix differentiated by dense cream calcareous flecking in fabric A, red iron oxide inclusions in fabric B and cream silty clay pellets in G. Fabric H was the only type with a significantly different component of common shell inclusion up to 9mm in size, suggesting that this originated from areas of Fuller's Earth. The other fabrics could all derive from the same broad geological source, the slight differences reflecting natural variations in deposits.

### *Forms*

- 3.3.4 The Roman tile forms are quantified in Tables B.1 and B.2 in relation to fabrics and phasing respectively.

#### *Tegulae*

- 3.3.5 Tegulae formed the largest proportion of the tile, accounting for almost a third by weight. They were made mainly in fabrics D and E and were the only tile to be made in fabrics A and F (there are strong indications that the fragment of fabric A classified as flat tile was part of a tegula). The tegulae were very neatly finished with smooth surfaces, unusually so on the base, probably produced by knife or wire trimming though this rarely left any striations as more commonly occur, either because of the fine fabric and moulding sand used or possibly because extra care was taken to produce well finished tiles.
- 3.3.6 Flanges survived on ten tiles and were mostly rectangular in form (type A), apart from two with rounded profiles (types D2 and E). The flanges ranged in width from 19mm to 32mm with half the examples large enough to exhibit a distinct taper longitudinally thinning from the bottom edge to the top. Flange heights varied from 43 to 48mm. The internal base angle included both curved and angular examples. Two tiles had a double finger groove running alongside the flange on the tile surface and another had a triple arrangement. Double and triple finger grooves on tegulae are common at Winchester and the surrounding area but are not especially frequent outside this region (Poole and Shaffrey 2011, 290).
- 3.3.7 Cutaways at the corners of the tegulae included one upper cutaway of standard rectangular form and seven lower cutaways. The lower cutaways included Warry's types C4, C5, D15 and R. The last is a type that appears to occur exclusively in rural settlements and has been found at villa sites of the Danebury Environs Project in Hampshire. The C4 and C5 categories are dated by Warry (2006) to mid-2nd to mid-3rd century and the D15 type to mid-3rd to 4th centuries. Two tiles had nail holes 7mm in diameter, in one case centred 52mm from the top edge.
- 3.3.8 Signature marks occurred on three tegulae, two of which could be identified as type 2.1 and 2.2 in the form of horseshoe-shaped signature. One (context 2293, a Phase 3b layer in the Central Area) with a single finger groove was quite small measuring 60mm high and starting from the lower edge of the tile 55mm from the left-hand flange. The second (context 2733; Phase 5 robber trench fill, Room 8) was made with two narrow shallowly inscribed grooves starting c 20mm above the tile edge and measuring slightly over 76mm high. The finger grooves were unusually narrow and may have been made by a child or adolescent. A further short length of finger groove forming an arc from

the tile edge (context 2081; Phase 3b layer) may have been part of a simple semicircular signature (type 1). Only one tegula had burning on both surfaces, suggestive of reuse in an oven or similar structure.

#### Imbrices

- 3.3.9 Imbrices formed a relatively low proportion of the assemblage (8% by weight). All were fragmentary and identified on the basis of curvature observed. Profiles included angular with a more V-shaped form and rounded. They measured 12–21mm thick (Fig. 7). Outer surfaces were smooth and even with one having slight linear corrugations from smoothing. Few edges survived but included typical concave and angled examples. No markings were present. Two tiles had evidence of burning or sooting on the surfaces.

#### Flue tile

- 3.3.10 Flue tile formed 10% (by weight) of the assemblage. All the fragments were identified on the basis of keying and are presumed to come from standard box flue tiles (*tubuli*) (Plate 36). They measured 16–22mm thick (Fig. 7), but no other complete dimensions survive. The keying was all combed and includes bands forming straight and wavy vertical and diagonal patterns. The best preserved example (context 2647; Phase 5 layer, Room 14) has a diagonal band running from the centre of the edge to the side, cut by a second straight band running parallel alongside the edge, and both were subsequently cut by a squiggly band running vertically alongside the corner angle. The comb measured 25mm and had six teeth. Another tile with a similar combination of straight diagonal band overlain by two vertical wavy bands was less well preserved (context 2549; Phase 5 layer, Room 3) but had possibly been made with the same comb (27mm wide with six teeth). Other designs included a straight vertical band alongside the corner angle, combined a diagonal band from the corner made with a narrow comb 12mm wide with three narrow widely spaced teeth, and a curving arc made with a coarse comb 31mm wide with five or more teeth. No vents were observed.

#### Ceramic tesserae

- 3.3.11 Loose tesserae were recovered mainly from Area B and the Central Area with small numbers recovered from the buildings (the relatively small number from the buildings may result from loose tesserae being retained with the *in situ* mosaics). All the tesserae were made from tile, except for one from a black pot and three stone tesserae, two of which were made from grey limestone and the third white one probably from Lower Chalk. A number retained remains of mortar around the edges or on the base.
- 3.3.12 The majority were medium-sized, measuring between 10 and 20mm, and rectangular or square in shape (Fig. 8). Other shapes included trapezoidal, triangular, diamond, pentagonal, hexagonal and ovoid. In comparison with the *in situ* mosaics, these were deliberately produced to fill specific spaces of non-standard shape.

#### Flat tile and indeterminate

- 3.3.13 Flat tile and indeterminate scraps formed 18% (by weight) of the assemblage but almost half in terms of fragment count. Flat pieces ranged in thickness from 12mm to over 39mm (Fig. 7) overlapping with all other identified forms. However, a significant proportion extends beyond the maximum thickness of tegulae observed on this site,

suggesting the possibility that some brick is present though not otherwise positively identified. The small fragment with an incomplete thickness of 39mm is almost certainly brick.

### *Discussion of the Roman tile*

- 3.3.14 The tile assemblage is relatively small and this no doubt reflects the limited use of tile in the construction of the villa buildings. It is clear from the excavated remains that local stone was extensively used in walling and large deposits of stone roofing show that this was the dominant roof material used. In view of this, it is perhaps surprising that imbrices were not more common, forming a greater proportion of the assemblage, as it was not unusual for these to be used as ridge tile in conjunction with stone roofing.
- 3.3.15 Tile found within the buildings exhibit few distinct concentrations. Tesseræ are most common, unsurprisingly, in relation to the Northern Building 2, where the mosaics occurred in Rooms 4, 6 and 7, in the adjacent Central Area and Area B to the west, where tesseræ manufacture is thought to have taken place. A scatter of tesseræ occurred in the Southern Building 1 and a concentration of a further 15 tesseræ was found in Building 3, suggesting that a tessellated pavement or mosaic may also have occurred in this building.
- 3.3.16 There is no single concentration of roofing tile to suggest that a particular part of the buildings was roofed with ceramic tiles. It is possible that the tile was not used for roofing at all, but used in other constructions. However, the general absence of burning on the tile suggests that it was not being utilised in any of the hearths, ovens, corndryers or flues. There is a marginally greater concentration of roof tile associated with Building 1 and it is possible that ceramic tiles were used for roofing at some stage in the life of the building. One tegula fragment had been reused in the Phase 3b stone floor of Room 1. There is also a distinctly greater concentration of flue tile within this building indicating that part of it was heated at some stage in its use. This is consistent with the character of apsidal Room 11, which is typical of a hot plunge bath with vaulted roof. The absence of brick is accounted for by the use of stone pilae and stone and mortar supports for the suspended floor which was also probably of stone.
- 3.3.17 The greatest concentration of tile (42% by weight) was found in Phase 3a contexts (Table B.2), suggesting that this was period of refurbishment and alteration to the buildings, when tile structures were dismantled and replaced with stone. A second peak occurs in Phase 5 (29% by weight) which no doubt relates to disuse, demolition and robbing of the buildings.

## **3.4 Fired clay and burnt stone by Cynthia Poole**

### *Introduction*

- 3.4.1 A modest assemblage of fired clay, amounting to 545 fragments weighing 2469g, was recovered from deposits within the buildings as well as from external areas, dated from Phase 1 to 6. Fired clay is not itself intrinsically dateable and is reliant on associated material or stratigraphic context for phasing. All the material is presumed to be Roman in date. A high proportion of the assemblage was recovered from sieved

samples (70% by weight, 86% count); this material inevitably has a low MFW of 3g compared to 10g for hand-collected material.

- 3.4.2 The assemblage has been fully recorded on an Excel spreadsheet in accordance with guidelines set out by the Archaeological Ceramic Building Materials Group (ACBMG 2007), which whilst not specifically designed for fired clay provide appropriate guidance. The record includes quantification, fabric type, form, surface finish, organic impressions, dimensions and general description. Fabrics were characterised on macroscopic features and with the aid of x10 hand lens.

### *The character of the assemblage*

- 3.4.3 Most of the fired clay occurs in a fine sandy fabric similar to CBM fabric D. A few pieces have a coarser sandy fabric, and some contain shell, though these pieces may be shelly mudstone, rather than fired clay proper. Much of the fired clay is amorphous or has a single shaped flat surface, generally fairly roughly finished or with finger marks from smoothing. Some pieces formed thin flat slabs 10–15mm thick which probably represent the lining of corndryers or ovens. Much of the fired clay from sieved samples came from the fills of corndryers, an oven and a hearth, and as such represents fragments dislodged from the walls or floors of the structures during use and raking out.
- 3.4.4 There is little that could be considered in any way diagnostic, but two pieces (Phase 3b cleaning layer 2031 and Phase 4, Room 8 deposit 2766) have a slaggy vitrified surface that probably derives from the lining of smithing hearth. One other distinctive piece was part of a thick slab of clay 44mm thick, pierced by a circular vent c 90–100mm in diameter with a bevelled edge and burnt grey on the rough lower surface. This probably formed part of the dome superstructure of an oven and was found in the base of a Phase 2 corndryer or oven (2393) situated in the central area of the site (Table 1). Other fired clay found in the feature had a rough hand moulded surface or was amorphous and probably derived from the internal wall surface of the structure.
- 3.4.5 There was also a single fragment (Phase 3b cleaning layer 2035) with three interwoven wattle impressions consisting of two rods 10mm and 15mm in diameter woven around an upright sail 21mm in diameter. It had a rough surface and measured 24mm thick. It probably originated from the superstructure or drying floor of an oven.

Context	No. fragments	Weight (g)	Description	Phase
Corndryer 2271	17	58	Most pieces amorphous, some with flat moulded surface. Fragments up to 12mm thick Pre-villa [below S Bldg 1; Room 2], ctx 2592, 2593	1
Oven 2393			Fragments of wall lining with rough flat hand moulded surface up to 22mm thick and part of a dome plate 44mm thick pierced by circular vent c 90-100mm dia with bevelled undercutting edge. The surfaces of the plate are flat but roughly finished and burnt grey on the underside	2
Corndryer/oven 2400	146	456	Burnt/heated natural clay. Fragments from CD-central area are amorphous and nodular and have the appearance of burnt or heated clay from the surrounding <i>in situ</i> natural. One piece had a smooth surface which may represent an area of the natural with served as part of the structure surface Central area, Ctx 2394, 2398	2
Oven 2801	44	88	Amorphous irregular fragments up to 30mm in size. These have the appearance of natural unprepared clay possibly fragments of the burnt natural clay encompassing the structure	3a

			N Bldg 2; Room 8, ctx 2795, 2828, 2830	
Corndryer 2900	58	396	Amorphous fragments or with a single flat roughly finished surface and up to 20mm thick S Bldg 1; Room 10, ctx 2741, 2805, 2884-5, 2887, 2897	4

Table 1: Catalogue of fired clay from ovens and corndryers

### *Discussion*

- 3.4.6 The simple nature of the fired-clay assemblage is typical of many Roman sites and reflects the type of ovens and corndryers found on the site. Most of the material appears to derive from either the natural clay into which structures were cut and subsequently burnt during their use, or from clay lining the internal wall and floor surfaces. There is little evidence of high temperature activity and it is probable that most material comes from ovens for domestic or crop processing activities. There is some evidence for superstructure but in general these ovens were of straightforward construction without need of specialised accessories. The fragments with vitrified surface most likely derive from a smithing hearth, which would have been needed for producing nails and other ironwork during the construction of the buildings.

### *Burnt stone*

- 3.4.7 Some 25 fragments of burnt stone, weighing 278g, were recovered. Some of the material classified as burnt stone appeared to be sandy mudstone or clayey sandstone, although stone specialist Dr Ruth Shaffrey was not happy to classify a significant proportion of the burnt stone as stone. Equally, however, much did not have the characteristics of fired clay and it is possible that most of both the burnt stone and fired clay derives from natural sediments burnt *in situ* around the edges of ovens, or lumps of such material disturbed and burnt in the course of firing up corndryers or ovens. Other burnt stone included sandstone and shelly and fine-grained limestone. It is possible that limestone was being burnt on site to produce lime for mortar.

## 3.5 Plaster and mortar *by Cynthia Poole*

### *Introduction*

- 3.5.1 Painted wall plaster and mortar amounts to some 590 fragments and was recovered from 34 contexts, with painted plaster forming the bulk of the assemblage. The majority of the plaster has not been processed in any way, except to be laid out in airtight plastic Stewart boxes and kept damp as found and maintained in a dark environment. No cleaning has taken place and some blocks appear to consist of two or more layers of plaster congealed in clay sediment. Individual fragments vary in size from a couple of square centimetres up to about 200sq cm. The total assemblage of painted wall plaster is estimated to represent a surface area between 1.0sq m and 1.5sq m. The plaster has been scanned and quantified, but not weighed. Brief notes were made, but no detailed record has been possible. The mortar and opus signinum, including both hand-collected pieces and fragments from sieved samples, have been recorded on an Excel spreadsheet. Both groups of material are quantified and details summarised in Appendix C.

### *Mortar types and production*

- 3.5.2 Four distinct mortar types were identified:

- M1: cream-white chalky mortar containing little or no visible aggregate, though rare small tile or limestone grits were occasionally observed in some pieces.
- M2: cream mortar containing occasional white chalk/lime balls 2–4mm and moderate density of tile grit, angular and rounded, up to 10mm though generally less than 6mm and dark grey angular limestone grit less than 5mm in size.
- M3: yellow or occasionally creamish-yellow sandy mortar containing frequent small pebbles and limestone-derived grit including shell up to 10mm in size, rarely up to 50mm.
- M4: pink lime mortar containing frequent angular and rounded tile grit and scattered dark grey angular limestone grit, both up to 5mm in size. Rare small white lime balls.

3.5.3 There were two samples of lime mortar unevenly mixed with copious sand and grit, which had the appearance of waste material left over from mortar preparation. These were found in 1960s backfill (2526) and a late Phase 5 layer (2450). A burnt lump of chalk or other cryptocrystalline limestone was found in a rubble layer (2564) assigned to Phase 5 in Building 2 Room 7 and may indicate that the lime for the mortar was also produced on site for the building work.

### *Mortar and wall plaster*

3.5.4 Mortar was used in the construction and rendering of the stone walls as well as for opus signinum for floors. Only two fragments of opus signinum composed of cream lime mortar mixed with frequent angular tile grit up to 18mm and occasional grey angular limestone grit 2–3mm were retained from a 1960s' backfill deposit (2324) and a cleaning layer (2021) in the Central Area.

3.5.5 There is evidence from the mortar and wall plaster that a thicker (30–40mm), rougher 'first finish' render was applied to the walls, which was followed by a thinner (10–15mm) 'final finish' render with a more even, smoother surface, over which a thin layer (1–2mm) of cream or pink plaster was applied to give a very smooth, flat external surface. Small quantities of mortar were recovered, mostly amorphous and indeterminate in form, though a few had a rendered surface. Two in fabric M1 and M4 had a flat, even surface with remnants of a red wash adhering. Another piece had a much rougher surface and probably represents a first finish render. Some of the painted plaster has evidence of an interface between two layers of mortar at a depth of 10–15mm from the surface, though it is not always visible and it is possible some areas had only a single thick coat of render.

### *Painted plaster*

3.5.6 Painted plaster was recovered mainly from within the rooms of Buildings 1 and 2, apart from a small quantity from a sieved sample from the central area (Plate 37). A wide range of colours was used: red, white, pink, yellow ochre, green, blue, mauve, purple, maroon-red and black, and nearly all the painted plaster occurred on a base of mortar type M3 overlain by a cream plaster skim.

North Building 2, Room 7

3.5.7 Painted plaster from this room includes fragments of plain red, white, blue, green, yellow ochre, mauve and possibly black (or a very dark purple). A small fragment had blue and green. A number of pieces had mauve and white bands of colour, dark



maroon-red and mauve and a small line of pink. This combination of colours suggests the possibility of a figurative design, including drapery or clothing over flesh. The plaster was recovered from layers 2597 and 2598, both assigned to Phase 5.

North Building 2, Room 8

- 3.5.8 A modest quantity of plaster (c 27 fragments) amounting to a surface area of about 430sq cm was recovered from three layers (2660, 2707 and 2750) all assigned to Phase 5. Colours used in this room included red, maroon-red, pinkish red, pink-yellow ochre, pale blue. One piece has a yellow-ochre ground traversed by a red strip 9mm wide. Another small fragment has the edge of a block of maroon on a white ground, with two thin pink bands at different angles to it. Some of the pieces with pink have the appearance of shading on flesh.

South Building 1, Room 1

- 3.5.9 Three small scraps of plaster in fabric M3 with a cream plaster surface painted red or green were found in layers 2293 and 2704, assigned to Phase 3a. An unpainted fragment of plaster with a rough flat surface made in pink M4 mortar may have derived from the lining of a bath structure.

South Building 1, Room 2

- 3.5.10 Painted plaster was recovered from five deposits (2104, 2180, 2182, 2232 and 2235), mostly of Phase 3b, but also of Phases 4 and 6, representing a surface area of about 230sq cms. All of these had a pink plaster surface over mortar M3. The most common colours were green and red. Two small pieces had a thin yellow stripe 4mm wide traversing a red ground and another piece had a white ground bisected by a thin black stripe 3mm wide. Another piece had three adjacent bands of green, red and blue: the thin red stripe may have been separating larger blocks of green and blue, or all three may have formed part of a frame.

South Building 1, Room 3

- 3.5.11 This room produced the largest group of painted plaster representing a surface area of just over 1sq m, concentrated in four layers (2595, 2617, 2747 and 2748) apart from a few scraps from 2811, all of Phase 4. Some pieces (context 2617) curve up at the edge, suggesting that these were edge pieces where the plaster met the floor or the corner of the room, which may enable the blocks to be located relative to their position on the wall.
- 3.5.12 A wide range of colours were present and included plain fragments of red, maroon, pink, cream or white, green, blue, purple, yellow ochre, and black, and 13 fragments with green areas ranging from light to dark. Fragments with blocks of a plain red ground were the most common.
- 3.5.13 Combinations of colour included maroon-red and white, green and blue, blue and red, and green over red. One piece had a sky-blue block over mauve adjacent to a block of white. Another piece had a red ground traversed by white and blue stripes. One piece had blocks of red and white separated by a black stripe 11mm wide. A couple of pieces had a white or light green ground, one of which was traversed by a stripe. Several pieces had the same pattern of a red ground overlain at one edge by an area of mauve

delineated by a thicker blue stripe and a thinner white stripe with a small area of green at the opposite edge. Another combination had a red ground traversed by adjacent stripes of dark green or black, green and white, decreasing in width to the white stripe. Others included stripes of yellow, blue and white on red.

- 3.5.14 In addition to these blocks of colour outlined, framed or separated with stripes of contrasting colour, there also appeared to be pieces that could indicate a more figurative design. These included pieces with a white ground overlain by mottled green, which might represent foliage or water. The other main combination was a white ground with varying shades and lines of light and dark red with darker shading of maroon and purple or a mix of red and pink. These do not appear to represent any type of geometric design such as framed blocks of colour, but are more likely to represent some sort of figurative scene involving clothing or drapery and figures. That said, there were no motifs that could be positively recognised as representing part of a body such as eyes, fingers or feet, to confirm such an assertion.

South Building 1, Room 11

- 3.5.15 A small quantity of painted plaster was recovered from two sieved samples from layers 2833 and 2927 assigned respectively to Phases 3b and 2. They included fragments with single colour blocks of red, white, ochre and blue and red and white combined.

South Building 1, Room 14

- 3.5.16 This room produced a fairly small amount of painted plaster mostly from sieved samples from layers 2860 and 2880, both assigned to Phase 3b. The only colours present were red and white and included one piece with a dark red ground traversed by a white stripe 5mm wide.

### **3.6 Metalwork by Ian R Scott**

- 3.6.1 The metal finds from the 2016–2017 excavations were rapidly scanned, identified and quantified, but not fully recorded. The identifications and quantifications have been entered onto an MS Excel spreadsheet, but without detailed descriptions and measurements.

#### *Composition of the metalwork assemblage*

- 3.6.2 The metalwork from the 2016–2017 excavations comprises 1197 objects (1534 fragments) and includes 1153 iron objects (1480 fragments), 38 copper-alloy objects (48 fragments) and six lead objects. Most of the finds are Roman in date although there are a few finds that are later in date.
- 3.6.3 The iron objects are dominated by nails, which number at least 728 (1000 fragments), and hobnails (325; 351 fragments). Other finds categories are more limited (Table 2). They include three possible horseshoe nails, which are medieval or post-medieval in date, a possible awl, which could be Roman, and six possible household objects. Among the last category are a copper-alloy handle escutcheon for furniture, probably post-medieval, and a composite iron and copper-alloy stud or washer, which is also possibly post-medieval in date. There is an iron whittle tang knife blade, which could be Roman, and the base and lower body of a small cylindrical lead or pewter vessel,

which could be post-medieval but could be earlier date. The sixth possible household object is a piece of iron from topsoil, which might have been part of a vessel handle.

Function	No. objects	No. fragments
Binding	5	6
Footwear	333	359
Household	6	6
Miscellaneous	67	68
Nail	728	1000
Personal	20	21
Query	20	19
Structural	9	9
Tool	1	1
Transport	3	3
Undiagnostic	0	37
Waste	5	5
Total	1197	1534

Table 2: Metalwork quantification by function

3.6.4 With the exception of hobnails and other possible shoe fittings and the possible exception of a pin or spike with a rolled over loop at one end, the identifiable personal items are all of copper alloy and comprise one bow brooch fragment, well preserved but incomplete, a fragment of possible plate brooch, two finger rings, and at least ten fragments of late Roman bracelets (Table 3). The bow brooch is of a form that Mackreth (2011, 103–5, plate 70) termed a proto-Headstud, which has a marked south-western (Wiltshire, Somerset, Dorset and westward) distribution. Other personal items include two late medieval or early post-medieval small dress or sewing pins. There are numerous miscellaneous fragments and some fragments of uncertain identification.

Sub-division	Ctx	bow brooch	plate brooch?	bracelets	finger rings	buckle loop	circular stud	shank button	dress pins	Total
Area B	2053			2						2
	2056			1				1		2
Central Area	2112				1					1
	2162								1	1
Room 1	2034			1						1
Room 10	2762			1						1
Room 3	2136				1					1
Room 8	2604			1		1				2
	2632								1	1
	2796			1						1
Other	2001	1								1
	2003		1							1
	2059			2						2
	2083						1			1
	2542			1						1
Totals		1	1	10	2	1	1	1	2	19

Table 3: Summary of personal items, all Roman apart from the shank button and dress pins

3.6.5 Hobnails and other shoe fittings, although numerous, are widely scattered with most contexts having very small numbers (Table 4). There are, however, a few obvious concentrations, which may mark the disposal of footwear or the discarding of hobnails. All the concentrations were recovered from deposits and layers rather than

cut features, which might suggest that they mark the discarding or abandonment of footwear when the building was vacated.

Site sub-division	Clamp	Hobnail	Total
Area A		34	34
Area B	4	70	74
Central Area	3	89	92
Other	1	40	41
Room 1		21	21
Room 2		5	5
Room 5		4	4
Room 6		3	3
Room 7		3	3
Room 8		3	3
Room 11		1	1
Room 13		51	51
Room 14		1	1

Table 4: Summary quantification of shoe fittings by site sub-division

### *Distribution of the metalwork assemblage by phase*

- 3.6.6 There are limited numbers of finds from contexts of Phases 1 and 2 and not that many more from Phase 3a contexts (Table 5). In contrast there are large numbers of finds from Phase 3b contexts, with slightly smaller quantities from Phases 4 and 5, but an even larger quantity of finds from Phase 6.

Phase	Object count	Frag. count
1	1	3
2	16	22
3a	45	65
3b	356	431
4	101	136
5	147	220
6	506	626
unphased	25	31
Totals	1197	1534

Table 5: Summary of metalwork quantification by phase

### *Discussion*

- 3.6.7 There are only a few closely datable finds and these comprise mainly personal items. The bracelets are of late Roman date. Although bracelets occur throughout the period of the Roman occupation, it is only in the late Roman period that the fashion for bracelets really takes off for women. Most of the examples from Cattle Hill are of types that are found in the late 3rd century and the 4th century (Plate 38). The bow brooch fragment is of a form that probably dates from the late 1st and 2nd century, although examples have been recovered from later contexts (Mackreth 2011, 103–5).
- 3.6.8 Apart perhaps from the personal items, the nails are potentially the most informative items. Most of the identifiable nails are of Manning Type 1 with flat or slightly domed circular or sub-rectangular heads (Manning 1985, 134–37). The complete nails fall mainly in the size range from 40mm to 80mm, which is the size that would be expected for use with a domestic wood structure. The flat heads would have stood slightly proud and be exposed to view. There is a small number of larger nails of the same general type for heavier timberwork. In addition, there are some nails that had very small heads or no visible heads which could be driven into timber, leaving no head standing

proud. The distribution of the nails shows that the majority occur in later contexts and in particular in Phases 3b and 5 but most clearly in Phase 6. The nails are concentrated in Area B and the central area of the site (Table 6). Such concentrations could be suggestive of deliberate demolition or perhaps more likely of abandonment and collapse *in situ*.

Sub-division	1	2	3a	3b	4	5	6	unph	Totals
Area B				1			218		219
Other		1	1	37			112	2	153
Central Area		7		92	7	7	22	1	136
Room 13			6	9	39	51		2	107
Room 8			14		6	47	29		96
Room 7		1	3		0	43	36		83
Area A		3	3	72					78
Room 1			6	25		7	2		40
Room 2	3				10		17	1	31
Room 3				1	14		2		17
Room 10		1	1	4		1	4		11
Room 14				1		3		7	11
Room 6						2		7	9
Building 1						5			5
Room 12								2	2
Room 5				2					2
Totals	3	13	34	244	76	166	442	22	1000

Table 6: Quantification of nails by site sub-division and phase (fragment count)

### 3.7 Coins by Paul Booth

- 3.7.1 Fifty Roman coins and coin fragments, all of copper alloy, were recovered during the fieldwork (including two from the evaluation phase). A further four 'coins'/tokens of post-Roman date have not been included in this total. The Roman material is entirely of later 3rd- to 4th-century date.
- 3.7.2 The coins are in very variable condition in terms of surface encrustation and corrosion, and some are also very worn. They were initially scanned, and selected pieces were cleaned, which in most but not all cases enabled the provisional identification to be refined. Detailed identification has been presented where this is relatively straightforward, but full identification was not possible in many cases because of the issues of condition. In some cases the mintmark (the key to identification of 4th-century coinage) either did not survive or the flan was so small that it never accommodated the mintmark in the first place. The coins are listed in tabular form in approximate chronological sequence in Appendix D and the assemblage is summarised in Table 7.

Date	Reece Period	Total coins	Phase total
AD 260–275	13	2	
AD 275–296	14	2	
Phase B	Uncertain	8	12
AD 296–317	15	2	
AD 317–330	16	6	
Phase C			8
AD 330–348	17	9	
AD 348–364	18	4	
AD 364–378	19	7	
AD 378–388	20		
AD 388–402	21	1	
Phase D	Uncertain	2	23

Date	Reece Period	Total coins	Phase total
3-4C/unassigned		7	
TOTAL		50	

Table 7: Summary quantification of Roman coins by issue period and phase

- 3.7.3 The coins were recovered from across the site. Many of them can be assigned to stratified components of the site sequence, rather than being simply recovered from the surface of the occupied area. The assemblage is summarised in terms of chronological units below, using the period and phase schemes of Richard Reece (eg Reece 1991). These are defined with varying degrees of precision.
- 3.7.4 No 'pre-radiate' (mid-late 3rd century) coins were identified. Later 3rd-century pieces (Reece periods 13 and 14) form a relatively significant part of the assemblage (12 coins), though many cannot be closely identified at present, the earliest closely dated piece being an issue of Claudius II (AD 268–270). The overall size of the assemblage is such that arguments based on the percentages of coins of a particular period have to be treated with caution. Notwithstanding this, coins of Reece's periods 15 and 16, like those of periods 13 and 14, again appear to be relatively well-represented. The coins of Reece's Phase D, dated from AD 330 onwards, dominate the assemblage. This is a characteristic and widespread rural settlement pattern, with the greatest number of coins assigned to periods 17 and 19, as would be expected (Plate 39). The presence of a single coin of period 21 (AD 388–402) provides an indication of some activity on the site up to the end of the 4th century. Again this is what might be expected, but in relatively small assemblages the chronological significance of the absence of period 21 coins can be hard to judge; the presence here, even if only of a single coin, largely removes that uncertainty.
- 3.7.5 Overall, therefore, the coins present a picture of later Roman activity that can be widely matched in its broad outline. Superficially the coins suggest occupation exclusively in the later Roman period (perhaps with a slightly atypical emphasis on the later 3rd and early 4th centuries) but the absence of earlier coins, particularly of later 2nd- to early 3rd-century date, is not necessarily significant in view of the assemblage size and the limited extent of excavation of earlier deposits.

### 3.8 Industrial residue (slag) by Lynne Keys

- 3.8.1 A very small quantity of material (4.6kg), initially identified as slag, was recovered by hand on site. The material was examined by eye and tested with a magnet. It was categorised on the basis of morphology; a magnet was used to test for iron-rich material and to detect smithing microslags in the soil adhering to slags. Each slag or other material type in each context was weighed except for smithing-hearth bottoms, which were individually weighed and measured for statistical purposes (Tables 8 and 9).

Slag Type	Weight (g)	Process	Ironworking?
Cinder	17	non-diagnostic	no
Coal	38.5	non-diagnostic	yes
Fuel ash slag	25	non-diagnostic	no
Vitrified hearth lining	424	non-diagnostic	no

Smithing hearth bottom (x6)	1234	diagnostic	smithing
Undiagnostic slag	2572	undiagnostic	smithing
Iron-rich undiagnostic	137	undiagnostic	smithing
Slag run	22	undiagnostic	yes

Table 8: Slag types in the assemblage

### *Explanation of terms and slag types*

- 3.8.2 Activities involving iron can take two forms, smelting or smithing. Smelting is the manufacture of iron from ore and fuel in a smelting furnace. The products are a spongy mass called an unconsolidated bloom consisting of iron with a considerable amount of slag still trapped inside, and slag (waste). No slags diagnostic of smelting were present in the Cattle Hill assemblage.
- 3.8.3 Smithing involves the hot working (using a hammer) of the bloom to remove excess slag (primary smithing) or, more commonly, the hot working of one or more pieces of iron to create or to repair an object (secondary smithing). As well as bulk slags, including the smithing hearth bottom (a plano-convex slag cake which builds up under the tuyère hole—hottest part—where the air from the bellows enters the hearth), smithing generates micro-slags; these can be hammerscale flakes from ordinary hot working of a piece of iron (making or repairing an object) and/or tiny spheres from bloom smithing or high temperature welding used to join or fuse two pieces of iron. Hammerscale, because of its tiny size, is usually only recovered by taking soil samples from fills and deposits but it is very magnetic and its presence can be detected using a magnet. It is most prevalent (thickest) in archaeological contexts in the immediate area of smithing, ie in the vicinity of the anvil and between it and the smithing hearth. No hammerscale micro-slags were present in the assemblage examined.
- 3.8.4 Slag described as undiagnostic cannot be assigned to smelting or smithing, either because of morphology or because it has been broken up during deposition, re-deposition or excavation. Other types of debris in an assemblage may derive from a variety of high temperature activities—including domestic fires—and cannot be taken on their own to indicate that ironworking was taking place. These include fired clay, vitrified hearth lining, cinder and fuel ash slag. If found in association with iron smelting and/or smithing slag they are almost certainly products of the process; here, we cannot be sure they were produced by ironworking.

### *Results and discussion*

- 3.8.5 The assemblage can be summarised by phase as follows:
- Phase 1: Room 2, layer 2264 contained 27g of undiagnostic slag.
  - Phase 2: 13g of undiagnostic slag was recovered from this phase.
  - Phase 3b: 1.9kg of material came from this phase. Area A layer cleaning contained 811g; various Central Area cleaning layers 935g; Other Area layer cleaning 50g; Room 5 foundation (2046) contained just 11g of slag.
  - Phase 4: 595g of slag came from this phase. Central Area, layer 2112 contained 527g of this amount, including one smithing hearth bottom. Posthole 2146, fill 2145 produced 68g of slag.

- Phase 5: rubble layer 2564 in Room 7 contained just one smithing hearth bottom weighing 579g.
- Phase 6: this phase contained a total of 810g of slag and high temperature debris in several Area B cleaning layers: 2051 = 154g; 252 = 113g; 2053 = 18g; 2054 = 262g.

3.8.6 The diagnostic slags in the assemblage are those of secondary iron smithing. Several small smithing hearth bottoms (or smithing cakes) were recovered and their size is indicative of short, one-off episodes of smithing (Table 9). No smithing micro-slugs were recovered, which implies that the bulk slag is redeposited material and not indicative of smithing anywhere on or near the site. The slag was also fragmentary and generally small in size, which adds to the argument for redeposition. It is likely that the slag had been thrown out into fields (as was often done to break up heavy soil) and had been subject to further redeposition.

	range	median	standard deviation
Weight (g)	61–579	127	199
Length (mm)	55–115	73	22
Breadth (mm)	45–70	58	11
Depth (mm)	25–70	32	18

Table 9: Statistical data for smithing hearth bottoms

- 3.8.7 A small quantity of vitrified hearth lining was recovered which had been tempered with crushed flint fragments; some of this material had also made its way into some pieces of slag during the smithing process. Two fragments had portions of two tuyere holes extant in their sides, showing that these pieces were from an industrial hearth rather than a domestic one.
- 3.8.8 A small quantity of burnt or slagged coal was found in several contexts and is likely to have been the fuel used for the smithing.

### 3.9 Glass by Ian R Scott

- 3.9.1 There are just 26 pieces of glass (Table 10). These include small pieces of probable vessel glass and window glass. Several of the pieces of vessel glass are post-medieval or later bottle sherds. The other vessel glass comprises fragments of blue-green glass probably of Roman date and more certain sherds of late Roman vessel glass. The latter are generally small thin-walled sherds in very pale green glass with distinctive fine bubbles.
- 3.9.2 The most interesting piece of glass is a large piece of Roman matt/glossy window glass (SF 11), which has the distinctive thickened edge and rough underside of Roman cast glass.

Context	SF no.	Frag. count	Vessel type	Function	Comments
708	28	1	unknown	Query	Blue-green chip
804	15	1	vessel	Household	Body sherd in very pale green glass with fine bubbles. Late Roman glass
1014		1	wine bottle	Household	Small body sherd from a post-medieval wine bottle. Weathered surfaces.
1016	17	1	vessel	Household	Small body sherd probably from a modern vessel.



1016	27	1	vessel	Household	Small thin walled body sherd with 3 parallel cut grooves. Colourless glass.
9999	11	1	N/A	Window	Piece of matt/glossy cast Roman window glass, with thickened edge.
2000		1	bottle	Household	Modern machine moulded
2003		1	vessel	Household	Modern, with random pattern of green trailing
2003	406	1	jug	Household	Sherd with part of rod handle and junction with neck of a vessel, probably a jug. Pale yellow green glass with fine bubbles. Late Roman
2016	226	1	vessel	Household	Body sherd from ?globular vessel. Could be roman but undiagnostic form.
2041		1	vessel	Household	Vessel undiagnostic to form. Post med or later?
2059		1	vessel	Household	Vessel undiagnostic to form. Post med or later?
2089		1	vessel	Household	Sherd from machine moulded vessel. Modern.
2092	786	1	vessel	Household	Sherd from vessel, undiagnostic to form. Roman, but could be later.
2103	874	1	vessel	Household	Tiny curved shred. Could be roman but undiagnostic to form
2160		1	pillar moulded bowl	Household	Body sherd with remains of three ribs
2181	889	1		Window	Small sherd of probable window, not closely datable.
2183	1638	1		Window	Tiny sherd, probably post medieval or more recent
2219	900	1		Window	Small sherd of pale green window glass, not closely datable.
2268		1	vessel	Household	Small sherd comparatively thick-walled. Scratched on one and worn by rubbing the part of the opposite face. Could be roman, but undiagnostic to form.
2460		1	pill bottle	Household	Base of small machine moulded pill bottle. Modern. Maker's and other marks on base
2526		1	bottle	Household	Base from a machine moulded square section bottle. Maker's and other marks on base.
2526		2	wine bottle	Household	2 x refitting sherds from base of cylindrical bottle with bell-shaped pushup. Possibly machine moulded. Late post-med. or more probably modern
2526		1	spirits bottle	Household	Bottle of oval section moulded in two-piece moulded with base plate. Embossed "gilbey l <sup>th</sup> " on base. 19th century.
2627		1	bottle or jug	Household	Fragment of upper portion of a ribbon handle at junction with neck. Roman
Total		26			

Table 10: Quantification of glass

### 3.10 Stone objects by Ruth Shaffrey

- 3.10.1 A total of 13 stone artefacts were recovered during the 2017 excavations (Table 11). All were fully recorded with the aid of a x10 magnification hand lens.
- 3.10.2 Six stone counters or discs were recovered. These measure between 19mm and 95mm in diameter and are made from lias, limestone and flint. The purpose of these discs is not certain, but they may have been used as lids or stands for pottery vessels or, in the case of the smaller examples, as gaming counters.
- 3.10.3 Two stone vessels were recovered from rubble debris in Room 13 and a layer in Room 3. The first is of a fine-grained quartzitic pale brown sandstone with a very shallow non-projecting spout and regular wear inside, suggesting that it was used for grinding, rather than pounding (the external base is also worn, suggesting that it moved about whilst being used). The second vessel is made of a very shelly limestone from Bembridge or Binstead. This example has two lugs but no ribs and is of more classic mortarium style (Plate 40). It too has even wear internally.

3.10.4 A single, probable quern or rubber fragment of fine-grained quartzitic reddish brown sandstone was found in a Phase 3b deposit in the Central Area. It has one pecked face suggesting this function but is otherwise undiagnostic.

3.10.5 A whetstone or possible cushion stone was found in rubble debris in Room 7. It is a square flat stone with rounded edges and smooth flat faces probably used for sharpening. However, there are also some pit marks on both faces, possibly suggesting use as a cushion stone. Tools like this are very unusual and indicate that metalworking was taking place nearby.

3.10.6 A single pestle or whetstone manufactured from a cobble was found in a Phase 3b deposit in Room 1. It is bulbous at both ends with tiny remnants of pecking and some wear, particularly at the wider end, but it has also been used around the centre as a whetstone. A single small limestone sphere was found. It was presumably used recreationally.

SF No	Ctx	Function	Notes	Size	Lithology
-	2053	Fossil	Small almost spherical fossil. Phase 6, Area B	16mm in diameter	Fossil
1586	2747	Bowl/mortar	Two adjoining fragments. Shallow smallish bowl or mortar with two lugs (no ribs). Lugs spread out in plan view and are flat on top. They are rounded in profile. The inside of the bowl is evenly worn. The base is flat and smooth and the sides have diagonal tooling. Phase 4, Rm 3	170mm internal diameter. Walls are 18mm thick at top. Vessel is 62mm high and 49mm deep	Binstead/Bembridge
1589	2620	Counter	Possibly made from pottery vessel base? Circular counter. Has circular striations on one face and what looks like remains of vertical walls. Phase 4, Rm 3	Measures 35mm in diameter x 7mm thick	Lias or pottery
1625	2847	Counter	Crudely circular counters. Phase 3a, Rm 11	19–20mm in diameter x 2mm thick and 14–16mm in diameter x 1.5mm thick	Lias
1581	2728	Counter	Crudely circular counter. Phase 5, Rm 14	21–22mm in diameter x 5mm thick	Lias
1219	2549	Counter/disc	Crudely circular flat disc with thick edges. Phase 5, Rm 3	95mm in diameter x 15mm thick	very fine grained limestone
1566	2595	Counter	Pebble, smooth all over and circular. Phase 4, Rm 3	20mm thick x 11mm thick	?flint grey stone
-	2575	Whetstone or cushion stone	Square flat stone with rounded edges and smooth flat faces probably used for sharpening. However, there are also some pit marks on both faces, possibly suggesting use as a cushion stone or for banging against the stone. Phase 5, Rm 7	55 x 58mm x 20mm thick	fine grained dark brown siltstone
1291	2582	Mortar/shallow bowl	Thick flat-bottomed shallow vessel with shallow U-shaped spout through the rim. Burnt and blackened across the top. The inside of the bowl is worn smooth, particularly across the base and there is no evidence of percussion wear, suggesting it was used for grinding rather than pounding. The sides have been worked with pecking into a	285–295mm in diameter x 65mm high and 38mm internal depth	Fine grained quartzitic pale brown sandstone

			roughly circular shape. The base is flat and worn very smooth suggesting that it moved about on the surface it sat on, rather than being fixed into position. Rim about 40mm although so shallow there are no sides as such. Phase 4, Rm 13		
-	2375	Sphere/ marble	Small piece of oolitic limestone that has been shaped into a sphere. Marble sized. Phase 2, Central Area	21mm in diameter	Oolitic fine grained limestone
-	2265	Probable quern /rubber fragment	No original edges but one flat pecked face survives. Other faces are very smooth but this appears to be natural rather than through use. Phase 3b, Central Area		Fine grained quartzitic reddish brown sandstone
1051	2280	Pestle/ whetstone	Almost bone shaped - bulbous at both ends and narrower in the middle but with one end only just wider and other end very bulbous. It is worn all over with tiny remnant of pecked surfaces visible at either end. The tool has been used as a pestle, as shown by rounded wear on the fatter end but some bevelling around the centre suggests it was also used as a whetstone. It is burnt/blackened in places. Phase 3a, Rm 1	81mm long (31 x 35 at narrow end; 38 x 45 at wider end)	Fine grained micaceous reddish brown sandstone

Table 11: Stone artefacts by context

### 3.11 Structural stone by Ruth Shaffrey

3.11.1 Large quantities of stone roofing material and tesserae were observed on site during excavation. Samples of each category were brought off site for closer analysis. Most of the stone roofing was quantified on site: complete stones were individually weighed, thickness measured and photographed against a scaled board; incomplete stones were photographed in groups by context, with thickness measured and group weight taken and undiagnostic fragments were weighed and counted by context. Loose tesserae were brought back from site for basic recording. All the data can be found in the archive.

3.11.2 Approximately 2500 stone tesserae were scanned with the purpose of looking at material types, approximate sizes and evidence for manufacture. Tesserae were broadly grouped into the following sizes:

- Tiny = two dimensions 12mm or less
- Small = two dimensions 13–19mm
- Medium = two dimensions 20–25mm
- Large = two dimensions 25mm+

3.11.3 Almost two thirds of the tesserae are of either grey or white lias (64.9%). Almost a third (28.6%) are of a yellowish white limestone and there are very small quantities of other materials, and less than 1% in total are of grey, reddish brown or brown sandstone or slate (Table 12).

Stone type	Tiny	Small	Small–medium	Medium	Medium–Large	Large	Rod	Total
Lias	765	344	46	289	116	80	4	1644
Limestone	11	20	22	274	101	297		725
CBM	104	21		5				130
Brown sandstone		1				9		10
Grey sandstone	1			1				2
Red Sandstone	3			17		1		21
Slate	1							1
Total	885	386	68	586	217	387	4	2533

Table 12: Stone tesserae (loose) quantification by stone type

3.11.4 Rods of white and grey lias were found in layers 2162 and 2268 (Central Area) and cleaning layer 2052 and 2051 in Area B. These are clear evidence for manufacture of tesserae. Stone tended to be cut into long rods and then snapped into individual tesserae. No such rods were found for other stone types, so it is possible that the small quantities of other tesserae were made elsewhere and brought onto site.

3.11.5 Some observations on tesserae sizes can be made. Most of the white limestone tesserae (93%) are of the larger sizes and this is also true of the sandstone tesserae. In contrast, the ceramic tesserae are virtually all tiny in size and were presumably therefore selected for parts of the mosaics requiring fine detail. The lias was used for tesserae of all sizes but tend towards the smaller size, with 67% of them being small or tiny in size. It seems as though the lias and ceramic were preferred for the finer detail in the mosaics and the sandstone and yellow limestone for the areas around the outside of the tessellated pavements.

3.11.6 A column and a large slab are other evidence of the use of stone structurally (Table 13). The dwarf column (SF 793, Room 1) is made of a spar-prominent oolitic limestone with obvious veins, probably a Bath stone type. Dwarf columns tended to be mounted on small walls and used in porches or colonnades and are indicative of reasonably high status. A massive slab was also found in external surface 2287. It retains diagonal tool marks on one face. Two adjacent sides are chamfered and the third is tooled. A shallow channel measuring 90mm wide by 10mm deep runs parallel to one of the chamfered sides. Its purpose is not known but it was presumably employed structurally.

Ctx	Function	Lithology	Size	Phase/Area	Notes
2286	Structural	Shelly yellowish limestone	270 x 14–25 x 75–90mm. 14mm deep	3b; Central Area	Roughly half cylindrical with channel carved out on one side in deep spaced pecking. Flattened and worn on the other face
–	Column	Bath stone?	82cm long x 24cm in diameter	Rm 1	Column with square lathe hole measuring 50 x 50 inside and 85 x 85mm in the shallower section. 40mm deep
2287	Massive slab	Limestone	65 x 88cm plus 2cm for the chamfer	3a; Central Area	Diagonal tool marks on one face. Two adjacent sides are chamfered and the third is tooled. A shallow channel measuring 90mm wide x 10mm deep runs parallel to one of the chamfered sides. Face roughly finished
2595	Structural/architectural stone	Oolitic limestone of Bath stone type	2681g	4; Rm 3	Flat base, concave curved opposing face and straight edges. Drain?
2236	Structural slab	Pale brown sandstone	18mm thick; 383g	3b; Central Area	Probable roofstone reused, as mortar attached to one face. No original edges

Ctx	Function	Lithology	Size	Phase/ Area	Notes
2756	Structural stone	Shelly yellow limestone	180 x 140 x 95mm. 15mm deep; 1040g	3a; Rm 8	One slightly curved and probably tooled face but not enough original faces survive for function to be determined. However, it is almost certainly structural – as 2286

Table 13: Structural stone (other than roofing and tesserae)

- 3.11.7 A huge quantity of stone roofing material, in various states of preservation, was excavated at Cattle Hill and it is clear that stone was used on the roofs of one or more buildings here. It is almost without exception made of the local lias. A total of 2668 fragments of stone roofing (weighing 1226kg) were recorded from 35 contexts. More roofing was observed on site but it was not possible to record it all; it is estimated that about 75% of the roofing was recorded. The mean fragment weight of the stone roofing is 438g, suggesting very good survival rates and low fragmentation.
- 3.11.8 The complete stones demonstrate some interesting variations. Two basic forms are present: hexagonal/pentagonal stones and stones with one rounded end. The stones with one rounded end were hung with the rounded end downwards (in other words, visible on the roof) because the nail holes are at the other end. The hexagonal/pentagonal stones are the most common shape. These have nail holes towards one end or occasionally in the centre of the stone (Plate 41). The complete stones measure in the region of 300–470mm long and each weighs approximately 4–5kg
- 3.11.9 The lias roofing typically has thick straight (snapped) edges, whilst sandstone and limestone roofing typically has tapered edges. This is because of the way lias stone breaks, it would not have been easy to create the tapered edges in this material. Thickness of the stone roofing ranges from 10–30mm but lias laminates naturally, and some of the thinner stones may have been thicker originally.
- 3.11.10 Although there was some variation in the shape of the stone roofing at Cattle Hill, it is clear that Lias was the preferred stone type. Villas in the general area did use other materials, but Devon slate was preferred slightly further west, ceramic tile slightly further south and Pennant sandstone to the north.

## 3.12 Shale by Ruth Shaffrey

- 3.12.1 A total of 15 pieces of shale were found during the 2017 excavation. These were recorded and information about them entered onto an MS Excel spreadsheet and summarised here (Table 14).
- 3.12.2 Three of the shale pieces are not obviously worked and presumably represent debris from manufacture. Five spindle whorls were found, of which four are complete. All the whorls are of flat disc form with a symmetrically rounded circumference and equally sized faces (Walton Rogers 2007, type B2). Some are relatively thick (SF 766 and SF 1401), while others have more steeply rounded sides (eg SF 908) but the overall profile is of the same design. All the whorls have a high-quality finish. The perforations are very neatly drilled so that they are perfectly cylindrical and measure between 6.5 mm and 7.5mm in diameter. Each spindle whorl is incised with one or more circular lines and SF 1401 is stepped from each of the faces to the sides, creating a very distinctive design (Plate 42). The spindle whorls weigh between 19g and 23g. The shale has dried

out somewhat so it is not clear what their initial weight was, but an estimate in the region of 30g seems likely, and this would be in the expected range.

3.12.3 Fragments from five plain annular armlets were recovered. The internal diameters of the armlets range from 37mm to 65mm; the smaller of these are likely to be children's armlets. A single flat piece of shale is probably a tabletop or similar, but does not retain any original edges. The shale has not been scientifically analysed but it almost certainly came from Dorset.

SF No.	Ctx	Phase/ Area	Function	Notes	Size
791	2083	6, Other	Cylindrical bead	Slim cylinder slightly tapered to one end and incised with 5 evenly spaced grooves around the circumference and pierced through the length	15.5mm long x 4mm in diameter
933	2144	3b, Rm 1	Spindle whorl	Flat faces and symmetrically rounded edges. Single circular groove around each end of the perforation and around the centre of the whorl. Perfectly cylindrical neat perforation of 7.5mm	37mm in diameter x 21.5mm thick
1562	2595	4, Rm 3	Armlet, child's	Simple armlet with pointed inside profile (showing lathe attachment) and rounded outside. Plain. Quite dried out (despite being stored in water)	37mm internal diameter, 51mm external diameter x 10mm wide
	2628	5, Rm 7	debris	Fragment, not obviously worked but presumably waste	
	2589	5, Rm 7	debris	Fragment, not obviously worked but presumably waste	
1471	2647	5, Rm 14	Armlet fragment, child's	Simple armlet with pointed inside profile (showing lathe attachment) and rounded outside. Plain. Quite dried out (despite being stored in water)	50mm internal diameter and 60mm external x 7mm wide
1390	2181	6, Other	Armlet fragment, child's	Simple armlet with pointed inside profile (showing lathe attachment) and rounded outside. Plain. Quite dried out (despite being stored in water)	40mm internal diameter, 50mm external diameter x 5mm thick
908	2113	3b, Central Area	Spindle whorl	Flat faces (slightly concave even) with rounded sides. Neat circular incision around one perforation, 3 around the centre, one halfway between these and each perforation. Beautifully finished. Curved edges are much more pronounced than on other example	39mm in diameter x 13.5mm thick. 7mm perforation
766	2093	4, Rm 14	Spindle whorl	Thick spindle whorl of same general design as others with flat faces and rounded faces, symmetrical, but this is a thicker example. Three circles incised around the circumference, but not evenly spaced. Same neat perfectly cylindrical perforation as other two	6.5mm perforation, 33mm in diameter x 22mm thick
836	2209	3b, Central Area	Spindle whorl	Fragment broken across bedding plane. Looks to be same form as others with evidence for at least one circular incision	>27mm in diameter. Perforation 6.5mm
1401	2582	4, Rm 13	Spindle whorl	Thick spindle whorl of same general design as others with flat faces and rounded faces, symmetrical, but this is a thicker example and there is a pronounced ridge around each end of the perforation with two lines incised on the resulting flat face. Same neat perfectly cylindrical perforation as other two 7mm diameter. Double incised line round the middle	34mm in diameter x 22mm thick
728	2052	6, Area B	Armlet	Plain form same as others	60mm internal diameter
	2564	5, Rm 7	Debris	Possible shale disc - very fragmented	
	2246	3b, Rm 7	?Tabletop	Flat piece but lacking any original edges	>180 x >99 x 5mm thick
	2371	3b, Central Area	Armlet fragment	With D-shape cross section and pronounced lathe ridge still present on inside	approx internal diameter 65mm x 6 x 6mm

Table 14: Shale artefacts

### 3.13 Bone objects by Edward Biddulph

3.13.1 Two worked bone objects were recovered from environmental samples. One fragment was from Phase 4 hearth (2755, fill 2764) in Room 8 (Plate 43), another from a Phase 4 deposit (context 2627) in Room 13 (Plate 44). Both had been burnt and represent small fragments of decorated bone (or possibly ivory) hairpins or styli.

### 3.14 Flint by Michael Donnelly

3.14.1 A very small assemblage of nine struck flint was recovered from the excavation (Table 15). The assemblage was dispersed over seven contexts and the flintwork is clearly residual. There was a lack of genuine diagnostic finds, but several pieces do have enough technological indices to indicate their likely date.

3.14.2 Eight of the nine pieces were of flint while the ninth was Portland chert, a material widely used in the south-west of England. The assemblage comprised four flakes, two blades, a backed knife, a retouched tool fragment and a piece of indeterminate waste. The tool fragment is probably part of a denticulate or other heavy backed tool. The backed knife is a fairly expedient tool on a side trimming flake. The piece does not work well as a scraper and so the left sided retouch is most likely backing for a simple form of knife.

3.14.3 Of the blade forms, one displayed a soft hammer bulb and had a clearly abraded platform margin, both of which are strong indicators of an early prehistoric date. There was also an indication that another plunging flake may be an informal attempt at rejuvenating a blade core, this piece also had an abraded platform. The Portland chert flake is very thin and regular and is likely to be early prehistoric in date. The remaining flakes and waste are undiagnostic.

Context	Type	Sub-type	Comment	Date
2230	Flake	Inner	Regular thin flake in Portland chert	?EPH
2373	Miscellaneous retouch	Misc trimming blank	Distal segment with backing/denticulation along its left edge, possibly from a blade	
2373	Flake	Inner	Proximal segment	
2417	Flake	Inner	Heavily plunging removal with platform abrasion., possibly attempt at rejuvenating a blade core	?EPH
2429	Irregular waste			
2440	Flake	Misc trimming	Soft-hammer struck flake, probably early in date	?EPH
2526	Blade	Misc trimming		?EPH
2825	Backed knife	Preparation flake	Backing does not work as a scraper so likely for holding as a simple knife	
2880	Blade	Misc trimming	Regular blade form with abraded platform and soft-hammer bulb.	EPH

EPH = Early prehistoric

Table 15: Worked flint by context

3.14.4 This small assemblage indicates that there was a limited presence here during prehistory. The blade forms and certain other pieces indicate an early date, but this cannot be refined further with any degree of certainty. The assemblage is likely to date to the Mesolithic or early Neolithic but could conceivably be of mixed date rather than

belonging to any single event. The flintwork most likely represents casual losses and abandoned tools and debitage left during intermittent visits to this locality. Early prehistoric evidence, often dated to the Mesolithic period, is well known from Somerset including numerous sites around the Somerset Levels (Bell *et al.* 2015; Bond 2007).

### 3.15 Mosaics by Anthony Beeson

#### *Introduction*

- 3.15.1 The 1960s excavations revealed a polychrome mosaic which was determined to have a figure of Diana, the Roman goddess of hunting and the moon. Part of the mosaic was published in Cosh and Neal (2005). The 2016 excavations re-revealed the Diana mosaic in what was termed Room 4. A tiny fragment of a second mosaic was seen in Room 6. The 2017 excavations uncovered a second large mosaic in Room 7.

#### *Diana mosaic, Room 4 (Plate 45)*

- 3.15.2 The mosaic (2050) floored a rectangular chamber measuring 4.85m by 3.5m. The mosaic itself is also rectangular but with a wider border of rough tessellation on the southern side. The mosaic is orientated lengthways, north-south but is designed to be viewed from the east. Within the borders of grey-white tessellation a blue-grey (hereafter 'blue') fillet surrounds the central decorated panel which employs blue-grey, red purple, yellow and red in its designs. Within the border fillet are runs of large poised right-angle triangles in blue that surround the entire mosaic and survive in part on all sides. These triangles were obviously laid in strips and the mosaicist ignored the problem of corners as, at the surviving south-western corner, the southern triangle frieze continues right up to the western edge of the surrounding border and gives a clumsy appearance where it meets the western run of triangles.
- 3.15.3 Held within the triangle border on the north and south sides are the remains of a second rare and attractive border composed of a row of alternately faced lotus flowers or trifold-calices. The flowers are linked together by their leaves that sprout from and join the base of each bloom in turn forming an undulating and harmonious line. The lotus frieze has a parallel in the border of a now lost mosaic found in Old Broad Street, London. Adjoining the lotus panels, and of equal east-west length to them, are the edges of a square guilloche frame surrounding the main panel of the mosaic. Remains of the frame survive on all sides. The three-strand guilloche is in contrasting colours of red, yellow and white against purple, blue and white. Within the frame is a large circle decorated with a right-angled Z-pattern. Between the circle and the frame, large lotus leaves with curling tendrils fill the spandrels. Within the circle are regular interlaced squares, one decorated with guilloche in blue, red, yellow and white, whilst the other has right angled Z-pattern in blue, purple and white. This is an unusual decoration for an interlaced square and is only matched in south-west Britain by the mosaic from Yatton in Somerset (Cosh and Neal 2005, mosaic 226.1). The triangular interspaces between the squares and the circular border are filled with three small blue triangles on the white ground. Within the octagonal centre space of the squares is a circular border decorated with an elongated Z-pattern that surrounds the figured centre piece. The central roundel holds the greater part of a somewhat crudely executed bust of a



female worked in red, yellow, white, blue and purple. The tesserae employed in this figured work are of the same size as the rest of the mosaic and thus add to its visual simplicity and lack of subtle detail. The skin is shaded in blue and purple and a fold or shadow is indicated below her chin with two rows of blue tesserae. The neckline of her tunic is decorated with bold red triangles. Originally, the character depicted was unknown and she was believed to have a bird upon her left shoulder. However, this writer recognised that she was actually the goddess Diana and that the 'bird' was actually the upper end of a Scythian bow and its string, and that she was depicted as wearing the deity's customary stephane or diadem on her head. Above the right shoulder several rows of blue tesserae represent either the customary quiver or arrows. Notwithstanding its naivety, this is an excellent depiction and it is wonderful that it has survived so well after years of burial. Diana faces the east which is somewhat of a problem in interpreting the social alignment of this chamber as one would expect the goddess to either face the position of importance or the entrance. There is no evidence for a door on the eastern side and the border of coarse tessellation on this side is narrow and not really suited to hold more than a chair.

- 3.15.4 There is a possibility that the central bust was prefabricated and then set into the mosaic with the wrong orientation. If this was the case, then one might imagine that it should have been looking south towards the widest border and towards the postulated entrance to the chamber.

### *Room 6*

- 3.15.5 Although mostly destroyed, enough remains to show that this room, perhaps originally an antechamber to Room 7, was again floored with a coarse border of grey-white tesserae that surrounded a central rectangular mosaic panel. Unfortunately, the central area of this mosaic is now apparently completely destroyed, but sufficient remains of what is presumably its border on the north side to show that it was either surrounded by a deep border of guilloche or that the latter formed part of guilloche mat that may have either filled the whole panel or framed a central design on the north and south sides. Colours employed are blue-grey, red and white. The room measures approximately 6.0m by 3.65m.

### *Geometric Mosaic, Room 7 (Plate 46)*

- 3.15.6 This mosaic (2639) floors a more-or-less square chamber and the central decorative geometric design is surrounded by a coarse grey-white border that is wider on its eastern side. Roughly half of the room's tessellation now survives. The main decorative geometric panel itself is roughly square with the one remaining eastern side of the design measuring 6.2m by 6m.
- 3.15.7 On a white field, the colours employed by the mosaicist are a blue grey (again hereafter referred to as blue), red terracotta and a purple-brown. The basic design of the pavement is formed by four pairs of intersecting squares forming stars in each quarter of the mosaic. These interlaced squares are the type geometrically based on a three-by-three grid and each touches the mosaic's surrounding border in two places on each of their outer sides forming triangles between the points. As here and at Hurcot, Somerset (Cosh and Neal 2005, mosaic 200.1a), interlaced squares are often

found in mosaic design used in groups of four. Such interlaced squares contrast with the more easily constructed sort (as seen on the Diana mosaic) that are drawn by marking eight points on a circle held within a square. Mosaics with interlaced squares seem to have found their greatest popularity in south-western Britain, whence more than three quarters of existing British examples are known. They are generally credited as dating from the 4th century AD.

- 3.15.8 Within Room 7's coarse outer tessellation, blue fillets bind a white border with the inner bearing spaced blue T-shapes. At the surviving north-east and south-eastern corners these rather clumsily become L-shapes. It seems that, like the triangle border of Room 4, the four T-borders were each laid as individual runs of the design and not as a harmonious whole that took notice of the presence of the corners. Within the T-border a band of simple guilloche encircles the mosaic. Its strands employ blue, white and purple tesserae contrasting against bands of blue, white and red.
- 3.15.9 Two of the original four stars formed by the interlaced square frames of guilloche remain tolerably complete on the eastern side of the mosaic with only fragments of the guilloche remaining from the others. The runs of simple guilloche used on the square frames employ blue, white and purple tesserae to contrast against those interlaced frames composed of blue, white and red. The north-eastern central panel enclosed by the 'star' formed by the interlaced squares has a blue octagonal border fillet that encloses a circular border surrounding the panel's central motif. The blue circular border is composed of superposed triangles held between two parallel lines of tesserae. The central motif in the circle is formed by four out-facing and elegant lotus flowers that are outlined in blue. The blue outline links each open blossom with its neighbour forming a harmonious undulating line. The upper parts of the lotus flowers are executed in red on the white background. Their stems are one tessera in length and these adjoin a central ring of blue tesserae. A single remaining tessera within this blue circle suggests, that it had at least one band of red inside it and probably resembled the half-circle holding three red, white and blue lotus leaves that may be seen in the remaining 'lunette' midway along the eastern side. The motif of four outward pointing lotus leaves springing from a circle appears in the corner boxes of the mosaic from Yatton (Cosh and Neil 2005, mosaic 226.1).
- 3.15.10 The roundel held within the octagon formed by the south-eastern interlaced squares is the most remarkable for its contents. Within the blue-on-white octagonal border a circular blue fillet, one tessera wide, surrounds a swirling and unusual circle of saw-edge border looking remarkably like the edge of a modern circular saw. Such a motif is a rarity in this area on known mosaics. The central roundel on the lost mosaic from Fifehead Neville in Dorset was surrounded by concentric borders of a pattern usually interpreted as 'tear-drop-shaped leaves' in red, black and grey (Cosh and Neal 2005, mosaic 167.2). It may be that this is a misinterpretation of the saw-edge pattern. Centred within this border is a red, white and blue guilloche or Gordian knot. From the interstices of the knot sprout four narrow lotus blossoms that resemble rather compressed fleurs-de-lis. This motif is unmatched anywhere in the region beyond a similar device recorded on the same lost pavement from Fifehead Neville mentioned above.

- 3.15.11 Parts of three of the original four side lunettes remain within the pentagons formed by the outer edges of the interlaced squares. That on the eastern side is complete. Like the fragmentary lunettes, this is held within a border of right-angled Z-pattern. Such lunettes on interlaced squares mosaics are most often surrounded by guilloche (again as at Hurcot) that flow from and join to the main border of guilloche that surrounds the design. Lunettes completely bordered by Z motifs (but there held within guilloche borders) were again found at Fifehead Neville. The Bratton Seymour mosaic is unusual in that the lunette is not surrounded by guilloche and that the Z border only surrounds the curve. It is closed on its outer edge by the mosaic's bordering blue fillet. The lunette is filled by one whole and two half lotus leaves that face outwards from a half-circle as on the four-leaf examples in the corner boxes at Yatton. The northern lunette is mostly lost beyond part of its Z border, but enough remains of the southern one to suggest its original contents. A fragment of the Z border remains on the southern lunette's western side and about half of the red, white and blue half circle may be traced in its lower central area. Unlike the red, white and blue lotus leaf motif in the eastern (and presumably western) lunettes, from this half circle three stems in purple-brown tesserae emerge. Single red leaves, rather reminiscent of an arrow fletch, hang from the lower edges of the stems. A row of blue tesserae forms a lanceolate leaf shape around part of the lowest red leaf, enclosing a white tessera at its tip blue stem or outline, but the design is freely drawn by the mosaicist and is obviously not a standard one. It may perhaps have originally been intended to resemble a spray of flowers or foliage. This foliate design brings to mind the unusual vegetal freehand motifs found on mosaics at Fifehead Neville and possibly Yatton.
- 3.15.12 Unusually for an intersecting square design, the Bratton Seymour mosaic again does not have the more usual guilloche bordered quadrants at the corner (such as at Hurcot), but instead has kite-shaped quadrangular panels outlined with blue fillets. Such a scheme appears at Ilchester Mead (Cosh and Neal 2005, mosaic 203.1). Both of the Bratton Seymour quadrants hold motifs based on lotus leaves. Although at first glance these appear to be standard motifs they are both in fact unique in their design and unparalleled elsewhere in the region. The south-eastern one resembles a lotus fan with a short stem or handle. The leaf faces outwards, and the volutes or spirals forming the body of the leaf curve outwards to form short tendrils. The north-eastern quadrant has a more elaborate fleur-de-lis motif based on a bud and calyx that faces inwards. The leaves of the calyx continue either side as curling tendrils, whilst two red and white leaves curl below forming a base. A row of purple tesserae adds interest to one calyx leaf.
- 3.15.13 Two of the triangles formed where the interlaced squares touch the outer border are divided centrally between red and white zones. That at the south-east is more complicated and is filled by four contrasting red and white triangles. The two surviving lozenges between the interlaced squares are filled by reversed lotus leaves.
- 3.15.14 The octagon formed by the four interlaced squares in the centre of the mosaic is bordered by a band of blue and white chequer-work between blue fillets. Within this frame is a slightly wider circular band of red and white chequer-work held within blue fillets. Chequer-work is an uncommon decoration in the region although one of

the interlaced squares at Yatton was decorated with such bands of red, white and blue. Serpents in the area are depicted with chequered bodies such as on the pavement from Durngate Street, Dorchester (Cosh and Neal 2005, mosaic 165.11).

3.15.15 Only a fragment of the white central roundel now survives, but it is enough to give a clue as to what was originally depicted on its surface. It is certain that the roundel bore the bust of a figure, as its right shoulder and arm, shaded in lines of blue and purple are clearly depicted. The inner line, depicting where the upper arm adjoins the torso, curves away from the body forming the shape of a somewhat embonpoint breast and a single blue tessera indicates a nipple. Towards the right edge of the fragment a diagonal and descending line of small red tesserae that ends in a larger tessera presumably represents a necklace especially as the actual modelling of the body, like that of Diana, is undertaken in blue and purple. This line also seems too minimal to be interpreted as the edge of a garment. What appear to be large lanceolate-shaped leaves, bordered in blue tesserae and infilled with red and purple tips, hang down, and by the flow of tessellation, seemingly emanate from the side of the missing head. Presumably these are the remnants of a chaplet or the bunches that often represent the ribbons and foliage associated with the tying of a stephane or diadem on the head (compare Neptune-Oceanus from the mosaic found at Fordington High Street and now in the Dorset County Museum, Dorchester (Cosh and Neal 2005, mosaic 165.13)). These postulated leaves also remind one of a similar brown feature depicted beside the head on a watercolour recording by M E Hartley of the lost central roundel at Fifehead Neville (Cosh and Neal 2006, mosaic 167.1). Although an identification as leaves seems most likely, one is reminded of the rather lanceolate locks of hair depicted by Lysons on the bust of Venus and the also the winds from the site at Frampton in Dorset, so that possibility cannot be ruled out.

3.15.16 Lacking any sure iconographical attributes, identification of the Bratton Seymour bust is purely a matter of speculation, but if the bust is naked and wearing a necklace, then Venus again might be a possibility as the goddess seems a popular subject for mosaics in the region. If male, then perhaps one might look to Sol as the occupant with the 'leaves' being the sun rays that stream from his head and the necklace a strap. Bacchus as well might be another candidate, although given the apparent female anatomy depicted and the presumed necklace a goddess certainly would seem more likely than either. The execution of the bust, insofar as one may judge by what remains, is considerably more competent than that of the Diana emblema and shows a greater variation in the size of tesserae employed. Whoever occupied the roundel, they looked eastward towards the room's widest border and the seat of its most important occupant.

### *Discussion*

3.15.17 The discovery (and rediscovery) of mosaics is always an excitement and these mosaics from Bratton Seymour are more interesting than most in the originality of some of the motifs employed in their decoration that now enable us to make connections with other pavements found in the south-west. The new mosaic of Room 7 is particularly interesting for its unusual motifs and for providing tantalising evidence for a figured central panel. It is particularly exciting that the Diana pavement has

survived burial since 1967 so well. It seems likely that the same mosaicists responsible for the pavements at Fifehead Neville, Yatton and perhaps Bromham also worked at Bratton Seymour. Whether the Diana mosaic of Room 4 was laid at exactly the same time as those in Rooms 6 and 7 is difficult to judge. It seems likely that if the same firm was responsible for Rooms 4, 6 and 7, then different mosaicists in that group worked on the figured work in the central roundels. The little that survives of the figure in Room 7 is vastly superior in execution to the Diana roundel of Room 4 in technique. The fact that different mosaicists worked on separate pavements does not, of course mean that they were not laid at the same time. The Diana mosaic, which employs yellow tesserae, which are absent from the new mosaics of Rooms 6 and 7, has certain similarities in decoration with that at Yatton, which certainly also has a decorative connection with elements of the mosaic of Room 7. It is noticeable that Room 7's singular knot and lotus motif of the south-eastern interlaced square is certainly reminiscent of that used at Fifehead Neville as are the brown 'leaves' of the figured central emblema and the T-shape border.

## 4 ENVIRONMENTAL AND OSTEOLOGICAL EVIDENCE

### 4.1 Human remains by Lauren McIntyre

#### *Introduction*

- 4.1.1 This report details the results of the analysis of two articulated juvenile skeletons (SK 2074 and SK 2895), and one fragment of disarticulated human skull (SF 1558).
- 4.1.2 Skeleton 2074 was recovered from a shallow grave cut (2079), located immediately west of wall 2123, which separated Rooms 2 and 3 in Southern Building 1. The burial was partially exposed during archaeological investigations in the 1960s, being left *in situ*, covered over with a corrugated iron sheet and backfilled until rediscovery during the current project. A bone sample was taken from the right femur for C14 dating. The results indicated a 92% probability that the individual dated to between cal AD 380–537 (Table 29), demonstrating a late Roman to post-Roman date.
- 4.1.3 Skeleton 2895 was recovered from the charcoal-rich upper fill of Phase 3b small oven or firepit (2894) in Room 10. The disarticulated skull was found in a clay deposit (2264; Phase 1), which may have served as a bedding layer for a floor surface.

#### *Methodology*

- 4.1.4 Recording of the human remains was undertaken with reference to Brickley and McKinley (2004). The skeletons were assessed in terms of preservation (Grade 0–5+, after McKinley 2004, 16), completeness (0–25%, 26–50%, 51–75%, 76–100%) and fragmentation ('low', <25% of the skeleton fragmented, 'medium', 25–75% of the skeleton fragmented, or 'high', >75% fragmented). The age of the skeletons was estimated where possible using relevant standards (Fazekas and Kosa 1978; Ubelaker 1978; Scheuer and Black 2000). Sex was not determined, as there are currently no standard methods for estimating biological sex in juveniles (Brickley 2004: 23). Pathologies were recorded with reference to standard texts (eg Aufderheide and Rodríguez-Martín 1998; Ortner 2003).

#### *Results*

Skeleton 2074 (Plate 47)

- 4.1.5 Skeleton 2074 was 51–75% complete and had fragments of cranium, both arms and hands, ribs, vertebrae, and pelvis surviving. Both femora were also present, as well as the left tibia and one fragment of right fibula. Two small bones that may represent the remains of two tarsals (the calcaneus and talus) from the left foot were also present. Bone surfaces were slightly or moderately eroded (consistent with grade 2 after McKinley 2004, 16) and less than 25% of the bones had suffered fragmentation. Overall, the preservation of the skeleton was good.
- 4.1.6 The skeleton was classified as a neonate (birth–one month) based on the maximum lengths of several bones (left clavicle, right scapula, both humeri, right radius and ulna, both ilia, both femora and left tibia), the maximum widths of the right scapula and both ilia, and dental crown development. Therefore, the individual represents the remains of a juvenile who died shortly before, during, or after birth. It is not possible, by conventional methods, to determine whether the child had been still- or live-born.

4.1.7 Fragments of five deciduous teeth were present, as were five sockets in the right mandible. All teeth were in the early stages of development. As all the dentition was unerupted, no dental pathology was observed.

4.1.8 No pathology was observed on this skeleton.

Skeleton 2895

4.1.9 Skeleton 2895 was 40% complete and had fragments of cranium (left and right parietal, right *pars lateralis* and right temporal), the left arm (humerus, radius and ulna), right arm (humerus), two right ribs, fragments of two thoracic and one lumbar vertebrae, pelvis (left and right ilium), right leg (femur, tibia and fibula) and left leg (femur and tibia) remaining. Bone surfaces were slightly eroded, with some patchy surface erosion (grade 1; McKinley 2004, 16) and high levels of fragmentation. Overall, the preservation of the skeleton was fair.

4.1.10 The skeleton was tentatively classified as a neonate (birth–one month) based on the maximum width of the right *pars lateralis* (28.3mm, consistent with an age of >40 weeks in utero: Fazekas and Kosa 1978, in Scheuer and Black 2000, 61) and non-union of the *pars lateralis* with the occipital squama (<1 year: Scheuer and Black 2000, 60–1). All other skeletal elements were too fragmented to measure. Therefore, the individual represents the remains of a juvenile who died shortly before, during, or after birth. It is not possible, by conventional methods, to determine whether the child had been still or live born. The dentition was absent, and no pathology was observed.

Disarticulated remains

4.1.11 This fragment comprised partial left and right parietals fused at the sagittal suture. Surface preservation was good (grade 1; McKinley, 2004, 16). The morphology of the fragment was consistent with the cranium of an adult individual aged >18 years. It was not possible to determine biological sex. One non-metric trait, a parietal foramen, was present on the right parietal. No pathological evidence was observed.

### *Discussion*

4.1.12 The majority of available Romano-British burial evidence from Somerset dates to the later part of the Roman period, although inhumation burials do occur in Roman Britain across the whole period, from the 1st to early 5th century AD (Pearce 2013, 145). Furthermore, inhumation burial is far more common than cremation in the county during this period (*ibid.*). Large numbers of infant burials have been excavated in Somerset compared to elsewhere in Britain. In a survey of Romano-British infant burials by modern geographical county, Moore (2009) shows that Somerset has a fairly high representation of such burials. Some 20 infant burials are known from Catsgore alone (Everton 1982) dating mainly to the 3rd–4th centuries AD, with a number from locations within buildings (*ibid.*).

4.1.13 Skeleton 2074 represents the well-preserved remains of a juvenile who died around the time of birth. Skeleton 2895 also represents the remains of a juvenile who died around the time of birth and was interred in a pit which was dug into the remains of a disused furnace.

- 4.1.14 In the Roman period, neonate and infant burials (individuals aged between 38 weeks in utero and 1 year) are scarce within formal cemeteries, being more common in association with the inside of buildings (eg under the floor), adjacent to domestic structures (eg in foundation cuts), and in a variety of non-domestic external features such as wells, ditches, paths and furnaces (Philpott 1991, 97; Esmonde Cleary 2001, 135; Moore 2009, 43 and 38). Burial of these young individuals within or in close proximity to domestic buildings appears to have declined in frequency throughout the Romano-British period (Moore 2009, 38). Burial within non-domestic buildings such as workshops and agricultural structures becoming more common by the 4th century (*ibid.*).
- 4.1.15 Several examples of skeletons (including neonates) interred in or associated with furnaces, like skeleton 2895, have been documented from Roman villa sites in Britain. For example, at Winterton in Lincolnshire, a neonate of 3rd-century date was discovered in the north-west corner of the furnace room of a bath suite (Stead 1976). At Littlecote Park in Wiltshire, three infant burials were found associated with a bronze-working furnace (Frere 1984, 322). The bones of adult skeletons were found closely associated with a furnace at Itter Crescent villa in Cambridgeshire, likely to represent a secondary burial made within the flue (Webb 2015, 9). At the same site, a further burial (of an older adult male) was made within a grave dug into the stoking pit of a kiln (*ibid.*, 16).
- 4.1.16 It has been postulated that babies and infants may have been buried in these types of context to deliberately associate the deceased with the presence of heat and fire, which may have had spiritual connotations (Moore 2009, 47). However, considering that the Cattle Hill neonate 2895 was interred in association with the remains of a disused oven or firepit, it is unclear whether this simply represents the opportunistic re-use of an old feature, or whether the burial was interred to mark the end of the use of the feature.
- 4.1.17 The presence of a fragment of disarticulated skull in the bedding layer for a floor surface is also typical for the period. Human burials are found deliberately placed under the floors of domestic structures at Romano-British rural sites, eg at Winterton in Lincolnshire (Pearce 2013, 194). However, considering that the Cattle Hill example only comprises a single (though rather large) fragment, it is also possible that this bone deposition is accidental or residual. Clay layer 2264 may comprise redeposited natural. If this is the case, it is possible that part of a burial was disturbed during collection of material for construction of the bedding layer, and the fragment was incorporated unintentionally.

## 4.2 **Animal bones by Martyn Allen**

### *Introduction*

- 4.2.1 The excavation produced a total of 2344 hand-collected animal bone specimens, while 745g of animal bones was recovered from environmental samples. The animal bones were well preserved and only a few contexts contained material that was more degraded. This report presents and discusses the general character of the assemblage, its spatial and contextual distribution, the relative frequency of the main livestock species including chronological changes, and taphonomic factors. The assemblage has



the potential for more detailed analysis, particularly with regards of ageing and measurement, that may provide further information about dietary and animal husbandry practices.

- 4.2.2 The assemblage is dominated by sheep/goat remains, particularly between Phases 2 and 4 (mid-3rd–early 5th century AD). This appears to follow a regional pattern of sheep husbandry in the western part of southern Britain that appears to centre on the Cotswolds to the north of the site. A higher proportion of material derives from pits in Phases 2 and 3, in which sheep/goat remains feature prominently. One late 4th–early 5th-century pit may include the articulated remains of at least two sheep. It is here argued that this reflects an emphasis on wool production, which may have been an important aspect of the economy of the villa.
- 4.2.3 Cattle remains were more common in post-Roman deposits (Phases 5 and 6), though they were fairly equal to sheep/goat remains in number within these phases. Animal bones from Phase 6 may include some residual material from the villa, since it includes backfill deposits from excavations undertaken in the 1960s. Some evidence for high-status dietary habits is evident, notably a small but apparent increase in pig remains after the establishment of the villa, and bones from wild animals which appear to indicate a penchant for hunting.

### *Methods*

- 4.2.4 The animal bone assemblage has been recorded by rapid assessment. Numbers of cattle, sheep/goat, pig, horse and bird bones have been counted from each context. No attempt was made to differentiate between sheep and goat bones. Specimens from other species (ie dogs, cats, deer, etc.) have been counted as ‘other mammal’, though their presence has been recorded by context, as have bird species where they have been identified. The number of non-identifiable specimens, usually long-bone shaft fragments, vertebrae and rib fragments, have been counted for each context to provide an overall quantification of the assemblage. The presence of specific elements from the main taxa have been recorded by context, but not quantified.
- 4.2.5 Numbers of specimens with signs of burning, butchery and gnawing have been quantified. Specimens with pathological conditions were counted, though these amounted to no more than eight or nine examples.
- 4.2.6 The potential of the ageing data to provide patterns of livestock slaughter practices has been assessed by counting the number of ageable mandibles and long bones from cattle, sheep/goats and pigs. Only mandibles with two or more permanent molars, or at least the presence of the fourth deciduous premolar or the third permanent molar, have been counted as these are likely to provide a reliable wear stage (cf Grant 1982). Other bones were counted where fusion (or non-fusion) of the proximal and/or distal epiphysis was evident.
- 4.2.7 The potential of the biometric data has been assessed by recording the number of measurable bones from cattle, sheep/goat, pigs, horses, birds and ‘other mammals’ from each context. These specimens need not be complete bones, but have at least one surviving, measurable dimension. The criteria for measurements is based on the standards created by von den Driesch (1976).

4.2.8 Animal bones from sieved samples were weighed by context and the presence of species were recorded in terms of their broad taxonomic group (eg rodent, amphibian, fish and bird). The fish bones have been separately assessed in more detail (see Nicholson below).

### Results

4.2.9 The results presented below primarily consider the hand-collected remains, while the animal bones recovered from sieved samples are examined independently further below.

Phase	Date	Cattle	Sheep /goat	Pig	Horse	Other mammals	Birds	Non-ID	total
1	2nd C	1	1	0	0	0	0	0	2
2	m-l 3rd C	9	185	1	0	0	3	87	285
3a	l 3rd-e 4th C	29	140	27	2	8	1	126	333
3b	4th C	88	149	14	15	7	7	287	567
4	l 4th-e 5th C	30	94	8	2	9	5	163	311
5	l 5th-6th C	70	75	5	4	5	7	135	301
6	6th C +	110	105	16	6	13	11	267	528
unphased		2	4	0	2	0	0	9	17
total		339	753	71	31	42	34	1074	2344

Table 16: Animal bone. Number of identified and non-identified specimens by phase

#### Taxa representation

4.2.10 Sheep/goat was the most frequently identified species, contributing over 32% of the total animal bone assemblage (Table 16). This accounted for twice the number of cattle remains (14.4%), and about 10 times the number of pig bones (3.0%). Figure 9 shows that sheep/goat remains dominated in Phases 2–4, but gradually decreased in frequency from 93.4% of the identified remains in Phase 2 to 40.2% in Phase 6. Cattle bones, in contrast, increased from 4.5% of the identified specimens in Phase 2 to 31.4% in Phase 3b, though they were still less common than sheep/goat in this phase. Cattle bones were most common in Phases 5 and 6, when they contributed over 42% of the identified specimens, and were roughly equal in number to sheep/goat remains.

4.2.11 Pig bones were barely present prior to Phase 3a but contributed 13% of the animal remains in this phase (27 specimens). These were enhanced by a quantity of neonatal/infant pig bones found in Room 11 (context 2847). After Phase 3a, pig remains contributed about 5–6% in each of the following phases. Horse bones were found in small numbers in deposits dating between Phases 3a and 6, being most frequently encountered (15 specimens) in 4th century (phase 3b) features, and included parts of a skull found in a cleaning layer (2029) in Area A.

4.2.12 A total of 42 specimens from other mammals were identified. Dog bones were discovered in nine contexts dating to each Phase between 3a and 6. These included possible partial skeletons in contexts 2756 (Phase 3a) and 2738 (Phase 4). Deer remains were recovered from nine contexts. These were mostly red deer teeth, though a possible fallow deer tooth was found in Phase 6 context 2069, and a roe deer tooth in Phase 4 context 2818. Context 2799 (Phase 3b) contained a red deer upper molar

and a zygomatic (skull) bone that may have come from the same animal. Context 2795 (Phase 3a) contained a shed red deer antler that had been burnt and broken along the main beam, and one of the lower tines had been sawn off. Context 2866 (Phase 3a) contained a metacarpal fragment that appeared to derive from a fallow deer. Fallow deer are of particular interest as these animals are known to have been imported into Britain during the Roman period (Sykes 2010). Hare bones were identified in three contexts, phased as 3b, 4 and 5, though these should be further examined to compare with rabbit. Also, a tibia from a Phase 6 context (2566) was uncertainly identified and may be from either a hare or a cat. Two rodent limb bones were recovered from Phase 6 context 2059.

4.2.13 Bird bones were recovered in small numbers, never representing more than 5% of the identified assemblage in any phase, though most of the bird bones derived from features dating from the 4th century onwards. Most of these were chicken bones, including some neonatal/infant remains (context 2595), which suggests that chickens were reared at the villa. One ulna was identified as goose (context 2104), and a few bones from smaller bird species were also recorded.

Provenance and distribution

4.2.14 Figure 10 and Table 17 show the number of animal bones recovered from different feature types in each of the main phases. Most of the animal bones from Phase 2 deposits, over 46%, derived from pits, reducing to 39% in phase 3b and 25% in phase 4. No animal bones were recovered from pits in Phases 5 and 6, and these phases were dominated by material from layer deposits. This may partly account for the low proportion of cattle remains in Phases 2 and 3a, as studies have shown that butchery waste from larger livestock tends to be deposited in ditches at the peripheries of settlements (Wilson 1996). Almost none of the animal bone assemblage from Cattle Hill derived from ditches, and much of it appears to have been recovered from layers on either side of the buildings and within the rooms. The pattern of carcass disposal is perhaps suggestive of localised kitchen waste.

Phase	Layer	Ditch	Pit	Structure	Other	Total
2: m-l 3rd C	94	2	132	57	0	285
3a: l 3rd-e 4th C	187	0	130	16	0	333
3b: 4th C	524	0	2	20	21	567
4: l 4th-e 5th C	230	0	78	1	0	309
5: l 5th-6th C	296	0	0	0	5	301
6: 6th C +	509	0	0	0	19	528

Table 17: Number of specimens from different features types

4.2.15 In terms of spatial distribution, animal bones were recovered in most areas of the site (Table 18). A large proportion, about 44%, derived from areas external to the villa building. The largest quantity (17.9%) was recovered from layers in the Central Area to the east of the villa, with slightly less material deriving from Areas A (7.9%) and B (6.8%) on the western side. These probably represent scatters of waste that built up over time. Of the three main buildings that were fully excavated, Southern Building 1 produced the highest quantity of animal bones. Material from rooms 1-3, 10-12 and 14 contributed 38.6% of the total assemblage, which compares to 17.3% from the

rooms in Northern Building 2 (mostly from room 13), and just over 2% from the central building, which appears to have been kept relatively clear of debris.

Area/Room	NISP	%NISP
Room 1	104	4.4
Room 2	190	8.1
Room 3	138	5.9
Room 5	3	0.1
Room 6	46	2.0
Room 7	81	3.5
Room 8	117	5.0
Room 10	190	8.1
Room 11	140	6.0
Room 12	1	0.0
Room 13	160	6.8
Room 14	143	6.1
Central Area	419	17.9
Area A	185	7.9
Area B	159	6.8
Building 1	2	0.1
Other	266	11.3
total	2344	100

Table 18: Number and percentage of specimens from different rooms and areas

#### Taphonomic factors

4.2.16 As already mentioned, much of the animal bone assemblage was well preserved and very few specimens showed signs of extensive weathering. This is coupled with the fact that relatively few fragments exhibited carnivore gnawing. A total of 52 specimens from layer deposits (56 in all) exhibited gnaw marks, though this only amounted to 2.8% of the assemblage (Table 19). The fact that dogs and other scavenging animals did not have much access to carcass remains, along with low levels of weathering, suggests that material was quite rapidly deposited.

Feature type	Burnt		Butchered		Gnawed		Total NISP
	NISP	%	NISP	%	NISP	%	
Layer	39	2.1	115	6.3	52	2.8	1840
Pit	1	0.3	2	0.6	1	0.3	342
Structure	1	1.1	4	4.3	0	0.0	94
Other	0	0.0	3	6.7	3	6.7	45

Table 19: Number and percentage of burnt, butchered and gnawed bones

4.2.17 There were very few burnt bones in the assemblage, only 41 in total, and there is no evidence for burning as a method of waste disposal as there is no sign of heavily burnt (calcined) material. Interestingly, a group a sheep/goat skull and foot specimens in Room 11 of Building 1 (layer 2847) had been burnt and this may be the result of an industrial process or potentially a ritual practice. Another deposit of sheep/goat skull and foot fragments were recovered from the fill (2378) of another pit in the central area, though these remains showed no sign of burning. The worked red deer antler found in an oven/fire pit deposit (2795) in Room 8 may represent the remains of industrial working during the 4th century AD.

4.2.18 Butchery marks were observed on 6.3% of the assemblage from layer deposits, along with a smaller number from other features. More detailed analysis of these marks could allow a better understand of carcass-processing methods and whether these changed over time. There is some evidence for the use of cleavers and intensive processing of cattle carcasses. Two axially chopped cattle tibiae were recovered from Phase 2 deposit 2230 and Phase 3b deposit 2224 respectively. Another group of bones that included cleaver marks was recovered from deposit 2104, and although mid-4th-century AD pottery was also present, this was a backfill of material from the 1960s excavation. Nonetheless, these remains hint at a distinctly ‘Roman’ style of butchery that is more commonly associated with urban centres (Maltby 2007). Another interesting aspect of the assemblage is that several horse bones from late Roman deposits exhibit butchery marks. These include a possibly butchered pelvis (context 2365), a femoral head with cut marks (context 2595) and two metacarpals with superficial chop marks (contexts 2265 and 2096). Butchery of the pelvis and the femur suggest that horse meat was being eaten, if not on a regular basis.

Ageing data

4.2.19 Sheep/goat remains provide the best opportunity for studying slaughter patterns. A total of 27 sheep/goat mandibles can provide estimated ages from dental eruption and tooth wear patterns, with a further 11 specimens from post-Roman contexts that can be used as comparative material (Table 20). The number of sheep/goat specimens that can be examined for epiphyseal fusion is also substantial, including 183 elements from Phase 2–4 deposits. Taken together, these data can be analysed to examine kill-off patterns for what appears to be an important regional villa assemblage of sheep/goat bones. This would help to better understand husbandry practices at the site and whether specialisation was taking place (ie wool production, dairying, etc.).

Phase	No. mandibles	No. long bones
2: m–l 3rd C	4	97
3a: l 3rd–e 4th C	9	36
3b: 4th C	8	27
4: l 4th–e 5th C	6	23
5: l 5th–6th C	9	7
6: 6th C+	2	11

Table 20: Number of ageable sheep/goat mandibles (dental eruption and wear) and long bones (epiphyseal fusion)

4.2.20 The cattle and pig remains do not offer the same opportunities as the sheep/goat assemblage (Tables 21 and 22), though these may provide suitable data for comparisons with other regional assemblages. Nonetheless, there are remains of neonatal (and possibly foetal) cattle, sheep/goats, pigs and chickens in the assemblage, suggesting that all four livestock species were being reared at the site and may indicate that livestock production was an important aspect of the villa’s economy.

Phase	No. mandibles	No. long bones
2: m–l 3rd C	0	0
3a: l 3rd–e 4th C	0	6
3b: 4th C	4	18
4: l 4th–e 5th C	3	5

5: I 5th–6th C	4	7
6: 6th C+	2	20

Table 21: Number of ageable cattle mandibles (dental eruption and wear) and long bones (epiphyseal fusion)

Phase	no. mandibles	no. long bones
2: m–I 3rd C	0	1
3a: I 3rd–e 4th C	0	21
3b: 4th C	1	6
4: I 4th–e 5th C	0	2
5: I 5th–6th C	0	1
6: 6th C+	3	0

Table 22: Number of ageable pig mandibles (dental eruption and wear) and long bones (epiphyseal fusion)

#### Biometric data

4.2.21 The vast majority of the measurable specimens are of sheep/goat (Table 23). A total of 156 of these derive from Phase 2–4 deposits and will provide a useful dataset to examine potential changes in sheep/goat size over time. The specimens can be used to examine withers' heights as well as the stockiness of the animal. There are fewer measurable cattle specimens, though these may be of some use to examine cattle size in a regional context. There are not enough measurements that can be taken from pig, horse and bird (chicken) remains to provide robust results.

Phase	Cattle	Sheep/goat	Pig	Horse	Bird	Other
2: m–I 3rd C	1	64	1	0	2	0
3a: I 3rd–e 4th C	5	31	0	0	0	1
3b: 4th C	16	32	4	2	3	0
4: I 4th–e 5th C	7	29	1	0	1	1
5: I 5th–6th C	18	16	0	1	5	0
6: 6th C+	22	25	2	0	6	1

Table 23: Number of measurable specimens from each taxon

#### Sieved remains

4.2.22 In total, 77 contexts were sieved for environmental remains and these produced a fairly high quantity of microfauna and smaller elements from larger mammals (Table 24). Rodents bones were identified from 37 contexts dating from Phases 2 to 5 and were the most common microfauna taxon. No attempt was made to identify any of the rodent bones to species, though it should be noted that shrew bones were also found in three contexts alongside rodent bones (2587, 2620 and 2884). It is uncertain whether these were contemporary remains or the bones of burrowing animals that had later become entombed.

Phase	Rodent	Bird	Amphibian	Fish	Total no. contexts
1: 2nd C					1
2: m–I 3rd C	3	1	2		7
3a: I 3rd–e 4th C	9	3		4	20

3b: 4th C	9	3		1	21
4:   4th–e 5th C	11	4		1	19
5:   5th–6th C	5	3			7
6: 6th C+					1
unphased					1
total	37	14	2	6	77

Table 24: Number of contexts with microfaunal taxa present

- 4.2.23 Bird bones were also fairly common in the sieved samples, being found in 14 contexts. Other than one chicken bone, these remains all derived from small, wild-bird species, mostly probably passerines. As with the rodent bones, no attempt was made to identify the bird bones to species.
- 4.2.24 Fish bones were recovered from six contexts, four of which dated to the mid–late 3rd century AD. Amphibian bones were recovered from two contexts dating to the mid–late 3rd century AD (2378 and 2927) and mostly appear to be frog bones rather than toad.
- 4.2.25 A total of 56 contexts produced specimens from larger mammals, mostly small, unidentifiable fragments, though sheep/goat, cattle, pig and red deer remains were present. Pit deposits 2378 (Phase 2), 2899 (Phase 3a) and 2217 (Phase 4) all produced relatively high numbers of sheep/goat skull and foot bones and may relate to structured deposits already noted in the hand-collected assemblage. Burnt material was also recovered from nine contexts, and although rarely in large quantities, this did include remains from hearth fill 2382 (Phase 2), oven fill 2795 (Phase 3a), and corndryer fill 2839 (Phase 4), and may be directly related to those features.

### *Discussion*

- 4.2.26 The excavation has produced a modest-sized assemblage of animal bones which requires a more in-depth analysis to realise its full potential. There are very few contemporary habitation sites in eastern Somerset, south-western Wiltshire and northern Dorset with large animal bone assemblages. The nearest examples are found at the roadside settlement at Shepton Mallet, Somerset (Albarella and Hammon 2011; Pinter-Bellows 2001).
- 4.2.27 The high sheep/goat frequencies noted here reflects a regional trend noted in the Cotswolds, rather than of villas sites in general (Allen 2017, 92, fig. 3.11). Although located several kilometres south of the Cotswolds, Cattle Hill villa lies on a comparable geology and the general landscape may have been conducive to similar farming practices. This could be examined in greater depth if the sheep/goat ageing and biometric data can be recorded and analysed. On a provincial scale, sheep/goat kill-off patterns tend to show little evidence of change through time or of specialisation (ibid. 114). This evidence, however, runs contra to the historical evidence for a burgeoning wool industry in later Roman Britain (Frere 1987, 272). Specialised wool production may have been undertaken from a small number of sites, with villa estates perhaps being prime candidates since they probably had access to the land required to farm large numbers of sheep and potentially the consumer markets that could have enabled such specialisation to take place. Analysis of the large sheep/goat biometric dataset would allow for a better understanding of livestock types and whether any variation

here was reflective of a focus on wool production. The existing evidence for sheep size in late Iron Age and Roman Britain suggests that some animals significantly increased in size at some late Roman sites in the east of England, possibly because of more intensive breeding practices, or because of imported stock, or both (Allen 2017, 105–6). However, there are comparatively few datasets from the south-west to compare this pattern.

4.2.28 Butchery patterns also suggest that the site adopted a style of carcass processing that was more akin to practices more often found in Romano-British towns than in the countryside, though has been noted at some villas (Maltby 2007). Further examination of the butchery marks could suggest whether the site had links with urban butchers and markets, perhaps at Ilchester and Shepton Mallet on the Fosse Way. The evidence for horse butchery is also of some interest as this trait is not often found at Romano-British sites, since horses were not commonly raised for meat in this period (Allen 2017, 127–8).

4.2.29 The evidence of wild animal remains is also of interest for a villa site. Previous studies have suggested that hunting, fowling and fishing in Roman Britain was largely a feature of elite practice, with wild animal remains being exploited more frequently at villas compared with rural farmsteads (Allen and Sykes 2011; Allen 2014). The presence of fallow deer remains is also significant, as these animals were imported exotica during the Roman period, probably to be kept in managed parks around villa estates (Sykes 2010).

### 4.3 Fish bones by Rebecca Nicholson

4.3.1 A small number of fish bones was recovered from the residues of sieved soil samples (Table 25). With the exception of a single vertebra from a small ray (Rajidae) and a fossil fish tooth, all the remains are from eel (*Anguilla anguilla*). Other fish remains are present in some sample flots (Fosberry pers. comm.) but have not been seen by the author.

4.3.2 The recovery of eel bones in three contexts, possibly midden levelling layers, of Phase 3a in Room 1 suggests the consumption of this fish. Eels would have been widely available in local rivers and streams and this is the most likely source. The small ray vertebra is the only evidence for marine fish and may be from a preserved specimen.

Context	Sample	Context description/location	Phase	Identification
2292	33	Occupation layer, room 1	3a	2 eel vertebrae
2545	50	Occupation layer, room 1	3a	5 eel vertebrae and one eel opercular
2656	92	Layer, room 1	3a	3 eel vertebrae
2848	151	Layer, room 8	3a	1 small ray vertebra
2884	163	Corndryer, room 10	4	1 fish tooth, probably fossil
2117	18	Pit fill, central area	3b	2 eel vertebrae and 1 eel articular

Table 25: Fish bones

### 4.4 Shell by Rebecca Nicholson

#### *Marine shell*

4.4.1 The marine shell assemblage is fairly small (Tables 26 and 27); all was hand-retrieved, and no context or phase included more than a small number of shells. Almost all the recovered assemblage is flat oyster (*Ostrea edulis* L.), with both left and right valves



identified. The only other shells present in the assemblage are a single rough cockle (*Acanthocardia tuberculata* L.), a whelk (*Buccinum undatum* L.) and occasional fragments of mussel (*Mytilus* sp.). The oysters range both in size and condition; some valves are very large. Around 20% of the valves exhibit tunnelling from marine polychaete worms (ie *Polydora ciliata* (Johnston)) and/or calcareous worm tube encrustations on the surface of the shell and occasional examples of sponge (*Cliona* sp.) borings are also present (all as illustrated in Winder 2011). Few of the left valves are complete enough for measurement.

Phase	No. oyster valves	Weight (g) of shell	Other shell
1	1	66	
2	1	5	
3a	8	1034	1 x rough cockle
3b	8	270	Mussel fragments
4	7	299	1 x whelk
5	3	190	
6	3	161	
Total	31	2025	

Table 26: Marine shell by phase

Area	No. oyster valves	Weight (g) of shell
1960s backfill	1	46
Area A	2	104
Central Area	4	169
Other	4	103
Room 1	3	482
Room 2	3	247
Room 3	4	88
Room 7	1	49
Room 8	1	96
Room 10	3	33
Room 11	3	468
Room 14	2	140
Total	31	2025

Table 27: Marine shell by area

- 4.4.2 One oyster valve from Room 14 (Phase 3b) has a crude rectangular hole in the centre which may have been inflicted when the shell was collected, although the poor and fragile condition of the valve means that post-burial damage cannot be ruled out.

### *Avian eggshell*

- 4.4.3 Avian eggshell was recovered from the coarse residues of four soil samples, as Table 28. No attempt has been made to further identify it using high power microscopy or mass spectrometry, but it is likely that the eggshell is from domestic fowl, duck or goose, with the first of these perhaps most likely. The Romans kept chickens, as demonstrated by finds of both bones and eggshell on Roman sites. Both domestic fowl and goose bones have been found at Cattle Hill (Allen, this report), with the presence

of a young chicken suggesting that these birds were reared on site. Eggs also featured in Roman recipes, but it is unclear whether the eggshell in this case comes from eggs used in the kitchen or from hatched chicks.

Context No.	Sample No.	Weight (g)	Context description	Phase
2292	33	1	Layer, Room 1	3a
2855	153	0.1	Layer, Room 11	3a
2884	163	0.1	Deposit, corndryer	4
2927	180	1	Layer, Room 11	2

Table 28: Avian eggshell by context

## 4.5 Environmental samples by Rachel Fosberry

### *Introduction and methodology*

- 4.5.1 A total of 159 bulk samples were taken from features within the excavated areas of the Roman villa site. Samples were taken from layers and deposits that were phased as pre-villa (Phase 1) to the late and post-villa occupation (Phase 5) and one later sample.
- 4.5.2 Individual sample volumes are between 10 and 40 litres (one to four buckets). For this assessment, only one bucket (approximately 10L) was processed to determine whether plant remains were present, their state of preservation and whether they were of interpretable value with regard to domestic, agricultural and industrial activities, diet, economy and rubbish disposal.
- 4.5.3 The samples were processed by tank flotation using modified Siraf-type equipment for the recovery of preserved plant remains, dating evidence and any other artefactual evidence that might be present. The floating component (flot) of the samples was collected in a 0.25mm nylon mesh and the residue was washed through 10mm, 5mm, 2mm and 0.5mm sieves.
- 4.5.4 A magnet was dragged through each residue fraction for the recovery of magnetic residues prior to sorting for artefacts. Any artefacts present were noted and reintegrated with the hand-excavated finds.
- 4.5.5 The dried flots were subsequently sorted using a binocular microscope at magnifications up to x60 and abbreviated lists of the recorded remains are presented in Appendix E. Identification of plant remains is with reference to the Digital Seed Atlas of the Netherlands (Cappers *et al.* 2006) and the author's own reference collection. Nomenclature is according to Zohary and Hopf (2000) for cereals and Stace (2010) for other plants. Plant remains have been identified to species where possible. The identification of cereals has been based on the characteristic morphology of the grains and chaff as described by Jacomet (2006).
- 4.5.6 Carbonised seeds and grains are blackened and often distorted and fragmented leading to difficulty in identification. Evidence of germination of cereal grains has been determined by the characteristic effects that this process has on the grain. The development of a sprout (also known as coleoptile or 'shoot') in hulled wheat (with the outer husk still in place) forms a groove in the dorsal surface of the grain which is very distinctive. The germinated grain often has shrunken sides, a missing end (where

the sprout has broken off) and a glossy sheen. The sprouts may still be attached to the grain but are frequently found detached.

### *Quantification*

4.5.7 For the purpose of this assessment, items such as seeds and cereal grains have been scanned and recorded qualitatively according to the following categories:

- # = 1–5
- ## = 6–25
- ### = 26–100
- #### = 101–500
- ##### = >500 specimens

4.5.8 Items that cannot be easily quantified such as charcoal and molluscs have been scored for abundance:

- + = rare
- ++ = moderate
- +++ = frequent
- ++++ = abundant
- +++++ = super-abundant

4.5.9 The following abbreviations have been used in the tables of summary results, which are presented in Appendix E (Tables E.1–E.7):

- M= mineralized
- CPR = charred plant remains
- f = fragment

### *Results*

4.5.10 Preservation of plant remains is predominantly by carbonisation as a result of burning in a reduced atmosphere in hearths and corndryers. Occasionally, plant remains are also preserved by mineralisation, though there is no evidence of waterlogging at the site. Charred cereals and the waste produced in cereal processing (CPW) are abundant in several samples and there is evidence of germination of grain, possibly for brewing.

4.5.11 Hulled wheat is the most common cereal with both spelt (*Triticum spelta*) and emmer (*T. dicoccum*) present, frequently in abundance. It is not always possible to distinguish between the two species and reference is generally to spelt/emmer. Barley (*Hordeum* sp.) is relatively rare and oats (*Avena* sp.) are similarly infrequent. It is not possible to distinguish between the cultivated variety of oats and the wild varieties as the diagnostic chaff is absent. The weed seed assemblage is not diverse and comprises common crop weeds such as bromes (*Bromus* sp.), rye-grass (*Lolium* sp.), docks (*Rumex* sp.), corn gromwell (*Lithospermum arvense*) and cleavers (*Galium aparine*) along with grassland/pasture plants such as grasses (Poaceae), ribwort plantain (*Plantago lanceolata*) and buttercups (*Ranunculus acris/repens/bulbosus*). Legumes include small vetches/tares (*Vicia/Lathyrus* sp.) that could be crop weeds or evidence of fodder crops or crop rotation, peas (*Pisum* sp.) and beans (Fabaceae) that are likely to have been cultivated.

4.5.12 The results are described by their spatial location within the villa rooms and Area A (located to the west) and with provisional phasing.

Phase 1: Pre-villa (Table E.1)

4.5.13 All the samples from the earliest phase of activity were taken from Room 2. Preserved plant remains are scarce, limited to six grains of barley recovered from one of the fills (2591) of corndryer 2271. This deposit also produced charcoal that may be suitable for species identification.

Phase 2: Early villa construction and use (Table E.2)

4.5.14 Phase 2 samples were taken from Rooms 2, 10 and 11 as well as the central area (Rooms 4 and 5) and Area A. The samples from the central area produced a background scatter of cereals. Hearth fill 2382 (sample 37) contained a moderate assemblage of charred weed seeds that are indicative of damp pasture and probably represent the burning of hay. The taxa include ribwort plantain, buttercups, docks nipplewort (*Lapsana communis*), vetch/tare, rushes (*Juncus* sp.), spike-rush (*Eleocharis* cf. *palustris*) and marsh marigold (*Caltha palustris*).

4.5.15 Within Room 10, hearth layer 2913 (sample 173) contained germinated grains of spelt/emmer wheat, occasional barley grains and large legumes that are of a size that suggests they are field beans (*Vicia faba*). There is very little chaff in this sample and it is possible that the grains represent malt.

4.5.16 The remaining samples from this phase did not produce notable assemblages of preserved plant remains although charcoal volumes were moderate in some samples and abundant in fill 2911 of pit 2912 (sample 172).

Phase 3a: Main period of villa occupation (Table E.3)

4.5.17 Samples from this phase were taken from Rooms 1, 8 10, 11 and 13, Area A and central area (Rooms 4 and 5).

4.5.18 Within Room 1, layers 2291 (sample 32) and 2684 (sample 82) produced moderate assemblages of charred spelt and emmer grain. Layer 2291 contained a mineralised pulse, possibly a lentil (*Lens culinaris*). Layer 2292 (Sample 33) did not contain any plant remains, but ostracods were noted. Ostracods are small bivalve crustaceans that are aquatic and indicate the presence of water.

4.5.19 The samples from Room 8 contained occasional charred cereals, mostly spelt grains that are poorly preserved. A single flax/linseed (*Linum usitatissimum*) seed was present in fill 2795 of oven/hearth 2801 (sample 127) and a large volume of coal was recovered from deposit 2840 (sample 145).

4.5.20 The most significant samples from Phase 3a are from layers/deposits in Room 11. Layer 2846 (sample 150) contained abundant chaff of spelt and emmer wheat in addition to germinated wheat grains and detached wheat sprouts. Deposit 2855 (sample 153) produced a similar assemblage of chaff, germinated grain and sprouts and is better preserved with clearly identifiable emmer glume bases and spikelet forks. Occasional barley grains are also present within this sample. Layer 2846 (sample 176) similarly has abundant emmer wheat chaff along with a single rachis of barley (six-row) and

occasional barley grains, germinated wheat grains and sprouts. A mineralised mallow (*Malva* sp.) seed was noted.

Phase 3b: Main period of villa occupation (Table E.4)

- 4.5.21 Samples were taken from most of the areas excavated. Within the Central Area, layer 2265 (sample 30) produced an assemblage of charred emmer and spelt grain, much of which had characteristic signs of having germinated but the grains are very fragmented (possibly representing gristing) and poorly preserved, which can also be characteristic of malting.
- 4.5.22 Layer 2471 (sample 42) from outside the villa (listed as 'other') produced a similar assemblage but with greater abundance of the individual components of a germinated grain assemblage mixed with chaff.
- 4.5.23 In Room 1, spelt and emmer were present in most samples in low quantities. Mineralised remains in the form of fly pupae, millipede segments and phosphatic nodules were found in several of the layers and are likely to represent the disposal of latrine waste or animal dung in this room.
- 4.5.24 Room 2 samples were largely unproductive with the exception of layer 2567 (sample 61) which contained spelt and emmer chaff and sprouts but no grain.
- 4.5.25 Posthole 2820 (sample 136) in Room 3 was rich in spelt/emmer chaff and also contained silicates (the remains of cereal awns).
- 4.5.26 In Room 8, layer 2799 (sample 125) contained abundant mollusc shells that are reasonably well preserved. Charred plant remains within this room consist of occasional spelt/emmer grains, the samples from Rooms 10 and 11 were similarly unremarkable in content.
- 4.5.27 Layer 2092 (sample 12) in Room 14 contains abundant spelt and emmer chaff in addition to poorly preserved grains, many of which have germinated. Occasional sprouts are also present.

Phase 4: Later villa occupation (Table E.5)

- 4.5.28 Numerous samples were taken from this phase and represent most of the villa rooms. Samples from the central area, Rooms 1, 2, 7 and 8 largely consist of small quantities of grain and chaff. Occasional samples are charcoal-rich. Layers 2620 (sample 96) and 2811 (sample 149) in Room 3 contain germinated spelt and emmer grains, sprouts, chaff with abundant charred awns.
- 4.5.29 Corndryer 2930 in Room 10 produced assemblages showing spatial variation. Assemblages of almost pure grain that had been fully cleaned were recovered from fills 2804, 2805 and 2806 (samples 131–133), possibly representing grain that was being dried for hardening prior to milling. Samples from fills 2807 and 2808 (samples 134 and 135) contain germinated emmer and spelt grains, sprouts, frequent chaff and abundant silicates (awns) as does fill 2887 (sample 161); this last sample also contains legumes of varying sizes that include vetches, peas and beans. Further fills, 2834, 2835 and 2839 (samples 146–148) were unproductive. Samples from a pit 2954 within Room 10 are less productive, containing only occasional grains although some of these are germinated.

4.5.30 Layer 2627 in Room 13 (samples 80 and 115) contained charred germinated grain. Sample 115 also contains large peas with evidence of insect infestation through small bore holes. One of the charred grains also has a hole that may have been caused by insects. Layer 2093 (sample 22) in Room 14 contained fragmented, germinated grain with abundant sprouts that is a characteristic assemblage of malted grain that has been ground (gristed) to remove the outer chaff and sprouts from the grain.

Phase 5: Late and post-villa occupation (Table E.6)

4.5.31 Samples were taken from layers with Rooms 3, 6, 7, 8, 13 and 14. Charred plant remains were less frequent in this phase, with the exception of chaff-rich layer 2204 (sample 23) in Room 13 and layer 2728 (sample 116) in Room 14, which contains germinated grains and frequent sprouts but no chaff.

Phase 6: Medieval, post-medieval and modern (Table E.7)

4.5.32 A single sample (sample 14) taken from a 1960s context in Room 2 contained chaff and sprouts, clearly indicating residual material.

### *Discussion*

4.5.33 The environmental samples from this site have produced charred plant assemblages that are remarkably similar in content, despite originating from different areas within the villa and the associated areas. Except for the earliest phase, there is extensive evidence of the germination of both spelt and emmer wheat.

4.5.34 Spelt and emmer are hulled wheats in which the grain is tightly enclosed in spikelets that each contain (normally) two grains and snap off easily from the rest of the ear. When the grains are held within the spikelets they are more resistant to insect attack and to accidental germination through exposure to moisture. Hulled wheats require several processing stages in order to release the grain (caryopsis) from the tough outer chaff of the spikelet. This is best described by Hillman (1981) and Wilkinson and Stevens (2003, 195) and involves stages including harvesting, fine sieving, parching and pounding, threshing, winnowing and finally coarse-sieving to produce clean grain suitable for grinding/milling into flour. The resultant chaff was commonly used for fuel, particularly as tinder for starting fires. Large quantities of chaff are frequently found on Roman sites, particularly in corndryers and associated features.

4.5.35 The assemblages from Cattle Hill contain significant quantities of germinated wheat grains. In a study by Parks (2012, 129) germinated spelt grains occur often within large assemblages of burnt spelt processing waste, giving rise to the theory that these deposits represent the by-products of the cleaning of malt. Germinated grain is not considered sufficient evidence of brewing, unless there are associated features such as corndryers and malting floors, both of which are present at this site. An alternative explanation for the presence of germinated grain is through natural spoilage of the crop through exposure to moisture.

4.5.36 Other food types have not been well-preserved within these assemblages. Flax seeds hint at possible cultivation of this important plant that was utilised for both its seeds (for oil) and the stems (for linen). Pulses would have been an important dietary

component, stored dried. Peas, beans and a possible lentil have been identified and there is evidence of insect damage.

## 4.6 Radiocarbon dating

4.6.1 Three radiocarbon dates were obtained (Table 29). Two were provided by Beta Analytic Radiocarbon Dating Laboratory (Figs 11 and 12); the third was provided by the Scottish Universities Environmental Research Centre.

Lab id	Context	Feature	Element	$\delta^{13}\text{C}$ (0/00)	Radiocarbon age (BP)	Calibrated date (95% confidence)	Calibrated date (68% confidence)
Beta-563968	2913	Oven 2900	Charred material	-22.7	1790 ± 30	133–264 cal AD (68.5%) 274–330 cal AD (26.9%)	210–258 cal AD (34.4%) 283–322 cal AD (21.1%) 170–194 cal AD (10.7%) 145–150 cal AD (2%)
Beta-563969	2806	Corndryer 2930	Charred material	-21.3	1770 ± 30	206–345 cal AD (85.6%) 138–200 cal AD (9.8%)	274–330 cal AD (42.5%) 230–264 cal AD (25.7%)
SUERC-69735 (GU42066)	2074		Human bone	-19.3	1626 ± 30	351–367 cal AD (3%) 380–537 cal AD (92.4%)	389–431 cal AD (45.8%) 492–530 cal AD (22.4%)

Table 29: Summary of radiocarbon dating results

## 5 DISCUSSION

### 5.1 Activity before the villa

- 5.1.1 Flint tools recovered from the excavation point to limited activity here during the Mesolithic or early Neolithic periods. The discoveries add to similar discoveries that have been made in the area, among them flint scrapers, flakes, and a barbed-and-tanged arrowhead (Somerset HER no. 53572). The objects, lost or discarded, speak of intermittent visits to the area by people moving across the landscape, possibly following the rivers and streams.
- 5.1.2 Occupation of a more permanent character was recorded within Room 2 in the form of an oven (2271) that was cut by Phase 2 wall 2574. Pottery from the oven was deposited during the 2nd century or later. Other pottery, recovered as residual occurrences from later features, also suggested activity in the 2nd century. Such material included Central Gaulish samian and a bead-rimmed jar in black-burnished ware. It is worth noting that pottery spanning the 1st to 3rd centuries was recovered from recent investigations at the site by Wessex Archaeology (S Membery, pers. comm.), strengthening the prospect of a significant phase of occupation pre-dating the buildings reported on here.
- 5.1.3 It is not impossible that this earlier phase represents the initial phase of the villa, much of which having been destroyed by later construction or incorporated into later walls. Wall 2574, along with another (2933) that joins it at right angle, may be a remnant of this earlier, putative phase. Alternatively, some or all of this earlier activity could relate to a more traditional type of farmstead that did not constitute masonry buildings. The magnetometer survey appeared to show that the villa buildings had been superimposed on curvilinear ditches, while further ditched enclosures and a circular feature (a roundhouse?) lay further to the west (Fig. 2). Such features hint at later prehistoric or early Roman settlement, although it should be noted that no later prehistoric pottery was recorded during the assessment phase.

### 5.2 Summary of villa development

- 5.2.1 The structures uncovered during the 2016 and 2017 excavations comprised four ranges of room and a connecting wall. The northernmost range (Building 2) was a block of four rooms (designated rooms 6, 7, 8 and 13). A range of three rooms (Rooms 4, 5 and an unlabelled room), part of the 'Central Area', lay to the south. Further south still was Building 1, a block of eight rooms (Rooms 1, 2, 3, 9, 10, 11, 12 and 14), one of which being heated. Building 3 was the southernmost range. At least two rooms were evident, although the building was not investigated in detail.
- 5.2.2 Ceramic and scientific dating suggests that none of the excavated buildings was constructed earlier than the 3rd century. Pottery of 3rd- or 4th-century date was recovered from oven 2900, one of the earliest features in Building 1. A radiocarbon determination obtained from the feature produced a wide calibrated date range (Table 29) but did not contradict the ceramic phasing.
- 5.2.3 It is clear from the stratigraphic sequence that the buildings developed over time, reflecting periods of remodelling and villa expansion. Apart from walls 2933 and 2574,



which may belong to an earlier phase, Building 3 and Room 11 of Building 1 were the earliest structures uncovered (Phase 2). Room 11 was a heated room and may have formed part of a bath suite. After the late 3rd century (Phase 3a), Room 11 was altered, and to this a sunken room (Room 1) was added. Meanwhile, the rooms of the Central Area and Rooms 8 and 13 of the Northern Building were constructed, and a wall connected the buildings (Building 3 remaining detached). Building 1 saw further expansion in the 4th century (Phase 3b), with the construction of Rooms 2, 3, 9, 10, 12 and 14. In Building 2, Rooms 6 and 7 were added to existing Rooms 8 and 13. This development represented the fullest expansion of the uncovered buildings. Subsequent development, most notably a stone-built corndryer (2930) constructed in Building 1 in the late 4th century (Phase 4), was carried out within the walls of the existing buildings. Some of the latest products of the Oxford, New Forest, Dorset, and South Midlands pottery industries were collected, indicating that ceramic supply and use continued into the second half of the 4th century AD. A period of demolition, wall-robbing and occupation of a more informal nature characterised the activity of the 5th century (Phase 5). Some of the 'post-villa' activity included human burial. One burial (2074) had been placed within the ruins of Building 1 sometime between the late 4th and early 6th centuries.

### 5.3 Appearance and organisation of the villa

- 5.3.1 The 1960s excavations uncovered the plan of what is traditionally identified as a winged corridor house (eg Richmond 1969, 53) and buildings that continued the line of the house along its longitudinal axis to the north-west (Fig. 2). How the winged corridor house developed is uncertain on current evidence, but it may have begun as a simple cottage, hall or row-type house (cf Richmond 1969; Smith 1997, 23-64) before being elaborated with the addition of wings.
- 5.3.2 The recorded buildings appear to form one front of a more extensive villa complex (Fig. 13). Combining the recent results with the plan of the villa derived from the 1960s excavation, it can be seen that Building 3 represents the north wing of the winged corridor house and that Buildings 1 and 2 formed an extension to the north-west. The building represented by Rooms 4 and 5, perpendicular to Building 1, belonged to another wing (north-west) of the complex. It is possible that a third (south-east) wing existed, but this cannot be confirmed. In its earliest phase, as revealed by the 2016 and 2017 excavations, the complex included a winged corridor house and, it seems, a small, detached bathhouse. The north-east wing was then extended—the bathhouse may have been relocated at this stage—and the north-west wing was built. Rooms were added to the north-east wing or existing rooms improved in a subsequent phase of development.
- 5.3.3 External areas were identified south-west of Building 1 (Area A), south-west of Building 2 (Area B) and possibly east of the building represented by Rooms 4 and 5 within the Central Area. The materials used for the surfaces suggest that the open areas were used in different ways. Cobbles were uncovered in Areas A and B and may denote courtyards and working, utilitarian spaces, while flagstones, possibly representing a grander, more public, space had been laid in the Central Area. It is uncertain whether the flagstones belonged to an external space (eg another

courtyard) or an internal one (eg a corridor). It may be significant, however, that the surviving flagstones butt against the north-east wall of Room 4, which contained the 'Diana' mosaic, one of the three mosaics uncovered at the site, marking one possible entrance into the villa complex.

- 5.3.4 Room 4, fittingly with perhaps the grandest mosaic, may have been a public room designed to impress the visitor and display the owner's wealth and taste. Rooms 6 and 7 in Building 2 were also designed to impress, but if Room 6, with its poorly surviving mosaic and painted wall plaster, was intended as an antechamber of Room 7 (decorated with the geometric mosaic, as well as painted wall plaster), as Anthony Beeson suggests (above), then it can be surmised that entry to the building was through the SW-facing or SE-facing wall, visitors approaching the entrance from the Area B courtyard or by means of a corridor along wall 2065/2116/2119. This may point to Building 2 containing a private, more exclusive, set of rooms. It is not implausible that Room 7 served as a dining room (if the postholes in the room marked the position of couches, then these were a later addition, as the postholes cut through the mosaic). It is telling that no fragments of painted wall plaster or a tessellated floor were found in Rooms 8 or 13 of Building 2; both rooms, in fact, had stone floors, suggesting that these had a working function. A Phase 3a hearth (2801) within Room 8 suggests that the room served as a kitchen. Room 13 may have provided storage or served some other function.
- 5.3.5 By the late 4th century (Phase 4), Rooms 6 and 7 had been converted to a more utilitarian role. A stone floor had been laid over the mosaic in Room 6, and a hearth (2791) was built in Room 7.
- 5.3.6 At its fullest extent (Phase 3b), Building 1 appears to have been of middling status. Painted wall plaster recovered from Rooms 1, 2, 3, 11 and 14 suggest that the walls were decorated, giving the rooms a social aspect, but there was no evidence that tessellated floors had been laid within the rooms. Room 1, with its sunken, stone floor, formed a cellar, and it is tempting to identify this as a storeroom or possibly even a treasury. The building may have represented the 'business' side of the villa, a building where the owner or the owner's representatives (a bailiff, perhaps) could conduct the day-to-day business of running the estate—receiving traders and officials, carrying out administrative tasks, paying workers, and so on—in relative comfort. This interpretation, however, remains highly speculative.
- 5.3.7 Building 1, like Building 2, saw a dramatic change of function in Phase 4. A substantial, stone-built corndryer was inserted into Room 10, and a hearth was placed in Room 2. Fly pupae, millipede segments and phosphatic nodules, indicating latrine waste or animal dung was found in Room 1. While this evidence was collected from layers assigned to Phase 3b, it is possible that it derived from later use. Together, the evidence indicates that the building served an agricultural function and may have provided a basic level of accommodation for workers.
- 5.3.8 The external appearance of the villa at its fullest extent is open to interpretation, but a plausible reconstruction, created by archaeological illustrator Jon Cane based on evidence from Cattle Hill and other villas is offered in Figure 13 (it should be noted that the reconstruction was created after the evaluation phase of fieldwork, before the

excavations were undertaken). No individual villa provides a very close parallel to Cattle Hill, but if Cattle Hill in its developed form was a courtyard villa, as the cobbling in Areas A and B and Rooms 4 and 5 suggest, then the villa may not have been too dissimilar to other courtyard villas, such as Bignor in Sussex (Rudling and Russell 2015). Some elements of the Cattle Hill complex can be paralleled more readily. The winged corridor house closely matches in appearance the winged corridor house at Redlands Farm, near Stanwick in Northamptonshire (Fig. 14; Biddulph *et al.* 2002). That villa in its earliest form comprised a simple, rectangular hall house, and in a subsequent phase, wings and corridors were added. The precise development of Cattle Hill's winged corridor house is unknown from the current evidence, but Redlands Farm provides a possible model.

## 5.4 Economy of the villa

- 5.4.1 Despite the villa's (modern) name, cattle farming was not the principal economic activity at Cattle Hill. Herds of cattle were undoubtedly maintained, but sheep were more important to the villa's economy. Sheep (or goat) dominated the animal bone assemblage (although care must be taken in interpreting the figures, based on the numbers of individual specimens, presented in this report). The animals would have been kept for meat, dairy products and wool production, the last potentially being the most important activity. Further analysis of the bones, however, is required to gain a better understanding of the place that sheep had at the site. Pigs and horses were also kept at the site. Unusually, butchery marks were seen on some horse bones, suggesting that animals had been slaughtered for meat.
- 5.4.2 Crops were grown in the fields within the villa estate. The main crops were spelt and emmer, but flax and pulses were also cultivated, though to a lesser degree. An abundance of germinated grain, sprouts, chaff, and awns from the assessed environmental samples strongly suggests that malting and brewing were carried out at the villa. Much of the evidence was collected from the Phase 4 stone-built corndryer (2930) in Room 10, identifying the structure as a malting oven, where the grain could be heated both to encourage germination, as well as arrest it (cf Reynolds and Langley 1979, 38–41; Biddulph 2011, 225). Germinated grain was found in deposits of Phases 2 and 3, as well as Phase 4, indicating that malting and brewing were activities undertaken throughout the life of the villa. Before the malting oven was built, grain, having been soaked in water for several days, would have been spread across malting floors to allow it to germinate. The grain could then be heated in ovens, albeit at a smaller scale than was permitted in the purpose-built malting oven. No evidence for malting floors was uncovered, but it is possible that such floors were located in agricultural buildings within the north-west and south-east wings or in standalone barns. Steeping tanks also remain unidentified, although it is not impossible that Room 1 served that purpose, at least in Phases 3b and 4; samples from deposits dating to these phases contained grain and chaff, though very little germinated grain.
- 5.4.3 The resulting malt could be stored or traded as a product. To make ale, the malt would need to be milled. It is perhaps no coincidence that part of a millstone (SF 820) was found in Room 10 (Plate 31). The millstone may have been deliberately placed, possibly as an act of closure to mark the final use of the corndryer.

## 5.5 The people of Cattle Hill

- 5.5.1 We know little of the people who lived and worked at the villa, although artefacts provide a clue. While the pottery has not recorded to a sufficiently detailed degree to gain a firm idea of pottery supply and use, the presence of fine wares and imported wares, such as samian and amphorae, in addition to coarse-ware jars and bowls, point to a diverse range of functions, as would be expected on a villa site. Continental foodways would not have been unknown, at least for the villa's owner and family. A high-status diet is suggested by evidence for the consumption of fish, shellfish, wild animals (venison and hare), and reared chickens and geese and their eggs, and supported by evidence for the increasing importance of pigs. Fragments of glass vessels also suggest high-status dining. Olive oil, transported from Southern Spain within globular amphorae (Dressel 20), would have been used for cooking and dining, but also for lighting and cleansing. Estate workers, presumably living in accommodation away from the main house, may have had more basic fare, cooked more traditionally, although this cannot be demonstrated from the current evidence.
- 5.5.2 Care was taken over personal appearance, as finds of bracelets, finger rings and brooches testify. Small shale bracelets suggest that children were among the villa's population. This is, of course, suggested more readily by the presence of two neonate burials (2074 and 2895), although it should be noted that burial 2074 post-dated villa occupation.
- 5.5.3 Another unusual aspect was the presence of fallow deer. Such animals were considered exotic and imported into Britain during the Roman period for hunting; the discovery of bones at Cattle Hill suggests that fallow deer were kept within managed parks around the villa estate. Other pursuits enjoyed by the villa's owners and others included hunting, for instance of red deer and hares, and fishing.
- 5.5.4 The burial of infants within the sphere of the living (for example, within buildings), rather than within formal cemeteries is a well-known phenomenon of the Roman world. Quite what underlay the motivations behind the practice is uncertain, but they are liable to be varied (Rohnbogner 2018, 326–9). For burial 2895, importance may be attached to its context, a fill of an oven or fireplace. As explained by McIntyre (above), the connotation of heat, fire and light may have been significant. The notion that infant burials imbued the area around them with fruitfulness and fecundity (ibid., 328) may also be relevant in the context of corndryer 2930, in that it replaced the oven within which the burial was found.

## 5.6 The wider landscape

- 5.6.1 The Cattle Hill villa sat within an extensive agricultural landscape, though was in reach of local centres. The nearest major settlement was *Lindinis* (Ilchester), which was located some 10km south-west of the villa. This settlement developed from a fort and an associated vicus in the late 1st and 2nd centuries into a walled 'small town' and may have been an important market for the goods—wool, malt and ale among them, perhaps—produced at the villa. A closer market was offered by a nucleated settlement or village at Castle Farm, South Cadbury, some 5km south-west of the villa. The site was occupied between the 1st and 5th centuries AD and succeeded the neighbouring

hillfort at Cadbury Castle, which was occupied principally from the middle to late Iron Age (Barratt *et al.* 2000). Excavations at Castle Farm uncovered evidence for buildings, kilns, corndryers and other settlement-related features (Leach and Tabor 1996; Tabor 2004).

- 5.6.2 Other settlements lay to the east and west of Cattle Hill. At Stoke Lane, near Wincanton and 5km east of the villa, excavations revealed a settlement with evidence for metalworking (Hughes 1990). More industrial activity was recorded some 4km north-west of the villa at Manor Farm, Castle Cary. Excavations there uncovered a lime kiln, with pottery suggesting a later 2nd- to 3rd-century date (Leach and Ellis 2003). The dating of the lime kiln is intriguing, coinciding with the earliest recorded phases of the villa, raising the possibility that the mortar used in the construction of the villa walls was prepared using lime produced at Manor Farm.
- 5.6.3 Religious shrines were also a feature of the landscape. The temple at Lamyatt Beacon (Leech 1986), built in the late 3rd century, was perhaps most significant to Cattle Hill. The summit of the hill on which Lamyatt Beacon stands is clearly visible from Cattle Hill and it is likely that the religious ceremonies conducted on that site would have been attended by some of the inhabitants of the villa. It is possible that the owner or other individuals who resided at the villa participated in the ceremonies, perhaps even as officiants.
- 5.6.4 It is worth adding that the situation of the villa would not have been determined only by proximity to potential markets and road links. The villa was built on the top of a hill that today provides stunning views of the countryside, and this is likely to have been a key factor with regard to its location. Its setting, as well as its mosaics and painted rooms, reminds us that the villa was designed to impress and was, perhaps most importantly, an expression of the owner's wealth and status.

## 6 PUBLICATION AND ARCHIVING

### 6.1 Publication

6.1.1 This report represents the principal report of the 2016 and 2017 excavations. It is intended that summaries outlining the results of the fieldwork and preliminary analysis be submitted for publication in due course in the county journal, *Proceedings of the Somerset Archaeological and Natural History Society*, and the national journal, *Britannia*.

### 6.2 Archive

6.2.1 The archive has been deposited following appropriate standards and guidelines (Brown 2011; ClfA 2014b; SW Heritage 2017) with the Somerset Museums Service under the following accession number: TTNCM : 15/2018.

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## APPENDIX A SITE SUMMARY DETAILS / OASIS REPORT FORM

<b>Site name:</b>	Cattle Hill Roman villa, Hadspen House, Bratton Seymour, Somerset
<b>Site code:</b>	XSOCHV 16 and XSOCHV17
<b>Grid Reference</b>	ST 66731 29889
<b>Type:</b>	Excavation
<b>Date and duration:</b>	July–August 2016 and March–May 2017
<b>Area of Site</b>	c 4.0ha
<b>Location of archive:</b>	The archive has been deposited with the Somerset Museums Service under the following accession number TTNCM : 15/2018.
<b>Summary of Results:</b>	Oxford Archaeology carried out archaeological investigations between 2015 and 2017, at Cattle Hill, Hadspen House, Bratton Seymour, Somerset, on the site of a known Roman villa, first recorded in the 19th century and partially excavated in the 1960s. A geophysical survey was undertaken in 2015, which was followed by trial-trench evaluation in 2016 and then open-area excavations in the summer of 2016 and spring of 2017.

The 3rd–4th-century AD villa complex, positioned on high ground within a productive agricultural landscape, was substantial, comprising an arrangement of well-preserved structures, outlying buildings and enclosures. Three buildings were identified, along with an open central area and external areas. The investigations demonstrated multiple phases of construction, occupation, alteration, and disuse. Polychrome mosaic floors were uncovered in three rooms (4, 6 and 7), pointing to high-status habitation. Two of the mosaics, the so-called ‘Diana mosaic’ and the ‘geometric mosaic’, were approximately 50% complete.

Six broad phases were identified:

**Phase 1:** Pre-villa activity. There were hints of prehistoric presence and a suggestion of low-level 2nd-century occupation.

**Phase 2:** Initial construction of villa buildings during the mid–late 3rd century AD. The phase encompasses the construction of Building 3 and the probable hypocaust structure of Room 11.

**Phase 3:** Apogee of the villa complex between the late 3rd and late 4th centuries. Two sub-phases were recognized: an initial phase of construction and use (Phase 3a), followed by alterations and additions, suggesting a rapid expansion (Phase 3b).

**Phase 4:** Period of deterioration, repair, and changes in use between the late 4th to 5th centuries AD. Mosaic floors required repairs, while other floors were replaced. Rooms originally of high status appear to have become more functional utilitarian.

**Phase 5:** Further deterioration during the 5th–6th centuries AD, although occupation and activity, albeit of a lower intensity and

possibly intermittent nature, persisted. Phase characterised by the deliberate dismantling of walls, the collapse of roofs and accumulation of detritus.

Phase 6: Continued robbing of building materials from the 6th century onwards. The area reverted to an open field with later drainage and field systems being established.

There is a moderate assemblage of finds including almost 7000 sherds of Roman pottery, 100 copper-alloy objects (approximately half of them being coins), over 1000 iron nails, shale objects, worked bone, glass fragments, numerous fragments of painted wall plaster and a large amount of worked stone, both as objects and building materials. A significant amount of preserved charred plant remains, animal bones and industrial residues were retrieved through palaeoenvironmental sampling.

## APPENDIX B CERAMIC BUILDING MATERIAL SUMMARY DATA

Fabric	Tegula		Flat tile		Imbrex		Flue		Tessera		Indeterminate		Total		Total	
	Nos	Wt (g)	Nos	Wt (g)	Nos	Wt (g)	Nos	Wt (g)	Nos	Wt (g)	Nos	Wt (g)	Nos	%	Wt (g)	%
A	1	287	1	132									2	0.71	419	4.73
B			1	10									1	0.36	10	0.11
C			2	98									2	0.71	98	1.11
D	25	3369	22	664	6	283	5	12	70	216	61	242	189	67.5	4786	54.05
D group			18	60					2	8	1	5	21	7.5	73	0.82
E	4	835	11	229	4	24			3	10	3	31	25	8.93	1129	12.75
F	10	967	1	6									11	3.93	973	10.99
G			3	36	1	71	2	64			1	5	7	2.5	176	1.99
H					2	219					1	3	3	1.07	222	2.51
J			1	11	2	97	6	779	1	1	3	56	13	4.64	944	10.66
Limestone									2	5			2	0.71	5	0.06
Limestone/chalk									3	16			3	1.07	16	0.18
Ceramic									1	3			1	0.36	3	0.034
Total	40	5458	60	1246	15	694	13	855	82	259	70	342	280	100	8854	100

Table B.1: CBM quantification by fabric and form

Phase	Tegula		Flat tile		Imbrex		Flue		Tessera		Indeterminate		Total		Total	
	Nos	Wt (g)	Nos	Wt (g)	Nos	Wt (g)	Nos	Wt (g)	Nos	Wt (g)	Nos	Wt (g)	Nos	%	Wt (g)	%
U	1	111	2	18			1	41			11	43	15	5.36%	213	2.4%
6	1	112	8	353	6	50			51	148	11	82	77	27.5%	745	8.4%
5	9	1413	2	69	3	303	10	750	2	4	4	3	30	10.71%	2542	28.7%
4			2	84					10	51	9	26	21	7.5%	161	1.82%
3b	14	341	17	456	4	253	2	64	13	39	23	160	73	26.1%	1313	14.83%
3a	15	3481	9	193	1	32			2	8	7	12	34	12.14%	3726	42.08%
2			20	73	1	56			4	9	5	16	30	10.7%	154	1.74%
Total	40	5458	60	1246	15	694	13	855	82	259	70	342	280	100%	8854	100%
%	14.3%	61.64%	21.43	14.1%	5.36%	7.84%	4.64%	9.66%	29.3%	2.93%	25%	3.86%				

Table B.2: Quantification of Roman tile forms by phase

## APPENDIX C PAINTED PLASTER SUMMARY DATA

Area	Ctx	Phase	Material	Nos	Area sq cm	Colour & Design
N Bldg 2: Rm 7	2564	5	P	1		-
N Bldg 2: Rm 7	2597	5	PWP	22	1425	Blue, green, mauve, white, red, ?black, 1x yellow ochre ground; 1 small fragment with blue/green; mauve & white bands, maroon red & mauve with line of pink: possibly figurative design.
N Bldg 2: Rm 7	2598	5	PWP	37	300	Red, white
N Bldg 2: Rm 8	2660	5	PWP	10		Mauve
N Bldg 2: Rm 8	2707	5	PWP	13	150	Pinkish red, yellow ochre, maroon red. Pink looks like shaded flesh.
N Bldg 2: Rm 8	2750	5	PWP	4	31	Red, ochre. Yellow ochre with red stripe 9mm w.
N Bldg 2: Rm 8	2756	3a	P	1		Unpainted
S Bldg 1: Rm 1	2293	3a	P/PWP	7	19	Unpainted & red
S Bldg 1: Rm 1	2553	3a	PWP	1	18	Unpainted
S Bldg 1: Rm 1	2704	3a	PWP	1		Green
S Bldg 1: Rm 11	2833	3b	PWP	25		Red & white; red; ochre; blue
S Bldg 1: Rm 11	2927	2	PWP	43		Red, white
S Bldg 1: Rm 14	2860	3b	PWP	50		Red & white
S Bldg 1: Rm 14	2880	3b	PWP	2	12	Red; dark red ground traversed by white stripe 5mm w.
S Bldg 1: Rm 2	2104	6	P	1		White ground traversed by thin black stripe 3mm w.
S Bldg 1: Rm 2	2180	4	PWP	19	150	Green (12); red (3); green/red/blue stripes (1); red with thin yellow stripe 4mm w (2)
S Bldg 1: Rm 2	2182	3b	PWP	18	47	Red (5); green (13)
S Bldg 1: Rm 2	2232	3b	PWP	18	17	Red (12); green (4)
S Bldg 1: Rm 2	2235	3b	PWP	5	14	Red
S Bldg 1: Rm 3	2595	4	PWP	19	1800	Red, cream, green
S Bldg 1: Rm 3	2617	4	PWP	38	2200	Red, white, pink; white ground with red motif/design. White ground with red?drapery/figures. Mix of red & pink; white ground. The pink & red are painted for shading. Possibly figures.
S Bldg 1: Rm 3	2747	4	PWP	192	5550	Red, white, purple, maroon, blue, green, cream/yellow, black. Blocks of colour traversed or separated by narrow stripe(s) in contrasting colour. Blocks with possible figurative design in shades of red, maroon, pink.
S Bldg 1: Rm 3	2748	4	PWP	37	1800	Red, white/cream
S Bldg 1: Rm 3	2811	4	PWP	5		Red, white; green; maroon red & white; green/blue
Central Area	2195	-	PWP	20		Maroon red, white, pink
Total				589		

Table C.1: Summary of plaster and mortar by context



Area	Ctx	S. No.	Nos	Wt (g)	Material	Type	Dimensions	Description
No label	0	~	8	46	Mortar	M1	20-50mm.	amorphous
Area A	2021	~	1	11	Opus signinum	M2	17mm th; 27mm	amorphous
N Bldg 2 Room 6	2098	16	4	14	PWP	M1	20-30mm	2x smooth surface painted red
Central Area	2161	~	4	13	Mortar	M4	>20mm th; 10-35mm size.	amorphous
Central Area	2163	~	1	5	Mortar	M1	>13mm	Flat even surface, red wash directly on the mortar surface.
N Bldg 2 Room 13	2204	23	1	1	Mortar	M2	20mm	amorphous
Central Area	2225	~	1	15	Mortar	M2		amorphous
Central Area	2268	~	1	6	Mortar	M1	13mm th	Render. Unpainted. Flat back interface.
Central Area	2281	31	3	7	Mortar	M2	30	amorphous
Central Area	2324	~	1	12	Opus signinum		15 x43mmL.	broken fragment
Other	2450	~	15	35	Mortar	M1	20mm	?waste mortar
Other	2526	~	7	110	Mortar	waste		Irregular lumps of poorly mixed lime mortar & aggregate
N Bldg 2 Room 7	2598	71	5	22	Mortar	M3f	15-25mm	amorphous
S Bldg 1 Room 3	2620	96	21	190	Mortar	M3c	15-60mm	Several pieces burnt grey or reddened. Not typical mortar possibly some sort of cob
S Bldg 1 Room 14	2647	~	6	30	Mortar	M2	18-19mm th; 15-40mm	Render
S Bldg 1 Room 1	2651	90	11	125	Mortar	M3c	20-60mm	amorphous
N Bldg 2 Room 8	2752	109	3	14	Mortar	M1	17mm th; 15-30mm	Amorphous; one with possibly remnants of flat rendered surface.
S Bldg 1 Room 10	2758	130	3	27	Mo/PWP	M3f	14-18mm th; 20-36mm	1x flat surface painted red; 1x rough render; 1x amorphous
S Bldg 1 Room 14	2770	141	11	65	Mortar	M3f	11-19mm th; 20-50mm	Most amorphous; rough render x2
N Bldg 2 Room 8	2830	128	6	26	Mortar	M3f	15-40mm	amorphous
S Bldg 1 Room 10	2834	146	7	61	Plaster	M3f	16mm th; 15-45mm	Flat rendered surface with white chalky veneer

Table C.2: Summary of mortar and opus signinum by context

## APPENDIX D CATALOGUE OF ROMAN COINS

SF No	Ctxt	Est Date AD	Reece Period	Denomination	Obv	Rev	Mint	Ref	Condition	Comment
233	2018	268-270	13	radiate 17-21mm	IMP C CLA[V]DIVS PF AVG?	VIC[TORIA] AVG	A? in l field		W/W	
1099	2000	271-274	13	radiate 18-20mm	]TETRICVSPFAVG	SALV S AVGG			SW/SW	
1588	2728	275-296	14	radiate 14-16mm	radiate head r	?			EW/EW	irregular
888	2112	275-296	14	radiate 16mm	radiate head r	figure			W/W	
1365	2582	later 3C	13-14	radiate 18-19mm	?	antelope?			E/E	Heavily encrusted
972	2001	later 3C	13-14	radiate 14-16mm						
1017	2263	260-296	13-14	radiate 16-20mm	radiate head r				W/VW	
916	2041	later 3C	13-14	?radiate 13mm	radiate head r??	?				Irregular eroded
242	?	later 3C	13-14	?radiate 15-16mm					EW/EW	eroded
750	2083	260-296	13-14	radiate 20mm	]PC[ ]VS PF AVG	Spes ?			W/W	
1643	2234	260-296?	13-14	radiate 16mm	radiate head r	IO[VI] .....			W/W	Irregular,
1637	2843	late 3C??	13-14??	AE3 14-16mm					EW/EW	completely illegible shape
1620	2796	300-307	15	AE1 27mm	]NVS NOB C	GENIO POP VLI ROMANI	altar/?//PLG		SW/SW	Part encrusted
804	2097	309-317??	15	AE2 22mm	CONSTANTINVS PFAVG	SOLI INVIC TO COMITI	T /F//PTR		SW/SW	
1380	2604	321-322	16	AE2 19mm	CONSTANTI] NVS IVN NC	BEATA TRANQVILLITAS	PLON	RIC VII, London 236	W/W	
352	2042	320-324?	16	AE3 18mm	CONSTAN TINVSAVG	SARMATIA DEVICTA	PTRarc		SW/SW	
1062	2001	320-324?	16	AE2 20mm	CRISPVS[ ]CAES	BEATA TRANQVILLITAS			SW/SW	
336	2003	320-324?	16	AE3 18-19mm	CRISPVS NOBILC	BEATATRAN QVILLITAS	P A//PLON		SW/SW	
1285	2570	323-324	16	AE3 17-18mm	CON]STANTINVS IVN N[	Caesarum nostrorum, wreath	PTR	RIC VII, Trier 433	E/E	heavily encrusted, a Caesar of the House of Constantine
1035	2268	320-324??	16?	AE2-3 19mm		Caesarum nostrorum???			SW/SW	
1377	2003	330-335	17	AE3 15mm	Constantinopolis	Victory on prow			W/W	
1434	2565	341-348	17	AE3 14mm	head r	Victoriae dd augg q nn			W/W	encrusted

SF No	Ctxt	Est Date AD	Reece Period	Denomination	Obv	Rev	Mint	Ref	Condition	Comment
963	2241	330-341	17	AE4 11-12mm		Gloria Exercitus			VW/VW	irregular
537	2052	330-335	17	AE3 16mm	Constantinopolis?	Victory on prow			W/W	
1098	2000	330-335	17	AE4 12mm		Gloria Exercitus 2 standards			W/W	
338	2003	341-348	17	AE3 14mm	] N PF AVG head r	VICTORIAE DD AVGG Q NN	leaf//missing		SW/SW	
408	2053	335-337	17	AE3 15mm	FLIVLCONSTANSNOBCAES	GLORIA EXERCITVS 1 standard	TRS.		SW/SW	
510	2055	330-335	17	AE3 15mm	Constantinopolis	Victory on prow			W/W	
1427	2647	337-341	17	AE3 14mm	head r	Pax publica?			VW/VW	fragile
1251	2564	351-353	18	AE2 22-24mm	DN DECENTIVS NOB CAES	VICTORIAE DD NN AVG ET CAE	AMBarc	LRBC2, 14	SW/SW	r hand side of reverse is double struck
1482	2726	348-350	18	AE2 20-21mm	DN CONSTAN TIVS PF AVG	FEL TEMP REPARATIO 'hut'2	TRS	LRBC2, 30	SW/SW	
821	2143	350-364	18	AE3 15mm	head r?	Fel Temp Reparatio fh?			SW/SW	Irregular
337	2003	350-364?	18	AE4 9mm					VW/VW	irregular
3	1001	364-378	19	AE3 18-20mm		SECVRITAS REIPVBLICAE			W/SW	
1276	2565	367-375	19	AE3 17mm	DN VALEN [S PF AVG	SECVRITAS REIPVBLICAE	OF/I//ON?	LRBC2, 340?	W/W	
1426	2647	367-375	19	AE3 16mm	DN VA]LEN [S PF AVG	GLORIA ROMANORVM emperor and captive	OF/IIII//CON?	as LRBC2, 513	W/W	
1089	2001	364-378	19	AE3 16mm	DN VALEN S PF AVG	SECVRITAS REIPVBLICAEcheck	check		SW/SW	
538	2051	364-378	19	AE3 17mm	DN VALEN S PF AVG	SECVRITAS REIPVBLICAE	?PCON		SW/SW	
795	2003	364-375	19	AE3 15-17mm	Valentinian I	Gloria Romanorum			W/W	
359	2003	364-378?	19?	fragment		Gloria Romanorum?			SW/SW	
1483	2726	388-402	21	AE4 12mm	DN A]RCADIVS PF AVG	VICTOR[IA AVGGG			SW/SW	
204	2009	330+		AE4 11mm					W/W	irregular
733	2082	330+		AE3 13-14mm		??victory				
248	2024	4C		AE3 17mm	head r	CONS			W/SW	
1449	2604	4C		AE3 16mm	head r?	?			E/E	encrusted
326	2037	3-4C?		fragment						
1082	2001	3-4C		AE3 16mm						
828	2096	3-4C		AE3 16mm						incomplete
1100	2000	3-4C		AE3 15-17mm					EW/EW	
809	2001	late 3-4C		AE4 8mm					EW/EW	

SF No	Ctxt	Est Date AD	Reece Period	Denomination	Obv	Rev	Mint	Ref	Condition	Comment
1102	2000	post-med								
1158	2000	post-med								
1101	2000	post-med							EW/EW	
49	99999	post-med							EW/EW	
<p>Early denominations in copper coinage included sestertius, dupondius and quadrans. Known Latin names are not easily correlated with coin types of the later 3rd and 4th centuries. The generic term 'radiate' is used here the later 3rd century, while for the 4th century most coins were probably described by the term 'nummus', but denominations here are defined in terms of commonly-used size based divisions, as follows: AE2 = 19-25mm; AE3 = 13-19mm; AE4 = &lt;13mm.            Condition codes: E – eroded, W – worn, SW – slightly worn, EW – extremely worn</p>										

Table D.1 Catalogue of Roman coins

## APPENDIX E SUMMARY RESULTS FROM ENVIRONMENTAL SAMPLES

site sub-division	Context No	Feature No	Sample Number	Feature type	No of Boxes	Floated Volume (L)	Flot Volume (ml)	Cereals	Fish bone/scale	Molluscs	Estimated charcoal volume (ml)	Potential
Room 2	2269	2271	29	corndryer	4	10	1	0	0/0	0	<1	
Room 2	2264		63	layer	4	10	5	0	0/0	#/f	<1	
Room 2	2593	2271	64	corndryer	2	10	<1	0	0/0	0	<1	
Room 2	2592	2271	65	corndryer	3	10	5	0	0/#	0	<1	
Room 2	2591	2271	66	corndryer	2	7	15	##	0/0	0	10	charcoal
Room 2	2590	2271	67	corndryer	2	10	<1	0	0/0	0	0	
Room 2	2264		111	layer	4	0						

Table E.1: Phase 1 samples summary results

site sub-division	Context No	Feature No	Sample Number	Category	Feature Type	No of Boxes	Floated Volume (L)	Flot Volume (ml)	Cereals	Germinated grain	Chaff	Legumes	Weed Seeds	small mammal bones	Molluscs	Estimated charcoal volume (ml)	Fired clay	Potential
Area A	2357	2361	43	pit	Pit	1	5	55	#	0	0	0	#	0	0	50	0	Charcoal
Central Area	2382		37	hearth	Oven	1	11	20	0	0	0	0	###	0	0	25	0	CPR - hay
Central Area	2382		38	hearth	Oven	1	10	50	#	0	#	0	#	0	0	<1	0	
Central Area	2396	2393	39	corndryer	Oven	1	5	10	0	0	#	0	0	0	0	5	###	
Central Area	2394	2393	40	corndryer	Oven	1	10	10	0	0	0	0	#	0	#/#	7	0	
Central Area	2398	2393	41	corndryer	Oven	2	8	20	0	0	0	#	#	0	0	25	###	
Central Area	2378	2383	44	pit	Pit	1	10	2	#	0	#	0	#	0	0	<1	0	
Central Area	2378	2383	45	pit	Pit	1	10	5	##	0	#	0	#	0	0	1	0	
Room 2	2187		48	layer	deposit	4	10	15	0	0	0	0	0	0	0	5	0	
Room 10	2897	2900	168	corndryer	hearth backfill	2	9	30	0	0	0	0	#	##	##/#	25	0	
Room 10	2911	2912	172	pit	Pit	2	10	130	0	0	0	0	0	0	#/#	130	0	Charcoal
Room 10	2913		173	layer	Hearth	1	5	40	##	###	#	##	#	0	#/#	35	#	CPR-malt?
Room 10	2914	2900	174	corndryer	Hearth	1	10	40	#	#		#	#	0	#/#	20	##	
Room 11	2917	2918	179	pilae	pilae base	1	2.5	15	#	0	0	0	0	#	#/#	2	#	

Table E.2: Phase 2 samples summary results

site sub-division	Context No	Feature No	Sample Number	Feature Type	No of Boxes	Floated Volume (L)	Flot Volume (ml)	Cereals	Germinated grain	detached sprouts	Chaff	Legumes	Weed Seeds	small mammal bones	Fish bone/scale	Molluscs	Estimated charcoal volume (ml)	potential
Area A	2439		47	Layer	1	1	10	0	0	0	0	0	0	0	0/0	0	5	
Central Area	2317		35	Layer	1	9	1	#	0	0	#	##	#	0	0/0	0	<1	
Room 1	2291		32	Layer	1	8	15	###	0	0	##	#m	#	##	0/#	##/#	10	
Room 1	2292		33	Layer	4	10	10	0	0	0	0	0	0	#	0/0	##/##	8	Snails?
Room 1	2545		50	occupation layer	4	10	10	#	0	0	0	0	0	0	0/0	0	8	
Room 1	2546		52	mortared floor surface	4	10	<1	0	0	0	0	0	0	0	0/0	#/#	0	
Room 1	2557		55	Layer	1	8	<1	0	0	0	0	0	0	0	0/0	0	0	
Room 1	2559		56	deposit	1	2	1	0	0	0	0	0	0	0	0/0	#/#	0	
Room 1	2553		57	mortared surface	4	10	1	0	0	0	0	0	0	#	0/0	#/#	<1	
Room 1	2648		82	occupation layer	4	10	20	###	0	0	##	0	#	#	0/0	##/b	8	
Room 1	2651		90	floor surface	1	8	2	0	0	0	#	0	#	0	0/0	#/#	1	
Room 1	2652		91	occupation layer	2	9	20	#	0	0	#	0	0	#	#/0	#/#	20	
Room 1	2656		92	occupation layer	1	10	30	#	0	0	#	0	0	##	#/0	##/b	35	
Room 1	2657		94	mortared deposit	1	3	1	#	0	0	0	0	0	0	0/0	#/#	0	
Room 1	2659		95	occupation layer	2	10	2	0	0	0	0	0	0	#	0/0	#/#	1	
Room 1	2662		99	surface	1	10	1	#	0	0	#	0	0	0	0/0	#/#	<1	
Room 1	2663		100	mortared surface	4	10	1	0	0	0	0	0	0	#	0/0	#/#	<1	
Room 1	2705	2706	101	uncertain discrete	1	3	20	0	0	0	0	0	0	#b	0/0	##/#	<1	
Room 1	2704		121	Layer	4	10	1	0	0	0	0	0	0	0	0/0	0	0	
Room 8	2756		108	Layer	4	8	1	0	0	0	#	0	0	0	0/0	#/#	1	

site sub-division	Context No	Feature No	Sample Number	Feature Type	No of Boxes	Floated Volume (L)	Flot Volume (ml)	Cereals	Germinated grain	detached sprouts	Chaff	Legumes	Weed Seeds	small mammal bones	Fish bone/scale	Molluscs	Estimated charcoal volume (ml)	potential
Room 8	2800		126	deposit	4	10	20	##	0	#	0	0	0	0	0/0	##	15	
Room 8	2795	2801	127	Oven/Hearth	2	10	120	#	0	0	0	0	0	0	0/0	##	180	charcoal
Room 8	2828	2801	138	Oven/Hearth	1	4	30	##	0	0	0	0	#	0	0/0	0	30	
Room 8	2796		144	trample	4	10	15	#	0	0	#	0	#	0	0/0	##	10	
Room 8	2840		145	deposit	1	10	270	0	0	0	0	0	0	0	0/0	##	270	
Room 8	2848		151	Layer	1	10	10	#	0	0	#	#	#	#	0/0	##	1	
Room 8	2848		152	Layer	1	6	20	#	0	0	#	0	0	#	0/0	##	5	
Room 8	2868	2941	159	Pit	1	10	20	0	0	0	#	0	0	#	0/0	##	20	
Room 8	2827	2826	180	hypocaust	2	10	40	0	0	0	0	0	##	###	##	0	100	charcoal
Room 10	2843		157	Hearth	1	10	15	#	0	0	#	0	#	0	0/0	##/#	6	
Room 10	2843		158	Hearth	1	10	80	0	0	0	0	0	0	#	0/0	0	100	
Room 10	2888		167	trample	1	10	25	#	#	#	0	0	#	##	0/0	##/#	25	
Room 10	2899	2903	169	pit fill	2	10	25	0	0	0	0	0	0	#	0/0	##	5	
Room 10	2838		181	layer	1	10	1	#	0	0	0	0	0	0	0/0	0	<1	
Room 11	2846		150	deposit	3	9	30	###	###	##	#### #	#	#	0	0/#	##	20	CPR
Room 11	2855		153	Layer	1	5	25	##	###	##	#### #	#	##	##	0/0	##	15	CPR
Room 11	2846		176	Layer	2	9	40	0	##	#	####	0	#m	0	0/0	##	30	CPR
Room 11	2915		177	deposit	1	15	5	#	0	0	0	0	0	##	0/0	##/#	3	
Room 13	2655	2654	89	post hole ?	1	5	30	#	0	0	0	0	0	0	0/0	##	30	

Table E.3: Phase 3a samples summary results



site sub-division	Context No	Feature No	Sample Number	Category	No of boxes	Floated Volume (L)	Flot Volume (ml)	Cereals	Germinated grain	detached sprouts	Chaff	Legumes	Weed Seeds	small mammal bones	Fish bone/scale	Molluscs	Estimated charcoal volume (ml)	Potential
Central Area	2113		15	layer	2	10	15	#	0	0	#	0	#	#	0/0	##/#	10	
Central Area	2117	2118	18	pit	2	10	15	0	0	0	0	0	#	#	#/#	0	10	
Central Area	2220		25	layer	4	10	25	#	0	0	##	#	0	0	0/##	#/#	20	
Central Area	2265		30	layer	4	10	15	####	#	#	####	0	##	#	0/0	#/#	5	CPR
Central Area	2281		31	layer	2	10	30	0	0	0	0	0	0	0	0/0	#/#	35	
Central Area	2223		34	layer	2		1	#	0	0	0	0	0	0	0/0	0	<1	
Other	2081		11	layer	4	10	7	#	0	0	##	#	#	#	0/#	#/#	5	
Other	2088	2109	13	uncertain discrete	3	10	12	#	0	0	#	0	#	0	0/0	#/#	10	
Other	2417		42	layer	2	10	50	####	###	##	#####	#	#	#	0/0	0	25	CPR
Room 1	2129		19	layer	4	10	15	##	0	0	##	0	#	#	0/0	##/#	8	MR
Room 1	2144		27	layer	2	8	20	###	0	0	##	#	#	##	0/0	#/#	10	MR
Room 1	2263		28	layer	4	10	10	#	0	0	##	0	0	0	0/0	#/#	3	MR
Room 1	2144		76	layer	4	10	20	##	0	0	#	0	#	##	0/0	0	15	
Room 1	2129		77	layer	3	10	20	##	0	0	#	0	#	#	0/0	0	5	
Room 1	2611		78	layer	3	9	20	##	0	0	0	0	#	##	0/#	0	3	
Room 2	2074	2078	10	burial inhumation	1	0												
Room 2	2228		26	layer: rubble debris	1	7	20	#	0	0	#	0	#	#	0/0	#/#	10	
Room 2	2228		54	layer: rubble debris	1	1	<1	0	0	0	0	0	0	0	0/0	0	<1	
Room 2	2182		59	surface internal other	4	10	1	#	0	0	0	0	0	0	0/0	#/#	<1	

site sub-division	Context No	Feature No	Sample Number	Category	No of boxes	Floated Volume (L)	Flot Volume (ml)	Cereals	Germinated grain	detached sprouts	Chaff	Legumes	Weed Seeds	small mammal bones	Fish bone/scale	Molluscs	Estimated charcoal volume (ml)	Potential
Room 2	2232		60	layer	4	10	2	#	0	0	#	0	0	0	0/0	0	1	
Room 2	2567		61	layer	1	2	5	#	0	#	####	0	0	0	0/0	0	<1	
Room 2	2715		106	layer	2	10	1	#	0	0	0	0	0	0	0/0	0	<1	
Room 2	2761		114	layer	1	3	10	0	0	0	0	0	0	#	0/0	0	10	
Room 3	2821	2820	136	posthole	1	8	25	##	#	#	####	#	0	#	0/0	0	10	CPR - silicates
Room 8	2799		125	layer	4	10	10	#	0	0	0	0	#	#	0/0	###/##	<1	molluscs
Room 8	2830	2801	128	oven/fire pit	2	8	15	#	0	0	0	0	#	0	0/0	##/##	10	
Room 8	2831		139	layer	1	7	25	##	0	0	#	0	0	0	0/0	0	25	
Room 8	2799		154	layer	1	10	10	0	0	0	##	0	0	##	0/0	##/##	5	
Room 8	2799		155	layer	1	7	5	0	0	0	##	0	0	##	0/0	##/##	2	
Room 10	2762		137	layer	3	10	10	##	#	0	#	0	0	#	0/0	0	3	
Room 10	2837		143	surface internal other	3	10	10	#	0	0	##	0	#	0	0/0	##/##	8	
Room 10	2895	2894	171	oven/fire pit	1	10	5	0	0	0	0	0	0	0	0/#	##/##	<1	
Room 11	2833		142	layer	3	10	35	##	0	0	###	0	#	0	0/0	##/##	10	
Room 14	2092		12	layer	3	10	20	####	#	#	####	##	##	##	##/##	##/##	10	CPR?
Room 14	2860		156	layer	2	10	25	##	##	0	##	0	#	##	0/#	###/##	15	
Room 14	2880		166	layer	3	10	20	##	#	0	0	0	#	#	0/0	##/##	15	

Table E.4: Phase 3b samples, summary results

site sub-division	Context No	Feature No	Sample Number	Category	No of Boxes	Floated Volume (L)	Flot Volume (ml)	Cereals	Germinated grain	detached sprouts	Chaff	Legumes	Weed Seeds	small mammal bones	Molluscs	Estimated charcoal volume (ml)	Potential
Central Area	2145	2146	17	posthole	2	10	3	#	0	0	#	0	0	0	##	2	
Room 1	2701		97	layer	1	3	5	#	0	0	0	0	0	##	##	1	
Room 1	2700		98	posthole	1	2	15	##	0	0	0	#	0	0	##	15	
Room 2	2181		20	layer	4	10	15	##	0	0	0	#	##	##	##/##	10	
Room 2	2188		24	layer	1	4	1	0	0	0	0	0	0	0	0	<1	
Room 2	2181		49	layer	4	10	20	##	0	0	0	#	##	#	##	15	
Room 2	2544		51	layer	1	5	10	#	0	0	#	0	0	##	##/##	5	
Room 2	2180		53	surface internal other	4	10	<1	0	0	0	0	0	0	0	0	<1	
Room 2	2188		72	layer	1	2	1	0	0	0	0	0	0	0	0	<1	
Room 2	2613		83	layer	1	8	15	#	0	0	0	0	#	0	##/##/b	5	
Room 2	2614		84	layer	1	9	30	#	0	0	#	#	#	#	##	25	
Room 2	2615	2645	85	hearth	1	2	10	#	0	0	#	0	#	0	##	5	
Room 2	2640	2645	86	hearth	1	9	25	0	0	0	#	0	#	##/##b	##/##/b	20	Charcoal
Room 2	2644	2645	87	hearth	1	1	40	#	0	0	#	0	#	0	##	40	Charcoal
Room 3	2617		73	layer	2	10	20	#	0	0	#	#	#	##	0	5	
Room 3	2595		74	layer	3	10	15	#	0	0	#	0	#	##	0	3	
Room 3	2620		75	layer	3	10	10	#	0	0	#	0	#	0	0	2	
Room 3	2620		96	layer	2	10	25	###	##	##	###	#	##	###	##	15	CPW ?
Room 3	2811		149	layer	1	10	20	##	##	####	####	0	##	0	##	10	CPR
Room 7	2790	structure 2312	124	hearth	1	8	50	0	0	0	#	#	##	0	##/##	15	

site sub-division	Context No	Feature No	Sample Number	Category	No of Boxes	Floated Volume (L)	Flot Volume (ml)	Cereals	Germinated grain	detached sprouts	Chaff	Legumes	Weed Seeds	small mammal bones	Molluscs	Estimated charcoal volume (ml)	Potential
Room 8	2752	structure 2755	109	hearth	1	8	100	#	0	0	#	0	0	##	##/##	100	
Room 8	2764	structure 2755	112	hearth	1	8	20	##	0	0	0	0	0	##	##/#	20	Bone object
Room 8	2765		113	layer	3	8	5	#	0	0	0	#	0	0	##/#	2	
Room 8	2766		123	layer	3	10	20	#	0	0	0	0	0	0	##/#	3	
Room 10	2758		107	layer	1	1	<1	0	0	0	0	0	0	0	0	<1	
Room 10	2741	2930	118	corndryer	4	10	10	0	0	#	0	0	#	#	##/#	2	
Room 10	2757		119	layer	4	10	10	#	0	#	0	#	#	0	##/#	2	
Room 10	2758		130	layer	4	8	45	###	####	0	0	0	#	##	##/#	25	malt
Room 10	2803	2930	131	corndryer	4	10	50	####	0	0	#	#	#	0	0	10	
Room 10	2804	2930	132	corndryer	4	10	30	####	0	0	0	0	#	0	0	2	
Room 10	2805	2930	133	corndryer	3	5	60	#####	0	0	#	#	#	#	0	5	CPR
Room 10	2806	2930	134	corndryer	2	10	200	###	###	##	#####	#	#	0	0	20	CPR
Room 10	2807	2930	135	corndryer	2	4	20	##	##	##	#####	#	#	0	0	10	CPR
Room 10	2834	2930	146	corndryer	2	10	1	#	0	0	0	0	0	0	0	<1	
Room 10	2839	2930	147	corndryer	2	10	1	0	0	0	0	0	0	0	0	0	
Room 10	2835	2930	148	corndryer	1	10	1	#	0	0	#	0	0	0	0	<1	
Room 10	2758		160	layer	4	10	60	####	####	##	#####	##	##	#	0	35	CPR
Room 10	2887	2930	161	corndryer	1	8	30	####	#####	##	0	0	##	#	0	10	CPR
Room 10	2883	2954	162	corndryer	2	10	10	###	##	0	0	0	0	#	##/#	5	
Room 10	2884	2954	163	corndryer	1	10	20	##	#	0	0	0	0	0	##/#	5	
Room 10	2885	2954	164	corndryer	4	10	1	##	0	0	0	0	#	0	##/#	<1	

site sub-division	Context No	Feature No	Sample Number	Category	No of Boxes	Floated Volume (L)	Flot Volume (ml)	Cereals	Germinated grain	detached sprouts	Chaff	Legumes	Weed Seeds	small mammal bones	Molluscs	Estimated charcoal volume (ml)	Potential
Room 10	2886	2954	165	corndryer	1	5	15	##	0	#	0	0	#	0	##/#	15	
Room 10	2893	2954	170	oven/fire pit	2	10	1	#	0	0	0	0	0	0	##/#	<1	
Room 13	2627		80	layer	1	9	20	##	##	0	##	#	#	0	0	15	
Room 13	2633		81	layer	1	10	1	#	0	#	#	#	0	0	0	<1	
Room 13	2627		115	layer	3	10	50	####	###	##	0	##	#	0	0	35	CPR – insect infestation
Room 13	2633		122	layer	1	10	5	0	0	0	0	0	0	0	0	<1	
Room 13	2802		129	layer	1	6	1	0	0	0	0	0	0	0	##/#	1	
Room 14	2217	2216	21	pit	2	10	1	0	0	0	#	0	0	0	0	<1	
Room 14	2093		22	layer	2	10	40	#####	0	###	####	#	##	0	##/#	15	CPR
Room 14	2770	2769	141	pit	3	10	15	##	0	0	##	0	#	0	##/#	10	

Table E.5: Phase 4 samples, summary results

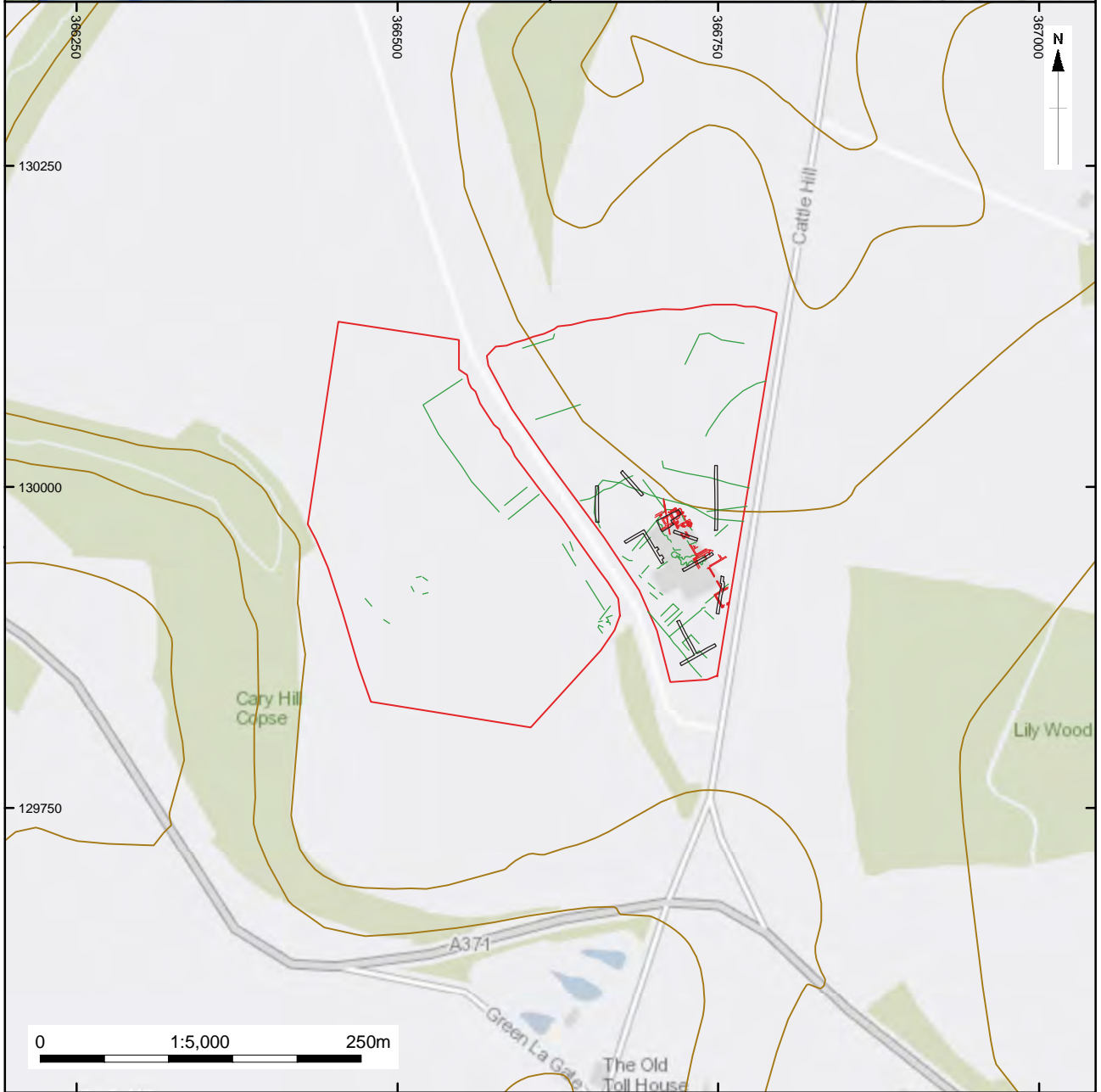
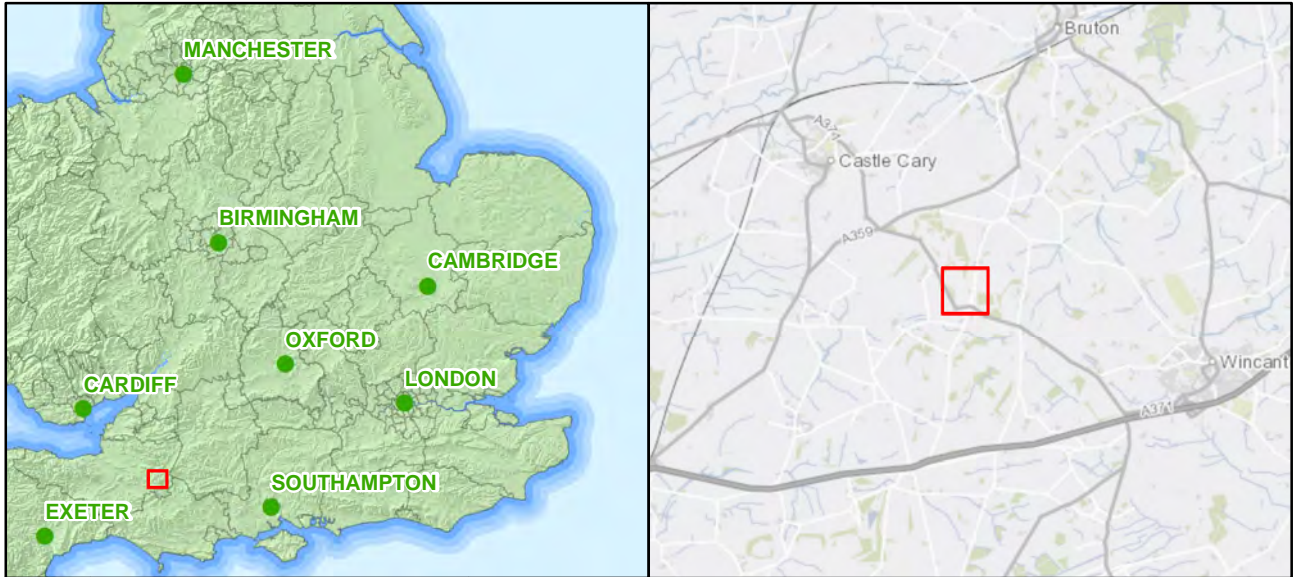
site sub-division	Context No	Sample Number	Category	No of Boxes	Floated Volume (L)	Flot Volume (ml)	Cereals	Germinated grain	detached sprouts	Chaff	Weed Seeds	small mammal bones	Molluscs	Estimated charcoal volume (ml)	Potential
Room 3	2549	69	layer	1	8	40	#	0	0	#	0	##	##/#	35	
Room 6	2098	16	layer	3	8	10	##	0	0	0	##	##	###/##	1	Molluscs
Room 7	2597	70	layer	3	10	10	0	0	0	0	0	#	###/##	<1	Molluscs
Room 7	2598	71	layer	1	10	0	0	0	0	0	0	0	0	0	
Room 7	2587	110	layer	1	10	10	0	0	0	0	0	##	##/##	<1	
Room 8	2711	102	layer	2	9	5	#	0	0	0	0	##	##/#	1	
Room 8	2712	103	layer	2	7	15	0	0	0	0	0	###	##/##	<1	
Room 8	2746	140	layer	1	5	10	0	0	0	0	0	0	0	0	
Room 13	2204	23	layer	1	7	1	#	0	0	###	0	0	##/#	<1	
Room 14	2728	116	layer	4	10	20	###	###	###	0	#	0	##/#	10	CPR - malt
Room 14	2729	117	layer	1	10	30	##	0	##	0	#	0	##/##	15	

Table E.6: Phase 5 samples, summary results

site sub-division	Context No	Sample Number	Category	No of Boxes	Floated Volume (L)	Flot Volume (ml)	detached sprouts	Chaff	Legumes	Weed Seeds	small mammal bones	Molluscs	Estimated charcoal volume (ml)
Room 2	2104	14	Layer	4	10	10	##	##	#	#	#	##/#	8

Table E.7: Phase 6 sample results





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Figure 1: Site location



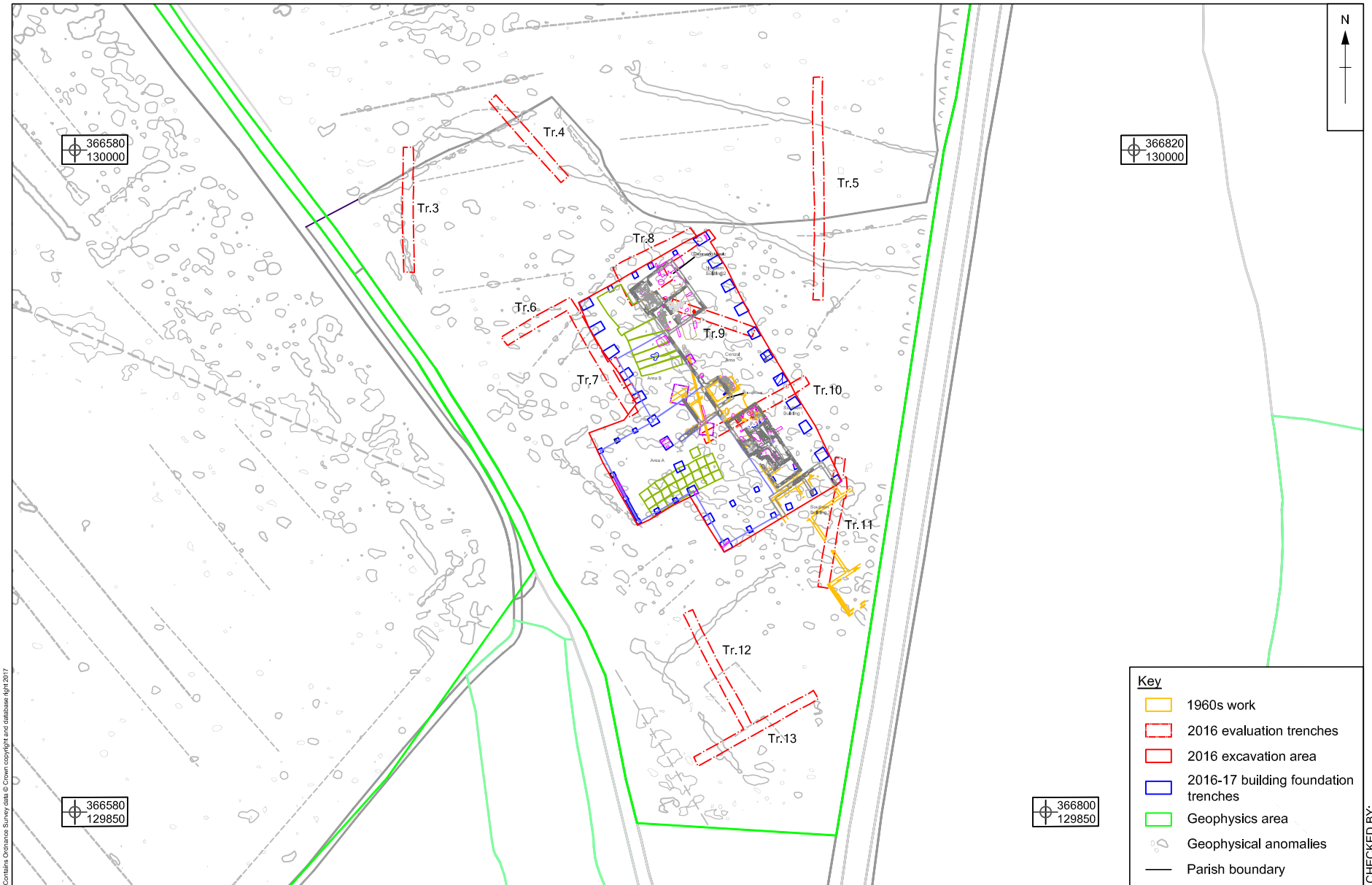
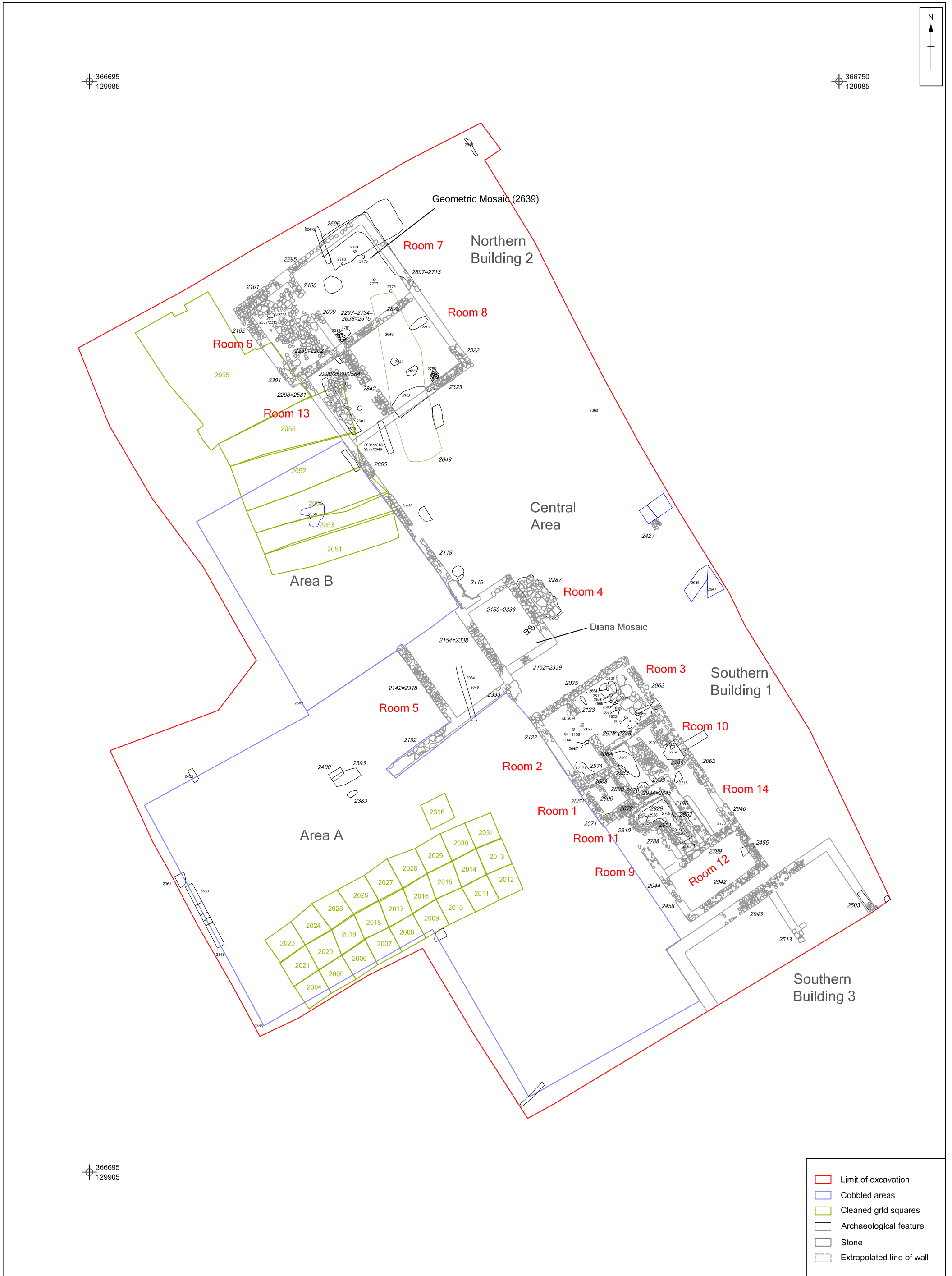
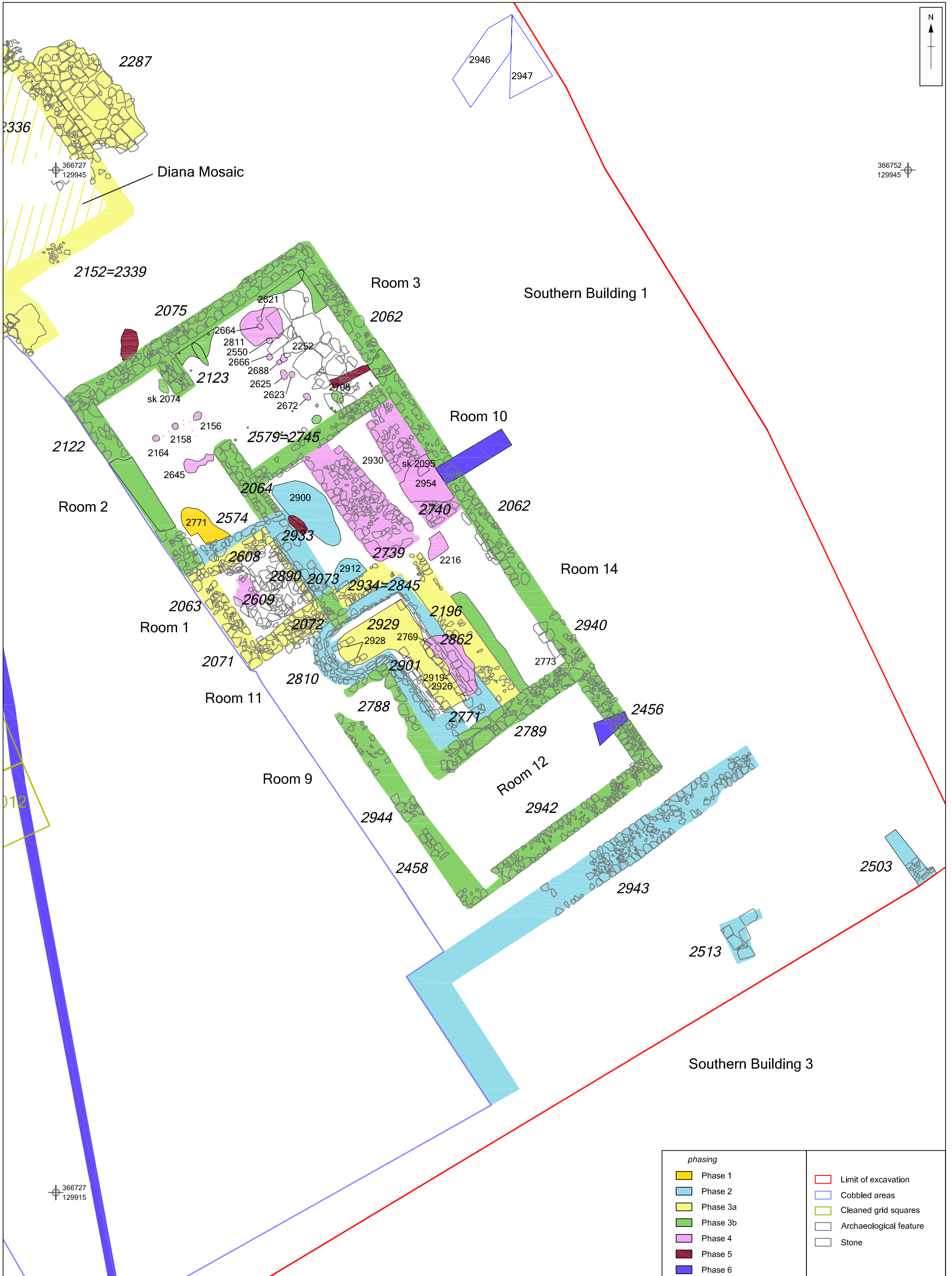
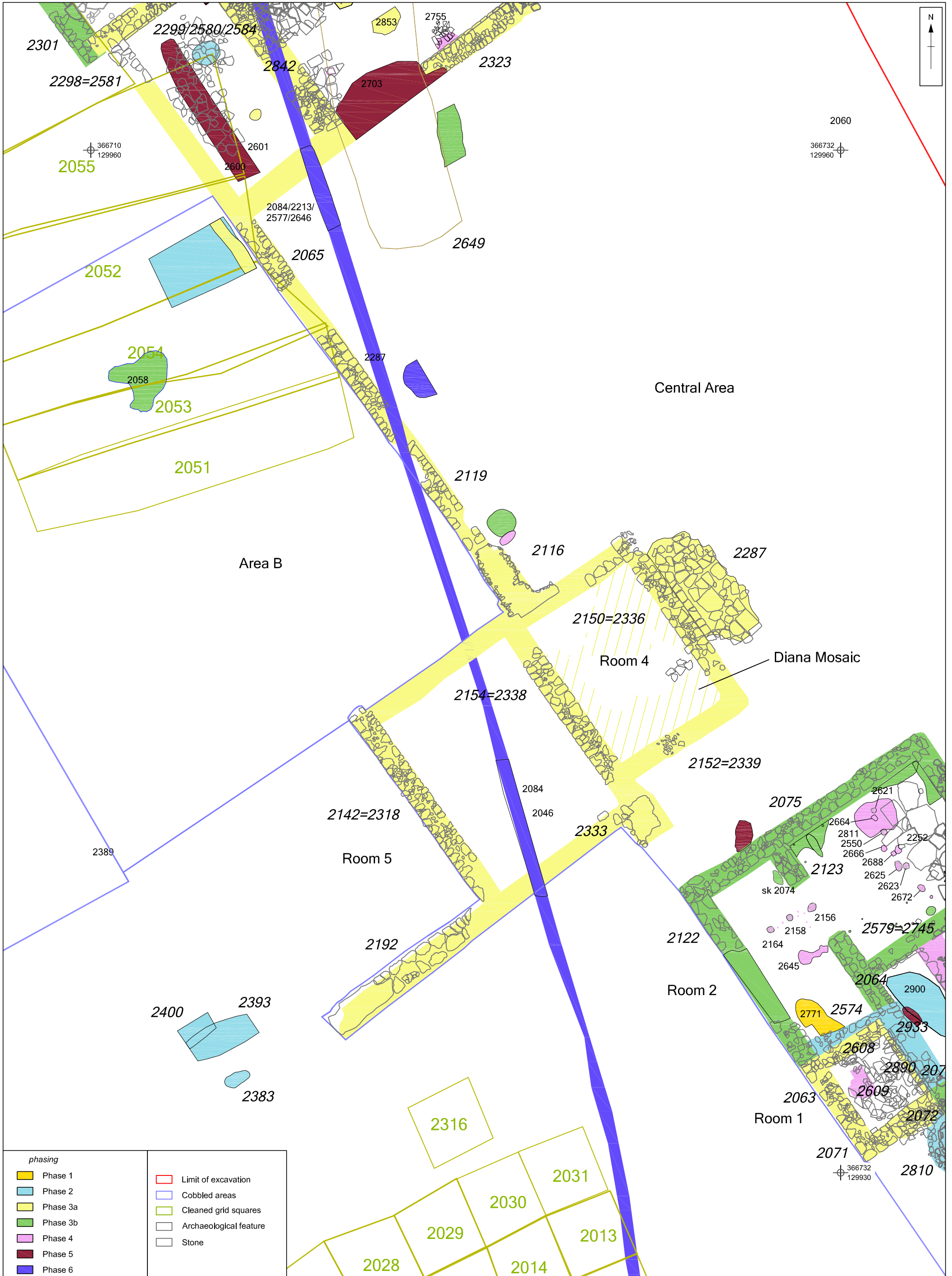
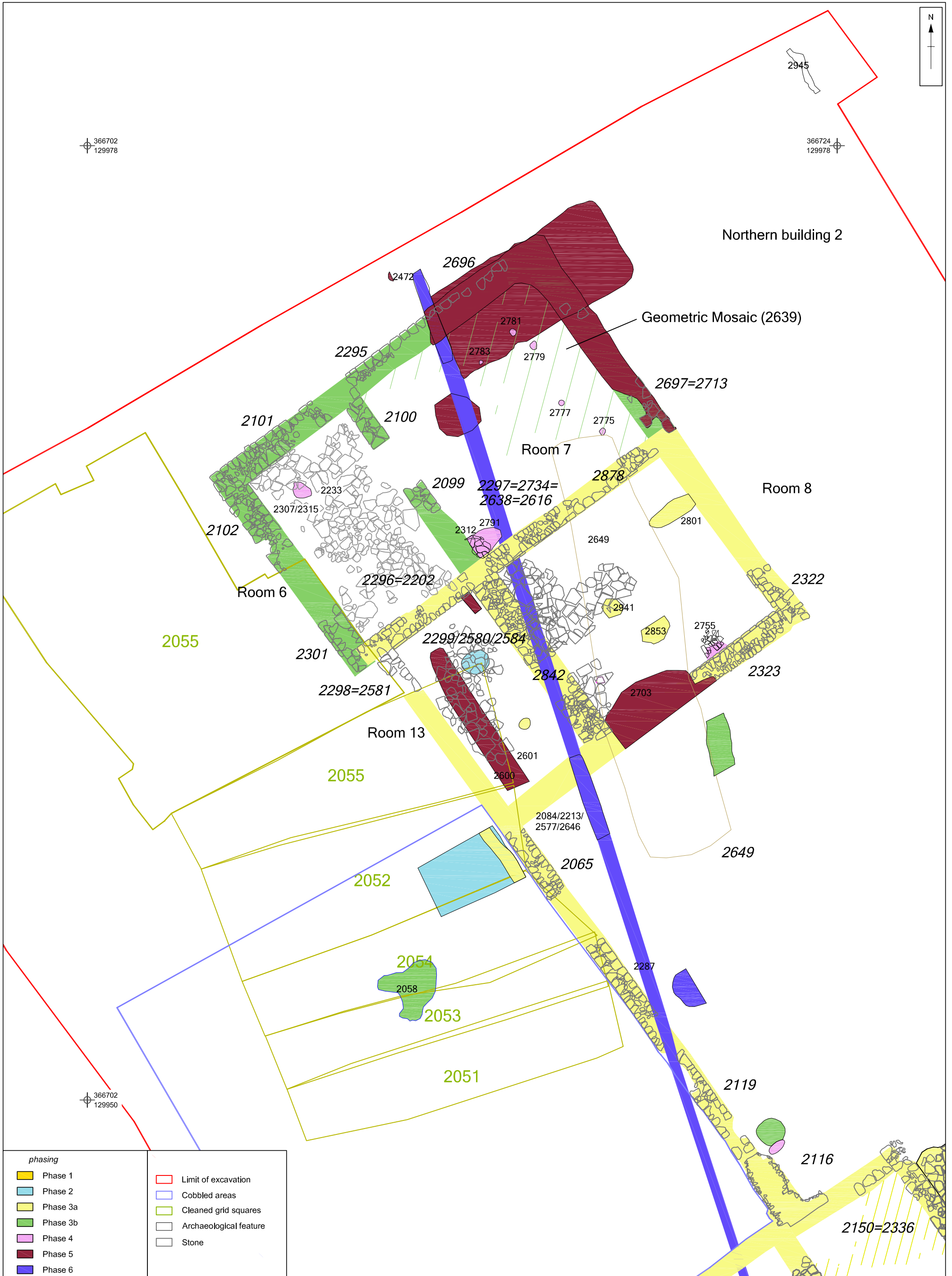


Figure 2: Overall site plan, showing different areas of work









Survey Data supplied by : Conan Parsons

0 5m  
Scale at A3 1:100

Figure 6. Plan of Northern building 2

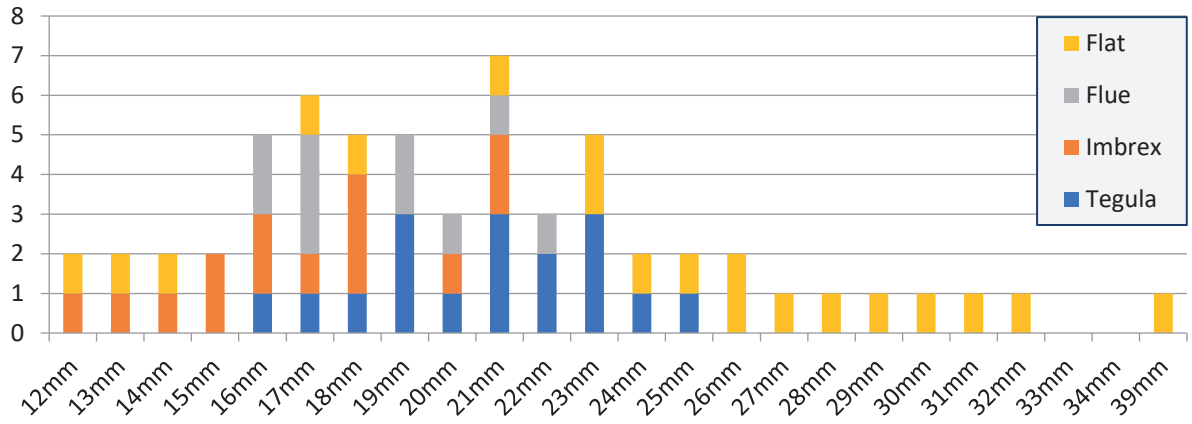


Figure 7: Chart comparing thickness for different forms of tile

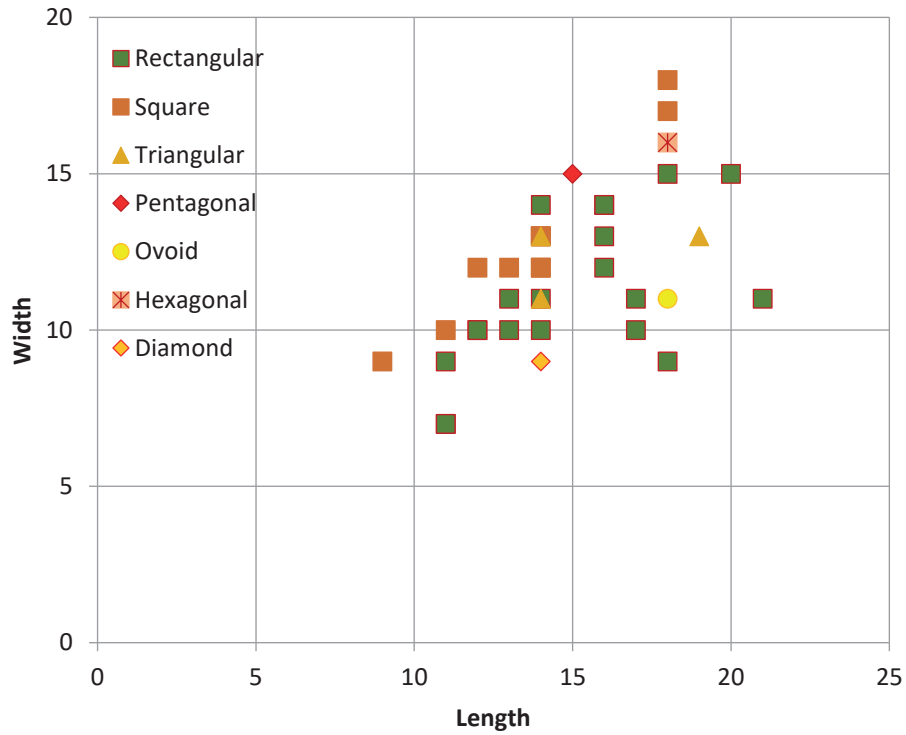


Figure 8: Ceramic tesserae sizes categorized by shape

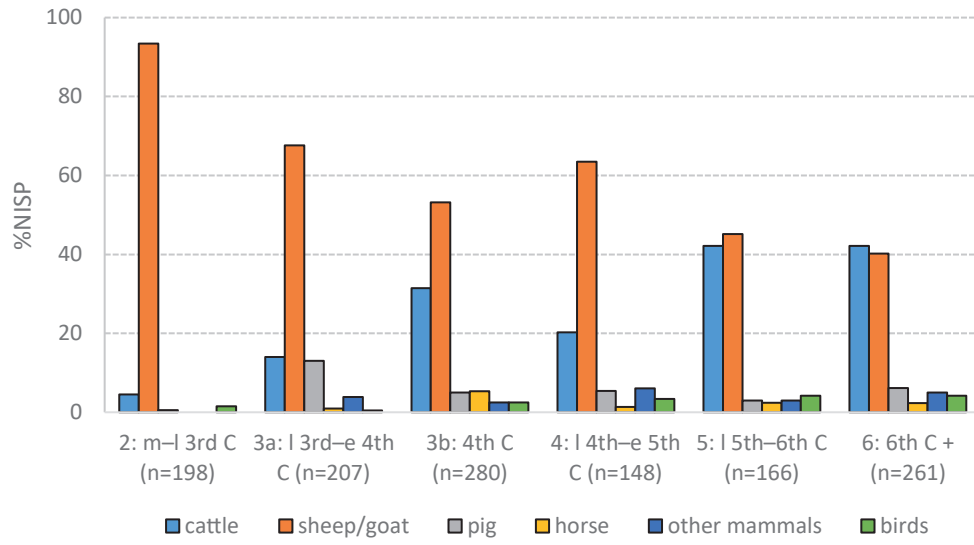


Figure 9: Relative frequency of the main animal taxa by phase

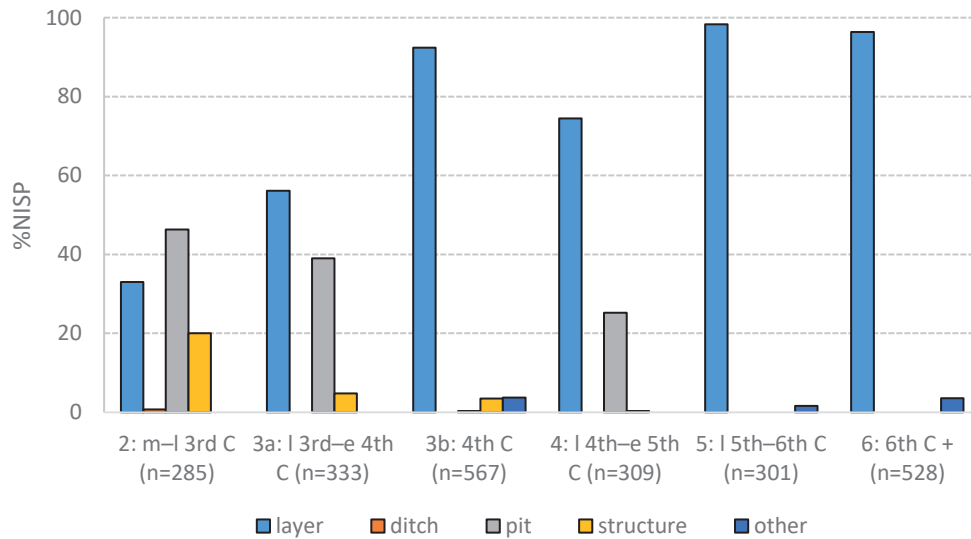


Figure 10: Relative frequency of animal bones in different feature types by phase

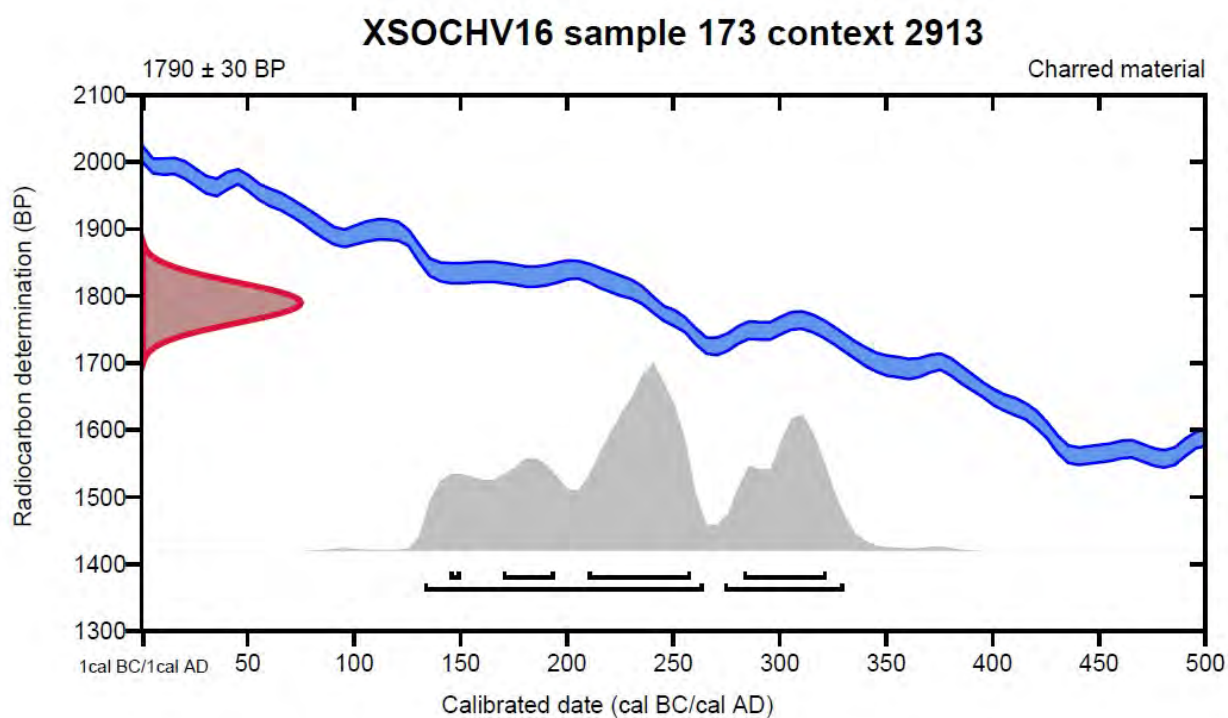


Figure 11: Radiocarbon date from Phase 2 hearth or oven context 2913, sample 173

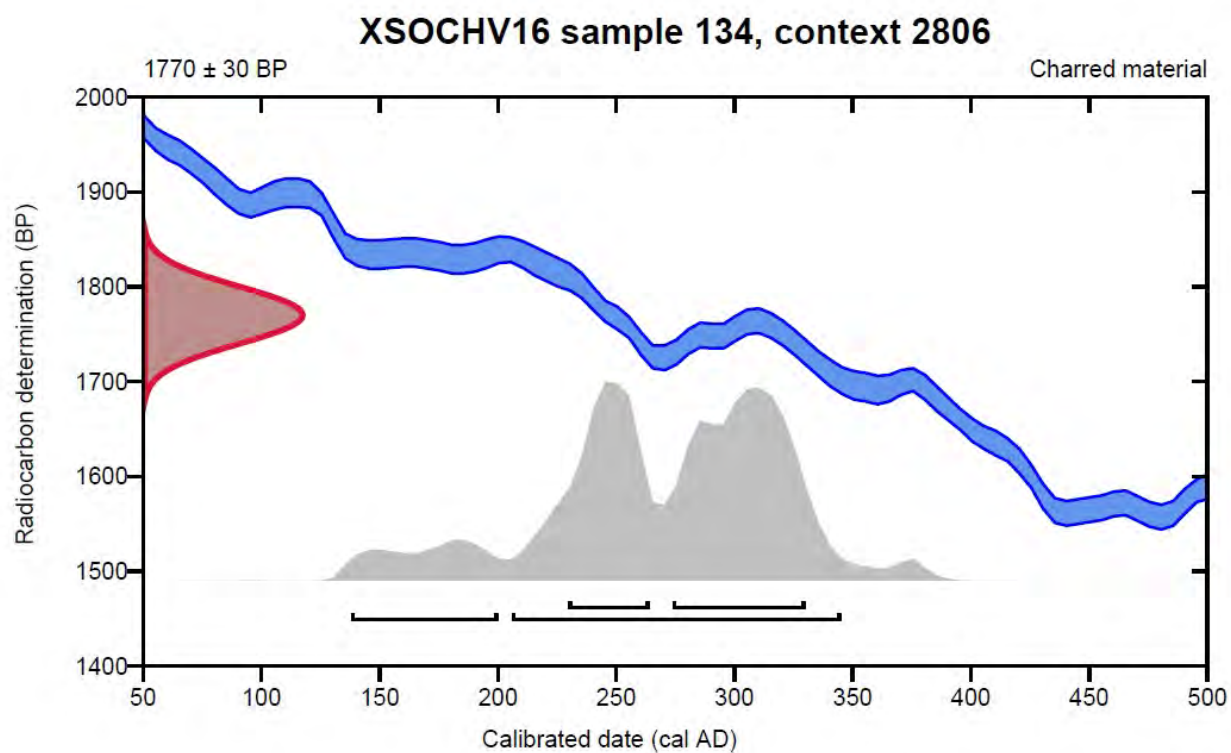


Figure 12: Radiocarbon date from Phase 4 stone corn-dryer context 2806, sample 134



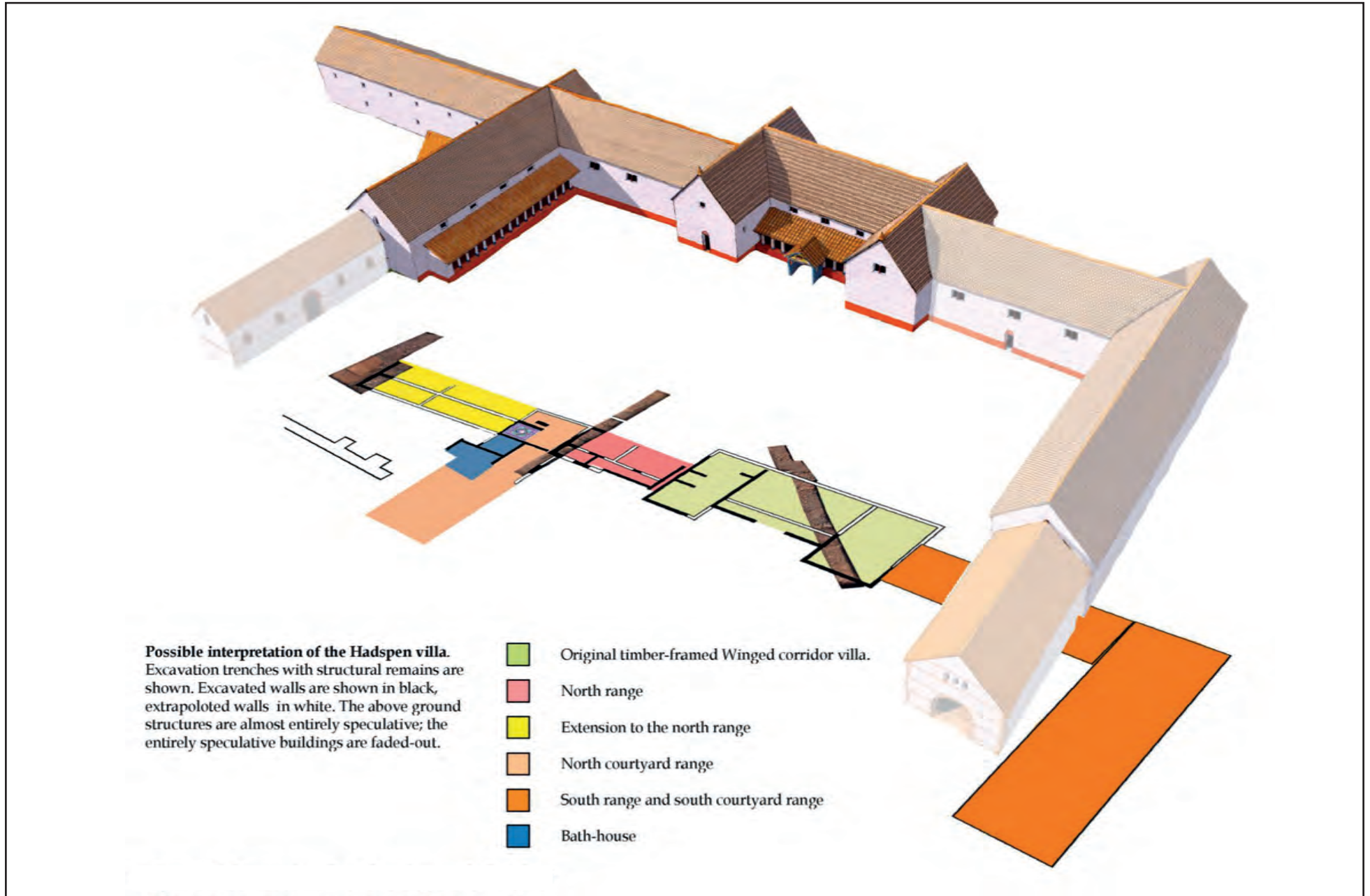


Figure 13: Hypothetical reconstruction of villa complex, overlying 1960s' plan of villa, by Jon Cane

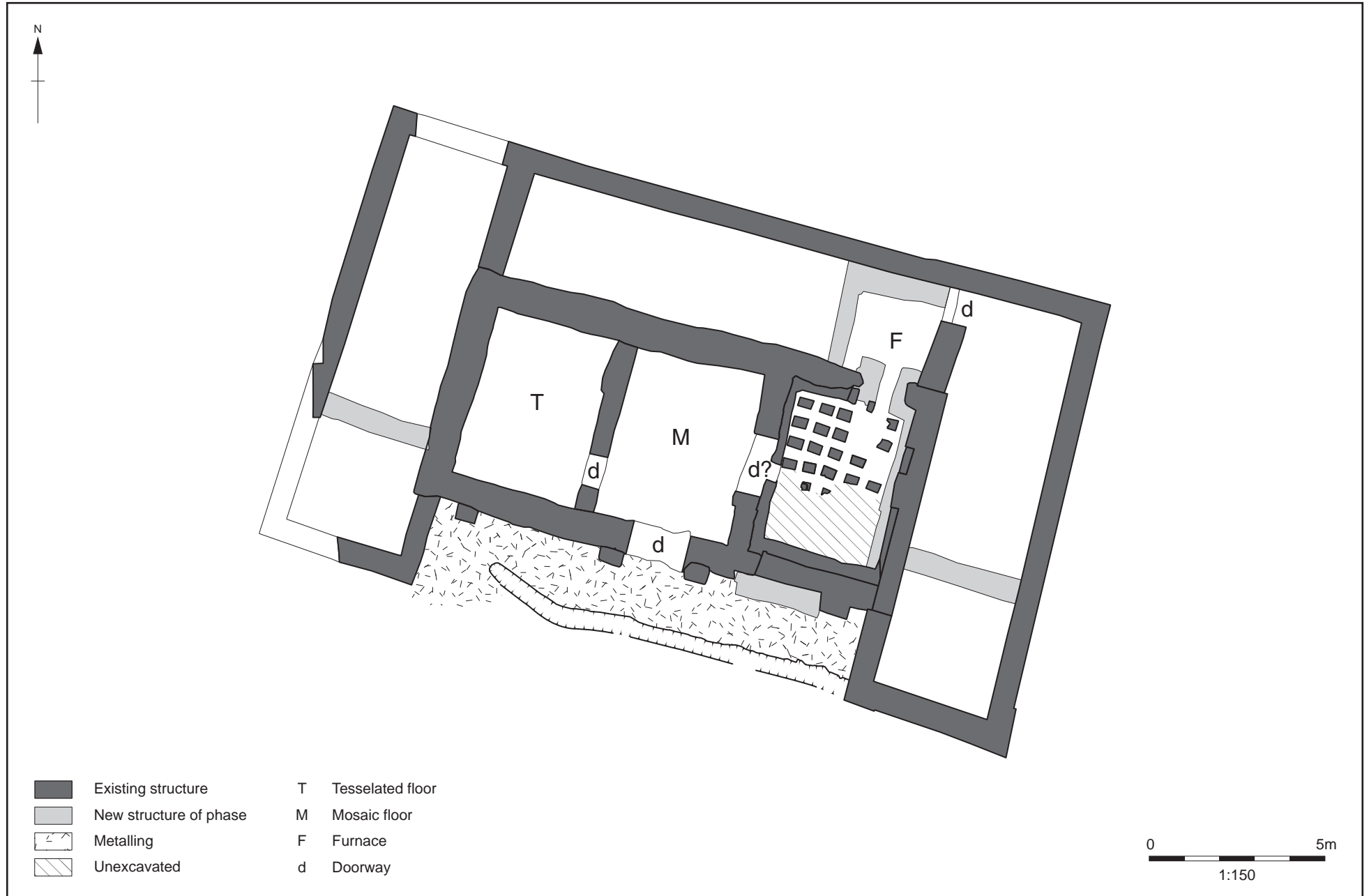


Figure 14: A parallel for the winged corridor house of Cattle Hill: plan of Redlands Farm villa, Northamptonshire



Plate 1: Excavation as revealed at the end of 2016 works

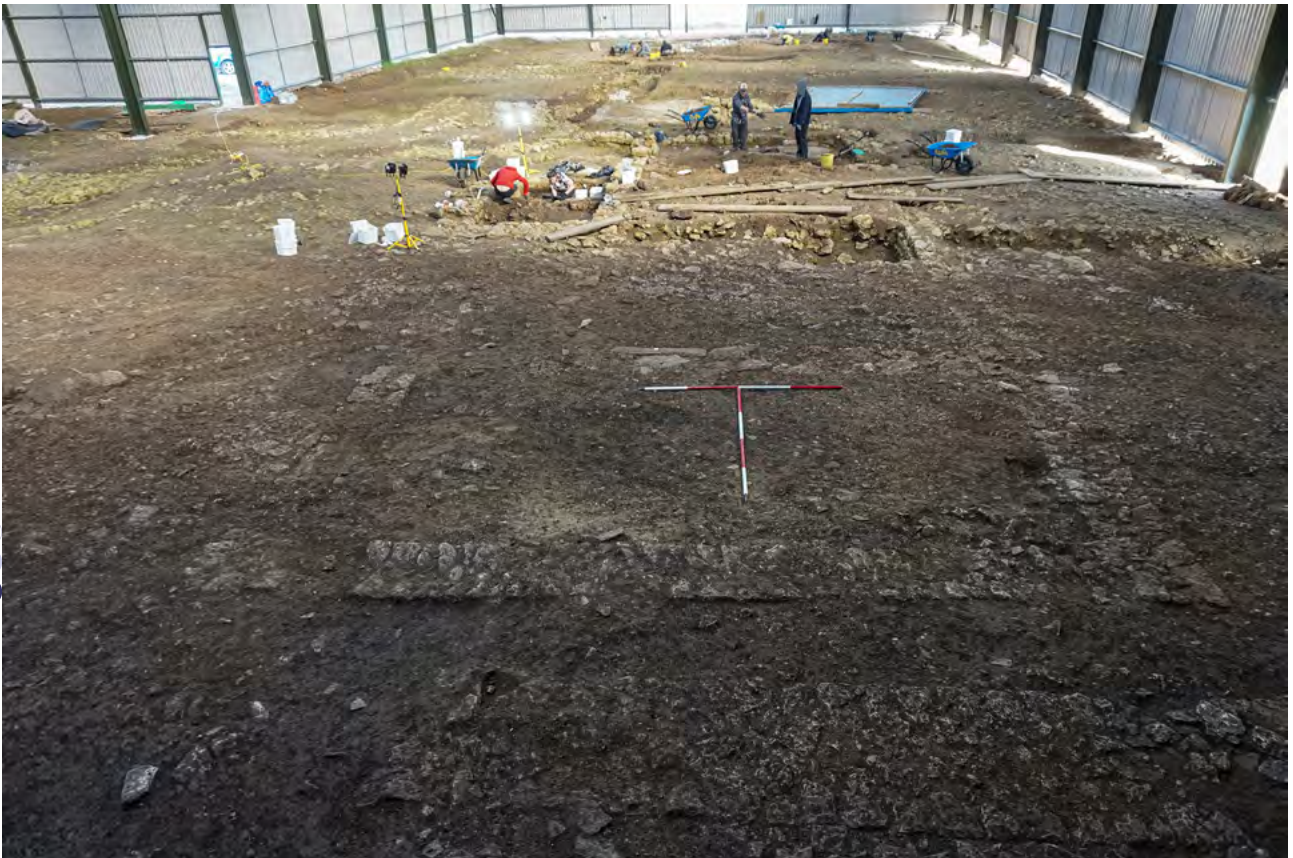


Plate 2: Southern Building 1 at the start of the 2017 excavations (Building 3 wall is visible in the foreground), looking N



Plate 3: Southern Building 1, looking N



Plate 4: Room 11, part excavated, looking E



Plate 5: Rooms 4 and 5, looking NE



Plate 6: Area A cobbles 2057 during excavation, looking E



Plate 7: Area B cobbles and tile debris during excavation, looking NE



Plate 8: Room 11, looking N



Plate 9: Room 1 -2, walls 2608 and 2574, looking E



Plate 10: Room 10, oven 2900, looking N



Plate 11: Area A, successive ovens 2400 and 2393, looking SE



Plate 12: Room 1, internal faces of south walls 2071 and 2072, looking S





Plate 13: Room 8, SE corner walls 2322 and 2323, looking S



Plate 14: Room 8, north wall 2297/2638/2734), looking N



Plate 15: Room 13, stone floor 2600, looking S



Plate 16: Room 8, west wall, foundation 2720/2842 and stone floor 2721, looking N



Plate 17: Room 8, hearth or oven 2801, with deposits and debris, looking W



Plate 18: Room 2, looking S



Plate 19: Room 3, south wall 2579/2745, looking S



Plate 20: Room 14, east wall 2062/2940, looking E



Plate 21: Room 2, east walls 2064 and 2073, looking E



Plate 22: Room 14, south wall 2789 overlying wall 2196, looking S



Plate 23: Room 1, floor 2226 of re-used stone tiles, looking E



Plate 24: Room 2, section through floor sequences, looking N



Plate 25: Room 7 cleaning Geometric mosaic 2639, looking SW



Plate 26: Area B, tessera deposit 2058, looking N



Plate 27: Room 2, postholes 2156, 2158 and 2164, looking S



Plate 28: Room 3, postholes 2550, 2621, 2623, 2625 and 2672, looking S





Plate 29: Room 3, flagstone floor 2252, looking S



Plate 30: Room 10, corndryer 2930, looking S



Plate 31: Room 10, millstone (SF 820) within pit 2216, looking N



Plate 32: Room 14, with charred deposits exposed, looking W



Plate 33: Room 6, stone floor 2233



Plate 34: Room 7, hearth 2791 overlying mosaic 2639, looking E



Plate 35: Room 8, hearth 2755 against the south wall 2323, looking S



Plate 36: Box flue tile fragment

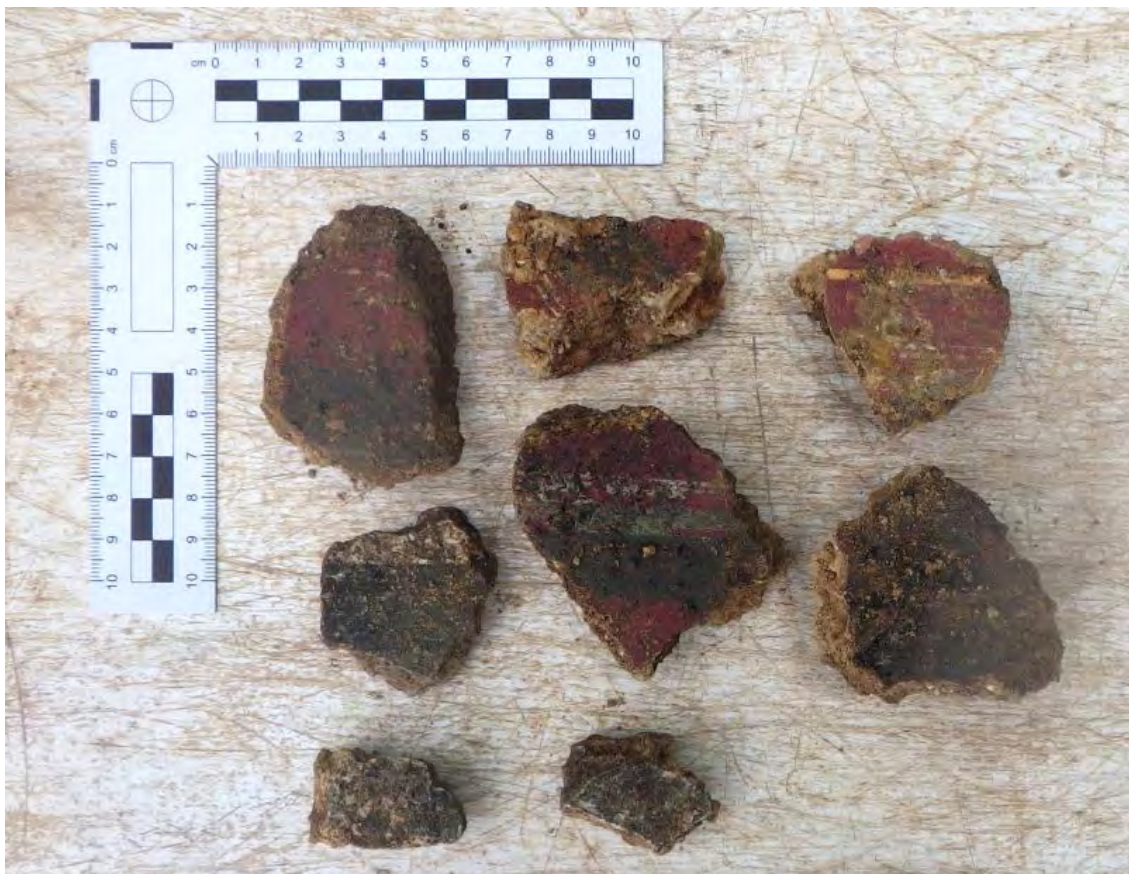


Plate 37: Selection of painted plaster



Plate 38: Copper alloy bracelet fragment



Plate 39: Copper alloy coin of Decentius (AD 351-353)



Plate 40: Stone flanged bowl



Plate 41: Stone tile with pierced nail hole



Plate 42: Shale spindle whorl



Plate 43: Bone object, context 2764



Plate 44: Bone object, context 2627





Plate 45: Room 4, Diana mosaic (2050)



Plate 46: Room 7, Geometric mosaic (2639)

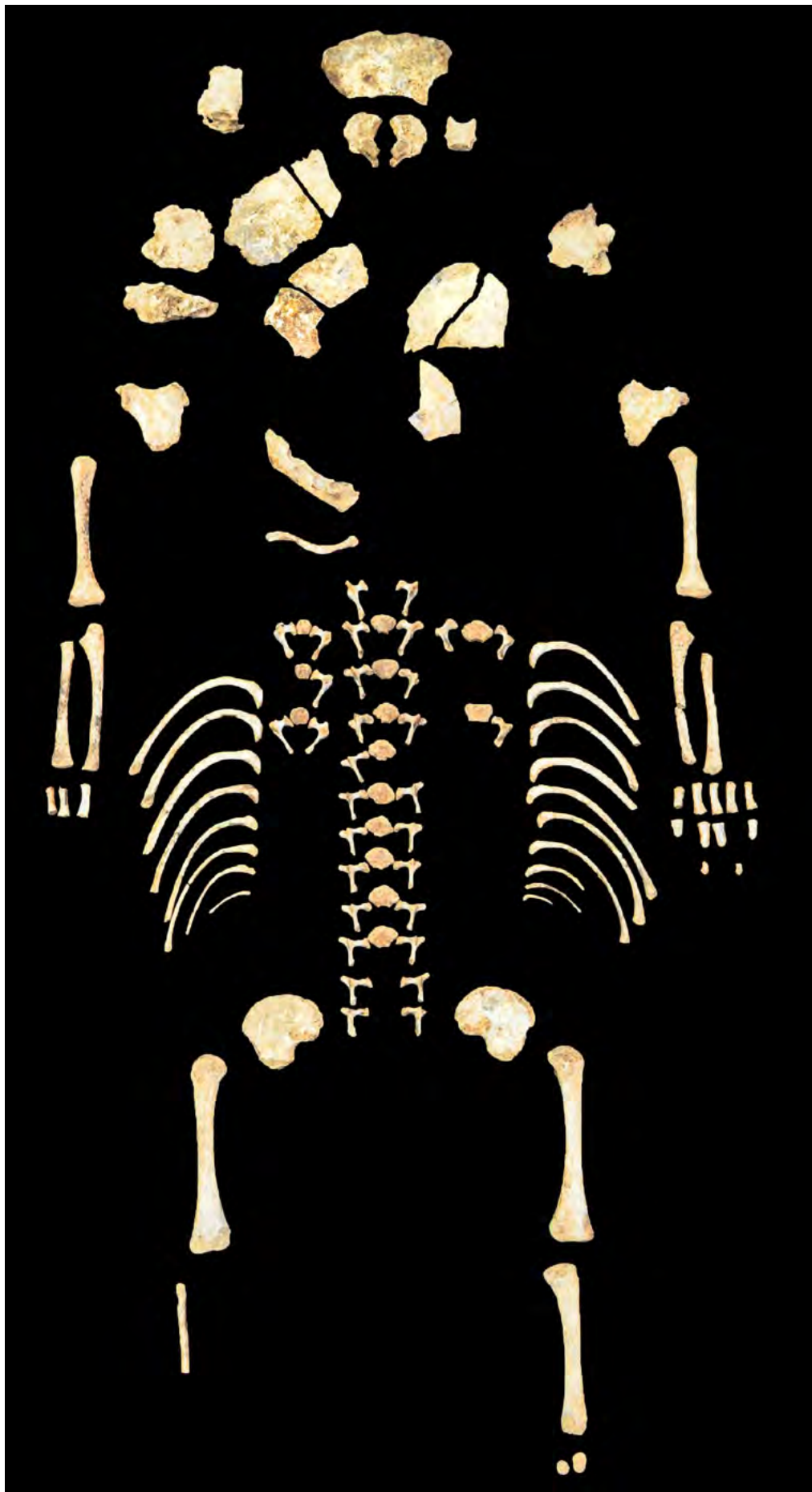


Plate 47: Room 2, skeleton 2074





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