Former Peugeot Garage
Rhodaus Town (A28)
Canterbury
Kent CT1 2RH

Post-Excavation Assessment

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Summary

This report provides an assessment of archaeological data recovered during an excavation in advance of a proposed development at the former Peugeot Garage and Total filling station, Rhodaus Town (A28), Canterbury, Kent (NGR 614921 157363). The work was undertaken in response to planning application CA/15/000602/FUL submitted to Canterbury City Council, and was conducted between 28 September 2015 and 21 February 2016.

The excavation encapsulated a total area of 6460m^2 and revealed archaeological evidence for activity spanning the Neolithic, Bronze Age, Iron Age, Roman, Anglo-Saxon, medieval and post-medieval periods. The proposed development area had suffered from some modern impacts associated with the former use as a garage. Observed geology comprised Head deposits of clay and silt overlying Second Terrace River Gravels above solid Seaford Chalk. Monitoring during remediation groundworks which included removal of underground storage tanks and associated utilities, and excavation of deeper archaeological features, exposed the underlying Seaford Chalk.

Residual assemblages of worked stone, dated to the Neolithic to late Bronze Age (c 3500 BC–800 BC), and pottery, dated to the mid to late Bronze Age through to the late Iron Age (c 1600 BC–AD 50), represented sporadic and low intensity prehistoric activity within the local setting.

During the late Iron Age/early Roman period (c 25 BC–AD 70), remnants of a soil horizon, a sunken lane, and coaxial field system demonstrated the emergence of a more formal agricultural landscape.

From the early/mid Roman period (c AD 70–300), broadly contemporary with the development of Canterbury's urban infrastructure, the coaxial field system was replaced by new boundary ditches, aligned parallel to the still extant sunken lane, and industrial-scale clay and gravel extraction commenced in the northernmost of these newly defined land plots. Adjacent settlement activity was hinted at by an assemblage of pottery of mid Roman date, recovered from later features, and a scattering of potential refuse pits.

During the early fourth century, the plot of land to the south of the clay and gravel extraction pits was utilised as a cemetery. The cemetery was defined by the existing boundary ditches, and comprised 219 inhumation burials, laid out in regular rows in earth-cut graves, and a single cremation burial. Overall, preservation of human remains was poor. The remains of 195 individuals, comprising men, women, and children, were recovered. Most individuals were laid out in a supine position (on the back), with legs extended and head at the south-west end. One individual was laid out in a prone position (face down). In six cases, individuals were laid with their heads at the north-east end. Two graves contained multiple individuals, and two graves contained decapitation burials (heads removed after death). Just over 80% of the burials had evidence of grave furniture, comprising timber coffins and/or stone packing of some form. One cist burial with a tile lid was also recorded. Just over 13% of the burials contained objects associated with costume, dress or personal adornment. This included a burial containing two silver buckles of probable eastern European origin, dated to the late fourth or early fifth century AD. Less than 3% of the burials contained objects purposefully deposited as grave goods. This included the cremation burial, which had been placed in a cinerary urn, with two accompanying vessels, dated to the late fourth century AD.

Following the cessation of burials, activity did not resume on any significant scale until the mid/late Anglo-Saxon period (c AD 720–1050) when a number of pits were dug across the proposed development area, The pits contained a combination of domestic refuse, including food waste and cess, and metalworking waste, including evidence for both iron smelting and smithing.

Shortly following the Norman conquest in 1066, a motte and bailey castle was established within the surviving circuit of the former Roman town wall of Canterbury, focused on the present Dane John mound and gardens. Immediately outside the town wall, traces of a Norman defensive circuit were identified, transecting the western edge of the proposed development area and enclosing the adjacent former St Mary Bredin School site. The ditch, which had a potential width of 12m wide and extended to a depth of 7.98m OD into the underlying

chalk bedrock, would at one time have contained running water, and was potentially planted with thistles to provide an additional deterrent.

Evidence for at least one later re-cut of the ditch was recorded, though by no means as substantial a barrier, and a new boundary ditch traversed the proposed development area to the south. Evidence of continued pit digging was noted to the north-east of the defensive circuit, potentially representing a continuation of the pre-Norman domestic and metalworking activity.

By the high medieval period (c AD 1225–1350) the Norman defensive works had been superseded by a later stone-built keep on Castle Street, overlooking Worthgate, and the former outer bailey was occupied by the Dane John Manor. The partially infilled defensive ditch was overlain by a sequence of consolidation, metalling and silt deposits believed to represent the formation and use of a trackway associated with the Dane John Manor.

During the late medieval period (c AD 1350–1550) the proposed development area continued to be used as agricultural land. Archaeological features comprised pits, soil layers, and linear features.

Agricultural land use continued uninterrupted through the post-medieval period, until construction of the former Kent County Pavilion in 1877 and the adjacent Canterbury Agricultural Hall in 1878. Further development of the site continued following acquisition of the Pavilion by the Canterbury Motor Company from 1902, and Agricultural Hall in 1931, and its subsequent growth as Rootes Garage from 1935. During the Second World War the garage came under control of the War Department, and Civil Defence air-raid shelters were constructed within the premises.

The recovered data has the potential to contribute significantly to understanding the local heritage setting from the late Iron Age onwards. Key elements, principally the late Roman cemetery and early medieval extra-mural defences, also have the potential to make a significant contribution to wider regional and national research agendas.

Acknowledgments

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The project was managed by Richard Helm. Fieldwork was supervised by Adrian Gollop and Damien Boden.

Excavation was conducted by Ian Anderson, Hypatia Atheiria, Robert Billington, Thierry Biot, Kristien Borgers, David Brookes, George Carstairs, Mathew Charlwood, Jude Children, Isobel Curwen, Anne-Noelle de Salle, Justyna Dekiert, Mark Denyer, Caitlin Godfrey, Silvia Gregorio, John Grigsby, William Hewson, Jan Janulewicz, Ross Lane, Andrew Macintosh, Phil Mayne, Laura McArdle, Hazel Mosley, Adrian Murphy, Samuel Oates, Martha Page, Edward Palka, Mathew Phillips, Dale Robertson, Peter Seary, Dani Shalet, Jess Twyman, Alexandra Vokes, Samuel Whitehead, and Tania Wilson.

Isobel Curwen, Sammi Hall, Chelsea Parham, Emma Watts-Plumpkin, and Luke Taylor provided specialist on-site osteological assistance.

Simon Pratt monitored removal of underground fuel storage tanks and geomorphological observations. David Peat and Jean-Luc Schwenninger undertook geological sampling for OSL dating.

Finds processing was carried out by Jacqui Clifton and Michele Johnson. Environmental processing was conducted by Alex Vokes and Martha Page, manged by Enid Allison. Marion Green and Andrew Savage spot-dated pottery.

Isobel Curwen, Laura McArdale and Jess Twyman processed recovered human remains. Specialist assessment of human remains was conducted by Laura McIntyre and managed by Louise Loe.

Soil pH was measured by Simon Pratt, Jess Twyman, and Laura McArdle.

Post-excavation processing of site records was by Damien Boden, Kristien Borgers, Mathew Charlwood and Adrian Gollop.

Specialist assessment of finds were by Luke Barber (post-Roman pottery, ceramic building materials, industrial residues), Malcolm Lyne (Roman pottery), Barbara McNee (prehistoric pottery), Andrew Richardson (registered finds), and Tania Wilson (struck flint).

Environmental assessments were by Wendy Carruthers (plant remains) and Ian Smith (faunal remains).

Report figures were illustrated by Peter Atkinson. Photographic records and X-Radiography were managed by Andrew Savage. Quality assurance was by Peter Clark and Jane Elder.

The archaeological programme was monitored by Rosanne Cummings, Archaeological Officer, Canterbury City Council.

1 Introduction

1.1 Project background

1.1.1 Canterbury Archaeological Trust Ltd (CAT) was commissioned by Canbury Holdings Ltd to undertake a programme of archaeological site investigation works at the former Peugeot Garage site, Rhodaus Town (A28), Canterbury, Kent, CT1 2RH (NGR 614921 157363). The programme was requested in response to a planning application (CA/15/000602/FUL) submitted to Canterbury City Council (CCC) on 13 March 2015 for the erection of student accommodation comprising 539 bedrooms, ancillary gymnasium, administration/catering/welfare facilities, refuse and recycling facilities, cycle parking, car parking and landscaped open space.

1.1.2 An archaeological desk-based assessment (Weekes 2014), a historic environment assessment of buried heritage assets (Helm and Weekes 2014), and a built heritage statement (Montagu Evans 2015) had previously been submitted in support of the planning application.

1.1.3 The application was granted consent on 14 August 2015 with attached conditions (17 and 18) pertaining to the implementation of an approved programme of archaeological works.

1.1.4 Condition 17 related to the archaeological monitoring of demolition and geotechnical site investigation works to identify and record any buried archaeological features and deposits and to assess their importance. Archaeological monitoring was carried out between 30 September and 3 October 2014 and 14 January to 6 March 2015 in accordance with an approved written scheme of investigation dated 31 July 2014 (CAT 2014). A Level 2 historic building survey was made of the former Peugeot Garage buildings before and during demolition works, conducted between 4 September and 9 March 2015 in accordance with Historic England (formerly English Heritage) guidelines (Historic England 2006). Condition 17 of the planning consent was discharged in full on 21 October 2015 following submission of final reports (Pratt 2014; 2015; Seary 2015).

1.1.5 Condition 18 related to the archaeological excavation of the proposed development area, prior to the commencement of construction works. The excavation was carried out between 28 September 2015 and 21 February 2016 in accordance with an approved written scheme of investigation dated 26 June 2015 (CAT 2015a).

1.1.6 This report provides a post-excavation assessment of the archaeological data recovered during the excavation in part fulfilment of Condition 18 of the planning consent.

1.1.7 The post-excavation assessment follows the principles identified in Historic England's guidance documents on the Management of Research Projects in the Historic Environment, specifically the *MoRPHE Project Manager's Guide* (2006) and *MoRPHE Project Planning Note 3 Archaeological Excavations* (2008).

1.2 Location, topography and geology

1.2.1 The proposed development area (PDA) is located south-east of the city centre, outside of the historic city wall, in the parish of St Mary Bredin (Wincheap Ward) (Plate 1). The PDA comprises a roughly rectangular plot, approximately 0.82ha in area, and was formerly occupied by a Total petrol filling station and Robins and Day garage and Peugeot car showroom (Fig 1).

1.2.2 The north side of the PDA fronts onto Rhodaus Town (A28), a dual carriage way forming a ring road around the southern part of Canterbury city centre. The frontage is overlooked by the scheduled city wall and the Dane John mound and gardens. The east side is bounded by an access road running between the PDA and Augustine House, Canterbury Christ Church University, and a block of land occupied by Canterbury Christ Church University Arts Centre, which is surrounded by the PDA on its north, east and south sides. The south side of the PDA is bounded by student accommodation. The west side of the PDA is bounded by the rear gardens of residential properties fronting Rhodaus Close, and the former St Mary Bredin School building.

1.2.3 Within the PDA, former above ground features included a petrol filling station forecourt with canopy and shop/office unit fronting the A28, and vehicle workshops extending to the rear. Known below

ground features include underground fuel storage tanks (USTs) and associated connections located below the forecourt area, and other utilities and services extending from the Rhodaus Town (A28) frontage.

1.2.4 Topographically, the PDA is situated on the south-east side of the Stour Valley, on a gentle north-facing slope with an approximate 3m rise, from 15m above Ordnance Datum (OD) on the Rhodaus Town (A28) frontage to 18m OD at the south-eastern boundary. The north-west boundary of the PDA truncates the remnants of an artificial earthen mound, occupied by the former St Mary Bredin School building, which rises 3m above the modern ground surface level on the Rhodaus Town (A28) frontage.

1.2.5 Underlying solid geology has been identified as Seaford Chalk, overlain by Second Terrace River Gravels, and sealed by Head deposits of clay and silt (brickearth) (BGS 2016). Geotechnical site investigation (SI) works conducted within the PDA indicate that the surface of the Seaford Chalk dips down towards the north-west, between 8.88m OD and 12.83m OD, its deepest point potentially representing a south-west to north-east trending palaeo-channel. Second Terrace River Gravels, measuring up to 4.45m in thickness, survive between 10.28m OD and 15.28m OD. Head deposits, measuring between 0.16m and 4.00m in thickness, survive between 12.11m OD and 17.80m OD (Pratt 2014; 2015).

1.3 Project objectives and methodology

Objectives

1.3.1 The principal objective of the archaeological excavation was to ensure preservation by record of any archaeology where the proposed development would result in its permanent loss.

1.3.2 Where archaeology was present, excavation would be used to form an understanding of past human activity and land use within the PDA over time; specifically:

- to understand the character, form, extent and date of archaeological deposits or features;
- to recover where possible evidence for past environmental change;
- to place project results within the wider heritage setting;
- to disseminate project findings in an appropriate format.

Methodology

1.3.3 Archaeological excavation was conducted where development would impact on potential buried archaeology. The final excavated area measured 6,460m^2, representing approximately 80% of the total PDA.

1.3.4 Due to ground contaminants and USTs, remediation groundworks operated concurrently with the archaeological excavation. Remediation groundworks comprised initial machine breakout of hardstanding and concrete slabs, followed by machine removal of modern ground and overburden under archaeological control. Machine ground reduction was carried out using a toothless ditching bucket in unidirectional, 100–200mm spits to the top of archaeological features and deposits or the surface of geology, whichever was the higher.

1.3.5 Where archaeological deposits and features were exposed, further remediation groundworks were halted until archaeological excavation had been completed and signed off by the CCC Archaeological Officer.

1.3.6 Where USTs and associated installations had truncated archaeological deposits and features, controlled removal, monitored by an archaeologist, was determined to be an appropriate mitigation strategy to enable progression of remediation groundworks.

1.3.7 Following each stage of machine clearance, exposed archaeological features and deposits were hand cleaned and the extents mapped to an accuracy of <5mm using a differential global positioning system (Leica Viva GS08 with Smart Net). The resultant plan was used to determine a strategy for excavation.

1.3.8 The principal aim of the excavation strategy was to recover stratigraphic data and associated datable materials to provide sufficient information to meet the project objectives.

1.3.9 All archaeological features and deposits were excavated in single context (Plate 2). Cut features such as pits and post-holes were half sectioned and the sections recorded before full excavation. Linear features were sample excavated at regular intervals and sections recorded. Large features and deposits were excavated in quadrants or sections, as appropriate. In addition to hand excavation, controlled machine excavation of stepped sections was undertaken through the largest cut features (>10m) following approval by the CCC Archaeological Officer, prior to hand-cleaning, sampling and recording.

1.3.10 All burials were excavated in full. Where cremated material was contained within a container (eg ceramic vessel), the container and contents were extracted as a single unit for excavation under laboratory conditions. Excavation of human remains was conducted under Ministry of Justice Licence Nos 14-0257 and 15-0332.

1.3.11 Recording contexts was undertaken using pro-forma CAT context recording sheets. Single-context plans were hand drawn on A3 drafting film at a scale of 1:10 or 1:20 as appropriate. Sections were drawn at a scale of 1:10.

1.3.12 A full digital SLR photographic record was maintained at all stages of excavation.

1.3.13 A comprehensive programme of soil sampling for environmental analysis was undertaken across the PDA following on-site discussion and recommendations of a specialist environmental archaeologist.

1.3.14 Artefacts were retrieved by context. Finds processing was undertaken concurrently with excavation to provide spot dating of significant contexts. Artefacts requiring conservation were stabilised during excavation.

1.3.15 Bulk soil samples were taken from archaeological deposits and features under advisement from a qualified environmental archaeologist, following on-site discussion of the date and quantity of artefacts and environmental evidence present.

1.4 Health, Safety and Welfare

1.4.1 Health, Safety and Welfare followed a risk assessment and method statement (RAMS) submitted to the Client, Canbury Holdings and their appointed Principal Contractor, Cardy Construction Ltd (CAT 2015b).

1.4.2 All CAT operatives received a Site Safety induction by Cardy Construction Ltd. Updates to Working Safely procedures and toolbox talks were provided by CAT as required.

2 Heritage setting

2.1 Area of Archaeological Importance

2.1.1 The northern part of the proposed development area (PDA) partially lies within the Canterbury Area of Archaeological Importance (AAI) as designated by the Secretary of State on 30 March 1984 pursuant to the Ancient Monuments and Archaeological Areas Act 1979.

2.1.2 Statutory Instruments 1285 and 1286 dated 17 August and 30 September 1984 detail the procedures that should be followed to comply with the Act to ensure that the potential archaeological resource is protected and preserved. Canterbury Archaeological Trust Ltd is the designated investigating authority within the AAI.

2.2 Conservation Area

2.2.1 The PDA is located outside the boundary of the Canterbury City Conservation Area (CCC 2010, 2, plan 1).

2.2.2 Potential impacts from the PDA on the setting of the adjacent Conservation Area have been assessed to the north (Worthgate Character Area), east (the Oaten Hill and Old Dover Road Character Area), and south (the Nunnery Fields Character Area) of the PDA and are considered to be low (Montagu Evans 2015, 50–53).

2.3 Designated Heritage Assets

2.3.1 There are no nationally designated heritage assets located within the PDA.

2.3.2 Two Scheduled Monuments: the Canterbury City Walls (Historic England List Entry No. 1003554) and Dane John Mound and Roman remains (Historic England List entry No. 1003780); and one Historic Park and Gardens, the Dane John Garden (Historic England List entry No.1001360), overlook the frontage of the PDA approximately 37m to the north-west.

2.3.3 Potential impacts from the PDA on the setting of adjacent Designated Heritage Assets have been assessed, with only minor negative impact identified on the setting of the Dane John Garden (Historic England List entry No.1001360), and positive potential impacts reported for the Canterbury City Walls (Historic England List Entry No. 1003554) and Dane John Mound (Historic England List entry No. 1003780) (Montagu Evans 2015, 54–56).

2.4 Non-designated Heritage Assets

2.4.1 Non-designated heritage assets have been recorded within the bounds of the PDA. These comprise two Roman inhumation burials (HER ref MCA21678 and MCA22053), excavated during a watching and recording brief in 1996 (HER ref ECA8371) and a segment of ditch associated with the Norman extra-mural defensive circuit (HER ref MCA22330), investigated during evaluation in 1989 (HER ref ECA8307).

2.4.2 Potential impacts to non-designated heritage assets within the PDA have been assessed and are high (Helm and Weekes 2014)

2.5 Heritage potential

2.5.1 A summary of known heritage within the setting of the PDA by chronological period is provided below. The location of previous archaeological investigations is shown in Fig 2.

Prehistoric (c 800,000–100 BC)

2.5.2 Palaeolithic (c 500,000–8,300 BC) artefacts and faunal materials of national significance have been recovered from the Second Terrace River Gravels during quarrying at Station Road East in 1890 (Smart et al 1975, 274).

2.5.3 Late Mesolithic to early Neolithic (c 8300–3500 BC) worked flint assemblages have been recovered during adjacent excavations at Augustine House (Helm 2010; 2014), and Rhodaus Town (Gollop 2015).

2.5.4 Late Neolithic (c 2500–2150 BC), Bronze Age (2150–800 BC) and early Iron Age (800–300 BC) features have been identified during excavation at Rhodaus Town (Gollop 2015). These include three cremation burials, several pit features and a north-north-west to south-south-east aligned ditch which appears to extend into the PDA.

Late Iron Age to Roman (c 100 BC–AD 410)

2.5.5 A late Iron Age inhumation burial was identified below Augustine House. The inhumation burial later became the focus of a late Roman temple (see below) suggesting it may have been marked by a funerary mound (Helm 2010; 2014).

2.5.6 Six further potential funerary mounds have been recorded in Canterbury located on the south-east side of the city (Urry 1948), and all relate to the setting of the PDA:

Dane John Mound (SAM KE 44);

St George's Roundabout (Salt Hill) (MCA 21568);

Station Road East (Pin Hill) (MCA 21617);

Rhodaus Town (St Mary Bredin School) mound (MCA 21705);

St George's Lane (Little Dunghill) (MKE 4603);

Oaten Hill (unallocated).

2.5.7 Together, the seven Canterbury funerary mounds form an important group and are considered to be of national significance, with few comparable sized concentrations reported elsewhere in Britain. Such funerary mounds are generally accepted to mark the position of elite burials, and date from the late pre-Roman Iron Age and continue into the third century AD (Eckardt 2009, 66; Jessup 1959, 10–11; Pearce 2000, 4; Tonybee 1982, 179–183; Struck 2000, 88). While the majority are associated with cremation burials, inhumation burials are also known, often contained within lead, stone or wooden coffins and usually accompanied by few or no grave goods (Eckardt 2009, 66).

2.5.8 None of the Canterbury funerary mounds have been investigated in any detail.

2.5.9 Antiquarian reports record the recovery of an apparently 'Bronze Age palstave' from the Station Road East (Pin Hill) mound (MCA 21617), removed during construction of the railway to the east of the station in 1860 (Bennett 1988, 317; Page 1932, 77–78; Wheeler 1932, 62).

2.5.10 An inhumation burial, aligned north-south, and contained within a lead coffin was recovered from the St George's Roundabout (Salt Hill) mound (MCA 21568) during laying of the Victorian sewer in 1868 (Andrews 1985, 56; Pilbrow 1871, 160–161; Smith 1882, 35–36).

2.5.11 A second inhumation contained within a lead coffin is reported to have been retrieved by treasure hunters early in the sixteenth century from a 'tumulus near Baron Hales house' (Urry 1948, 147), perhaps the Rhodaus Town (St Mary Bredin School) mound (MCA 21705).

2.5.12 The Rhodaus Town (St Mary Bredin School) mound (MCA 21705) is likely to be the location of a cremation burial disturbed in 1783, the mound raised over the internment reported as containing 'many fragments of brick, pottery, oyster-shells and animal bones' (Anderson 1990, 295; Page 1932, 78).

2.5.13 Two test pits (ECA 8307) excavated on the Rhodaus Town (St Mary Bredin School) mound in 1989 encountered residual Roman pottery and a few possibly human bones, but no *in situ* Roman material (Rady 1990).

2.5.14 A late Iron Age to early Roman (100 BC–70 AD) rectilinear field system, defined by parallel field boundaries, along with associated cultivated soil horizons, a gully, post-holes and pit features, have been recorded below Augustine House. The rectilinear field system respected the position of the inhumation burial and conjectured mound (Helm 2014).

2.5.15 Both the field system and associated cultivated soil horizon continue south into the Rhodaus Town excavation and are likely to extend to the north and west below the PDA (Gollop 2015).

2.5.16 Comparable late Iron Age agricultural activity is recorded approximately 140m to the north-east of the PDA below Whitefriars (Houliston forthcoming). A contemporary settlement focus, including domestic

structures, has been excavated approximately 225m to the north of the PDA, below the Marlowe Car Park (ECA8625) (Blockley et al 1995).

2.5.17 During the early Roman period (c AD 43–200), the PDA was situated outside the focus of Roman urban development, and approximately 120m south-east of Roman Watling Street (CCUAD 328; MCA 21556; MCA 21595; MCA 21631), the main road connecting Canterbury (Durovernum Cantiacorum) to the Roman port at Dover (Portus Dubris).

2.5.18 Extensive gravel and brickearth extraction took place alongside the road frontage with large quarries identified below the Canterbury Police Station (MCA21674; MKE 4656; No 55, ECA 81444; ECA 8329; ECA 9323; ECA 9324), Augustine House (Helm 2014) and 24a Old Dover Road (ECA 8130) sites. The quarries date to the late first and early second century AD, and are contemporary with the initial phase of Roman town development, for which the quarries provided raw materials (Diack 2005; Hicks 1999; 2002).

2.5.19 A 'gravel bank' reported from the Canterbury Police Station site might relate to landscaping for a possible Roman amphitheatre (MKE 4656; ECA 8329) (Diack 2005).

2.5.20 Following construction of the Roman town wall (SAM KE 23) c AD 270–290 the former quarries appear to have been used as extra-mural refuse dumps. During this period Watling Street had become the principal route into the Roman town through Ridingate (MCA 22442), and reflected the growing significance of Dover as the main port of entry into Britain.

2.5.21 Some evidence for suburban growth along the frontage of Watling Street comprising both domestic and industrial activities has been identified below the Canterbury Police Station (ECA 8144) and 24a Old Dover Road (ECA 8130). Activity dates from the early second century AD, with a growth in intensity from the late second to early third century, and continuing less intensively into the late fourth century AD. Boundary ditches extending parallel to Watling Street identified at Augustine House (Helm 2010; 2014) and Rhodaus Town (Gollop 2015) potentially mark the south-western limits of this suburban development.

2.5.22 A hollow-way identified below Rhodaus Town and aligned perpendicular to Watling Street might represent a route extending from Watling Street to the south-west, potentially traversing the southern edge of the PDA (Gollop 2015).

2.5.23 The PDA lies within a projected Roman cemetery extending between Wincheap and Old Dover Road (MCA 21820). Burials have been recorded, both within the PDA, comprising two inhumation burials (MCA 21678; MCA 22053; ECA 8371; Jarman 1999), and extending either side at Station Road East (CCUAD 369; CCUAD 647; ECA 8424), at Watling Street roundabout (MCA 21721; ECA 8526), at Canterbury Christ Church Arts Centre (ECA 9367; Boden 2006), at Augustine House (Helm 2010; 2014), at Rhodaus Town (Gollop 2015), and along the route of Watling Street (CCUAD 263; CCUAD 434)

2.5.24 In general the distribution of burials is relatively dispersed, and might represent a number of burial groups rather than a single formal extra-mural cemetery. However, at Rhodaus Town (Gollop 2015) the late Roman burials were more concentrated, with 20 individuals identified, and were placed within an enclosure, situated adjacent and south of the hollow way. The burials were placed in furnished graves, with evidence for coffins and grave goods, including complete pottery and glass vessels and personal items of jewellery.

2.5.25 To the north of the hollow way, below Augustine House a Romano-Celtic type temple was constructed above the former late Iron Age burial and conjectured mound. It is probable that the shrine and cemetery enclosure were contemporary, dated to the early- to mid-fourth century AD. The shrine was associated with deposits of coins, personal items of footwear and jewellery, along with evidence for feasting, probably representing votive offerings and other ritual activities (Helm 2010; Helm 2014).

Anglo-Saxon (c AD 410–1066)

2.5.26 An isolated find spot of an Anglo-Saxon glass bead is recorded at 5a Rhodaus Town (ECA 8952) during unmonitored ground works in the 1960s. The bead might derive from a disturbed inhumation burial (CAT 2006a). A potential for further Anglo-Saxon burials in the vicinity is indicated by a inhumation, dated to the seventh century AD, excavated at 24a Old Dover Road (ECA 8130) (Hicks 1999).

2.5.27 Evidence for associated Anglo-Saxon occupation dated to between the early eighth century AD and early eleventh century AD is recorded at both 24a Old Dover Road (ECA 8130) and the Canterbury Police Station (ECA 8144). Activity appears to have been primarily domestic in character (including refuse pits and a cess pit containing mineralised plant remains), but with evidence of small-scale industries (including metal-working residues, cattle horn working, and pottery stained with pigment used in textile dyeing) also recorded (Diack 2005; Hicks 1999).

2.5.28 Within the adjacent site at Augustine House (Helm 2010; 2014) and Rhodaus Town (Gollop 2015), only limited evidence was recovered, principally residual sherds of pottery dated to the late seventh to tenth century, with the area presumably left as open land.

2.5.29 A 'Viking gold ring' (ECA 8610) dated to the early eleventh century AD was found near to the Dane John mound in 1893.

Medieval (c AD 1066–1540)

2.5.30 Following the Norman invasion in 1066 a motte and bailey castle was established in Canterbury, focused within the circuit of the city wall. The motte was located on the Dane John Mound (SAM KE 44; MCA 21942; MCA 22560) with the inner bailey ditch identified within the Dane John Gardens. At some time between AD 1085 and 1125 the motte and bailey was abandoned following construction of a new stone castle and keep on the south-west side of Canterbury (Renn 1982).

2.5.31 An associated outer bailey defensive works (MCA 22330, MCA 22597) is indicated outside the city wall. Excavation at Station Road East (CCUAD 647) identified a v-shaped ditch over 10m wide and 4m deep forming the western arm of a substantial enclosure (Anderson and Rady 1990; Bennett 1991). Evaluation within the PDA during 1990 (ECA 8307) identified the potential eastern arm of the same enclosure, extending north-west to south-west along the western edge of the former Total petrol filling station forecourt and below the shop/office unit (Rady 1990, 9).

2.5.32 A probable related enclosure dated to the eleventh century, formed by a 2.20m wide by 1.8m deep v-shaped ditch, was recorded to the east of the PDA during the Rhodaus Town excavation (Gollop 2015). The ditch forming the northern side of this enclosure should extend into the southern half of the PDA, and it would seem to be orientated toward the eastern arm of the outer bailey defensive works.

2.5.33 At Augustine House (Helm 2010; 2014), a consecutive sequence of three intercutting ditches dated to between the late eleventh to early fourteenth centuries AD, demarcate a boundary to the rear of medieval properties fronting Old Dover Road. The boundary is recorded in contemporary property rentals held by Christ Church Priory (Urry 1967). Medieval features associated with properties fronting Old Dover Road have been excavated at 24a Old Dover Road (ECA 8130). These included domestic rubbish pits and possible beam-slots indicating the presence of timber buildings on the site. While pottery was mainly of eleventh-century date, occupation probably extended into the sixteenth century (Diack 2005).

2.5.34 Additional medieval activity comprising a low intensity scatter of pits, post-holes and soil deposits has been recorded during excavations at both Augustine House (Helm 2010; 2014) and Rhodaus Town (Gollop 2015).

2.5.35 These features probably relate to activity associated with the twelfth-century AD manor of Dungeon (later Dane John Farm), established within the former outer bailey defensive works.

2.5.36 The Dungeon manor was located in the area now occupied by Rhodaus Close, approximately 40m south-west of the PDA. The associated manorial estate extended from Wincheap to the Old Dover Road (Willson 2006, 23). An alternative location for the manor is indicated by a small group of buildings on an anonymous map of Canterbury dating to c 1640 (Canterbury Cathedral Archives, Map 123) with an eighteenth- and nineteenth-century map suggesting that it may have lain about 200m south. One of these maps (Gostling 1825) shows the Rhodaus Town and Pin Hill mounds with a narrow row of buildings between them, north of the Dane John Manor: a panorama of Canterbury drawn from the Dane John mound (Bogue 1850) suggests that these were late medieval or early post-medieval dwellings.

2.5.37 In 1895 a row of three houses situated on the road frontage of Rhodaus Town, in front of Augustine House, was demolished, during which medieval masonry was observed in the cellars (ECA 8935),

possibly reused stone from St Edmund's Church (MCA 19803), formerly situated in the area of the present Dane John Gardens, and destroyed in AD 1349 (Willson 2006).

Post-medieval (c AD 1540–present)

2.5.38 An alignment of post-holes within the Rhodaus Town site (Gollop 2015) to the south-east probably indicate the original alignment of the pre-Lansdown Road field boundary, possibly of seventeenth to eighteenth century date. Further post-medieval horticultural and agricultural features were present within the Augustine House site (Helm 2010; 2014). Pottery from these ranged from the late seventeenth to early twentieth century in date, indicating that much of the area was open land during this period. Post-medieval horticultural and agricultural land use across the PDA is indicated by seventeenth- to nineteenth-century historic maps.

2.5.39 The existing St Mary Bredin's School building was erected on the adjacent Rhodaus Town (St Mary Bredin) mound (MCA 21705) in c 1860. The school continued to function until 1940 (Willson 2006; Seary 2015).

2.5.40 In 1877 the Kent County Pavilion, later renamed the Canterbury Olympia Skating Rink, was constructed within the PDA immediately to the east of the St Mary Bredin's School. To the east of the Pavillion, within the PDA, the Canterbury Agricultural Hall was established in 1878. The agricultural hall was used for cattle shows and horticultural events. In 1909 the agricultural hall provided a new roller-skating rink, following closure of the Olympia Skating Rink (Seary 2015).

2.5.41 In 1902 the Pavillion was purchased by the Canterbury Motor Company. During the First World War production was redirected towards the munitions. By 1931 the Canterbury Motor Company had also acquired the Canterbury Agricultural Hall.

2.5.42 By 1935 the Canterbury Motor Company was taken over by the Rootes Brothers, and the frontage of both the Pavillion and Agricultural Hall modified to provide improved facilities including space for a car showroom and offices. During the Second World War the garage was requisitioned by the War Department offering army training in mechanics and a fire fighting unit.

2.5.43 An air-raid shelter, with room for 220 students and staff was provided for the adjacent St Mary Bredin School. This lay in the playground, apparently at its south-western end. However, from November 1940, the school was closed and the shelter opened to the public. No ordnance is shown to have been dropped within the PDA during the Second World War. Adjacent recorded bomb impact sites are located at: Augustine House; to the rear of properties fronting Lansdown Road; south of Rhodaus Close, north of the railway; within the grounds of the Dane John Gardens; and near to the Watling Street roundabout, Rhodaus Road.

2.5.44 The former school building served as a restaurant during and after the war but it and the mound were incorporated into the garage complex in 1953 (Willson 2006, 3.8). In 1969 Rootes was bought by Chrysler, who reverted the garage to its old name of Canterbury Motor Company. In the same year, the historic topography was significantly changed by the infilling of the city ditch and widening of the road to form part of the ring-road (Willson 2006). In 1981 the garage was bought by Peugeot, and in 1989 the remaining portion of the former Kent Pavilion was demolished to make way for a petrol filling station (Seary 2015).

2.5.45 While no trace of the former Pavilion survived, much of the structure of the Canterbury Agricultural Hall had been retained as part of the Peugeot Garage and car showrooms until its demolition in 2015 (Seary 2015).

3 Project archive

3.1 General

3.1.1 The project archive was prepared in accordance with *Management of Research Projects in the Historic Environment* (MoRPHE, Historic England 2015), and *Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation* (AAF 2011).

3.1.2 The project archive is presently held at the office of the Canterbury Archaeological Trust (92a Broad Street, Canterbury, Kent CT1 2LU)

3.1.3 A digital copy of the project archive is available under the project code: PGC using the CAT Integrated Archaeological Database (IADB), a secure password protected online resource available at http://iadb.canterburytrust.co.uk/portal_main.php?DB=CAT.

3.2 Documentary archive

3.2.1 All project fieldwork records have been collated, checked for consistency, and scanned for digital archiving in the IADB. Plan and section drawings have been scanned and digitised using AutoCAD 2015. All hardcopy fieldwork records are complete and in good condition. Quantification of fieldwork records is shown in Table 1.

Table 1. Fieldwork records

Record type	Quantity	Format
Context registers	112	A4
Context record sheets	2595	A4
Drawing registers	39	A4
Drawing sheets	810	A3
Registered finds registers	24	A4
Photographic registers	143	A4
Digital photo images	5915	TIFF image file
Environmental sample registers	31	A4
Soil sample sheets	475	A4

3.3 Material archive

3.3.1 All finds recovered during the project have been processed, catalogued and packaged in accordance with the United Kingdom Institute for Conservation Guidelines (UKIC 1990). The finds have all been washed and marked where appropriate.

3.3.2 Bulk finds are contained by context in polybags and stored within 'standard' (17'×12'×9' with 4' deep lift off lid, capacity 0.03 cubic metres) or 'half sized' (17'×12'×4' with 4' deep lift off lid, capacity 0.015 cubic metres) brass wire-stitched museum boxes (1900 micron double kraft-lined, pH 6.5–8) supplied by the Ryder Box Co. Quantification of bulk finds is shown in Table 2.

Table 2. Bulk finds by material

Material	Quantity	Weight (g)
Bone	379	47114.60
Ceramic	16	2119.90
Ceramic building material	428	90630.10
Flint	164	9616.50
Geological object (fossil/geode)	3	28.00
Glass	22	6460.60
Industrial material	48	48784.10
Organic matter	1	1.00
Pottery	3751	39302.80
Shell	26	1618.00
Stone	25	26767.30
Unidentified material	2	191.00

Material	Quantity	Weight (g)
Wood	17	81.10
Total	**4,882**	**272,715.00**

3.3.3 Registered finds (including all metal finds) are stored in sealable plastic containers, with silica gel and a humidity indicator strip, as required. Quantification of registered finds is shown in Table 3.

Table 3. Registered finds by material

Material	Quantity	Weight (g)
Bone	40	68.20
Ceramic building material	12	10349.50
Copper alloy	90	486.76
Flint	13	326.20
Glass	11	1133.60
Gold	1	0.10
Iron	1698	51297.40
Iron, bone	1	10.20
Leather	20	136.00
Multiple	1	18.90
Pottery	57	3846.90
Silver	5	31.70
Stone	26	35544.20
Unidentified	13	204.10
Wood	5	3.50
Total	**1,993**	**103,457.26**

3.3.4 Environmental samples were collected from a representative sample of feature types. Bulk soil samples were collected for general biological analysis and retrieval of micro remains. Samples for pH testing were collected from archaeological deposits (burials) and from background geology. Monolith samples comprising intact blocks of sediment, were collected from intact soil profiles for analysis of soil formation processes. Quantification of environmental samples is shown in Table 4.

Table 4. Environmental samples

Environmental sample type	Quantity
Bulk soil sample (non-burial)	108
Bulk soil sample (burials)	305
pH samples	260
Monolith samples	9
Total	**682**

4 Stratigraphic description

4.1 Stratigraphic data

4.1.1 A total of 2608 contexts were recorded during the excavation. These have been combined into 643 sets (prefixed S), representing individual archaeological features, deposits or interventions. Sets have been combined into 33 groups (prefixed G) and into eight main activity phases (prefixed P). Phases span the late Iron Age/early Roman, early/mid Roman, late Roman, Anglo-Saxon, early medieval, high medieval, late medieval and post-medieval to modern chronological periods.

4.1.2 A summary description of each group is presented below by phase.

4.2 Geology

G1 Geology (Plate 3)

S1106, S1107, S1200, S1262

4.2.1 Observed geological deposits comprised Head deposit of clay and silt (S1264, S4072) overlying Second Terrace River Gravels (S1106, S1107, S1200, S1262). Monitoring during remediation groundworks and during excavation of deeper features exposed underlying solid geology, identified as Seaford Chalk (S4177).

4.3 Prehistoric

4.3.1 No features or deposits were attributable to the prehistoric period.

4.3.2 An assemblage of prehistoric worked flint, comprised largely of flaked debitage and a small number of blades and blade-like flakes, along with cores, scrapers and retouched pieces (including serrated blades), was broadly dated to the Neolithic to late Bronze Age (c 3500 BC–800 BC) periods. A small assemblage of pottery was also recovered, comprised of sherds attributable to the mid to late Bronze Age through to the late Iron Age (c 1600 BC–AD 50) periods.

4.3.3 Although recovered as residual material, both assemblages indicate the presence of prehistoric settlement related activities taking place within the surrounding vicinity.

4.4 Phase 1 Late Iron Age/early Roman (c 25 BC–AD 70)

4.4.1 Remnants of a soil horizon (G2), a sunken lane or trackway (G3) and a coaxial field system (G4) were all attributed to a transitional late Iron Age to early Roman date. Elements of all three groups have been previously observed to the south and east of the PDA during adjacent investigations at Augustine House (Helm 2014) and Rhodaus Town (Gollop 2015).

G2 Soil horizon (Fig 3)

S2534, S3350, S3976, S5010, S5016, S5017

4.4.2 Remnants of a soil horizon survived above the geological Head deposit in six separate locations across the PDA. The soil horizon, which measured up to 0.26m thick, was interpreted as a cultivated soil horizon, and originally extended across the full extent of the PDA, with a comparable soil also recorded at Rhodaus Town (Gollop 2015, group 4). Finds included burnt and worked flint, abraded late Iron Age/early Roman and Roman pottery and Roman ceramic building material.

G3 Sunken lane (Fig 3; Plates 4–5)

S5093, S5104

4.4.3 A linear feature, aligned north-east to south-west, extended for a visible length of 58.6m before continuing beyond the excavation area. The feature was excavated in two interventions (S5093 and S5104), and had a maximum visible width of 4.3m and depth of 1.65m. Recovered pottery indicated a date beginning in 25 BC–AD 70, but with later fills suggesting it was in use at least until the end of the Roman period and possibly into the Anglo-Saxon period.

4.4.4 The feature forms a continuation of a sunken lane or trackway previously investigated at Rhodaus Town, with a combined length of 128m now exposed, and measuring up to 17.2m wide (Gollop 2015, group 11).

G4 Field system (Fig 3; Plates 6–8)

S3020, S3047, S3049, S3088, S3090, S3194, S3311, S3314, S3320, S3329, S3395, S3397, S3437, S3445, S3627, S3629, S5075, S5150, S5180, S5199, S5213, S5251, S5268

4.4.5 Six field ditches represented a coaxial field system. Ditch 1 (S3395, S3397, S3437, S3445, S3627, S3629, S5075, S5268 and S5213), ditch 2 (S3194, S3311, 3314, 3320), ditch 3 (S3088) and ditch 4 (S3020, S3047, S3049, S3090) were aligned north-west to south-east, perpendicular to the sunken lane (G3). Ditch 5 (S3329) and ditch 6 (S5150, S5180, S5199, S5251) were aligned north-east to south-west.

4.4.6 Pottery from these ditches was mainly of c AD 130–270 date, associated with infilling during Phase 2, but with a small proportion of abraded earlier sherds, dated c AD 0–70/70–150, and attributed to field marling. Contemporary linear features below Augustine House (Helm 2014, 11) and Rhodaus Town (Gollop 2015, group 5) represent a continuation of this field system to the south and east.

4.5 Phase 2 early/mid Roman (c AD 70–300)

4.5.1 Phase 2 was represented by a reorganisation of land use during the Roman period. The phase 1 co-axial field system (G4) was replaced by two parallel boundary ditches (G5 and G6) spaced between 50m and 52m apart. Potentially as early as the late first century AD, land to the north of boundary ditch (G5) was utilised for clay and gravel extraction (G7), with associated occupation activity represented by miscellaneous pits (G8). No evidence for activity south of boundary ditch (group 6) was observed. The sunken lane (group 3) continued in use throughout phase 2.

G5 North boundary ditch (Fig 4; Plates 9–10)

S3034, S3039, S3045, S3058, S3062, S3075, S3076, S3095, S3098, S3109, S3125, S3127, S3134, S3197, S3199, S3201, S3228, S3232

4.5.2 A boundary ditch, aligned north-east to south-west, traversed the PDA continuing beyond the limit of excavation. The ditch was visible at its north-east end for a length of 36.8m, but is likely to have continued further to the south-west, though this was unclear due to later truncation. The ditch was investigated in ten interventions (S3034, S3062, S3075, S3076, S3098, S3125, S3134, S3197, S3201, S3232) and measured between 1.35m and 2.73m wide, by between 0.32m and 0.7m deep, and had a rounded, concave base. At least one recut (S3045, S3058, S3095, S3099, S3109, S3127, S3199, S3228, S3232) was visible along the length of the ditch, measuring between 1.17m and 2.13m wide by between 0.44m and 0.84m deep.

4.5.3 Recovered pottery had a broad date range spanning AD 43–420, much of which appeared to be abraded and residual in date. The ditch recut probably dated to the late fourth century AD, indicated by three fresh sherds from a jar in Richborough/Canterbury grog-tempered ware of c AD 350–420. Other significant finds included seven Roman coins comprising one of a late third-century date (SF 15) and five of mid fourth-century date (SF 24, 37, 39, 79, 80, 83), a copper alloy bracelet (SF 69), two copper alloy pins (SF 27, 82), and a copper alloy ring (SF 28).

G6 South boundary ditch (Fig 4; Plate 11)

S5054, S5067, S5070, S5092, S5124, S5283

4.5.4 A boundary ditch, aligned north-east to south-west, traversed the PDA for a visible length of 30.9m continuing beyond the limit of excavation. The ditch was investigated in five interventions (S5054, S5070, S5092, S5124, S5283), and measured between 2.83m and 3.39m wide, by between 0.32m and 0.86m deep, and had a rounded, concave base. Pottery recovered from the ditch fills indicated a date range spanning AD 43–300.

4.5.5 A potential ditch recut (S5067) was observed truncating set 5070. The recut measured 2.79m wide by 1.43m deep. No evidence for the continuation of this recut in the other interventions was identified. No pottery was recovered from the recut fills.

G7 Quarry pits (Figs 4, 11–14; Plates 12–13)

S1070, S1078, S1080, S1082, S1136, S1144, S1162, S1230, S1233, S1235, S1244, S1271, S1282, S1288, S1292, S1294, S1297, S1298, S1306, S1316, S1330, S1335, S1344, S1360, S1361, S1370, S1376, S1379, S1384, S1385, S1387, S1393, S1405, S1406, S1415, S1416, S1419, S1422, S1427, S1429, S1432, S1437, S1438, S1444, S1445, S1448, S1449, S1451, S1452, S1454, S1458, S1460, S1465, S1466, S1474, S1476, S1484, S1492, S1493, S1498, S1503, S1504, S1505, S1509, S1513, S1530, S1532, S1533, S1538, S1541, S1544, S1548, S1549, S1564, S1579, S1580, S1587, S2005, S2006, S2009, S2011, S2175, S4071, S4094, S4109, S4174

4.5.6 Some 86 separate cut features were interpreted as clay and gravel extraction pits. The features were concentrated to the north of the G5 boundary ditch, and covered an area of approximately 2,347m^2, representing an extensive area of quarrying activity. In general, these features were exposed to the level of the formation horizon of the proposed development only, and as such were mapped following machine clearance of made ground but were not fully excavated. Two stepped, machine cut trenches (trench 1 and 2), forming an L shape, were excavated to sample features where groundworks associated with construction of a basement and temporary crane pit were to be sited. The machine cut trenches extended to a third trench, previously disturbed by installation of underground fuel storage tanks, which was archaeologically monitored during their removal.

4.5.7 Where exposed, pits had rounded edges and appeared to be sub-circular in shape, with observed extents of between 0.98m and 25.08m in length, and surviving depths of between 0.49m and 2.75m. Quarrying appeared to have been piecemeal, with pits dug to remove the overlying head deposits and underlying river gravels, but were not observed extending into the underlying chalk. Pits were rapidly infilled with redeposited clay and gravel waste presumably from adjacent pits, with pits often truncating the edges of earlier pits. No finds were recovered from the quarry pit backfills. This contrasts with adjacent quarrying activity previously observed below Augustine House and the Canterbury Police Station, where pits had been cut in the late first century AD and then appeared to have been left open until the late third and fourth century AD when they were utilised as an extra-mural refuse dump (Helm 2014, 139).

G8 Pits (Fig 4; Plates 14–15)

S1005, S1009, S1013, S3018, S3032, S3056, S3078, S3112, S3114, S3304, S3306, S3318, S3326, S3399, S5174, S5230, S5269

4.5.8 Seventeen sub-circular cut features were interpreted as domestic refuse pits. Pits S1005, S1009, S1013, S3018, S3032, S3056, S3078, S3112 and S3114 were located between the G7 quarry pits and the G5 boundary ditch; the southern edge of pit S3078 was truncated by the later recut of the G5 boundary ditch (S3045). Pits S3304, S3306, S3318, S3326, S3399, S5174, S5230 and S5269 were located between the G5 boundary ditch and the G6 boundary ditch. The pits measured between 0.38m and 4.53m long by between 0.36m and 2.72m wide, and between 0.10m and 1.17m deep. Pottery recovered from pit fills indicated a date range between c AD 150 and c AD 300.

4.6 Phase 3 late Roman (c AD 300–410+)

4.6.1 A formal burial ground (G9), containing some 219 inhumation burials and one cremation burial, was established on the plot of land demarcated by the G5 north boundary ditch and G6 south boundary ditch. Both boundary ditches are likely to have been retained throughout the active use of the cemetery, as was the G3 sunken lane located to the south. The burial ground is contemporary with associated funerary and religious activity, including a separate enclosed cemetery at Rhodaus Town (Gollop 2015, groups 19 and 20), and further inhumation burials and a Romano-British temple located below Augustine House (Helm 2014).

G9 Cemetery (Fig 5; Plates 16–30)

Graves 1–220

4.6.2 The plot of land situated between the G5 north boundary ditch and G6 south boundary ditch was used as a formal burial ground. A total 219 potential inhumation burials (graves 1–192 and 194–220) and a single cremation burial (grave 193) were recorded. The formal burial ground measured 51m wide

(north-west to south-east) by at least 68m long (north-east to south-west), with burials likely to continue beyond the investigated area to the north-east and south-west. One burial (grave 76) was located outside of the burial ground immediately south of the G6 boundary ditch.

4.6.3 Inhumation burials were contained in rectangular earth-cut graves, with generally straight vertical sides, square or rounded edges and flat bases. Graves were generally aligned approximately north-east to south-west, and appear to have been distributed in formal rows extending perpendicular to the G5 and G6 boundary ditches. Exceptions comprised graves 3, 159, and 198 aligned north-west to south-east. Few instances of intercutting graves were noted. In all but two instances (grave 210 truncating grave 216, and grave 211 truncating grave 214), where graves were seen to intercut the new burial appeared to purposely avoid disturbance of human remains.

4.6.4 Of the 219 inhumation burials excavated, the remains of 195 individuals were recovered. Overall preservation of human skeletal material was poor. In some cases, human remains were represented by a soil stain, but no bone. The cremation burial contained the remains of at least one individual.

4.6.5 The majority of individuals were laid out in a supine position, with legs extended and the head at the south-west end. One individual was laid in a prone position (grave 16), and in six cases individuals were placed with their heads at the north-east end (graves 7, 8/16, 12, 109, 152 and 160). Two graves contained multiple burials, one containing two children (grave 2; Plate 19), the other containing one adult and two children (grave 9/10/11; Plate 18). Both multiple burials were located side by side in the same cemetery row. This row also contained two decapitation burials (grave 2 and grave 141; Plates 19 and 20).

4.6.6 One hundred and seventy-eight graves had evidence for the presence of grave furniture. This comprised evidence for either a timber coffin, represented as a timber stain in the soil and/or in situ iron nails and iron coffin fittings (106 graves); stone lining, comprising flint nodules, and less commonly chalk, tufa, ironstone greensand and sandstone (9 graves), or both (63 graves). One cist burial, with a lid formed of two essentially complete tegulae roof tiles (grave 207; Plates 21 and 22), was also recorded. The remaining forty graves had no evidence of grave furniture.

4.6.7 Twenty-nine graves contained objects associated with costume, dress or personal adornment deliberately deposited with the deceased, while six graves contained other deliberately placed objects (distinct from grave furnishing or costume related objects).

4.6.8 A preliminary chronology for active use of the cemetery has been established. Residual pottery recovered from grave backfills was of mainly late second-century to third-century date, with latest wares extending to the early fourth century and it is suggested that this material might relate to pre-cemetery activity within the vicinity spanning c AD 170–310+. Seven Roman coins provide *terminus post quem* dates for seven graves between the later third century to mid fourth century AD. The single cremation burial (grave 193), which comprised a cinerary urn and two accompanying vessels, a dish and ampulla, was dated to the late fourth century (Plate 30). Two sherds of a potential Romano-Saxon import were recovered from grave 84 and grave 146, dated to the late fourth and early fifth century. Grave 152 contained two silver buckles paralleled by types from the Danube and Black Sea region of eastern Europe, dated sometime between the very late fourth century and early fifth century (Plates 26–29).

4.6.9 Commencement of cemetery activity is therefore suggested to date from the early fourth century, with use of the cemetery continuing until the early fifth century.

4.7 Phase 4 Anglo-Saxon (c AD 410–1050)

4.7.1 A very small assemblage (3 sherds) of residual early to mid Anglo-Saxon (c AD 410–720) pottery demonstrated that only limited activity continued in the vicinity following cessation of the G9 cemetery in the early fifth century.

4.7.2 Activity was resumed from the mid to late Anglo-Saxon period (c AD 720–1050), represented by refuse pits (G10) containing both domestic and metalworking waste.

G10 Pits (Fig 6; Plates 31–35)

S2510, S2519, S2521, S2523, S2532, S2533, S2552, S2562, S2575, S2584, S2586, S2591, S3012, S3036, S3084, S3117, S3119, S3121, S3158, S3159, S3285, S3297, S3524, S3663, S3719, S3874, S5030, S5110, S5224

4.7.3 Twenty-five pits were distributed in an approximate north-east to south-west scatter across the area of the former G9 cemetery. The pits were sub-rectangular to circular in shape, and varied between 0.40m to 3.26m long by 0.26m to 2.75m wide. Bases were concave to flat and between 0.09m to 1.40m deep. Two post-holes (S3117 and S3119) were identified at the base of sub-rectangular pit S3121 (perhaps representing a sunken-featured building). Single stake-holes (S2523 and S2532) were also identified in the base of pits S2521 and S2533, respectively.

4.7.4 Pottery recovered from pits S2519, S2521, S2552, S3036, S3084, S3117, S3121, S3159, S3159, S3285, S3297, S3524, S3719, S5030 and S5224, indicated a date range of between c AD 625–925. Pits S2510, S2519, S3012, S3036, S3084, S3121, S3285, S3297 and S3524 all contained ironworking residues, including a large furnace bottom from pit S2510 and forge bottoms from pits S2519 and S3036, indicating that both smelting and smithing was undertaken at or within the immediate vicinity. Other waste, including animal bone and charred grains indicated more domestic-like refuse was also being deposited, including a significant proportion of sprouted barley grains indicative of malting, while mineralised plant remains demonstrated that sewage was present amongst the material being dumped.

4.8 Phase 5 early medieval (c AD 1050–1225)

4.8.1 The early medieval period was marked by the cutting of a large ditch (G11) traversing the north-west extent of the PDA. The ditch formed part of an extra-mural defensive circuit associated with a Norman motte and bailey castle (Anderson and Rady 1990; Rady 1990). A concentration of pits (G12) located outside the defensive circuit extended west from the partially infilled G11 ditch and across the area of former G7 clay and gravel extraction pits. Towards the end of the early medieval period the G11 ditch was recut by a narrower and shallower ditch (G13), which truncated some of the G12 pits. To the south, another boundary, comprising a ditch with at least three recuts (G14), traversed the excavated area from north-east to south-west. This boundary had been previously investigated below Rhodaus Town to the south-west (Gollop 2015, group 23 and 24).

G11 Extra-mural defensive ditch (Figs 7, 13–14; Plates 36–41)

S2174, S2278, S2953

4.8.2 A substantial ditch was exposed along the north-west edge of the excavation area. The ditch extended on a north-west to south-east alignment and was observed for 46m before continuing beyond the north-west edge of excavation. At the south-east end, the ditch made a right-angled turn to the south-west, continuing beyond the edge of excavation and extending to the south of the adjacent former St Mary Bredin school.

4.8.3 Excavated in three interventions (S2174, S2278 and S2953), up to 5.03m width of ditch was exposed. An estimate of the full ditch width indicated a potential total width of over 12m. The ditch cut into the underlying chalk bedrock to a depth of 8.83m OD at the south-east end, dropping to 7.98m OD at the north-west end, and had a regular, slightly concave base, up to 3.4m wide.

4.8.4 Pottery from the ditch fills had a date range of between c AD 1050 and 1150, with a small proportion of sherds potentially dated as late as c AD 1225. The basal fills of the G11 ditch were waterlogged. Recovered plant remains revealed that it would have been dominated by thistles, perhaps propagated to provide an additional barrier, while aquatic insect remains confirmed that the base had contained water for at least some of the time. Nine intact monolith samples (S2174, samples <214>, <215> and <216>; S2953, samples <234>, <235>, <236>, <237>, <240> and <241>) were collected from the ditch infill to undertake micromorphological analysis of the deposits and to recover microfossils, such as pollen and diatoms (Plate 40).

G12 Pits (Figs 7, 11–14)

S1038, S1057, S1059, S1112, S1115, S1150, S1151, S1164, S1174, S1181, S1182, S1184, S1185, S1221, S1252, S1265, S1266, S1468, S1470, S1470, S1480, S1482, S1485, S1488, S1488, S1488, S1488, S1490, S1522, S1545, S1578, S1583, S2090, S2245, S2280, S2295, S2427, S2592, S2934, S2952, S2954, S2961, S2985, S2987, S3162, S3212, S3216, S3309, S3323, S4062, S4064, S4103, S4148, S4156, S4162

4.8.5 Fifty-five pits were attributed to phase 4 activity, potentially representing a mixture of both refuse disposal and quarrying. Pits S2280, S2295, S2427, S2934, S2952, S2954, and S2961 truncated the partially infilled G11 ditch. Pits S2592, S3309 and S3323 were located to the south-east within the area of the former phase 3 G9 cemetery. The remaining pits extended to the north-east across the area of the former phase 2 G7 quarrying.

4.8.6 The majority were investigated in section only, and their full extents were not determined. Where visible, pits had maximum lengths of between 0.35m and 12.57m, and varied between 0.20m and 2.78m in depth.

4.8.7 Pottery recovered from pits S2592, S1112, S1150, S1151, S1164, S1181, S1182, S1184, S1221, S1266, S1490, S1522, S1583, S2090, S2245, S2295, S2427, S2934, S2961, S2985, S3162, S3212, S3216, S3309, S3323 and S4103 was mainly dated c AD 1050–1175, with a smaller proportion dated c AD 1175–1250. Pits S1150, S1151, S1164, S1182, S1184, S1468, S1583, S2090, S2427, S3162, and S3309 all contained ironworking residues. This included hearth lining from pits S1151, S1164, S2090 and S3309, a large fresh piece of tap slag from pit S1468, and a forge bottom from pit S3309. Potentially, this waste represents a continuation of the industry identified during the previous phase 4 mid to late Anglo-Saxon activity. As with the G10 pits, waste more typical of domestic refuse, including animal bone and charred and mineralised plant remains, was also present.

G13 Recut extra-mural defensive ditch (Figs 7, 13–14)

S2027, S2413, S4198, S4223

4.8.8 The partially infilled but still visible G11 ditch was recut by ditch G13, effectively representing the re-establishment of the defensive circuit. The recut G13 ditch, which also truncated the later G12 pits, was significantly reduced in scale. Investigated in four interventions, the recut had a visible width of up to 8.02m. The ditch cut through the previously disturbed ground to a depth of between 11.20m OD at the south-east end, dropping to 10.78m OD at the north-west end, and had an irregular, slightly concave base, up to 2.65m wide.

4.8.9 Pottery from the recut ditch had a date range focused between c AD 1200 and 1275, with some earlier sherds (c AD 1050–1225) also present.

G14 Southern boundary ditch (Fig 7; Plate 42)

S5036, S5040, S5044, S5048

4.8.10 A north-east to south-west boundary ditch traversed the full width of the south excavation area, continuing beyond the north-east and south-west edges of excavation. The ditch was observed for a length of 58.8m and investigated in two interventions, and comprised of up to three potential recuts. The earliest ditch cut could not be determined stratigraphically. Two initial cuts (S5044 and S5048), both containing pottery dated to c AD 1050–1150, were truncated by a later recut S5040, containing pottery dated to c AD 1050–1200. This was itself cut by S5036. No dating evidence was recovered from S5036, and it is possible that the latest use of this ditch extended into phase 6.

4.8.11 All the ditch cuts followed the same approximate line, and measured between 1.49m and 2.26m wide by between 0.92m and 1.60m deep. Profiles for earlier cuts S5044 and S5048 were V-shaped, while the later cuts S5040 and S5036 were U-shaped.

4.9 Phase 6 high medieval (c AD 1225–1350)

4.9.1 A hollow or depression remained visible along the length of the infilled G11 extra-mural defensive ditch and G13 recut. From the early to mid-thirteenth century, layers of redeposited Head clay and silt (G15) were purposely laid within this depression to consolidate the ground in preparation of a metalled surface (G16). The metalled surface potentially represented a trackway following the line of

the former defensive circuit. This was overlain by a sequence of further alternating soil layers (G17, G19, G21) and metalled surface (G18, G20), representing ongoing infilling and resurfacing of the potential trackway through the high medieval period. Potential refuse pits (G22) were seen to cut the latest G20 metalling and soil layers (G21). These were sealed by a further sequence of soil layers (G23) representing its final abandonment.

G15 Consolidation (Fig 14; Plate 43)

S4205

4.9.2 Layers of redeposited Head clay and silt were observed in a single intervention (S4205) laid over the depression formed by the G11 defensive ditch and G13 ditch recut. The layers, which in places extended up to 1.25m thick, represented purposeful dumping of 'clean' earth, presumably to consolidate the former ditch before laying of the G16 metalled surface. No finds were recovered from these clean deposits.

G16 Metalled surface (Figs 13–14)

S2411, S2975

4.9.3 Compacted layers of flint gravel held within a matrix of clay were exposed in two interventions (S2411 and S2975), forming a metalled surface, potentially representing a trackway, following the line of the former circuit of the extra-mural defensive ditch.

4.9.4 The surface was laid above G15 consolidation S4205 in intervention S2975, and above infilled G13 recut ditch in intervention S2411. The full extent of the metalling was not exposed, but measured at least 5.31m (S2975) and 8.57m (S2411) in width, and up to 0.47m (S2975) and 0.51m (S2411) in thickness.

4.9.5 A small assemblage of finds included four sherds of pottery dated c AD 1150–1225, and an iron horse shoe (SF 554) and nail (SF 556), all recovered from S2411.

G17 Layers (Figs 13–14)

S2409, S2412

4.9.6 A sequence of silty layers overlay the G16 metalled surface. Layers S2412 were formed above G16 S2411 and comprised 18 separate deposits varying between 0.02m and 0.56m thick, with a total combined thickness of up to 0.94m. Layers S2409 were formed above G16 S2975 and comprised 14 separate deposits varying between 0.08m and 0.53m thick, with a combined total thickness of up to 0.77m. Pottery dated to c AD 1150–1225 was recovered from S2412.

G18 Metalled surface (Figs 13–14)

S2406, S4033

4.9.7 A metalled surface formed of compacted flint gravel in a clay matrix was laid over the G17 soil layers, potentially representing the reinstatement of the G16 metalled surface. Metalled surface S2406 overlay G17 layers S2412, and measured at least 5.21m wide by up to 0.34m thick. Metalled surface S4033 overlay G17 layers S2409 and measured at least 4.90m wide by up to 0.83m thick. No dating evidence was recovered.

G19 Layers (Figs 13–14)

S2405, S4001

4.9.8 A sequence of silty layers overlay the G18 metalled surface. Layers S2405 were formed above G18 metalled surface S2406 and comprised eight separate deposits varying between 0.18m and 0.50m thick, with a total combined thickness of up to 0.67m. Layers S4001 were formed above G18 metalled surface S4033 and comprised eight separate deposits varying between 0.15m and 0.68m thick, with a total combined thickness of up to 0.91m. Pottery recovered from S2405 was dated to c AD 1225–1350, and pottery from S4001 was dated to c AD 1300–1375. Other notable finds included a further two iron horse shoes (SF 567 and SF558) and a copper alloy weight (SF101).

G20 Metalled surface (Figs 13–14)

S2404, S4128 (and wheel-rut S2401)

4.9.9 A final layer of metalling formed of a compacted flint gravel in a clay matrix was laid over the G19 soil layers. Metalled surface S2404 overlay G19 layers S2405, and measured at least 5.89m wide by up to 0.19m thick. Metalled surface S4128 overlay G19 layers S4001 and measured at least 8.04m wide by up to 0.20m thick. A potential wheel-rut (S2401), aligned north-west to south-east, was worn into the surface of metalled surface S2404. Recovered pottery had a date range of c AD 1250–1350. A copper alloy pin (SF551) was recovered from the surface of S2404.

G21 Layers (Figs 13–14)

S2403, S4051

4.9.10 A final sequence of silty layers overlay the G20 metalled surface. Layers S2403 were formed above G20 metalled surface S2404 and comprised two separate deposits varying between 0.08m and 0.33m thick, with a total combined thickness of up to 0.33m. Layers S4051 were formed above G20 metalled surface S4128 and comprised eight separate deposits varying between 0.16m and 0.53m thick, with a total combined thickness of up to 0.84m. Pottery was limited to two sherds from S4051 dated to c AD 1175–1250.

G22 Pits and post-holes (Figs 8, 13–14; Plate 44)

S2576, S3010, S3026, S4046 S4088, S4195, S4224

4.9.11 Five pits (S3026, S4046, S4088, S4195, S4224) and two post-holes (S2576, S3010) were attributed to phase 6. Pits S4046, S4088, S4195 and S4224 were observed on the western part of the site, truncating G21 layers S4051 (pits S4046 and S4088), G20 metalled surface S4128 (pit S4224) and the G13 ditch recut S4223 (pit S4195). Pit S3026 and post-holes S2576 and S3010 were situated in the eastern part of the site.

4.9.12 The pits had maximum visible extents of between 0.98m and 2.47m in width, and between 0.27m and 0.61m in depth. The post-holes had maximum visible extents of between 0.54m and 0.72m in width, and between 0.28m and 0.43m in depth.

4.9.13 Pottery recovered from pit S3026 and post-holes S2576 and S3010 was dated to c AD 1200–1350. Pottery from pit S4224 was dated c AD 1475–1550, but this material is likely to be intrusive.

G23 Layers (Figs 13–14)

S2348, S4077

4.9.14 A sequence of layers comprised of intermixed silty clay soils overlay the G22 pits in the western part of the excavation, formed within the still extant hollow of the former G11 ditch and G13 recut. Layers S2348 overlay G22 pit S4195 and comprised six separate deposits varying between 0.09m and 0.62m thick, with a total combined thickness of up to 0.98m. Layers S4077 overlay the G22 pits S4046, S4088 and S4224 and comprised nine deposits varying between 0.03m and 1.22m thick, with a total combined thickness of up to 1.22m. Pottery from both sets of layers had a date range of c AD 1250–1350.

4.10 Phase 7 late medieval (c AD 1350–1550)

4.10.1 During the late medieval period the excavated area appeared to have been used for agriculture. Recorded archaeology comprised a dispersed scatter of pits (G24), a sequence of soil layers (G25), and three linear features (G26), potentially representing field ditches.

G24 Pits (Figs 9, 11 and 14; Plate 45)

S1573, S1574, S1575, S1576, S1577, S2372, S2383, S2999, S3022, S3069, S3256, S3278, S3280, S3284, S3334, S3341, S3708, S4012, S4023, S4026, S4027, S4048, S4085, S5085

4.10.2 Twenty-four pits were attributed to late medieval activity. No clear pattern in the distribution of pits was evident. The pits varied between 0.26m and 2.36m in length by between 0.20m and 1.58m in

width, and between 0.13m and 1.57m depth. Residual pottery of Roman date was recovered from pits S3114, S3708 and S4026. Other finds included late medieval brick and tile from pit S3284, and a fragment of pale green glass (BF1080) from S3284.

G25 Soil layers (Figs 9, 11–14)

S1018, S1096, S1196, S1473, S1496, S1511, S2004, S2057, S2118, S2162, S2246, S2261, S3330, S4008, S4010

4.10.3 A series of relatively homogenous silty clay soil layers was recorded, surviving in the northern half of the excavated area exposed during machine ground reduction. The layers were excavated in interventions across the area of the G7 quarrying and extra-mural defensive ditch G11 and subsequent recut G13. The deposits, which survived up to 1.68m thick, potentially extended into the southern half of the excavated area, but apart from S3330, had largely been removed by later landscaping. Pottery from these deposits had a date range focused between c AD 1350 and 1550.

G26 Linear features (Figs 9 and 13; Plates 46–47)

S2060, S2067, S2075, S2333, S2130, S3219, S3286

4.10.4 Three linear features truncated the G24 pits and G25 soil layers. The linear features were aligned perpendicularly to each other and potentially represent field boundaries. Linear 1 (S2060, S2067, S2075, S2333) was aligned north-west to south east, and had a visible length of 18.76m, its south-east extent truncated by a modern intrusion. The linear measured between 0.42m and 0.47m wide, flaring to 2.48m wide at its south-east end, by up to 0.32m deep. Linear 2 (S2130, S3219) and linear 3 (S3286) were both aligned north-east to south-west, and were spaced approximately 8m apart. Linear 2 had a visible length of 21.30m and measured between 0.58m and 1.28m wide, by up to 0.45m deep. Linear 3 had a visible length of 7.5m and surviving dimensions of up to 1.45m wide by 0.12m deep. Pottery recovered from linear features 1 and 2 were all residual, with the latest pottery sherds dated to between c AD 1250 and 1350.

4.11 Phase 8 post-medieval to modern (c AD 1550+)

4.11.1 Land use continued to be horticultural through the post-medieval period until the later part of the nineteenth century, when the Kent County Pavilion, and then the Canterbury Agricultural Hall were established between 1877 and 1878, respectively. Features attributed to this phase comprised pits (G27), post-holes (G28) and soil layers (G29). Elements of the former Kent County Pavilion and Canterbury Agricultural Hall buildings were recorded (G30), along with later air-raid shelters (G31) installed during the Second World War. The latest features comprised modern intrusions (G32) and machine removed deposits (G33).

G27 Pits (Figs 10 and 14; Plates 48–53)

S1003, S1066, S1188, S1194, S1301, S1499, S1507, S2054, S2070, S2407, S3016, S3037, S3086, S3133, S3230, S3251, S3254, S3282, S3406, S3407, S3409, S3451, S3457, S3508, S5272, S5272

4.11.2 Twenty-six pit features were located across the excavated area, attributed to post-medieval activity. The majority are likely to represent intermittent refuse disposal. However, three linear pits (S3406, S3409, S3457) potentially related to garden or horticultural activity and one notably large pit (S2054), measuring 17.5m by 14m wide, and at least 1.56m deep, potentially originated as a clay or gravel pit, before being infilled with domestic refuse. Pit S1003 was cut to contain a timber box within which had been placed a glass bottle containing a handwritten message with the heading 'Treasure' (Plate 52). Pottery from these features was mainly concentrated in the late nineteenth to early twentieth century, with a background scatter of earlier sherds dated between c AD 1600–1750.

G28 Post-holes (Fig 10; Plate 54)

S1015, S2157, S2263, S2402, S2595, S3014, S3042, S3053, S3071, S5284, S5285, S5286, S5287, S5288, S5289

4.11.3 At least two former fence lines were indicated by some fifteen post-holes. A north-east to south-west alignment was represented by post-holes S3053, S5286, S5287, S5288, S5289, extending for a length

of 22.95m; while a north-west to south-east alignment was represented by post-holes S5284, S5285, S2263, and perhaps S2402, extending for a length of 44.19m. Six further post-holes (S1015, S2157, S2595, S3014, S3042, and S3071) could not be attributed to a specific alignment.

G29 Layers (Figs 10 and 14)

S1019, S20126, S2503, S3007, S3008

4.11.4 Late post-medieval soil layers were recorded in five locations across the excavated area. The soil layers represent the remnants of a late post-medieval soil horizon which would have extended across much of the excavated area and which survived later truncation.

G30 Buildings (Figs 10, 13–14)

S1519, S2267, S2408, S2556, S3005, S3252, S3383

4.11.5 A range of concrete wall footings (S2267), brick walls (S1519, S2556), associated service trenches (S2408), brick floor remnants (S3252), hardcore consolidation layers (S3005) and a brick-lined well (S3283) represent the remnants of the late post-medieval to modern building structures which occupied the excavation area. These comprised elements associated with the former Kent County Pavilion, constructed in 1877, and the Canterbury Agricultural Hall, constructed in 1878, and later modifications and additions following acquisition of the site by the Canterbury Motor Company from 1902 onwards.

G31 Air-raid shelters (Fig 10; Plates 55–59)

S2048, S3339, S5290, S5291, S5292, S5293

4.11.6 Five air-raid shelters were identified within the excavated area.

4.11.7 Four of the air-raid shelters (S3339, S5290, S5291, S5292), located on the western edge of the excavation area, were of Stanton-type modular design, formed of pre-cast reinforced concrete panels and reinforced concrete struts assembled within a construction trench, with access from the west via an entrance passage with stairway. A linear slot (S5293) extending between the entrances of S5291 and S5292 potentially represented the location of a protective wall or screen.

4.11.8 The fifth air-raid shelter (S2048), located approximately 14m to the north-east, truncated the infilled G27 pit (S2054), and potentially represented a later addition following requisitioning of the garage facilities by the War Department. The shelter was constructed of standard frogged bricks with a reinforced concrete ceiling, and lay partially below ground within a construction trench. The shelter consisted of two separate chambers, accessed via an open-air entrance passage with blast wall protection on its east side.

G32 Modern features (Figs 10, 11 and 13)

S1260, S1514, S2016, S2031, S3404, S4043, S4049, S5000, S5083

4.11.9 Identified modern features comprised service trenches and installations associated with the former Peugeot Garage and Total filling station, and intrusive features associated with pre-construction geotechnical and remediation groundworks.

G33 Machine removed deposits (Not illustrated)

S1000, S2066, S3000, S3163, S3213, S3218, S3225, S3233, S3975

4.11.10 Machine removed deposits comprised the existing hardstanding and bedding deposits associated with the former Peugeot Garage and was carried out under continuous archaeological supervision.

4.12 Statement of potential

4.12.1 The stratigraphic data has the potential to make a significant contribution to understanding the past land use and activity from the late Iron Age period to the modern period within the local setting.

4.12.2 Elements of the stratigraphic data, notably from the Roman G9 cemetery and the early medieval G11 defensive ditch, also have the potential to make a significant contribution to the wider regional and national setting.

4.13 Recommendations for further work

4.13.1 Post-excavation assessment has determined that the stratigraphic integrity of the recorded data is good.

4.13.2 The potential for residual (the presence of earlier material in later deposits or features) and intrusive (later material located within earlier deposits or features) material in stratigraphic units is considered high, particularly where medieval and later features truncate earlier phases of activity.

4.13.3 To ensure post-depositional contamination is accounted for when finalising the site chronology it is recommended that analysis and interpretation of stratigraphic groups allocated to phases 1 to 7 be carried out in collaboration with all finds specialists.

4.13.4 A detailed stratigraphic narrative of phase 8 post-medieval and modern archaeological groups is not anticipated to form part of the final publication report. As such, no further analysis of phase 8 post-medieval to modern stratigraphic groups is required.

5 Prehistoric struck flint (Tania Wilson)

5.1 Introduction

5.1.1 The 2015 archaeological fieldwork at Peugeot Garage, Canterbury produced an assemblage of 117 pieces of struck flint and 60 pieces of natural unmodified flint, weighing a total of 3kg. 286 pieces of burnt natural flint weighing 7kg, was also recovered. The struck flint assemblage was recovered from some sixty-nine contexts representing a range of features and deposits.

5.1.2 Previous archaeological investigations have taken place to the east of the study area, at the site of Augustine House, and to the south-east (Rhodaus Town excavation). The struck flint assemblage recovered during these investigations has been dated to the Neolithic and Bronze Age periods (Helm 2010; Wilson 2014).

5.2 Methodology

5.2.1 The assemblage was hand-retrieved and bagged by context. A small quantity (four struck pieces) was recovered from environmental samples. The artefacts have been quantified and a basic catalogue has been produced. The catalogue is held with the site archive.

5.2.2 The burnt unmodified flint assemblage was scanned to identify any struck burnt pieces. This material is not considered within the scope of this assessment.

5.3 Assemblage composition

5.3.1 A preliminary summary of the assemblage composition is presented in Table 5. The majority of the assemblage was recovered from features currently thought to post-date the prehistoric period. Artefacts were recovered from a range of features dated to the Roman and medieval periods.

Table 5. Struck flint assemblage composition

Type	Qty
Blade	6
Flake	88
Flake, blade-like	3
Irregular waste	4
Core	5
Notched flake	2
Retouched piece	2
Scraper	4
Serrated flake / blade	2
Thames pick	1
Total	**117**

5.3.2 Initial inspection of the assemblage shows that the raw material selected for use varies. Black and grey semi-translucent flint, along with grey opaque flint are represented. Bullhead flint (Shepherd 1972) is also represented in small quantities. The cortex, where present, is invariably hard and weathered. On this basis, it is likely that readily available raw material such as that in surface deposits, acted as the principal source.

5.3.3 The condition of the assemblage appears to be largely fresh and unpatinated. Just fourteen pieces (12% of the assemblage) are patinated and two struck pieces (2%) have evidence of being burnt. The frequency of breakage and edge damage has not been recorded at this stage but as the assemblage is largely residual a moderate level of damage would be anticipated.

5.3.4 The assemblage largely comprises flake debitage, a small number of blades and blade-like flakes are represented. Some five cores and core fragments were recovered, all of which appear to have been principally used for the production of flakes.

5.3.5 A total of eleven retouched pieces were recovered, forming 9% of the assemblage. Scrapers form the most common tool type represented, comprising largely end-retouched forms. Two notched flakes and two retouched pieces were also collected. Of particular note is a fine Thames Pick which was recovered from the fill of Grave 53 (S3478). In addition, two serrated pieces were recovered, and one flake with evidence of possible utilisation damage.

5.4 Discussion

5.4.1 The earliest diagnostic piece in this assemblage is the Thames Pick, which can be dated to the Mesolithic period. However, this appears to be an isolated find and no other elements within the assemblage are indicative of this date. The remainder of the assemblage has very few diagnostic pieces. Serrated pieces may suggest a Neolithic date but, overall, a broad Neolithic to Bronze Age date range is suggested.

5.4.2 This assemblage is not contemporary with the features recorded at the site. However, the good condition of the material suggests that the assemblage is derived from the immediate vicinity. The recovery of cores and other debitage suggests that flint working was probably taking place within the area. However no *in situ* knapping deposits were located. The quantity and range of retouched implements represented would be consistent with an assemblage representing settlement-related activities.

5.5 Statement of potential

5.5.1 This assemblage represents flint working and possible settlement activity within the locality of the Peugeot Garage site during the Neolithic to Bronze Age periods. The group can be directly linked to previous discoveries made during the Augustine House and Rhodaus Town excavations.

5.6 Recommendation for further work

5.6.1 It is recommended that the assemblage is prepared for inclusion in the publication of the excavation results as part of wider interpretation of prehistoric activity within the immediate locality. To this end, further detailed analysis and cataloguing of a sample (50%) of the assemblage would be necessary. It is recommended that both the stratigraphic and spatial distribution of the assemblage is examined in more detail, and the assemblage compared with contemporary material recovered from adjacent excavations at Augustine House and Rhodaus Town. A summary report appropriate for integration within the publication will be produced, including three items selected for illustration.

6 Prehistoric pottery (Barbara McNee)

6.1 Introduction

6.1.1 A total of 28 sherds weighing 197g, with a mean sherd weight of 7g, was recovered from archaeological investigations at the former Peugeot Garage site (PGC EX 15). The condition of the pottery is poor, and displays significant levels of abrasion on all sherd surfaces. A high percentage of the material was recovered from the backfill of a number of Roman inhumation burials, and dates to the later prehistoric period.

6.2 Methodology

6.2.1 The pottery was recorded using the methodology set out by the Prehistoric Ceramics Research Group (1997). All sherds were examined and assigned to a broad fabric group after macroscopic examination and by using a binocular microscope (×10 power). A basic fabric series was established based on dominant inclusion types. All sherds were counted and weighed to the nearest whole gram, and given a unique pottery record number for ease of reference. Characteristics noted include basic forms, decoration and use wear evidence. Parallels have been sought using published and unpublished material. Microsoft Excel has been used to analyse and summarise the data. The pottery has also been assessed in order to identify its potential for further analysis.

6.3 Quantification

6.3.1 A number of ceramic phases have been identified and a breakdown of the assemblage by ceramic phase (CP) is listed in Table 6, and by archaeological context (Table 7). Much of the dating is tentative as the assemblage mostly contained several worn featureless sherds, and close dating cannot be achieved with any degree of confidence when small body sherds alone are represented. The Prehistoric Ceramics Research Group (1997, 21) also suggests that a minimum of 25 sherds should be present in a context for a reliable estimation of phase to be carried out. Precise identification is also hampered by certain fabrics which are long lived, and can occur in several ceramic phases.

Table 6. Summary of pottery by ceramic phase

Ceramic Phase	No and percentage of sherds	Weight and percentage of sherds
CP1: Middle to late Bronze Age (1300–1100 cal BC)	1 (3.6%)	13 (6.6%)
CP2: Late Bronze Age to early Iron Age (1100–600 cal BC)	2 (7.1%)	15 (7.6%)
CP3: Possible earliest Iron Age to mid Iron Age (800–400 cal BC)	17 (60.7%)	56 (28%)
CP4: Late Iron Age to early Roman (first century BC to first century AD)	4 (14.3%)	81 (41%)
CP5: Indeterminate later prehistoric (1100–100 cal BC)	4 (14.3%)	32 (16.2%)

Table 7. Quantification of the assemblage by context

Context	Set	Group	Phase	Count	Weight (g)	Ceramic phase	Comments
1000	1000	33	7	1	60	4	Late Iron Age flint tempered bead jar rim
2093	2090	12	4	1	10	2	Plain body sherd, could be later Bronze Age
2110	2174	11	4	2	3	3	Flakes of flint tempered pottery
2553	2555	9	2	1	4	3	Small flint tempered body sherd
3033	3034	5	2	1	8	3	Worn body sherd, could be later Bronze Age or early Iron Age
3067	3076	5	2	1	16	5	Flint tempered rim, ovoid form which is common throughout prehistory
3260	3262	9	2	1	5	3	Worn flint tempered body sherd
3270	3273	9	2	1	5	2	Coarse flint tempered body sherd, could be late Bronze Age
3331	3333	9	2	1	4	5	Body sherd, very worn
3358	3356	9	2	1	6	3	Jar sherd, could be earliest Iron Age
3362	3365	9	2	1	1	3	Worn jar sherd
3421	3422	9	2	1	5	5	Worn flint tempered sherd, could be late Iron Age

Context	Set	Group	Phase	Count	Weight (g)	Ceramic phase	Comments
3432	3435	9	2	1	13	1	Worn very coarse flint tempered body sherd, could be middle Bronze Age
3444	3445	4	1	1	7	5	Worn flint tempered body sherd
3446	3449	9	2	1	2	3	Rim sherd from a thin walled bowl
3471	3472	9	2	1	2	3	Rim sherd from a thin walled bowl
3495	3400	9	2	1	2	3	Worn body sherd
3569	3572	9	2	1	2	3	Thin walled flint tempered jar sherd
3605	3606	9	2	1	4	3	Worn body sherd
3709	3710	9	2	1	2	3	Thin walled flint tempered bowl sherd
3789	3790	9	2	1	5	3	Worn body sherd with sooting on exterior
3801	3804	9	2	1	3	3	Worn flint tempered body sherd
3982	3083	9	2	1	3	3	Fine bowl sherd
4313	?	?	?	3	21	4	Late Iron Age sherds with combed decoration and one 'Belgic' grog tempered sherd
5149	5150	4	1	1	4	3	Poorly wedged flint tempered body sherd

6.4 Fabrics

6.4.1 Six basic fabric groups have been identified during preliminary examination (Table 8). The groups have been classified based on dominant inclusions, and further subdivided based on clay matrix type (silt or sand).

Table 8. List of fabric groups

Fabric Group	Description
1	F/1: Flint and silty clay
2	F/2: Flint and silty clay with rare iron ore
3	FSa/1: Flint and a very fine sandy clay matrix
4	FGSa/1: Flint and grog in a very fine sandy clay matrix
5	FO/1: Flint with sparse organic matter, silty clay
6	G/1: Grog and silty clay

6.4.2 The geology of the area around Canterbury comprises of Upper Chalk, Head Brickearth, Clay-with-Flints and Thanet Beds (Geological Survey Sheet 289), and these geological deposits would have provided suitable materials for potting. This would suggest that the pots were locally made. Three different clay matrices were identified, and this would suggest the exploitation of a variety of clay sources by the potters. The assemblage is almost completely dominated by flint tempered fabrics and this is very typical of later prehistoric assemblages across Kent. The only exception is one sherd (context 4314) which is grog tempered, and has been phased to the late Iron Age/early Roman period. Grog was the temper in most widespread use for 'Belgic' forms both in Kent, and more generally throughout south-east Britain (Pollard 1988, 31). Flint tempered fabrics were also used for 'Belgic' style vessels (Couldrey and Thompson 2007, 176), although the use of grog temper rapidly becomes the dominant fabric (Couldrey 2007, 181). Seven flint tempered sherds from the Peugeot Garage are late Iron Age in date.

6.5 Forms, surface treatments and decoration

6.5.1 The assemblage contains just seven featured sherds. Precise identification is hampered due to the lack of adjoining shoulders and obtaining the correct orientation. The assemblage does however include a rim belonging to a late Iron Age/early Roman bead rim storage jar (context 1000). Parallels can be seen at Highstead (Thompson 2007, figure 105/50 Period 4 and 5, c 100 BC–AD 75). Further examples of this jar type can also be found at Farningham Hill (Couldrey 1984). Two late Iron Age flint tempered sherds (recovered from context 4313) display swirling comb type decoration, and parallels can be seen at Highstead (Thompson 2007, figure 111/108).

6.5.2 Slightly earlier phases of activity could be represented by a small rim sherd which derives from a jar, and has a slightly flaring rim with an internal bevel. The sherd find similarities with jars from the earliest Iron Age site at Monkton Court Farm (Macpherson-Grant 1994, figure 13/75). The condition of the Peugeot Garage sherds is very poor; however, it is possible to identify surface treatments on just

seven sherds (smoothing, wiping and burnishing). These are very common surface finishes, and are frequently employed to be functional as well as decorative.

6.6 Discussion

6.6.1 The pottery derived from twenty-five contexts. Pottery sherds from the excavation phase show high levels of abrasion on all surfaces. This suggests possible derivation from a rubbish collection open to weathering and trampling, or general use in a domestic context prior to ending up in their excavated context. Most of the pottery was recovered from the backfill redeposited within Roman graves. A small number of sherds derived from ditch and pit fills.

6.6.2 Earlier prehistoric (Neolithic and early Bronze Age) pottery does not appear to be represented at the Peugeot Garage site. Hints of a middle Bronze Age phase of prehistoric activity may be attributed to the recovery of one sherd from the backfill of Grave 46 (context 3432). This particular fabric and vessel wall thickness also occurs within the late Iron Age. However the firing and density of the flint inclusions is more typical of the middle Bronze Age. A number of coarse flint tempered sherds could represent the next phase of prehistoric activity, which would commence at some point during the late Bronze Age or earliest Iron Age phase, and may continue into the early Iron Age. A small number of sherds can be more positively identified, and these belong to a late Iron Age ceramic tradition (contexts 1000 and 4313).

6.7 Conservation

6.7.1 The pottery is well bagged and boxed for long term storage and will require no further conservation. It is recommended that all of the prehistoric material be retained for long-term storage.

6.8 Statement of potential

6.8.1 This small pottery assemblage is important as an indicator of settlement or use within the area during the later prehistoric period, possibly commencing during the later middle Bronze Age through to the late Iron Age/early Roman period (c 1300 cal BC to first century AD). It is difficult to tell if this occupation was continuous. The late Iron Age 'Belgic' type vessels are identifiable by the presence of grog-tempered fabric, with beaded rims and 'swirling' combed decoration. These are accompanied by flint and sandy wares. The date of the introduction of 'Belgic' wares into Kent is considered to be c 100–50 BC. The fabrics are mostly fairly coarse, and some of the sherds display evidence of poor clay preparation and wedging. This could suggest a low status settlement site using the locally produced wares for domestic purposes such as storing and serving food.

6.9 Recommendations for further work

6.9.1 There is little potential for further analysis due to the condition of the pottery, and the lack of diagnostic sherds, and therefore no further work is recommended for the prehistoric pottery assemblage.

7 Roman pottery (Malcolm Lyne)

7.1 Introduction

7.1.1 The site yielded 2069 sherds (21164g) of excavated Roman pottery from 302 contexts (Table 9). The pottery spans the Roman period, although very little of it is earlier than c AD 150–170 in date. A further 167 sherds (460g) of pottery were retrieved from environmental samples.

7.2 Methodology

7.2.1 The pottery assemblage was quantified by numbers of sherds and weights per fabric. Fabrics were identified using a ×8 magnification lens with built-in metric graticule in order to identify the nature, size, form and frequency of added filler inclusions and those naturally present in the potting clay. Finer fabrics were also examined using a ×30 pocket microscope with artificial illumination source. The fabric codes are those created by the Canterbury Archaeological Trust (Macpherson-Grant et al 1995).

7.2.2 None of the pottery assemblage is large enough for further quantification by Estimated Vessel Equivalents (EVEs) based on rim sherds (Orton 1975).

7.3 The assemblages

Late Iron Age to early Roman (c 25 BC–AD 170)

7.3.1 Very little pottery is attributable to this earliest phase of activity on the site. Two sections across the trackway (G3) at the south-eastern end of the site yielded a mere five sherds (29g) of pottery between them. Cut 5093 had a sequence of fills of which the lowest to produce pottery was 5098 and yielded two abraded fragments of 'Belgic' grog-tempered ware (c 25BC–AD 70). Context 5096 above yielded a further sherd from a combed storage-jar (c AD 70–150). Context 5095 at the top of the sequence produced a fragment from a BB2 cooking-pot (c AD 150–200). This sequence suggested that the trackway is a primary feature and remained in use into the second half of the second century but further sections made across it at the adjacent Rhodaus Town site show that it remained in use until at least the end of the Roman occupation (Lyne 2016, Assemblage 1)

7.3.2 Excavated sections across the six field system ditches (G4) produced just 41 sherds (398g) of pottery, of which the bulk belongs to the next phase: the few earlier fragments are abraded and have the appearance of field marling material. The south-eastern cemetery boundary ditch may also have its origin in this phase. The first cut was lacking in pottery: the four recut ditch sections yielded 81 sherds (559g), of which 74 came from context 5090 in cut 5092 and span the period c AD 70–180. The three sherds from primary silt 5091 below included a fragment from a jug in oxidised fine 'Belgic' grog-tempered ware which could be pre-Conquest in date.

7.3.3 The fills of the later phase graves (G9) yielded 1420 sherds (9459g) of residual pottery. Nearly all of this belongs to the mid Roman period, but did also include a few abraded fragments of field-marling material of c 25 BC–AD 170 date.

Mid Roman (c AD 170–300+)

7.3.4 The bulk of the pottery from the site is of late second- to third-century date but most of it is residual in its contexts. Many of the 1420 residual sherds from the later Roman burials are too fresh to be from field-marling and are clearly from some kind of occupation on the site, traces of which were presumably obliterated by later grave digging. A fairly precise date-range for this occupation can be arrived at by a form and fabric breakdown of the overall assemblage.

7.3.5 Canterbury greywares are very significant in pottery assemblages from the city from their appearance in c AD 80 to their sharp decline and disappearance c AD 175. There are very few sherds in this fabric from the graves and similarly few fragments from lattice decorated bowls of Monaghan's Class 5D (1987, c AD 120–180). The bulk of the pottery is from cooking-pots in high-temperature fired Native Coarse Ware (c AD 170–300) and Thameside industry products. These latter include bowls of Class 5C (c AD 150/70–250) and dishes of Classes 5E and 5F in Cliffe BB2 (c AD 170–350 and AD 130–270/300

respectively), as well as rouletted beakers in North Kent fineware (c AD 190–350) and sandy greyware cooking-pots (c AD 150–300+).

7.3.6 The latest wares present in the pottery assemblage from the graves are Oxfordshire Red Colour-coat (c AD 240+), BB1 (c AD 250/70–300+) and late Roman Grog-tempered ware with siltstone grog (c AD 270–350/420). Nearly all of the vessel forms in these fabrics need not be later than AD 300 but there are two exceptions, both in Oxfordshire Red Colour-coat fabric. These are a C100 mortarium sherd from Grave 31 (Young 1977, c AD 300–400+) and a fragment from a bowl of uncertain type with a rosette stamp from Grave 7 (c AD 310–400+).

7.3.7 All of this suggests that the occupation took place between c AD 170 and AD 310+.

Late Roman (c AD 300–410+)

7.3.8 None of the 219 inhumation burials (G9) in the cemetery had ceramic grave goods, making it difficult to determine as to whether burials started to be made immediately after the end of the previous occupation or whether there was a gap in activity on the site: we do not know when the cemetery ceased to be used for the same reason. It is to be hoped that radiocarbon dates from several of the graves may go some way towards solving this problem.

7.3.9 The first cut of the north boundary ditch (G5) yielded 223 sherds (2815g) of pottery, much of which is residual and derived from the occupation of the previous phase. There are, however, several sherds of fourth-century date: these comprise those from a late grog-tempered convex-sided dish (c AD 350–420) and an Oxfordshire Red Colour-coat jug of Young's type C12 (c AD 300–400).

7.3.10 The recut of the north boundary ditch (G5) produced a mere 54 sherds (567g) of mainly residual pottery, but also including three fresh sherds from a jar in Richborough/Canterbury grog-tempered ware (Lyne 2015, c AD 350/370–420) and a sherd from a sandy hand-made jar of possible post-Roman date.

7.3.11 Nearly all the G9 graves were aligned east-west. This, coupled with the lack of grave-goods, suggests a potential Christian cemetery. Such a cemetery would have been impossible before the conversion of Constantine I in AD 312. This is a possible commencement date which fits in well with that for the end of occupation in the previous phase.

7.3.12 There is one solitary cremation from the cemetery (Grave 193, S5135), the three pots from which comprise a large truncated jar in black late Roman grog-tempered ware with siltstone grog (c AD 270–370/420), a deep convex-sided dish bowl of Lyne type 7A.16 in similar fabric (c AD 370–420) and a slightly damaged bottle of Monaghan's Class 1B.5 dated by Pollard to c AD 150–350. The latter looks like an old pot with existing damage, suggesting that the cremation is late fourth-century in date.

7.4 Statement of potential

7.4.1 Taken in conjunction with the pottery from the adjacent enclosed cemetery at Rhodaus Town and the Romano-British temple at Augustine House, the assemblage has good potential to contribute useful information on an extra-mural locality from Roman Canterbury and the associated funerary and religious practices.

7.5 Recommendations for further work

7.5.1 It is recommended that the Roman pottery assemblage be written up for publication. An estimated 20 pottery sherds will be selected for illustration.

Table 9. Catalogue of Roman pottery

Group	Set	Context	Date–range	Fabric	No of sherds	Weight (g)	Comments	Form
0	0	1175		MISC	1	15	Fresh	Jar
0	0	1175	c AD 170–250	R14	1	13	Fresh	Ev rim jar
0	0	2500		R16	2	17		Beakers
0	0	5018	c AD 70–200	R6	1	15	Very abraded	Flagon handle
2	2534	2534	c 100 BC–AD 50	B3	2	1		
2	3976	3976	c AD 150–270/370	LR2.1	4	16	Fresh and abraded	Jar
2	3976	3976	c AD 270–370	LR2.4	1	6	Fresh	Jar
2	3976	3976	c AD 150–350	R14	2	10	Fresh and abraded	Jar
2	3976	3976		R75	1	1	Abraded	
2	5010	5010	c AD 170–300	R1	1	4	Abraded	Jar
2	5010	5010		R16	1	2	Fresh	Beaker
2	5017	5017	c AD 70–200	B2/R1	1	7	Abraded	Jar
3	5093	5095	c AD 120/50–200	R14	1	8	Fresh	Cooking-pot
3	5093	5096	c AD 70–150	B2/R1	1	9	Sl abraded	Combed storage jar
3	5093	5098	c 25BC–AD70	B2	2	8	Abraded	
3	5104	5103	c AD 130/50–350	R14	1	4	Abraded	Jar
4	3020	3019	Residual	MLIA2	3	1	Very abraded	
4	3047	3046	c AD 70–200	B2/R1	1	24	Abraded	Storage jar
4	3090	3089	c AD 250–400	LR13	1	1	Fresh	
4	3090	3089		R73	1	4	Abraded	
4	3311	3310	c AD 70–150	B2/R1OX	2	52		Combed store jar
4	3320	3319	c AD 0–70	B2	2	56		Combed store jar
4	3395	3396		B1	1	1	Abraded	
4	3395	3396		B2	1	4	Abraded	
4	3395	3396		Misc	1	1		
4	3395	3396		R14	1	1	Flake	
4	3395	3396	c AD 150–270	R73	1	5	Fresh	Necked jar
4	3437	3436	c AD 150–270/370	LR2.1	3	36	Fresh	Jar
4	3437	3436	c AD 270–370	LR2.2	1	38	Fresh	Cheese-wired jar
4	3437	3436		R16	1	3	Fresh	Beaker
4	3437	3436	c AD 170–300	R3	1	42	Fresh	Jar
4	3445	3444	c AD 170–300+	LR2.1	1	8	Fresh	3H4 jar
4	3445	3444	c AD 180–270/370	LR2.2	2	18	Fresh	Jar
4	5075	5076	c AD 150–270/370	LR2.1	1	15	Fresh	Jar
4	5075	5076	c AD 170–300	R1	1	35	Abraded	Jar
4	5075	5076	c AD 170–250	R14			Fresh	5C 4.3 bowl
4	5075	5076	c AD 170–230	R14	3	33	Fresh	5C7 bowl
4	5075	5076	c AD 150–250	R16	1	12	Fresh	Jar
4	5075	5076	c AD 170–300	R3	1	15	Fresh	Jar
4	5075	5076	c AD 120–200	R43	1	5	Abraded	Dr 37
4	5150	5149		Misc	2	1	Abraded	
4	5150	5149	c AD 150–350	R14	1	2	Abraded	
4	5150	5149	c AD 190–350	R16	3	2	Fresh	Rouletted beaker
4	5150	5149		B2/R1	1	35	Sl abraded	Open form
4	5150	5149	c AD 150–270/370	LR2.1	2	24	Fresh	Jar
4	5150	5149	c AD 180–270/370	LR2.2	1	4	Abraded	Jar
4	5150	5149	c AD 170–300	R1	1	9	Fresh	Jar
4	5150	5150	c AD 170–300	R1	1	7	Fresh	Jar
4	5150	5150	c AD 270–300	R13	1	17	Fresh	Jar
4	5150	5150		R16	1	2	Fresh	Beaker
4	5150	5150	c AD 120–200	R43	2	23	Fresh	
4	5180	5203	c AD 270–370	LR2.3	1	2		Jar
4	5199	5179	c AD 150–270/370	LR2.1	4	17	Fresh and abraded	Necked jar
4	5199	5179	c AD 130–350	R14	1	3	Very abraded	
4	5199	5179	c AD 200–275	R36	1	3	Abraded	Beaker
4	5199	5198	c AD 150–270/370	LR2.1	2	4		Jar
4	5199	5198	c AD 170–300	R1	1	3	Fresh	Jar
4	5199	5198	c AD 130–350	R14	1	4	Fresh	
4	5199	5198		R16	2	3	Fresh	Closed
4	5199	5198	c AD 130–250	R33	1	1	Fresh	Roughcast beaker
4	5199	5198		R73	3	3		

Group	Set	Context	Date–range	Fabric	No of sherds	Weight (g)	Comments	Form
5	3034	3033	c AD 70–200	B2/R1	4	53	Fresh and abraded	Jars
5	3034	3033	c AD 270–400	LR11	3	7	Fresh	Slit indent beaker
5	3034	3033	c AD 270–370	LR2.4	1	29	Fresh	3H8 jar
5	3034	3033	c AD 100–200	R14	5	26	Fresh	Ev rim jar
5	3034	3033		R16	12	54	Fresh	Inc roul beaker
5	3034	3033	c AD 43–250	R17	1	6	Fresh	Closed
5	3034	3033	c AD 150–200	R43	3	14		Dr31
5	3034	3033	c AD 43–250	R56	2	76		GAUL 4
5	3034	3033		R73	7	48	Fresh and abraded	
5	3039	3040	c 25 BC–AD 70	B2	2	102	Abraded	Furrowed st jar
5	3039	3040	c AD 70–200	B2/R1	5	27	Fresh and abraded	Storage jar
5	3039	3040	c AD 270–400	LR1.1			Fresh	Ev rim jar
5	3039	3040	c AD 350–420	LR1.1	12	314	Fresh	Convex-sided dish
5	3039	3040	c AD 300–400	LR10	7	33		C12 jug
5	3039	3040	c AD 160–300	LR11	1	2	Abraded	Beaker
5	3039	3040	c AD 190–270	LR2.1			Fresh	Indented jar
5	3039	3040	c AD 190–270	LR2.1	11	87	Fresh	3H1.8 jar
5	3039	3040	c AD 190–270	LR2.2	1	13	Fresh	3H1.8 jar
5	3039	3040	c AD 240–400	LR7	5	123	Fresh	P24.1 bowl
5	3039	3040		MISC	4	11		
5	3039	3040	c AD 270–350	R13	1	7	Fresh	Open form
5	3039	3040	c AD 150/70–250	R14			Fresh	5C bowl×3
5	3039	3040	c AD 170–270	R14			Fresh	5E1 dish×3
5	3039	3040	c AD 130–270/300	R14	29	291	Fresh	5F dish
5	3039	3040	c AD 150–250	R16			Fresh	5B1.1 bowl
5	3039	3040	c AD 190–280	R16	9	46		Rouletted beaker
5	3039	3040	c AD 170–300	R3	13	214	Fresh	Jars
5	3039	3040	c AD 150–200	R43				Dr31
5	3039	3040	c AD 120–200	R43	4	8		Dr36
5	3039	3040	c AD 150–250	R8	2	6		
5	3045	3072	c AD 180–270/370	LR2.2	1	5	Fresh	Jar
5	3045	3072		MISC	2	11	Abraded	
5	3045	3072	c AD 170–270	R14	3	48	Fresh	5E1.8 dish
5	3045	3072		R16	1	1	Fresh	Beaker
5	3045	3072	c AD 170–300	R64	1	59	Abraded	Mortarium
5	3045	3072		R73	1	34	Fresh	Jar
5	3045	3072		R98	1	15	Abraded	Amphora
5	3058	3057	c AD 70–200	B2/R1	1	6	Fresh	Jar
5	3058	3057	c AD 240–400	LR10	2	27		C97 sherd
5	3058	3057	c AD 50–300	LR2.1	3	18	Fresh	Lid
5	3058	3057		MISC	1	1	Fresh	
5	3058	3057	c AD 170–300	R1	1	16	Fresh	Jar
5	3058	3057	c AD 150/70–350	R14	2	4	Fresh	Open form
5	3058	3057	c AD 190–280	R16	1	2	Fresh	Rouletted beaker
5	3062	3061	c AD 240–400	LR10	1	130	Sl abraded	Mortarium
5	3075	3073	c AD 70–200	B2/R1	2	16	Fresh	Jar
5	3075	3073	c AD 120–180	R14	2	26	Fresh and abraded	5D0.4 bowl
5	3075	3073		R16	5	22	Fresh	Beaker
5	3075	3073	c AD 120–200	R43	2	22	Sl abraded	
5	3075	3073		R73	1	20	Sl abraded	Jar
5	3076	3067		B2/R1	1	1	Sl abraded	
5	3076	3067	c AD 270–420	LR1.1	1	3	Fresh	Jar
5	3076	3067	c AD 150–270/370	LR2.1	1	2	Fresh	Jar
5	3076	3067		MISC	3	1		
5	3076	3067	c AD 150/70–350	R14	2	11	Fresh	Open form
5	3076	3067		R16	3	1		Closed
5	3076	3067	c AD 300–400	Amph	1	48	Fresh	
5	3076	3067		B2	1	22	Abraded	
5	3076	3067	c AD 70–150	B2/R1	1	1	Abraded	Combed jar
5	3076	3067	c AD 270–420	LR1.1	3	62	Fresh	Ev rim jar
5	3076	3067	c AD 270–400	LR10	2	24	Fresh	C47 bowl
5	3076	3067	c AD 270–400	LR11	1	8	Fresh	Closed
5	3076	3067	c AD 150–270/370	LR2.1	5	39		Jar
5	3076	3067	c AD 130–270/300	R14	9	51	Fresh	5F dish

Group	Set	Context	Date–range	Fabric	No of sherds	Weight (g)	Comments	Form
5	3076	3067	c AD 200–300	R16	6	21	Fresh	Beaker base
5	3076	3067	c AD 170–300	R3	3	50	Fresh	Jar
5	3076	3115	c AD 180–270/370	LR2.2	2	49	Fresh	Jar
5	3076	3115	c AD 200–350	R14	2	31	Fresh	5E dish
5	3076	3115	c AD 150–250	R16	1	6	Fresh	Jar
5	3076	3115	c AD 170–260	R46	1	10	Fresh	Dr 45
5	3095	3093	c 100 BC–AD 50	B3	1	7	Fresh	Combed sherd
5	3095	3093	c AD 150–270/370	LR2.1	2	10	Fresh	
5	3095	3093		MISC	4	41		
5	3095	3093	c AD 170–300	R1	6	96	Fresh	Ev rim jar
5	3095	3093		R16	2	16	Fresh	Closed
5	3095	3093	c AD 120–200	R43	2	12	Fresh	
5	3099	3100		?LR2.3	1	7	Fresh	Handmade jar
5	3099	3100	c AD 270–400	LR1.1	2	35	Fresh	Jar
5	3099	3100	c AD 270–400	LR10	1	7	Fresh	C47 bowl
5	3099	3100	c AD 170–300	R1	1	24	Fresh	Knife trimmed jar
5	3099	3100	c AD 190–230	R16	1	3	Fresh	Rouletted beaker
5	3125	3124	c 25 BC–AD 150	B2	2	25	Abraded	Combed store jar
5	3125	3124	c AD 270–420	LR1.1	6	112	Fresh	Jar
5	3125	3124	c AD 240–400	LR10	4	37	Fresh burnt	C97 Mortarium
5	3125	3124	c AD 200–270/370	LR2.1	4	181	Fresh	Beaker base
5	3125	3124	c AD 240–400	LR7	3	25	Fresh	P24 bowl
5	3125	3124	c AD 170–270	R14	1	8	Fresh	5E dish
5	3125	3124	c AD 190–260	R16	1	1	Fresh	Indented beaker
5	3125	3124		R98	1	109	Fresh	Amphora
5	3125	3128	c AD 270–400	LR10	2	25	Fresh	C27 beaker
5	3125	3128	c AD 150–270/370	LR2.1	1	5	Fresh	Jar
5	3125	3128	c AD 240–400	LR7	1	18	Fresh	
5	3125	3128	c AD 170–300	R1	2	14	Fresh	Jar
5	3127	3126		?R17	1	1		
5	3127	3126	c 25 BC–AD70	B2	2	6	Fresh	Jar
5	3127	3126	c AD 270–420	LR1.1	1	9	Fresh	Jar
5	3127	3126	c AD 350–420	LR1	3	16	Fresh	Jar
5	3127	3126	c AD 150–270/370	LR2.1	1	8	Fresh	Jar
5	3127	3126	c AD 240–400	LR7	1	3	Abraded	Bowl
5	3127	3126	c AD 130–350	R14	3	18	Sl abraded	Open form
5	3127	3126	c AD 190–260	R16	1	4	Fresh	Indented beaker
5	3127	3126	c AD 80–175	R5	1	13	Sl abraded	Jar
5	3199	3198	c AD 180–250	LR2.2	1	19		Open form
5	3199	3199	c AD 170–300	R1	1	6	Fresh	Jar
6	5054	5053	c AD 150–250	R16	1	29	Fresh	Jar base
6	5092	5090	c AD 70–200	B2/R1	2	12	abraded	Storage jar
6	5092	5090	c AD 120/50–180	R14	67	440	1 vessel	5D0.2 Bowl
6	5092	5090	c AD 43–130	R16	5	7	Fresh	Biconical beaker
6	5092	5091	c AD 0–70	B1 OX	1	12	Fresh	Flagon
6	5092	5091	c AD 70–200	B2/R1	1	6	Sl abraded	Jar
6	5092	5091	c AD 43–250	R50	1	27	Fresh	DR20
6	5124	5123	c AD 70–120	R26	1	4	Abraded	Lid-seated bowl
6	5124	5123	c AD 170–300	R3	2	22	Fresh	Jar
6	5283	5015	c AD 43–110	R42	1	1	Abraded	
8	1005	1004	c 25 BC–AD 150	B2/R1	1	7	Sl abraded	Combed jar
8	1005	1004	c AD 170–300	R3	1	12	Fresh	Jar
8	1009	1006	c AD 70–200	B2/R1	1	8	Abraded	Neck-cordoned jar
8	1013	1010	c 25 BC–AD 200	B2	1	8	Fresh	Jar
8	3078	3077	c AD 270–300	R13	1	36		Jar base
8	3318	3316	c AD 130–350	R14	1	1	Fresh	
8	3318	3316		R16	1	2	Fresh	Beaker
8	5213	5208	c AD 70–100	B2/R1	1	95	Fresh	Jar
8	5213	5208	c AD 150–270	LR2.1	1	6	Fresh	
8	5213	5208		MISC	1	4		
8	5213	5208	c AD 170–230	R14	2	17	Fresh	5E dish×2
8	5213	5208	c AD 150–250	R16	2	45	Fresh	Jar
8	5213	5208		R17	2	1	Fresh	
8	5213	5208	c AD 43–110	R42	1	42	Sl abraded	

Group	Set	Context	Date–range	Fabric	No of sherds	Weight (g)	Comments	Form
8	5213	5208	c AD 80–175	R5	2	7	Fresh	Jar
8	5213	5210	c AD 170–230	LR2.2	1	6	Fresh	3H7 jar
8	5213	5210	c AD 170–300	R1	1	16	Fresh	Jar
8	5213	5210	c AD 170–230	R14	3	53	Fresh	5E dish
8	5213	5210		R16	1	2	Fresh	Closed
8	5213	5210	c AD 100–200	R23.6	1	10	Fresh	Ev rim jar
8	5213	5210	c AD 70–250	R23.6	2	9	Fresh	Platter
8	5213	5210	c AD 170–250	R50	1	158	Sl abraded	DR20
8	5213	Above 5209	c AD 130–250	R33	8	63	1 vessel	Beaker
8	5213	Below 5209	c AD 150–270	L2.1	1	4	Fresh	Jar
8	5213	Below 5209		R98	1	48	Fresh	Amphora
9	2507	2505	c AD 150–270/370	LR2.1	1	2	Fresh	Jar
9	2507	2505		MISC	1	1	Fresh	
9	2507	2505	c AD 130–350	R14	1	3	Fresh	Open form
9	2507	2505		R73	1	2	Abraded	
9	2513	2511	c AD 250–370	LR5.1	1	3	Abraded	
9	2513	2511	c AD 130–350	R14	1	2	Abraded	
9	2526	2524	c AD 270–370	LR2.3	1	31	Fresh	Jar
9	2529	2527	c AD 150–270/370	LR2.1	1	6	Fresh	
9	2529	2527		MISC	1	2	Abraded	
9	2529	2527	c AD 170–300	R3	1	14	Fresh	Jar
9	2529	2527	c AD 170–200	R43	1	7	Abraded	Dr 45
9	2529	2527	c AD 80–175	R5	1	13	Fresh	Jar
9	2540	2538	c AD 270–420	LR1.1	1	10	Fresh	Jar
9	2543	2541		MISC	3	6		
9	2543	2541	c AD 120–250	R16	2	4	Fresh	4A2 bowl
9	2543	2541	c AD 150–200	R35	1	1	Abraded	Beaker
9	2543	2541	c AD 90–110	R42	1	4	Fresh	Dr 18/31
9	2543	2541	c AD 80–175	R5	1	7	Fresh	
9	2546	2544	c AD 150–270/370	LR2.1	1	6	Sl abraded	Jar
9	2555	2553	c AD 43–70	B9	1	2		
9	2555	2553	c AD 180–270/370	LR2.2	1	6	Fresh	Jar
9	2555	2553		Misc	1	2		
9	2555	2553	c AD 120–200	R14			Fresh	3J2 jar
9	2555	2553	c AD 130–270	R14	3	17	Fresh	5F dish
9	2555	2553	c AD 190–280	R16	3	3	Fresh	Rouletted beaker
9	2555	2553		R17	1	1	Fresh	Closed
9	2555	2553	c AD 170–200	R43	1	23	Sl abraded	Dr31
9	2555	2553		R74	1	2	Sl abraded	
9	2555	2553		R85	1	2	Sl abraded	Flagon
9	2560	2558	c AD 150–270/370	LR2.1	1	1	Fresh	Jar
9	2560	2558	c AD 170–300	R1	1	2	Fresh	Jar
9	2560	2558	c AD 170–250	R14	1	1	Fresh	Ev rim jar
9	2560	2558		R16	1	2	Abraded	
9	2567	2565	c AD 240–400	LR10	1	1		
9	2567	2565	c AD 180–270/370	LR2.2	1	4	Fresh	Jar
9	2570	2569	c AD 130–350	R14	1	3	Fresh	Jar
9	2573	2572	c AD 150–270/370	LR2.1	1	24	Abraded	Jar
9	2573	2572	c AD 180–270/370	LR2.2	1	2	Fresh	Jar
9	2573	2577	c AD 200–400	LR5?	1	13	Abraded	Open form
9	3051	3050	c 25 BC–AD 70	B1	1	8		Closed
9	3051	3050	c AD 70–200	B2/R1	1	7		Storage jar
9	3051	3050	c AD 200–350	R14	1	12	Fresh	Str-sided dish
9	3051	3050		R16	1	1	Fresh	Beaker
9	3051	3050	c AD 80–175	R5	1	10	Fresh	Jar
9	3066	3064	c AD 43–250	R17	1	9	Sl abraded	Flagon
9	3066	3064	c AD 120–250	R7	5	50	Fresh	Jars×2
9	3081	3079	c AD 270–400	LR12	1	1	Abraded	Beaker
9	3081	3079		MISC	1	1	Abraded	
9	3081	3079	c AD 170–300	R1	1	6	Fresh	Jar
9	3081	3079		R16	2	2	Fresh	

Group	Set	Context	Date–range	Fabric	No of sherds	Weight (g)	Comments	Form
9	3081	3079	c AD 43–250	R17	1	1		
9	3081	3079	c AD 150–200	R89	1	18	Sl abraded	Flagon
9	3102	3101	c 25 BC–AD 100	B2	3	15	Abraded	Bead-rim jar
9	3102	3101	c AD 180–270/370	LR2.2	1	13	Fresh	Jar
9	3102	3101	c AD 43–300+	R16	1	2	Fresh	
9	3137	3135	c AD 310–400	LR10	1	2	Fresh	Stamped bowl
9	3137	3135	c AD 270–370	LR2.3	1	2	Fresh	Jar
9	3137	3135	c AD 130–350	R14			Sl abraded	Closed
9	3137	3135	c AD 130–350	R14	2	32	Very abraded	Open form
9	3137	3135		R16	1	2	Fresh	Closed
9	3137	3135	c AD 120–200	R43	2	14	Fresh	
9	3140	3138	c AD 150/70–250	R14	1	34	Sl abraded	5C bowl
9	3148	3146	c AD 150–270/370	LR2.1	2	3		Closed
9	3148	3146		MISC	1	3	Abraded	
9	3148	3146	c AD 170–300	R1	2	34	Fresh	Jar
9	3148	3146	c AD 190–300	R16	1	1	Fresh	Rouletted beaker
9	3148	3146	c AD 130–250	R33	1	3	Fresh	Beaker
9	3151	3152	c AD 160–400	LR11	1	3	Fresh	Closed form
9	3151	3152		MISC	1	4		
9	3151	3152	c AD 150/70–350	R14	3	62	Fresh and abraded	Open forms
9	3151	3152		R16	1	1	Fresh	Closed
9	3151	3152	c AD 170–300	R3	1	10	Sl abraded	Jar
9	3151	3152	c AD 150–200	R43	2	15	Sl abraded	Dr31
9	3191	3192	c AD 70–150	B2/R1	1	4	Abraded	Combed storejar
9	3191	3192	c AD 270–400	LR10	1	3	Fresh	C16 jar
9	3191	3192	c AD 180–270/370	LR2.2	1	6	Fresh	Jar
9	3191	3192	c AD 120–200	R43	1	3	Abraded	
9	3259	3257		B2/R1	1	10	Fresh	Jar
9	3259	3257	c AD 170–300	R1	4	39	Fresh	Jars
9	3259	3257	c AD 150/70–250	R14	2	21	Fresh	5C bowl
9	3259	3257		R73	1	3	Abraded	Jar
9	3262	3260	c AD 170–300	R1	1	15	Fresh	Jar
9	3262	3260	c AD 120–200	R43	1	5	Sl abraded	
9	3266	3263	c AD 70–200	B2/R1	6	37	Fresh and abraded	Jars
9	3266	3263	c AD 240–400	LR10	1	2	Fresh	Beaker
9	3266	3263		R16	2	3	Fresh	Beaker
9	3267	3268	c 25 BC–AD 70	B2	1	3	Abraded	Combed jar
9	3267	3268	c 15 BC–AD 80	BER12	1	2	Sl abraded	Open form
9	3267	3268	c AD 240–400	LR10	1	6	Fresh burnt	Open form
9	3267	3268	c AD 150–270/370	LR2.1	2	6	Fresh	Jar
9	3267	3268	c AD 170–300	R1	2	11	Sl abraded	Jar
9	3267	3268	c AD 150/70–350	R14	3	16	Fresh	Open form
9	3267	3268	c AD 120–200	R43	1	1	Abraded	
9	3273	3270	c AD 43–70	B1 BL	2	15	Fresh	GB platter copy
9	3273	3270	c AD 150–270/370	LR2.1	2	8	Sl abraded	Jar basal
9	3273	3270		R16	3	8	Fresh	Closed
9	3273	3270	c AD 170–300	R3	1	12	Fresh	Jar
9	3276	3274	c AD 70–150	B2/R1	1	18	Sl abraded	Combed store jar
9	3276	3274	c AD 150–230/70	LR2.1	1	7	Fresh	3H2.3 jar
9	3333	3331	c AD 240–400	LR10	1	3	Fresh	C51 bowl
9	3333	3331	c AD 160–270	LR11	1	2	Abraded	Beaker
9	3333	3331	c AD 150–270/370	LR2.1	1	1	Sl abraded	Jar
9	3333	3331		MISC	1	1	Abraded	
9	3333	3331	c AD 150/70–250	R14			Fresh	5C bowl
9	3333	3331	c AD 170–270	R14	4	38	Fresh	5E dish
9	3333	3331	c AD 190–280	R16	1	1	Fresh	Rouletted beaker
9	3343	3342	c 25 BC–AD 100	B2	5	25	Fresh	Bead-rim jar
9	3343	3342	c AD 150–270/370	LR2.1	2	4	Fresh	Jar
9	3343	3342	c AD 270–370	LR2.4	1	7	Fresh	Jar
9	3343	3342		MISC	4	6		
9	3343	3342	c AD 170–300	R1	5	19		Jar
9	3343	3342	c AD 130–270/300	R14	3	19	Fresh	5F dish
9	3343	3342		R16	2	3		
9	3343	3342	c AD 140–260	R46	1	1	Abraded	

Group	Set	Context	Date–range	Fabric	No of sherds	Weight (g)	Comments	Form
9	3343	3342	c AD 80–175	R5	1	3	Fresh	Jar
9	3343	3342		R71	1	5		Open form
9	3346	3344	c AD 180–270/370	LR2.2	1	1	Fresh	Jar
9	3349	3347	c AD 150–270/370	LR2.1	1	3	Fresh	Jar
9	3349	3347	c AD 170–300	R1	1	5	Fresh	Jar
9	3355	3353	c AD 150–270/370	LR2.1	3	12	Fresh	Jar
9	3355	3353	c AD 180–270/370	LR2.2	3	8	Fresh	Jar
9	3355	3353	c AD 270–370	LR2.4	1	11	Fresh	Jar
9	3355	3353	c AD 150/70–250	R14	3	13	Sl abraded	5C bowl
9	3355	3353	c AD 190–280	R16	5	11	Fresh and sl abraded	Rouletted beaker
9	3355	3353	c AD 43–250	R17	2	4	Fresh	Flagon
9	3356	3358	c AD 70–200	B2/R1	1	5	Fresh	Jar
9	3356	3358	c AD 270–370	LR2.3	1	5	Sl abraded	Jar
9	3356	3358		R16	2	2	Fresh	Jar
9	3356	3367	c AD 230–300	LR11	1	4	Fresh	Funnel-necked bkr
9	3356	3367	c AD 150–270/370	LR2.1	2	15	Fresh	Jar
9	3361	3359	c AD 0–200	B2.1	1	21	Abraded	Storage jar
9	3361	3359	c AD 150–270/370	LR2.1	3	17	Fresh	Jar
9	3361	3359	c AD 180–270/370	LR2.2	1	1	Fresh	Jar
9	3361	3359	c AD 170–300	R1	1	9	Fresh	Jar
9	3361	3359	c AD 130–270/300	R14			Fresh	5F dish
9	3361	3359		R16	2	5	Fresh	Closed
9	3361	3359	c AD 43–250	R17	1	3	Fresh	Flagon
9	3361	3359		R56	1	29	Fresh	GAUL 4
9	3361	3359	c AD 150/70–250		3	26	Fresh	5C bowl
9	3365	3362	c AD 270–400	LR10	1	1	Fresh	Beaker
9	3365	3362	c AD 160–270	LR11	1	1	Sl abraded	Beaker
9	3365	3362	c AD 150–270/370	LR2.1	2	6	Fresh	Jar
9	3365	3362	c AD 150–270/370	LR2.1	1	2	Fresh	Jar
9	3365	3362		MISC	1	1		
9	3365	3362	c AD 130–350	R14	1	5	Fresh	Jar
9	3365	3362	c AD 130–350	R14	1	1	Fresh	
9	3365	3362		R16	2	3	Fresh	Closed
9	3365	3362		R16	1	2	Fresh	Beaker
9	3365	3362	c AD 170–300	R3	1	7	Sl abraded	Jar
9	3372	3368	c AD 300–400	LR10	1	41	Fresh	C100 mortarium
9	3372	3368	c AD 150–270/370	LR2.1	4	21	Fresh and abraded	Jar
9	3372	3368		MISC	2	7		
9	3372	3368	c AD 150–200	R43	1	1		Dr31
9	3376	3373	c AD 150–270/370	LR2.1	6	33	Fresh and abraded	
9	3376	3373		R16	6	15	Fresh	Closed
9	3376	3373	c AD 200–275	R36	1	1	Abraded	Beaker
9	3376	3373	c AD 120–200	R43	3	6	Abraded	Bowl
9	3376	3373	c AD 200–270	R71			Fresh	5E dish
9	3376	3373	c AD 150–270		2	9	Fresh	Necked jar
9	3380	3377	c AD 150–270/370	LR2.1	2	5	Fresh	Jar
9	3380	3377	c AD 270–370	LR2.3	1	6	Fresh	Jar
9	3380	3377	c AD 170–300	R1	1	9	Sl abraded	Jar
9	3380	3377	c AD 130–350	R14	1	10	Abraded	Jar
9	3380	3377		R16	2	10	Sl abraded	Closed
9	3380	3377	c AD 120–200	R43	1	4	Abraded	
9	3386	3384	c 25 BC–AD 70	B1 BL	2	10	Fresh	Jar
9	3386	3384	c AD 70–200	B2/R1	1	2	Abraded	
9	3386	3384	c AD 180–270/370	LR2.2	1	3	Sl abraded	Jar
9	3386	3384	c AD 170/90–350	R14	1	12	Fresh	4A2 bowl
9	3386	3384		R16	1	1	Fresh	Beaker
9	3386	3385	c AD 170–350	R13	1	9		Cl 8 dish
9	3387	3388	c AD 150–270/370	LR2.1	1	25	Abraded	Jar
9	3387	3388	c AD 240/70–300	R13	1	46	Fresh	Bestwall 6/4 bowl
9	3387	3388	c AD 150/70–250	R14	4	35	Fresh	Chamf open form
9	3387	3388	c AD 190–270	R16	1	11	Fresh	2A6 beaker
9	3387	3388	c AD 43–250	R17	1	20	Abraded	
9	3389	3390	c AD 200–370	LR2.1	1	2	Fresh	Hook-rim jar

Group	Set	Context	Date–range	Fabric	No of sherds	Weight (g)	Comments	Form
9	3389	3390	c AD 270–370	LR2.4	1	15	Fresh	Jar
9	3392	3391	c AD 170–300	R1	1	2	Abraded	Jar
9	3392	3391	c AD 170–300	R3	2	34	Fresh	Jar
9	3412	3410	c AD 270–370	LR2.3	2	11	Fresh	Jar
9	3412	3410	c AD 170–300	R1	1	5	Fresh	Jar
9	3412	3410	c AD 210–290/300	R13	1	13	Fresh	Bowl
9	3412	3410		R16	1	16	Fresh	Beaker
9	3414	3413	c AD 270–420	LR1.1	1	11	Fresh	
9	3414	3413	c AD 150–270	LR2.1	7	27	Fresh	Jar
9	3414	3413	c AD 180–270/370	LR2.2	1	1	Fresh	Jar
9	3414	3413	c AD 150–350	R14	1	6	Abraded	
9	3414	3413		R16	3	6	Fresh	Closed
9	3422	3421	c AD 0–70	B2 BL	1	10	Abraded lump	Storage jar
9	3422	3421	c AD 150–270/370	LR2.1	2	12	Fresh	Jar
9	3422	3421	c AD 270–370	LR2.4	1	7	Fresh	Jar
9	3422	3421	c AD 270–370	LR5.1	1	6	Fresh	Jar
9	3422	3421		MISC	1	1		
9	3422	3421	c AD 200–350	R14	1	8	Fresh	5E dish
9	3422	3421	c AD 150–250	R16	1	4	Fresh	Jar
9	3422	3421	c AD 170–200	R43	1	1	Fresh	Mortarium
9	3424	3423	c AD 70–150	B2/R1	2	12	Abraded	Combed jar
9	3424	3423	c AD 160–270	LR11	1	2	Sl abraded	Beaker
9	3424	3423	c AD 270–350	R13	1	17	Fresh	Open form
9	3424	3423	c AD 170–300	R3	2	29	Fresh	Jar
9	3427	3425	c AD 270–420	LR1	1	25	Abraded	
9	3427	3425	c AD 230–300	LR11	1	2	Abraded	FN Beaker
9	3427	3425		LR13?	2	5	Fresh	Closed
9	3427	3425	c AD 150–300/70	LR2.1	1	6	Fresh	3H2 jar
9	3427	3425	c AD 180–270/370	LR2.2	1	2	Fresh	Jar
9	3427	3425	c AD 270–370	LR2.3	3	25	Fresh	Jar
9	3427	3425	c AD 270–370	LR2.4	1	6	Fresh	Jar
9	3427	3425		Misc	2	4		
9	3427	3425		R16	1	2	Fresh	Closed
9	3427	3425		R50	1	6	Fresh	DR20
9	3435	3431	c AD 170–300	R3	1	22	Fresh	Jar
9	3435	3431		R71	1	2	Fresh	Closed
9	3435	3432		B2/R1	1	5	Abraded	
9	3435	3432	c AD 270–370	LR2.3	1	5	Fresh	Jar
9	3435	3432	c AD 170–300	R3	1	4	Fresh	Jar
9	3435	3434	c AD 0–70	B2	1	9	Abraded	Combed store jar
9	3438	3440		B2/R1	2	31	Fresh and abraded	Jars
9	3438	3440	c AD 160–270	LR11	1	1	Fresh	Beaker
9	3438	3440	c AD 150–175/200	R5	3	30	Fresh	Reeded-rim bowl
9	3449	3446		B2/R1	1	1	Fresh	
9	3449	3446	c AD 270–370	LR2.3	7	46	Fresh, 1 vessel	3H4 jar
9	3449	3446		MISC	3	13		
9	3449	3446	c AD 150/70–350	R14	2	11	Fresh	Oprn form
9	3449	3446		R16	4	14	Fresh and abraded	Corrugated jar
9	3449	3446	c AD 130–250	R17	1	4	Fresh	Flagon
9	3449	3446	c AD 120–200	R43	1	25	Sl abraded	
9	3459	3458	c AD 130–200	R16	1	2	Abraded	Ac latticed jar
9	3459	3484	c AD 150–270/370	LR2.1	1	19	Fresh	Jar
9	3459	3484		MISC	3	15	Fresh	Cornice rim bkr
9	3459	3484	c AD 220–300	R13	1	24	Fresh	8/5 Dish
9	3459	3484	c AD 150/70–350	R14	2	5	Fresh	
9	3470	3467	c AD 150–270/370	LR2.1	1	2		Jar
9	3472	3471		B2/R1	1	2	Abraded	
9	3472	3471	c AD 270–370	LR2.1	1	4	Fresh	3H4 jar
9	3472	3471	c AD 270–420	LR5	1	17	Sl abraded	Jar
9	3472	3471	c AD 270–370	LR5.1	1	3	Fresh	Jar
9	3472	3479	c AD 270–370	LR5.1	1	3	Fresh	Jar
9	3475	3473	c AD 270–370	LR2.4	1	16	Sl abraded	Jar
9	3475	3473	c AD 200–300	R16	1	17	Fresh	Beaker
9	3478	3476	c AD 240–400	LR10	2	1	Abraded	Abraded

Group	Set	Context	Date–range	Fabric	No of sherds	Weight (g)	Comments	Form
9	3478	3476		LR2.1	1	1	Abraded	Abraded
9	3478	3476	c AD 250–400	LR13	1	3		Flask?
9	3478	3476	c AD 240–400	?LR10	1	1	Sl abraded	
9	3478	3476	c AD 230–300	LR11	1	4	Abraded	Indented beaker
9	3478	3476	c AD 170–270/300	R14	1	14	Sl abraded	5E dish
9	3478	3476		R16	2	8	Fresh	Closed
9	3478	3476		R17	1	1	Fresh	
9	3478	3476	c AD 80–175	R5	1	5	Fresh	Jar
9	3482	3480	c AD 240–400	LR10	1	3	Sl abraded	Beaker
9	3482	3480	c AD 200–350	R14	1	7	Fresh	Ev rim jar
9	3482	3480	c AD 120–200	R43	1	2	Fresh	
9	3488	3485	c AD 270–420	LR1.1	1	49		Jar
9	3488	3485	c AD 240–400	LR10	5	19		Beaker etc
9	3488	3485	c AD 150–270/370	LR2.1	3	20		Jar
9	3488	3485	c AD 270–370	LR2.3	2	7		Jar
9	3488	3485	c AD 270–420	LR5	2	9		Cl 3B jar
9	3488	3485		MISC	3	2		
9	3488	3485	c AD 270–300	R13	1	1		Jar
9	3488	3485	c AD 150/70–350	R14	1	1		Open form
9	3488	3485	c AD 190–270	R16	5	21		2A6 beaker
9	3488	3485	c AD 170–300	R3	3	60		Jar
9	3488	3485	c AD 120–200	R43	3	9		
9	3488	3485		R98	2	8		Amphora
9	3491	3489	c AD 150–270/370	LR2.1	2	10	Fresh	Jar
9	3491	3489	c AD 200–350	R14	1	17	Fresh	5E dish
9	3491	3489	c AD 140–260	R46	1	2	Abraded	
9	3494	3493		R16	1	1	Fresh	
9	3494	3493	c AD 150–200	R43	1	18	Fresh	Dr 31
9	3494	3493		R71	1	15	Fresh	Closed
9	3499	3495	c AD 270–420	LR1.1	1	20	Abraded	Jar
9	3499	3495	c AD 240–400	LR10	3	5		
9	3499	3495	c AD 270–400	LR11	4	17	Sl abraded	Closed
9	3499	3495	c AD 150–270/370	LR2.1	4	20		Jar
9	3499	3495		MISC	2	2		
9	3499	3495	c AD 170–300	R1	4	41	Fresh	Jar
9	3499	3495		R16	3	6	Fresh	Beaker
9	3499	3495	c AD 170–300	R3	1	14		Jar
9	3499	3495	c AD 170–200	R43	3	34	Fresh and abraded	Dr 31
9	3499	3495		R98	3	140	Fresh	Amphora
9	3503	3502	c 25 BC–AD70	B2 BL	1	9	Abraded	Jar
9	3503	3502	c AD 150/70–350	R14	1	7	Fresh	Open form
9	3503	3502		R16	1	4	Fresh	Closed
9	3503	3502	c AD 43–250	R17	1	6	Fresh	
9	3506	3504	c AD 200–350	R13	1	12		Straight sided dish
9	3511	3509	c AD 150–270/370	LR2.1	1	2	Sl abraded	
9	3519	3516	c AD 270–400	LR1 var	1	3	Abraded	Open form
9	3519	3516	c AD 240–400	LR10	1	8	Sl abraded	Open form
9	3519	3516		Misc	1	1		
9	3519	3516	c AD 150/70–350	R14	2	7	Sl abraded	
9	3519	3516	c AD 150–250	R8	1	4	Fresh	Closed
9	3530	3528	c AD 150–270/370	LR2.1	2	11	Fresh	Jar
9	3530	3528	c AD 170–300	R1	3	36	Fresh	Jar
9	3530	3528		R16	1	10	Fresh	Jar
9	3533	3531	c AD 150/70–350	R14	3	2		
9	3533	3531		R16	1	2	Sl abraded	Beaker
9	3533	3531	c AD 120–200	R43	1	4	Sl abraded	
9	3543	3538	c AD 150–300+	LR2.1	1	33	Fresh	Ev rim jar
9	3543	3538	c AD 130–250	R17	1	5	Fresh	Flagon
9	3543	3539	c AD 270–420	LR1.1	1	1	Fresh	Jar
9	3543	3539	c AD 150–300+	LR2.1	3	55	Fresh	3H2 jar
9	3543	3539		MISC	2	5	Fresh	
9	3543	3539	c AD 170–300	R3	2	17	Sl abraded	Jar
9	3546	3544	c AD 150–270/370	LR2.1	1	3	Fresh	Jar
9	3546	3544		R17	1	23	Fresh	Mortarium

Group	Set	Context	Date–range	Fabric	No of sherds	Weight (g)	Comments	Form
9	3552	3548		Misc	1	1	Fresh	Beaker
9	3552	3548	c AD 43–140	R16	1	27	Fresh	Dish
9	3554	3553	c AD 150–270/370	LR2.2	1	5	Fresh	
9	3554	3553	c AD 170–300	R1	2	23	Sl abraded	Jar
9	3554	3553	c AD 90–130	R43	1	7	Fresh	Dr18/31
9	3560	3558	c 25 BC–AD70	B2	1	8	Abraded	
9	3560	3558	c AD 150–270/370	LR2.1	2	5	Sl abraded	Jar
9	3560	3558	c AD 170–200	R43	1	18	Abraded	Dr 45
9	3563	3561	c AD 70–200	B2/R1	1	11	Fresh	Storage jar
9	3563	3561	c AD 240–400	LR10	1	2	Sl abraded	Beaker
9	3563	3561		R16	1	9	Sl abraded	Open form
9	3566	3564		Misc	1	1	Fresh	
9	3566	3564	c AD 43–250	R17	1	8	Fresh	Closed
9	3566	3564	c AD 120–200	R43	1	8	Sl abraded	Dr33
9	3572	3569	c 25 BC–AD70	B2	3	20	Abraded	Jar
9	3572	3569	c AD 270–420	LR1.1	1	22	Fresh	Jar
9	3572	3569	c AD 240–400	LR10	1	15	Very abraded	Beaker
9	3572	3569	c AD 270–400	LR11	1	6	Very abraded	Closed
9	3572	3569	c AD 160–270	LR11	1	2	Fresh	Box lid
9	3572	3569	c AD 150–270/370	LR2.1	4	15	Fresh	Jar
9	3572	3569	c AD 180–270/370	LR2.2	1	9	Fresh	Jar
9	3572	3569	c AD 170–300	R1	4	46	Fresh	Jar
9	3572	3569	c AD 170–270/300	R14	2	15	Fresh	5E dish
9	3572	3569	c AD 190–270	R16	6	19	Fresh	2A6 beaker
9	3572	3569	c AD 150–200	R43	2	2	Abraded	Dr31
9	3574	3535	c AD 150–270/370	LR2.1	2	1		
9	3574	3535	c AD 270–400	LR11	1	4	Abraded	Closed
9	3574	3535	c AD 270–370	LR2.1	2	35	Fresh	Jar
9	3574	3535		MISC	1	32	Fresh	
9	3574	3535	c AD 170–300	R1	2	60	Fresh	Jar
9	3574	3535	c AD 190–300+	R16	2	5	Fresh	Rouletted beaker
9	3574	3535	c AD 170–300	R3	1	16	Abraded	Jar
9	3584	3581	c AD 70–150	B2/R1	3	16	Fresh	Combed jar
9	3584	3581	c AD 150–270/370	LR2.1	2	12	Sl abraded	Jar
9	3584	3581	c AD 180–270/370	LR2.2	1	4	Fresh	Jar
9	3584	3581	c AD 170–300	R1	3	16	Fresh	Jar
9	3593	3590	c AD 43–100	B2/R1	2	26		Bead-rim jar
9	3593	3590	c AD 150–270/370	LR2.1	3	16	Fresh	Jar
9	3593	3590		MISC	2	6		
9	3593	3590	c AD 150–200	R14	8	35	Fresh, 1 vessel	Cooking-pot
9	3593	3590	c AD 190–300	R16	1	2	Fresh	Rouletted beaker
9	3593	3590	c AD 200–275	R36	1	2	Sl abraded	Beaker
9	3593	3590	c AD 43–110	R42	4	60	Fresh, 1 vessel	Dr33
9	3593	3590	c AD 120–200	R43	1	4	Fresh burnt	
9	3593	3590		R98	1	53	Sl abraded	Amphora
9	3601	3597	c AD 150–270/370	LR2.1	1	3		Jar
9	3601	3598	c AD 30–80	BER10	1	4	Fresh	Butt-beaker
9	3601	3598	c AD 150–270/370	LR2.1	1	3	Sl abraded	Jar
9	3601	3598	c AD 180–270/370	LR2.2	1	3	Fresh	Jar
9	3601	3598	c AD 240–400	LR7	2	2	Abraded	Closed
9	3601	3598	c AD 130–270/300	R14	3	61	Fresh	5F dish
9	3601	3598		R16	1	2	Abraded	Closed
9	3601	3598		R17	3	6	Fresh	Closed
9	3601	3598		R99	1	9	Sl abraded	Mortarium
9	3606	3605		B2/R1	1	3	Abraded	
9	3606	3605	c AD 150–270/370	LR2.1	2	21	Fresh	Jar
9	3610	3608	c AD 270–420	LR1.1	2	96	Fresh	Jar
9	3610	3608		MISC	1	31	Sl abraded	Lid
9	3610	3608		R16	2	7	Fresh	Jar
9	3613	3611	c AD 180–270	LR2.2	1	7	Fresh	3H8 jar
9	3613	3611	c AD 270–300	R13	1	8	Abraded	Open form
9	3613	3611		R17	1	1	Abraded	
9	3621	3617		B2	2	8	Abraded	
9	3621	3617	c 15 BC–AD80	BER12	2	4	Very abraded	Platter

Group	Set	Context	Date–range	Fabric	No of sherds	Weight (g)	Comments	Form
9	3621	3617	c AD 150–270/370	LR2.1	1	4	Abraded	Jar
9	3621	3617	c AD 180–270/370	LR2.2	1	5	Abraded	Jar
9	3621	3617	c AD 43–250	R17	1	12	Abraded	Flagon
9	3621	3618	c AD 150–270/370	LR2.1	2	3	Fresh	Jar
9	3621	3618	c AD 130–200+	R16	1	2	Fresh	Poppyhead beaker
9	3625	3622		B2/R1	3	15		
9	3625	3622	c AD 150–270/370	LR2.1	2	27	fresh	Jar
9	3625	3622	c AD 170–300+	LR2.3	4	37	fresh	3H7 jar
9	3625	3622	c AD 170–300	R1	1	5	Fresh	Jar
9	3625	3622	c AD 270–350	R13.1	1	20	Fresh	Str-sided dish
9	3625	3622		R16	2	18	fresh	
9	3625	3622	c AD 120–200	R43	1	1	abraded	
9	3625	3622		R50	2	28	fresh	DR50
9	3625	3625	c AD 270–420	LR1.1	1	5	Fresh	Jar
9	3625	3625	c AD 180–270/370	LR2.2	1	3	Fresh	Jar
9	3625	3625	c AD 120–200	R43	1	25	Fresh	Dr 81
9	3625	3625		R99	1	29	Fresh	Mortarium
9	3635	3595		Misc	1	1	Sl abraded	Closed
9	3635	3595	c AD 130–350	R14	1	3	Abraded	Jar
9	3635	3595	c AD 190–300	R16	3	1	Sl abraded	Rouletted beaker
9	3635	3634	c AD 150–200	B2/R1	1	6	Abraded	Ev rim jar
9	3635	3634	c AD 160–270	LR11	3	6	Abraded	Beaker
9	3635	3634	c AD 150–270/370	LR2.1	3	16	Sl abraded	Jar
9	3635	3634		MISC	1	5		
9	3635	3634	c AD 170–300	R1	6	74	Fresh and abraded	Jar
9	3635	3634	c AD 130–350	R14	1	7	Fresh	Open form
9	3635	3634		R16	1	2	Fresh	Beaker
9	3635	3634	c AD 200–275	R36	1	8	Sl abraded	Beaker
9	3635	3634	c AD 150–200	R43	1	4	Sl abraded	Dr31
9	3635	3634	c AD 170–260	R46	2	10	Fresh	R45 mortarium
9	3639	3637	c AD 150–270/370	LR2.1	2	4	Fresh	Jars
9	3639	3637	c AD 180–270/370	LR2.2	2	8	Fresh	Jar
9	3639	3637		MISC	1	2		
9	3639	3637	c AD 170–300	R1	1	7	Abraded	Jar
9	3639	3637		R16	1	3	Fresh	Open form
9	3639	3637		R17	1	1	Sl abraded	Flagon
9	3639	3637	c AD 200–275	R36	1	2	Fresh	Beaker
9	3641	3640	c AD 30–80	BER10	1	5	Abraded	Butt beaker
9	3641	3640	c AD 270–420	LR1.1	1	4	Fresh	Jar
9	3641	3640	c AD 150–270/370	LR2.1	2	12	Sl abraded	Jar
9	3641	3640	c AD 270–370	LR2.3	1	12	Fresh	Jar
9	3641	3640	c AD 170–300	R1	1	18	Abraded	Jar
9	3641	3640		R16	1	5	Abraded	Closed
9	3641	3640	c AD 120–200	R43	1	11	Fresh	Dr33
9	3641	3640	c AD 70–200	R6.1	1	3	Sl abraded	
9	3641	3640	c AD 150–270	R71	1	7	Fresh	Jar
9	3641	3640	c AD 150–270	R73	1	3	Fresh	Jar
9	3648	3616	c AD 150–270/370	LR2.1	1	4	Fresh	Jar
9	3648	3616	c AD 170–270/300	R14	2	21	Fresh	5E dish
9	3648	3616	c AD 43–250	R17	1	1	Sl abraded	Flagon
9	3649	3652		B5	5	27	Fresh	Open form
9	3649	3652	c AD 170–300	R3	1	28	Sl abraded	Jar
9	3649	3652	c AD 170–270	R73	5	29	Fresh	Jar
9	3649	3653	c AD 270–370	LR2.3	1	23	Abraded	Cheese-wired base
9	3649	3653		MISC	1	4	Fresh	
9	3649	3653		R56	1	6	Sl abraded	GAUL 4
9	3660	3658		B2/R1	1	11	Abraded	Jar
9	3660	3658		B9	3	16	Abraded	
9	3660	3658	c AD 270–400	LR11	2	3	Very abraded	Closed
9	3660	3658	c AD 150–270/370	LR2.1	2	7	Sl abraded	Jar
9	3660	3658	c AD 240–300+	R13	1	12	Very abraded	Beaded+fl bowl
9	3660	3658	c AD 150–350	R14	1	13	Fresh	Jar
9	3672	3706	c AD 270–370	LR2.3	1	47	Abraded	Jar
9	3692	3687		B2/R1	1	4	Abraded	

Group	Set	Context	Date–range	Fabric	No of sherds	Weight (g)	Comments	Form
9	3692	3687	c AD 150–270/370	LR2.1	2	4	Fresh	Jar
9	3692	3687		Misc	1	2		
9	3692	3687		R16	5	9	Fresh	Beaker
9	3692	3687	c AD 120–200	R43	3	68	Fresh and abraded	Dr37
9	3692	3687	c AD 50–150	R75	1	1	Abraded	Flagon
9	3692	3687		R98	1	35	Fresh	Amphora
9	3692	3689		Misc	2	6	Fresh	
9	3692	3689	c AD 170–300	R1	1	23	Sl abraded	Jar
9	3692	3689	c AD 150/70–350	R14	1	4	Fresh	Open form
9	3700	3669	c AD 43–300+	R16	1	3	Sl abraded	Closed
9	3710	3709	c AD 70–200	B2/R1	1	17	Fresh	Storage jar
9	3710	3709	c AD 150/70–350	R14	1	2	Fresh	Open form
9	3710	3709		R16	2	2	Fresh	Beaker
9	3710	3709	c AD 200–275	R36	1	1	Fresh	Beaker
9	3714	3711	c AD 70–150	B2/R1	7	50	Fresh and abraded	Combed jars
9	3714	3711	c AD 270–420	LR1.1	4	70	Fresh	Jars
9	3714	3711	c AD 150–200	LR2.1	13	54	Abraded	Ev rim jar
9	3714	3711	c AD 170–300+	LR2.2			Fresh	3H7 jar
9	3714	3711	c AD 200–250	LR2.2	3	62	Fresh	5E dish
9	3714	3711	c AD 270–370	LR2.3	3	39	Fresh	Hook rim jar
9	3714	3711		MISC	10	21		
9	3714	3711	c AD 170–300	R1	1	24	Sl abraded	Jar
9	3714	3711	c AD 150/70–250	R14				5C bowl
9	3714	3711	c AD 170–270/300	R14	9	57		5E dish
9	3714	3711		R16	7	43	Fresh	Jar
9	3714	3711	c AD 43–140	R17	2	5	Sl abraded	7A1 dish
9	3714	3711	c AD 170–230	R46	1	15		Dr37
9	3720	3724	c AD 270–420	LR1.1	2	24	Fresh	Jar
9	3720	3724	c AD 150–270/370	LR2.1	3	41	Fresh	
9	3720	3724		MISC	3	1		
9	3720	3724	c AD 200–270/300	R14	2	19	Fresh	5E dish
9	3720	3724	c AD 170–300	R3	2	11	Sl abraded	Jar
9	3720	3724	c AD 170–250+	R50	2	164	Fresh	DR20
9	3720	3724		R75	1	17	Fresh	Flagon handle
9	3730	3732	c AD 150–270	LR2.1	1	25		Jar base
9	3735	3733	c AD 150–270/370	LR2.1	1	1	Abraded	
9	3735	3733	c AD 180–270/370	LR2.2	1	2	Fresh	Jar
9	3735	3733	c AD 150/70–350	R14	1	2	Abraded	
9	3735	3733	c AD 120–200	R43	2	2	Abraded	
9	3735	3733	c AD 170–230	R46	1	18	Sl abraded	DR45
9	3735	3733	c AD 150–240	R99	2	60	Fresh join	Hammerhead mort
9	3738	3736	c AD 150–350	LR2.1	1	1		Indented beaker
9	3745	3743	c AD 270–420	LR1.1	1	4	Abraded	Jars
9	3745	3743	c AD 240–400	LR10	1	1	Fresh	Bowl
9	3745	3743	c AD 250–400	LR13	1	5	Fresh	Closed
9	3745	3743	c AD 150–270/370	LR2.1	6	15	Fresh	Jar
9	3745	3743	c AD 240–300+	R13	2	20	Fresh	6/4 Bowl
9	3745	3743	c AD 170–270/300	R14	1	2	Abraded	5E dish
9	3745	3743	c AD 190–230	R16	7	34		2C6 beaker
9	3745	3743		R17	2	7	Fresh	
9	3745	3743	c AD 270–350	RX	1	17	Fresh	C5.1 Beaker
9	3749	3746		MISC	3	7		
9	3749	3746	c AD 170–300	R1	2	55	Fresh	Jar
9	3749	3746	c AD 120–200	R43	1	32	Abraded	
9	3749	3746		R71	1	7	Sl abraded	Closed
9	3749	3748	c AD 150–370	LR2.1	1	8	Fresh	Jar
9	3750	3751	c AD 50–150	VRW	1	1	Fresh	Closed
9	3756	3753		LR2.1	1	5	fresh	Jar
9	3756	3753		LR2.2	1	3	fresh	Jar
9	3756	3753	c AD 270–300+	R13	1	7	Fresh	Open form
9	3756	3753	c AD 120–250	R16			Fresh	4A2 bowl
9	3756	3753	c AD 230–300+	R16	3	12	Fresh	Beaker
9	3756	3753		R75	1	2	sl abraded	Closed
9	3757	3758	c AD 170–300	R1	1	3	Fresh	Jar

Group	Set	Context	Date–range	Fabric	No of sherds	Weight (g)	Comments	Form
9	3757	3758	c AD 150/70–350	R14	1	2	Fresh	
9	3757	3758	c AD 43–250	R17	1	8	Fresh	Flagon
9	3766	3768	c AD 150–300+	LR2.1	2	13	Fresh	3H2 jar
9	3766	3768	c AD 170–200	R43	1	3	Fresh	Mortarium
9	3769	3772	c AD 170–300	R3	1	3	Abraded	Jar
9	3774	3773	c AD 70–200	B2/R1	1	6	Abraded	Storage jar
9	3774	3773	c AD 270–420	LR1	2	19	Fresh	Jar
9	3774	3773	c AD 130–270/300	LR2.1	6	44	Fresh	5F dish
9	3774	3773		MISC	1	1		
9	3774	3773	c AD 170–300	R1	2	22	Fresh	Jar
9	3774	3773		R16	2	7	Sl abraded	Closed
9	3774	3773	c AD 120–200	R43	1	5	Abraded	
9	3774	3818	c AD 270–370	LR2.3	1	3		Jar
9	3779	3780	c AD 270–370	LR2.3	1	15	Sl abraded	Jar
9	3790	3789	c AD 150–250	R16	3	27		Jar base
9	3795	3791	c AD 270–420	LR1.1	1	8	Sl abraded	Jar
9	3795	3791	c AD 270–370	LR2.4	1	15	Fresh	Jar
9	3796	3797	c 25 BC–AD70	B2	1	2	Very abraded	
9	3796	3797		B8	1	3	Fresh	Jar
9	3800	3798	c AD 170–300	R1	1	3	Fresh	Jar
9	3800	3798	c AD 150–350	R14	1	2	Abraded	Jar
9	3800	3798	c AD 150–250	R16	1	1	Fresh	Jar
9	3800	3798	c AD 170–250	R50	1	16	Fresh	DR20
9	3804	3801		B1	1	4	Abraded	
9	3804	3801		B2/R1	3	10	Abraded	Jar
9	3804	3801		MISC	1	2	Fresh	
9	3804	3801	c AD 140–190/250	R16	1	10	Fresh	5B1.1 bowl
9	3804	3801		R17	2	1	Fresh	Closed
9	3808	3715		B2/R1	2	11	Abraded	
9	3808	3715	c AD 150–270/370	LR2.1	2	8	Fresh	Jar
9	3808	3715		MISC	1	1		
9	3808	3715	c AD 150–350	R16	3	15	Fresh	Indented beaker
9	3811	3809		R71	1	10	Abraded	Jar
9	3823	3821	c AD 170–270+	LR2.1	1	7		Ev.rim jar
9	3826	3891		B2/R1	1	4	Sl abraded	
9	3826	3891	c AD 270–420	LR1	1	11	Fresh	Jar
9	3826	3891		MISC	2	1		
9	3826	3891		R16	1	5	Abraded	
9	3826	3891		R17	1	1	Sl abraded	
9	3827	3829	c AD 150/70–350	R14	6	22	Fresh and abraded	Open form
9	3827	3829		R17	2	5	Fresh	Closed
9	3866	3862	c AD 150–270/370	LR2.1	1	1	Abraded	Jar
9	3866	3862	c AD 170–300	R1	3	65	Abraded	Jar
9	3866	3862		R16	1	1	Abraded	
9	3870	3867	c AD 0–80	B9	3	5	Very abraded	
9	3870	3867	c AD 43–110	R42	1	5	Fresh	
9	3885	3882	c AD 150–270/370	LR2.1	2	12	Fresh	Jar
9	3885	3882		R16	1	2	Fresh	Beaker
9	3896	3893	c AD 170–270	R14	1	26	Fresh	5E dish
9	3901	3898	c AD 180–270/370	LR2.2	1	2	Sl abraded	Jar
9	3901	3898	c AD 270–370	LR2.3	1	8	Sl abraded	Jar
9	3901	3898	c AD 270–420	LR5	2	2	Sl abraded	Closed
9	3901	3898	c AD 210–280/90	R13	1	7	Fresh	6/2 Bowl
9	3901	3898		R17	1	2		Beaker
9	3912	3911		B2/R1	5	73	Abraded	Jars
9	3912	3911	c AD 160–250	LR11	6	18	Fresh, 1 vessel	Bag beaker
9	3912	3911	c AD 150–200	LR2.1	7	37	Sl abraded	Ev rim jar
9	3912	3911	c AD 180–270/370	LR2.2	3	16	Sl abraded	Jar
9	3912	3911		MISC	9	8		
9	3912	3911	c AD 170–300	R1	6	39	Sl abraded	Jar
9	3912	3911	c AD 250–350	R13.1	4	25	Sl abraded	
9	3912	3911	c AD 150/70–250	R14			Abraded	5C bowl
9	3912	3911	c AD 240–350	R14	6	59	Fresh	Beaded+flanged bowl

Group	Set	Context	Date–range	Fabric	No of sherds	Weight (g)	Comments	Form
9	3912	3911		R16	5	19	Fresh and abraded	
9	3912	3911	c AD 150–200	R43	2	19	Abraded	Dr31
9	3912	3911		R99	2	13	Abraded	Mortarium
9	3922	3919		B2/R1	2	8	Fresh	Jar
9	3922	3919	c AD 240–400	LR10	5	12	Fresh	Open form
9	3922	3919	c AD 150–270/370	LR2.1	2	8	Fresh	Jar
9	3922	3919		MISC	1	2		
9	3922	3919	c AD 150/70–350	R14	2	7	Fresh	
9	3922	3919		R71	1	6	Sl abraded	
9	3933	3929	c AD 150–270/370	LR2.1	2	10		Jar
9	3933	3929	c AD 200–350	R14	4	56		5E dish
9	3933	3929		R16	1	2	Sl abraded	
9	3933	3930	c AD 170–300	R3	1	4	Fresh	Jar
9	3937	3934	c AD 200–350	R14	1	29	Sl abraded	5E dish
9	3942	3938	c AD 150–200	R43	1	6	Fresh	Dr31
9	3949	3946		B2/R1	1	3	Abraded	
9	3949	3946	c AD 150–270/370	LR2.1	2	7	Fresh	Jar
9	3949	3946	c AD 170–230	R14			Sl abraded	5C4.4 bowl
9	3949	3946	c AD 130–270/300	R14	3	60	Sl abraded	5F dish
9	3949	3946	c AD 190–300	R16	2	10	Abraded	Rouletted beaker
9	3949	3946		R17	2	2	Abraded	Flagon
9	3956	3952	c AD 270–420	LR1.1			Fresh	Jar
9	3956	3952	c AD 270–420	LR1.1	2	37	Fresh	Dish
9	3956	3952	c AD 270–350	R13	2	24	Abraded	Open form
9	3956	3952	c AD 120–200	R43	1	1	Abraded	
9	3961	3963	c AD 270–370	LR2.3	1	14	Sl abraded	Str-sided dish
9	3961	3963	c AD 150–300+	R16	2	11	Sl abraded	Indented beaker
9	3961	3963	c AD 120–200	R43	1	1		
9	3967	3965	c AD 150–270/370	LR2.1	1	4	Fresh	Jar
9	3967	3965	c AD 240–400	LR7	1	12	Sl abraded	Closed
9	3967	3965	c AD 170–260	R46	1	8	Fresh	Dr 45
9	3974	3971		B2/R1	3	21		Jar
9	3974	3971	c AD 240–400	LR10	2	4	Sl abraded	Beaker
9	3974	3971	c AD 160–270	LR11	1	1		Beaker
9	3974	3971	c AD 150–270/370	LR2.1	6	36		Ev rim jar
9	3974	3971	c AD 270–370	LR2.4	2	33	Sl abraded	Jar
9	3974	3971		Misc	2	6		
9	3974	3971	c AD 150/70–250	R14			Fresh	5C bowl
9	3974	3971	c AD 200–350	R14	3	22	Fresh	5E dish
9	3974	3971	c AD 190–300	R16	3	31	Fresh	Rouletted beaker
9	3974	3971		R17	1	2		Closed
9	3974	3971	c AD 120–200	R43	2	2	Abraded	Dr 36
9	3974	3971		R98	1	32	Fresh	amphora
9	3979	3977	c AD 240–400	LR10	3	19	Abraded	
9	3979	3977	c AD 150–270/370	LR2.1	1	6	Abraded	
9	3979	3977	c AD 220–290/300	R13	1	6	Sl abraded	Cl 8 dish
9	3979	3977	c AD 150/70–350	R14	1	6	Sl abraded	Open form
9	3979	3978	c AD 270–420	LR1.1	1	2	Fresh	
9	3979	3978		MISC	4	8	Fresh	Closed
9	3979	3978	c AD 120–200	R43	4	7	Abraded	
9	3983	3982	c AD 70–150	B2/R1	3	67	Sl abraded	Combed store jar
9	3983	3982	c AD 270–350	LR1.1	2	52	Fresh	7A14 dish
9	3983	3982	c AD 200–270	LR2.1			Fresh	Jars×2
9	3983	3982	c AD 200–270/300	LR2.1	9	74	Fresh	5F dish
9	3983	3982	c AD 180–270/370	LR2.2	1	6	Fresh	Jar
9	3983	3982	c AD 270–370	LR2.4	1	5	Fresh	Jar
9	3983	3982	c AD 150–250	MISC	1	2	Abraded	Pentice beaker
9	3983	3982		R14	6	18	Fresh and abraded	
9	3983	3982	c AD 150–250	R16	5	19	Sl abraded	Jar
9	3983	3982	c AD 150–200	R43			Abraded	Dr 31
9	3983	3982	c AD 170–200	R43	8	74		Dr45
9	3983	3982	c AD 70–200	R6.1	1	17	Sl abraded	Mortarium
9	3984	3812	c AD 270–370	LR2.4	1	11	Fresh	Jar
9	3984	3812	c AD 240–400	LR22	1	3	Abraded	Mortarium

Group	Set	Context	Date–range	Fabric	No of sherds	Weight (g)	Comments	Form
9	3984	3812	c AD 120–200	R43	1	6	Abraded	
9	3984	3812		R73	1	3	Very abraded	
9	3985	3986	c AD 170–300	R1	1	10	Abraded	Jar
9	3989	3988	c AD 170–300	R1	1	7	Abraded	Jar
9	3989	3988	c AD 270–300	R13	2	7	Fresh	Open form
9	3989	3988	c AD 150/70–250	R14	1	4	Fresh	Open form
9	3990	3991	c AD 270–420	LR1.1	2	12	Fresh	Jar
9	3990	3991	c AD 150–270/370	LR2.1			Fresh	Jar
9	3990	3991	c AD 70–250	LR2.1	3	21	Fresh	3L1 jar
9	3990	3991		MISC	1	5	Abraded	
9	3990	3991	c AD 170–300	R1	1	23	Sl abraded	Jar
9	3990	3991	c AD 130–270/300	R14	2	18	Fresh	5F dish
9	3999	3997	c AD 70–150	B2/R1	1	11	Abraded	Combed jar
9	3999	3997	c AD 240–400	LR10	2	9	Fresh	C8 flagon
9	3999	3997	c AD 150–250	LR2.1			Fresh	Ev rim jar
9	3999	3997	c AD 200–270	LR2.1	5	28	Fresh	5E dish
9	3999	3997	c AD 270–370	LR2.3	2	29	Fresh	Necked jar
9	3999	3997	c AD 270–420	LR5	1	6	Fresh	Jar
9	3999	3997		MISC	2	3		
9	3999	3997		R16	2	2		Closed
9	3999	3997	c AD 120–200	R43	2	10	Abraded	
9	5055	5056	c AD 0–200	B2/R1	1	2	Abraded	Storage jar
9	5055	5056		MISC	1	3		
9	5055	5056	c AD 150–350	R14	4	10	Abraded	
9	5055	5056	c AD 170–300	R3	2	34	Sl abraded	Jar
9	5055	5056	c AD 150–200	R43	2	3	Fresh	Dr 31
9	5055	5061	c AD 150–350	R14	1	14		Open form
9	5074	5071	c 25 BC–AD70	B2	2	3	Abraded	
9	5074	5071	c AD 230–300	R16	1	1	Abraded	Beaker
9	5114	5111	c AD 70–200	B2/R1	1	17	Fresh	Neck cordoned jar
9	5114	5111	c AD 0–100	BER16	1	1	Abraded	Briquetage
9	5114	5111	c AD 150–270/370	LR2.1	5	18	Fresh	jar
9	5114	5111		MISC	1	3	Abraded	
9	5114	5111	c AD 170–300	R1	3	74	Fresh	Jar
9	5114	5111	c AD 270–300+	R13	1	11	Fresh	Open form
9	5114	5111	c AD 150/70–250	R14	2	32	Fresh	5C bowl
9	5114	5111	c AD 280–350	R16	6	30	Fresh	Rouletted beaker
9	5114	5111	c AD 70–200	R6.1	1	11	Sl abraded	Closed
9	5118	5115	c AD 150–270/370	LR2.1	3	17	Fresh	Jar
9	5118	5115	c AD 270–370	LR2.4	1	8	Fresh	Jar
9	5118	5115		MISC	5	5		
9	5118	5115	c AD 130–270	R14	3	31	Fresh	5F diah
9	5118	5115		R16	2	10	Fresh	Closed
9	5118	5115	c AD 130–250	R33	1	3	Abraded	Rouletted beaker
9	5118	5115	c AD 120–200	R43	3	33		Dr 81
9	5118	5115		R50	1	29	Abraded	DR 20
9	5135	5132	c AD 270–420	LR1.1	14	109		Large jar
9	5135	5133	c AD 270–420	LR1.1	1	2391		Large jar
9	5135	5133	c AD 150–350	R16	1	559	Complete SF 457	1B5 bottle
9	5135	5133					Truncated	
9	5135	5134	c AD 370–420	LR1.1	1	666	Complete SF 458	7A16 dish
9	5135	6050	c AD 270–420	LR1.1	2	3		Crem jar frags
9	5135	6051	c AD 270–420	LR1.1	1	1		Crem jar frag
9	5135	6052	c AD 270–420	LR1.1	2	5		Crem jar frags
9	5135	6053	c AD 270–420	LR1.1	2	2		Crem jar frags
9	5135	6054	c AD 270–420	LR1.1	14	58		Crem jar frags
9	5135	6055	c AD 270–420	LR1.1	7	16		Crem jar frags
9	5135	6056	c AD 270–420	LR1.1	6	8		Crem jar frags
9	5135	6057	c AD 270–420	LR1.1	6	89		Crem jar frags
9	5135	6058	c AD 270–420	LR1.1	5	23		Crem jar frags
9	5135	6059	c AD 270–420	LR1.1	3	11		Crem jar frags
9	5135	6060	c AD 270–420	LR1.1	1	2		Crem jar frags
9	5136	5137	c AD 150–270/370	LR2.1	1	7	Fresh	Jar
9	5136	5137	c AD 270–300	LR2.3	6	46	Fresh, 1 vessel	5F dish

Group	Set	Context	Date–range	Fabric	No of sherds	Weight (g)	Comments	Form
9	5136	5137		MISC	2	6		
9	5136	5137	c AD 280–350	R16	2	15	Fresh	Rouletted beaker
9	5136	5137	c AD 170–300	R3	1	56	Sl abraded	
9	5139	5140	c AD 70–200	B2/R1	2	32	Abraded	Storage jar
9	5139	5140	c AD 160–250	LR11	1	1	Fresh	Hunt cup
9	5139	5140	c AD 180–270/370	LR2.2	2	4	Fresh	Jar
9	5139	5140	c AD 130–200	R14	1	1	Abraded	Cooking pot
9	5139	5140	c AD 43–120	R16	1	26	Sl abraded	7A2 dish
9	5147	5145	c AD 150–270/370	LR2.1	1	6	Sl abraded	Closed
9	5147	5145	c AD 270–370	LR5.1	1	4	Fresh	Jar
9	5147	5145	c AD 170–300	R1	4	74	Fresh	Jar
9	5147	5145	c AD 130–200	R14	1	7	Abraded	Ac latticed jar
9	5154	5152		B2/R1	4	20		
9	5154	5152	c AD 150–270	LR2.1	4	34		Jar
9	5154	5152	c AD 180–270/370	LR2.2	2	6		Jar
9	5154	5152		MISC	1	3		
9	5154	5152	c AD 150/70–250	R14				5C bowl
9	5154	5152	c AD 130–270/300	R14	8	66		5F dish
9	5154	5152	c AD 100–130	R16	5	22		Poppyhead beaker
9	5154	5152		R17	1	9		Open form
9	5154	5152	c AD 270–275	R36	1	1		Beaker
9	5154	5152	c AD 150–200	R43	2	11		Dr31
9	5154	5152	c AD 170–250	R50	1	18		DR20
9	5154	5152	c AD 70–200	R6.1	1	33		Closed
9	5154	5152	c AD 150–250	R8	1	15		Beaker
9	5158	5155	c AD 170–270	R14	1	4	Fresh	5E dish
9	5158	5155		R16				Ev rim beaker
9	5158	5155	c AD 200–275	R16	4	13	Fresh	2C6 beaker
9	5165	5163		B2/R1	1	3	Abraded	
9	5165	5163	c AD 130–270	LR2.1	4	17	Fresh	5F dish
9	5165	5163	c AD 130–350	R14	3	5	Fresh and abraded	
9	5165	5163		R16	1	1		
9	5165	5163	c AD 150–200	R43	1	1		Dr31
9	5168	5166	c AD 120–150	LR2.1	6	108		Flanged bowl
9	5168	5166		MISC	3	17		
9	5168	5166	c AD 170–300	R1	5	42		Jar
9	5168	5166	c AD 130–150	R14	6	45		Open form
9	5168	5166	c AD 150–250	R16	1	3		Jar
9	5168	5166		R17	1	2		Flagon
9	5185	5181		B2/R1	1	16		Necked jar
9	5185	5181	c AD 240–400	LR10	8	24	1 beaker	Beaker
9	5185	5181	c AD 250–400	LR13	1	4		
9	5185	5181	c AD 270–370	LR2.4	1	13		Jar
9	5185	5181	c AD 170–300	R1	2	24		Jar
9	5185	5181	c AD 170–270/300	R14	6	85		5E dish
9	5185	5181	c AD 190–270	R16	1	8		2A6 beaker
9	5185	5181		R17	2	19		Flagon
9	5185	5181	c AD 170–300	R3	1	9		Jar
9	5185	5181	c AD 120–200	R43	1	4		
9	5195	5194	c AD 270–370	LR2.4	1	22	Fresh	Jar
9	5195	5194		MISC	1	1	Abraded	
9	5195	5195	c AD 270–420	LR1	1	5	Fresh	
9	5195	5195	c AD 190–350	R16	1	1	Abraded	Rouletted beaker
9	5207	5204	c AD 240–400	LR10	1	16	Fresh	Beaker
9	5207	5204	c AD 160–270	LR11	1	1	Fresh	Beaker
9	5207	5204	c AD 170–300	R1	4	87	Fresh	Jar
9	5207	5204	c AD 150–250	R16	1	9	Fresh	Jar
9	5207	5204		R73	1	10	Fresh	Jar
9	5216	5214	c AD 43–70	BER10	1	1	Abraded	Butt beaker
9	5216	5214	c AD 270–300	LR2.3			Fresh	5F dish
9	5216	5214	c AD 270–370	LR2.3	6	47	Fresh	Jars
9	5216	5214	c AD 270–420	LR5	3	6	Sl abraded	
9	5216	5214	c AD 150/70–350	R14	4	22	Fresh and abraded	Open form
9	5216	5214	c AD 170–300	R3	2	32	Fresh	Jars

Group	Set	Context	Date–range	Fabric	No of sherds	Weight (g)	Comments	Form
9	5216	5214	c AD 120–200	R43	1	3	Abraded	
9	5235	5200	c AD 150–300	LR2.2	2	23		3H2 jar
9	5235	5200		MISC	2	6		
9	5235	5200	c AD 150/70–250	R14	5	39		5C bowl
9	5235	5200		R16	1	1		
9	5235	5200	c AD 43–100	R73	2	14		Butt beaker
9	5263	3846	c AD 150–270/370	LR2.1	2	12	Fresh	Jar
9	5263	3846		R17	1	2	Sl abraded	Closed
9	5263	3846	c AD 120–200	R43	1	1		
10	2519	2514	c AD 70–200	B2/R1	1	31	Abraded	Jar
10	2519	2514	c AD 150–270/370	LR2.1	1	6	Fresh	Jar
10	2519	2514	c AD 170–300	R1	1	37	Abraded	Jar
10	2521	2520	c AD 160–270	LR11	1	2	Fresh	Beaker
10	2521	2520	c AD 150–270/370	LR2.1	1	5	Fresh	Jar
10	2521	2520	c AD 150/70–350	R14	1	18	Fresh	Open form
10	2552	2551	c AD 270–420	LR1	1	4	Fresh	Jar
10	2552	2551	c AD 270–300+	R13	1	4	Fresh	Str sided dish
10	2552	2551		R73	1	2	Fresh	
10	3012	3011	c AD 130–350	R14	1	7		Open form
10	3036	3035		B2/R1	1	6	Abraded	
10	3036	3035		LR2.1	7	9		
10	3036	3035		MISC	4	4		
10	3036	3035	c AD 170–300	R1	3	10	Abraded	Jar
10	3036	3035	c AD 150–350	R14	5	2	Fresh	
10	3036	3035		R16	9	15	Fresh	
10	3036	3035	c AD 150/70–250	R71	1	6	Abraded	5C bowl
10	3036	3035	c AD 300–400	LR10	1	7	Fresh	C81 bowl
10	3036	3035		MISC	1	5	Abraded	
10	3036	3035		R16	1	2	Fresh	Closed
10	3036	3035	c AD 43–90	R42	1	1	Fresh	Dr18
10	3084	3082	c AD 270–300	R13	1	5		Closed form
10	3084	3083	c AD 250–400	LR13	1	3	Fresh	Closed
10	3084	3083		R16	1	3	Fresh	Closed
10	3121	3120		B2	2	12	Fresh	Jar
10	3121	3120	c AD 150–270/370	LR2.1	2	15	Sl abraded	Jar
10	3121	3120	c AD 120/150–210	R14	1	6	Sl abraded	5C2 bowl
10	3158	3157	c AD 150/70–350	R14	1	4		Open form
10	3159	3160	c 25 BC–AD 70	B1	1	4	Sl abraded	
10	3159	3160		B2/R1	2	10	Abraded	
10	3159	3160	c AD 200–270/370	LR2.1	1	19	Fresh	Jar
10	3159	3160		MISC	1	2		
10	3159	3160	c AD 130–350	R14	3	24	Sl abraded	Open form
10	3159	3160		R16	1	2	Sl abraded	
10	3159	3160	c AD 120–200	R43	3	13	Sl abraded	Curle 23
10	3159	3160	c AD 70–200	R6.1	1	4	Sl abraded	Closed
10	3285	3287	c AD 200–270	R14	4	44		Str-sided dish
10	3285	3287		R17	1	2	Fresh	Beaker
10	3285	3287	c AD 170–300	R3	2	17	Sl abraded	Jar
10	3285	3288	c 25 BC–AD70	B2	1	2	Abraded	
10	3285	3288	c 100 BC–AD50	B3	1	2	Abraded	
10	3285	3288		R16	1	1	Fresh	
10	3285	3288	c AD 200–275	R36	1	1	Flake	Beaker
10	3285	3288	c AD 270–400	LR1.1	1	3	Fresh	Jar
10	3285	3288	c AD 270–400	LR10	2	9	Fresh	Beaker
10	3285	3288	c AD 150–270	LR2.1	1	13	Fresh	Jar
10	3285	3288	c AD 170–300	R1	5	44	Fresh and abraded	Jar
10	3285	3288	c AD 130–300	R14	2	23	Fresh	5F dish
10	3285	3288		R16	1	3	Fresh	Closed
10	3285	3288	c AD 70–200	R6.1	2	6	Fresh	Closed
10	3285	3290	c AD 270–420	LR1.1	1	1	Fresh	Jar
10	3285	3290		MISC	1	1		
10	3285	3291	c AD 150–270/370	LR2.1	1	3	Abraded	Jar
10	3285	3293	c AD 190–350	R16	1	1	Fresh	Rouletted beaker
10	3285	3321		B2/R1	1	4	Sl abraded	

Group	Set	Context	Date–range	Fabric	No of sherds	Weight (g)	Comments	Form
10	3285	3321	c AD 240–400	LR10	1	1	Fresh	
10	3297	3296		R16	2	2		
10	3297	3296	c AD 120–200	R43	2	7		
10	3297	3296	c AD 150–270/370	LR2.1	1	5	Sl abraded	
10	3297	3296	c AD 130–200	R16	1	5	Fresh	Poppyhead beaker
10	3524	3520	c AD 150–270/370	LR2.1	1	1	Flake	
10	3524	3520	c AD 240–400	LR7	1	4	Sl abraded	
10	3524	3520	c AD 270–300+	R13	1	2	Abraded	
10	3719	3717	c AD 150–260	R46	1	8	Sl abraded	Dr 31
10	5030	5023	c AD 43–70	B1	1	14	Very abraded	GB platter
10	5030	5023	c AD 0–200	B2/R1	1	7	Very abraded	Storage jar
10	5030	5023		B8	2	9	Fresh	
10	5030	5023	c AD 220–300	R13	2	25	Fresh	8/5 dish
10	5030	5024	c AD 300–400	LR10	4	17		C81 bowl
10	5224	5223		Misc	1	5		
10	5224	5223	c AD 150–350	R14	1	4	Sl abraded	Open form
10	5224	5223	c AD 120–200	R43	1	5	Flake	
10	5224	5223	c AD 43–250	R56	1	3	Very abraded	GAUL 4
11	2278	2270	Residual	MISC	1	1	Very abraded	
11	2278	2270	c AD 270–400	LR11	1	45	Abraded	Beaded+fl bowl
11	2278	4031	c AD 120–200	R43	1	1		
12	1057	1033	c AD 150–270/370	LR2.1	1	2		Jar
12	1150	1021		B2/R1	1	6	Very abraded	
12	1150	1021		LR2.1	1	1	Fresh	
12	1150	1021		MISC	3	1	Abraded	
12	1150	1021		R14	4	3	Fresh and abraded	
12	1150	1021	c AD 70–200	B2/R1	1	8	Fresh	Necked jar
12	1150	1021	c AD 80–175	R5	2	14	Fresh	Jar
12	1151	1049	c AD 150–350	R14	1	2	Abraded	Jar
12	1151	1173	c AD 30–80	BER10	1	1	Fresh	Butt beaker
12	1151	1173	c AD 150–350	R14	2	2	Fresh	Open form
12	1164	1076	c AD 70–200	B2/R1	1	11	Sl abraded	Jar
12	1164	1076	c AD 43–300	R16	1	3	Fresh	Closed
12	1490	1489	c AD 180–300	LR2.2	1	5		Jar
12	1583	1124	c AD 250–400	LR13.1	2	16	Fresh	Beaded+fl bowl
12	1583	1124	c AD 270–370	LR2.3	1	3	Fresh	Jar
12	1583	1124	c AD 270–370	LR5.1	1	3	Fresh	Jar
12	2090	2091	c AD 250/70–400+	LR1.1	1	7	Abraded	Ev rim jar
12	2090	2091	c AD 170–300	R3	1	13	Abraded	
12	2245	2133	c 25 BC–AD 70	B1 OX	1	16	Sl abraded	Neck cordoned jar
12	2245	2133	c AD 70–200	B2/R1	1	32	Abraded	Jar basal
12	2245	2133	c AD 43–300	R16	1	7	Fresh	Closed
12	2245	2133		R50	1	63	Sl abraded	DR20
12	3216	3217	c AD 170–300	R1	1	15	Sl abraded	Jar
12	3216	3217		R16	1	4	Sl abraded	Closed
12	3309	3307	c 25 BC–AD70	B2	1	12	Abraded	
12	3309	3307	c AD 150–270/370	LR2.1	1	1	Abraded	
12	3309	3307		MISC	3	1		
12	3309	3307	c AD 190–350	R16	2	3	Abraded	Rouletted beaker
12	3309	3307	c AD 150–270/370	LR2.1	1	4		Jar
12	3323	3322	c AD 200–270	R14	1	5	Fresh	5E dish sherd
13	4198	2296	c AD 200–275	R36	1	2		Beaker
13	4198	2344	c AD 170–300	R3	1	37	Abraded	Jar
13	4223	2352	c AD 160–270	LR11	1	4	Fresh	Beaker
13	4223	2352	c AD 150/70–350	R14	1	8	Sl abraded	Open form
14	5036	5035		B2/R1	1	6	Abraded	
14	5036	5035	c AD 70–200	R6.3	1	4	Fresh	
14	5040	5037	c AD 150–270/370	LR2.1	2	7	Fresh and abraded	
14	5040	5037	c AD 170–300	R1	1	9	Fresh	Jar
14	5040	5037	c AD 150–200	R43	1	1	Fresh	Dr 31
19	2405	2073	c AD 240–400	LR10	1	2	Abraded	
19	2405	2073	c AD 170–300	R3	2	9	Sl abraded	Jar
19	2405	2077	c AD 70–200	R6.1	1	11	Abraded	Lagena handle
20	2404	2065	c AD 170–300	R3	1	7	Fresh	Jar

Group	Set	Context	Date–range	Fabric	No of sherds	Weight (g)	Comments	Form
20	4128	2258	c 25 BC–AD70	B2	1	3	Abraded	
20	4128	2258	c AD 150–270/370	LR2.1	1	1	abraded	
20	4128	2258		R50	1	29	Very abraded	
23	2348	2346	c AD 90–130	R17	1	19	Sl abraded	5B2 dish
23	2348	2346	c AD 43–85	R42	1	1	Fresh	Dr29
23	2348	2348	c AD 70–200	B2/R1	1	7	Fresh	Jar
23	2348	2348	c AD 150–250	R16	1	17	Fresh	Jar
23	2348	2351	c AD 150/70–350	R14	1	7	Sl abraded	Open form
23	2348	2351	c AD 150–200	R43	1	1	Sl abraded	Dr31
24	3018	3017	c AD 160–270/300	LR11	1	1	Fresh	Beaker
24	3018	3017	c AD 270–370	LR2.3	1	7	Sl abraded	Jar
24	3018	3017	c AD 160–270	LR11	1	5	Fresh	Beaker
24	3018	3017	c AD 150–270/370	LR2.1	1	4	Fresh	Jar
24	3018	3017	c AD 200–350	R7	1	16	Fresh	Pollard 203 jar
24	3018	3017	c AD 150–250	R8	1	23	Sl abraded	Flagon
24	3032	3029	c AD 150–270/370	LR2.1	3	2	Fresh	
24	3032	3029		R16	1	1		
24	3056	3055	c AD 43–70	R42	1	4	Fresh	
24	3114	3113	c AD 160–270/300	LR11	2	1	Fresh and abraded	Beaker
24	3114	3113	c AD 150–350	R14	1	3	Abraded	
24	3114	3113		R16	3	1	Fresh and abraded	Closed
24	3114	3113	c AD 240–400	LR10	1	26	Fresh	
24	3114	3113		R16	1	4	Fresh	Closed
24	3304	3298	c AD 130–350	R14	1	4		Jar
24	3304	3300	c AD 150–270/370	LR2.1	1	17	Sl abraded	Open form
24	3304	3300	c AD 130–350	R14	2	13	Fresh	Jar
24	3304	3300		R16	2	4	Fresh	
24	3304	3300	c AD 170–300	R3	3	28	Fresh	Jar
24	3306	3305	c AD 180–270/370	LR2.2	2	10	Fresh	Jar
24	3306	3305	c AD 270–370	LR2.3	1	2	Sl abraded	Jar
24	3306	3305		R16	1	1	Fresh	Beaker
24	3306	3305	c AD 43–250	R17	1	1	Abraded	Flagon
24	3326	3324	c AD 150–270/370	LR2.1	1	5	Abraded	Jar
24	3708	3707	c AD 170–300	R1	1	9	Fresh	Jar
24	4026	2144		R16	1	1		Closed
24	5174	5175	c AD 240–400	LR10	4	22	Fresh	Beaker
24	5174	5175	c AD 300–350	LR11	1	2	Sl abraded	Slit indent beaker
24	5174	5175	c AD 270–370	LR2.3	1	18	Fresh	Jar
24	5174	5175		R16	2	19	Fresh and abraded	Closed
24	5174	5175	c AD 120–200	R43	5	5	Abraded	
24	5174	5176	c AD 150–270/370	LR2.1	1	6	Fresh	Jar
24	5174	5176	c AD 180–270.370	LR2.2	1	29	Fresh	Jar
24	5174	5176	c AD 170–300	R1	1	12	Fresh	Jar
24	5174	5178	c AD 70–110	R42	1	2	Fresh	
24	5230	5231	c 25 BC–AD50	B2	1	12	Abraded	Furrowed jar
24	5230	5231	c AD 270–420	LR1	1	7	Fresh	Jar
24	5230	5231	c AD 180–270/370	LR2.2	1	21	Fresh	Open form
24	5230	5231		MISC	2	13		
24	5230	5231	c AD 170–300	R1	2	12	Fresh	Jars
24	5230	5231	c AD 150–250	R14	2	11	Fresh	Open form
24	5230	5231	c AD 250–350	R16	3	28	Fresh	Rouletted beaker
24	5230	5231	c AD 80–175	R5	3	41	Fresh	Jar
24	5230	5232		B2/R1	1	4	Abraded	
24	5230	5232	c AD 210–280/90	R13	1	10	Fresh	6/2 Bowl
24	5230	5232	c AD 200–350	R14				5E dish
24	5230	5232	c AD 270–350	R14	3	33	Fresh	Beaded+fl bowl
24	5269	5170		B2/R1	1	6		Jar
24	5269	5170	c AD 150–270	LR2.1	3	11		Jar
24	5269	5170	c AD 130–350	R14	2	2		Jar
24	5269	5170	c AD 150–300	R99	1	77		Mortarium
25	2162	2149	c AD 80–175	R5	1	7	Abraded	Jar
25	2162	2149	c AD 70–200	R6.3	1	2	Fresh	Closed
25	2403	2056	c AD 170–300	R1	1	8	Fresh	Jar
25	2403	2056	c AD 70–110	R42	1	4		Dr 37

Group	Set	Context	Date–range	Fabric	No of sherds	Weight (g)	Comments	Form
25	3145	3145	c AD 150–270/370	LR2.1	2	10	Sl abraded	Jar
25	3145	3145		MISC	2	1	Abraded	
25	3145	3145	c AD 170–300	R1	1	6		
25	3145	3145	c AD 150/70–300	R14	1	8	Fresh	Open form
25	3145	3145	c AD 120–150	R43	2	5		Dr 27
25	3145	3145	c AD 170–250	R50	1	202	Fresh	DR20
26	2075	2074	c AD 70–200	R6.3	1	2	Fresh	Closed
26	2130	2128	c AD 120–200	R43	1	2	Fresh	Dr33
26	2130	2128	c AD 70–200	R6.1	2	26	Fresh	Mortarium
27	3037	3041	c AD 250–350	R14	1	9		Beaded+fl bowl
27	3228	3227	c AD 270–400	LR1.1	1	21	Fresh	Jar
27	3228	3227	c AD 240–400	LR10	2	126	Fresh	Mortarium
27	3228	3227	c AD 300–400	LR11	1	13	Sl abraded	Rouletted beaker
27	3228	3227	c AD 150–270/370	LR2.1	1	3	Fresh	
27	3228	3227	c AD 180–270/370	LR2.2	1	6	Fresh	Jar
27	3228	3227		MISC	3	8		
27	3228	3227	c AD 130–350	R14	1	6	Fresh	Open form
27	3228	3227		R16	3	3	Fresh	
29	2026	2026	c AD 270–370	LR2.3	1	4	Fresh	
29	2026	2026	c AD 170–250/300	LR2.4	1	10	Abraded	3H7 jar
29	2503	2502	c AD 200–275	R36	1	1		Beaker
32	3404	3403	Residual	B2/R1	1	1		
32	3409	3408	c 20 BC–AD 43	B5	3	26	Fresh	Dish
32	3409	3408	c AD 150–270/370	LR2.1	1	10	Fresh	Jar
32	3409	3408	c AD 150/70–250	R14	3	39	Fresh	Open form
33	1000	1000		FX	1	8	Very abraded	
33	1000	1000	c AD 150/70–250	R14	1	5	Very abraded	Cl 5C bowl
33	3000	3000	c AD 120–200	R43	1	6	Abraded	
33	3163	3163	Residual	R42	1	4		Dr 27
33	3163	3165	Residual	R14	1	17		Open form
33	3163	3170	c AD 160–270	LR11	1	5	Fresh	Beaker
33	3163	3170	c AD 150–250	R16	1	23	Fresh	Jar
33	3218	3219	c AD 240–400	LR10	1	1	Fresh	Open form
33	3218	3219	c AD 150–270	LR2.1	1	5	Fresh	Jar
33	3218	3219		R16	1	1	Abraded	

8 Post-Roman pottery (Luke Barber)

8.1 Introduction

8.1.1 The archaeological work recovered 1084 sherds of post-Roman pottery, weighing 21,845g, from 141 individually numbered contexts (including material from the environmental residues). The overall assemblage is of variable condition with sherd sizes generally ranging from very small (< 10mm across) to large (over 100mm across). The average sherd weights by provisional period are shown in Table 10. Although it is clear the late post-medieval period produced by far the largest freshest sherds, the Anglo-Saxon figures are a little distorted by either very small quantities or the presence of thick-walled/heavy vessels. Although some sherds are notably fresh, many show signs of moderate abrasion, suggesting they have been subjected to some reworking.

8.1.2 At the time of assessment no details were available on context beyond the general site interim report and unphased site plan. This data, together with the final groupings/phasing, will be incorporated during the analysis stage. The pottery has been fully recorded (number/weight/estimated number of vessels) on pro forma for archive. This used the Canterbury Archaeological Trust fabric codes for Anglo-Saxon and medieval types, and the Museum of London codes for post-medieval types. This information has been used to create an Excel database of the assemblage. Spot dating was carried out during this recording work.

8.1.3 The overall site assemblage is characterised in Table 10. Although all the different periods are represented, the majority of the assemblage is of the early medieval period. The exact division between periods is approximate as the CAT fabric groups, prefixed with a period letter code, often cross the actual dates allocated. This is most notable with the mid-late Anglo-Saxon sandy fabrics (MLS2 and LS1) and early medieval and medieval sandy fabrics (EM1 and M1). This is the result of a continual chronological development of these fabrics through time making division at the sub-period boundaries somewhat subjective, particularly when dealing with single bodysherds.

Table 10. Provisional characterisation of the post-Roman pottery assemblage. Totals include all residual/intrusive and unstratified material.

Period	No./weight	Average sherd size	No. of contexts (excludes unstratified/ mixed contexts)
Romano-Saxon? Late C4th–early 5th?	2/8g	4g	2
Early/middle Anglo-Saxon (EMS fabrics) C5th–mid C8th	3/30g	10g	0
Mid-late Anglo-Saxon (MLS fabrics) Mid C8th–mid 9th	77/1353g	17.6g	15
Late Anglo-Saxon? (LS fabrics) Mid C9th–mid 11th	1/26g	26g	0
Early medieval (EM fabrics) Mid C11th–early C13th	443/4059g	9.2g	73
High medieval (M fabrics) Early C13th–mid/late C14th	280/1756g	6.3g	26
Late medieval (LM fabrics) Mid/late C14th–early/mid 16th	39/665g	17.1g	6
Early post-medieval (PM fabrics) Mid C16th–mid/late 18th	19/270g	14.2g	6
Late post-medieval (LPM fabrics) Mid/late C18th–mid C20th	220/13,678g	62.2g	11

8.2 Periods and fabrics

Romano-Saxon?

8.2.1 Two oxidised micaceous bodysherds, possibly from the same vessel, were recovered from contexts 3597 (Grave 84, S3601) and 5111 (Grave 146, S5114). Both are slightly worn and have no other post-Roman pottery in association. The sherds may be late Roman fineware or a Saxon import and further checking needs to be undertaken (Fitzpatrick-Mathews 2016).

Early to mid Anglo-Saxon (c AD 410–720)

8.2.2 The three sherds allocated to this period consist of bodysherds of EMS 1.4 sandy and EMS 4 organic tempered ware residual in contexts 1183 (G4 pit S1182) and 2352 (G13 ditch S4223), together with a EMS4 jar with simple rim that could just be an old vessel still in use in context 3287 (G10 pit S3285). It is possible the sherds represent the beginnings of the mid Anglo-Saxon activity in the first half of the eighth century.

Mid Anglo-Saxon to late Anglo-Saxon (c AD 720–850)

8.2.3 The 77 sherds allocated to this period are generally quite fresh, though the large average sherd size is due to the presence of five sherds (118g) from heavy MLS 7c Ipswich vessels. There is a scatter of MLS 1 (sand with organic tempered ware) that is likely to be from the first half of the eighth century. As this material is quite fresh, it appears to be from primary refuse disposal. The majority of the assemblage is composed of MLS 4 (shelly ware), which accounts for 28 sherds (769g) from jars/cooking pots with simple rims. MLS2 (Canterbury-type sandy ware) is also well represented: 15/230g. Where discernable it also appears as jars/cooking pots with simple rims and light exterior burnishes. One or two sherds have bossed decoration but otherwise the vessels are plain. A further 12 sherds (36g) have been grouped under MLS2/LS1 as they have attributes of the more developed late Anglo-Saxon Canterbury-type sandy wares and could be of the mid/later ninth century. The Ipswich ware includes one pitcher with gridded stamped decoration (context 2514, G10 pit S2519) and there is one possible imported sherd that needs further checking. Overall it would appear there was low-level on-site activity during the early/mid eighth and ninth centuries.

Late Anglo-Saxon (c AD 850–1050)

8.2.4 A single possible LS2 shelly sherd with bossed decoration has been allocated to this period (context 2517, G10 pit S2519), but it is most likely from a vessel around the middle of the century and thus part of the tail end of the mid Anglo-Saxon activity.

Early medieval (c AD 1050–1225)

8.2.5 This period produced the largest group of sherds (443/4059g), most of which appear to relate to the earlier part of the range: c AD 1050 to 1150, at least where feature sherds are present. These normally consist of simple flaring rims from cooking pots. Most sherds are small and show some signs of having been reworked. The vast majority of vessels are in early medieval Canterbury Sandy Ware (EM1), which accounts for 284 sherds weighing 2691g and some 129 estimated vessels. There are some EM1 vessels of the period c AD 1150 to 1225, but these are in the minority. Contemporary with these later vessels is a scattering of shell-dusted Canterbury Sandy Ware (EM.M1: 26/316g) and a number of developed EM1 sherds that have high medieval traits (EM1/M1: 103/666g), though the latter are lacking in feature sherds. EM2 shelly and EM3 sandy-shelly wares are represented by only 11 (66g) and 14 (170g) sherds respectively. Other fabrics include EM5 (1/8g) and EM7 (1/10g), both North French/Flemish greywares, and a single sandy hemispherical crucible fragment in EM.M2A (context [2257]).

High medieval (c AD 1225–1350)

8.2.6 The 280 high medieval sherds appear to span the period c AD 1225–1350, but little need be later than AD 1325. As is usual for Canterbury, the vast majority of sherds are in M1 Tyler Hill sandy ware (267/1610g). Cooking pots (estimated 71 vessels) and jugs (estimated 50 vessels) dominate the M1 wares, but bowls and a cauldron are also present. The jugs have the usual decorative repertoire of incised lines, rilling, white slip, applied strips etc under patchy clear or green glazes. Some harder fired

sherds belong to the mid fourteenth century and have been grouped under M1/LM1 (3/80g). There is a scattering of jugs in London ware (M5), buff 'Wealden/Rye' sandy ware (M53) and a M11A Scarborough ware, the latter from a knight jug (context 2066, G33 layer). Imports are limited to single scraps of probable North French (M19) and Saintonge (M22) jugs. As such, despite the small size of the assemblage, the refuse appears to have been derived from one or more households with relatively good connections.

Late medieval (c AD 1350–1550)

8.2.7 There is a notable drop-off in the quantity of pottery after c AD 1325/50, but activity clearly continued. The most common type is late Tyler Hill ware (LM1) that accounts for 29 sherds (562g) – the vast majority of the late medieval pottery. A mixture of storage jars, cooking pots and jugs with minimal decoration is present. These probably relate mainly to activity between c AD 1350/75 and 1450/75. Pottery of the period c AD 1450–1550 is scarce, but more diverse, including LM1.2 (Canterbury transitional sandy ware), LM2 (Canterbury-type fine earthenware), LM4 (Wealden Buff sandy ware) and LM5 (Tudor Green). The latter includes both jugs and cups (4/26g).

Early post-medieval (c AD 1550–1750)

8.2.8 The 19 sherds of early post-medieval pottery represent no more than a background scatter of sherds spanning the entire period. These include local glazed red earthenwares, London stoneware, tin-glazed ware and German (Frechen) stoneware.

Late post-medieval (c AD 1750–1900+)

8.2.9 The late post-medieval assemblage is of notable size (220/13,678g) and includes many larger fresh sherds. Although some is of the later eighteenth to early nineteenth century (eg the creamware and pearlware), the vast majority is of the second half of the nineteenth century or early twentieth century. A fairly typical range of domestic ware/vessels is represented including those for storage, food preparation, the consumption of food and drink (including tea wares) and sanitary wares. Of note are the glazed red earthenware pipkin from context 3250 (G27 pit S3251) and the near complete bread bins/margarine jars in Normandy-type stoneware (all three coming from context 3250). English stoneware is also well represented (25/2682g) and includes a range of bottles with salt or Bristol glazes, some of which are stamped. Context 3250 produced a stoneware foot warmer.

8.3 The assemblages

8.3.1 Context groups are usually small: there are 91 individual contexts that produced five or less sherds. Table 11 summarises all context groups containing 25 or more sherds.

Table 11. Summary of post-Roman pottery groups of 25 sherds or more

Context	Set	Group	Provisional period/spot date	No/weight	Comments
1021	1150	12	EM: c AD 1075–1150	57/455g	Clean group
1175	1174	12	EM: c AD 1175–1250	27/228g	Clean group
2049	2054	27	LPM: c AD 1850–1900	40/1362g	Some residual/old early C19th
2056	2403	25	HM: c AD 1250–1325	26/268g	Clean group
2064	2404	20	HM: c AD 1250–1325	52/169g	Some residual EM. Most granules from residue
2104	2174	11	EM: c AD 1150–1225	27/158g	Some residual EM. Most granules from residue
2247	4077	23	HM: c AD 1250–1350	62/153g	Clean but mainly granules from residue
3250	3251	27	LPM: c AD 1840–1880	34/7638g	Clean group
3253	3254	27	LPM: c AD 1840–1880	36/1948g	Clean group
3455	3457	32	LPM: c AD 1905–1935	78/2042g	Clean group

8.3.2 Although the amalgamation of individual contexts into sets/groups will help increase the numbers of sherds for group analysis, the general trend is toward smaller groups. Residuality is variable and, on

the whole, is easily isolated, particularly in contexts with more than five sherds. Until context details are available and the full grouping/phasing is undertaken the degree to which coherent land-use group assemblages can be formed is uncertain.

8.4 Statement of potential

8.4.1 The post-Roman pottery assemblage has mixed potential for further analysis. From a ceramics perspective there is little in the assemblage that will advance our current knowledge of pottery in Canterbury. This is due to the small size of the feature assemblages, the low numbers of unusual feature sherds, the dominance of the usual types and the lack of association with other intrinsically datable finds. The pottery from the Norman outer bailey ditch is an exception as it may provide a usefully dated assemblage once the ceramics have all been grouped.

8.4.2 The assemblage has slightly more potential for further analysis in regard to the chronological development of the site. The presence of the mid Anglo-Saxon pottery is interesting as the main area of activity for this period has previously been further north-east. The mid Anglo-Saxon assemblage is small and generally lacking in feature sherds but a few pieces are worth illustrating. The early medieval assemblage's potential lies solely in its association with the bailey ditch – the sherds themselves are unremarkable. The same can be said for the high medieval assemblage, though it does include small but significant quantities of non-local wares. The late medieval and early post-medieval assemblages hold no potential for further study beyond demonstrating limited activity during these periods. The late post-medieval assemblage is generally small but the group from context [3250] is interesting in containing the Normandy-type stoneware vessels.

8.5 Recommendations for further work

8.5.1 It is proposed to undertake further targeted analysis on the post-Roman assemblage. Initially some sherds need a little further work to establish their date/source. Once the final site grouping/phasing has been undertaken the information will need to be input into the pottery excel database to allow proper interrogation of the assemblage. With the exception of the combined group from the Norman bailey ditch and late post-medieval context 3250 (and its associated contexts), no specific context groups are proposed for detailed description/analysis. An overview report will be produced for publication outlining the chronological sub-periods and their associated wares. This will concentrate on the mid Anglo-Saxon and early medieval periods, with other periods being only briefly summarised. Up to 15 sherds are proposed for illustration to accompany the chronological narrative of the pottery report.

9 The clay tobacco pipes (Luke Barber)

9.1 Assemblage summary

9.1.1 The excavations recovered just 20 fragments of clay pipe, weighing 60g, from one of nine individually numbered contexts. The assemblage has been fully listed in Table 12.

Table 12. Clay pipe assemblage (AO = bowl form types after Atkinson and Oswald 1969).

Context	Element	Likely date of pipe	No/ weight	Combined stem length	Bore diameter	Comments
1000	Stem	c AD 1650–1700	1/4g	67mm	2.4mm	
2026	Bowl frag	c AD 1660–1680 (AO 18)	1/8g	-	2.3mm	
2501	Stem	c AD 1750–1900	1/2g	25mm	1.7mm	
3000	Stem	c AD 1650–1700	6/16g	183mm	2.1–2.3mm	
3000	Stem	c AD 1700–1750	2/4g	54mm	1.7–2.1mm	
3000	Stem	c AD 1750–1900+	2/10g	87mm	1.6–1.7mm	
3000	Bowl frag	c AD 1640–1660 (AO 10)	1/4g	-	2.1mm	Illeg. stamp on heel. Milled ring around stem
3013	Stem	c AD 1750–1900+	2/4g	50mm	1.6–1.8mm	
3132	Stem	c AD 1600–1650	1/2g	15mm	3.0mm	Very worn
3281	Stem	c AD 1750–1900+	1/2g	30mm	1.4mm	
3452	Stem	c AD 1750–1900+	1/2g	21mm	1.6mm	
3455	Stem	c AD 1750–1900+	1/2g	48mm	1.3mm	J/B initials either side of flat spur. Uncertain maker

9.1.2 The assemblage is generally characterised by small fragments, often with a notable degree of wear suggesting most pieces have seen some reworking. As such the degree of residuality and intrusiveness is not always easily gauged, particularly as pipes often appear in isolation. By far the largest group is from mixed deposit 3000, with the remainder of pieces being found in ones and twos only. Whatever the case a full chronological range of pipes appears to be represented.

9.2 Statement of potential

9.2.1 The clay pipe assemblage is small, mainly lacking in diagnostic pieces and contains no decent context groups or pieces of particular note. As such the material is not considered to hold any potential for further analysis.

9.3 Recommendations for further work

9.3.1 No further work is proposed.

10 The ceramic building material (Luke Barber)

10.1 Introduction

10.1.1 The archaeological work recovered 2030 pieces of ceramic building material (CBM), weighing just over 99.5kg, from 302 individually numbered contexts. These totals include a significant quantity of burnt clay/daub fragments as well as material from one of 15 environmental residues. The latter are dominated by small pieces of burnt clay (395/1665g). A selective strategy was employed for the archive recording. All material that was clearly residual in its context was only quantified by form. The remainder, including that from currently undated deposits, was fully recorded by form and fabric. The whole assemblage was recorded along these lines on pro forma records for archive. The resultant data has been used to create a Microsoft Excel spreadsheet as part of the current assessment and digital archive. Fabric codes relate to the author's Canterbury type series but have yet to be correlated with the former CAT series. At the time of assessment only the preliminary spot dates were available – the grouping and phasing not being complete. Beyond the basic interim report and unphased site plan no detailed information on individual contexts was available – this detail will be added to the archive during the analysis work. The assemblage is composed of a wide mix of material, both in terms of types and chronological spread, but the majority is of the Roman period. The assemblage is characterised in Table 13.

Table 13. Breakdown of the ceramic building material assemblage

Type	Number	Weight
Daub/burnt clay	616	4170g
Roman brick	200	32,532g
Roman box flue tile	9	702g
Roman tegula tile	66	15,316g
Roman imbrex tile	69	4344g
Roman tessera	16	332g
Roman tile (undiagnostic)	478	15,564g
Medieval roof tile	507	18,592g
Medieval floor tile	2	72g
Post-medieval brick	38	7210g
Post-medieval roof tile	16	688g
Post-medieval drains and misc	13	260g

10.2 Daub/burnt clay

10.2.1 A relatively large assemblage of burnt clay/daub is present in one of six different fabrics. The types are summarised in Table 14.

Table 14. Summary of burnt clay/daub. (NB. Fabrics missing from sequence not present at this site)

Fabric code	Description	No/weight	Comment
D1a	Abundant fine sand	1/14g	Mid/late RB context
D2a	Silty clay (occasional voids/iron oxides)	606/4004g	Early Roman onward (inc definite daub)
D2b	Silty clay, rare flint	4/128g	Early Roman onward (inc definite daub)
D5b	Fine sand, aerated with common flint	1/10g	High medieval context
D6a	Hearth lining	3/8g	Early medieval context
D9a	Silty clay with common calcareous (chalk/shell) inclusions to 2mm	1/6g	Mid/late Roman context

10.2.2 The earliest burnt clay/daub was recovered from early Roman deposits but only Fabrics D2a and D2b are represented and even then in small quantities (14/149g). None of this material has any diagnostic features. Deposits dated to the mid/late Roman period produced 81 pieces (309g: D1a, D2a and D9a), some of which have deliberately flattened faces. It is possible that some of the currently undated deposits will prove to be of the Roman period when final phasing is completed. The scatter of burnt

clay/daub from Anglo-Saxon (113/566g) and early medieval (218/1368g) deposits is significant, but, with the exception of the hearth lining from context [3307], is all in similar fabrics to those noted in Roman deposits. Pieces with traces of wattle marks are notably few – the best example being a D2a example from high medieval context [3027]. The scatter of material in later deposits is almost certainly residual.

10.3 Roman brick and tile

10.3.1 The assemblage of Roman ceramic building material is quite large and consists of a very diverse scatter of fabrics and forms. The range of fabrics is notable: 26 different types were recovered, though many are obviously closely related and originated from the same production centre (Table 15). Many of the fabrics appear in early Roman deposits, suggesting multiple sources of supply for the construction of the first-century AD town. At present their longevity is uncertain but it is highly likely a significant proportion of the brick and tile from late Roman deposits is residual or re-used material. Once the final ceramic dating is complete, and an assessment can be made of the residuality in each deposit, it may be possible to refine some fabric date ranges. All the fabrics have been noted in Canterbury previously by the current author. A significant portion of the assemblage consists of pieces that are too small to be diagnostic of form (Table 13). This reflects the relatively fragmented nature of much of the assemblage suggesting most of it has seen significant reworking.

Table 15. Roman brick and tile fabrics (NB. Fabrics missing from sequence not present at this site. Totals exclude residual Roman tile, which was not recorded by fabric)

Fabric code	Description	No/weight	Occurrence (based on provisional spot dates)
R1a	Moderate medium sand	204/13,188g	c 1st century AD +
R1b	Moderate/abundant fine/medium sand	19/776g	c 1st century AD +
R1c	Abundant medium sand	56/9772g	c 1st century AD +
R1d	Moderate fine/medium sand, common iron oxides and sparse calcareous inclusions to 2mm	5/500g	c 1st century AD +
R1e	Common medium quartz, occasional marl & fe ox to 2mm, rare siltstone to 3mm. A pale fabric	3/684g	c 2nd century AD +
R1f	Abundant fine/medium quartz, common/moderate chalk to 3mm (most to 1mm)	2/344g	c 2nd century AD +
R2a	Sparse fine sand with moderate marl streaks and iron oxide pieces	15/578g	c 1st century AD +
R2b	Moderate marl to 4mm and iron oxides to 2mm with common quartz and some calcareous speckling. A buff fabric	1/12g	c 2nd century AD +
R3a	As 2a but with sparse/moderate medium sand	1/70g	c 3rd century AD +
R4a	Silty/sparse fine sand with very rare marl or iron oxide inclusions and rare larger quartz grains	46/1989g	c 1st century AD +
R4b	Sparse fine sand, very rare marl or iron oxide inclusions	110/10,783g	c 1st century AD +
R6a	Pale yellow/buff Eccles-type. Sparse fine sand.	28/1236g	c 1st century AD +
R6b	As 6a but sparse sand, iron oxides and marl	3/74g	c 2nd century AD +
R6c	As 6a but sparse/moderate fine/medium sand	18/2732g	c 1st century AD +
R7a	Moderate/abundant fine sand with very rare fine iron oxides in some	50/2084g	c 1st century AD +
R7b	As 7a but with sparse medium sand	18/936g	c 1st century AD +
R7c	As 7a but with sparse calcareous inclusions to 0.25mm	20/1310g	c 1st century AD +
R8a	Sparse fine sand with common voices and sparse shell inclusions to 1mm	7/474g	c 1st century AD +
R8b	No/rare fine sand, but common chalk (often voids – some shell?) to 2mm	18/1124g	c 1st century AD +
R8c	Sparse fine/medium quartz, common/moderate chalk to 1mm	4/222g	c 1st century AD +
R9a	Sparse fine sand with sparse chalk to 3mm and clay pellets to 4mm	15/906g	c 1st century AD +
R9b	As 9a but with sparse sandstone to 2mm and sparse chalk to 1mm	2/82g	c 2nd century AD +
R10a	Sparse medium sand, common iron oxides to 3mm and rare/sparse chalk and marl	22/2182g	c 1st century AD +
R10b	Sparse fine/medium sand with common iron oxides to 3mm	2/156g	c 2nd century AD +
R11b	Abundant black (iron oxide) sand	1/36g	Roman
R13a	Moderate fine/medium sand, iron oxides to 4mm and rare flint/chalk inclusions	2/1542g	c 2nd century AD +

10.3.2 The form make-up of the Roman assemblage includes the full range of most common types (Table 13). Although brick accounts for a significant proportion of the assemblage and often appears in post-Roman deposits (62/9928g) the overall assemblage is clearly not one of re-use. Types such as the floor cubes and imbrex tiles are not normally selected for re-use, both within the Roman period and later – but they are quite well represented on the current site. As such, a large proportion of the assemblage probably represents discard and demolition spread/dumping from the Roman town. However, some tile was specifically brought to the site for use in burial – most notably the two essentially complete tegulae from grave 207 (5187). These are in R1c (5274g: 438mm × 295–335mm) and R4b (4138g: 385mm × 295–325mm) and both appear to have their flanges deliberately trimmed back, probably during their former use. There are a number of different flange types and heights amongst the 30 or so examples present, but only a couple of batch marks. The box flue tiles all have simple vertical combing, often with oblique strokes as well.

10.4 Post-Roman brick and drains

10.4.1 The excavations recovered a small assemblage of post-Roman brick from the site. All is of post-medieval date. Despite the small number of pieces involved five new brick fabrics were noted amongst the material. The assemblage is summarised in Table 16. A general background scatter is represented.

Table 16. Post-Roman brick (B) and drain (P) fabrics. (NB. Fabrics missing from sequence were not present at this site)

Fabric code	Description	No./weight	Suggested date range
B1a	Friable silty with some voids, occasionally with rare flint to 6mm. Low/medium fired.	3/94g	C16th–17th
B1b	Fine quartz/silty with some voids. A clean fabric. Quite well formed, low/medium fired	16/1554g	?C17th–18th
B2a	Silty with sparse sand with occasional to sparse calcareous and iron oxide inclusions to 1mm. Crudely formed but well fired.	2/48g	Mid C16th–17th
B5a	Sparse fine/medium sand tempered with occasional flint inclusions to 10mm and moderate iron oxides to 2mm. Quite well formed and medium fired.	2/1246g	C17th–18th
B6a	Moderate fine sand with rare iron oxides and white inclusions to 0.25mm. Well formed and medium fired	10/1162g	C18th–19th
B7b	Friable, silty with voids & sparse iron oxides and cal/shell to 1mm	1/462g	?C17th–18th
B11a	Abundant calcareous peppering in open texture with some iron oxides. Well formed, medium fired.	1/100g	C19th–20th
B12a	Granular fabric with notable marl/pale clay. LBC? Late C19th–20th	1/30g	Late C19th–20th
B13a	Moderate quartz & slag with sparse flint to 5mm. Quite crude formed, med fired. Extruded/striations. Weakly frogged.	1/2440g	Mid C19th–early 20th
B14a	Dull yellow, sparse fine quartz, common slag to 7mm. Quite well formed, medium fired, London stock	1/74g	C19th–early 20th
P1a	Off-white/yellow granular stoneware. Fe wash, salt glazed	1/36g	C19th–early 20th
P2a	Grey fe speckled London stoneware. Fe wash, salt glazed	1/56g	C19th–early 20th

10.4.2 With the exception of a complete B13a brick sample from context 2557 all of the brick is fragmentary, but a number of complete thicknesses or widths are present. The nineteenth to early twentieth century is represented well in the small assemblage – the two drain fragments (contexts 3507 and 3893) being of this period.

10.5 Post-Roman roof tile

10.5.1 A notable assemblage of post-Roman roof tile was recovered, the vast majority of which is of the medieval period (Table 13). The assemblage is dominated by pieces of flat tile with no surviving fixing points, however, with two possible exceptions, where fixings do survive they are all from peg tiles. As such it is fairly safe to assume that the 'flat' tile fragments all derive from peg tiles. The assemblage is composed of pieces spanning the late twelfth/thirteenth to nineteenth centuries though the majority can be placed between the late twelfth/thirteenth and fourteenth centuries. A single new medieval fabric (T2c) was noted and it is clear from the current assemblage that some subdivision of fabrics T1a and T2a will be needed in future. The full range of medieval and post-medieval fabrics present is given in Table 17. Most fragments are small but a few larger ones are present that give data on the spacing of peg holes on the tiles in the different fabrics. All of the medieval peg holes are of circular form. The

only complete width measurement was from a T2a tile from context 2147 (130mm). A number of the medieval peg/flat tiles have clear or green patchy glazing on the lower 30–40mm of their faces and a scatter of ridge tiles, also with patchy glazing, is also present.

Table 17. Post-Roman roof tile fabrics. (NB. Fabrics missing from sequence not present at this site)

Fabric Code	Description	No/weight	Suggested Date Range
T1a	Abundant medium sand temped (mainly white grains). Low to medium fired. Tyler Hill. Can be divided into earlier, more open textured fabric, and later denser one	244/8580g	Late C12th–13th/early 14th
T2a	Sparse to moderate medium sand tempered (mainly white grains). Medium to well fired. Tyler Hill. Can be divided into more/less sandy divisions	210/7602g	Later 13th–15th
T2b	As T2a but notably harder fired and usually reduced (as pottery fabric LM1).	15/514g	C14th–15th
T2c	Moderate fine/medium quartz, sparse fe ox to 1mm. Lower fired than T2a.	8/194g	C14th–15th?
T2d	As T2a but notable chalk inclusions to 2mm	1/78g	C14th–15th?
T3a	Rare/sparse medium sand. Medium/well fired.	13/660g	?C15th–mid 16th (but merges with T3b)
T3b	Rare fine sand, Medium/well fired, sometimes with clay pellets and white wash/slip.	4/126g	?C16th–17th
T3c	Moderate fine sand. Medium/well fired.	1/124g	Late C15th–17th
T5a	Sparse fine sand with moderate calcareous inclusions to 0.5mm (voids). Well fired.	8/374g	Later C15th–16th
T5b	Sparse fine sand with rare calcareous inclusions to 0.5mm. Well/hard fired.	4/140g	Later c15th–16th
T5d	Buff fabric with moderate/abundant calcareous inclusions to 0.5mm and notable marl streaking. Quite well formed & well/hard fired	2/26g	Mid C15th–16th
T5e	Moderate fine/medium quartz, moderate/ common chalk to 0.5m, occasional shell. Possibly nib tiles	1/300g	C12th–13th?
T6a	Sparse fine sand with rare/common iron oxides to 0.5mm. Well fired. (Not a well defined group). Includes pan tile	12/562g	Late C17th–18th

10.5.2 There are relatively few pieces of late medieval tiles present (T3a and T5 variants) though they often appear alongside earlier medieval tile in deposits. A single tile in a new calcareous fabric (T5e) was recovered from context 2348. It measures 17mm thick and has a very gentle curve to its corner suggesting it may be an example of an early nib tile, but too little is present to be certain. The only other roof tile type present is a piece of T6a pan tile from context 3381 that is likely to be of eighteenth- to nineteenth-century date. The post-medieval peg/flat tile assemblage is very small and lacking in feature pieces of any note.

10.6 Post-Roman floor tile

10.6.1 Just two small pieces of medieval floor tile were recovered from the site (contexts 2348 and 3000), both of which have had all/nearly all their glaze worn off. The former appears to be an F1c tile of Westminster-type, the other an F1b Tyler Hill product.

10.7 The assemblages

10.7.1 Context groups are usually small, however, due to the very variable nature of the size of the pieces contexts with a high fragment count can frequently have a low overall weight. Table 18 summarises all context groups containing 25 or more pieces.

Table 18. Summary of CBM context groups of 25 pieces or more

Context	Provisional period	No/weight	Comments
2028	Late medieval	34/2022g	Includes residual High medieval material
2056	High medieval	52/1394g	Clean group
2066	High medieval	28/924g	Some residual Roman
2073	High medieval	43/3124g	Some residual Roman and ?intrusive post-medieval
2077	High medieval	25/410g	Clean group
2149	Late medieval	66/2716g	All/mainly High medieval

Context	Provisional period	No/weight	Comments
2348	High medieval	56/2934g	Residual Roman and ?intrusive late medieval
2517	Not dated	43/504g	All daub
3015	Post-medieval	28/766g	Residual High medieval
3027	High medieval	112/1096g	Mainly daub, most residual
3040	Mid/late Roman	37/1826g	Clean group
3287	Anglo-Saxon	82/1890g	Mainly daub. Residual Roman
3307	Early medieval	218/1416g	Mainly daub

10.7.2 The diversity of Roman fabrics within a single context is notable, even within the first- to second-century deposits. As the likelihood of high residuality in these early deposits is probably quite low, it would appear that Canterbury was being supplied by a number of production centres early on. This is likely to be the result of the surge of Romanised building during the creation of the town requiring quantities that could only be provided by several production sites. Further analysis of residuality within the pottery may help clarify this. Residuality in the medieval groups is usually more easily isolated and it is certainly clear that the late medieval groups contain a considerable number of high medieval tiles. However, some clean groups are present for the high medieval period (eg context 2056).

10.8 Statement of potential

10.8.1 The ceramic building material assemblage is of moderate size with a wide chronological mix. The assemblages of different periods vary greatly in size and have a correspondingly variable potential for further analysis. For example, the burnt clay assemblage is virtually devoid of feature pieces and is not considered to hold any potential for further analysis. The post-medieval assemblage consists of generally isolated pieces, but has provided a number of new fabric types not noted previously. The medieval assemblage has also provided a couple of new fabrics as well as a few useful groups that help refine/confirm fabric dating and attributes. The Roman assemblage is generally quite fragmented and in small context groups with no new fabrics being noted. With the notable exception of the complete tegulae from the burial the assemblage has little potential for detailed analysis, though some checking of dating may help refine fabric chronologies. Ceramic building material has been somewhat selectively studied in the past in Canterbury, as elsewhere – publication usually concentrating on the Roman combed and roller-stamped box flue tiles (Stow 1983; Barford et al 1995) or medieval decorated floor tiles (eg Horton 2001). Although more recent work has been undertaken to rectify this (Harrison 1997; 2008) there is still no comprehensive published fabric series for the city; something that needs to be addressed in the future. At this general level the current assemblage has produced a wide range of fabrics, some not noted before, and therefore offers the potential to integrate and expand the provisional series that was being compiled (Harrison 2008). To that end the current assemblage has some potential in the general study of ceramic building material from the city.

10.9 Recommendations for further work

10.9.1 Some further analysis is proposed for the ceramic building material. This will initially involve integrating the final pottery dating and site phasing with the ceramic building material archive. Following this a rapid interrogation of the site data against fabric/form will allow the filtering out of most reliable data on date/form of the brick and tile. The above fabrics also need correlation with the earlier fabric series that was being established for the city. An overall summary report can then be produced outlining the assemblage at a general level and attempting to summarise the main trends in usage in different periods. This will draw heavily on the above factual statement but will incorporate findings from the further stratigraphic analysis. Full details of the *tegulae* from the burial will be given and these two tiles are the only ones proposed for illustration.

11 The mortar (Luke Barber)

11.1 Assemblage summary

11.1.1 The excavations recovered 43 pieces of mortar, weighing 864g, from nine individually numbered contexts. The assemblage has been fully listed by type on pro forma for archive with the information being added to the CBM excel database. The assemblage includes 10 different mortar types and is summarised in Table 19.

Table 19. Summary of mortar assemblage. (NB. Type codes missing from sequence not present at this site)

Code	Description	No/weight	Comments
M2a	Pale yellow coarse sandy	4/98g	From late C1st–2nd
M3a	Buff sandy wall plaster	1/30g	C1st contexts
M4a	Off-white sandy with moderate flint & common chalk	1/108g	From late C3rd–4th
M4b	Buff with abundant medium/coarse quartz, common chalk to 2mm and common flint to 10mm	27/188g	Roman/medieval?
M4c	As M4b but with flint pebbles to 30mm	3/312g	Roman/medieval?
M5a	Abundant fine quartz off-white lime mortar, some larger sub-angular flints to 3mm	1/12g	Post-medieval? New at PGCEX15
M5b	Off-white/grey, abundant quartz	2/38g	Date? New at PGCEX15
M8a	Abundant buff cement mortar. Pointing from brickwork	1/4g	Late post-medieval. New at PGCEX15
M9a	Coal-flecked off-white/cream with some quartz/grits	1/12g	Late post-medieval. New at PGCEX15
M10b	Mid grey fine sandy cement	2/62g	C19th

11.1.2 The mortar fragments are on the whole amorphous, but a number of pieces have flat faces and a piece of M4a from context 1006 has the remains of a lime wash. It is clear there is a wide chronological spread within the mortar and there are a notable number of late post-medieval types. Residuality is often difficult to gauge with the less chronologically distinctive types.

11.2 Statement of potential

11.2.1 The mortar assemblage is small and somewhat divorced from the structures it originated from. Most had been redeposited. In the absence of comparative mortar samples from dated walls the current assemblage has little potential for further analysis.

11.3 Recommendations for further work

11.3.1 No further work is proposed.

12 The metallurgical residues (Luke Barber)

12.1 Introduction

12.1.1 The archaeological work recovered 70,234g of metallurgical residues from 127 individually numbered contexts. This total consists of 57,462g (520 individual pieces) of hand-collected material with the remainder being derived from one of 97 environmental residues. As a consequence the sizes of individual pieces varies greatly, from tiny chips from within the residues to large hand-collected pieces of over 5kg. The assemblage has been fully listed by context and type on metallurgical recording sheets which are housed with the archive. The information from these has been used to create a Microsoft Excel spreadsheet for the digital archive. Although the hand-collected slag was counted as well as weighed the material from the residues was simply weighed. This approach had to be taken as the residues included very large quantities of tiny pieces of slag that were too numerous to count and indeed divide by type. This small mixed material was weighed and scanned to note the types and approximate proportions of the different slag types present.

12.1.2 The current assessment represents an overview of the metallurgical residues by provisional phase and type, the former drawing on ceramic dating, stratigraphy and association. Although some deposits could chronologically shift a little during final analysis this is considered unlikely at the present site. As such the current overview is considered to be a reliable guide to the main trends and allows an informed assessment of potential. To that end the assemblage is summarised in Table 20.

Table 20. Summary of metallurgical assemblage by weight (g)

Phase	1	2	3	4	5	6	7	8	Unphased
Number of contexts	*5*	*3*	33	*22*	*29*	*13*	*13*	*4*	*5*
Magnetic Fines	7		31						6
1a Hearth lining		22	2	1416	662	74	136	98	
2a Fe smelting (tap)				150	1868				
2b Undiagnostic Fe(dense/flowed)		56		742	408	98	12		
2c Fe smelting (dense)				120					
2d Fe Smelting furnace base				5242					
3a Undiagnostic Fe (brown/aerated)			854	13150	14874	2072	2624	1454	
3b Fe smithing (forge bottoms)				1352	594		7614	174	
3c Undiagnostic Fe (grey/brown/dense)					726		752		
4a Fuel ash slag (from coal)								98	
4b Fe cinder/lightweight					18	38			
5a Hammerscale	14	8	6	633	177	67	108	62	3
Fe concretion			32					72	
Mixed (residues)	12	14	15	7161	2334	954	488	530	
Grand Total	**33**	**100**	**940**	**29966**	**21661**	**3303**	**11734**	**2488**	**9**

12.2 Metallurgical residues by phase

Phase 1 Late Iron Age/early Roman

12.2.1 This phase produced a notably small assemblage of material, all of which was recovered from environmental residues. The small quantities of magnetic fines, consisting of clay and ferruginous stone granules whose magnetic properties have been enhanced through heating, are not indicative of metalworking. There were more magnetic fines, as well as natural iron concretions and tiny chips of cinder/fuel ash slag in the mixed residues. The 14g of hammerscale are clearly from iron smithing activity. The quantities involved suggest some contemporary smithing rather than all being intrusive (sets 3020 and 3395 contained between 100-200 flakes each). All of this hammerscale was recovered from the group 4 ditch.

Phase 2 early/mid Roman

12.2.2 Phase 2 deposits produced just 100g of metallurgical residues, though a range of types is represented (Table 20). The material derived from the G5 ditch fill (group 5) where a sparse scatter of hearth lining, type 2b slag and hammerscale was recovered. Too little is present to interpret, but a background scatter of spread smithing waste appears to be represented.

Phase 3 late Roman

12.2.3 The metalworking residues recovered from the burials (group 9) is residual, and includes a scatter of natural iron concretions and magnetic fines. Hammerscale was recovered from S2540, S3148, S3386 and S3392 but only in very small quantities. This would again suggest the area was not party to metalworking at this time, but was receiving small quantities of smithing waste derived from elsewhere.

Phase 4 Anglo-Saxon

12.2.4 This is the first phase on site where there is a marked concentration of metalworking residues (Table 20). Much of the material consists of quite large fresh pieces, all deriving from one of 10 pits (group 10). To that end the material must be seen as redeposited, but the quantity and condition suggests it relates to activity potentially within the boundaries of the site. Pit 2510 is notable for containing 13,966g of waste, including a very large furnace bottom weighing 5242g and measuring 220–260mm in diameter. The size of this suggests it to be associated with smelting, however, the pit also contained 3392g of type 3a slag and some 450g of hammerscale. This would suggest both smelting and, probably to a greater extent, smithing, was undertaken by the mid Anglo-Saxon metalworkers. It may be the latter was more related to the refining of blooms rather than secondary smithing, as has been suggested for the mid Anglo-Saxon metalworking at the Canterbury Christ Church University site to the north-east (McDonnell and Young 2015). However, pit 2519 produced two classic sized plano-convex forge bottoms of between 75mm and 95mm diameter (another was recovered from pit 3036), large quantities of type 3a slag and moderate quantities of hammerscale suggesting secondary smithing. It would therefore appear that both processes were undertaken at/near the site but further close stratigraphic and spatial distribution analysis may help to prove this.

Phase 5 early medieval

12.2.5 The early medieval phase also produced a significant quantity of metallurgical residues. Although there is some danger of residuality the ceramics suggest this is not an issue in most deposits. The ditch fill (group 11) produced consistent, albeit small, quantities of material from the associated environmental residues. With the exception of one group of type 3b slag all of this relates to low/moderate quantities of hammerscale. This material could be residual Anglo-Saxon material entering the ditch but this is impossible to prove. The group 12 pit fills produced much more material including a large fresh piece of tap slag from pit S1468 (1856g). A further piece (12g) was recovered from pit S3309 but they remain isolated pieces. The bulk of the material consists of type 3a slag which, although strictly speaking undiagnostic of process, is suspected of being smithing waste. There is a 594g forge bottom from pit S3309, and significant quantities of hammerscale were recovered from five of the pits. It would therefore appear that the early medieval waste relates essentially to smithing but with the potential for some earlier residual pieces.

Phase 6 high medieval

12.2.6 Far less metallurgical residues were recovered from deposits of this period (3303g). The material was recovered from one of five groups (G19–23) that include metalled surfaces, soil layers, pits and post-holes. As such the potential for residuality in many of these open deposits is high (though spatial analysis has not been undertaken at assessment stage). No particularly large groups are present – by far the largest concentration coming from G22 pit S3026 which produced 1516g of slag including probable smithing waste and notable quantities of hammerscale. Low-level smithing is suggested if the material is not residual.

Phase 7 late medieval

12.2.7 At 11,734g the late medieval assemblage represents a significant increase in waste from the preceding period. However, much of the associated pottery is of the high medieval period and it is thus considered likely that the metallurgical residues may also largely be residual. This is particularly the case with the gully fills of group 26 and much of the pit and quarry fills of group 25. Of the latter, the two contexts that produced solely late medieval pottery (*c* AD 1350–1425) produced small quantities of hearth lining, undiagnostic iron slag and moderate quantities of hammerscale. This material could also easily be residual. The majority of the slag attributed to phase 6 was recovered from pit and quarry fills (group 24) though ceramic dating is absent. This group produced 10,812g of waste, most of which was recovered from pit S3032 (9826g). Most notable is the presence of six forge bottoms in fill 3029 and moderate quantities of hammerscale. This may only represent a discrete dump of smithing waste from activity elsewhere.

Phase 8 Post-medieval/modern

12.2.8 The relatively small quantity of phase 8 metallurgical residues is almost certainly dominated by residual material. However, pit S3251 (group 27) produced 98g of fuel ash slag almost certainly derived from coal burning likely to be of the period.

12.3 Statement of potential

12.3.1 The excavations have produced a moderate sized assemblage of metallurgical residues from the site. There appears to be little metalworking activity during the late Iron Age to Roman periods, but with a sudden intensification in smelting/smithing and smithing in the mid Anglo-Saxon and early medieval periods respectively. Low levels of iron smithing are suggested for the high and late medieval periods but the degree of residuality cannot be established with certainly. The phase 1, 2, 3, 6, 7 and 8 assemblages are too small, dispersed or insecure to warrant any further analysis beyond that already undertaken for this assessment.

12.3.2 The mid Anglo-Saxon and early medieval assemblages are of a little more interest. The Anglo-Saxon assemblage is important as it complements the much larger contemporary group from the Canterbury Christ Church University site (McDonnell and Young 2015) and offers a chance to compare the two – mid Anglo-Saxon assemblages are rare and shed new light on the nature of metalworking at the time. The early medieval assemblage needs to have its distribution studied to gain a better understanding of how it relates to contemporary activity and what that activity may have been associated with.

12.4 Recommendations for further work

12.4.1 Some limited further analysis is proposed on phase 4 and 5 slag and a summary report be produced for publication. Tasks consist of updating the assemblage catalogue with final group/phase data, study of the spatial distribution of key phase 4 and 5 groups. Comparison of this assemblage with that from the contemporary metalworking assemblage from Canterbury Christ Church University is also recommended before production of a summary report for publication.

13 **Registered finds** (Andrew Richardson with Ian Anderson)

13.1 Introduction

13.1.1 The finds assemblage recovered from the project site comprised some 751 records of registered (also referred to as 'small') finds, collectively representing a total of 2034 individual objects, or fragments of objects. The registered finds include objects of metal (iron, copper alloy, silver and gold), plus small quantities of worked bone, worked stone, flint, glass and ceramic objects (both pottery and ceramic building material), as well as a small number of finds of other or unidentified materials. Most were registered on site; others (numbered 9000 onwards) have been allocated numbers during initial finds processing. All have been entered in the Integrated Archaeological Database (IADB) used by CAT, with numbers prefixed 'SF'.

13.1.2 In addition to the registered finds a number of finds, mostly of worked stone and glass, have been recorded as bulk finds. These are not considered here, but will be integrated into the relevant specialist analysis reports.

13.1.3 This assessment was undertaken in cognisance of the procedures of assessment as set out in MAP 2 (English Heritage 1991), to provide both a quantification of the assemblage and a qualitative overview of its potential for further analysis.

13.1.4 This report is ordered according to material (e.g. 'copper alloy objects' or 'iron objects') and within those material groups by functional category where possible. A statement on the conservation of items in each material group is also included.

13.1.5 The majority of registered finds were recovered from the Roman cemetery, and represent a mixture of coffin fittings (mostly in the form of iron nails), deliberately deposited costume accessories and grave goods, and residual finds from grave backfills. During analysis these will integrated into the overall grave catalogue, rather than being catalogued by functional type as is the case with the non-funerary assemblage. This assessment therefore considers firstly the finds from the Roman cemetery, and then the registered finds from all other, non-funerary, contexts.

13.2 Registered finds from the Roman cemetery

13.2.1 A total of 220 graves, mainly inhumations, were identified within the Roman cemetery. These were allocated grave numbers on site up to grave 220. The majority of these graves produced one or more finds. Table 21 presents a quantification of the registered finds by material. It should be noted that bulk finds were also recovered from the graves, mostly residual finds such as pottery recovered from grave backfills. The bulk find material is not included in this quantification or assessment, but its presence should be noted and reflected in the final grave catalogue. The great majority (over 80%) of registered finds from graves were iron objects, primarily nails and coffin fittings. Much smaller quantities of finds of other materials were recovered from the burials, including finds of copper alloy, silver, worked bone and stone, glass, pottery and ceramic building material. Finds of lead are conspicuous by their complete absence from the assemblage (including both the cemetery and non-cemetery assemblages).

Table 21. Quantification of registered finds from Roman funerary contexts

Material Class	No. of Records	No. of Objects/ Fragments	Notes
Iron	396	1395	Predominantly nails, coffin fittings and hobnails
Copper alloy	23	25	Brooches, bracelets, pins, fittings, coins
Silver	3	3	1 pin, 2 buckles
Worked bone	6	37	Pin, comb (30 fragments), needle, burnt bone
Worked stone	11	15	Structural frag, grave packing, excludes flint
Flint	12	12	Pick, scrapers, flakes
Glass	9	9	Vessels, bead, fragments
Pottery	16	58	Pottery from cremation burial 193, 1 crucible fragment from Grave 74

Material Class	No. of Records	No. of Objects/ Fragments	Notes
Ceramic building material	11	11	Daub, Roman roof tile
Other	6	19	Multiple or unidentified materials, wood
TOTAL	493	1584	

13.2.2 As was stated above, for the purposes of formal analysis and publication, the finds recovered from the Roman graves should be recorded within the overall grave catalogue and then discussed both in terms of their place within the grave assemblage and by class of object (e.g. 'dress accessories and ornaments; pins').

13.2.3 The finds recovered from the graves can be divided into four broad categories. Firstly, fixtures and fittings within the grave, mostly represented by coffins (including very large numbers of iron nails), but also including stone packing and roof tiles used as coverings. In the case of this cemetery, this category accounts for the great majority of the finds assemblage.

13.2.4 Secondly, costume accessories that were probably deposited as a result of individuals being interred clothed (as opposed to in a shroud). These include a small number of brooches, bracelets and belt fittings, although the possibility that some of these were deposited as keepsakes should be kept in mind. A number of pins may be representative of costume, but could equally well be shroud fastenings.

13.2.5 Thirdly, a small number of deliberately placed objects can be best interpreted as grave goods. These include a worked bone comb from grave 28 and pottery vessels from grave 193 (a cremation burial).

13.2.6 Finally, a number of finds were recovered that probably represent residual material accidentally deposited during the backfilling of graves. This category includes quantities of worked flint, daub, pottery and possibly some Roman coins.

13.2.7 The graves that have produced finds are listed in Table 22, along with an initial categorisation based on this fourfold division (grave furniture, costume, grave goods and residual material). In addition, some finds cannot be categorised without further analysis of their form and place within the burial, so these are listed as uncatagorised at this stage.

Table 22. Summary of artefacts in Roman graves by class (x indicates present)

Grave	Grave Furniture	Costume	Grave Goods	Residual Finds	Uncategorised
1				X	
2	X				
3		X		X	
4	X			X	
5				X	
6	X			X	
7	X	X		X	
8				X	
9	X			X	
10					
11					
12	X	X		X	
13	X			X	
14	X			X	
15	X			X	
16	X			X	
17	X			X	X
18	X	X		X	
19				X	
20	X			X	X
21	X			X	
22				X	

Grave	Grave Furniture	Costume	Grave Goods	Residual Finds	Uncategorised
23				X	
24	X			X	
25				X	X
26	X			X	
27				X	X
28	X		X	X	
29	X			X	
30	X			X	
31	X	X		X	X
32	X			X	
33	X			X	
34				X	
35	X			X	
36	X			X	
37	X			X	X
38	X			X	
39	X			X	
40	X			X	
41	X			X	X
42					X
43	X			X	
44	X			X	
45				X	X
46				X	
47	X			X	
48	X			X	X
49	X			X	X
50	X	X		X	
51	X			X	
52	X			X	
53	X			X	
54	X			X	
55	X			X	
56	X	X		X	X
57	X			X	
58	X			X	
59	X		X	X	X
60				X	
61	X			X	
62	X			X	
63	X				
64	X	X		X	
65	X	X			
66	X			X	X
67	X			X	
68	X			X	
69	X			X	
70	X			X	
71	X			X	
72	X			X	
73	X	X		X	X
74	X			X	X
75	X			X	
76	X	X		X	X
77	X				X
78					
79	X			X	X
80	X				

Grave	Grave Furniture	Costume	Grave Goods	Residual Finds	Uncategorised
81	X			X	
82	X			X	X
83	X			X	
84	X			X	
85					
86				X	
87	X			X	
88	X	X		X	
89	X			X	
90				X	X
91	X	X		X	
92	X			X	X
93	X			X	X
94	X			X	
95	X			X	X
96	X	X		X	
97	X			X	
98					
99	X	X		X	
100					
101	X	X		X	
102	X			X	
103	X				
104				X	
105		X			
106				X	
107	X				
108				X	
109				X	
110	X				
111				X	
112	X			X	
113	X	X	X	X	
114	X			X	
115	X			X	X
116	X			X	
117					
118				X	
119				X	
120				X	X
121				X	X
122	X			X	
123					
124	X			X	X
125	X			X	
126				X	
127					
128				X	
129	X			X	
130	X			X	
131				X	
132	X			X	
133	X			X	
134					
135				X	
136					
137	X			X	
138	X	X		X	

Grave	Grave Furniture	Costume	Grave Goods	Residual Finds	Uncategorised
139	X			X	X
140	X			X	
141				X	
142				X	
143	X			X	X
144				X	
145	X			X	
146	X			X	
147					
148	X			X	
149	X	X		X	
150	X				
151	X			X	
152		X		X	
153				X	
154	X			X	
155					
156				X	
157	X	X			
158		X			
159					
160	X				
161	X			X	
162	X				
163					
164					
165			X	X	
166					
167	X			X	
168					
169	X				
170	X			X	
171	X				
172					
173	X			X	
174	X			X	
175	X				
176	X				
177					X
178	X			X	
179	X				
180	X			X	
181					
182	X	X		X	
183	X			X	
184				X	
185	X			X	
186				X	
187	X			X	
188					
189	X	X		X	
190	X			X	
191	X			X	
192	X			X	
193			X	X	X
194	X	X		X	X
195	X	X		X	
196	X			X	

Grave	Grave Furniture	Costume	Grave Goods	Residual Finds	Uncategorised
197	X			X	
198	X		X	X	
199	X			X	
200	X			X	
201	X			X	
202				X	X
203	X			X	
204					
205					
206	X			X	
207	X			X	
208	X	X			
209	X			X	
210	X	X		X	
211	X				
212	X			X	X
213	X			X	
214					
215	X				
216					
217					
218					
219	X				
220					
TOTAL	178	29	6	167	35

Grave Furniture

13.2.8 The majority of the registered finds recovered from the Roman cemetery, and indeed the overall site, represent evidence of various types of grave furniture. Of the 220 identified graves, a minimum of 178 (81%) contained some form of evidence for grave furniture. Almost all related to coffins or their fittings, including such things as handles, but also large numbers of iron coffin nails, as well as worked stone fragments used as packing material.

13.2.9 A wide range of iron nails, studs and other fittings were recovered from the graves. Many have traces of mineral preserved wood (and possibly some other organic materials) on them. Most if not all are likely to be coffin-related; in some graves this is apparent from the arrangement of the fittings, and their association with other evidence for coffins, such as coffin stains and/or stone packing. However, many nails were also retrieved from the grave backfills.

13.2.10 In addition to the many iron nails and fittings, a number of graves contained stones that appear to have formed packing around coffins. Samples of packing stones were not always recovered, but Grave 26 had stone packing around a coffin that included ironstone, Greensand and sandstone rubble. Grave 65 had two stone fragments (SF9092) registered as being of 'Greenstone' (presumably meaning Greensand) found near the head area. Grave 113 contained possible packing material comprising Tufa, ironstone, sandstone (SF9132) and Greensand (SF9128), in addition to two large flint nodules placed at the feet within the coffin.

13.2.11 Grave 122 contained two sandstone packing stones (SF385 and 386) plus a fragment of column (SF384) used as packing around a coffin. Grave 124 contained a large sandstone cobble (SF393), and grave 125 contained a sandstone lump (SF372). Packing was recorded in grave 157, but no samples appear to have been taken. Finally, grave 175 contained three sandstone fragments (collectively registered as SF442). The worked stone, including the grave packing stone, are reported elsewhere by Barber (section 15, pp 93-95).

13.2.12 In addition to packing stones, two roof tiles or tegulae (SF491 and SF492) were found in grave 207 covering the body of a child.

13.2.13 The extent and nature of the use of coffins in the cemetery should represent a key research area during analysis of the site. The combined evidence for coffins and other grave furniture (metal fittings, wood and other mineral preserved organics, packing material and stratigraphic evidence such as soil stains of the shape of the grave cut) would be best considered together in an integrated report, including input from relevant specialists such as Damian Goodburn (for wood) and Dana Goodburn-Brown (for conservation cleaning and analysis of iron fittings). This would represent a significant amount of work, but would be the best approach to understanding this important aspect of the funeral rites practised in this late Roman cemetery.

Costume

13.2.14 Twenty-nine graves (just over 13% of the total) produced objects associated with costume, dress or personal adornment. This total does not include examples of dress accessories that appear to represent residual finds in the grave backfill. These are discussed below. Rather, the concern here is with deliberately deposited items of dress or personal adornment. Some, but not all, of these items will have been deposited as a result of the deceased being interred dressed, a burial rite distinct from the more common late Roman practice of burial with shrouds. It may be the case that dressed burial replaced shroud burial during the course of the late fourth and early fifth centuries (Ellen Swift pers comm).

13.2.15 A number of graves produced hobnails, possibly indicating the presence of footwear. However, only two graves contained large numbers certainly representing deposited hobnailed footwear; the body in grave 12 had been interred wearing a pair of hobnailed shoes, whilst a cluster of 36 hobnails under the skull in grave 36 suggests the presence of a shoe placed under the head. Graves 7 (which also contained a copper alloy tag), 31, 50, 56, 73, 88, 91, 96, 99, 101, 138, 149, 189, 194, 195 and 208 all contained between 1 and 5 very small iron nails that may be hobnails, although it is also possible some may be studs, possibly from coffins. Further analysis of form and, where possible, position in the burial will be required to distinguish between them.

13.2.16 Four graves contained pins. The backfill of grave 3 produced an incomplete pin of worked bone (SF26), decorated with incised linear ornament. It is possible that this was actually a residual find redeposited during backfilling, rather than a worn item. In contrast, the individual in grave 64 was buried with silver (SF246) and copper alloy (SF278) pins. These were found against the skull, and most likely represent hair pins. The form of the silver pin suggests a date of between c AD 250 and 400. Similarly, the individual in grave 65 was buried with a copper alloy pin which was found at the base of the back of the skull, again probably a hair pin. Grave 158 produced a large bent copper alloy pin (SF418), almost certainly a hairpin, although its position in the grave is not recorded (it is assigned to the backfill).

13.2.17 Three graves contained copper alloy bracelets. An almost complete bracelet of late third- to fourth-century date was found to the left of the skull in grave 64 (which also contained the silver and copper alloy hair pins). Although not apparently worn, there seems little doubt this was deliberately placed with the body at the time of burial. The backfill of grave 194 contained part of a copper alloy bracelet; this may be a residual find. The backfill of grave 210 also contained a copper alloy bracelet (SF479), but this was almost complete, and seems more likely to have been deliberately deposited with the body, rather being a residual find.

13.2.18 In contrast, there is little reason to doubt that the individual in grave 152 was interred wearing a belt. This is evidenced by an unusual pair of silver buckles (SF410 and 411), that appear to have been attached by small riveted plates to the lower edge of the belt. Both buckles point towards an iron fitting (SF412) by the upper right femur, suggesting that this object was suspended by straps from the buckles. This pair of buckles are especially significant finds. Silver belt-fittings of any type are extremely rare finds in graves from Roman Britain. Ager (2012) notes only two British burials containing them; grave 1846 from Lankhills, Winchester (Booth et al 2010, 289–90, fig. 3.248, 2–3) and grave B1 from Kingsholm, Gloucester. Furthermore, the Canterbury examples, like those from Kingsholm grave B1, would appear to be best paralleled by types from the Danube and Black Sea regions, with their closest parallel being perhaps a buckle from Kerch, Crimea (Zasetskaya 1993, 56, pl. 26, 1026). In terms of date, it is likely they were manufactured in the Pontiac-Danubian area sometime between the very late fourth (c AD 390 onwards) or early fifth century AD, with their burial in

Canterbury being likely to have taken place at some point during the first half of the fifth century. Clearly these are important finds which merit further detailed study.

13.2.19 Grave 182 produced the bow and foot of a copper alloy crossbow brooch. It appears to be an example of Mackreth's Type 2b (Mackreth 2011, 200, plate 136), datable to the late second or third century AD. However, it was recorded as coming from the grave backfill and this and its condition may indicate that is residual (which is likely the case with the only other brooch retrieved from a grave, SF178 from grave 45; see below).

13.2.20 Graves 105 and 157 both produced glass beads; these have been reported on elsewhere by Broadley (section 14, pp 91–92).

13.2.21 The body in grave 18 was found with a heavily encrusted iron ring or loop (SF113) placed at the centre of the pelvis. It is not clear without conservation cleaning what this object is, but it is possible it is some kind of belt fitting. Similarly, the iron (SF359) and copper alloy (SF469) objects found in grave 113 may be costume related, but again conservation cleaning will be required to confirm their form and function.

Grave goods

13.2.22 Only six graves (just under 3% of the total) produced objects that are best interpreted as being deliberately deposited grave goods. These include a bone comb (SF140) from grave 28, possibly glass vessel fragments from grave 59, two large flint nodules placed by the feet but apparently within the coffin in grave 113, part of a bone needle in grave 165, pottery vessels from grave 193 (a cremation burial), and a copper alloy coin (SF465) found near the mouth in grave 198. The pottery is reported on elsewhere by Lyne (section 7, pp 27–28). The bone comb is in a very fragmentary condition and would benefit from conservation cleaning before further analysis.

13.2.23 Of seven coins that were found in graves, one, SF465 from grave 198, appears to have been deliberately deposited as a grave good. It was found in, or in the area of the mouth, of the skeleton. It is a copy of a Constantinopolis commemorative issue. The coin it copies would have been minted between c AD 340–345, thus providing a *terminus post quem* for this burial of AD 340.

13.2.24 The remaining coins from graves were all recorded as coming from grave backfills, and were probably residual (see below).

Residual finds from graves

13.2.25 Some 167 graves (over 77% of the total) contained artefacts that are likely to have been redeposited as residual finds during backfilling. Most of these were recorded as bulk finds of pottery, ceramic building material, worked or burnt flint, slag, and animal bones. However, a number of registered finds, including six Roman coins and a copper alloy brooch (SF178 from grave 45), are best considered to be residual finds accidentally deposited in grave backfills (although an alternative explanation of deliberate deposition of coins or parts of artefacts during the backfilling of graves as part of the funeral rite should not, perhaps, be completely ruled out).

13.2.26 Brooch SF178 comprises two joining pieces of a plain Nauheim Derivative brooch, which dates to the mid-first century AD. Given its early date and condition, it seems very likely it entered the grave as a residual find.

13.2.27 The six Roman coins from backfills (SF78 from grave 7, SF108 from grave 15, SF123 from grave 20, SF144 from grave 31, SF185 from grave 48 and SF364 from grave 124) are more likely to have been deposited as residual finds in the grave backfill. Coin SF123 in grave 20 is very small, and the grave fill was heavily affected by root action, leading to suggestion that this coin could have been intrusive. However, it could equally be a residual inclusion in the backfill. It is a contemporary copy of a coin minted between c AD 355 and 365, a date not inconsistent with the rest of the cemetery. Most of the other coins in grave backfills date to the mid to late fourth century. Although mostly residual, the coins do provide a *terminus post quem* (TPQ) for their associated burials, providing useful additional dating evidence for the cemetery. Table 23 summarises the coin-dated graves.

Table 23. Coin-dated graves

Grave	SF	Coin Type	Coin minting date	TPQ
7	SF78	Constantinopolis	AD 340–345	AD 340
15	SF108	Constantinopolis	AD 340–345	AD 340
20	SF123	House of Constantine, Falling Horseman	AD 355–365	AD 355
31	SF144	House of Constantine, Falling Horseman	AD 355–365	AD 355
48	SF185	Radiate, Victory	AD 260–273	AD 260
124	SF364	Valentinian I, Securitas Reipublicae	AD 367–375	AD 367
198	SF465	Constantinopolis	AD 340–345	AD 340

13.2.28 Although, with the exception of one cremation burial, most of the pottery in the graves was present as residual sherds in the backfill. This is reported on elsewhere by Lyne (section 7, pp 27–47), and despite residuality does provide further useful dating by providing further TPQs for a number of burials.

Uncategorised finds from graves

13.2.29 A total of 35 graves (just over 16% of burials) contained registered finds that cannot, at this stage, be placed under one of the above categories (coffin, costume, grave goods, or residual). These finds will require further close scrutiny, both of their forms and functions, as well as their position in the grave (where this has been recorded) to try to interpret them fully. Many may, in fact, be further cases of accidentally deposited residual finds, or indeed unrecognised coffin fittings.

13.2.30 Grave 37 produced a roughly rectangular stone (SF9130). This may be ironstone, and appears to be either water-rolled or deliberately rubbed smooth. Its position in the grave is not recorded, making it impossible to tell whether this was residual in the grave fill or deliberately deposited with the body.

13.3 Catalogue of registered finds by grave

Grave 2

SF65. Iron nail.

Grave 3

SF26. Bone pin. Incomplete decorated bone pin. Lower part of shaft, tapering towards point. Band of incised linear decoration around upper part of shaft. Found in backfill towards lower left part of grave. Length: 65mm (minimum). Diameter: 7mm. Weight: 3g. Context (3050), backfill of grave.

Grave 4

SF29. Iron nail.
SF30. Iron nail.
SF31. Iron nail.
SF32. Iron nail.

Grave 6

SF9082. Iron nail.

Grave 7

SF73. Copper alloy sheet. Section of copper alloy sheet, which tapers towards a rounded point. Possibly a tag or strap end? Found at right chest area. Length: 19mm. Width: 7.5mm. Thickness: 0.25mm. Weight: 0.3g. Context (3135), backfill of grave. Illustrate.
SF78. Copper alloy coin. Nummus, Constantinopolis. Copy of ae3. Trier mint. Circa AD 340–45. RIC VII, Trier, copy as 523. Found above head, probably residual. Diameter: 14mm. Weight: 1.1g. Context (3135), backfill of grave.
SF94. Iron hobnail(?). Small iron nail, probably a hobnail. Found just to right of right knee. Length: 11.5mm. Width: 10mm. Weight: 1.4g. Context (3135), backfill of grave. Illustrate.
SF95. Iron nail.

SF96. Iron coffin furniture.

Graves 9/10/11

SF103. Iron nail. Context (3145), soil horizon above graves 9, 10, 11, probably derived from one of these burials.

Grave 12

SF98. Iron nail.
SF99. Hobnail boot. 9× iron hobnails. Right foot.
SF100. Hobnail boot. 22× iron hobnails. Left foot.

Grave 13

SF105. Iron nails. 2× nails. Found by feet, but appear too long to be hobnails.
SF106. Pot. Rim sherd of pot. Late second to third century AD. Found to right of pelvis, towards edge of grave. Probably residual in grave backfill.

Grave 14

SF9114. Iron nails. 3×.

Grave 15

SF107. Iron nail.
SF108. Copper alloy coin. Nummus, Constantinopolis. Copy of ae3. Trier mint, 1st officina. Circa AD 340–345. RIC VII, Trier, copy of 543. Found in fill to left of legs, about 150mm above level of bones, probably residual. Diameter: 13mm. Weight: 1g. Context (3192), backfill of grave.
SF9113. Iron nails. 2×.

Grave 16

SF9094. Iron nail.
SF9095. Iron nail with wood attached.

Grave 17

SF9022/1. Iron nail. Head and part of shaft only. Possibly a coffin fitting? Recovered from backfill. Length: 24mm. Width: 19mm. Weight: 4.6g. Context (3257), backfill of grave.
SF9022/2. Iron object. Globular iron object. Recovered from backfill. Length: 38mm. Width: 28mm. Thickness: 22mm. Weight: 23g. Context (3257), backfill of grave.

Grave 18

SF112. Iron nail. Found near left femur.
SF113. Iron ring or loop. Found at centre of pelvis. Heavily encrusted with soil. Length: 30mm. Width: 25mm. Thickness: 8mm. Weight: 16.7g (maximum). Context (3261), skeleton. Illustrate.
SF114. Iron stud. Small dome-headed stud. Found by left shoulder. Length: 11mm. Diameter (head): 10mm. Weight: 1g. Context (3261), skeleton. Illustrate.
SF115. Iron nail.

Grave 20

SF123. Copper alloy coin. Nummus of the House of Constantine. Copy of ae3. Reverse: falling horseman. Circa AD 355–365. RIC VIII, copy as Trier 358. Found close to left foot of skeleton, but the grave fill was heavily rooted so this very small coin may be intrusive. Diameter: 7mm. Weight: 0.3g. Context (3270), backfill of grave.
SF124. Iron nail. In two pieces.
SF125. Iron nail.

Grave 21

SF116. Iron nail.

SF117. Iron nail.
SF118. Iron nail.
SF119. Iron nail.
SF120. Iron nail.
SF121. Iron nail.
SF122. Iron object. Large oval(?) iron plate, broken into two joining pieces, with protrusions from both upper and underside. Probably a coffin fitting. Length: 80mm. Width: 51mm. Thickness: 55mm. Weight: 124g. Context (3265), coffin stain. Illustrate.

Grave 24

SF137. Iron nails. 3×.

Grave 25

SF138. Iron nail or stud. Broken into three pieces. Found in nasal cavity of skeleton. Context (3348), skeleton.

Grave 26

SF136. Iron nails. 9×.
SF143. Iron nails. 9×.
SF9025. Iron object. Probably a coffin fitting. Soil encrusted. Length: 91mm. Width: 39mm. Thickness: 26mm. Weight: 84g. Context (3342), backfill of grave. Illustrate.

Grave 27

SF141. Iron nails or studs.

Grave 28

SF140. Bone comb. Double sided composite bone comb with incised decoration. In multiple fragments. Found at top left of skull. Context (3355), backfill of grave. Illustrate.
SF9118. Iron nails. 7×.

Grave 29

SF139. Iron nail.
SF197. Iron nail. Plus 3× iron fragments.
SF198. Iron nails. 3×.

Grave 30

SF142. Iron nails. 10×.

Grave 31

SF144. Copper alloy coin. Nummus of the House of Constantine. Copy of ae3. Reverse: Fel Temp Repartio, falling horseman. Circa AD 355–365. RIC VIII, copy as Trier 358. Position in grave not recorded, probably residual. Diameter: 10mm. Weight: 0.5g. Context (3368), backfill of grave.
SF145. Iron hobnail? Or nail?
SF146. Copper alloy object. Encrusted in soil. Check X-ray. Recommend conservation cleaning. Context (3368), backfill of grave.
SF147. Iron nail.

Grave 32

SF9119. Iron nails. 7×.

Grave 33

SF148. Iron nails. 6×.

Grave 35

SF149. Iron nail.
SF9112. Iron nails. 2×.

Grave 36

SF177. Iron nail.

Grave 37

SF163. Iron coffin fittings. 18×.
SF9130. Worked(?) stone. Small sub-rectangular piece of stone, possibly ironstone. The stone appears to be either water-rolled or rubbed. Location in grave not recorded, possibly residual. Length: 56mm. Width: 47mm. Thickness: 20mm. Weight: 114g. Context (3391), backfill of grave.

Grave 38

SF166. Flint scraper.
SF167. Iron nail.
SF168. Iron nail.

Grave 39

SF155. Iron nail.
SF9067. Iron nails. 6×.

Grave 40

SF153. Iron nail.
SF154. Iron nail.

Grave 41

SF156. Glass fragment. See report by Broadley.
SF157. Iron nails/studs.
SF158. Iron nails/studs.
SF159. Iron nails/studs.
SF160. Iron nails/studs.
SF9051. Iron nail.

Grave 42

SF161. Glass fragments. See report by Broadley (section 14, pp 91–92).
SF162. Copper alloy object. 2× small fragments of sheet metal. Weight: 0.9g. Context (3417), backfill of grave.

Grave 43

SF165. Iron coffin fittings.
SF9121. Iron nails. 6×.

Grave 44

SF169. Iron coffin fitting.
SF170. Iron coffin fitting. May be part of same object as SF171.
SF171. Iron coffin fitting. May be part of same object as SF170.
SF172. Iron coffin fitting.
SF173. Iron nail.
SF174. Iron nail.
SF175. Iron nail.
SF183. Iron nails(?). 19×.

Grave 45

SF178. Copper alloy brooch. Two joining pieces of a plain Nauheim Derivative brooch. Most of the brooch is present, including the pin, although the foot with solid catchplate is detached and the head and pin is somewhat bent out of shape. Circa AD 45–75. Length (main fragment): 50.5mm (minimum). Width: 5.5mm. Thickness: 7mm. Weight: 1g. Context (3446), backfill of grave, probably residual. Illustrate.
SF186. Iron objects. 14× fragments, including one sub-rectangular plate, nails, and fragments. Possibly coffin fittings.
SF9120. Iron object. Subtriangular fragment. Possibly coffin fitting?

Grave 47

SF176. Iron nail.
SF9060. Iron nails. 3×.

Grave 48

SF184. Iron nail. Large nail head and part of shaft, plus iron fragment.
SF185. Copper alloy coin. Regular radiate. Reverse: Victory. Circa AD 260–273. Found near foot of grave, probably residual in backfill. Diameter: 18mm. Weight: 1.8g. Context (3460), backfill of grave.

Grave 49

SF190. Iron nail.
SF200. Iron nail.
SF224. Iron nail.
SF9045. Iron object. Fragment.

Grave 50

SF179. Iron nails. 2×.
SF180. Iron nails. 2×.
SF181. Iron nail.
SF182. Iron nail.
SF187. Iron nail.
SF188. Iron nail.
SF191. Iron nail.
SF217. Iron coffin fitting.
SF218. Iron coffin fittings. 3×.
SF219. Iron coffin fitting.
SF220. Iron coffin fittings. 6×.
SF221. Iron nails. 4×.
SF222. Iron nails. Large, fused together.
SF253. Iron nails. 15×.
SF9116. Iron nail.
SF9247. Iron hobnail(?). Length: 13mm. Diameter (head): 11mm. Weight: 1.1g. Found during post-excavation assessment of skeleton, in association with mandible. Context (3483), skeleton.

Grave 51

SF192. Iron nails. 3×.
SF193. Iron nail.

Grave 52

SF201. Iron nail.

Grave 53

SF194. Worked flint pick. Thames pick. Mesolithic.

SF195. Iron nail. Upper right side of pelvis.
SF196. Iron nail. Found between legs, just below pelvis.
SF199. Iron nails. 4×.
SF9105. Wood. Fragment of charred wood, probably part of a coffin.

Grave 54

SF223. Iron nails. 2×.
SF9115. Iron nails. 2×.

Grave 55

SF9136. Iron nails. 2×.

Grave 56

SF216. Iron coffin fittings. 9×.
SF247. Iron hobnails. 2× hobnails. Position in grave not recorded. Weight: 5g. Context (3488), grave cut.
SF248. Worked flint scraper.
SF9109. Iron object(s). 11×. Coffin fittings?

Grave 57

SF206. Iron nail.

Grave 58.

SF207. Iron nail.
SF208. Iron nail.
SF209. Iron coffin fittings. 2× fragments.
SF210. Iron nail.
SF211. Iron coffin fittings. 2× fragments.
SF212. Iron nails. 4×.
SF213. Iron nail.
SF214. Iron nails. 2×.
SF9107. Wood. Small fragments of charred wood, possibly from coffin.

Grave 59

SF202. Iron nails. 3×.
SF203. Iron nails and studs. 20× coffin nails and studs.
SF204. Worked flint scraper.
SF205. Iron plate. Sub-rectangular plate. Length: 41mm. Width: 35mm. Thickness: 10mm. Weight: 19.6g. Context (3495), backfill of grave.
SF9011. Glass vessel. Small fragment of clear vessel glass. See report by Broadley (section 14, pp 91–92).
SF9012. Glass object. Small fragment of clear glass. See report by Broadley (section 14, pp 91–92).

Grave 61

SF237. Iron nail.
SF238. Iron nail.
SF239. Iron nail.
SF240. Iron nail.
SF241. Iron nail.
SF242. Iron nail.
SF243. Iron nail.
SF244. Iron nail.

Grave 62

SF231. Iron coffin fittings. 20× nails and coffin fittings.

SF254. Iron nails. 5×.
SF255. Iron coffin fittings. Nails and fragments.
SF9103. Iron object. Sub-rectangular fragment, probably part of coffin fittings.

Grave 63

SF225. Iron nail.
SF226. Iron nail.
SF227. Iron nail.
SF228. Iron nail.
SF229. Iron nail.
SF230. Iron nail.

Grave 64 (Treasure case 2016/T85)

SF246. Silver pin. Facetted cuboid head, tapering shaft. The shaft is broken about a third of the way down its length, but both pieces are present. Found resting against top of skull, probably a hairpin. Circa AD 250–400. Length: 58mm. Diameter (shaft): 2mm. Weight: 2.1g. Context (3541), skeleton. Illustrate.
SF265. Copper alloy bracelet. Complete, but with one detached terminal. Hook and eye terminals. Found to the left of skull. Late third to fourth century AD. External diameter: 64mm. Internal diameter: 58mm. Thickness (band): 5mm. Weight: 11.9g. Context (3539), backfill of grave. Illustrate.
SF278. Copper alloy pin. Possible remains of rectilinear(?) head, shaft broken into four pieces. Found beneath skull, probably a hairpin. Length: 45mm. Diameter: 2mm. Weight: 0.1g. Context (3541), human skeleton. Illustrate.
SF287. Iron nails. 4×. Possibly boarding of grave cut.
SF288. Iron nail.
SF9142. Iron nail.

Grave 65

SF232. Copper alloy pin. End of shaft, tapering to a point. Found at the base of the back of the skull, probably a hairpin. Length: 18mm (minimum). Diameter: 1.5mm. Weight: 0.2g (minimum). Context (3525), backfill of grave. Illustrate.
SF9092. Worked stone. 2× Greestone [sic] pieces from head area. See report by Barber (section 15, pp 93–95).

Grave 66

SF9037. Iron nails. Disc-headed. Plus other iron fragments.

Grave 67

SF245. Iron nail.

Grave 68

SF252. Iron nails. 4×.
SF260. Iron nails. 29×.
SF261. Iron nails. 8×.
SF9078. Iron nail.

Grave 69

SF249. Iron nail.

Grave 70

SF250. Iron nail.
SF251. Iron nails. 3×.

Grave 71

SF277. Iron coffin fitting.

Grave 72

SF256. Iron nail.
SF257. Iron nails. 2×.

Grave 73

SF258. Iron nails. 2×.
SF262. Iron nails. 2×.
SF263. Iron nails. 3×.
SF264. Iron nail.
SF266. Iron object. Possibly a coffin fitting. Found 'between ribs and arm'.
SF267. Iron hobnail. Found between ribs. Length: 9mm. Diameter: 12mm. Weight: 1.2g. Context (3561), backfill of grave.
SF9084. Iron nail.

Grave 74

SF281. Iron coffin fittings.
SF9093. Ceramic crucible. Fragment. Length: 33mm. Width: 28mm. Thickness: 8.5mm. Weight: 10.1g. Context (3569), backfill of grave.

Grave 75

SF9124. Iron nails. 4×.

Grave 76

SF268. Iron nail.
SF269. Iron nail.
SF270. Iron nail.
SF271. Iron nails. 4×.
SF272. Iron nail.
SF273. Iron nails.
SF274. Iron nail.
SF275. Iron object. 3× fragments, including two joining lengths of square-sectioned iron shaft encased in wood. Heavily encrusted. Length: 64mm (minimum). Width: 34mm. Thickness: 19mm. Weight: 58.1g (minimum). Context (5071), backfill of grave.
SF279. Iron nails. 4×.
SF280. Iron nails. 12×.
SF321. Iron nail.
SF415. Iron nail.
SF416. Iron hobnails. 36×. Found under skull. Weight: 174g. Context (5071), backfill of grave.
SF419. Iron nail.
SF420. Iron nail.
SF421. Iron nail.
SF422. Iron nail.
SF423. Iron nail.
SF424. Iron nail.

Grave 77

SF276. Copper alloy object. Sub-rectangular fragment of sheet metal. Found over skull. Length: 17mm (minimum). Width: 14mm. Thickness: 0.2mm. Weight: 0.3g. Context (3575), backfill of grave.
SF309. Iron nail.

Grave 79

SF330. Iron coffin fittings.
SF331. Iron coffin fittings.
SF332. Iron coffin fittings.
SF333. Iron coffin fittings.
SF334. Iron nails. 3×.
SF335. Iron coffin fittings. 7× fragments. Missing.
SF336. Iron nails. 2×.
SF9046. Iron object. Probable coffin fitting.
SF9117. Worked flint. Context (3583), coffin stain.
SF9165. Iron nails. 5×.
SF9166. Iron objects. 2×. Probable coffin fittings.

Grave 80

SF282. Iron nails. 2×.
SF283. Iron nails. 5×.
SF284. Iron nail.
SF285. Iron nail.
SF286. Iron nails. 7×.

Grave 81

SF297. Iron nail.
SF298. Iron nail.
SF299. Iron nail.

Grave 82

SF289. Iron nails. 9×.
SF312. Iron nails. 24×.
SF9111. Iron object(s). 2× small fragments.

Grave 83

SF290. Iron nails. 3×.
SF291. Iron nail.
SF292. Iron nail.
SF296. Iron nail.
SF300. Iron nail.
SF301. Iron nail.
SF302. Iron nail.
SF303. Iron nails. 3×.
SF304. Iron nail.
SF306. Iron nails. 4×.
SF307. Iron nail.
SF308. Iron nail.
SF311. Iron nails. 2×.

Grave 84

SF293. Iron nails. 6×.
SF294. Iron nails. 11×.
SF295. Iron nails. 3×.

Grave 85

SF305. Iron object(?). Probably an incorrect record. On the finds register this is recorded as coming from the grave backfill (3602), but on the IADB SF305 is recorded as an iron ring from the fill of ditch (5076), which cuts grave 85.

Grave 87

SF9091. Iron nails. 13×.

Grave 88

SF310. Iron nail.
SF9013. Iron hobnails. 2×. Weight: 2.4g. Context (3611), backfill of grave.

Grave 89

SF9207. Iron object(s). 12× fragments. Possible coffin fittings?

Grave 90

SF9035. Iron objects. 2× thick sub-rectangular iron plates or strips.

Grave 91

SF315. Iron objects. 12× hobnails, nails and coffin furniture.

Grave 92

SF313. Iron nails. 5×.
SF9038. Iron object. Heavily encrusted.
SF9085. Iron object.

Grave 93

SF314. Iron nails. 3×.
SF495. Iron nails. 2×.
SF9066. Iron object. Square-sectioned shaft, heavily encrusted.

Grave 94

SF323. Iron nails. 3×.
SF9071. Iron nail.

Grave 95

SF316. Iron nail.
SF317. Copper alloy object. Sub-rectangular sheet with rounded end. Possibly a mount. Some fine transverse lines may be damage rather than incised decoration. Length: 40.5mm. Width: 38mm. Thickness: 0.5mm. Weight: 6.9g. Context (3640), backfill of grave. Illustrate.
SF9053. Iron nail. Small.
SF9054. Copper alloy ring. Two small fragments of an incomplete wire ring. Weight: 0.2g (minimum). Context (3640), backfill of grave.

Grave 96

SF318. Iron nail.
SF322. Iron hobnail. Length: 12mm. Width: 9mm. Thickness: 8mm. Weight: 1g. Context (3642), backfill of grave.
SF324. Iron nail.
SF326. Iron hobnail. Length: 15.5mm. Width: 12mm. Thickness: 11mm. Weight: 2.7g. Context (3642), backfill of grave.
SF347. Iron nail. Within coffin.
SF350. Iron nail. Found within coffin wall.

Grave 97

SF319. Iron nail.
SF320. Iron nails. 5×.

Grave 99

SF338. Iron nails. 7×. Some could be hobnails.

Grave 101

SF325. Iron nails. 10×. Some may be hobnails, although they are distributed across the coffined area and may all be coffin-related.

Grave 102

SF351. Iron nail.

Grave 103

SF339. Iron nail.
SF340. Iron nail.
SF341. Iron nail.
SF342. Iron nail.
SF343. Iron nail.
SF344. Iron nail.
SF345. Iron nail.
SF346. Iron nails. 2×.

Grave 104

No SF in IADB, but skeleton and deposit sheets mention iron nails in the backfill.

Grave 105

SF337. Glass bead. Blue. See report by Broadley.

Grave 107

SF348. Iron nail. From within coffin.
SF349. Iron nail. From within coffin.

Grave 110

SF9220. Iron nails. 5×.

Grave 112

SF468. Iron nails. 8×.
SF9164. Iron coffin fitting. Possibly a handle.

Grave 113

SF358. Iron nails. 3×.
SF359. Iron object. Two joining pieces, heavily encrusted.
SF469. Copper alloy object. Small corroded fitting, sub-triangular, cross or T-shaped in section (one section may be broken). Length: 12mm. Width: 10mm. Thickness: 10mm. Weight: 1.2g. Context (3711), backfill of grave. Illustrate.
SF9062. Iron hobnails. 5×. Weight: 4.1g. Context (3711), backfill of grave.
SF9128. Worked stone. Greensand packing stone. See report by Barber (section 15, pp 93–95).
SF9132. Worked(?) stone. Sandstone packing stone. See report by Barber (section 15, pp 93–95).

Grave 114

SF352. Iron nails. 2×.
SF353. Iron nail.
SF355. Iron nail.
SF360. Iron nails. 5×.
SF361. Iron nail.
SF363. Worked flint. Struck flake.

SF365. Iron nail.
SF366. Iron nail.
SF367. Iron nail.
SF368. Iron nail.
SF369. Iron nail.
SF370. Iron nail.
SF371. Iron nail.

Grave 115

SF354. Iron nails. 13×.
SF9052. Iron object(s). 3× fragments, plus nail. Missing.

Grave 116

SF356. Iron nails. 11×.
SF357. Iron nails. 9×.
SF362. Iron handle. Possibly from a coffin?

Grave 120

SF9110. Glass object. Fragment. See report by Broadley (section 14, pp 91–92).

Grave 121

SF9139. Iron object. Sub-rectangular plate. Heavily encrusted. Length: 35mm. Width: 27mm. Thickness: 12mm. Weight: 13.5g. Context (2527), backfill of grave.

Grave 122

SF384. Worked stone structural fragment. Part of a stone column. See report by Barber (section 15, pp 93–95).
SF385. Worked stone object. Sandstone packing. See report by Barber (section 15, pp 93–95).
SF386. Worked stone object. Sandstone packing. See report by Barber (section 15, pp 93–95).

Grave 124

SF364. Copper alloy coin. Nummus of Valentinian I. Ae3. Reverse: Securitas Reipublicae. Arles mint. AD 367–375. AS CK 514. Position in grave not recorded, probably residual. Diameter: 17mm. Weight: 1.4g. Context (3748), backfill of grave.
SF393. Worked stone object. Large sandstone cobble or boulder. See report by Barber (section 15, pp 93–95).

Grave 125

SF372. Worked stone structural fragment. Sandstone lump, possibly used as packing material in grave. Length: 94mm. Width: 88mm. Thickness: 53mm. Weight: 517g. Context (3743), backfill of grave.
SF373. Iron nail.
SF374. Iron nail.
SF375. Iron nail.
SF9086. Iron nails. 3×.

Grave 129

SF506. Iron nails. 2×.

Grave 130.

SF376. Iron nail.

Grave 132

SF377. Iron nails. 2×.

SF378. Iron nail.
SF379. Iron nail.
SF380. Iron nail.
SF381. Iron nail.
SF382. Iron nail.
SF387. Iron nail.
SF392. Iron nail.

Grave 133

SF383. Iron nails. 3×.

Grave 137

SF388. Iron nails. 2×.

Grave 138

SF389. Iron nails. 2×.
SF390. Iron nails. 3×.
SF391. Iron object. Small encrusted object, possibly a coffin fitting? Length: 20mm. Width: 14mm. Thickness: 13mm. Weight: 4.5g. Context (3773), backfill of grave.
SF394. Iron hobnail. Length: 13mm. Diameter (head): 11mm. Weight: 1.3g. Context (3773), backfill of grave.
SF395. Iron nail.
SF396. Iron nail.
SF397. Iron shaft. Heavily encrusted, probably a nail.
SF400. Iron object. Possibly a small corner bracket, perhaps a coffin fitting.
SF402. Iron object. Possibly a coffin fitting.
SF403. Iron hobnail. Length: 12.5mm. Diameter: 11mm. Weight: 1.3g. Context (3773), backfill of grave.

Grave 139

SF459. Iron object. Large iron shaft or plate with rectangular cross-section, plus small fragment. Both encrusted. Length: 75mm. Width: 23mm. Thickness: 11mm. Weight: 63g (all dimensions for larger object). Context (5115), backfill of grave.
SF9030. Iron nails. 2×.

Grave 140

SF9126. Iron nails and coffin fittings. 10×, including two joining parts of loop and shaft with wood adhering.

Grave 143

SF398. Glass object. See report by Broadley (section 14, pp 91–92).
SF9206. Iron nail.

Grave 145

SF401. Iron nails. 2×.

Grave 146

SF414. Iron nails. 18×.

Grave 148

SF404. Iron nail.
SF432. Iron object. Small fragment, possibly part of a coffin fitting. Found in backfill towards head end of grave.

Grave 149

SF405. Iron nails. 3×.
SF413. Iron nails. 3×.
SF426. Iron hobnail(?). Plus non-related iron fragment.
SF431. Iron hobnail or nail. Not seen by AR, may be a mis-entry for SF413.

Grave 150

SF408. Iron nail.

Grave 151

SF406. Iron nail.
SF407. Iron slag. 4× fragments. Probably residual. Weight: 69.8g. Context (3891), backfill of grave.
SF409. Worked flint scraper.

Grave 152 (Treasure case 2016/T122)

SF410. Silver buckle. Oval loop, tongue and small oval plate, the latter with three dome-headed rivets, all of silver. Found above right pelvis, tongue aligned towards SF412. Length: 37mm. Width: 18.5mm. Thickness: 14mm. Weight: 15g. Context (3822), human skeleton. Illustrate.
SF411. Silver buckle. Oval loop, tongue and small oval plate, the latter with three dome-headed rivets, all of silver. Found above left pelvis, tongue aligned towards SF412. Length: 37mm. Width: 18.5mm. Thickness: 13mm. Weight: 14.6g. Context (3822), human skeleton. Illustrate.
SF412. Iron object. Loop or hanger. Found at upper right leg. Context (3822), human skeleton. Illustrate.

Grave 154

SF417. Iron nails. 5×.
SF9070. Iron nail. Three joining fragments.

Grave 157

SF9248. Glass bead. See report by Broadley.

Grave 158

SF418. Copper alloy pin. Plain conical head, tapering shaft, lower third of shaft bent at over 90°. Probably a hairpin. Roman. Length (bent): 77mm. Diameter (head): 4mm. Weight: 4.9g. Context (2568), backfill of grave. Illustrate.

Grave 160

SF508. Iron nail.

Grave 161

SF425. Iron nail.

Grave 162

SF9208. Iron nail.
SF9209. Iron nail.
SF9210. Iron nail.
SF9211. Iron nail.
SF9212. Iron nail.
SF9213. Iron nails. 3×.
SF9214. Iron nail and wood fragments.
SF9215. Iron nail.
SF9216. Iron nail.
SF9217. Iron nail.
SF9218. Iron nail.

SF9219. Iron nail.

Grave 165

SF507. Worked bone needle. Pointed head with thread hole, flat cross-section, with broken shaft. Length: 50.5mm (minimum). Width: 4.5mm. Thickness: 1.5mm. Weight: 0.4g. Context (2587), backfill of grave. Illustrate.

Grave 167

SF427. Iron nails. 2×.
SF428. Iron nails. 3×.

Grave 169

SF440. Iron nails.

Grave 170

SF429. Iron nail.
SF430. Iron nails. 6×.

Grave 171

SF448. Iron nail.

Grave 173

SF433. Iron nails. 4×.
SF434. Iron nails. 3×.

Grave 174

SF443. Iron nails. 2×.
SF445. Iron nail.

Grave 175

SF442. Worked stone structural fragments. 3× sandstone blocks. See report by Barber.

Grave 176

SF438. Iron nails. 16×.

Grave 177

SF437. Iron nails. 6×. Described as coffin nails. Missing.

Grave 178

SF435. Iron nails. 69×.

Grave 179

SF436. Iron nails and coffin fittings. 15×.

Grave 180

SF439. Iron nail.
SF9123. Iron nails. 5×.

Grave 182

SF441. Iron nails. 21×.
SF450. Iron nail.
SF453. Copper alloy brooch. Plated copper alloy bow and foot of a Crossbow brooch. Circa AD 140–300. Length: 43mm (minimum). Width: 8mm (minimum). Thickness: 14mm (minimum). Weight: 3.3g (minimum). Context (3929) backfill of grave. Illustrate.

SF454. Iron nails(?). 6× fragments.

Grave 183

SF444. Iron nails. 2×.

Grave 185

SF455. Iron nail.

Grave 187

SF446. Iron nails. 3×.
SF447. Iron nails. 40×.
SF9144. Wood. Several lumps of clay containing fragments of charred wood, probably the remains of a coffin.

Grave 189

SF449. Iron nails. 2×.
SF9101. Iron hobnails. 2×. Weight: 2g. Context (3963), backfill of grave.

Grave 190

SF452. Iron nail.

Grave 191

SF9075. Iron nails. 17×.

Grave 192

SF460. Iron nails. 4×.
SF9246. Iron nail.

Grave 193 (Cremation)

SF456. Pottery vessel. Cremation urn. Illustrate.
SF457. Pottery vessel. Almost complete ampulla. Illustrate.
SF458. Pottery vessel. 22× sherds of a dish, plus some sherds from other vessels. Illustrate.
SF571. Copper alloy sheet. Illustrate. Not seen by AR.
SF9223. Pottery vessel. 2× sherds. Context (5132), fill of cremation urn. Illustrate.
SF9224. Pottery vessel. Sherd. Context (5132), fill of cremation urn. Illustrate.
SF9226. Pottery vessel. 2× sherds. Context (5132), fill of cremation urn. Illustrate.
SF9227. Pottery vessel. 2× sherds. Context (5132), fill of cremation urn. Illustrate.
SF9230. Pottery vessel. 15× fragments of prehistoric pottery. Context (5132), fill of cremation urn. Illustrate.
SF9233. Pottery vessel. 7× sherds. Context (5132), fill of cremation urn. Illustrate.
SF9234. Pottery vessel. 6× sherds. Context (5132), fill of cremation urn. Illustrate.
SF9238. Pottery vessel. 6× sherds. Context (5132), fill of cremation urn. Illustrate.
SF9239. Pottery vessel. 6× sherds. Context (5132), fill of cremation urn. Illustrate.
SF9241. Pottery vessel. 4× sherds. Context (5132), fill of cremation urn. Illustrate.
SF9242. Pottery vessel. Sherd. Context (5132), fill of cremation urn. Illustrate.
Grave also contained quantities of cremated human bone (SF9231; SF9235; SF9243) and probable pyre debris in the form of quantities of daub/burnt clay (SF9225; SF9228; SF9229; SF9232; SF9236; SF9237; SF9240; SF9244; SF9245).

Grave 194

SF470. Copper alloy bracelet. Fragment of band, with oval cross-section. Diameter: 31mm (minimum). Width: 4.5mm. Thickness: 2.5mm. Weight: 2.2g. Context (3982), backfill of grave. Illustrate.
SF471. Iron nails.
SF471. Iron hobnails. 3× (471/1, 471/5, 471/7). Context (3982), backfill of grave.

SF474. Glass object. Fragment. See report by Broadley (section 14, pp 91–92).

Grave 195

SF481. Iron hobnails. 5×. Weight: 4.3g. Context (3986), backfill of grave.
SF9065. Iron nail.

Grave 196

SF462. Iron nails. 3×.

Grave 197

SF461. Iron nails. 7×.
SF463. Iron nails. 11×.
SF9064. Iron nails. 3×.
SF9161. Iron nails. 3×.

Grave 198

SF464. Iron nail.
SF465. Copper alloy coin. Nummus, copy of Constantinopolis commemorative issue. Circa AD 340–345. Found in area of mouth. Context (3988), skeleton.
SF490. Iron nails. 3×.

Grave 199

SF472. Iron nails. 2×.
SF9080. Iron nail.

Grave 200

SF473. Iron nail.

Grave 201

SF466. Iron nails. 20×.

Grave 202

SF9087. Copper alloy pin(?). Fragment of shaft with pointed end, probably the end of a pin. Length: 18mm (minimum). Diameter: 3mm. Weight: 0.06g. Context (5152), backfill of grave. Illustrate.

Grave 203

SF467. Iron nail.

Grave 206

SF475. Iron nails. 7×.
SF478. Iron nails. 8×.

Grave 207

SF491. Ceramic roof tile. Used as a cover for the burial. See report by Barber (section 10.3.2, p 55).
SF492. Ceramic roof tile. Used as a cover for the burial. See report by Barber (section 10.3.2, p 55).

Grave 208

SF477. Iron hobnails. 3×. Weight: 4g. Context (5190), backfill of grave.
SF9102. Iron nail.

Grave 209

SF486. Worked flint flake.
SF487. Worked flint flake.
SF488. Worked flint flake.

SF489. Worked flint flake.
SF9076. Iron nails. 3×.
SF9077. Iron nails. 2×.

Grave 210

SF479. Copper alloy bracelet. Penannular oval-sectioned band which tapers and narrows towards terminals. Almost complete, one missing terminal. Diameter (external): 50.5mm (maximum). Diameter (internal): 43.5mm. Width (band): 8mm (maximum). Thickness (band): 5mm (maximum). Weight: 18.5g. Context (5200), backfill of grave. Illustrate.
SF493. Iron nails. 2×.

Grave 211

SF9205. Iron nail.

Grave 212

SF483. Worked stone tesserae(?). Light grey rectangular piece of soft sandstone. Possibly a tesserae. Length: 23mm. Width: 20.5mm. Thickness: 14mm. Weight: 10.1g. Context (5204), backfill of grave. Illustrate.
SF485. Iron nail.

Grave 213

SF480. Iron nail.

Grave 215

SF494. Iron nail. Missing.
SF9041. Iron nails. 11×.
SF9042. Iron nails(?). 3× rounded fragments, possibly nail heads.
SF9137. Iron object. Shaft, possibly a coffin fitting?

Grave 219

SF476. Iron nails. 3×.

13.4 Registered finds from non-funerary contexts

13.4.1 Table 24 presents a quantification of the registered finds from non-funerary contexts. Finds of iron form the majority of the assemblage, in terms of both records and individual objects or fragments (70.5% and 74% respectively). Most of these finds are nails, although a range of other objects are present. Some 72 copper alloy items were also recovered, including a bracelet, pins, and several coins. A modern gold finger ring, cigarette tin and silver coin were also recovered, along with modest quantities of worked bone, worked stone, glass and other items.

Table 24. Quantification of Registered Finds from non-funerary contexts

Material Class	No. of Records	No. of objects/ fragments	Weight (g)	Notes
Iron	180	337	20187	Nails, hobnails, horse shoe, buckle, pin, ring, fittings
Copper alloy	48	72	398	Bracelet, pins, weight, mount, coins, fittings
Other metal	3	3	200	Gold finger ring, silver coin, cigarette tin
Worked bone	4	4	19	Pin shaft(?), fragments
Worked stone	10	10	4302	Hones, structural fragments
Flint	3	3	23	Scraper, flakes
Glass	3	3	1120	Bottles, bead
Ceramic	1	1	50	Roman tile fragment
Other	3	22	143	Leather, animal hide, wooden

Material Class	No. of Records	No. of objects/ fragments	Weight (g)	Notes
				button, plus 4 void records
TOTAL	255	455	26442	

13.4.2 The finds have been assessed by material (with the exception of the coins). During analysis they will be catalogued and discussed primarily by functional class (e.g. 'dress accessories and ornaments; pins').

Finds of metal

Iron

13.4.3 Iron objects account for just over 70.5% of the non-funerary registered finds assemblage in terms records and over 74% in terms of individual objects or fragments. The majority of records (98 out of 180) relate to nails. Iron hobnails from footwear also occurred in a number of contexts. Unidentified fittings account for 57 records; hopefully many of these can be identified during analysis, although a proportion are unidentifiable fragments.

13.4.4 The assemblage of iron objects also includes a knife (SF259), three blades (SF502, 550 and 565), an iron buckle (SF552), pins (SF6, 9186), a ring (SF305), hobnails (SF9, 233, 9187, 9188, 9191, 9192, and 9193), fittings from a bucket (SF110), hooks (SF9096, 9190), horse shoes (SF97, 554, 558, 567) and a shovel (SF109). Finally, the iron assemblage includes a length of iron drain pipe (SF9141) and a piece of slag or crucible bloom (SF501).

Copper alloy

13.4.5 Some 30 copper alloy artefacts (excluding coins, which are discussed separately below) were recovered from non-funerary contexts. They include items associated with costume or personal ornamentation, including a bracelet (SF69), button (SF91), pendant (SF9197), ring (SF28) and a number of pins (SF1, 27, 82, 551, 559, 569 and 9196), at least one of which (SF1) appears to be a brooch pin. The remaining copper alloy finds comprise a hook (SF9204), mount (SF563), stud (SF9195), sheet fragments (SF553 and 9047), a length of tube and other fittings from the fill of a box (SF9146) and a range of as yet unidentified items.

13.4.6 All the copper alloy objects are likely to merit full cataloguing during the analysis phase. Some will be intrinsically datable and may contribute to the dating of their associated contexts.

Tin

13.4.7 SF9044 is a Benson and Hedges cigarette tin, with iron latch and handle. This was found in the rubble infill of an air-raid shelter.

Gold

13.4.8 A fragment of a modern hallmarked 9ct gold finger ring (SF9200) was recovered from environmental sample 110, from pit [3016]. Since this pit appears to be of Roman date, this find must be considered intrusive. As it is less than 300 years old, it does not qualify as Treasure under the terms of the Treasure Act (1996).

Coins

13.4.9 A total of 19 coins were recovered from non-funerary contexts. All but two were copper alloy Roman coins (see list below). The Roman coins add to the growing number recovered from this area of Canterbury, including coins found in association with a probable fourth-century shrine at the adjacent Augustine House site (Anderson 2014). This group of coins reinforce a pattern of an assemblage dominated by issues of the mid-fourth century AD (in this case mainly 330s to 340s), with a few third-century coins, of which the earliest is a coin of Gordian III (SF33, dated to AD 238–244). The latest coin from this group is a 'falling horseman' issue datable to c AD 355–365 (SF80); this is consistent with a very marked decline in coin loss after AD 365 observed across adjacent sites.

13.4.10 The non-Roman coins were a Victorian halfpenny (SF4) and silver sixpence (SF56). The coins are catalogued below.

13.4.11 Roman coins:

SF2. Copper alloy coin. Nummus. Constantinopolis. Copy of ae3. Mint illegible. Circa AD 340–345. RIC VII, copy of Lyons 241. Diameter: 15mm. Weight: 1.4g. Unstratified.

SF7. Copper alloy coin. Radiate. Reverse illegible. Circa AD 240–273. Diameter: 20mm. Weight: 2.1g. Context (3007), subsoil.

SF8. Copper alloy coin. Nummus. Constantinopolis copy of ae3. Lyons mint, 1st officina. Circa AD 340–345. RIC VII, Lyons, copy of 241. Diameter: 15mm. Weight: 1.6g. Context (3035), fill of pit [3036].

SF15. Copper alloy coin. Radiate of Tetricus I. Reverse: Pax Aug. AD 271–274. RIC 102. Diameter: 18mm. Weight: 1.3g. Context (3040), fill of ditch [3039].

SF16. Copper alloy coin. Nummus. Urbs Roma. Ae3. Trier mint, 1st officina. AD 332–333. RIC VII, Trier 542. Diameter: 17mm. Weight: 1.8g. Context (3038), fill of pit [3037].

SF17. Copper alloy coin. Nummus. Constantinopolis. Copy of ae3. Trier mint, 1st officina. Circa AD 340–345. RIC VII, Trier, copy as 523. Diameter: 15mm. Weight: 0.9g. Context (3038), fill of pit [3037].

SF24. Copper alloy coin. Nummus. Urbs Roma. Copy of ae3. Trier mint, 1st officina. Circa AD 340–345. RIC VII, Trier copy of 522. Diameter: 12mm. Weight: 0.9g. Context (3067), fill of ditch [3076].

SF33. Copper alloy coin. As of Gordian III. Reverse: PM TRP II COS PP, Gordian sacrificing. AD 238–44. RIC 291. Diameter: 23mm. Weight: 7g. Context (3085), fill of modern pit [3086].

SF37. Copper alloy coin. Nummus. Constantinopolis. Ae3. Rome mint, 5th officina. AD 330–331. RIC VII, Rome 339. Diameter: 16mm. Weight: 2.4g. Context (3067), fill of ditch [3076].

SF39. Copper alloy coin. Nummus. Constantinopolis. Ae3. Trier mint, 1st officina. AD 330–331. RIC VII, Trier 530. Diameter: 19mm. Weight: 2.8g. Context (3040), fill of ditch [3039].

SF79. Copper alloy coin. Nummus of Constantine I. Ae3. Reverse: Gloria Exercitus, 1 standard. Mint illegible. AD 335–7. RIC VII, as Lyons 285. Diameter: 13mm. Weight: 1.3g. Context (3040), fill of ditch [3039].

SF80. Copper alloy coin. Nummus of House of Constantine. Copy of ae3. Reverse: Fel Temp Reparatio, falling horseman. Mint illegible. Circa AD 355–365. RIC VIII, copy as Trier 358. Diameter: 7mm. Weight: 0.2g. Context (3040), fill of ditch [3039].

SF83. Copper alloy coin. Nummus. Constantinopolis. Copy of ae3. Mint illegible. Circa AD 340–345. RIC VII, copy as Lyons 241. Diameter: 13mm. Weight: 1g. Context (3124), fill of ditch [3125].

SF129. Copper alloy coin. Nummus. Constantinopolis. Ae3. Trier mint, 1st officina. AD 332–333. RIC VII, Trier 543. Diameter: 16mm. Weight: 1.8g. Context (3287), fill of pit [3285].

SF555. Copper alloy coin. Radiate of Allectus. Reverse illegible. AD 293–296. Diameter: 23mm. Weight: 3.4g. Context (2085).

SF557. Copper alloy coin. Radiate of Carausius. Reverse: Pax. No mint mark, possibly a copy. AD 286–293. RIC 880. Diameter: 19mm. Weight: 4.2g. Context (3165), deposit sequence [3163].

SF562. Copper alloy coin. Nummus of Constantine II. Copy of ae3. Reverse: Gloria Exercitus, 1 standard. Trier mint. RIC VII, Trier, copy as 586. Circa AD 340–345. Diameter: 15mm. Weight: 1.3g. Context (2128), fill of ditch [2130].

SF9202. Copper alloy coin. Nummus. Fragment. Illegible. Circa AD 330–402. Diameter: 12mm (minimum). Weight: 0.3g. Context (3029), fill of pit [3032]. Environmental sample <136>.

13.4.12 Modern coins:

SF4. Copper alloy coin. Victorian half penny. 1885. Diameter: 25mm. Weight: 5.2g. Context (3000), overburden.

SF56. Silver coin. Victorian sixpence. 1864. Diameter: 19mm. Weight: 2.6g. Unstratified.

13.5 Worked antler and bone

13.5.1 A small piece of worked bone (SF9199) was retrieved from environmental sample <112>, from the fill of pit [3012]. The object is sub-triangular, with a cut mark along its short edge. Environmental sample <195> from pit [3297] produced a short length of round-sectioned shaft, possibly part of a bone pin shaft. Other registered finds of bone (SF9002 and 9016) appear to be unworked.

13.6 Ceramic

13.6.1 Only a single ceramic registered find was recovered from a non-funerary context. This was a square fragment of Roman tile (SF9135), possibly deliberately cut to shape, from pit [3285].

13.7 Other materials

13.7.1 Three finds of organic materials were registered during post-excavation processing. These comprise a wooden four-hole button of modern date (SF9027), a piece of animal hide (SF9061) from modern pit [3133], and a collection of dried leather, possibly waste pieces (SF9145) from modern pit [1003].

13.7.2 In addition, three registered find records can be discounted: SF568 comprised two pieces of slag from a Roman quarry fill, and has been de-registered and recorded as a bulk find (BF2021) along with the other industrial material recovered from the site. SF104 similarly comprised slag and this has also been recorded as a bulk find. Finally, SF215 proved to consist only of soil and has been discarded.

13.8 Statement of potential

13.8.1 This finds assemblage is collectively of at least regional importance as a result of the large number of finds relating to the late Roman cemetery. In some cases, notably the silver buckles from grave 152, the finds are of national significance. Together with the recent finds of other late Roman burials in the immediate area, at Augustine House and Rhodaus Town, this cemetery represents a very important addition to the Roman funerary archaeology of Canterbury, and as such the finds from these graves assume considerable importance.

13.9 Recommendations for further work

13.9.1 The assemblage of coffin nails and other fittings from the Roman burials represents the bulk of the assemblage and potentially requires the greatest amount of time to analyse and report upon. This would be best done by a specialist in ancient wood, working in conjunction with a metals conservator, such as Damian Goodburn and Dana Goodburn-Brown. The aim of this analysis should be to characterise the different coffin types present in the cemetery, rather than to focus on individual nails and fittings, although the latter should be detailed to a reasonable degree in the grave catalogue and a representative sample illustrated.

13.9.2 Alongside a representative sample of coffin nails and fittings, the following finds (as a minimum) are recommended for conservation cleaning: SF113, SF122, SF140 (bone comb), SF275, SF359, SF410, SF411, SF412, SF453, SF9025, SF9027.

13.9.3 Fully cataloguing and discussion of the remaining finds from the cemetery (that is, those that are not coffin related) is likely to require 5 days (in addition to any recommendations for further work from other specialists). For the registered finds from non-funerary contexts, an additional 5 days should be sufficient to catalogue (for those that merit it; for less significant finds it should be sufficient to list them by material and context) and discuss the finds. An additional 5 days should be allowed to ensure integration of the final report with other specialist reports, as well as with the reports on registered finds from the wider project area.

13.9.4 In addition, many of the finds, especially those from the Roman graves, merit illustration (as a minimum, those listed as requiring illustration in the grave catalogue above). Some should certainly be drawn, others could be photographed.

14 Glass (Rose Broadley)

14.1 Introduction

14.1.1 The glass assemblage from Peugeot Garage, Canterbury can be divided into two groups: a small quantity of vessel, window fragments and beads from Roman grave fills, and a large quantity of post-medieval glass, principally bottles.

14.2 Roman glass

14.2.1 Grave 41 (S3416) contained a colourless rim sherd with a fire-rounded rolled-out rim and possible traces of incised linear decoration just below the outward bend. This sherd is from a Roman cup form, probably dating to around the third century AD. Grave 42 (S3418) contained a pale blue-green sherd that is warped and probably heat-damaged. It has the appearance of either bottle or window glass of the first to third centuries, but the size and damage make it difficult to determine which. Two fragments of glass were found in Grave 59 (S3499), both of which are very small. One appears to be pale green window glass, and contains small bubbles. The other is from a thin and very pale blue-green vessel. The sherd contains a large bubble, but also appears to feature two sets of incised linear decoration. Both are consistent with a mid-Roman date. Grave 120 (S3735) contained a small sherd from a very thin colourless vessel, typical of good quality Roman tableware and similar to the fragment from Grave 41. Grave 194 (S3983) contained a thick blue-green sherd with a mottled texture on one side, from a prismatic bottle of the first to third centuries AD.

14.2.2 Two beads were found, one a very long, rhombic, deep blue bead from Grave 105 (S3678), and the other a short, cylindrical opaque pale green bead from Grave 157 (S3839). The shape of the former makes it more unusual, but the latter is a common and typical late Roman bead (third to fourth centuries AD), although the type continued in use for a very long time, through the early Anglo-Saxon period (up to approximately the mid-sixth century).

14.2.3 All of the above are Roman, and based on an initial assessment, date from approximately the second to fourth centuries AD. It is likely that all were included in the grave fills accidentally. They represent a light scatter of fragments of both vessel and window glass in the soil, supporting the impression of this area as peripheral, but also close to the fringes of activity and occupation in Roman Canterbury.

14.2.4 One flat sherd obscured by iridescent surface changes was found in the fill of Grave 131 (S2546). This window glass fragment is likely to be intrusive in its Roman context. Although dating of corroded potash window glass is difficult, it may be around the same date as another fragment from a post-medieval context 3381 (G30 S3383), and is of likely post-medieval date but from before 1800.

14.2.5 In addition to the glass from the grave fills, one Roman window glass fragment, which is pale green with a rounded edge and made by the 'casting' technique, was found in the upper fill (3072) of the G5 boundary ditch (S3045) that also contained some Roman pottery and tile. This is further evidence of Roman buildings and occupation nearby.

14.3 Post-medieval glass

14.3.1 This group represents the majority of the glass from the site, and is dominated by complete or nearly complete bottles that date to the late nineteenth and early twentieth centuries, corresponding with the approximate period when a public house was located in the vicinity (c AD 1875–1905). The first key context group is from fill 2049 of a G27 quarry pit (S2054) and contains the rims and necks of several utility bottles in dark brown and pale green glass. Most interesting is a pale green round-ended soda bottle with 'EDWIN BING, CHEMIST, CANTERBURY' on the side. Edwin Bing opened a chemist in Canterbury c AD 1865, selling sodas and mineral water as was common at the time, and expanded by creating a separate mineral water company c AD 1878.

14.3.2 A second context group represents a selection of material retained from fill 3250 of a modern G27 pit (S3251) full of post-medieval ceramics and glass. A wide variety of utility bottles are present, both large and small and in range of colours and sizes. The highlights include two pale green 'torpedo' soda bottle bases dating to c AD 1870–1900, one of which has '…RGATE' ('MARGATE?') on the side. Another is a medium-sized blue-green bottle with 'GOODALL BACKHOUSE & Co' along the side and 'YORKSHIRE

RELISH' around the shoulder. The company was another example of chemists diversifying into consumer goods in the mid-nineteenth century, based in Leeds and under this name from 1858. The company operated the largest sauce factory in the world by 1874 and was one of the first to register a trademark (for Yorkshire Relish) in 1876. Other interesting features of the group are a pale grey-blue neck with a matching stopper still in it and another similar stopper fragment, a small, colourless bottle still containing a dark brown residue, and a large blue-green cylindrical bottle base with fluted sides.

14.3.3 Fill 3253 of a G27 late post-medieval pit (S3254) contained a colourless phial with a rounded base and four identical colourless medicine bottles, two of which still contained brown residue, and one of which still has a rusted metal lid attached. The fill (3452) of a modern G32 linear feature (S3457), containing a medium blue-green bottle with neck and rim missing, and the following on the side: 'SHAXBY BROs', 'H & R.S./TRADEMARK', 'CANTERBURY', 'SUTCLIFFE'S PATENT, BARNSLEY'. The Shaxby brothers were merchants of wine, ales and sodas and aerated water manufacturers, and were based in Stour Street and Jewry Lane between at least 1884 and 1903. The fill (3455) of a modern G32 linear feature (S3457) contained several colourless glass pedestals from drinking glasses, a large, colourless bottle base containing dark red residue, and a series of small bottle necks in blue-green, pale blue and colourless glass. However, the majority of glass from this context had a medicinal theme. The context group contained another bottle with the name of 'E. BING & SON', 'CANTERBURY' on the side, although this time the bottle 'tombstone'-shaped. The other highlights were a twelve-sided colourless bottle containing a creamy residue, with 'SEOUAH' and 'PRAIRIE FLOWER' on the side; a medium blue bottle with 'GUY'S TONIC' on the side and a measuring scale for 'TABLESPOONS' on the other; and a brown bottle with 'B.W & Co', 'LONDON', '… HILL?' on the base. An advertisement in the London Evening News of 11 December 1890 refers to prairie flower as a medicine for joints, headaches and constipation. Advertisements for Guy's Tonic survive from c AD 1890–1910, stating that it was for 'indigestion and nervousness'. B W & Co stands for Burroughs Wellcome & Co, a pharmaceutical company c AD 1880–1925.

14.3.4 Perhaps most surprisingly, in the fill (1001) of a timber box located in G27 late post-medieval pit (S1003), a medium pale green bottle was found that contained a paper note. The bottle has a complete side seam and thus dates to after 1905, although it probably belongs in the first half of the twentieth century. The paper is old enough to be very fragile, and the only words deciphered so far are 'Treasure'!

14.3.5 Finally, a fragment of corroded potash window glass was found in the fill (3381) of a G30 well (S3383). Corroded potash window glass is difficult to date, but post-medieval and before 1800 is very likely.

14.4 Statement of potential

14.4.1 The research potential of the glass assemblage is moderate. All types represented are found relatively frequently. However, the assemblage has potential to contribute information relevant to the nature of the Romano-British activity on the site, our wider understanding of the development and morphology of Roman Canterbury and its extra-mural suburbs, the overall chronological sequence, and the chronological sequence for the inhumation cemetery, and how it relates to the Roman glass and features found at the adjacent Rhodaus Town and Augustine House excavations.

14.4.2 The post medieval glass is of local interest due to the appearances of names of local businesses of the mid and late nineteenth century. Many of the bottles in particular come from the early phase of mass production and consumerism, and although they are therefore common finds, they document this shift in society generally and also the post-medieval history of this area of Canterbury.

14.5 Recommendations for further work

14.5.1 The potential of the Roman glass assemblage merits the creation of a short analysis report to be included in the final site publication. The following tasks will be required for report completion: recording (weighing, measuring) and cataloguing; identification and analysis, including checking contextual information for vessel sherds, and report production.

14.5.2 A full catalogue and report on the post-medieval and early modern glass would be too time-consuming to justify, but it would be worth spending a little additional time considering the spatial relationships of the main context groups with each other, with nearby features and with buildings such as the pub and local housing that are known from historic maps.

15 Geological material (Luke Barber)

15.1 Introduction

15.1.1 The excavation produced 91 pieces of stone, weighing 62,533g, from 41 individually numbered contexts. These totals include 10 pieces (31g) from three different environmental samples and 17 individual stones that had been allocated small find numbers. In the event, the majority of the latter are not worked. The assemblage has been fully listed on geological record sheets for the archive, with the resultant information entered onto a Microsoft Excel spreadsheet. Each main stone type was allocated a code number for archive though many of these have variations that have been kept separate by the addition of a letter to the type number. The assemblage is characterised in Table 25 by type and probable source.

Table 25. Characterisation of the geological material by type/probable source area

Phase	Unphased	2	3	4	5	6	7	8
No. of contexts	*2*	*1*	*15*	*5*	*2*	*4*	*6*	*6*
Thanet/Canterbury								
16a Downland flint	-		1/5g	-	-	-	-	-
16b Tertiary flint	-		3/17g	2/3g	-	-	-	-
16c Flint pebbles	-		4/326g	-	-	-	-	-
17a Chalk	-		-	-	-	-	1/378g	1/312g
Iron pyrites	-		-	3/20g	-	-	-	-
50a Glauconitic fine-grained sast (greenish)	-		10/15,518g	-	-	2/50g	-	-
50d Sparse glauconitic fine-grained sast (reddish/orange)	-	1/154g	7/16,832g	1/150g*	-	1/240g	-	-
50f Glauconitic fine-grained sast (grey-green)	-		1/154g	-	-	-	-	-
50g Glauconitic fine-grained sast (decalcified rind)	-		5/17,392g	-	-	-	-	-
55a Tufa (hard)	-		-	-	-	-	1/190g	-
55b Tufa (soft)	-		5/5998g	-	-	-	-	-
Other Wealden								
54a Lower Greensand(Folkestone stone)	-		-	-	-	-	1/338g	-
54d Lower Greensand (Kentish Ragstone)	-		-	-	-	1/618g*	-	-
54f Lower Greensand (Folkestone type)	-		-	1/120g	-	-	-	-
59b Ferruginous sandstone	-		1/6g	-	1/6g	-	-	-
59c Wealden Clay Ironstone	-		-	-	-	-	-	1/140g
Other English								
1a West Country slate	-		-	-	4/8g	3/60g	3/62g	2/6g
2a Welsh slate	1/8g		-	-	-	-	-	3/98g*
4b Coal shale	-		-	-	-	-	3/4g	-
9a Purbeck Marble	-		-	-	-	-	-	1/674g+
11a Kimmeridge shale	3/24g		-	-	-	4/18g	-	-
23a Yellow fine sast	-		-	-	-	-	-	1/1936g
24a Pink granite	-		-	-	-	-	-	1/74g
Hard grey-green slate	-		-	-	-	-	-	1/118g*
Imported								
5a German lava	-		-	3/6g*	-	-	-	-
6a Caen stone	-		-	-	-	1/218g	-	-
7d Oolitic lmst	-		-	-	-	-	-	1/168g
7f Oolitic lmst	-		-	1/84g	-	-	-	-
Totals	**4/32g**	**1/154g**	**37/56,248g**	**11/383g**	**5/14g**	**12/1204g**	**9/972g**	**12/3526g**

** = type includes worked objects, + type includes shaped building materials*

15.1.2 The assemblage is considered by preliminary site phasing. Although some deposits may shift phase following detailed stratigraphic analysis this is unlikely to be on a significant scale. As such the preliminary phasing is considered adequate to give a reliable framework for the assessment of the stone assemblage.

15.2 Phase 2 early/mid Roman

15.2.1 The earliest phased material was a piece of unworked weathered Thanet sandstone (50d) from G5 ditch S3045.

15.3 Phase 3 late Roman

15.3.1 Stone was retained from fifteen G9 graves. This included potentially accidentally introduced material. For example Grave 7 (S3137) contained a poorly formed spherical flint fossil, Grave 34 (S3386) a tiny piece of irregular Tertiary flint and Grave 81 (S3593) a grey flint pebble. Retained samples also included deliberately selected stone from Graves 65, 113, 122, 143, 144, 175 and to a lesser extent Graves 124, 133. This stone consisted of apparently unworked pieces of Thanet sandstone (types 50a, 50d and 50g) and a few pieces of unworked tufa (55b). The latter was only recovered from Graves 113 (4/242g) and 122 (1/5756g). The Thanet sandstones are all from a foreshore and consist of cobbles, boulders and fragments thereof which show extensive surface weathering and, in some instances, marine burrows. None have any signs of mortar adhering or are faced/shaped in any way – they are clearly not re-used building materials. These pieces are more akin to what one may expect as ship's ballast and they may have been collected from the quayside for re-use. To what extent they were deliberately placed will need to be assessed using the site notes and photographs.

15.4 Phase 4 Anglo-Saxon

15.4.1 The 11 pieces of stone from contexts attributed to this phase were recovered from G10 pits S2519, S3012, S3084 and S3285. The latter produced a sample of German lava from an environmental residue – although the pieces are amorphous, they undoubtedly originate from a rotary quern. A single piece of Thanet sandstone (50d) from pit S2519 is from a whetstone with a sub-triangular profile (38mm x 33mm x 34mm) with one notably flat worn face. The absence of definite Roman whetstones in the Phase 2 and 3 deposits suggests this example may indeed be Anglo-Saxon. However, some caution is needed as the oolitic limestone (7f Marquise-type from France) from pit S3012 is almost certainly a residual piece of Roman building material.

15.5 Phase 5 early medieval

15.5.1 Negligible quantities of stone were recovered from this phase, the most noteworthy being a West Country roofing slate from G13 ditch S4223 (fill 2349). This deposit produced pottery suggesting a date in the first half of the thirteenth century, which would be in keeping with the slate.

15.6 Phase 6 high medieval

15.6.1 The 12 pieces of stone from contexts dated to this phase show a dominance of Thanet sandstones (50a and 50d). However, unlike the Roman material, the medieval examples are much fresher and broken from quarried pieces with bedding exposed and none of the weathering noted in the Roman examples. This material may well represent rubble waste from building. There is a little West Country roofing slate from layers 2073 (G19 S2405) and 2082 (G17 S2412), and layer 2347 (G23 S2348) produced the weathered fragment of Caen stone. Layer 2348 (G23 S2348) produced a roughly squared paving sett with flat upper face (88mm x 87mm) with a domed underside in Kentish Ragstone. Similar setts were located in a deposit dated to between c AD 1175–1225 at 70 Stour Street, Canterbury. The Kimmeridge shale from the same deposit is likely to be residual Roman material. Overall the high medieval assemblage appears to represent a sparse background scatter of building material.

15.7 Phase 7 late medieval

15.7.1 The small quantity of stone from phase 7 included West Country roofing slate from G25 layers 2246 (S2246) and 2255 (S4051), Folkestone stone from G25 layer 2147 (S2246), and tufa from G25 layer 2028 (S2004) and likely represent a continuation of the background scatter of building material. The

Folkestone stone is from a beach boulder. The tiny scraps of coal shale from G24 pit S1576 could easily be intrusive.

15.8 Phase 8 post-medieval to modern

15.8.1 The 12 pieces of stone from phase 8 deposits include a number of residual medieval pieces (the West Country roofing slate from G27 pit S3016 and the fragment of Purbeck marble dressed block from G27 pit S3251 being cases in point). The oolitic limestone (7d) from G32 linear feature S3409 is likely to be residual Roman material. G27 pit S3254 produced a complete whetstone in a hard grey-green slate (118g, measuring 104mm long with a rectangular section measuring 40mm x 12mm) and three pieces of neatly sawn and polished Welsh slate (98g). The latter are almost certainly school slates though they do not have ruled lines. The associated pottery confirms a date between c AD 1840 and 1880.

15.9 Statement of potential

15.9.1 The stone assemblage is relatively small, particularly when considered by phase, and does not contain a high number of worked pieces. The material from phase 3 suggests the utilisation of boat ballast within the cemetery as it was easily accessible but there is a complete absence of deliberately worked pieces. The later phases show more diversity but the quantities involved are too small to draw firm conclusions from.

15.10 Recommendations for further work

15.10.1 Taken as a whole, the current assemblage does not hold any potential for further detailed analysis beyond that undertaken for this assessment. No further work is proposed and no separate report is needed for publication.

16 Animal bone (Ian Smith)

16.1 Introduction and methodology

16.1.1 An assemblage of animal bones was recovered by hand collection and sieving. The hand collected remains include the bones of cattle (*Bos taurus*), sheep/goat (*Ovis/Capra*), pig (*Sus* sp), horse (*Equus* sp), dog (*Canis familiaris*), cat (*Felis catus*), rabbit (*Oryctolagus cuniculus*), fowl (Galliformes) and fish (Pisces). The sieved remains include bones from goat (*Capra hircus*), rodents (Rodentia, several spp), shrews (Soricidae), reptiles (*Anguis fragilis* and cf *Ophidia*) and amphibians (*Rana* sp and *Bufo sp*). The assemblage is stored in seven museum (43cm x 30cm x 22cm) boxes.

16.1.2 The aim was to undertake an assessment of potential in a manner guided by principles outlined in Baker and Worley (2014).

16.1.3 Counts were made, amongst the main domesticates, of numbers of mandibular rows, measurable bones (von den Driesch 1976; Davis 1992) and specimens that demonstrated a fusion state. Counts were also made of appendicular elements that would count following the methodology and zones of Serjeantson (1996). The latter were divided into 'forelimb' (scapula, humerus, radius, ulna), 'hindlimb' (pelvis, femur, tibia, fibula, astragalus, calcaneus, navicular-cuboid) and 'feet' (metapodials and phalanges). Modern comparative material was consulted where necessary and reference was made to Halstead and Collins (1995), Schmid (1972) and Sisson and Grossman (1938). One reference to 'large mammal' relates to a cattle sized fragment, 'micro-mammal' refers to mouse/vole/shrew sized fragments. 'Horse' is here used to encompass all equid species, no species differentiation has been undertaken amongst disarticulated *Equus* remains. 'Fowl' here refers to members of the Galliformes (probably but not necessarily domestic). Counts were not made of mammal ribs, vertebrae or cranial/maxillary parts, although some notes relating to these have been taken into account.

16.2 Dating/phasing

16.2.1 The preliminary phasing indicates that the assemblage is multi-period and originates in the Roman through to the medieval periods. An insignificant amount of modern material is known to be present. A considerable proportion remains unassigned with regard to provisional date.

16.3 Results

16.3.1 The state of bone surface preservation is considered generally good, corresponding approximately to the erosion Grades 1 or 2 of Brickley and McKinley (2004).

16.3.2 A majority of the assemblage was recovered from pits and ditches but graves, metalled surfaces, post holes and other features also produced animal bones.

16.3.3 The hand collected material is dominated by the remains of cattle, sheep/goat and pig. Cattle outnumber sheep/goat according to the numbers of mandibular rows (Table 26), countable Serjeantson (1996) zones from forelimb, hindlimb and feet, and amongst specimens where the fusion state can be assessed and amongst measurable specimens (Table 27). Regarding the hand collected material an overview of fragments by context is included to possibly facilitate an assessment using updated phasing (Table 29).

Table 26. Mandibular row counts (hand collected) according to preliminary phasing

Mandibular rows	Cattle	Sheep/goat	Pig	Dog	Horse	Total
Roman	4	1	0		0	5
Mid/late Anglo-Saxon	13	8	2			23
Early medieval	0	2	0	0		2
High medieval	0	1	0	1	0	2
Modern	2		0			2
Undated	5	3	3	2	2	15
Total	**24**	**15**	**5**	**3**	**2**	**49**

Table 27. Frequency of appendicular parts (hand collected), and of specimens that bear fusion evidence, are measurable or can be sexed

	Forelimb	Hindlimb	Feet	Fusion	Measurable	Sex
Modern	*0*	*0*	*1*	*0*	*3*	*0*
cattle	0	0	1	0	2	0
pig	0	0	0	0	1	0
High medieval	*18*	*26*	*20*	*38*	*24*	*1*
cattle	9	12	15	19	13	0
sheep/goat	1	5	1	3	3	0
pig	1	5	4	7	0	1
horse	6	4	0	8	6	0
dog	0	0	0	0	1	0
fowl	1	0	0	1	1	0
Mid/late Anglo-Saxon	*21*	*17*	*40*	*46*	*50*	*4*
cattle	9	9	35	38	40	1
sheep/goat	7	7	4	6	6	0
pig	4	1	1	2	4	3
cat	0	0	0	0	0	0
fowl	1	0	0	0	0	0
Early Medieval	*11*	*12*	*4*	*18*	*11*	*0*
cattle	4	2	2	7	2	0
sheep/goat	1	1	1	1	2	0
pig	2	1	0	1	1	0
dog	0	1	1	2	2	0
cat	4	7	0	7	4	0
Roman	*14*	*14*	*28*	*33*	*27*	*4*
cattle	4	8	21	18	19	2
sheep/goat	6	2	3	7	5	0
pig	4	3	1	5	1	2
horse	0	0	3	3	2	0
roe deer	0	1	0	0	0	0
undated	*48*	*63*	*50*	*100*	*76*	*5*
cattle	11	20	26	32	22	0
sheep/goat	15	18	11	27	20	1
pig	5	6	2	7	4	2
horse	13	11	10	24	23	2
large mammal	0	1	0	0	0	0
dog	4	6	1	9	7	0
rabbit	0	1	0	1	0	0
Grand Total	**112**	**132**	**143**	**235**	**191**	**14**

16.3.4 The soil sampled/sieved bones (Table 28) include both the remains of small vertebrates and smaller parts of the large mammals. The latter includes fusion data from the main domesticates.

Table 28. Frequency of sieved remains according to preliminary phasing

		Presence	Forelimb	Hindlimb	Feet	Fusion	Measurable
Medieval							
cattle	*Bos taurus*	*			1		
sheep/goat	*Ovis/Capra*	*		1	4	2	1
pig	*Sus sp*	*			1		
dog	*Canis familiaris*	*					
cat	*Felis catus*	*		1			
hare/rabbit	*Lepus/Orytolagus*	*			1	1	
rabbit	*Oryctolagus cuniculus*	*			1	1	1
mouse	*Murid sp*	*					
mouse	*Mus/Apodemus*	*					

		Presence	Forelimb	Hindlimb	Feet	Fusion	Measurable
rat	*Rattus sp*	*	2			1	
rodent	*Rodentia*	*	1	1			
shrew	*Sorex araneus*	*					
slow-worm	*Anguis fragilis*	*					
toad	*Bufo*	*		4			
toad/frog	*Bufo/Rana*	*					
frog	*Rana sp*	*	1	1			
Mid/late Anglo-Saxon							
cattle	*Bos taurus*	*			2	1	
sheep/goat	*sheep/goat*	*	1				
goat	*Capra hircus*	*					
pig	*Sus sp*	*					
cat	*Felis catus*	*		1	1		
shrew	*Soricidae*	*					
Mid/late Anglo-Saxon?							
sheep/goat	*Ovis/Capra*	*		1			
Early Medieval							
sheep/goat	*Ovis/Capra*	*			2	2	1
cat	*Felis*	*	1	1	1	1	1
pig	*Sus sp*	*					
micromammal	*Mammalia*	*					
toad	*Bufo sp*	*					
fish	*Pisces*	*					
Roman							
cattle	*Bos taurus*	*			1	1	1
sheep/goat	*Ovis/Capra*	*					
hedgehog	*Erinaceus sp*	*					
rodent	*Rodentia*	*					
micromammal	*Mammalia*	*	1				
reptile	*Reptilia cf Ophidia*	*					
frog	*Rana sp*	*		1			
amphibian	*Amphibia*	*					
Unphased							
cattle	*Bos taurus*	*			1		
sheep/goat	*Ovis/Capra*	*	1	2			
pig	*Sus sp*	*	1				
micromammal	*Mammalia*	*					
Total			**9**	**14**	**16**	**10**	**5**

16.3.5 Human bone, phalanges and part of a vertebra are present in 3152 (G9 Grave 14 S3151) and a proximal tibia, vertebra, part mandible, part scapula and other fragmentary human remains are present in 3408 (G32 linear feature S3409). Human metapodials and phalanges are present in 3160 (G10 pit S3159) and 3138 (G9 Grave 8 S3140). Checks are needed on possible human bone in poor condition in 3405 (G24 pit S3406) and 3455 (G32 linear feature S3457).

16.3.6 The sieved material includes fish bone from early medieval context 2105 (G11 ditch S2174, sample <203>) and there is hand collected fish from 3027 (G22 pit S3026), but both in low numbers. There is poor potential for the identification of fish species.

16.3.7 Frog (*Rana*) was identified from Roman context 3067 (G5 ditch S3076, sample <121>), and toad (*Bufo*) from 2074 (G26 linear feature S2075, sample <201>), both on ilia. Both ilia could yield species identifications but most of the other amphibian remains are elements that will most probably only be securely identifiable to the level of genus.

16.3.8 The rodent remains include medieval rat (*Rattus* sp) from 2064 (G20 metalled surface S2404, sample <200>).

16.3.9 A shrew humerus (cf *Sorex araneus*) is present within context 2074 (G26 linear feature S2075, sample <201>).

16.3.10 Although vertebrae were not counted and no butchery has been examined in any detail, evidence for butchery does include some affecting the vertebrae including obvious fine cut marks across a cattle atlas from mid/late Anglo-Saxon pit 3083 (G10 pit S3084).

16.3.11 There is an associated group of kitten (*Felis catus*) bones (judged much of a single skeleton) from mid/late Anglo-Saxon pit 3290 (G10 pit S3285).

16.3.12 Measurable cattle, horse, sheep/goat, pig and dog bones are present. The measurable cattle bones are the largest such group and include 40 from mid/late Anglo-Saxon contexts and 19 from Roman contexts. These totals for cattle (and amongst the other species) may well rise since phasing work is in progress and 22 measurable cattle bones (and various others) remain unassigned to period at present. This data is valuable with regard to a range of issues including breed improvement and importation of stock.

16.3.13 The age-related data from hand collected mandibles and specimens bearing countable epiphyseal fusion states amounts to 284 specimens with an additional 10 fusion states from the sieved samples.

16.4 Statement of potential

16.4.1 The assemblage has good potential and further detailed work is recommended. The bulk of the potential lies amongst the main mammal groups. The material assessed by Kausmally (2014), given the proximity and date ranges of the two sites, is important to consider. At first sight there appear to be contrasts with the adjacent site, notably in the proportion of horse as compared to the other domesticates, but this requires substantiation through analysis. Kausmally recommended the use of Dobney and Reilly (1988) (Kausmally 2014). If this recommendation has been followed, it arguably makes sense to follow the same zonation (and other recording methods) for the Peugeot Garage site. This would facilitate any comparisons. The fact that counts of appendicular elements following Serjeantson (1996) were made for the present assessment presents no real hindrance at this stage since the two systems count essentially the same range of elements. Whilst Dobney and Reilly (1988) count mandibular zones (and third phalanges) and Serjeantson (1996) does not, mandibular rows have been counted here (and notes made regarding the presence of third phalanges). However taking loose mandibular parts into consideration, the counts made here are undoubtedly lower than would be expected following Dobney and Reilly (1988). In addition allowance must be made for ribs and vertebrae (which although counted by both zoning methods) were not counted here due to time and budget constraints.

16.5 Recommendations for further work

16.5.1 At this stage less than 1% of the material that could yield useful information has been revealed as 'modern'. However, a significant proportion (41% of elements considered to bear useful age or other information) is presently unassigned with regard to date range. Once this is rectified any modern material and contexts where high levels of residuality are noted will be excluded according to the project aims, and a revision made as to the required time needed and the estimated costs presented here.

16.5.2 In estimating costs, time has been allowed (via the rate of minutes per specimen) for a relatively large amount of possible refitting of elements including amongst the mandibles and amongst associated groups of mandibular teeth (and where checks can be made for matching mesial and distal interdental wear) and for the considerable number of small individual bags.

16.5.3 It is recommended that individual bones should be identified to element, side, species, diagnostic zone (following the zonation system of Dobney and Reilly 1988). Bone fusion, butchery, burning, fragmentation and gnawing should be recorded following the York system (2003) and recommendations by English Heritage (Baker and Worley 2014). Bone measurements will be taken where appropriate following the guidelines of von den Driesch (1976) or Davis (1992). Sex, pathology, and tooth wear will also be recorded following standard protocols (and taking into consideration methods used by Kausmally (2014) to allow for ease of comparison). Bone identifications will be made

using modern reference material and with the aid of reference literature (eg Halstead and Collins 1995; Schmid 1972; Hillson 2005; Cohen and Serjeantson 1996; Sisson and Grossman 1938).

Table 29. Hand collected fragments by context, taxa, measurable parts, body part presence and specimens from which sex can be determined ('modern' specimens excluded). 'Human' and 'Human?' are present where listed by context but have not been counted

Context	Mand rows	Measurable	Fusion	Forelimb	Hindlimb	Feet	Sex
Cattle	*24*	*98*	*114*	*37*	*51*	*100*	*3*
1076	0	0	1	0	1	0	0
1219	0	0	1	0	0	1	0
2022	0	1	1	0	0	1	0
2026	0	0	1	1	2	0	0
2056	0	1	1	1	2	1	0
2064	0	0	0	0	0	2	0
2065	0	6	6	2	5	5	0
2071	0	1	1	0	0	1	0
2073	0	1	2	0	3	0	0
2074	0	1	2	1	2	0	0
2077	0	2	0	0	0	2	0
2078	1	0	0	0	0	0	0
2087	0	0	2	1	0	2	0
2089	0	1	1	1	0	0	0
2098	0	0	0	1	1	0	0
2104	0	0	1	1	0	0	0
2106	0	1	2	1	1	0	0
2107	0	0	1	2	0	0	0
2109	0	0	1	0	0	1	0
2110	0	0	1	1	0	0	0
2128	0	1	1	0	0	1	0
2149	0	1	4	4	2	0	0
2247	0	1	2	1	0	2	0
2255	0	1	1	0	0	1	0
2292	1	0	1	1	0	0	0
2293	0	0	0	0	0	1	0
2294	0	0	0	0	1	0	0
2346	0	2	2	0	0	4	0
2347	0	1	1	1	0	2	0
2348	0	1	2	0	3	0	0
2349	0	1	0	0	2	0	0
2351	0	1	1	0	0	1	0
2386	0	0	1	0	0	1	0
2514	1	5	4	3	1	2	0
2518	1	0	0	1	0	0	0
2553	0	0	1	0	0	1	0
2717	0	1	0	0	2	0	0
3009	1	3	3	0	0	3	0
3011	3	6	2	1	1	3	0
3013	2	2	0	0	0	1	0
3015	1	5	6	1	0	7	0
3027	6	11	10	1	0	10	0
3028	3	10	8	0	1	8	0
3029	1	5	3	1	2	2	1
3030	1	0	0	0	0	0	0
3033	0	0	1	0	1	1	0
3035	0	2	2	1	1	2	1
3040	0	1	2	1	1	2	0
3050	0	0	0	1	0	0	0

Context	Mand rows	Measurable	Fusion	Forelimb	Hindlimb	Feet	Sex
3057	1	1	1	1	0	0	0
3067	0	0	1	0	1	1	0
3083	0	3	4	1	0	4	0
3093	0	0	0	0	0	1	0
3100	0	2	1	0	0	1	0
3115	0	1	1	0	0	1	0
3122	0	0	1	0	0	1	0
3129	0	0	0	0	0	1	0
3146	0	0	0	0	1	0	0
3160	0	1	1	0	0	1	0
3198	0	0	1	1	1	0	0
3287	0	0	1	1	0	0	0
3288	0	4	5	1	4	4	0
3290	0	2	2	0	0	4	0
3298	0	0	1	0	1	0	0
3300	0	0	1	0	0	1	0
3307	0	0	1	0	1	0	0
3388	0	0	1	0	0	1	0
3390	0	1	1	0	0	1	0
3410	0	0	1	0	1	0	0
3446	0	0	1	0	0	1	0
3484	0	1	1	0	0	1	1
3495	0	0	0	0	1	0	0
3528	0	1	0	0	1	0	0
3548	0	1	0	0	0	1	0
3590	0	2	1	0	0	2	0
3687	0	1	0	0	0	1	0
3707	1	0	1	0	1	0	0
3941	0	0	1	0	0	1	0
5035	0	0	0	1	0	0	0
5152	0	0	0	0	1	0	0
5210	0	0	0	0	1	0	0
5212	0	1	1	0	1	0	0
Dog	*3*	*10*	*11*	*4*	*7*	*2*	*0*
2056	1	0	0	0	0	0	0
2066	0	1	0	0	1	1	0
2073	0	0	1	0	1	0	0
2077	0	1	1	1	0	0	0
2079	0	1	1	1	0	0	0
2107	0	1	1	0	1	0	0
2109	0	1	1	0	0	1	0
2144	0	1	1	0	1	0	0
2257	0	0	1	1	0	0	0
2348	1	1	0	0	0	0	0
2351	1	1	0	0	0	0	0
3040	0	0	1	1	0	0	0
5231	0	1	1	0	1	0	0
5232	0	1	2	0	2	0	0
Cat	*0*	*4*	*7*	*4*	*7*	*0*	*0*
2105	0	1	1	1	0	0	0
2107	0	2	2	1	5	0	0
2109	0	1	3	2	1	0	0
2110	0	0	1	0	1	0	0
3290	0	0	0	0	0	0	0
Fish	*0*	*0*	*0*	*0*	*0*	*0*	*0*
3027	0	0	0	0	0	0	0

Context	Mand rows	Measurable	Fusion	Forelimb	Hindlimb	Feet	Sex
Fowl	*0*	*1*	*1*	*2*	*0*	*0*	*0*
2147	0	0	0	0	0	0	0
2247	0	1	1	1	0	0	0
2518	0	0	0	1	0	0	0
Horse	*2*	*31*	*35*	*19*	*15*	*13*	*2*
2026	0	2	2	1	0	1	0
2028	1	1	0	0	0	0	0
2062	0	2	2	2	0	0	0
2065	0	2	4	4	2	0	0
2066	0	0	0	0	1	0	0
2068	0	3	3	1	2	0	0
2069	0	0	0	0	1	0	0
2074	0	3	3	1	2	0	0
2079	0	1	1	0	1	0	0
2085	1	1	2	1	1	0	0
2089	0	2	1	0	0	2	0
2128	0	1	1	1	0	0	0
2257	0	0	0	1	0	0	0
2268	0	0	0	0	1	0	0
2289	0	1	2	1	1	0	0
2292	0	1	1	1	0	0	0
2347	0	1	1	1	0	0	0
2351	0	1	0	0	0	1	0
2805	0	0	0	0	1	0	0
3017	0	0	0	1	0	0	0
3035	0	0	0	0	0	0	0
3040	0	2	1	1	0	1	1
3093	0	0	0	0	0	0	0
3100	0	1	1	0	0	1	0
3115	0	0	1	0	1	0	0
3160	0	1	1	0	0	1	0
3396	0	0	1	1	0	0	1
3398	0	1	1	0	0	1	0
3436	0	1	0	0	0	1	0
3440	0	1	1	0	0	1	0
3504	0	1	1	0	0	1	0
3598	0	0	1	0	0	1	0
5035	0	1	2	0	1	1	0
5231	0	0	1	1	0	0	0
Human	*0*	*0*	*0*	*0*	*0*	*0*	*0*
3152	0	0	0	0	0	0	0
3408	0	0	0	0	0	0	0
Human?	*0*	*0*	*0*	*0*	*0*	*0*	*0*
3455	0	0	0	0	0	0	0
3558	0	0	0	0	0	0	0
3640	0	0	0	0	0	0	0
Large mammal	*0*	*0*	*0*	*0*	*1*	*0*	*0*
3040	0	0	0	0	1	0	0
Pig	*5*	*11*	*22*	*16*	*16*	*8*	*8*
2022	0	1	1	1	0	0	0
2055	0	0	0	0	1	0	0
2056	0	0	1	0	1	0	0
2065	0	0	2	0	1	1	0
2073	1	1	0	1	0	0	0
2093	0	0	0	1	0	0	0
2106	0	1	1	1	0	0	0

Context	Mand rows	Measurable	Fusion	Forelimb	Hindlimb	Feet	Sex
2107	0	0	0	1	0	0	0
2110	0	0	0	0	1	0	0
2147	0	0	1	0	1	0	0
2149	0	0	4	0	3	3	0
2247	0	0	0	1	0	0	0
2346	0	0	0	0	0	0	1
2514	0	0	0	1	0	0	0
2520	0	0	1	0	1	0	0
3009	0	0	2	1	1	0	0
3013	0	1	0	0	0	0	0
3015	0	0	0	1	0	0	0
3035	0	0	1	1	0	0	0
3040	0	0	0	0	0	0	0
3083	2	4	1	1	0	1	2
3120	0	0	1	0	0	1	0
3257	0	0	1	0	0	1	0
3288	0	0	0	2	0	0	0
3290	0	0	1	0	1	0	1
3300	0	0	1	0	1	0	0
3421	0	0	1	0	1	0	0
3436	0	0	0	0	1	0	0
3444	0	0	0	0	0	0	1
3495	0	0	0	0	1	0	0
3520	1	1	0	0	0	1	0
3538	0	0	0	0	0	0	1
3539	0	0	0	1	0	0	0
3569	0	1	1	0	1	0	0
3687	0	0	1	1	0	0	0
3733	0	0	0	0	0	0	1
3941	0	0	0	0	0	0	1
5231	1	1	0	1	0	0	0
Rabbit	*0*	*0*	*1*	*0*	*1*	*0*	*0*
2079	0	0	1	0	1	0	0
Roe deer	*0*	*0*	*0*	*0*	*1*	*0*	*0*
3504	0	0	0	0	1	0	0
Sheep/goat	15	36	44	30	33	20	1
1048	0	0	0	0	1	0	0
1076	0	0	2	1	2	0	0
1111	0	0	0	1	0	0	0
1178	0	0	0	0	1	0	0
1219	0	0	0	0	1	0	0
1220	0	1	1	0	1	0	0
2026	0	2	1	1	1	1	0
2056	0	3	4	1	2	2	0
2065	0	1	2	0	1	1	0
2066	0	0	0	0	0	1	0
2074	0	0	0	0	1	0	0
2077	0	1	1	0	1	0	0
2089	0	2	2	1	1	2	0
2091	0	0	1	1	0	0	0
2093	0	0	0	0	0	0	0
2098	0	1	1	1	0	0	0
2107	0	0	0	1	0	0	0
2128	0	2	2	1	0	1	0
2132	0	0	1	0	1	0	0
2149	1	2	0	1	0	0	0

Context	Mand rows	Measurable	Fusion	Forelimb	Hindlimb	Feet	Sex
2164	0	0	0	1	0	0	0
2236	0	0	0	0	0	0	0
2255	1	2	1	0	0	1	0
2346	0	0	1	0	1	0	0
2347	0	0	0	0	2	0	0
2349	0	1	3	2	1	0	1
2352	1	1	0	0	0	0	0
2514	3	1	1	1	2	0	0
2518	0	1	1	0	1	0	0
2574	0	1	2	1	1	1	0
2717	0	1	1	1	1	0	0
2805	0	0	0	0	0	0	0
3000	0	0	0	0	0	0	0
3009	0	0	0	0	0	0	0
3011	0	0	0	1	0	0	0
3015	0	0	1	1	1	0	0
3027	2	1	0	0	0	2	0
3028	0	0	1	0	1	1	0
3029	1	0	0	0	0	0	0
3030	0	1	0	0	1	0	0
3040	0	0	0	0	0	0	0
3050	0	0	1	0	1	0	0
3067	0	1	0	0	0	0	0
3079	0	0	0	0	0	0	0
3083	2	0	0	2	0	0	0
3120	0	0	0	0	0	1	0
3152	0	0	0	1	0	0	0
3198	1	1	0	0	0	0	0
3217	0	0	1	0	1	0	0
3287	0	0	0	1	0	0	0
3288	0	1	1	2	0	1	0
3290	0	1	2	1	2	0	0
3298	0	1	0	0	0	1	0
3300	0	0	2	1	3	0	0
3307	1	0	0	0	0	0	0
3381	0	1	1	1	0	0	0
3388	0	1	1	0	0	1	0
3446	0	1	1	0	0	1	0
3520	1	1	0	0	0	0	0
3581	0	1	1	1	0	0	0
3590	0	0	1	1	0	0	0
3758	0	1	1	0	0	1	0
3882	1	0	0	1	0	0	0
4084	0	0	1	0	0	1	0
Total	**49**	**191**	**235**	**112**	**132**	**143**	**14**

17 Bird remains (Enid Allison)

17.1 Introduction

17.1.1 Bird remains were recovered by hand-collection (35 bones/fragments) and from 23 bulk samples (147 bones/fragments from deposits dated to the Roman, Anglo-Saxon, and early to late medieval periods.

17.2 Methodology

17.2.1 The assemblage has been briefly examined and most of it has been provisionally identified, pending closer identification at the analysis stage by comparison with modern reference material. Unidentifiable fragments have been separated into size categories where possible, e.g. large, medium and small bird. Exceptions to this were multiple fragments of bird bone from several samples that have been counted but not examined closely. Some of this material and some fragments currently assigned to size categories are potentially identifiable.

17.2.2 The developmental stage of bones was recorded as mature (completely ossified) or immature (incompletely ossified and porous), and all fragments were briefly examined by eye for knife marks and pathological features. The presence of medullary bone (found in females in laying condition) has only been noted where it was exposed in broken fragments. The provisional data is held in archive.

17.3 The bird bone assemblage

General comments

17.3.1 The bird remains are generally uneroded with surface features readily visible but fragmentation is high, particularly for the material from samples. The majority of the identifiable fragments are of domestic fowl. Many, but not all, of the fragments assigned to the medium bird category are also likely to be from domestic fowl. Knife marks indicative of food preparation are clearly visible on some bones of domestic fowl and a large duck. A few fragments show signs of burning. Remains recovered by hand-collection and from samples are discussed together below for each phase of activity, but the records are shown separately in Table 30.

Taxa provisionally identified are:
Goose (cf *Anser* sp(p).)
Teal (*Anas crecca* Linnaeus)
Large duck, cf mallard (*Anas platyrhynchos* Linnaeus)
Large raptor (Falconiformes sp.)
Domestic fowl (*Gallus gallus* Linnaeus)
Medium wader (Charadriiformes sp.)
Small wader (Charadriiformes sp.)
Pigeon, cf domestic/feral pigeon (*Columba livia*)
Small Corvidae sp.
Small passerine spp.

Phase 2 early/mid Roman

17.3.2 A fragment of a small passerine humerus was recovered from G5 ditch S3127.

Phase 3 Late Roman

17.3.3 Single fragments of domestic fowl, a medium-sized wader (woodcock size) and an indeterminate medium bird were recovered from the fills of three G9 graves (Graves 44, 43 and 34 respectively.

Phase 4 Anglo-Saxon

17.3.4 Phase 4 bird bones were all recovered from G10 pit fills. The most interesting remains from this phase, and indeed from the assemblage as a whole, consisted of an associated bone group of a domestic fowl from pit S2519. This individual shows the characteristic skeletal morphology caused by the creeper

mutation which causes dwarfing of the limb bones. Knife marks caused during food preparation and/or consumption were present on the proximal articulation of the bird's left scapula and the distal trochleae of its right tibiotarsus. Bones from fowls with the creeper condition have previously been noted from a number of other sites in Canterbury (Allison 2015a; Allison 2015b) and to date only rarely elsewhere, although this may be at least partly due to under-recording. Fowl bones from other pits were normally proportioned. An associated bone group from a fill of pit S3084 was from an immature individual under 27 weeks of age (using data compiled by Serjeantson 2009, 39). Other taxa represented were teal (pit S3121) and large ducks comparable with mallard (pits S3036, S3297). Single small passerine bones/fragments from pits S3121, S3285 and S3297 are unlikely to be further identifiable.

Phase 5 early medieval

17.3.5 Bird remains were recovered from G11 ditch (S2174, S2278), and four G12 pits (S1184, G12 S1150, G12 S1151, S2427). Identified fragments are currently of domestic fowl and goose but a number of other fragments are potentially identifiable.

Phase 6 high medieval

17.3.6 Remains were recovered from G20 metalled surfaces (S2404, S4128), a G22 pit (S3026), and G23 layers (S2348 and S4077). Fragments currently identified are of domestic fowl, goose, a small wader, and a small corvid. Several other fragments are potentially identifiable.

Phase 7 late medieval

17.3.7 Remains came from G24 pits (S3018 and S5174), G25 layers (S2162, S2246), and a G26 linear feature (S2075). Hand-collected material was chiefly from G25 layer S2162, and the bones were in a more complete condition than much of the material from other periods. The majority of the identified elements are of domestic fowl some of which are relatively large by comparison with the earlier material. Other taxa include a large bird of prey (represented only by a claw phalanx), and a fledgling pigeon. The pigeon bone was in the final stages of ossification and has the size and general characteristics of domestic or feral pigeon. Other closely similar medium-sized wild species (rock and stock dove) cannot be conclusively ruled out however. Some currently unassigned fragments from this phase are potentially identifiable.

17.4 Statement of potential

17.4.1 The possibility that the bird remains from three Roman graves are deliberately placed should be considered with any other items recovered from the same contexts, but since all are single bones or fragments, it is at least equally likely that these are residual or intrusive in the grave fills.

17.4.2 The rest of the assemblage relates to the Anglo-Saxon and medieval periods and appears to be derived predominantly from domestic waste, with domestic fowl the dominant species. This dominance is typical of domestic refuse elsewhere in Anglo-Saxon and medieval Canterbury (e.g. Serjeantson 2001, Allison 2010, Allison 2015a, Allison 2015c, Allison forthcoming).

17.4.3 A notable find was an associated bone group from a fowl with the creeper condition which adds to previous records from Canterbury sites and also provides an indication that at least some of the Anglo-Saxon occupation waste came from households with a relatively high social standing. Similarly, the record of fledgling domestic pigeon from the late medieval period, and perhaps also the large bird of prey, suggests an element of status.

17.5 Recommendations for further work

17.5.1 Further work is recommended to complete identifications and to compare the material from each period with other assemblages of comparable dates from elsewhere in Canterbury. Detailed examination of the domestic fowl bones will add to data on the keeping and exploitation of poultry in Canterbury over time. It is expected that this will take up to one day.

Table 30. Numbers of identified fragments of bird bone by phase

	Early/mid Roman		Late Roman		Anglo-Saxon		Early medieval		High medieval		Late medieval	
	Phase2		Phase3		Phase 4		Phase 5		Phase 6		Phase 7	
	Hand-coll	Samples	Hand-coll	Samples	Hand-coll	Samples	Hand-coll	Samples	Hand-coll	Samples	Hand-coll	Samples
Goose	-	-	-	-	-	-	-	1	1	2	-	1
Teal	-	-	-	-	1	-	-	-	-	-	-	-
cf Mallard	-	-	-	-	2	-	-	-	-	-	-	-
Domestic fowl	1	-	1	-	6*	1	-	1	3	4	6	8
Domestic fowl (imm)	-	-	-	-	1	5**	3	1	-	1	2	-
Large raptor	-	-	-	-	-	-	-	-	-	-	-	1
Medium wader	1	-	1	-	-	-	-	-	-	-	-	-
Small wader	-	-	-	-	-	-	-	-	-	2	-	-
Pigeon (imm) cf domestic/feral	-	-	-	-	-	-	-	-	-	-	-	1
Small corvid	-	-	-	-	-	-	-	-	-	1	-	-
Small passerine spp.	-	1	-	1	1	2	-	-	-	-	-	6
Large bird	-	-	-	-	-	-	-	1	-	-	-	3
Medium-large bird	-	-	-	-	-	-	-	-	-	-	4	1
Medium bird	-	1	-	1	1	5	-	4	-	5	-	9
Medium bird (imm)	-	-	-	-	-	-	-	-	-	-	-	3
Small-medium bird	-	-	-	-	-	-	1	1	-	-	-	-
Indeterminate fragments	-	-	-	-	-	3	-	2	-	13	-	4
Misc fragments (some identifiable)	-	-	-	-	-	-	-	-	-	9	-	44
TOTAL	**2**	**2**	**2**	**2**	**12**	**16**	**4**	**11**	**4**	**37**	**12**	**81**

** the total includes an associated bone group (4 bones)*
*** associated bone group (5 bones)*

18 **Fish remains** (Alison Locker)

18.1 Introduction

18.1.1 Fish remains were retrieved from the >2mm fraction of bulk sample residues and from the 'wash over' fraction collected on 0.5mm mesh. A small amount of fish bone was also collected by hand. Material from 17 samples from Anglo-Saxon and medieval deposits, and the few hand-collected remains have been considered in this assessment.

18.2 Assemblage summary

18.2.1 The following species were identified; Elasmobranch indet., roker (*Raja clavata*), Rajidae, eel (*Anguilla anguilla*), conger eel (*Conger conger*), herring (*Clupea harengus*), Clupeidae, shad (*Alosa* sp.), Salmonidae, smelt (*Osmerus eperlanus*), cod (*Gadus morhua*), large Gadid, haddock (*Merlanogrammus aeglefinus*), whiting (*Merlangius merlangus*), small Gadid, ling (*Molva molva*), garfish (*Belone belone*), tub gurnard (*Trigla lucerna*), Triglidae, bullrout (*Myoxocephalus scorpius*), black sea bream (*Spondyliosoma cantharus*), mackerel (*Scomber scombrus*), plaice (*Pleuronectes platessa*), flounder (*Platichthys flesus*), dab (*Limanda limanda*) and sole (*Solea solea*).

18.2.2 The main species recovered by number were herring, cod (in certain contexts), whiting and plaice/flounder. The fish records are summarized in Table 31.

Phase 4 Anglo-Saxon

18.2.3 Fish were identified from three G10 pits (S3012, S3036 and S3084), including some hand collected bone from S3036 and S3084.

18.2.4 Contexts 3011 and 3035, from G10 pits S3012 and S3036 respectively, produced little fish bone; a few bones were attributed to large gadid, with single examples of whiting, mackerel and plaice or flounder.

18.2.5 A wider range of remains were recovered from G10 pit S3084 (fills 3082 and 3083). Fill 3082 included cod vertebrae possibly from the same fish, and skull fragments from two fish suggesting they were whole and more likely to be fresh, caught locally in the southern North Sea or Channel. This context also produced a shad maxillary with a possible cut mark on the inside. This marine species is the same family as herring and enters the tidal area of rivers to spawn; it was once the object of seasonal fisheries. Cod and ling were found in both the sieved samples from context 3083 and by hand collection. A basioccipital and vertebrae of cod may be from a single fish measuring over 100cm total length. This suggests a whole fish which may have been fished (on lines) off the local coastline where cod would be found more inshore in the winter months. Ling was only identified from vertebrae, both precaudal and caudal, possibly from a single fish over 100cm total length. The local coastline is south of its range so it may have been preserved and traded south. Other species include herring, plaice/flounder, small conger eel, eel (a single bone) and garfish, a pelagic species that can be found inshore feeding on young herring and other small fish and has been identified in small numbers at other Canterbury sites. Some of the 'indeterminate' fragments are likely to be broken flatfish vertebral spines.

18.2.6 Cod in particular and ling were part of an important trade in stored fish (salted and/or dried) as were herring, but did not become a significant commercial trade until the late tenth century AD (Barrett et al 2004). Large cod and ling have previously been found in Saxon deposits at the Canterbury Christ Church University site (Nicholson 2015).

Phase 5 early medieval

18.2.7 Fish bones were recovered from eight samples from a G11 ditch and five G12 pits. Despite the total volume sieved (148 litres), only 46 bones could be identified with herring the most numerous species overall. A small elasmobranch vertebra from 1167 (G12 pit S1151) is from a ray or small shark. A single smelt vertebra was identified from 3161 (G12 pit S3162), this species representing another seasonal fishery in river estuaries. Plaice/flounder bones were few, but dab was identified from context 1021 (G12 pit S1150). The only occurrence of black sea bream, common in the Channel in summer months,

was also from 1021. There was only one cod bone, an eroded premaxilla from a fish of approximately 90cms total length (after Wheeler and Jones 1976). Inshore small gadids were present including whiting.

Phase 6 high medieval

18.2.8 A metalled surface (G20 S2404), a pit (G22 S3026), and a layer (G23 S4077) were richer in identified fish than the preceding periods, with the assemblage dominated by herring, cod, large gadids and flatfishes. Layer 2064 (G23 S4077) included bones of conger eel, ray and bullrout, the last of these another occasional presence on Canterbury sites.

18.2.9 Pit fill 3027 (G22 S3026, both samples and hand collected fish) included cod skull fragments from fish of approximately 85cm and 120cm total length (after Wheeler and Jones 1976), some precaudal vertebrae belonging to one fish and a burnt skull fragment. Among the large gadid (cod/ling) category was a rib fragment with a cut mark. Ling was only identified from a precaudal vertebra. Among the flatfishes dab was identified from a dentary.

18.2.10 Layer 2247 (G23 S4077) was comparatively rich in fish, dominated by herring. Flatfish included sole. Gurnard, specifically tub gurnard, an inshore species, was identified from this context.

Phase 7 late medieval

18.2.11 Remains from two G25 layers were examined: 2148 (S2246) and 2149 (S2162). A large sample (volume 53 litres) from 2149 (sample <214>) produced the larger fish assemblage which was dominated by whiting, herring and flatfish, all representing inshore fisheries. Eel was more numerous than in other samples, and large gadids included haddock, not identified from earlier deposits. Ray, eel, gurnard as well as single bones from mackerel and a salmonid were identified.

18.2.12 As with the bones from earlier periods the fish represent both marine and estuarine fisheries, only eel and the salmonid could have been caught in fresh water.

18.3 Recommendations for further work

18.3.1 Recommendations for future work on this assemblage include approximately one day to finish the identifications and a further day to incorporate them into the report and make comparison with the fish recorded from other sites close by such as Augustine House (Locker 2014) and Canterbury Christ Church University (Nicholson 2015). The large cod and ling in Anglo-Saxon deposits are of particular interest.

Table 31. Recovered fish remains

Period	Anglo-Saxon (Phase 4)						Early medieval (Phase 5)								High medieval (Phase 6)				Late medieval (Phase 7)	
Context	*3011*	*3035*	*3035*	*3082*	*3083*	*3083*	*2105*	*1021*	*1165*	*1124*	*1049*	*1167*	*3161*	*3307*	*2064*	*3027*	*3027*	*2247*	*2148*	*2149*
Set	*3012*	*3036*	*3036*	*3084*	*3084*	*3084*	*2174*	*1150*	*1150*	*1583*	*1151*	*1151*	*3162*	*3309*	*2404*	*3026*	*3026*	*4077*	*2246*	*2162*
Group	*10*	*10*	*10*	*10*	*10*	*10*	*11*	*12*	*12*	*12*	*12*	*12*	*12*	*12*	*20*	*22*	*22*	*23*	*25*	*25*
Feature type	*Pit*	*Pit*	*Pit*	*Pit*	*Pit*	*Pit*	*Ditch*	*Pit*	*Pit*	*Pit*	*Pit*	*Pit*	*Pit*	*Pit*	*Metalled surface*	*Pit*	*Pit*	*Layer*	*Layer*	*Layer*
Sample	*<112>*	*<118>*	*H-Coll*	*<119>*	*<120>*	*H-Coll*	*<203>*	*<104>*	*<105>*	*<106>*	*<101>*	*<102>*	*<202>*	*<737>*	*<200>*	*<114>*	*H-Coll*	*<220>*	*<212>*	*<214>*
Sample Volume	15L	17L		8L	19L		33L	14L	8L	12L	7L	13L	28L	33L	40L	19L		34L	48L	52L
Elasmobranch	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	1	0	1
Ray	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0
Eel	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	3	0	10
Conger eel	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0
Herring	0	0	0	5	1	0	0	9	3	0	2	4	0	0	10	0	0	39	6	52
Clupeid	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	6
Shad	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Smelt	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Salmonid	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Cod	1	0	0	13	1	12	0	0	0	0	0	0	0	1	1	7	4	0	0	2
Haddock	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
Large Gadid	1	5	1	11	0	0	0	0	0	0	0	0	0	0	0	4	15	0	0	4
Whiting	0	1	0	1	1	0	0	3	1	0	1	0	0	0	7	0	0	5	8	42
Small Gadid	1	0	0	1	3	0	1	2	0	0	0	2	1	0	4	1	0	2	0	6
Ling	0	0	0	0	2	7	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Garfish	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Black sea-bream	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Tub gurnard	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Gurnard	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	1
Bullrout	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Mackerel	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Plaice/Flounder	1	1	0	30	13	0	1	2	1	3	0	1	1	0	4	3	0	7	0	43
Flounder	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Dab	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0
Sole	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0
Flatfish indet.	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
TOTAL IDENTIFIED	**4**	**8**	**1**	**62**	**25**	**19**	**3**	**18**	**6**	**3**	**4**	**8**	**3**	**1**	**29**	**18**	**20**	**69**	**16**	**172**
Indeterminate	**7**	**57**	**0**	**~650**	**83**	**0**	**3**	**21**	**12**	**8**	**19**	**26**	**0**	**2**	**64**	**122**	**0**	**550**	**30**	**345**

19 **Plant remains** (Wendy Carruthers)

19.1 Introduction

19.1.1 Soil samples were collected from a range of features for the recovery of environmental and economic information. These included bulk samples from dry contexts primarily for the recovery of charred plant remains and smaller samples from waterlogged contexts such as primary ditch fills which were processed for the extraction of waterlogged plant remains, insects and other organic materials. The soil samples were processed by CAT staff using standard methods of flotation (bulk samples) and wet sieving (waterlogged samples). The minimum mesh size was 300 microns in both cases. Sixty-four samples were sent to the author; fifty-seven dried flots and seven waterlogged wash-overs/residues. This report discusses the assessment of these samples.

19.1.2 The site is located close to excavations in Rhodaus Town (RTCEX13) that produced reasonable Neolithic, Bronze Age, Roman and medieval charred plant assemblages. It was hoped that Peugeot Garage would be a useful comparative site to Rhodaus Town. Superficially, the flots from both sites were similar in character. There was evidence for contamination in many of the samples at Rhodaus Town in terms of heat affected slaggy-types of material (denoted as HAM in this report and Table 32) and sewage staining. Similar problems were encountered at the Peugeot Garage site as discussed below.

19.2 Assessment methodology

19.2.1 After measuring the volume, each of the flots was dry-sieved through meshes of 3mm, 1mm and 250 microns prior to being rapidly scanned under an Olympus SZX7 stereoscopic microscope. Fractions of the flot were scanned until the character of the assemblage could be determined and a code for potential could be assigned. The following codes were used:

A = well-preserved and/or significant, frequent identifiable remains present. Worth analysing to recover economic and/or environmental information.
B = Plant remains may not all be well-preserved or abundant, but are present in sufficient numbers to be useful, especially when contexts are examined together.
C = poorly preserved and/or infrequent plant remains. These samples would only be useful if specific questions need to be asked concerning the deposit, or a radiocarbon date was required.
D = Indeterminate material or no plant remains present. No further potential.

19.2.2 Intermediate codes e.g. B/C were also used. To determine whether or not these samples have potential it is important to obtain information about the type of context, its approximate date (where possible) and, preferably, its location in relation to other sampled features. This information helps to show whether assemblages might be related e.g. for large spillages of burnt material spreading into several features, and helps in the detection of patterns of behaviour, e.g. are certain types of waste being deposited in pits and not ditches? Understanding these patterns and interconnections aids in the selection of material for radiocarbon dating, and in the selection of samples for full analysis.

19.2.3 Although some plant remains have been extracted and placed in glass tubes for their protection, the tubes have been returned to the flot bags.

19.2.4 In the case of waterlogged residues/wash-overs the residues were rinsed through the 3mm, 1mm and 250 micron meshes before scanning in order to remove silt that would obscure the seeds from view. Once characterised, the residues were returned to the bags, suspended in clean water. Occasionally important taxa were placed in glass tubes and returned to the residues. The waterlogged samples were returned to CAT so that the insects could be assessed by Enid Allison.

19.3 Results

19.3.1 The results of the assessment are presented in Table 32. Latin binomials have not often been used in the table for the sake of brevity. Full identifications using Stace (2010) and Zohary and Hopf (2000) for nomenclature will be carried out at the analysis stage. The assessment data is provisional and only roughly quantified using a star system.

+ = occasional (c 1–3 items)
++ = several (c 4–10 items)
+++ = common/frequent (c 11–50 items)
++++ = abundant (>50 items)

19.3.2 Abbreviations used in Table 32 are as follows;

CPR = charred plant remains
FTW = free-threshing wheat (*Triticum aestivum/turgidum*)
HNS =hazelnut shell (*Corylus avellana*)
HAM = heat affected material
MPR = mineralised plant remains
WPR = waterlogged plant remains
encr = encrusted with cessy material (or possibly sometimes silt)

19.4 Contamination, residuality and dating the samples

19.4.1 The samples from Peugeot Garage were difficult to characterise as very similar assemblages were observed in many of the samples, often dominated by hulled barley grains with very few remains indicative of Roman or earlier periods (i.e. hulled wheat glume bases, spikelet forks or grains). Sprouted barley was common in many samples, perhaps indicating contamination (to be investigated by radiocarbon dating) or the widespread deposition of brewery waste over more than one period.

19.4.2 In addition, heat affected material (HAM), coal fragments, hammerscale and slaggy blobs were common in many of the samples, suggesting that contamination by industrial waste (perhaps from a more recent period) may have occurred. Charred plant material could also have been introduced as contaminants at this time. This problem was also encountered at Rhodaus Town (Carruthers forthcoming) and Augustine House, Rhodaus Town (Carruthers 2014). In order to get to grips with the problems of contamination in this area of Canterbury a detailed programme of radiocarbon dating has been adopted. This is discussed further below.

19.5 Mineralisation

19.5.1 Some of the features showed signs of mineralisation, including staining on the charcoal fragments, mineralised worm cocoons, invertebrates and occasional seeds. This type of preservation is usually an indication that sewage or midden-type waste has been deposited or seeped into earlier feature from above. None of the flots contained enough mineralised seeds to be useful, but it is likely that the main location of this material would be the residue. It is suggested that sub-samples of residue from the following selected samples are sent to the author during the analysis stage to evaluate their potential:

Sample 118, context 3035, G10 pit S3036
Sample 119, context 3082, G10 pit S3084
Sample 198, context 3290, G10 pit S3285
Sample 199, context 3291, G10 pit S3285

19.5.2 The main feature producing definite evidence for the presence of sewage was large pit S3285 (provisionally dated to the mid/late Anglo-Saxon period), which contained some mineralised small curls of cereal bran. The basal fill of pit S3036 contained mineralised worm cocoons and fish bones, hinting at the presence of sewage. A larger number of features contained fish bones and sometimes fish scales, particularly pit S3084 but no mineralised plant remains. Because sewage staining and fish bone has been found quite widely in samples from other parts of Rhodaus Town it is important that only concentrations of mineralised material within discrete features are analysed, rather than dilute cessy waste which might represent widespread contamination. A more precise study of where the mineralised material is occurring will be made at the analysis stage.

Table 32. Summary of processed environmental samples

Sample	Context	Set	Group	Phase	Description	Sample volume (l)	Un-processed soil (l)	Large charcoal	Flot description	Charred plant remains	Potential	Notes
109	3019	3020	4	1	Fill of ditch, cut by RB ditch, pot	14	-	++	40ml flot; coal +++; silver HAM+	Common CPR; barley +++; sprouted barley+; Pisum/Vicia+; Trifolium-type+; HNS+; emmer glume base+	B	?IA, but rather contaminated
301	3310	3311	4	1	Fill of ditch, RB pot, nail. Directly below modern trial trench (see <302>)	6	-	++	25ml flot; black and silver HAM +++; coal+++; CBM+	Several CPR: sprouted barley ++; cf. Pea (5mm) +	(B)/C	Could C14 date barley grains to see when high HAM and sprouted barley were deposited
302	3319	3320	4	1	Fill of ditch (see <301>), RB pot & tile.	7	-	++	25ml flot; coal++; black & silver HAM+++	Occasional CPR: sprouted barley++	(B)/C	High contamination
333	3396	3395	4	1	Fill of ditch , RB tile, bone. Directly below overburden.	34	-	+++	240ml flot; black & silver HAM++; coal++; some large bone frags+	Occasional CPR: poor eroded barley+; spelt glume base+; Vicia/Lathyrus frag+	(B)/C	High contamination
831	5149	5150	4	1	Fill of ditch, linear terminus. RB tile, RB pot, daub	6	-	++	25ml flot; Occ v.lge charcoal frags	Occasional CPR: puffed cf. FTW grain +; 4mm Vicia sp.+; HNS+	(B)/C	Few remains
116	3067	3076	5	2	Fill of ditch, below ditch 3099. RB pot, RB tile, bone, Cu alloy, iron nails. Above fill 3115.	15	-	+++	90ml flot; black HAM++; CBM+; small sandy root pseudomorphs+++	Common CPR: sprouted barley++; half grains ++; emmer glume base+; spelt glume base+	B	Sprouted grain and glume bases
121	3067	3076	5	2	Fill of ditch 3076, below ditch cut 3099, above fill 3115. See <116> also from 3067.	16	-	+++	125ml flot; black HAM+++; poor bone frags++; small bones+; fish bones+	Common CPR: sprouted hulled barley++; half grains barley ++; emmer/spelt grains+; HNS+	B	Contamination common

Sample	Context	Set	Group	Phase	Description	Sample volume (l)	Un-processed soil (l)	Large charcoal	Flot description	Charred plant remains	Potential	Notes
147	3126	3127	5	2	Fill of ditch. RB pot, bone, slag, nails	10	-	+++	50ml flot; coal +; black slaggy +++	several CPR; poor FTW+; sprouted barley++; Vicia/Lathyrus+; unsprouted barley++ (poor)	B/C	
112	3011	3012	10	4	Fill of rubbish pit. Pot, RB tile, slag, bone	15	-	+++	150ml flot, freq bone frags+++; fish bone+, coal+	several CPR: poor barley++; hulled barley+; FTW+	B/C	
118	3035	3036	10	4	Basal fill of pit, frequent bone, RB tile, nails, pot, rare slag. Below pit cut 3084.	17	-	++	60ml flot; black HAM++; bone frags ++; fish bone+;	Frequent CPR: sprouted hulled barley +++; HNS+; spelt glume base+; MIN: worm cocoons+++	A/B	Not large or varied but potentially interesting. C14 date sprouted barley as primary pit fill sealed by [3084]
119	3082	3084	10	4	Fill of pit 3084, below overburden, above fill 3083. RB pot, bone, slag Fe			+++	270ml flot; oyster+++; fishbone +++; cockle+	Occasional CPR and MPR: CHARRED FTW+; MINERALISED worm cocoon+++; Brassica /Sinapis sp. +; Carex sp.+; invertebrates (pupa, millipede)	(B)/C	Could check residue for MPR. Frequent fishbone
120	3083	3084	10	4	Basal fill of large pit 3084. RB pot, RB tile, slag, nails			+++	125ml flot; bone frags ++; fishbone++;	frequent CPR: sprouted barley +++; FTW+	B	C14 date sprouted barley to compare with <118>?
195	3296	3297	10	4	Pit			+++	75ml flot, uncharred Euphorbia (contaminant); coal++; black HAM+++; oyster+	Occasional CPR; poor barley+; sprouted barley + (half-grains)	C	High contaminants
197	3289	3285	10	4	Fill of pit, tile, slag, pot, bone	16	-	+++ encr	40ml flot, freq large poor bone frags +++; occ fish bone+; black HAM+;	several CPR; barley ++ (some poor); spelt glume base +; poor emmer/spelt grain+	(B)/C	Some possible Roman material but contamination

Sample	Context	Set	Group	Phase	Description	Sample volume (l)	Un-processed soil (l)	Large charcoal	Flot description	Charred plant remains	Potential	Notes
198	3290	3285	10	4	Lower fill of pit with Roman pot, industrial waste, bone, nail	18	-	+++ encr	210ml flot, frequent fish bone and large bone frags,	Several CPR: MINERALISED bran curl+; worm cocoons++; woodlouse frag + CHARRED FTW+; Galium frag+	(B)/C	Cessy but no MIN seeds seen
199	3291	3285	10	4	Lower fill of pit with Roman pot, industrial waste, bone, nail	15	-	+++	250ml flot, fish vertebrae, chalky ?mineralised concretions	occasional CPR: barley frag +; MINERALISED bran curls +; straw/grass stem frag ++	C	Seeds not seen
250	3292	3285	10	4	Fill of pit, bone, greenish soil. See also s.251, 252, 300			++ encr	250ml flot, mainly silt/sand, coal+; small chalky concretions +++; bone frags+; black HAM+	Several MPR; MIN straw/stem frags ++; bran curl+; invertebrate frags+	(B)/C	Low cessy, no seeds seen. Scan residue?
251	3294	3285	10	4	Fill of pit - ?medieval rubbish pit			+	5ml flot, mainly orange silt; coal+; HAM+; fish bone+	NIL	D	
252	3293	3285	10	4	Fill of pit - ?medieval rubbish pit			++encr	60ml flot; bone frags+; chalky concretions (cessy); small bones+	occasional CPR: barley+; trace of MIN stems/straw	C	Trace of cess
300	3321	3285	10	4	Fill of pit - ?rubbish pit			+++encr	50ml flot; silver & black HAM++; small sandy (?cessy concretions)	Occasional CPR; FTW+; oat+; barley+ (slight sprouting); ?rye+	(B)/C	
425	3520	3524	10	4	Fill of pit , RB pot, Fe, bone. Directly below machined surface.	16	-	+++	50ml flot; black HAM++; poor bone frags ++	Occasional CPR: sprouted barley+; HNS+; FTW+; oat+; Vicia/Lathyrus+	(B)/C	HAM common
701	2508	2510	10	4	Fill of pit with metal working residue	39	20	+++	350ml flot; rootlets; black & silver HAM+++; CBM+; coal+; blobby slag++; hammerscale++	Several CPR: sprouted barley++; oat+; FTW / rye+; Galium aparine+; HNS+	B/C	Could date some sprouted barley to compare with Trench 3

Sample	Context	Set	Group	Phase	Description	Sample volume (l)	Un-processed soil (l)	Large charcoal	Flot description	Charred plant remains	Potential	Notes
706	2517	2519	10	4	Fill of pit, daub, pot, bone. ? Used in smelting	8	8	+++ slightly encr	80ml flot; rootlets; black HAM+++; small bones (?fish) +;	Occasional CPR: poor barley+; cf. Pea (5mm) +	(B)/C	Few remains
730	2581	2592	10	4	Fill of pit; slag, bone, pot, RB tile	10	-	+++ encr	75ml flot; frequent hammerscale+++; slaggy blobs++; red ferric slag+; white melted slag blob+	Occasional CPR: sprouted barley+	(B)/C	Frequent industrial waste, few CPR
100	1173	1151	12	5	pit containing pot & bone. See <101> to <103>	8	-	+++ encr	60ml flot; frequent stained/encrusted (cess?) charcoal, fish bone, bone	Several CPR: Oat grain (*Avena* sp.) ++; Free-threshing wheat (FTW) grain (*Triticum* sp.) +; hulled barley grain *(Hordeum vulgare*) +	B/C	
101	1049	1151	12	5	pit containing pot & bone. See <101> to <103>	7	-	+++ encr	45ml flot, frequent stained/encrusted charcoal, fish bone, scales	Occasional CPR: FTW grain +; hulled barley grain +; Bromus sp. +; cf. pea (cf. Pisum sativum) +	(B)/C	
102	1167	1151	12	5	pit containing pot & bone. See <101> to <103>	13	-	+++ encr	85ml flot; frequent encrusted charcoal, bone including fish	Barley grain ++; oat grain +; HNS +; cf. pea +; Prunus sp. frag+	B/C	
103	1166	1151	12	5	Basal fill of pit containing pot & bone.	13	-	+++ encr	60ml flot, frequent encrusted charcoal, bone ++; fish vertebrae +	Occasional CPR: FTW grain +; HNS +; pea/large vetch +	B/C	
104	1021	1150	12	5	pit fill including Roman rubbish	14	-	+++ encr	95ml flot, fish bone+	Several CPR; FTW+; oat++; HNS+; Agrostemma githago+	B/C	
105	1165	1150	12	5	pit fill including Roman rubbish. See <104>	8	-	++ encr	50ml flot; bone frags +, oyster+; fish bone+	occasional CPR: HNS+; barley+	(B)/C	
106	1124	1583	12	5	fill of pits, Roman pot	12	-	+++ encr	50ml flot; fish bones+;	Several CPR; barley++; oat+; FTW+; rye+; Pisum/Vicia/Lathyrus+	B/C	

Sample	Context	Set	Group	Phase	Description	Sample volume (l)	Un-processed soil (l)	Large charcoal	Flot description	Charred plant remains	Potential	Notes
113	1033	1057	12	5	pit backfill, daub, bone, RB pot. Below fill of pit [1059]	32	-	+++	25ml flot; coal+; HAM+	frequent CPR: sprouted hulled barley++(+) (reasonable preservation); Galium aparine+; Rumex sp. +; emmer/spelt spikelet fork+, spelt glume base+; emmer/spelt glume base+	B	Small flot but better preservation and less contamination
202	3161	3162	12	5	pit containing pot, bone, flint, iron, possible industrial waste				300ml flot, freq charcoal, silver and black HAM, CBM+,	Several CPR: FTW++; Vicia/Lathyrus sp.+; oat grain +; barley +; sprouted barley ++; emmer/spelt grain+	B/C	
203	2105	2174	11	5	fill of ditch, post-Roman pot, bone	33	-		170ml flot, fish scale , iron-like concretions with root voids, large bone frags ++, sandy root pseudomorphs frequent. Charcoal +++	several CPR: Hazelnut shell +, very poor vacuolated barley grains ++; FTW++; rye+	B/C	More FTW and less sprouted barley than some
205	2104	2414	11	5	fill of ditch with pot, bone, CBM	54	-		75ml flot, charcoal +++; no wood seen but frequent WPR:	Frequent WPR: WATERLOGGED (DRIED) Silybum marianum +++; Onopordum +; Rubus sp. ++; Lamium-type ++; Urtica urens +++; U.dioica+++; CHARRED: FTW++	A/B	Unusual assemblage
207	2109	2174	11	5	fill of ditch with post-Rom pot, CBM, bone, above fill 2111, below fill 2108; see <203>	47	-	++	70ml flot; oyster+; molluscs ++; bone frags+	frequent WPR: WATERLOGGED (DRIED): Silybum +; Rumex sp.++; Polygonum aviculare++; Lamium sp.+; Cirsium +++; Rubus +; Hyoscyamus niger+; Atriplex +; Urtica dioica+++; Ephyppia+++; CHARRED FTW+	B	As <205> but fewer Silybum
211	2115	2174	11	5	fill of ditch. Bone, flint	15	-	++	30ml flot; stones, chalk frags	NIL	D	

Sample	Context	Set	Group	Phase	Description	Sample volume (l)	Un-processed soil (l)	Large charcoal	Flot description	Charred plant remains	Potential	Notes
225	2270	2278	11	5	Ditch fill, below 2271, above 4164	10	-	++	250ml flot; frequent sand/silt; black & silver HAM; coal+; bone frags+	Occ CPR; HNS+	C	
228	2353	2953	11	5	Laminated layers base of ditch 2953	7	25	0	WATERLOGGED (WET); some wood ++ incl roundwood; insects+++; Ephippia+++; ostracods+++, molluscs+	Frequent WPR: Rumex+++; Carduus/Cirsium++; Malva sp.+; Stellaria media+; Urtica urens+; Sonchus asper+; Anthemis cotula+; etc.	B	Reasonably good preservation & diversity but mainly ruderals
229	2297	2953	11	5	blue clay	40	-	0	WATERLOGGED (WET); clayey, rootlets, Ephippia++++; worm cocoon+, molluscs++, occasional poor insects+	Occasional WPR; Rumex +; Cirsium/Carduus+; Stellaria media+	C	Poor preservation, some seed decay
230	2354	2953	11	5	Fill of ditch 2953, fill above (4214), below (2949)	12	20	+	WATERLOGGED (WET); Occasional twig and wood frags; abundant Ephippia; several insects ++;	Frequent WPR: Urtica urens+++; Rumex sp. (some in fruits) ++; Stellaria media+; Urtica dioica+; Cirsium/Carduus +; Atriplex ++; Sonchus asper+; Ranunculus r/a/b+; CHARRED poor grain frags+	B/C	Good preservation but standard ruderal assemblage
231	2373	2953	11	5	Fill of ditch 2953,gritty black material, small patch, below 2354	10	10	++	WATERLOGGED (WET): no wood but occasional WL tissues black HAM; several Ephippia;	Frequent WPR: Lapsana communis+++; Stellaria media++; Malva fruits and seeds+; Torilis japonica+; Chenopodium sp.++; Cirsium/Carduus sp.+; Cannabis sativa++; CHARRED hulled barley+; Triticum aestivum rachis+; FTW grain+	B	Some decay of organics but cannabis indicates hemp industrial waste. Date seeds?

Sample	Context	Set	Group	Phase	Description	Sample volume (l)	Un-processed soil (l)	Large charcoal	Flot description	Charred plant remains	Potential	Notes
232	2374	2953	11	5	Fill of ditch 2953,Dumped gravelly silty layer, below 4215	14	18	++	WATERLOGGED (WET); roundwood frags ++ possibly twining sp.; Ephippia+++; leather; ostracods++; reasonable insect assemblage but not abundant	Frequent WPR: Urtica urens+++; Urtica dioica+; Conium maculatum+; Rumex sp. (some in fruit) ++; Lapsana communis++; Stellaria media++; Polygonum aviculare++; Chenopodium sp. ++; Carex sp.+; Anthemis cotula+; Ranunculus sardous+; CHARRED: oat grain frag+; Triticum spelta glume base+	B/C	Better preservation than <231> but typical ruderal assemblage; CHOICE OF WHICH WET SAMPLES TO ANALYSE DEPENDS ON POSITION IN MEDIEVAL DITCH, INSECT ASSESSMENT AND NEED FOR DATING MATERIAL
238	4082	4223	13	5	lower laminated layer at base of ditch 4223			+	WATERLOGGED (WET) insects +++; ostracods+; Ephippia+; molluscs++	Several WPR: Rumex +++; Poaceae++; Anthemis cotula++; Sonchus asper++; Polygonum aviculare++; Prunus spinosa+; Linum usitatissimum +; Onopordum acanthium+ etc	B	Fairly diverse but not abundant
239	4084	4223	13	5	primary silt / redeposited chalk at base of ditch 4223			++	WATERLOGGED (WET): large roundwood+; silty/sandy, occasional insects, worm cocoon+; Ephippia+; Ostracods+	Several WPR: Anthemis cotula++; Conium frag++; Stellaria media+; Polygonum aviculare+; Agrostemma frag+; Rumex +; Rubus+	C	Poorer preservation than <228>
737	3307	3309	12	5	fill of pit; slag, bone, Fe, RB pot, RB tile	33	-	+++	400ml flot; frequent HAM; hammerscale++; coal ++; CBM+; blobby slag++; bone frags +++; reddened stones	Occasional CPR: sprouted barley+; Galium aparine+	(B)/C	High industrial waste

Sample	Context	Set	Group	Phase	Description	Sample volume (l)	Un-processed soil (l)	Large charcoal	Flot description	Charred plant remains	Potential	Notes
114	3027	3026	22	6	fill of pit. Below overburden. CBM, RB tile, pot, bone, iron	19	-	+++	400ml flot; bone frags++; black HAM+; MIN nodule+	Occasional CPR: FTW+; oat+;	(B)/C	Large flot but few remains
115	3028	3026	22	6	Basal fill of pit, below 3027. post-Rom pot, bone, slag, CBM	16	-	+++	200ml flot; bone frags +++; oyster+; CBM+; coal+	several CPR: good hulled barley+; some signs of germination, sprouted barley+; oat+	B/©	Some sprouting but not abundant
200	2064	2065	20	6	metalled surface with bone, pot (RB & later), CBM, Cu pin, nails	40	-	++ encr	50ml flot, frequent oyster and bone frags, fish bones and scales	several CPR: FTW++; oat+; Vicia/Lathyrus sp. ++ (4mm)	B/C	?large vetch possibly V. sativa
220	2247	deposit	23	6	Deposit with Roman pot, med/P/med tile, bone, nails	34	-	+++ encr	300ml flot; frequent heavily encrusted charcoal (cessy?) frequent fish bone & scales, bone frags	Free-threshing wheat (FTW) +; hulled barley (?partly mineralised) +; oat +; cf. pea +; hazelnut shell (HNS) +;	B/C	
221	2255	4051	21	6	Deposit below 4120, above 4121. Medieval CBM, bone, nail	37	-	++	120ml flot; bone frags ++; stones/sand++; fish bone+; oyster++;	Occasional CPR; 4.5mm Vicia/Lathyrus/Pisum +; Barley+; FTW+	(B)/C	
224	2258	4128	20	6	same as 2256	38	-	++ encr	40ml flot; fish bones+; large bone frags +;	Occasional CPR: barley +; FTW+	(B)/C	
233	2348	2348	23	6	Deposit in Trench 3. CBM, nail, bone, RB pot	30	-	++++	900ml flot; oyster+; coal+; fish bone+;	Several CPR: hulled barley+; oat+; rye+; Bromus +; small round FTW+	B/C	Not abundant but less contamination & better preservation
136	3029	3032	24	7	fill of pit, Roman CBM, Roman tile, bone, iron, slag	16	-	+++	140ml flot, freq large bone frags, some black slaggy HAM, CBM+	Several CPR: sprouted barley ++, plump oat +; rye grain +; Galium aparine+; HNS+	B/C	

Sample	Context	Set	Group	Phase	Description	Sample volume (l)	Un-processed soil (l)	Large charcoal	Flot description	Charred plant remains	Potential	Notes
138	3113	3114	24	7	fill of pit with Roman pot, CBM, slag, bone			+++	30ml flot, bone frags ++; coal +; fish bone+; black HAM	several CPR; sprouted hulled barley++; unsprouted hulled barley+; Bromus +; HNS+	B/C	
201	2074	2075	26	7	fill of gully with abundant animal bone, occ pot	40	-	++	180ml, mainly molluscs and bone frags, small bones, some CBM, coal, black HAM	Frequent uncharred Sambucus nigra+++;	C	No CPR
212	2148	2246	25	7	Deposit, below 4026, above 4024	48	-	++	75ml flot; oyster++; coal+; fish bone++; bone frags+	several CPR: FTW++; hulled barley+; rye+	B/C	
213	2147	2246	25	7	Deposit above 4024, post-Rom pot, bone, RB tile	17	10	+++ encr	70ml flot; fish bone+++, includes denticles	several CPR: hulled barley+; FTW+; rye/FTW+	(B)/C	Infrequent
214	2149	2162	25	7	Deposit, north of 2nd trench excavation, across motte and bailey ditch	52	-	++++	1400ml flot; bone frags+; coal+; fish bone++	several CPR; FTW+; grain frags++	(B)/C	Infrequent
218	2145	2246	25	7	Deposit	42	-	++	30ml flot; coal ++; black HAM+; molluscs+; oyster+; chalk lumps+; fish bones & scales ++	Several CPR; FTW++; Vicia/Lathyrus + (4mm)	(B)/C	Small flot, little in total
222	2167	-	-	-	Deposit	12	-	+	12ml flot; mostly sand/silt	NIL	D	
223	2168	-	-	-	Deposit	6	-	+	5ml flot, mainly silt/sand	NIL	D	
110	3015	3016	27	8	Refuse pit	10	-	+++	400ml flot; HAM+++;	Occasional CPR: barley+; Trifolium-type+	(B)/C	Infrequent but large flot
111	3013	3014	28	8	Fill of post-hole, below overburden. Clay pipe, bone, glass	8	-	+++	300ml flot; several large coniferous wood frags; silver HAM+++, coal++	Occasional CPR: hulled barley+; poor barley+; cereal culm node+; FTW+	C	

19.6 Description of the samples by phase

Phase 1 late Iron Age/early Roman

19.6.1 Five samples from four ditches distributed across the southern half of the site were assessed. Sample 109 from G4 ditch S3020 (context 3019) was the most productive sample, containing frequent hulled barley grains (*Hordeum* sp.) with a trace of sprouting. Small amounts of sprouted grains were also found in two other samples. An emmer glume base (*Triticum dicoccum*) was recovered from sample 109. The only other hulled wheat evidence was a spelt glume base (*Triticum spelta*) from sample 333, G4 ditch S3395 (context 3396). Three of the samples produced large vetch or pea fragments (*Vicia/Lathryus/Pisum* sp.) and one contained a puffed-up possible FTW grain or short-grained spelt (*Triticum* sp.). None of the flots were very large and four of the five contained frequent coal and HAM, perhaps indicating contamination.

Phase 2 early Roman

19.6.2 Three samples from two G5 ditch interventions (S3076 and S3127) were dated as Roman. Several sprouted barley grains were present in each sample suggesting that contamination might have occurred from overlying Anglo-Saxon features. This needs to be investigated by radiocarbon dating at the start of the analysis stage. Small amounts of emmer/spelt grains (*Triticum dicoccum/spelta*) and occasional chaff fragments (with both emmer and spelt confirmed) were present in two of the three samples (samples 116 and 121).

Phase 4 mid/late Anglo-Saxon

19.6.3 Sixteen samples from the G10 pits were assessed. Two samples produced frequent sprouted barley grains (sample 118, basal fill of pit S3036 and the fill of overlying pit S3084, sample 120, context 3083) in addition to some free-threshing wheat grains and a trace of spelt chaff. Radiocarbon dating of sprouted barley from sample 120, the basal fill of pit S3084 is strongly recommended. Smaller quantities of sprouted barley were present in four other pit fills (pits S3297, S3524, S2510 and S2592). It is likely that the grain was deliberately sprouted for the production of malt, although this would need to be confirmed through quantitative analysis. The largest group of samples came from the large pit S3285 (7 samples). As noted above, although mineralised bran fragments were present confirming that sewage was present amongst the material being dumped, very few plant remains were preserved by mineralisation (mainly mineralised straw/stem fragments probably representing toilet wipes). However, it is possible that more remains may be present in the residues. This will be investigated at the analysis stage. Charred plant remains were infrequent, comprising barley and FTW grains, traces of weeds and a little hulled wheat in one sample (sample 197, context 3289). Only slight signs of sprouting were found in barley from this feature. The single spelt glume base is likely to be residual, although some continuity in growing hulled wheats into the Anglo-Saxon period has been recorded on sites like West Stow (Murphy 1985).

19.6.4 Traces of hazelnut shell (HNS) and occasional weed seeds were also present. Free-threshing wheat grains (FTW) were infrequent but present in seven samples. Traces of oat (*Avena* sp.; possibly weeds) and occasional grains of rye (*Secale cereale*) were observed in several samples.

19.6.5 Oyster, fish bones, HAM and slaggy material was quite common in samples from this phase and there were some signs of mineralisation, such as the presence of mineralised worm cocoons, bran fragments, straw/stem fragments and invertebrate fragments in six of the samples (samples 118, 119, 198, 199, 250, 252), four of which came from pit S3285 described above. It is likely that faecal material had been deposited in some of the pits, as is commonly found in Anglo-Saxon features.

Phase 5 early medieval

19.6.6 Twenty-two samples from early medieval contexts were assessed, consisting mainly of pits (G12) and ditches (G11 and G13). Waterlogged and charred deposits from the G11 ditch (S2174, S2414 and S2953) and G13 ditch (S4223) were also investigated. The samples were spread across the site but the waterlogged deposits were all located in the north-western quarter of the trench.

19.6.7 Charred plant remains were infrequent in the four samples from G12 pit S1151 but the assemblages were more mixed in character and barley was less dominant than in most features. FTW grains, oats, possible peas and HNS were present in small quantities. Although signs of sewage were present throughout (fish bones and staining) industrial slaggy material was not present. In general, samples from Phase 4 showed fewer signs of 'contamination' (if radiocarbon dating shows this to be true) with malting waste (sprouted barley grains) or industrial waste (HAM and slag). Three samples contained some probable redeposited prehistoric material (hulled wheat remains), including a backfill from G12 pit S1057 which also contained frequent sprouted hulled barley grains (sample 113, context 1033). Oats and rye were present in low numbers in several samples.

19.6.8 The basal fills of the G11 ditch were clearly waterlogged but they had been sampled as dry fills so the flots were dried. Ditch S2174 and S2414 were both were dominated by the large seeds of milk thistle (*Silybum marianum*) with some cotton thistle (*Onopordum acanthium*). Both of these plants are impressively large and spiny thistles which have had a variety of uses in the past, including culinary and medicinal. The active principal in milk thistle is still used to reduce the toxic effects of chemotherapy on the liver and kidneys today. They would make an effective barrier if planted closely together. Both were probably introduced by the Romans, being most common in southern Europe, although milk thistle is thought to possibly be native in south-east England. It would be worth fully investigating these deposits and dating some of the large seeds.

19.6.9 The waterlogged samples varied in their state of preservation, being best preserved in sample 228 (context 2353, G11 S2953), 230 (context 2354, G11 S2953), and 238 (context 4082, G13 S4223) reasonable in samples 232 (context 2374, G11 S2953) and 231 (context 2373, G11 S2953), but poorer in samples 229 (context 2297) and 239 (context 4084).The assemblages are fairly similar to each other in that they are primarily common ruderal species indicative of nutrient-rich soils, such as nettles (*Urtica dioica and U. urens*), docks (*Rumex* spp.), nipplewort (*Lapsana communis*), hemlock (*Conium maculatum*). There are occasional notable remains that probably represent waste from activities taking place in the area, for example flax (*Linum usitatissimum*) and cotton thistle in sample 238, hemp seeds (*Cannabis sativa*) in sample 231 and traces of charred cereals (bread wheat rachis, oat and barley grains, ?redeposited hulled wheat chaff). It is suggested that, once the stratigraphic order is known to the author, joint decisions will be made with the archaeoentomologist, Enid Allison, as to which samples to select for full analysis to fully characterise the assemblages using both the plant remains and invertebrate remains together.

Phase 6 high medieval

19.6.10 Seven samples from this period were assessed but none produced notable assemblages. Some samples came from medieval deposits located in the north-west quarter of the excavation area. These samples contained frequent oyster and fish bone suggesting the deposition of sewage or midden type material. Six of the seven samples contained FTW grains and only one sample produced a trace of sprouted barley. Rye and oat grains, HNS and peas or large vetches (perhaps cultivated vetch) were present in small quantities in most of the samples.

Phase 7 late medieval

19.6.11 Seven late medieval samples were assessed but none were notable. HAM and slag were present as well as frequent fish bones and scales indicating possible contamination with sewage and industrial waste. Two samples contained traces of sprouted barley. Barley and FTW grains were present in the samples in low to moderate numbers. A few weed seeds were also present. The assemblages as a whole hold little potential for providing useful information about the economy or arable agricultural practices.

Phase 8 post-medieval to modern

19.6.12 A single sample from a refuse pit produced a barley grain and clover-type weed seed. More items might be present as the flot was large and a sub-sample was scanned. However, it is unlikely to be very informative.

19.6.13 G28 post-hole S3014 (context 3013, sample 111) was assessed and contained just a few charred barley, FTW grains and culm node fragments.

19.7 Statement of potential

19.7.1 Apart from the waterlogged ditch deposits, the plant assemblages from the Peugeot Garage site are not especially productive or diverse. Chaff and weed seeds were scarce, although careful sorting at analysis stage will increase these numbers to some extent. Two other factors may also be responsible for the scarcity of chaff in the late Iron Age/early Roman and Roman samples; the apparent dominance of barley in this part of Canterbury (see Davis 2007) and the urban character of the area at this time. Few chaff fragments survive when barley is charred and cereals may have been brought into the town in a fully processed state, explaining the scarcity of chaff and weed seeds. There are also issues regarding the presence of sprouted barley grains that need to be resolved, particularly in the light of information from adjacent sites at Augustine House and Rhodaus Town.

19.7.2 At Augustine House seven radiocarbon dates on hulled barley grains from late Roman features produced five post-medieval to modern dates (c AD 1660–1954), one Roman and one Anglo-Saxon date. A high proportion of the grains showed signs of sprouting (Carruthers 2014, 105) suggesting that they may have come from the same source as the barley at Peugeot Garage. At Rhodaus Town barley grains from the upper fill of an early Roman trackway produced a medieval date (c AD 1056–1259) although there were no signs of sprouting.

19.7.3 The principal cereal used for brewing in the Roman period in the British Isles was spelt, but there is some evidence that the Romans were aware that barley produced better malt than spelt, since at East Anton and Finkley, Andover, Hants (Carruthers forthcoming) smaller amounts of barley appear to have been added to the spelt recovered from malting kilns. It is important to check, therefore, the date of the sprouted barley by sending grains from a number of features for radiocarbon dating. This is necessary to determine whether it all derived from the same phase of activity. Industries often continue in the same location within towns and cities for long periods of time so it is possible that the grain at Peugeot Garage represents malting taking place in the Anglo-Saxon and later phases. This will also serve to inform future investigations in the Rhodaus Town area of Canterbury and is of some interest in itself for these periods. However, the main concentration appears in the mid to late Anglo-Saxon period. It is likely that malting waste became incorporated into later features where soils were re-worked, and this may explain small amounts in the early medieval and later samples. It is notable that 50% of the Anglo-Saxon and earlier samples contained sprouted barley compared to only 15% of the early medieval and later samples.

19.7.4 In addition to the dates on sprouted barley grains suggested above, it would be worth dating some of the waterlogged milk thistle and/or cotton thistle seeds, and possibly some hemp seeds from the G11 and G13 ditches. Although none of these items are likely to be 'early records', being occasionally found in other medieval urban deposits, they are infrequent enough to provide interesting records for the town and will help to date the features. They are all present in reasonable numbers rather than occasional seeds so should be securely stratified. They also provide information about possible small-scale industries taking place in the area, such as hemp retting and the possible cultivation of plants for medicinal use.

19.7.5 Although the charred plant evidence from this site is unusual and challenging, there are some indications to support the provisional phasing. Hulled wheat remains were unusually scarce making the detection of Roman and earlier deposits difficult. However, even using assessment data (where small items such as glume bases are likely to be under-represented) they were found to be more frequent in the Roman and earlier samples at a 50% presence, as compared with a 9% presence in the post-Roman samples. Using the presence data for free-threshing wheat grains (FTW), which are primarily (but not exclusively) indicators of post-Roman deposits, the Roman and earlier percentage of samples with FTW was 25% compared with 50% in the post-Roman samples. Other cereals, such as oats and rye, were also more common in the post-Roman samples, as might be expected. It is likely that full sorting and quantification would reveal some differences in the frequencies of the four cereal types over time. However, samples from the high, late and post-medieval phases were not productive enough or sufficiently diverse to produce useful data with regards to cereal usage over time. For this reason the analysis should concentrate on determining which phase the malted barley originates from and investigate the rich waterlogged assemblages from the G11 and G13 ditches.

19.8 Recommendations for further work

19.8.1 The following samples (see Table 33 below) are recommended for full analysis on the basis of the quality of the plant assemblages (with some being provisional until the results of the invertebrate assessment are complete). A few more samples in the B/C category could be added if required from an archaeological point of view plus three other samples from potentially mineralised features.

Table 33. Suggested samples for full analysis and radiocarbon dating

Sample	Context	Set	Group	Phase	Preservation	Period	Notes and dating
109	3019	3020	4	1	Charred	Late Iron Age/Roman	Possibly IA or RB as cut by RB ditch. Common barley grains, some sprouted. Date barley.
333	3396	3395	4	1	Charred	Late Iron Age/Roman	Large flot, to support evidence from <109>
116	3067	3076	5	2	Charred	Roman	C14 date sprouted barley.?
121	3067	3076	5	2	Charred	Roman	Date emmer/spelt grain?
118	3035	3036	10	4	Charred	Roman	C14 date sprouted barley as primary fill sealed by another feature [3084]
119	3082	3084	10	4	Charred/mineralised	Mid/late Anglo-Saxon	Could add to understanding of pit 3084 if check residue for mineralised remains
120	3083	3084	10	4	Charred	Mid/late Anglo-Saxon	C14 date sprouted barley.
113	1033	1057	12	5	Charred	Early medieval	C14 date sprouted barley
205	2104	2414	11	5	Charred/waterlogged	Early medieval	C14 date *Silybum marianum.*
207	2109	2174	11	5	Charred/waterlogged	Early medieval	To compare with <205>
228	2353	2953	11	5	Waterlogged/charred	Early medieval	Well preserved and diverse
231	2373	2953	11	5	Waterlogged/charred	Early medieval	C14 date hemp seeds
238	4082	4223	13	5	Waterlogged/charred	Early medieval	Flax and cotton thistle present

20 **Insect remains** (Enid Allison)

20.1 Introduction

20.1.1 Waterlogged deposits with a high potential for the preservation of organic remains by anoxic waterlogging were encountered in the lower fills of a large early medieval defensive ditch (G11 S2953) and a subsequent re-cut (G13 S4223). Such deposits are relatively rare both in Canterbury and the East Kent area in general and these are therefore considered to be of at least regional importance.

20.1.2 Seven bulk samples taken from the deposits were sub-sampled to ascertain whether identifiable insect remains were present, and to assess their potential to provide data on human activity, living conditions and local environmental conditions in the early medieval period.

20.2 Methods

20.2.1 Bucket flotation was carried out on sub-samples with volumes of 7–14 litres to separate a 'washover' consisting of the lighter organic component from a largely mineral residue. The washover fraction of each sample was then subjected to paraffin flotation to extract insect remains (Kenward et al 1980). Recovery throughout was to 0.3mm. The resulting paraffin flots were scanned in industrial methylated spirits (IMS) for the presence of insects and other invertebrates using a low-power stereoscopic microscope (×10–×45). The abundance of identifiable beetles (Coleoptera) and bugs (Hemiptera) in each sample was estimated, the state of preservation of remains recorded, and the potential to provide environmental data assessed. The abundance of other groups of invertebrates was estimated subjectively on a four-point scale as + present, ++ moderate numbers, +++ frequent, ++++ abundant. The abundance of molluscs was not recorded since they were much better represented in the sample residues.

20.2.2 Nomenclature for Coleoptera in Table 34 follows Duff (2012). Ecological codes used in Tables 34 and 35 are based the categories of Kenward et al (1986). The paraffin flots are currently stored in jars of IMS.

20.3 Results

20.3.1 Interpretable beetle and bug assemblages were recovered from all seven samples. Their abundance varies between samples with the larger assemblages consisting of over 200 individuals. The state of preservation also varies somewhat but is generally good in most samples, being notably poorer in sample <229>, context 2297 (G11 S2953). A list of all taxa noted during scanning is presented in Table 34, with details of individual samples are in Table 35. Identifications of beetles (Coleoptera) and bugs (Hemiptera) have in many cases not been pressed to species and should be regarded as provisional.

20.3.2 The taxa noted during scanning are predominantly from natural 'outdoor' habitats. The abundance aquatic invertebrates such as water flea ephippia (Cladocera: resting eggs), ostracod carapaces, aquatic beetles and bugs, chironomid (non-biting midges) larval head capsules, and caddis fly (Trichoptera) larval fragments, indicates that the ditch and the subsequent re-cut had both contained water for at least some of the time. Interestingly, riffle beetles (Elmidae) found in clear clean running water were noted in two samples (<228>, context 2353, G11 S2953; <239>, context 4084, G13 S4223). Detailed analysis of aquatic insects will provide further data on aquatic conditions, and additional data can be obtained from the study of ostracods, chironomids, and freshwater/wetland snails (present in the sample residue).

20.3.3 Terrestrial insects were dominated by taxa from natural 'outdoor' habitats, i.e. they would not live and breed within buildings or in accumulations of decomposing organic material. Ground beetles (Carabidae) and plant-feeding beetles, especially leaf beetles (Chrysomelidae) and weevils (Apionidae, Curculionidae) were all common. The terrestrial assemblage as a whole has a high potential to provide details of local ground conditions, vegetation, and land use. Eurytopic decomposer beetles found in organic detritus of various kinds make up a relatively low proportion of most of the assemblages, but there were hints from a few synanthropic taxa in some samples (particularly <229>, context 2297, G11 S2953) that occupation waste, including some from within buildings, had found its way into the ditch,

possibly in run-off since this component was too small to indicate direct dumping of waste into the ditch, at least close to the sampling point.

20.4 Statement of potential

20.4.1 Insect remains from the seven samples from the Peugeot Garage site have a high potential to produce information on deposit formation, aquatic conditions, the terrestrial environment in the immediate vicinity of the ditches, and to a lesser extent on waste disposal practices

20.4.2 In Kent generally, insect remains from archaeological deposits of all periods have been poorly studied due to the lack of suitable preservational conditions on many sites (e.g. Robinson 2002). Previous work on insect assemblages in Canterbury has been of a limited nature and chiefly concerns remains from cess pits (Allison 1993; Allison and Hall 2001; Allison and El-Hassey 2002; Carruthers and Allison 2015a; 2015b). This has chiefly provided data on sewage management and disposal of other occupation waste, and to a much lesser extent on diet and the immediate surroundings of the cess pits. In contrast, the assemblages from the Peugeot Garage site are predominantly from natural or semi-natural habitats and their analysis will contribute to a greater understanding of the local landscape in the vicinity of the ditch. The only previous work on insects from waterlogged natural or semi-natural deposits in Canterbury was from the St Mildred's Tannery site where remains from a sequence of wetland deposits associated with the River Stour were briefly assessed but not analysed (Allison and Pelling 2001).

20.5 Recommendations for further work

20.5.1 Additional analysis and recording of the insect assemblages from seven samples is recommended and a report suitable for publication prepared. It is important that analysis is carried out in conjunction with plant macrofossils from the same deposits. Ostracods, freshwater and marshland snails, and chironomid flies from the same samples may also be used to provide additional data on aquatic conditions if necessary.

Table 34. Insects and other invertebrate taxa noted while scanning paraffin flots

Identification has not been pressed to species level in many cases, and the list is provisional. Ecological codes for Coleoptera and Hemiptera are as follows: d – damp ground/waterside, h – house/building, l – wood/timber, oa – outdoor taxa (not usually found within buildings or in accumulations of decomposing organic matter), ob – probable outdoor taxa, p – plant-associated taxa, rd – dry decmposers, rf – foul decomposers, rt – eurytopic decomposers, sf – facultative synanthropes, st – typical synanthropes, u – uncoded, w – aquatic AD Some taxa are uncoded pending closer identification. Nomenclature for Coleoptera follows Duff (2012)

ANNELIDA: **OLIGOCHAETA** (earthworms)
Oligochaeta sp. (egg capsules)

CRUSTACEA:
CLADOCERA (water fleas)
Daphnia magna group ephippia
Daphnia sp ephippia
Cladocera spp ephippia

OSTRACODA (ostracods)
Ostracoda spp carapaces

INSECTA:
DERMAPTERA (earwigs)
Forficula auricularia Linnaeus
Dermaptera sp

HEMIPTERA (bugs)
Heteroptera
Coreus marginatus (Linnaeus) [oa-p]
Heterogaster urticae (Fabricius) [oa-p]
Lygaeidae spp [oa-p]
Corixidae sp(p) [oa-w]
Heteroptera spp [u]
Homoptera
Delphacidae spp [oa-p]
Auchenorhyncha spp [oa-p]
Aphidoidea sp(p)

TRICHOPTERA (caddis flies)
Trichoptera sp wing fragments
Trichoptera sp(p) larval fragments

DIPTERA (flies)
Melophagus ovinus (Linnaeus) (ked)
Chironomidae spp (non-biting midges)
Diptera spp
Diptera spp puparia

HYMENOPTERA (bees, wasps and ants)
Formicidae spp (ants)
Apoidea spp (bees)
Parasitica spp (parasitic wasps)

COLEOPTERA (beetles)
Gyrinidae (whirligig beetles)
Gyrinus sp. [oa-w]

Haliplidae (crawling water beetles)
Haliplus lineatocollis (Marsham) [oa-w]
Haliplus sp(p) [oa-w]

Dytiscidae (diving beetles)
Colymbetes fuscus (Linnaeus) [oa-w]
Hygrotus (*Coelambus*) sp [oa-w]
Hygrotus inaequalis (Fabricius) [oa-w]
Hydroporinae spp [oa-w]
Dytiscidae sp [oa-w]

Carabidae (ground beetles)
Nebria ?*brevicollis* (Fabricius) [oa]
Notiophilus sp [oa]
Clivina sp [oa]
Trechus obtusus or *quadristriatus [oa]*
Tachys sp [oa]
Bembidion spp [oa]
Calathus fuscipes (Goeze) [oa]
Anchomenus dorsalis [oa]
Amara sp [oa]
Ophonus sp(p) [oa]
Harpalini sp(p) [oa]
Carabidae spp and sp indet.[ob]

Helophoridae (grooved water scavengers)
Helophorus (*Empleurus*) spp [oa]
Helophorus spp [oa-w]

Hydrophilidae
Berosus sp [oa-w]
Hydrophilinae spp [oa-w]
Cercyon ?*haemorrhoidalis* [rf-sf]
Cercyon spp [u]
Megasternum concinnum (Marsham) [rt]

Histeridae (clown beetles)
Acritus nigricornis [rt-st]

Hydraenidae (moss water beetles)
Ochthebius minimus (Fabricius) [oa-w]
Ochthebius ?*marinus* (Paykull) [oa-w]
Ochthebius sp indet [oa-w]

Leiodidae
Catops or *Choleva* sp [u]
Leiodidae sp [u]

Staphylinidae (rove beetles)
Lesteva longoelytrata (Goeze) [oa-d]
Pselaphinae sp [u]
Mycetoporini sp [u]
Tachinus sp [u]
Tachyporus spp [u]
Tachyporinae sp [u]
Cypha sp. [u]
Aleochariinae spp [u]
Anotylus nitidulus (Gravenhorst) [rt-d]
Anotylus rugosus (Fabricius) [rt]
Anotylus sculpturatus group [rt]
Anotylus sp [rt]
Platystethus cornutus group [oa-d]
Platystethus nitens (Sahlberg) [oa-d]
Platystethus arenarius (Fourcroy) [rf]
Carpelimus spp [u]
Scydmaeninae sp [u]
Stenus spp [u]
Lathrobium spp [u]
Paederinae sp [u]

Gyrohypnus sp [rt]
Xantholinus sp. [rt]
Xantholinini sp [u]
Staphylininae spp [u]

Geotrupidae (dor beetles)
Geotrupinae sp. [oa-rf]

Scarabaeidae (dung beetles and chafers)
Aphodius granarius (Linnaeus) [ob-rf]
Aphodius porcus (*Fabricius*) [oa-rf]
Aphodius spp. [ob-rf]
Oxyomus sylvestris (Scopoli) [rt-sf]

Clambidae (fringe-winged beetles)
Clambus [rt-sf]

Elmidae (riffle beetles)
Elmidae sp [oa-w]

Elateridae (click beetles)
Elateridae spp [ob]

Cantharidae (soldier beetles)
Cantharidae sp [ob]

Ptinidae (spider and woodworm beetles)
Anobium punctatum (de Geer) [l-sf]

Kateretidae (short-winged flower beetles)
Brachypterus sp(p) [oa-p]

Nitidulidae (sap and pollen beetles)
Meligethes sp. [oa-p]

Monotomidae
Monotoma sp [rt-sf]

Phalacridae
Phalacridae sp [oa-p]

Cryptophagidae (silken fungus beetles)
Atomaria sp. [rd]
Ephistemus globulus (Paykull) [rd-sf]

Latridiidae (minute brown scavenger beetles)
Latridius minutus group [rd-st-h]
Enicmus sp. [rd-sf]
Corticariinae sp. [rt]

Oedemeridae (false blister beetles)
?Oedemeridae sp [u]

Anthicidae (ant-like flower beetles)
Omonadus sp [rt]

Chrysosmelidae (leaf and seed beetles)
Chaetocnema arida group [oa-p]
Chaetocnema concinna or *picipes* [oa-p]
Phyllotreta nemorum group spp [oa-p]
Phyllotreta spp [oa-p]
Alticini spp [oa-p]
Chrysomelidae sp [oa-p]

Apionidae (apionid weevils)
Aspidapion radiolus (Marsham) [oa-p]
Apionidae spp [oa-p]

Curculionidae (curculionid weevils)
Ceutorhynchus spp [oa-p]
Ceutorhynchinae spp [oa-p]
Otiorhynchus sp [oa-p]
Sitona spp [oa-p]
Scolytinae spp [l]
Curculionidae spp. and spp. indet. [oa-p]

Coleoptera spp and spp indet. [u]

Insecta spp larval fragments

ARACHNIDA
Acarina spp (mites)
Aranae sp (spiders)

Table 35. Insects and other invertebrates from the fills of ditch cuts [2953] and [4223]

Sample	Context	Set	Sample volume (litres)	Paraffin flot volume (ml)	Est. no. beetles and bugs	State of preservation	Comments on the beetle and bug assemblages	Taxa noted during scanning. The list is not intended to be exhaustive and identifications are provisional	Potential for analysis
<228>	2353	2953	7L	10ml	200+	Good; fragmentation mainly affecting larger taxa; a few sclerites with eroded edges	Aquatic beetles common; riffle beetles present; mainly 'outdoor' terrestrial assemblage; ground beetles and plant-associated taxa common; dung beetles present; eurytopic decomposers low	*Daphnia magna* gp epphipia +++, *Daphnia* ephippia ++, ostracods ++; *Forficula auricularia* +; *Coreus marginatus* [oa-p], Lygaeidae spp [oa-p], Corixidae [oa-w], Delphacidae [oa-p], Auchenorhyncha spp [oa-p]; fly puparia +; ants ++, bees +, parasitic wasps +; *Hygrotus inaequalis* [oa-w], Hydroporinae [oa-w], Dytsicidae [oa-w], *Notiophilus* [oa], *Trechus* [oa], *Bembidion* spp [oa]; *Calathus fuscipes* [oa], *Ophonus* [oa], Harpalini [oa], Carabidae spp [ob], *Helophorus* (*Empleurus*) [oa], *Helophorus* [oa-w], *Berosus* [oa-w], Hydrophilinae [oa-w], *Cercyon* ?*haemorrhoidalis* [rf-sf], Leiodidae [u], *Lesteva longelytrata* [oa-d], *Tachinus*[u], *Anotylus sculpturatus* gp [rt], *Platystethus cornutus* group [oa-d], *Platystethus* [oa-d], *Xantholinus* [rt], Staphylininae spp [u], Geotrupinae [oa-rf], *Aphodius* spp. [ob-rf], Elmidae [oa-w], Elateridae [ob], Cantharidae [ob], *Meligethes* [oa-p], *Enicmus* [rd], *Omonadus* [rt], *Phyllotreta nemorum* gp [oa-p], *Phyllotreta* [oa-p], Alticini spp [oa-p], Apionidae spp [oa-p], *Ceutorhynchus* spp. [oa-p], Ceutorhynchinae spp [oa-p], *Otiorhynchus* [oa-p], *Sitona* spp [oa-p], Scolytinae [l]; Curculionidae spp. [oa-p], Coleoptera spp [u]; insect larval fragments +++; mites ++	HIGH
<229>	2297	2953	10L	10ml	75	Moderate; fragmentation high; erosion moderate; some sclerites reddish	Few aquatic beetles; ked and a synanthropic group suggesting input of occupation waste, some perhaps from within buildings	*Daphnia magna* gp epphipia ++, *Daphnia* ephippia ++, Cladocera ephippia ++++; Corixidae [oa-w], Auchenorhyncha [oa-p], aphids +; caddis larval fragments +; ked +, chironomid larval head capsules ++++; ants ++, parasitic wasps +; Hydroporinae [oa-w], *Bembidion* [oa]; Carabidae spp [ob], *Helophorus* [oa-w], *Megasternum concinnum* [rt], Tachyporinae [u], Aleocharinae spp [u], *Anotylus rugosus*[rt], *Anotylus* [rt], *Carpelimus* [u], Scydmaeinae [u], Staphylininae spp [u], *Aphodius*?*porcus* [oa-rf], *Aphodius* [ob-rf], *Oxyomus sylvestris* [rt-sf], *Clambus* [rt-sf], *Anobium punctatum* [l-sf], *Brachypterus* [oa-p], *Meligethes* [oa-p], *Latridius minutus* gp [rd-st-h], Corticariinae s(p) [rt], *Omonadus* [rt], *Phyllotreta nemorum* gp [oa-p], *Phyllotreta* [oa-p], Alticini spp [oa-p], Apionidae spp [oa-p], Curculionidae spp [oa-p], Coleoptera spp [u]	HIGH

Sample	Context	Set	Sample volume (litres)	Paraffin flot volume (ml)	Est. no. beetles and bugs	State of preservation	Comments on the beetle and bug assemblages	Taxa noted during scanning. The list is not intended to be exhaustive and identifications are provisional	Potential for analysis
<230>	2354	2953	12L	10ml		Varies from good to moderate, occasional sclerites badly eroded;	Few aquatic beetles; possible hints of cultivated ground among terrestrial fauna	Earthworm egg capsules +; *Daphnia magna* gp epphipia +++, *Daphnia* ephippia ++++, Cladocera ephippia +; earwig +; Lygaeidae [oa-p], Corixidae [oa-w], Auchenorhyncha [oa-p]; chironomid larval heads +++, fly puparia +; ants +, parasitic wasps +; *Clivina* [oa], *Bembidion* [oa], Harpalini spp. [oa], Carabidae spp [ob], *Helophorus* (*Empleurus*) spp. [oa], Hydrophilinae [oa-w], *Cercyon*/*Megasternum* [u], *Acritus nigricornis* [rt-st], *Ochthebius* [oa-w], Pselaphinae [u], *Tachyporus*spp [u], Aleocharinae spp. [u], *Anotylus nitidulus* [rt-d], *Anotylus rugosus* [rt], *Anotylus*spp. [rt], *Platystethus* [oa-d], *Carpelimus* [u], *Stenus* [u], *Lathrobium* [u], *Aphodius* [ob-rf], *Enicmus* [rd-sf], Cortcariinae spp. [rt], *Phyllotreta nemorum* gp [oa-p], *Phyllotreta* spp. [oa-p], Alticini [oa-p], *Aspidapion aeneum* [oa-p], Apionidae [oa-p], *Ceutorhynchus* [oa-p], *Sitona* [oa-p], Scolytinae [l], Curculionidae [oa-p], Coleoptera spp [u], unexpanded Coleoptera [u]; insect larval fragments +; mites ++	HIGH
<231>	2373	2953	10L	10ml	100	Varies from good to moderate	Aquatic and terrestrial taxa represented	*Daphnia magna* gp epphipia ++, *Daphnia* ephippia ++, Lygaeidae [oa-p], Heteroptera [u]; ants +, parasitic wasps +; *Haliplus* [oa-w], *Nebria* ?*brevicollis* [oa], Carabidae spp [ob], *Helophorus* [oa-w], *Megasternum concinnum* [rt], *Ochthebius* ?*marinus* [oa-w], *Ochthebius* [oa-w], Aleocharinae spp [u], *Carpelimus* [u], *Lathrobium* [u], Staphylininae spp [u], *Brachypterus* [oa-p], Corticariinae [rt], *Omonadus* [rt], *Phyllotreta nemorum* gp [oa-p], *Chaetocnema arida* gp [oa-p], Apionidae spp [oa-p], Ceutorhynchinae spp [oa-p], Curculionidae spp. [oa-p], Coleoptera spp [u]; insect larval fragments ++; mites ++, spiders +	HIGH
<232>	2374	2953	14L	10ml	150	Generally good; large and medium sclerites fragmented	Aquatic *Helophorus* common; terrestrial beetles dominated by 'outdoor' taxa; ground beetles less numerous than in other samples;	*Daphnia magna* gp epphipia ++, *Daphnia* ephippia ++++, Lygaeidae [oa-p], Corixidae [oa-w], Auchenorhyncha [oa-p], aphids ++; caddis wing fragment +; chironomid larval heads ++++; ants ++, *Gyrinus* [oa-w], *Haliplus lineatocollis* [oa-w], Hydroporinae [oa-w], *Clivina* [oa], Carabidae [ob], *Helophorus* spp. [oa-w], *Ochthebius minimus* [oa-w], *Catops*/*Choleva* [u], Mycetoporini [u], *Tachyporus*[u], *Cypha* [u], Aleocharinae spp. [u], *Anotylus nitidulus* [rt-d], *Anotylus rugosus* [rt], *Anotylus*[rt], *Carpelimus* [u], *Stenus* [u], Xantholinini [u], Staphylininae spp. [u], *Aphodius* [ob-rf], Cortcariinae spp. [rt], ?Oedemeridae [u], *Phyllotreta nemorum* gp spp. [oa-p], *Phyllotreta* [oa-p], *Chaetocnema concinna*/*picipes* [oa-p], Alticini [oa-p], *Ceutorhynchus* [oa-p], Ceutorhynchinae spp. [oa-p], *Sitona* [oa-p], Coleoptera spp [u],	HIGH

Sample	Context	Set	Sample volume (litres)	Paraffin flot volume (ml)	Est. no. beetles and bugs	State of preservation	Comments on the beetle and bug assemblages	Taxa noted during scanning. The list is not intended to be exhaustive and identifications are provisional	Potential for analysis
<238>	4082	4223	11L	10ml	150+	Good	Aquatic and terrestrial taxa represented; terrestrial fauna dominated by 'outdoor' taxa; possible hints of synanthropic element	*Daphnia magna* gp epphipia ++, *Daphnia* ephippia +, ostracods ++; *Forficula auricularia* +; *Heterogaster urticae* [oa-p], Corixidae [oa-w], Auchenorhyncha spp [oa-p], aphids +; caddis larval fragments +; chironomid larval heads ++; ants +, parasitic wasps +; *Haliplus* [oa-w], *Colymbetes fuscus* [oa-w], *Hygrotus*(*Coelambus*) [oa-w], Hydroporinae [oa-w], Dytsicidae [oa-w], *Trechus obtusus* or *quadristriatus* [oa], *Tachys* [oa], *Bembidion* spp [oa]; *Anchomenus dorsalis* [oa], Carabidae spp [ob], *Megasternum concinnum* [rt], *Tachinus*[u], *Tachyporus* [u], Aleocharinae spp. [u], *Anotylus*spp. [rt], *Platystethus arenarius* [rf], *Stenus* [u], Xantholinini [u], Staphylininae spp [u], *Aphodius* spp. [ob-rf], Elateridae [ob], *Meligethes* [oa-p], *Monotoma* [rt-sf], *Phyllotreta nemorum* gp [oa-p], *Phyllotreta* [oa-p], *Chaetocnema arida* gp [oa-p], Alticini spp [oa-p], Apionidae spp [oa-p], *Ceutorhynchus* [oa-p], *Sitona* [oa-p], Curculionidae spp. [oa-p], Coleoptera spp [u]; insect larval fragments +; mites ++	HIGH
<239>	4084	4223	12L	10ml	200+	Good; fragmentation mainly affecting larger taxa	Low numbers of aquatic beetles but they include riffle beetles; mainly 'outdoor' terrestrial assemblage; ground beetles common; dung beetles present; eurytopic decomposers low	Earthworm egg capsules +; *Daphnia magna* gp epphipia +++, *Daphnia* ephippia +++, ostracods ++; earwigs +; Lygaeidae spp [oa-p], Auchenorhyncha spp [oa-p]; fly puparia +; ants +, bees +; *Hygrotus* [oa-w], *Nebria* ?*brevicollis* [oa]; *Clivina* [oa, *Trechus obtusus* or *quadristriatus* [oa], *Bembidion* spp [oa]; *Amara* [oa], *Ophonus* [oa], Harpalini [oa], Carabidae spp [ob], *Helophorus* (*Empleurus*) [oa], *Helophorus* [oa-w], *Cercyon* [u], *Megasternum concinnum* [rt], *Lesteva longelytrata* [oa-d], *Tachyporus* spp [u], Aleocharinae [u], *Anotylus rugosus* [rt], *Anotylus sculpturatus* gp [rt], *Platystethus nitens* [oa-d], *Carpelimus* [u], Paederinae [u], *Gyrohypnus* [rt], Staphylininae spp [u], Geotrupinae [oa-rf], *Aphodius granarius* [ob-rf], *Aphodius* spp. [ob-rf], Elmidae [oa-w], Phalacridae [oa-p], *Atomaria* [rd], *Ephistemus globulus* [rd-sf], *Enicmus* [rd], *Phyllotreta nemorum* gp [oa-p], *Phyllotreta* [oa-p], Alticini [oa-p], Chrysomelidae [oa-p], Apionidae spp, Ceutorhynchinae spp [oa-p], *Sitona* [oa-p], Scolytinae [l]; insect larval fragments ++; mites +	HIGH

21 Human remains (Lauren McIntyre)

21.1 Introduction

21.1.1 Discrete inhumations and one urned cremation (grave 193), dating to the Roman period were excavated during archaeological investigations at Peugeot Garage, Canterbury, Kent. A total of 218 inhumations were excavated and of these, 18 (graves 8, 80, 100, 115, 127, 162, 163, 168, 178, 196, 204, 205, 207, 211, 214, 217, 218, and 219) yielded no bone. Soil excavated from six further graves (147, 151, 154, 183, 199 and 209) was examined post-excavation in order to detect any small surviving fragments of human bone, but no trace was found. Human remains were therefore excavated, recorded and lifted from a total of 194 graves.

21.1.2 Preliminary spot dating, obtained from residual pottery from grave backfills indicates that most of the inhumations date between the second and third centuries, with smaller numbers dating to the first, fourth and fifth centuries. The cremation is likely to date to the late Roman period (approximately third to fifth century). Around a third of the graves are currently undated due to lack of finds, but these are also likely to be Roman in date.

21.2 Methods

21.2.1 All human remains were assessed in accordance with nationally accepted guidelines set out by Brickley and McKinley (2004) and Mays et al (2002). Unburnt inhumation burials were rapidly examined prior to washing to assess the state of preservation. Where preservation was deemed to be good, these were carefully washed over 2mm sieves by the Oxford Archaeology South Finds Department (FD), and then osteologically assessed by staff from Oxford Archaeology South Heritage Burial Services (HBS) when dry. Where preservation was deemed to be poor and fragile, remains were washed over 2mm sieves by staff from HBS and osteologically assessed during washing, in order to maximise the recovery of osteological data.

21.2.2 During all assessments, articulated skeletons were examined macroscopically and recorded in a tabular form in Microsoft Excel. The information recorded for each skeleton included skeletal completeness, preservation status and level of fragmentation, in addition to a record of potential for estimation of age and sex, metric and non-metric data and ancestry assessment. The presence/absence of dentitions and dental and skeletal palaeopathological information were also considered, as well as potential for isotope and ancient DNA analyses, facial reconstruction and other, relevant, scientific applications.

21.2.3 In accordance with recommended practice (McKinley and Roberts 1993) the cremation deposit was examined to record its colour, weight and maximum fragment size. Each fraction was assessed for identifiable bone elements and the presence of pyre and grave goods, and pyre debris.

21.2.4 This report summarises the results of the osteological assessment and gives recommendations for further work.

21.3 Results

Articulated skeletons

21.3.1 The results of the osteological assessment of skeletons from 194 inhumation burials are presented in Table 36. A full breakdown of information gathered for each skeleton is presented in the archive. Evidence of multiple skeletons was only recovered from grave 2, which contained at least two juveniles; all other graves yielding human remains contained a single individual. Therefore, the minimum number of assessed skeletons was 195.

21.3.2 Based on bone surface condition, extent of bone fragmentation and skeleton completeness, the overall preservation of the skeletons was judged to be fair to poor. The majority of skeletons had most of their bone surfaces affected by some degree of erosion, consistent with grade 3 of McKinley's (2004a, 16) system. In addition, most of the skeletons were less than 25% complete (91/195 individuals, 46.67%), with only 22 individuals (22/195, 11.28% of the assemblage) being more than 75% complete.

Table 36. Osteological summary of articulated human remains

Key: M = male, M? = probable male, M?? = possible male, F = female, F? = probable female, F?? = possible female, Y = yes, N = N, n/a = not applicable, - = no evidence, AMTL = ante mortem tooth loss, L = left, R = right, OP = osteophytes, JC = joint change, EB = eburnation, OA = osteoarthritis, MC = metacarpal, C = cervical, T = thoracic, L = lumbar, S = sacral. 'Low' (<25% fragmented), 'medium' (25-75% fragmented) or 'high' (>75% fragmented).

Grave	SK	Completeness	Preservation Grade (McKinley 2004)	Frag. Score	Age Category	Sex	Potential for Stature?	Potential for metrical analysis?	Potential for Non-metric Traits?	Dental Pathology	Skeletal Pathology	Potential for aDNA Analysis?	Potential for Isotope Analysis?
1	3605	26-50%	3	Medium	Young adult	F?	Y	Y	Y	Calculus	-	Y	Y
2	3105 3106 3107	26-50%	4	Medium	1× young and 1× older child	n/a	n/a	n/a	N	-	Cribra orbitalia	Y	Y
3	3052	<25%	3	Medium	Juvenile <18yrs	n/a	n/a	n/a	N	-	-	N	Y
4	3080	51-75%	2	High	Young adult	-	N	N	Y	Caries	-	N	Y
5	3102	76-100%	3	Medium	Prime adult	F?	N	Y	Y	Calculus, AMTL	-	Y	Y
6	3130	51-75%	3	Low	Prime adult	M?	Y	Y	Y	Calculus	OP distal femora, ectocranial porosity, Pagets disease?	Y	Y
7	3136	51-75%	3	Medium	Prime adult	F?	Y	Y	Y	AMTL, calculus, absence M3 (impaction, congenital etc)	-	Y	Y
9	3141	51-75%	3	Medium	Adult >18yrs	-	N	Y	Y	-	-	N	Y
10	3142	26-50%	1	High	Older child	n/a	n/a	n/a	Y	-	-	Y	Y
11	3143	26-50%	2	High	Juvenile <18yrs	n/a	n/a	n/a	N	-	-	N	Y
12	3147	51-75%	2	Medium	Prime adult	M?	Y	Y	Y	Calculus, periodontal disease	Slight ectocranial porosity	Y	Y
13	3154	76-100%	2	High	Prime adult	M	N	Y	Y	Calculus, AMTL	OP L&R glenoid	Y	Y
14	3156	51-75%	4	Medium	Middle adult	M??	Y	Y	Y	AMTL, absence M3 (impaction, congenital etc), calculus, caries	-	Y	Y
15	3193	<25%	3	Medium	Young child	n/a	n/a	n/a	N	-	-	N	Y
16	3203	26-50%	3	High	Young adult	F??	N	N	Y	Caries	-	Y	Y

Grave	SK	Completeness	Preservation Grade (McKinley 2004)	Frag. Score	Age Category	Sex	Potential for Stature?	Potential for metrical analysis?	Potential for Non-metric Traits?	Dental Pathology	Skeletal Pathology	Potential for aDNA Analysis?	Potential for Isotope Analysis?
17	3258	<25%	1	High	Young child	n/a	n/a	n/a	Y	-	-	Y	Y
18	3261	26-50%	5	High	Adult >18yrs	-	N	N	N	Caries, AMTL	-	Y	Y
19	3269	<25%	2	High	Older child	n/a	n/a	n/a	N	-	-	Y	Y
20	3271	26-50%	4	High	Prime adult	M??	N	N	N	Caries, AMTL, peg tooth	Ectocranial porosity/thickening?	N	Y
21	3264	76-100%	4	Medium	Older child	n/a	n/a	n/a	Y	-	Cribra orbitalia	Y	Y
22	3275	<25%	2	High	Young child	n/a	n/a	n/a	N	-	-	Y	N
23	3332	<25%	4	High	Young adult	-	N	N	N	-	-	Y	Y
24	3345	<25%	2	High	Older child	n/a	n/a	n/a	N	-	-	N	Y
25	3348	26-50%	2	High	Young adult	M?	N	N	N	Caries, calculus	-	Y	Y
26	3351	51-75%	1	High	Mature adult	-	N	N	N	Caries, calculus	-	Y	Y
27	3364	26-50%	3	Medium	Prime adult	M?	N	Y	Y	AMTL, calculus	-	Y	Y
28	3354	<25%	4	High	Young child	n/a	n/a	n/a	N	-	-	N	N
29	3357	26-50%	4	Medium	Prime adult	M?	N	Y	Y	AMTL, caries	-	Y	Y
30	3360	51-75%	5	High	Adolescent	n/a	N	N	Y	Calculus	-	Y	Y
31	3370	<25%	2	High	Prime adult	M??	N	N	Y	Caries, calculus	-	Y	Y
32	3775	51-75%	3	Medium	Prime adult	M??	Y	Y	Y	Caries, calculus, AMTL	-	Y	Y
33	3378	26-50%	2	Medium	Middle adult	-	N	N	N	-	-	N	Y
34	3385	76-100%	2	Medium	Prime adult	M??	N	Y	Y	Caries, calculus	-	Y	Y
35	3402	51-75%	4	Medium	Prime adult	?	N	Y	Y	Caries	Periostitis L&R tibiae	Y	Y
36	3428	76-100%	2	Low	Middle adult	M	Y	Y	Y	Caries, calculus, ante mortem tooth chipping, periodontal disease	OA cervical vertebrae, Schmorl's nodes T vertebrae, OP and spondylolysis L5, OP R acetabulum, healed fracture 1× R rib	Y	Y

Grave	SK	Completeness	Preservation Grade (McKinley 2004)	Frag. Score	Age Category	Sex	Potential for Stature?	Potential for metrical analysis?	Potential for Non-metric Traits?	Dental Pathology	Skeletal Pathology	Potential for aDNA Analysis?	Potential for Isotope Analysis?
37	3393	51-75%	4	Low	Middle adult	F?	Y	Y	Y	AMTL, calculus, ante mortem chipping	OA cervical vertebrae	N	Y
38	3442	26-50%	3	Medium	Adult >18yrs	?	Y	Y	Y	Calculus, AMTL	Arachnoid granulations?	Y	Y
39	3411	51-75%	2	Medium	Middle adult	M?	Y	Y	Y	Calculus, caries, periodontal disease	OP lumbar vertebrae and S1, cribra orbitalia	Y	Y
40	3429	26-50%	3	Medium	Prime adult	F?	N	Y	Y	Calculus, caries, AMTL, periapical void, periodontal disease	Poss ossified haematoma R tibia?	Y	Y
41	3463	51-75%	3	Low	Prime adult	M?	Y	Y	Y	Caries, calculus	OA	Y	Y
42	3418	76-100%	2	Medium	Older child	n/a	n/a	n/a	Y	-	-	Y	Y
43	3421	26-50%	3	High	Young child	n/a	n/a	n/a	N	-	-	Y	Y
44	3426	51-75%	3	Medium	Middle adult	M	N	Y	Y	Calculus, AMTL, caries, periodontal disease	JC R MC 1 and 5	Y	Y
45	3448	26-50%	3	Medium	Middle adult	F?	Y	Y	Y	AMTL, calculus	-	Y	Y
46	3434	76-100%	3	Low	Middle adult	M	Y	Y	Y	AMTL, caries, calculus, enamel hypoplasia, peripical void	OA T/L vertebrae, OP R distal femur, JC R glenoid	Y	Y
47	3439	76-100%	2	Low	Mature adult	F	Y	Y	Y	AMTL, calculus	-	Y	Y
48	3461	76-100%	2	Low	Prime adult	M??	Y	Y	Y	Caries, calculus, periapical void	Schmorl's nodes, OP T vertebrae, and L&R acetabulum	Y	Y
49	3467	76-100%	3	Medium	Prime adult	M	Y	Y	Y	Calculus, caries, AMTL, periapical void, periodontal disease	Healed fracture distal left fibula?	Y	Y

Grave	SK	Completeness	Preservation Grade (McKinley 2004)	Frag. Score	Age Category	Sex	Potential for Stature?	Potential for metrical analysis?	Potential for Non-metric Traits?	Dental Pathology	Skeletal Pathology	Potential for aDNA Analysis?	Potential for Isotope Analysis?
50	3483	51-75%	2	Low	Young adult	F	Y	Y	Y	Calculus, absence M3 (impaction, congenital etc)	OP S1, Schmorl's nodes T vertebrae	Y	Y
51	3500	<25%	2	Medium	Adult >18yrs	-	N	N	Y	-	Periostitis L tibia and fibula	N	Y
52	3474	26-50%	4	Medium	Prime adult	M??	N	N	Y	Calculus, enamel hypoplasia	-	Y	Y
53	3477	51-75%	3	Medium	Mature adult	F	N	Y	Y	Caries, calculus, AMTL	-	Y	Y
54	3501	51-75%	2	Low	Prime adult	F	Y	Y	Y	Calculus, caries, AMTL, periapical void, ante mortem chipping	Cribra orbitalia	Y	Y
55	3481	26-50%	3	High	Prime adult	-	N	N	N	Calculus	-	Y	Y
56	3487	76-100%	3	Medium	Middle adult	F	N	Y	Y	Enamel hypoplasia, calculus	Periostitis R tibia, OA S1, OP L+R acetabulum, EB L MC1, pisiform, triquetral, trapezium. Button osteoma R parietal?	Y	Y
57	3490	26-50%	2	Medium	Prime adult	M?	N	Y	Y	Caries, AMTL, periapical void, calculus	-	Y	Y
58	3493	76-100%	3	Medium	Young child	n/a	n/a	n/a	N	-	-	Y	Y
59	3426	51-75%	3	Medium	Young adult	?	N	Y	Y	Calculus, caries, AMTL	Fracture/osteochondritis D superior facet L calcaneus?	Y	Y
60	3518	51-75%	4	Medium	Older child	n/a	n/a	n/a	Y	-	-	Y	Y
61	3505	<25%	2	High	Young child	n/a	n/a	n/a	N	-	-	Y	N
62	3510	<25%	2	High	Young child	n/a	n/a	n/a	N	-	-	Y	Y
63	3513	<25%	3	High	Older child	n/a	n/a	n/a	N	-	-	N	Y
64	3541	76-100%	2	Medium	Adolescent	n/a	n/a	n/a	Y	Calculus	-	Y	Y
65	3626	76-100%	3	Medium	Prime adult	M	Y	Y	Y	Caries, calculus, AMTL	OA L acromio-clavicular, periostitis R tibia, L tibia and fibula	Y	Y

Grave	SK	Completeness	Preservation Grade (McKinley 2004)	Frag. Score	Age Category	Sex	Potential for Stature?	Potential for metrical analysis?	Potential for Non-metric Traits?	Dental Pathology	Skeletal Pathology	Potential for aDNA Analysis?	Potential for Isotope Analysis?
66	3529	76-100%	3	Medium	Prime adult	M	Y	Y	Y	Caries, calculus, AMTL	OA L hand and R acetabulum, OP L femoral head, OA cervical and lumbar spine, osteochondritis dissecans L humerus, periostitis R ribs	Y	Y
67	3532	<25%	3	High	Prime adult	-	N	N	N	Caries, calculus	-	N	Y
68	3536	76-100%	2	Medium	Middle adult	F	Y	Y	Y	AMTL, calculus	Spinal OA	Y	Y
69	3535	76-100%	3	Medium	Older child	n/a	n/a	n/a	Y	Caries	-	Y	Y
70	3551	26-50%	2	Medium	Older child	n/a	n/a	n/a	Y	-	-	Y	Y
71	3555	26-50%	4	Medium	Prime adult	M?	N	Y	Y	Caries, enamel hypoplasia, calculus, ante mortem chipping (?)	OP distal R femur, space occupying lesion distal R femoral metaphysis	Y	Y
72	3559	26-50%	3	Medium	Middle adult	M?	Y	Y	Y	Calculus, AMTL, caries, periapical void, ante mortem chipping, periodontal disease	OA C1 and C2, marginal OP L arm, cribra orbitalia	Y	Y
73	3562	76-100%	2	Medium	Prime adult	M	Y	Y	Y	Calculus, periodontal disease	OP lumbar vertebrae, os acromiale	Y	Y
74	3571	76-100%	2	Medium	Adult >18yrs	?	N	Y	Y	-	-	Y	Y
75	3565	26-50%	4	High	Adult >18yrs	F??	N	Y	Y	Calculus	Endocranial lesions/dense bone frontal	Y	Y
76	5072	<25%	4	High	Middle adult	-	N	N	N	-	-	N	N
77	3576	<25%	5	High	Middle adult	-	N	N	N	Calculus, caries	-	N	Y
78	3579	<25%	4	High	-	-	N	N	N	-	-	N	Y

Grave	SK	Completeness	Preservation Grade (McKinley 2004)	Frag. Score	Age Category	Sex	Potential for Stature?	Potential for metrical analysis?	Potential for Non-metric Traits?	Dental Pathology	Skeletal Pathology	Potential for aDNA Analysis?	Potential for Isotope Analysis?
79	3582	51-75%	4	High	Middle adult	M	N	Y	Y	Calculus, AMTL, periapical void, periodontal disease	Maxillary sinusitis, OP L acetabulum, periostitis L&R tibiae?	Y	Y
81	3591	51-75%	3	Medium	Middle adult	F?	Y	Y	Y	Calculus, enamel hypoplasia	OP S1 and L vertebrae	Y	Y
82	3633	<25%	5	High	Young adult	F??	N	N	N	Caries	-	Y	Y
83	3636	<25%	4	High	Young adult	-	N	N	N	Calculus	-	N	Y
84	3599	26-50%	2	High	Adolescent	n/a	N	N	N	Caries, calculus	Periostitis tibia	Y	Y
85	3603	51-75%	3	Medium	Mature adult	M	Y	Y	Y	AMTL	OA lumbar vertebrae, unilateral sacralisation L5 (not fully fused), OP L&R acetabulum and femoral heads, joint cysts R femoral head? Likely related to development of OA	Y	Y
86	3647	<25%	4	High	Middle adult	M?	N	N	N	Calculus	-	N	Y
87	3609	<25%	4	High	Prime adult	-	N	N	N	Calculus	-	N	Y
88	3612	<25%	2	High	Adult >18yrs	-	N	N	N	-	-	N	N
89	3587	26-50%	4	High	Young adult	-	N	N	N	-	-	N	Y
90	3620	<25%	5	High	Prime adult	-	N	N	N	Caries, calculus	-	N	N
91	5057	<25%	5	High	-	-	N	N	N	-	-	N	N
92	3624	26-50%	4	High	Young adult	M??	N	Y	N	Calculus	-	Y	Y
93	3690	76-100%	2	Medium	Adult >18yrs	M??	Y	Y	Y	Caries, calculus	OP L5 and S1	Y	Y
94	3638	51-75%	3	Medium	Young adult	F?	N	Y	Y	Caries, calculus, AMTL, periodontal disease, periapical void	-	N	Y

Grave	SK	Completeness	Preservation Grade (McKinley 2004)	Frag. Score	Age Category	Sex	Potential for Stature?	Potential for metrical analysis?	Potential for Non-metric Traits?	Dental Pathology	Skeletal Pathology	Potential for aDNA Analysis?	Potential for Isotope Analysis?
95	3680	26-50%	2	Medium	Young adult	-	N	N	Y	Enamel hypoplasia, caries	NSPI both femoral shafts - periostitis/osteitis/osteomyelitis? Recommend for radiography	N	Y
96	3644	26-50%	4	High	Prime adult	M??	N	N	N	-	-	N	Y
97	3652	26-50%	4	Medium	Young adult	M??	N	Y	N	Calculus	-	Y	Y
98	3656	<25%	4	High	Adult >18yrs	-	N	N	N	-	-	N	N
99	3659	<25%	4	High	Prime adult	-	N	N	N	Caries	-	Y	Y
101	3699	26-50%	4	High	Prime adult	-	N	N	N	Calculus	-	N	Y
102	3671	<25%	5	High	Older child	n/a	n/a	n/a	N	-	-	Y	N
103	5079	26-50%	2	Medium	Adult >18yrs	F	N	Y	Y	-	OP L acetabulum	N	Y
104	3674	26-50%	3	Medium	Prime adult	F??	N	Y	Y	Caries, calculus	OP L femoral head	N	Y
105	3677	<25%	5	High	-	-	N	N	N	-	-	N	N
106	3682	26-50%	2	Medium	Young adult	F?	N	Y	Y	Calculus	-	Y	Y
107	3696	51-75%	4	High	Adult >18yrs	-	N	Y	Y	-	-	N	Y
108	2506	26-50%	1	High	Young adult	M	N	N	N	Calculus	Ectocranial porosity	N	Y
109	2589	<25%	2	High	Prime adult	-	N	N	N	Caries	-	N	Y
110	3703	<25%	4	High	Adult >18yrs	-	N	N	N	-		N	Y
111	2517	<25%	3	High	Adult >18yrs	-	N	Y	N	-	Possible ossified artery R leg	N	Y
112	5167	<25%	5	High	-	-	N	N	N	-	-	N	N
113	3713	<25%	5	High	-	-	N	N	N	-	-	N	N
114	3742	<25%	3	High	Older child	n/a	N	n/a	N	Caries	-	N	Y
116	3722	26-50%	4	Medium	Prime adult	F?	Y	Y	Y	AMTL, ante mortem chipping, calculus	OA R distal humerus	Y	Y

Grave	SK	Completeness	Preservation Grade (McKinley 2004)	Frag. Score	Age Category	Sex	Potential for Stature?	Potential for metrical analysis?	Potential for Non-metric Traits?	Dental Pathology	Skeletal Pathology	Potential for aDNA Analysis?	Potential for Isotope Analysis?
117	3728	<25%	4	High	Adult >18yrs	-	N	N	N	-	-	N	N
118	2525	26-50%	2	Medium	Mature adult	M??	N	Y	Y	Calculus	-	Y	Y
119	3731	<25%	5	High	-	-	N	N	N	-	-	N	N
120	3734	<25%	5	High	-	-	N	N	N	-	-	N	N
121	2528	<25%	3	High	Adult >18yrs	-	N	Y	N	-	-	N	Y
122	3737	26-50%	2	High	Prime adult	M??	N	N	N	-	-	N	Y
123	3740	<25%	2	High	-	-	N	N	N	-	-	N	N
124	3748	51-75%	3	High	Young adult	F	N	N	Y	Caries, calculus	-	Y	Y
125	3744	<25%	4	High	Young adult	-	N	N	N	Calculus	-	N	Y
126	2536	<25%	2	High	Prime adult	M	N	N	N	-	-	Y	Y
128	2539	<25%	2	High	Juvenile <18yrs	n/a	n/a	n/a	N	-	-	N	Y
129	2542	<25%	1	High	-	-	N	N	N	-	-	N	N
130	3752	<25%	4	High	Middle adult	-	N	N	N	-	-	N	Y
131	2545	<25%	3	High	Older child	n/a	n/a	n/a	N	-	-	Y	Y
132	3755	51-75%	3	Medium	-	F?	Y	Y	Y	Possible retention of 2× deciduous molars	-	N	Y
133	3759	51-75%	2	High	Prime adult	M?	N	Y	Y	Calculus	-	Y	Y
134	3764	26-50%	4	High	Adult >18yrs	-	N	N	N	-	-	N	Y
135	3767	<25%	5	High	Prime adult	-	N	N	N	AMTL, calculus	-	N	Y
136	2548	<25%	4	High	-	-	N	N	N	-	-	N	N
137	3771	26-50%	5	High	Prime adult	M??	N	N	N	-	-	Y	Y
138	3820	<25%	3	High	Prime adult	M?	N	N	N	-	-	N	Y

Grave	SK	Completeness	Preservation Grade (McKinley 2004)	Frag. Score	Age Category	Sex	Potential for Stature?	Potential for metrical analysis?	Potential for Non-metric Traits?	Dental Pathology	Skeletal Pathology	Potential for aDNA Analysis?	Potential for Isotope Analysis?
139	5116	26-50%	3	Medium	Prime adult	F?	N	Y	Y	Caries, AMTL, calculus	OP C1 odontoid	Y	Y
140	3810	51-75%	3	Medium	Prime adult	??F	N	Y	Y	Calculus, AMTL	-	Y	Y
141	2554	51-75%	3	Medium	Young child	n/a	n/a	n/a	N	-	-	Y	Y
142	3793	<25%	3	High	Adult >18yrs	-	N	N	N	AMTL	-	Y	Y
143	3871	26-50%	3	High	Middle adult	-	N	N	N	Calculus, AMTL	-	Y	Y
144	3799	26-50%	3	High	Middle adult	M?	N	Y	Y	-	-	Y	Y
145	3803	<25%	4	High	Young adult	-	N	N	N	-	-	Y	Y
146	5112	<25%	3	High	Young adult	F??	N	Y	N	Enamel hypoplasia	Periostitis L tibia	Y	Y
147	3806	0%	n/a	n/a	n/a	n/a	N	N	N	n/a	n/a	n/a	n/a
148	3868	<25%	3	High	Middle adult	-	N	N	N	-	-	N	N
149	3857	<25%	5	High	Adult >18yrs	M?	N	N	Y	-	-	Y	Y
150	3816	51-75%	3	High	Prime adult	M??	N	N	N	-	-	Y	Y
151	3872	0%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
152	3822	<25%	5	High	Prime adult	-	N	N	N	-	-	N	Y
153	2566	51-75%	1	Medium	Young child	n/a	n/a	N	Y	-	-	Y	Y
154	3828	0%	n/a	n/a	n/a	n/a	n/a	N	n/a	n/a	n/a	n/a	n/a
155	3831	<25%	1	High	Older child	n/a	n/a	n/a	N	Calculus	-	Y	Y
156	3833	<25%	5	High	Young adult	-	N	N	N	-	-	N	Y
157	3838	<25%	5	High	Older child	n/a	n/a	n/a	N	-	-	N	Y
158	2569	51-75%	2	High	Middle adult	M??	N	Y	Y	Calculus, caries, AMTL	-	Y	Y
159	3842	51-75%	3	Medium	Young adult	M?	N	Y	Y	Calculus	-	Y	Y
160	2579	26-50%	2	Medium	Prime adult	F?	Y	Y	Y	Enamel hypoplasia, dental calculus, enamel pearl	Schmorl's nodes	Y	Y

Grave	SK	Completeness	Preservation Grade (McKinley 2004)	Frag. Score	Age Category	Sex	Potential for Stature?	Potential for metrical analysis?	Potential for Non-metric Traits?	Dental Pathology	Skeletal Pathology	Potential for aDNA Analysis?	Potential for Isotope Analysis?
161	3847	51-75%	3	Medium	Prime adult	M?	N	Y	Y	Calculus, periodontal disease	-	Y	Y
164	5127	<25%	n/a (teeth only)	High	Adolescent	n/a	N	N	N	Calculus	-	N	Y
165	2588	<25%	1	High	Young child	n/a	n/a	n/a	N	-	-	Y	Y
166	3859	<25%	4	High	-	-	N	N	N	-	-	N	Y
167	3864	<25%	2	High	Prime adult	-	N	N	N	Caries, calculus	-	N	Y
169	3879	<25%	3	High	-	-	N	N	N	-		N	N
170	3883	<25%	3	High	Adult >18yrs	-	N	Y	Y	-	OP L tibia, patella	N	Y
171	3876	<25%	3	High	-	-	N	N	N	-	-	N	N
172	3888	<25%	4	High	Adult >18yrs	-	N	N	N	-	-	N	Y
173	3894	<25%	3	Medium	Adult >18yrs	-	N	Y	Y	-	Healed fracture L tibia and fibula	N	Y
174	3899	<25%	3	High	Prime adult	-	N	N	N	-	-	N	Y
175	3904	<25%	4	High	Prime adult	-	N	N	N	-	-	N	Y
176	3906	<25%	2	Low	Adult >18yrs	-	Y	Y	Y	-	Periostitis L tibia	N	Y
177	3913	<25%	3	Medium	Adult >18yrs	-	Y	Y	Y	-	-	N	Y
179	3917	26-50%	3	High	Young child	n/a	n/a	n/a	N	-	-	N	Y
180	3921	<25%	2	High	Young adult	-	N	N	N	Caries, calculus	-	N	Y
181	3925	<25%	4	High	Older child	n/a	n/a	n/a	N	Caries	-	Y	Y
182	3931	76-100%	3	Medium	Adolescent	M??	N	Y	Y	Retained deciduous molar, dental overcrowding	-	Y	Y
183	3935	0%	n/a	n/a	n/a	n/a	n/a	N	N	n/a	n/a	n/a	n/a
184	3941	<25%	3	Medium	Adult >18yrs	F??	Y	Y	Y	-	-	N	Y
185	3944	<25%	3	High	-	-	N	N	N	-	-	N	N
186	3948	<25%	2	High	Middle adult	-	N	N	N	AMTL	-	N	Y

Grave	SK	Completeness	Preservation Grade (McKinley 2004)	Frag. Score	Age Category	Sex	Potential for Stature?	Potential for metrical analysis?	Potential for Non-metric Traits?	Dental Pathology	Skeletal Pathology	Potential for aDNA Analysis?	Potential for Isotope Analysis?
187	3953	<25%	2	High	Prime adult	-	N	N	N	-	-	N	Y
188	3957	<25%	5	High	-	-	N	N	N	-	-	N	N
189	3964	26-50%	5	High	Adolescent	n/a	N	N	N	Retained deciduous molar, caries	-	N	Y
190	3966	<25%	5	High	-	-	N	N	N	-	-	N	N
191	3972	51-75%	2	Medium	Young adult	F?	N	Y	Y	Calculus, canine impacted/not erupted	-	Y	Y
192	3978	<25%	5	High	Prime adult	-	N	N	N	Calculus	-	N	Y
194	5171	<25%	5	High	Young adult	-	N	N	N	-	-	N	Y
195	5221	<25%	3	High	Prime adult	-	N	N	N	-	-	N	Y
197	5141	<25%	n/a (teeth only)	Medium	Young child	n/a	n/a	n/a	N	-	-	N	Y
198	3988	<25%	3	High	Prime adult	-	N	N	N	Calculus	-	N	Y
199	3992	0%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
200	5164	<25%	5	High	Young adult	-	N	N	N	-	-	Y	Y
201	3998	<25%	5	High	-	-	N	N	N	-	-	N	N
202	5153	<25%	4	High	Young child	n/a	n/a	n/a	N	-	-	Y	Y
203	5156	<25%	5	High	-	-	N	N	N	-	-	N	N
206	5183	26-50%	3	Medium	Prime adult	M?	N	Y	Y	AMTL, calculus	-	Y	Y
208	5912	<25%	3	High	Infant	n/a	n/a	n/a	N	-	-	N	Y
209	5193	0%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
210	5233	<25%	5	High	Older child	n/a	n/a	n/a	N	-	-	N	N
212	5205	76-100%	2	High	Older child	n/a	n/a	n/a	Y	Caries	-	Y	Y
213	5215	<25%	5	High	Older child	n/a	n/a	n/a	N	Caries	-	N	N
215	5237	26-50%	4	High	Prime adult	M?	N	N	N	-	-	Y	Y
216	5241	<25%	5	High	Older child	n/a	n/a	n/a	N	-	-	N	Y

21.3.3 Fragmentation was assessed according to the proportion of bones fragmented, and scored as 'low' (<25% fragmented), 'medium' (25–75% fragmented) or 'high' (>75% fragmented). The majority of the assemblage was highly fragmented (117/195, 60.0% of the assemblage).

21.3.4 Only one skeleton, 3501 from grave 54, had a skull that was sufficiently intact for ancestry to be explored by the application of morphological and cranio-metric assessment. Provisionally, this skull appeared to possess Caucasoid features, but this requires more detailed analysis to confirm.

21.3.5 Of the 195 skeletons, 131 were adults and 45 were juveniles aged <18 years. It was not possible to determine whether a skeleton was adult or juvenile in 18 cases. A summary of preliminary age at death estimations is presented in Table 37. There was potential for adult age at death to be estimated using dental occlusal wear (Miles 1963; Brothwell 1981, 69), and degeneration of the auricular surface and pubic symphysis of the pelvis, although the pubic symphysis was only well preserved in three skeletons. There was potential for juvenile age at death to be estimated using dental development and epiphyseal fusion.

Table 37. Preliminary age at death estimations

Age group	Age range	No. of individuals
Pre-term	<37 weeks gestation	0
Neonate	Birth–1 month	0
Infant	1–12 months	1
Young child	1–5 years	15
Older child	6–12 years	20
Adolescent	13–17 years	6
Young adult	18–25 years	26
Prime adult	26–35 years	54
Middle adult	36–45 years	22
Mature adult	> 45 years	5
Unspecified juvenile	< 18 years	3
Unspecified Adult	> 18 years	24
TOTAL		**176**

21.3.6 Potential for sex estimation, using cranial and/or pelvic traits, was observed for 82 adult skeletons. A summary of preliminary sex estimations is presented in Table 38. Sex estimation was not explored in the juveniles, because there are currently no accepted methods (Brickley 2004, 23).

Table 38. Adult sex assessment

Sex Estimation	No. of Individuals
Male	9
Probable male	19
Possible male	13
Indeterminate sex	21
Female	8
Probable female	9
Possible female	3
TOTAL	**82**

21.3.7 A summary of the number of individuals with potential for metric and non-metric analysis is presented in Table 39. Non-metric traits are normal variants in skeletal anatomy, which may have a genetic or mechanical aetiology (Brothwell and Zakrzewski 2004). Skeletons were deemed to have potential for non-metric analysis if cranial and/or post-cranial skeletal elements that may exhibit such traits were present (after Berry and Berry 1967; Finnegan 1978; Brothwell and Zakrzewski 2004). Where non-metric traits were observed during assessment, these were recorded.

Table 39. Potential for Metric and Non-Metric Analysis

	No. of Individuals
Cranial indices	1
Post-cranial indices	74
Cranial non-metrics	71
Post-cranial non-metrics	71

21.3.8 The potential for the collection of cranial metric data was poor as the majority of skulls were fragmented: only one skeleton, SK3501, had a complete cranium. Potential for post-cranial metric data and both cranial and post-cranial non-metric data was fair. Only 24 adult skeletons had sufficiently intact long bones for stature estimation due to the poor survival rates of complete long bones (Table 36). This number may be increased slightly if long bone fragments are reconstructed (e.g. where a long bone has a single post-mortem break). It is recommended that bones exhibiting more than one post-mortem break are not reconstructed, as this greatly increases the potential for measurement error.

21.3.9 Evidence of the dentition, in the form of either teeth and/or sockets, was present in 157 individuals. Dental pathology and anomalies were observed in 104 individuals and included dental calculus, caries, periodontal disease, ante-mortem tooth loss, enamel hypoplasia, periapical voids, peg teeth, enamel pearls, ante-mortem tooth chipping, retention of deciduous teeth in adulthood, dental overcrowding, and possible congenital absence/impaction of the canine and third molars.

21.3.10 Skeletal pathology was observed in 46 individuals and consisted of spinal and extra-spinal osteoarthritis (as well as minor changes to the vertebrae and extra-spinal joints such as marginal osteophytes), Schmorl's nodes, cribra orbitalia, ectocranial porosity/thickening, maxillary sinusitis, periostitis, osteitis/osteomyelitis, ante mortem fracture, possible ossified haematoma, button osteoma, osteochondritis dissecans, Os acromiale, possible Paget's disease, and a possible ossified artery.

21.3.11 The analysis of ancient DNA (aDNA) has a number of applications, including the study of genetic traits, juvenile sex, investigation of population origins, establishing patterns of kinship, and analysis of pathogenic aDNA in order to diagnose diseases such as tuberculosis (Elders et al 2011, 3–4; APABE 2013, 11–2). The petrous bone is currently considered to be the best bone in the skeleton to use for aDNA analyses: aDNA preservation is highly correlated with bone density, and the petrous bone is comprised of very dense bone, particularly in the otic capsule of the inner ear (Pinhasi et al 2015). A total of 104 skeletons had complete petrous bones and therefore the potential for investigating aDNA is good. At the time of writing, petrous samples from the adjacent Rhodaus Town site are undergoing aDNA analysis. When the results of this study are finalised, it will be possible to provide comment on the potential for aDNA yields in the Peugeot Garage assemblage.

21.3.12 In addition to aDNA, potential for isotope analysis was observed in 167 skeletons. A summary of the presence of dental and skeletal elements that may facilitate isotope analysis is presented in Table 40.

Table 40. Potential for Isotopic Analysis

Isotopic Analysis	Skeletal Element Required	Number of Individuals
Mobility/geographic origin (strontium and oxygen)	Tooth enamel, second molar	103
Mobility/geographic origin (strontium and oxygen)	Tooth enamel, premolar	109
Average lifetime diet (carbon and nitrogen)	Cortical long bone	115
Childhood diet (carbon and nitrogen)	Trabecular rib bone	32

21.3.13 Carbon and nitrogen isotope ratios can be examined in order to study the composition of, and change in, ancient diet (APABE, 2013: 8–10). Recent analysis of carbon and nitrogen isotopes from Rhodaus Town (adjacent to the Peugeot Garage site) have suggested a slight discrepancy in the proportions of aquatic/marine resources consumed by males and females, with these potentially consumed by females in lesser quantities (Jay 2016, 12). However, the tested of skeletons undergoing isotope analysis from Rhodaus Town was small (13 individuals), therefore it was

suggested that the same relationship be investigated using a larger sample to confirm this tentative hypothesis (*Ibid*.). Strontium and oxygen ratios can be examined in order to explore likely geographic origins, which, when compared to burial location may allow inferences to be made regarding mobility and migration (APABE 2013, 10).

21.3.14 Furthermore, there is potential for analysis of human microbiota from dental calculus in 80 skeletons. Dental calculus (calcified plaque) derives from a combination of plaque fluid, saliva, and micro-organisms associated with plaque deposits that may accumulate on tooth surfaces (Hillson 1996, 255). Over 600 different taxa of microorganisms may be present in saliva and dental plaque (Dewhirst et al 2010): investigation of human microbiota has demonstrated that this plays a central role in health and chronic disease (Warinner et al 2015). Evidence of viral and fungal taxa, pathogenic bacteria, food debris (including plant phytoliths and organic chemical compounds related to the consumption of carbohydrates), and even environmental debris (e.g. charcoal that may have been inhaled) have also been identified in ancient and modern samples of dental calculus (Warinner et al 2015; Weyrich et al 2015; Hardy et al 2016; Lazzati et al 2016). Thus, dental calculus has the potential to provide information pertaining to diet, health and the living environment, and the interplay between all these factors (Weyrich et al 2015).

21.3.15 Only one individual, 3501 from grave 54, had a cranium that was considered complete enough for facial reconstruction, although this would need to be confirmed in consultation with an expert.

Cremation deposit (urn 5132)

21.3.16 A summary of the results of the assessment of the cremation deposit, excavated from urn 5132 is presented in Table 41. Seventeen spits were excavated, and each spit given a context number (contexts 6050–6066). Context 6051, the second spit to be excavated (from 1–2cm depth within the urn) did not contain any cremated bone, and hence is excluded from Table 40.

21.3.17 The total weight of the cremation deposit was 997.9g. This falls just below the average weight range of modern adult cremations (1000–2400g; McKinley 2000, 26), and well above the average weight range of archaeologically recovered cremations (600–900g; McKinley 2013). Human bone was positively identified from all 16 spits that yielded bone: these are potentially identifiable for evidence of age, sex and pathology. The majority of cremated bone was white in colour, with smaller proportions of blue, grey and black fragments. This indicates a generally efficient cremation process, although more detailed analysis should seek to quantify these proportions fully, and consider this in relation to different skeletal elements. Maximum fragment size across the deposit varied from 19.0mm in context 6050 (from the 0–1cm depth within the urn) to 56.3mm in context 6057 (from the 7–8cm depth within the urn). Fragmentation can be investigated further in order to explore intrinsic (e.g. levels of dehydration) and extrinsic (e.g. whether the bone has been deliberately manipulated) factors pertaining to the cremation process and any associated ritual activities (McKinley 2013, 161–3).

21.3.18 Burnt animal bone was identified in five spits, and sherds of pottery in four of the spits. No pyre debris was observed in the deposit. On site records indicate that the urn containing the cremation deposit had been truncated to some degree, which means that the deposit is unlikely to be complete.

Table 41. Cremation deposits from Grave 193

Context no.	Sample no.	Total weight of deposit	Maximum fragment size	Other pyre goods/debris in deposit?	Identifiable bones/teeth?	Colour	Notes	Recommendation
5132	-	13.4g	27.7mm	No	Yes	White/blue/grey/black	Cranial, mandibular, rib and unidentified joint surface fragments	Full analysis
6050	977	3.4g	19.0mm	No	Yes	White/grey	1× tooth root	Full analysis
6052	962	15.7g	25.5mm	Yes, burnt animal bone	Yes	White/blue/ grey/	1× fragment lumbar vertebrae	Full analysis
6053	963	11.5g	35.6mm	No	Yes	White/grey/ black	Cranial and vertebral fragments	Full analysis
6054	964	23.5g	38.2mm	Yes, burnt animal bone	Yes	White/grey/ black	Cranial and rib fragments	Full analysis
6055	695	55.1g	53.4mm	Yes, pottery sherds	Yes	White/grey/ black	Cranial and long bone shaft fragments	Full analysis
6056	966	10.2g	21.2mm	No	Yes	White/grey/ black	Tooth crown and cranial fragments	Full analysis
6057	967	55.0g	56.3mm	Yes, burnt animal bone	Yes	White/blue/ grey	Cranial, rib, pelvis and tibial shaft fragments	Full analysis
6058	968	70.7g	34.5mm	Yes? Pottery?	Yes	White/grey/ black	Cranial and tooth fragments, 1× fragment left calcaneus	Full analysis
6059	969	131.0g	45.3mm	Yes, pottery sherds, burnt animal bone	Yes	White/grey/ black	Cranial, facial, rib, and long bone shaft fragments. Acetabulum fragment with green staining	Full analysis
6060	970	108.7g	34.2mm	Yes, burnt animal bone	Yes	White/grey/ black	Cranial, tooth root and rib fragments	Full analysis
6061	971	127.1g	36.1mm	Yes, pottery sherds	Yes	White/grey/ black	Cranial, tooth root, rib and long bone shaft fractures. Green staining on 1× unid. fragment	Full analysis
6062	972	60.6g	40.1mm	No	Yes	White/blue/ grey/ black	Cranial, rib and lumbar vertebral fragments	Full analysis
6063	973	73.3g	23.9mm	No	Yes	White/grey/ black	Cranial, mandibular and long bone shaft fragments	Full analysis
6064	974	67.7g	43.0mm	No	Yes	White/blue/ grey/ black	Cranial, mandibular, and lumbar vertebrae fragments. Green staining on 2× unid. fragments	Full analysis
6065	975	78.5g	35.0mm	No	Yes	White/ grey/ black	Cranial and tibial shaft fragments	Full analysis
6066	976	92.5g	33.7mm	No	Yes	White/blue/ grey/black	Cranial, vertebral body, rib, pelvis, femoral head and fibula shaft fragments	Full analysis

21.4 Statement of potential

21.4.1 Overall levels of preservation, completeness and fragmentation of the Peugeot Garage human skeletal assemblage are poor. This has limited the level of osteological data that can be obtained from macroscopic analysis. However, it is evident that relevant information survives for a total of 169 skeletons (86.7% of the assemblage), and certain key parameters can be estimated for a good proportion of these. More specifically, it will be possible to explore demography, final achieved living height and dental and skeletal pathology. Evidence for age at death survives on a total of 176 skeletons (90.3% of the assemblage), and sex on 82 skeletons (42.2%). Stature can be estimated for at least 24 skeletons (12.3%). Post-cranial metrics and cranial/post-cranial non-metrics can be calculated for over a third of the assemblage (74/195, 37.9% skeletons with femora and/or tibiae suitable for the calculation of post-cranial indices; 71/195, 36.4% with potential for non-metrics). Potential for dental analyses (e.g. age at death estimation, dental pathology) is high, with 157 skeletons (80.5% of the assemblage) having surviving dentitions. A total of 46 skeletons exhibited skeletal pathology: this should be considered as a minimum number, as subtler pathological lesions may be observed during more detailed analysis. All of this information will contribute to knowledge on the structure and health status of the population.

21.4.2 The cremation deposit from urn 5132 also has good potential for osteological data. Although truncation of the deposit means that we can never account for the entire original deposit, there is still value in obtaining detailed information on the surviving fragments. However, the total bone weight for this deposit is above the average weight range for archaeologically recovered cremations (600–900g; McKinley, 2013), and detailed analysis could yield information pertaining to the number of individuals represented by the fragments, age at death, sex, pathology, pyre technology and funerary ritual.

21.4.3 In addition, there is potential for scientific analyses such as isotopes, aDNA and oral microbiome analysis to be undertaken on a good sized sample of the assemblage. This will complement the osteological data and afford a more powerful perspective on the population. This could contribute information on diet, health, environment, origins, migration and mobility, the life and death experience of boys and girls, and kinship patterns within the population.

21.4.4 The Peugeot Garage human skeletal assemblage is among 99 assemblages to have been excavated within close proximity of Canterbury (Weekes 2011; 2017). A 2011 review of Roman period cemeteries in the vicinity of Canterbury recorded in excess of 350 inhumation and cremation burials around the town, with the majority of these (>100) excavated at The Telephone Repeater Station, St. Dunstan's Terrace between 2001 and 2002 (Diack 2003; Weekes 2011, 34; Pearce 2015, 158). More recent investigations have uncovered a further 250 burials, including 93 at St. Dunstans (Weekes 2017), 137 at Hallet's Garage (Gollop 2012, 14), and 20 at Rhodaus Town (Gollop 2015). Burials from Canterbury span the first to early fifth centuries, meaning that osteological and burial data is available for the whole of the Romano-British period (Pearce 2015, 158). Burials from the Peugeot Garage site also potentially span this entire date range. The assemblage from Peugeot Garage therefore comprises a well dated, large skeletal sample, and (particularly in conjunction with the data set collated from the aforementioned assemblages) provides a unique opportunity to contribute to investigations of the population of the town with reference to multiple parameters. For example, research themes that further analysis of this assemblage could contribute to include:

Palaeodemography: population composition (age groups, sex ratios, juvenile sex); life expectancy; mortality risk

Kinship: family grouping within the cemetery

Health: general health status; patterns of health and disease in relation to the environment and socio-economic status; the impact of urbanisation on health (and comparison with contemporary rural population health); temporal change/continuity of health; weaning practices; childhood development, disease and care; human microbiota; presence of pathogenic bacteria

Diet: composition; sex/age/socio-economic differences; temporal change; oral health and implications for diet

Migration: population diversity/ancestry; mobility

Spatial distribution: cemetery zoning (by age, sex, family, socio-economic or other groupings), cemetery layout and chronological development

Burial practice/funerary ritual: pyre technology; burial and ritual variation; continuity and change; grave/pyre good diversity; distribution, deposition and grouping (e.g. according to age, sex)

21.4.5 The burial population from Roman Canterbury provides an excellent osteological case study with which to study the inhabitants of an urban settlement in Roman Britain. Few other Romano-British towns have large osteological data sets across multiple cemetery sites (or comprehensive collated data for the whole of the town) available in conjunction with secure dating over a good date range. Substantial Roman period burial data from multiple sites are currently only available from London, Colchester and York, and to a lesser extent from Gloucester and Leicester, though secure dating beyond 'Roman' is only available for a small proportion of the York assemblage, and the combined Leicester assemblage is somewhat smaller than that at Canterbury (McIntyre, 2014; Pearce, 2015: 139). Thus, when considered at the assemblage level, there is good potential for demographic, palaeopathological and other data. When combined with data from contemporary cemetery assemblages from elsewhere in the town, burials from Canterbury provide significant scope for detailed osteoarchaeological research rarely afforded in other Romano-British towns.

21.5 Recommendations for further work

Articulated skeletons

21.5.1 It is recommended that all of the articulated skeletons undergo full osteological analysis. The analysis should be carried out in accordance with national guidelines (Mays et al 2002; Brickley and McKinley 2004), and should include a full inventory of bones and teeth and estimations of sex and age. Mortality profiles should be constructed to demonstrate proportional age at death, with adult individuals also categorised by sex and juveniles categorised by sex where this has been established via analysis of aDNA. Life expectancy should also be calculated via the use of life tables. Where possible, stature should be calculated, along with platymeric, platycnemic and cranial indices where possible. A record of non-metric traits should be completed, and all pathological lesions observed (dental and skeletal) fully described. Diagnoses of pathology would be explored with reference to standard texts (e.g. Aufderheide and Rodríguez-Martín 1998; Rogers and Waldron 1995), and by the application of radiography where appropriate.

21.5.2 Radiographic analysis may be useful in the diagnosis of pathological conditions. For example, skeleton 3680 (grave 95) exhibits considerable non-specific infectious lesions, and substantial thickening of the right clavicle which may be indicative of Paget's disease. Radiography may be able to determine the extent of bone infection, e.g. distinguish between osteitis (infection of the bone cortex) and osteomyelitis (infection of the medullary cavity), and demonstrate key diagnostic radiographic features necessary for confirmed identification of Paget's disease. Full analysis of the assemblage may reveal other pathological lesions for which radiography may be required.

Cremation deposit

21.5.3 It is recommended that full analysis is undertaken on the cremation deposit from grave 193. This should be undertaken in accordance with standard practice (Mays et al 2004; McKinley 2004b). This would involve identification of skeletal elements within each context in order to determine the completeness of the cremation deposit, keeping separate the bones from each spit to investigate any potential structured deposition. The cremation processes (e.g. temperature and duration of the burn, body position) employed would also be explored, giving consideration to the range of colours and fragmentation patterns on different elements/body regions. The minimum number of individuals represented should also be explored with reference to the repetition of elements, combined with observations relating to age and size differences (Buikstra and Ubelaker 1994). Age and sex should be estimated where possible, and pathology described and diagnosed. Full analysis of the cremation deposits should also include examination of the unsorted residues (2–0.5mm) in order to estimate the total bone weight present within them.

21.5.4 All fragments of burnt animal bone should be separated out, identified to species (where possible) and weighed. Pottery sherds should be examined for evidence of burning (indicating their presence as pyre

goods or grave goods as appropriate). All deposits should also be examined for further evidence of non-human bone, either burnt or unburnt.

Catalogue and report

21.5.5 All of the human remains from Peugeot Garage should be catalogued. The results of the osteological analysis should be reported with reference to palaeodemography, stature range and mean (for adult males and females), cranial and post-cranial indices as a measure of morphological variation, and non-metric traits as a possible indicator of kinship. Pathological evidence should be reported as an indicator of general health status, and where possible inferences should be made concerning any observable patterns of health and disease (e.g. temporally, as a product of social or economic variation). Where possible, juvenile health and diet should also be considered in relation to evidence for weaning, patterns of development and growth, and care. Oral health should be considered in relation to diet.

21.5.6 Osteological results should be integrated with data pertaining to the funerary archaeology. Where possible, suggestions should be made regarding cemetery layout and zoning, and chronological development. Evidence pertaining to burial and funerary ritual variation should be considered, including suggestion of continuity/change throughout the period of cemetery use, and the diversity and distribution of grave goods according to any perceived patterns or burial groupings. Comparisons with other contemporary sites should then be made in order to place the site into a regional and national context: this will be key to the interpretation of the Peugeot Garage assemblage.

Scientific analyses

21.5.7 It is recommended that a programme of aDNA and isotopic analysis is undertaken. Analysis of an appropriate sample of petrous bones has the potential to yield information on juvenile sex, ancestry, and patterns of kinship within the assemblage. Additionally, analysis of isotope ratios sampled from the cortical long bone/trabecular rib bone and tooth enamel will provide information on dietary composition, dietary variation (according to factors such as sex, age, socio-economic disparity), and geographic origin/mobility and population diversity. Samples taken from dental calculus deposits have the potential to provide information on human microbiota, and patterns of health and disease in relation to the urban living environment, particularly where pathogenic bacteria are identified. Results from this assemblage will contribute significantly towards evidence for population composition, diet, health, environment, familial groupings, and migration in Canterbury during the Roman period, and will build upon existing any existing data for the town and wider region.

21.5.8 Comparable analysis is presently being coordinated by CAT on the adjacent late Roman cemetery at Rhodaus Town with significant results (MacIntyre et al 2017). A sample size of between 10–20% of articulated human skeletons for further scientific analyses is proposed, to be confirmed following completion of full osteological analysis.

21.5.9 Skeleton 3501, from grave 54, may potentially be a candidate for facial reconstruction, given the completeness of the skull and mandible.

Future excavation

21.5.10 Assessment of the current assemblage found that, where skeletons were less than <25% complete, skeletal elements were often represented by numerous small bone fragments contained within a large soil matrix. Despite due care and attention by the osteologists, hand processing these soil deposits still only yielded small quantities of heavily fragmented bone (although preservation and recovery of teeth in these instances was good). Inspection of the *in situ* photographs of these poorly preserved burials indicated that some of the skeletons had survived as little more than bone 'shadows'. These 'shadows' represent the silhouette of the skeleton, in the form of a darker soil stain sometimes retaining the morphology of the different skeletal elements.

21.5.11 It is recommended that, should future excavations on or in the vicinity of the Peugeot Garage site occur, a different sampling and processing strategy is employed for skeleton 'shadows'. It is anticipated that processing times would be greatly reduced by recovering skeleton 'shadows' as environmental samples using an appropriate strategy (e.g. sampling by anatomical region, or creating a grid within the grave and sampling soil by grid square if the 'shadow' is more ephemeral

in character), and processing the recovered soil via wet sieving to 2mm. It is expected that the osteological material recovered and processed in this manner would be of the same quantity and quality as that processed by hand during the current assessment, but could be achieved at a faster rate. It may also be valuable to conduct more in depth *in situ* osteological recording on site where skeletal preservation is poor in order to maximise data recovery.

21.5.12 Furthermore, it is recommended that systematic environmental sampling be undertaken for all inhumation burials, with the aim of recovering surviving examples of small/microscopic biological remains. Recent osteological research has shown that soil samples taken from the skull, chest and pelvic areas of inhumation burials may yield mineral structures such as gallstones, kidney stones, bladder and urinary calculi, ossified cartilage and arteries, pleural plaques, hydatid cysts and the eggs of intestinal parasites (Edwards et al 2010; Waters-Rist et al 2014; Antikas and Wynn-Antikas 2015; Binder et al 2016; Mitchell 2017; Rose and Loe 2016). Such objects may be examined using techniques such as x-ray diffraction, scanning electron microscopy, CT scanning and aDNA analysis in order to provide further evidence for health and diet.

22 Assessment conclusions

22.1 Significance of the data

22.1.1 The archaeological excavation has successfully met the principal objective to ensure preservation by record of any archaeology where the proposed development would result in its permanent loss (CAT 2015a). Post-excavation assessment of this record has demonstrated that the archaeological data is sufficient to understand the character, form, extent and date of the archaeological deposits and features revealed, and to recover evidence for past environmental change.

22.1.2 The data complement the results of previous investigations and contributes to our understanding of the past land use and human activity within the local setting.

22.1.3 The level of significance of the data, where significance refers to the value of a heritage asset to this and future generations because of its heritage interest (NPPF 2012), has been assessed in accordance with Table 42.

Table 42. Levels of archaeological significance

Level	Criteria
Very high	Archaeological remains of International/National significance such as: • Evidence associated with designated World Heritage Sites, Scheduled Monuments, Protected Wrecks, Registered Battlefields or Listed Buildings • Non-designated remains of equivalent status to the above, such as those identified in national research frameworks as being significantly rare
High	Archaeological remains considered as being of particular significance according to national and regional and/or academic research frameworks, making a special contribution to knowledge of past societies
Moderate	Archaeological remains considered as being of District, Regional or academic significance, adding comparative data for developing knowledge of past societies
Low	Archaeological remains considered as being of local significance, such as: • Sites of a local or parish value or interest for education or cultural appreciation • Sites so badly damaged that too little remains to justify inclusion within a higher grade.
Negligible	Archaeological remains considered as being of little or no significance, or so badly damaged that too little remains to justify inclusion within a higher grade.

22.1.4 The archaeological significance for the excavated features and deposits is summarised by phase in Table 43.

Table 43. Summary of potential archaeological significance of stratigraphic narrative by phase

Phase	Period	Summary	Significance
1	Late Iron Age/ early Roman	Evidence for agricultural land use comprising remnant soil horizons (G2), sunken lane (G3) and coaxial field system (G4).	Moderate
2	Early/mid Roman	Change of land use evidenced by establishment of new boundary ditches (G5 and G6) aligned parallel with still extant sunken lane (G3), utilisation of northern land plot for clay and gravel extraction (G7), and occupation represented by pits (G8) and residual pottery assemblage. Data has potential to contribute to understanding of	Moderate

		wider impacts of Roman town development on immediate rural hinterland.	
3	Late Roman	Formal cemetery (G9) established between boundary ditches (G5 and G6). Earlier sunken lane (G3) still in active use. Provisional dating indicates that cemetery was in active use from the early fourth century through to the early fifth century. The cemetery contributes significant data both to the local and regional funerary and religious setting and has potential to provide a type-site in national syntheses of regional data.	High
4	Anglo-Saxon	Refuse pits (G10) containing mainly mid/late Anglo-Saxon domestic and industrial metalworking waste.	Moderate
5	Early medieval	Ditch (G11), representing part of an extra-mural defensive circuit, can be associated with an adjacent scheduled intra-mural Norman motte and bailey castle. Significant potential for environmental data from primary ditch fills. Refuse pits (G12), later ditch recut (G13), and southern boundary ditch (G14) all contribute to understanding this monuments place in the local setting.	High
6	High medieval	The extra-mural defensive circuit was occupied by the medieval manor of Dane John. Activity comprised a sequence of consolidation (G15), metalled surfaces (G16, G18, G20), and soil layers (G17, G19, G21, G23), representing use of the remnant ditch as a trackway, and associated refuse pits (G21).	Moderate
7	Late medieval	Archaeological remains were limited to refuse pits (G24), soil layers (G25) and potential field ditches (G26) reflecting a probable agricultural land use.	Low
8	Post-medieval to modern	Agricultural activity, represented by pits (G27), potential fence-lines (G28) and soil layers (G29), continued until construction of Kent County Pavilion and Canterbury Agricultural Hall (G30) in late nineteenth century. Modern features comprised Second World War air-raid shelters (G31), later intrusive features (G32), and machine removed deposits (G33).	Low

22.1.5 The potential archaeological significance of the excavated materials and requirements for further analysis is summarised in Table 44.

Table 44. Summary of potential archaeological significance of excavated materials

Material class	Principal specialist	Significance	Further work
Prehistoric struck flint	T Wilson	Low	Yes
Prehistoric pottery	B McNee	Low	No
Roman pottery	M Lyne	Moderate	Yes
Post-Roman pottery	L Barber	Moderate	Yes
Clay tobacco pipes	L Barber	Low	No
Ceramic building material	L Barber	Moderate	Yes
Mortar	L Barber	Low	No
Metallurgical residues	L Barber	Moderate	Yes
Registered finds	A Richardson	High	Yes
Glass	R Broadley	Moderate	Yes
Geological material	L Barber	Low	No
Animal bone	I Smith	Moderate	Yes
Bird bone	E Allison	Moderate	Yes
Fish bone	A Locker	Moderate	Yes
Plant remains	W Carruthers	Moderate	Yes
Insect remains	E Allison	Moderate	Yes
Human remains	L McIntyre	High	Yes

22.2 Project Research Design

22.2.1 The assessment results indicate that the project has a moderate to high research potential. The following research aims (RAs) have been determined to provide guidance during the post-excavation analysis and have been defined in consultation with the relevant sections of the draft regional research agenda as set out by the South East Research Framework (SERF 2016).

RA 1 How far can the limited prehistoric data contribute to our understanding of the local setting during the Neolithic, Bronze Age and Iron Age periods?

RA 2 What evidence for past environments, if any, can be determined and what evidence is there for change over time?

RA 3 What is the nature of land use and activity during the later Iron Age period and how does this data compare to other evidence recovered from the surrounding local setting?

RA4 How does the sunken lane relate to other contemporary settlement evidence and associated landscape features (eg field systems, other route ways)? Can its purpose and route be determined?

RA 5 How did the Roman conquest and 'Romanization' impact on land use and activity within the PDA and the wider local setting?

RA 6 Is there evidence for the methodology, organisation and management of the Roman quarrying? How does the evidence contribute to our understanding of Roman industrial clay and gravel extraction within the local and regional setting?

RA 7 Provide a more closely dated chronology for the foundation, active use, and decline of the Roman cemetery, for example, through radiocarbon dating. How far can this refined chronology determine the morphology of the cemetery use? What evidence for spatial and temporal patterning in the cemetery and burial practise can be determined? Is the end use of the cemetery related to wider local and regional decline?

RA 8 How far can the Roman cemetery data contribute to our understanding of the funerary process and changing attitudes towards death, the afterlife and religious belief?

RA 9 How does the Roman cemetery data relate to the wider local setting? How does the cemetery contribute to our understanding of Canterbury's funerary and religious landscape? Why did the cemetery develop where it did, what influence did the proximity to potential late Iron Age or early Roman funerary mounds and a contemporary Romano-British temple have on its location and morphology, and how does the cemetery relate to other known Roman burials in the surrounding area?

RA10 How far can the cemetery data contribute to our knowledge of Canterbury's Roman population (paleodemography, kinship, health, diet, population ancestry, mobility, and diversity). What can comparison with other urban and rural cemetery populations tell us about the status and composition of the population buried at Rhodaus Town?

RA11 Can the evidence for mid/late Anglo-Saxon activity be related to settlement evidence within the local setting? Is there evidence that such activity was associated with an Anglo-Saxon estate?

RA 13 How does evidence for metalworking from the mid/late Anglo-Saxon pits compare with other metalworking assemblages within the local setting (eg Canterbury Christ Church University Campus and Lower Chantry Lane)? Are other industrial processes (eg malting), represented within the pit refuse?

RA12 Can the date for establishment, use and abandonment of the early medieval extra-mural defensive ditch be determined? Can the strategic significance and morphology of the extra-mural defences be defined? How do the extra-mural defences relate to other known early medieval defences in Canterbury? How did the extra-mural defences impact on existing land use (eg contemporary field boundaries) and settlement within the local setting?

RA13 What role did the extra-mural defences have following the replacement of the intra-mural Norman motte and bailey with a new stone-built keep located on Castle Street?

RA14 Can the replacement of the former extra-mural defensive ditch by a metalled trackway in the high medieval period be associated with the foundation of the Dane John Manor and farm?

RA15 Do sufficient documentary sources survive to establish a historical narrative for the Dane John Manor and surrounding area?

RA16 What does activity during the high medieval and late medieval periods tell us about land use within the local setting and how does this compare to other Canterbury suburbs?

22.3 Proposed analysis tasks

22.3.1 Recommended analysis tasks, personnel, and estimated number of days are listed below (Table 45).

Table 45. Summary of proposed analysis tasks

Material	Principal specialist	Task	Days
Prehistoric struck flint	T Wilson	Analysis 50% sample	0.5
	T Wilson	Catalogue	0.5
	T Wilson	Report text	0.5
	B McNee	Illustration (3 items)	0.5
Roman pottery	M Lyne	Report text	3
Post-Roman pottery	L Barber	Check sherds/fabrics	0.5
	L Barber	Integrate stratigraphic data	0.75
	L Barber	Analysis of key assemblages/spatial distribution	1
	L Barber	Report text	1.5
	B McNee	Illustration (20 items)	3
Ceramic building materials	L Barber	Integrate stratigraphic data	1
	L Barber	Correlation with former CAT fabric series	1.5
	L Barber	Analysis of key assemblages/spatial distribution	1
	L Barber	Report text	1
	B McNee	Illustration (2 items)	0.5
Metallurgical residues	L Barber	Integrate stratigraphic data	0.5
	L Barber	Analysis of key assemblages/spatial distribution	0.5
	L Barber	Comparison with other key sites (CCCU)	0.5
	L Barber	Publication text	1
Registered finds	D Goodburn	Funerary fittings catalogue and text	10
	A Richardson	Funerary/non funerary registered finds catalogue and text	10
Glass	R Broadley	Catalogue and report text	1.5
Animal bone	I Smith	Mandibular rows, all appendicular parts	4
	I Smith	Vertebrae, ribs, other mandibular parts	1
	I Smith	Literature search and biometric comparanda search	2
	I Smith	Analysis	2
	I Smith	Publication text	4
Fish bones	A Locker	Complete species identification	1
	A Locker	Report text	1
Plant remains	W Carruthers	Analysis and report text	14
	Queen's University Belfast	8 × 14C AMS dates	tbc
Insect remains	E Allison	Analysis, recording and report text	9
Human remains	L McIntyre	Full analysis 195 articulated remains (4/day)	49
	L McIntyre	Full analysis 1 cremation deposit	0.5
	L McIntyre	Reporting and catalogue (incl. integration of scientific analyses)	15
	L McIntyre	XR Diffraction/Infrared spectroscopy to identify calculi (5 samples)	tbc
	L McIntyre	Radiography (5 samples)	tbc

Material	Principal specialist	Task	Days
	M Jay	C and N isotopes (20% sample)	tbc
	M Jay	Sr isotopes (20% sample)	tbc
	M Jay	O isotopes (20% sample)	tbc
	M Jay	Isotope report	1
	R Pinhasi	aDNA haplogroups, relationships and juvenile sex (20% sample)	tbc
	Queen's University Belfast	20 × 14C AMS dates	tbc
Stratigraphic narrative	R Helm	Phase, Group, Set analysis and integration of specialist data	5

22.4 Publication

22.4.1 An interim synthesis report on the project results has been published in *Canterbury's Archaeology 2015–2016* (Helm 2017).

22.4.2 The project results are considered to hold sufficient research significance to warrant full publication.

22.4.3 In consultation with the Canterbury City Council Archaeological Officer, it is recommended that the final project results be integrated with data recovered during adjacent archaeological investigations within Rhodaus Town. These include excavation conducted to the rear of Rhodaus Town undertaken on behalf of Petros (Canterbury) Ltd, and proposed excavations to be conducted within the former Canterbury Christ Church Arts Centre (5 and 5a Rhodaus Town) on behalf of Sunley Holdings Ltd, and at the former site of the St Mary Bredin School and Mound, on behalf of Canbury Holdings Ltd.

22.4.4 To achieve this outcome, it is proposed all projects be completed to the post-excavation analysis stage before a final monograph integrating the results be produced.

22.5 OASIS Record

22.5.1 An OASIS (Online AccesS to the Index of archaeological investigationS) record has been created for this project (http://oasis.ac.uk/form/formctl.cfm?oid=canterbu3-286184).

22.5.2 The OASIS record will be updated following completion of the proposed analysis tasks and will be submitted to the Kent Historic Environment Record. This will include a digital .pdf version of the full archive report (Appendix 1).

22.6 Archive storage and curation

22.6.1 On completion of the project objectives and in accordance with the project specification (CAT 2015a), Canterbury Archaeological Trust will arrange transfer of the full documentary and material archive to Canterbury City Museums for long term storage.

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Appendix 1. OASIS Record Form

OASIS ID: canterbu3-286184

Project details

Project name	Peugeot Garage, Rhodaus Town, Canterbury
Short description of the project	Excavation in advance of development (CA/15/000602/FUL) on behalf of Canbury Holdings Ltd at the former Peugeot Garage site, Rhodaus Town, Canterbury (NGR 614921 157363). The excavation area totalled 6,460m2, and was conducted between 28 Sept 2015 and 21 Feb 2016. Archaeological data spanning the Neolithic, Bronze Age, Iron Age, Roman, Anglo-Saxon, medieval and post-medieval periods was recovered. Significant archaeology included: a late Iron Age sunken lane and coaxial field system; evidence for early Roman clay and gravel extraction; a late Roman inhumation cemetery active between the early fourth century through to the early fifth century AD; mid to late Anglo-Saxon refuse pits containing a mix of domestic waste and metalworking residues including evidence for smelting and smithing; an early medieval defensive ditch forming one side of an extra-mural defensive circuit, potentially part of an outer bailey to a Norman motte and bailey castle focused on the Dane John Mound and Gardens; later medieval activity comprising pits and a trackway following the line of the defensive circuit and associated with foundation of the Dane John Manor within its extents; and associated agricultural activity continuing until development of the site in the late nineteenth century both as an agricultural exhibition hall and roller skating rink. From the early twentieth century the site was acquired by the Canterbury Motor Company and continued as a garage, under different ownerships, until the present development.
Project dates	Start: 28-09-2015 End: 21-02-2016
Previous/future work	Yes / No
Any associated project reference codes	PGC EX 15 - Sitecode
Any associated project reference codes	CA/15/000602 - Planning Application No.
Type of project	Recording project
Site status	Area of Archaeological Importance (AAI)
Current Land use	Transport and Utilities 3 - Utilities
Monument type	BOUNDARY FENCE Post Medieval
Monument type	BUILDINGS Post Medieval
Monument type	AIR RAID SHELTER Modern
Monument type	HOLLOW WAY Late Iron Age
Monument type	HOLLOW WAY Roman
Monument type	COAXIAL FIELD SYSTEM Late Iron Age
Monument type	BOUNDARY DITCH Roman
Monument type	EXTRACTIVE PITS Roman
Monument type	PITS Roman
Monument type	INHUMATION CEMETERY Roman
Monument type	CREMATION BURIAL Roman

Monument type	PITS Early Medieval
Monument type	OUTER BAILEY Medieval
Monument type	PITS Medieval
Monument type	BOUNDARY DITCH Medieval
Monument type	TRACKWAY Medieval
Monument type	PITS Post Medieval
Significant Finds	LITHIC IMPLEMENT Neolithic
Significant Finds	LTHIC IMPLEMENT Bronze Age
Significant Finds	POT Late Bronze Age
Significant Finds	POT Iron Age
Significant Finds	POT Roman
Significant Finds	POT Early Medieval
Significant Finds	POT Medieval
Significant Finds	POT Post Medieval
Significant Finds	CERAMIC BUILDING MATERIAL Roman
Significant Finds	ANIMAL BONE Roman
Significant Finds	ANIMAL BONE Early Medieval
Significant Finds	ANIMAL BONE Medieval
Investigation type	Full excavation
Prompt	Planning condition

Project location

Country	England
Site location	KENT CANTERBURY CANTERBURY Former Peugeot Garage, Rhodaus Town, Canterbury
Postcode	CT1 2RH
Study area	6460 Square metres
Site coordinates	TR 14921 57363 51.274197900277 1.081701905724 51 16 27 N 001 04 54 E Point
Height OD / Depth	Min: 15m Max: 18m

Project creators

Name of Organisation	Canterbury Archaeological Trust
Project brief originator	Local Planning Authority (with/without advice from County/District Archaeologist)
Project design originator	Canterbury Archaeological Trust
Project director/manager	Richard Helm
Project supervisor	Damian Boden
Project supervisor	Adrian Gollop
Type of sponsor/funding body	Developer

Name of sponsor/funding body	Canbury Holding Ltd

Project archives

Physical Archive recipient	Canterbury City Museum
Physical Archive ID	3692
Physical Contents	''Animal Bones'',''Ceramics'',''Environmental'',''Glass'',''Human Bones'',''Industrial'',''Metal'',''Wood'',''Worked stone/lithics'',''other''
Digital Archive recipient	Canterbury City Museum
Digital Archive ID	3692
Digital Contents	''Animal Bones'',''Ceramics'',''Environmental'',''Glass'',''Human Bones'',''Industrial'',''Metal'',''Stratigraphic'',''Survey'',''Worked stone/lithics'',''other''
Digital Media available	''Database'',''GIS'',''Images raster / digital photography'',''Images vector'',''Spreadsheets'',''Survey'',''Text''
Paper Archive recipient	Canterbury City Museum
Paper Archive ID	3692
Paper Contents	''Environmental'',''Human Bones'',''Stratigraphic'',''Survey'',''other''
Paper Media available	''Context sheet'',''Correspondence'',''Drawing'',''Manuscript'',''Map'',''Matrices'',''Miscellaneous Material'',''Notebook - Excavation',' Research',' General Notes'',''Photograph'',''Plan'',''Report'',''Section'',''Survey '',''Unpublished Text''

Project bibliography 1

An article/chapter in published monograph

Publication type	
Title	Rhodaus Town revisited
Multi-article monograph title	Canterbury's Archaeology 2015-2016
Author(s)/Editor(s)	Helm, R.
Serial or multi article editor(s)	Elder, J.
Page numbers	15 - 23
Date	2017
Issuer or publisher	Canterbury Archaeological Trust
Place of issue or publication	Canterbury
ISBN	978-1-870545-36-5
Description	Interim synthesis on excavation in the Annual Review of the Canterbury Archaeological Trust

Project bibliography 2

Grey literature (unpublished document/manuscript)

Publication type	
Title	Former Peugeot Garage, Rhodaus Town (A28), Canterbury, Kent CT1 2RH. Post-excavation assessment
Author(s)/Editor(s)	Helm, R.
Author(s)/Editor(s)	Wilson, T.
Author(s)/Editor(s)	McNee, B.
Author(s)/Editor(s)	Lyne, M.
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Place of issue or publication	Canterbury
Description	Post-excavation Assessment report

Entered by	Richard Helm (richard.helm@canterburytrust.co.uk)
Entered on	7 June 2017

Plate 1 Panoramic view of Rhodaus Town area, showing the Peugeot Garage site (foreground), former St Mary Bredin School building (far centre), and the city wall with Dane John mound and gardens behind (right). Looking west

Plate 2. General view showing excavation works in progress, looking north-west

Plate 3. Geomorphological sampling following removal of underground storage tanks, looking north-east (scale 2m)

Plate 4. Section though G3 sunken lane (S5093), looking south-west (scale 1m)

Plate 5. Trench 1 following machine excavation, looking south-east (scale 1m)

Plate 6. G4 field system ditch S3090, looking north-west (scale 0.5m truncated by G5 boundary ditch S3034

Plate 7. G4 field system G4 ditch S3395, looking south-east (scale 0.5m)

Plate 8. Section through G4 fieldsystem ditch S3020 and G8 pit S3018, looking south-east (scale 1m)

Plate 9. G5 north boundary ditch, showing section through S3058 and recut S3062, looking south-west (scale 2m)

Plate 10. G5 north boundary ditch, looking north-east (scale 1m and 2m)

Plate 11. G6 south boundary ditch showing section through S5070 and recut S5067, looking south-west (scale 1m)

Plate 12. G7 quarry pits in background, and G8 pits S1005, S1009 and S1013 in foreground, looking north-west

Plate 13. Intervention through G7 quarry pits, looking south-east

Plate 14. G8 pit S3032, looking north-west (scale 1m)

Plate 15. G8 pit S3304, looking north-east (scale 1m)

Plate 16. G9 cemetery during excavation, showing (from left to right) graves 66, 81, 95 and 84, looking north-east

Plate 17. Grave 68 inhumation burial 3536 contained within timber coffin, represented by soil stain and iron nails, with stone lining

Plate 18. Grave 9/10/11 multiple inhumation burial comprising an adult 3141, older child 3142 and juvenile 3143, looking south-west (scale 0.2m)

Plate 19. Grave 2 multiple burial, comprising one young child 3105 and one older child 3106/7 whose burial rite included decapitation, looking south-west (scale 0.5m)

Plate 20. Grave 141 decapitation burial of young child 2554. The head has been separated from the body after death and placed at the body's feet, looking south-west (scale 0.5m)

Plate 21. Grave 207 showing in situ tegula (roof tile) forming lid above inhumation burial, looking north (scale 0.5m)

Plate 22. Grave 207 showing poorly preserved remains of young child 5188 below tegula lid, looking north (scale 0.5m)

Plate 23. Grave 64 inhumation burial 3541 in timber coffin, looking south-west (scale 0.5m)

Plate 24. Grave 64 detail of copper alloy bracelet (SF265) placed to left of skull 3541 (scale 10cm)

Plate 25. Grave 64 detail of in situ silver hairpin (SF246). A copper alloy hairpin was located below the skull (scale 5cm)

Plate 26. Grave 152 showing in situ silver buckles (SF410 and SF411) and iron object (SF412), looking north-west (scale 0.5m)

Plate 27. Grave 152 detail showing preservation of skull 3822 (scale 5cm)

Plate 28. Silver buckles (SF410 and SF411) from grave 152, before conservation

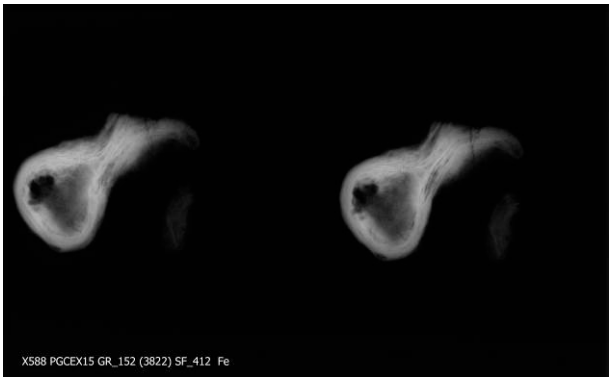

Plate 29. X-ray image of iron object (SF412) from grave 152

Plate 30. Grave 193 cremation burial showing cinerary earn (right), with accompanying ampulla (centre) and dish (left), looking west

Plate 31. Group 10 pit S2510 showing waste furnace bottom, looking south-east (scale 1m)

Plate 32. G10 pit S2519 containing metalworking waste, looking south-east (scale 0.5m and 1m)

Plate 33. G10 pit 3719, looking south (scale 0.5m)

Plate 34. G10 pit S3285, looking south-west (scale 1m)

Plate 35. G10 pit S3121, possibly a sunken featured building, looking south-east (scale 1m)

Plate 36. G11 ditch S2174 and G13 recut S2413 during excavtion, looking north-east

Plate 37. G11 ditch S2174 and G13 recut S2413, looking south-west (scale 1m and 2m)

Plate 38. G11 ditch S2174, looking south-west (scale 1m)

Plate 39. G11 ditch S2953 and G13 recut S4198, looking west

Plate 40. Collection of micromorphological samples from the G11 ditch S2953, looking west

Plate 41. G11 ditch S2278 and G13 recut S2280, looking north-west (scale: 1m)

Plate 42. G14 south boundary ditch S5044, and later recuts S5040 and S5036, looking south-west (scale 1m)

Plate 43. Section showing sequence of consolidation (G15), metalled surfaces (G16, G18, G20), soil layers (G17, G19, G21) overlying former defensive ditch G11 and recut G13, looking west (scale 1m)

Plate 44. G22 pit 3026, looking north-west (scale 1m)

Plate 45. G24 pit S2372, looking north-east (scale 1m)

Plate 46. G26 linear S2075, looking north-west (scale 1m)

Plate 47. G26 linear S2130, looking south-west (scale 1m)

Plate 48. G27 pit S1003, looking south-east (scale 10cm)

Plate 49. Glass bottle containing hand-written note from G27 pit S1003

Plate 50. Leather object from G27 pit S1003

Plate 51. Metal objects from G27 pit S1003

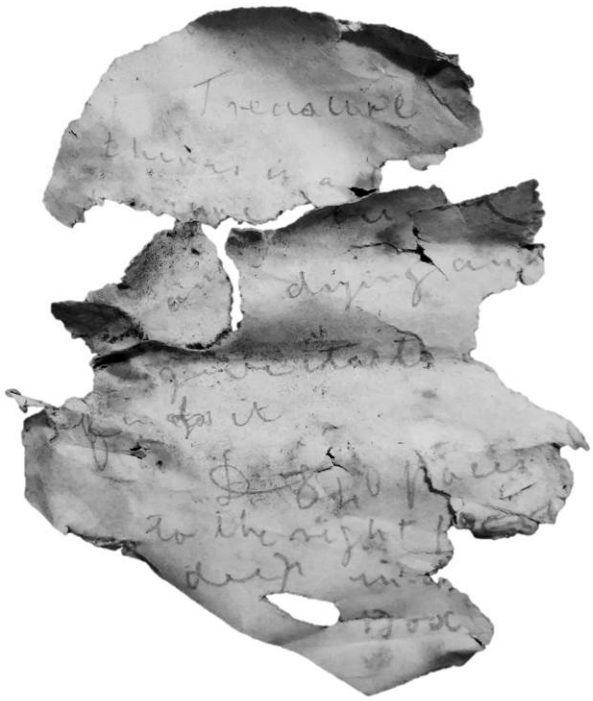

Plate 52. Hand-written note from G27 pit S1003

Plate 53. G27 pit 2054, looking south-east (scale 1m)

Plate 54. G28 post-hole S5288, looking north-east (scale 10cm)

Plate 55. G31 air-raid shelter S3339, looking south-west (scale 1m)

Plate 56. G31 air-raid shelter S5291 showing concrete entrance stair-way, looking north-east (scale 0.5m)

Plate 57. G31 air-raid shelter S2048, looking north-west (scale 1m)

Plate 58. G31 air-raid shelter S2048 following removal of reinforced concrete roof, looking north-west (scale 1m)

Plate 59. G31 air-raid shelter S2048 showing construction cut through G27 pit S2054, looking east (scale 1m)

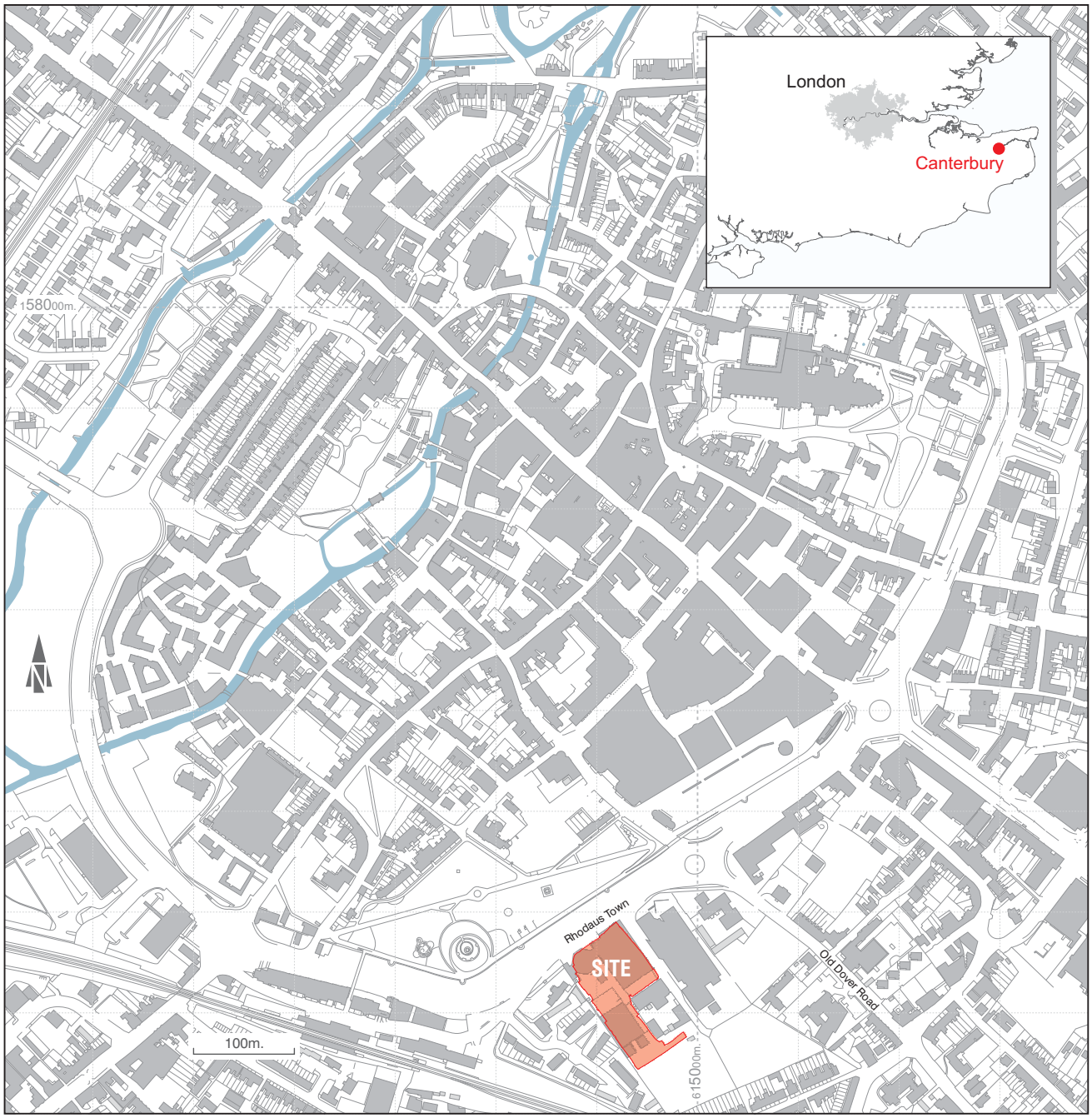

Fig 1. Site location (scale 1:6,250).

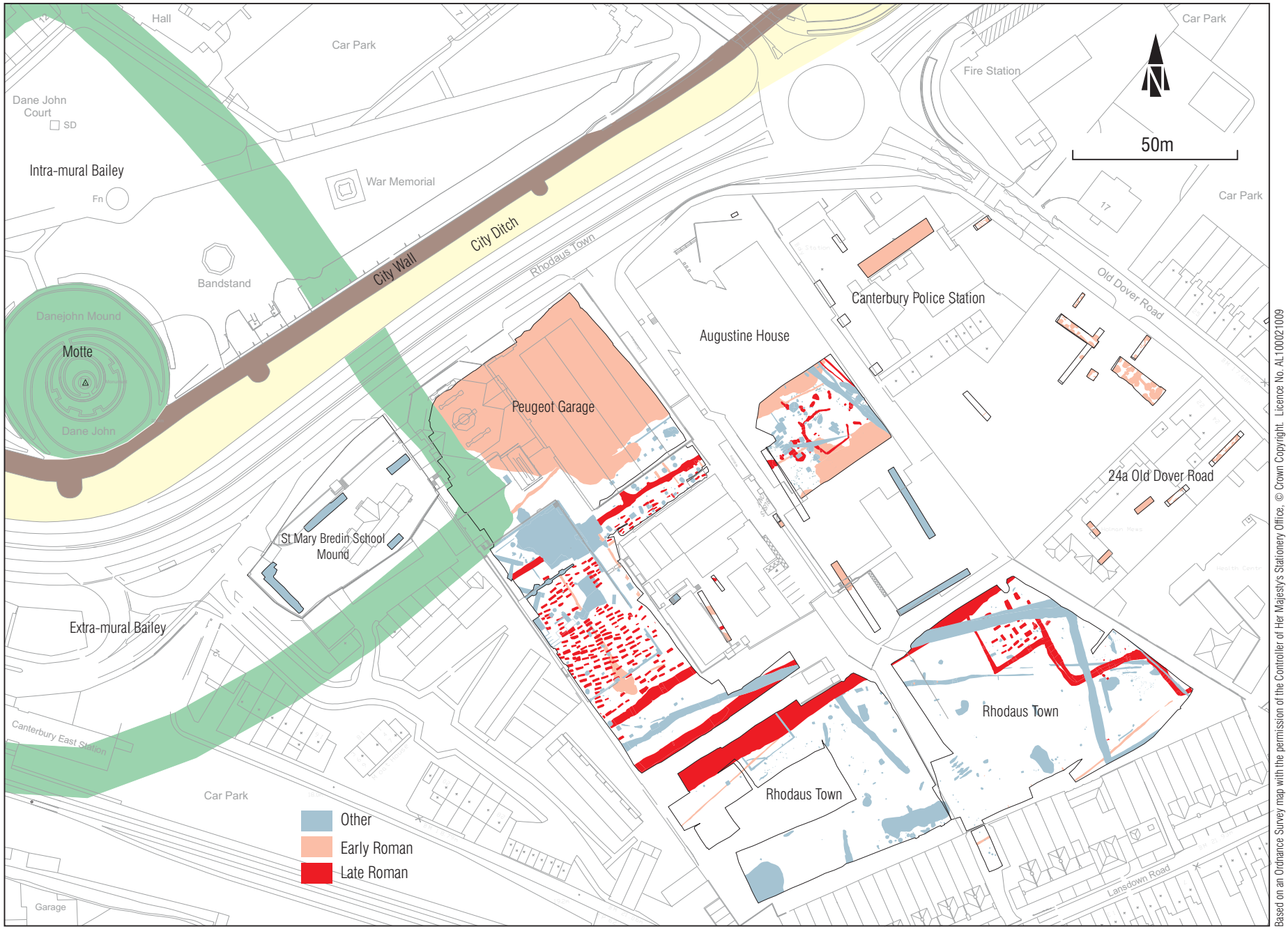

Fig 2. Excavated area showing previous archaeological investigations (1:1600)

Fig 3. Phase 1: late Iron Age/early Roman (1:500)

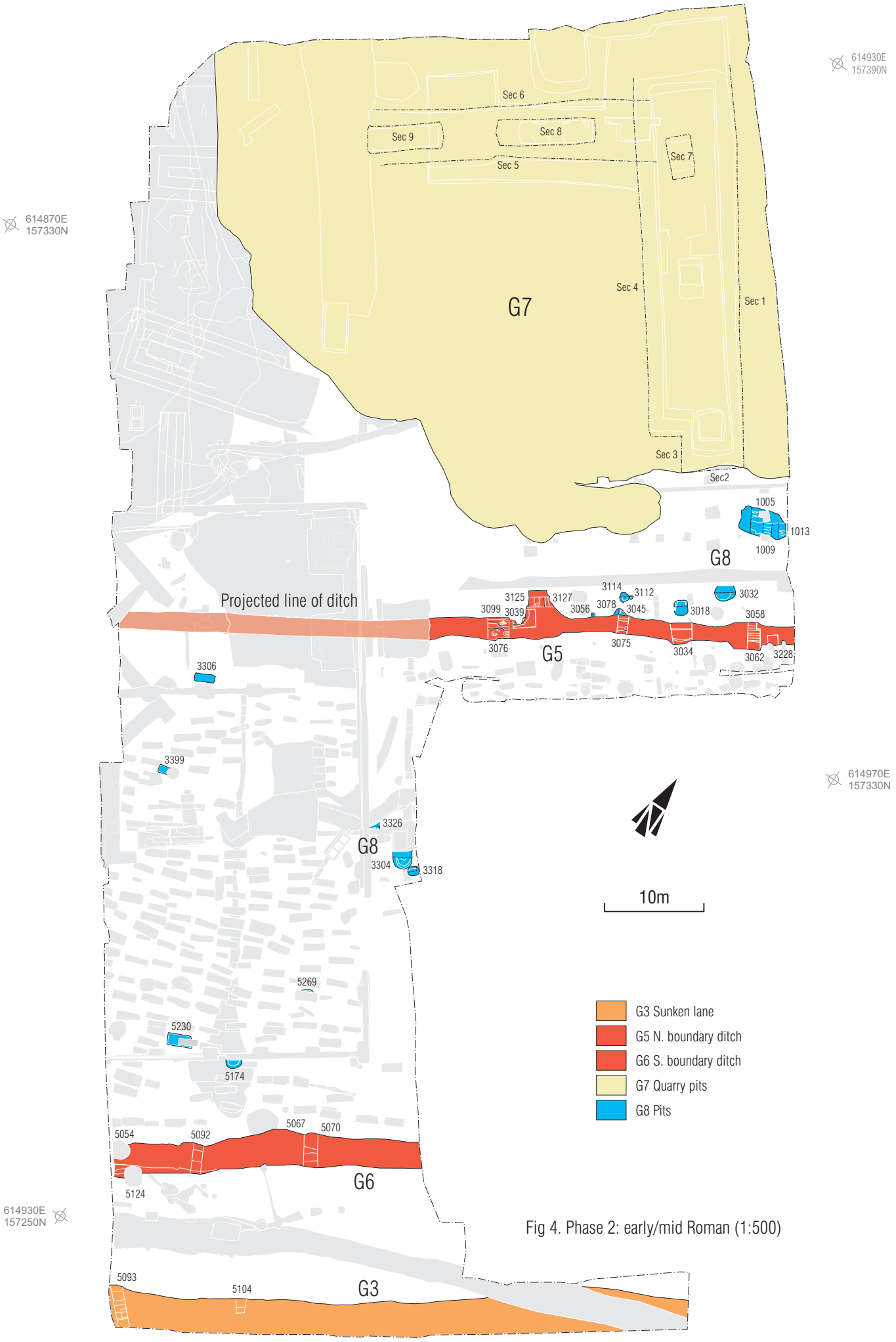

Fig 4. Phase 2: early/mid Roman (1:500)

Fig 5. Phase 3: mid/late Roman (1:500)

Fig 6. Phase 4: Anglo-Saxon (1:500)

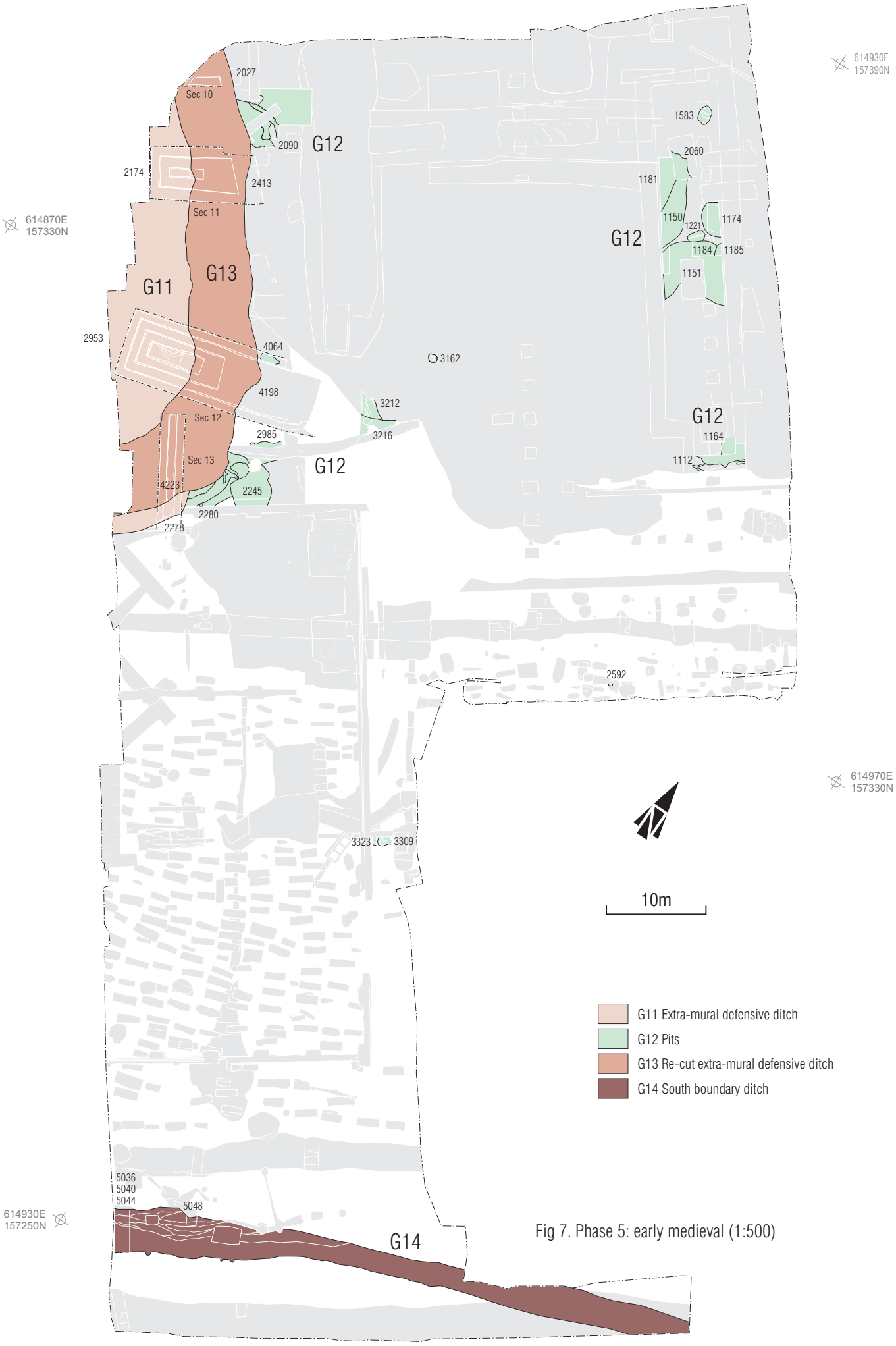

Fig 7. Phase 5: early medieval (1:500)

Fig 8. Phase 6: high medieval (1:500)

Fig 9. Phase 7: late medieval (1:500)

Fig 10. Phase 8: post-medieval to modern (1:500)

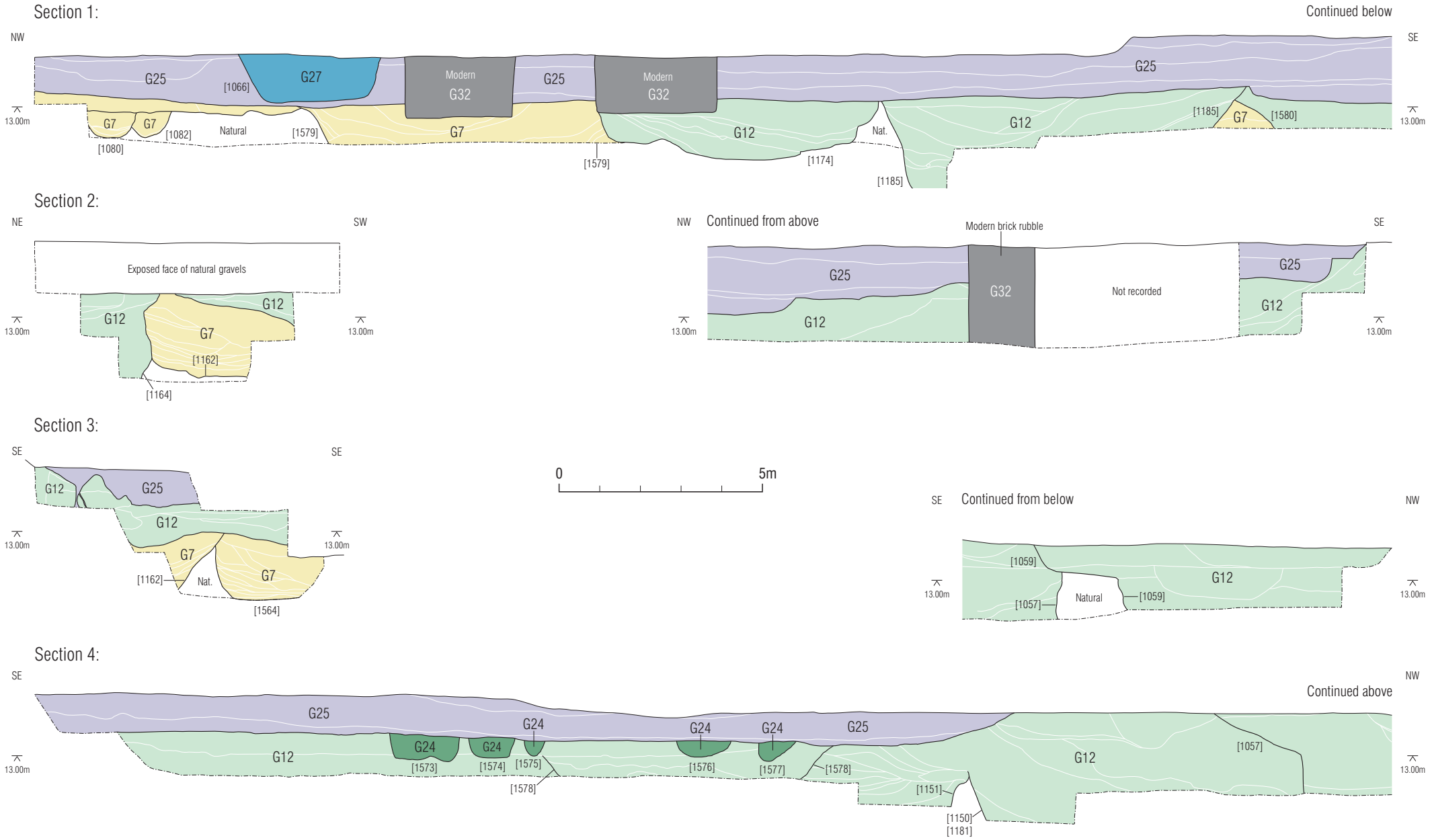

Fig 11. Sections 1 to 4 through quarry area (1:125)

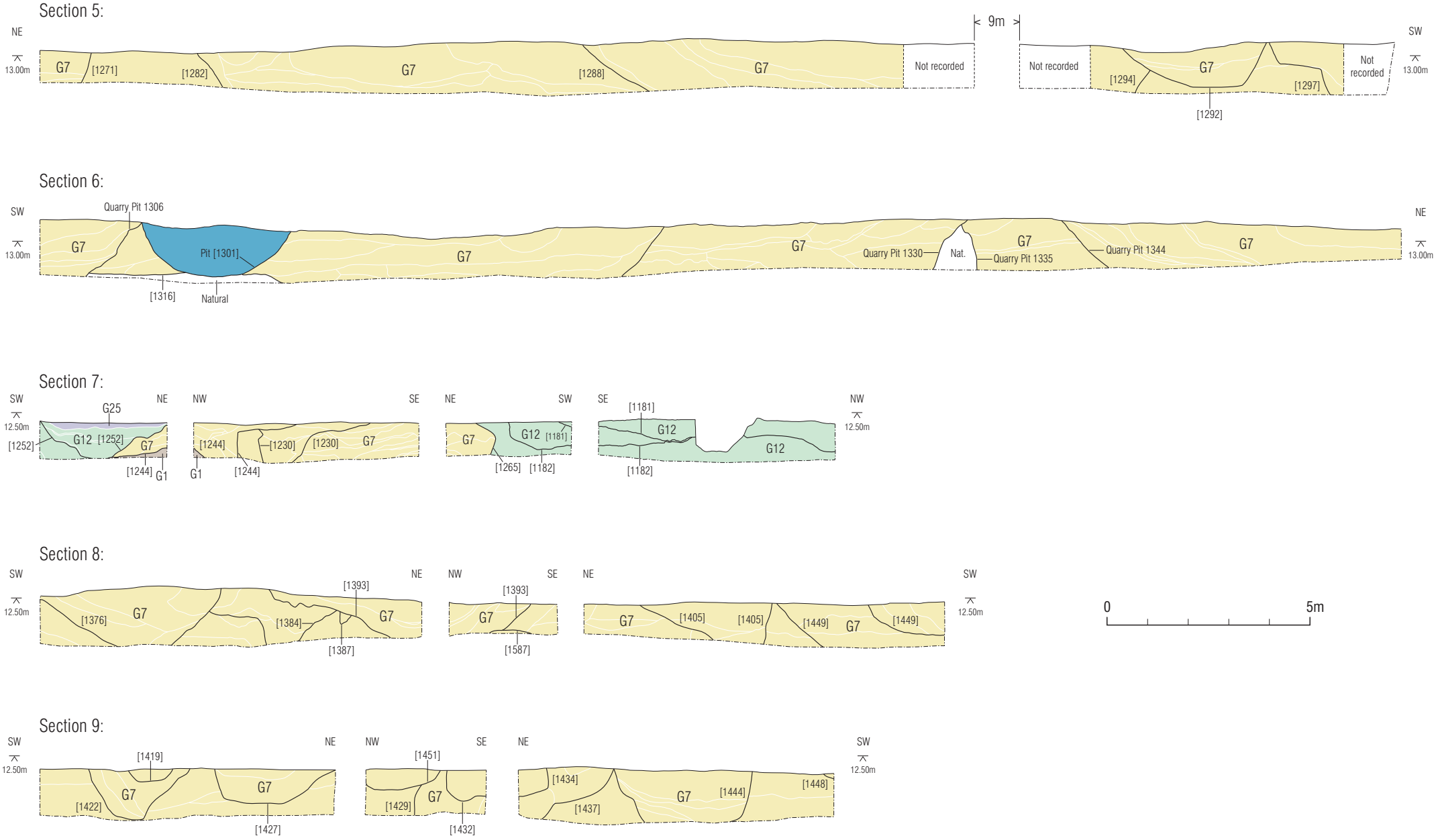

Fig 12. Sections 5 to 9 through quarry area (1:125)

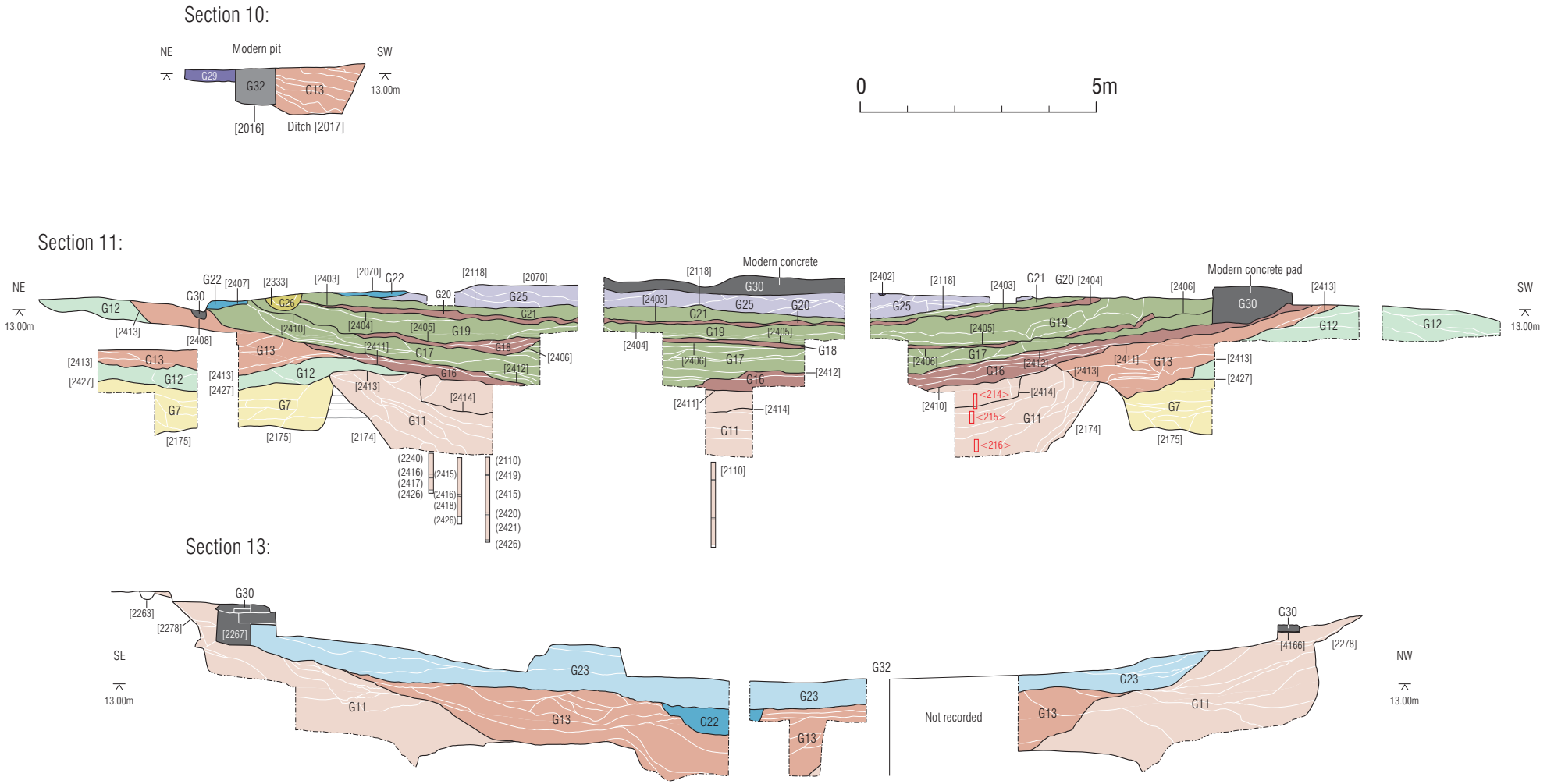

Fig 13. Sections 10, 11 & 13 through ditch area (1:125)

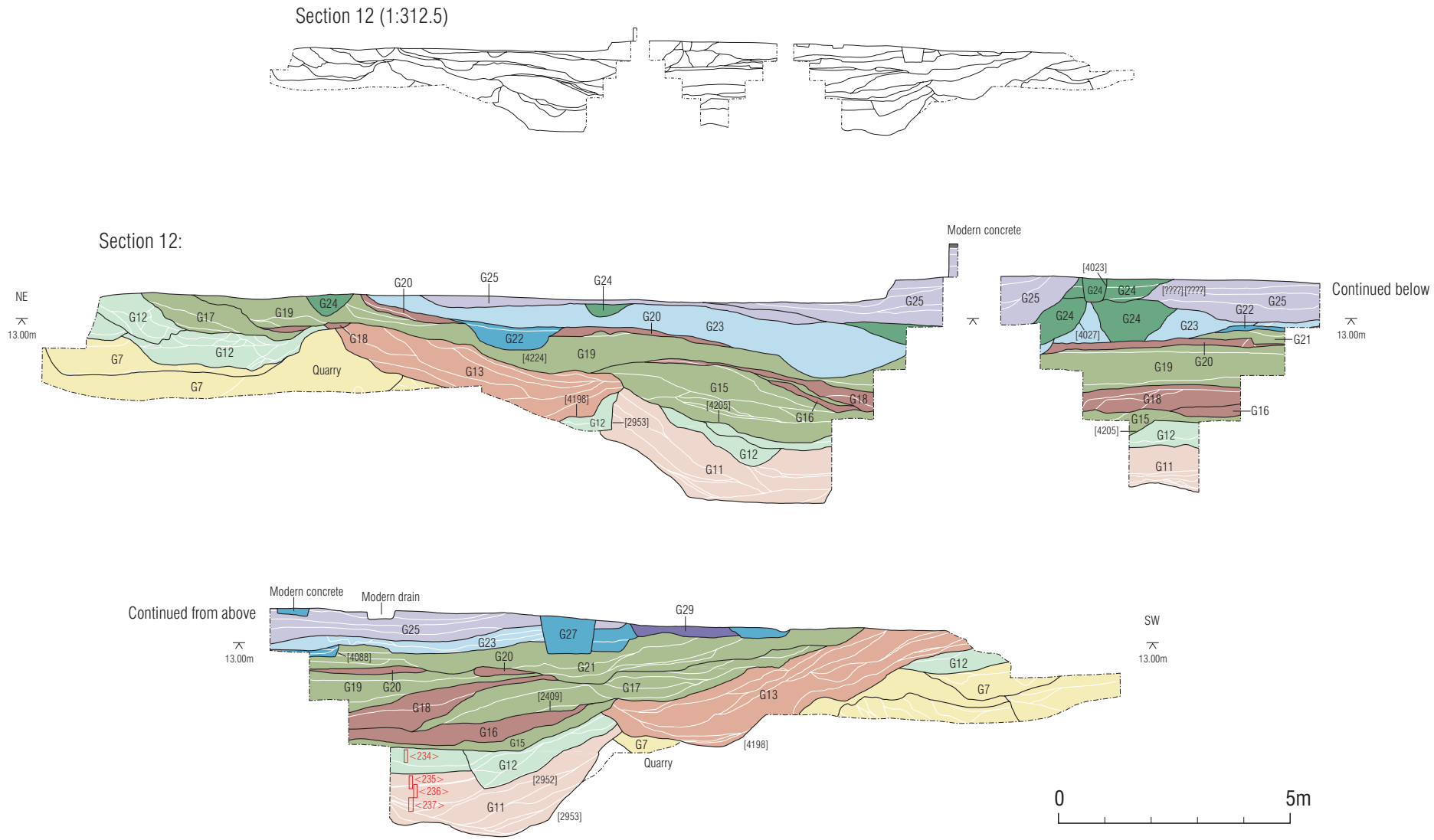

Fig 14. Section 12 through ditch area (1:125)