

**AN ARCHAEOLOGICAL EVALUATION AND ASSESSMENT OF AN
EXCAVATION AT WEST HILL HOSPITAL, DARTFORD, KENT**

Central National Grid Reference: TQ 5370 7430

Site Code: KWHH05

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1 ABSTRACT

- 1.1 This report details the results and working methods of an archaeological evaluation and excavation undertaken by Pre-Construct Archaeology at the former West Hill Hospital, Dartford between the 26th of September and the 18th of October 2005. The site is centred at National Grid Reference TQ 537 743. The archaeological work was commissioned by Lorraine Darton of CgMs Consulting Ltd on behalf of Barratt South London.

- 1.2 The work produced tentative evidence of Late Bronze Age activity and part of a Mid-Late Iron Age settlement, which included the remains of two roundhouses. Subsequently the area was used as a cemetery during the Roman period.

2 INTRODUCTION

- 2.1 An archaeological field evaluation and subsequent excavation were undertaken by Pre-Construct Archaeology Ltd between the 26th of September and 18th of October 2005 at the site of the former West Hill Hospital, West Hill, in Dartford Kent. The site is centred on National Grid Reference TQ 537743. The archaeological work was commissioned by Lorraine Darton of CgMs Consulting Ltd on behalf of Barratt South London.
- 2.2 The site had previously been the subject of a deskbased assessment (Chadick and Meager 2004) and an archaeological impact assessment (Darton and Failey 2005). These reports stated that the archaeological potential for remains pertaining to the Palaeolithic, Mesolithic, Neolithic, Bronze Age, Saxon and Medieval periods were negligible. However there was potential for Iron Age material on the North side of the site where fragments of pottery of Iron Age date were found in 1934. In addition there was a possibility for remains of Roman date, as Roman Watling Street ran immediately to the South of the site. The chances for material of post-medieval date, other than those of the late 19th century and 20th century hospital were considered slight. The impact assessment suggested that the site had been subject to significant truncation, caused by terracing of the land associated with the construction of the hospital premises.
- 2.3 Twenty-two evaluation trenches were planned within the area of the site and 18 of these were excavated and recorded. Excavation could not take place in 4 of the trenches (Trenches 2, 7, 14 and 18) because asbestos contamination proved to be a significant issue in these locations, as a result of which no excavation or recording of these trenches was possible.
- 2.4 In the evaluation exercise archaeological features were encountered at the extreme South side of the site, adjacent to the former Roman Watling Street. In addition significant evidence for Iron Age activity was found in the northern sector of the development area where previously Iron Age artefacts had been uncovered. Following consultation with the responsible Kent County Council archaeological officer two excavation areas were

opened up. These comprised trench 1 on the southwest side of the site, which measured 117m², and trench 2 on the north side which measured 183 m².

2.5 The archaeological evaluation and excavation were supervised by Ireneo Grosso, and the present report, detailing both the results of the evaluation and excavation was written and researched by Lisa Yeomans for Pre-Construct Archaeology Ltd.

2.6 The complete archive comprising written, drawn and photographic records as well as all artefacts and ecofacts, from both the evaluation and excavation will be deposited in an appropriate local archive when identified under the site code KWHH05

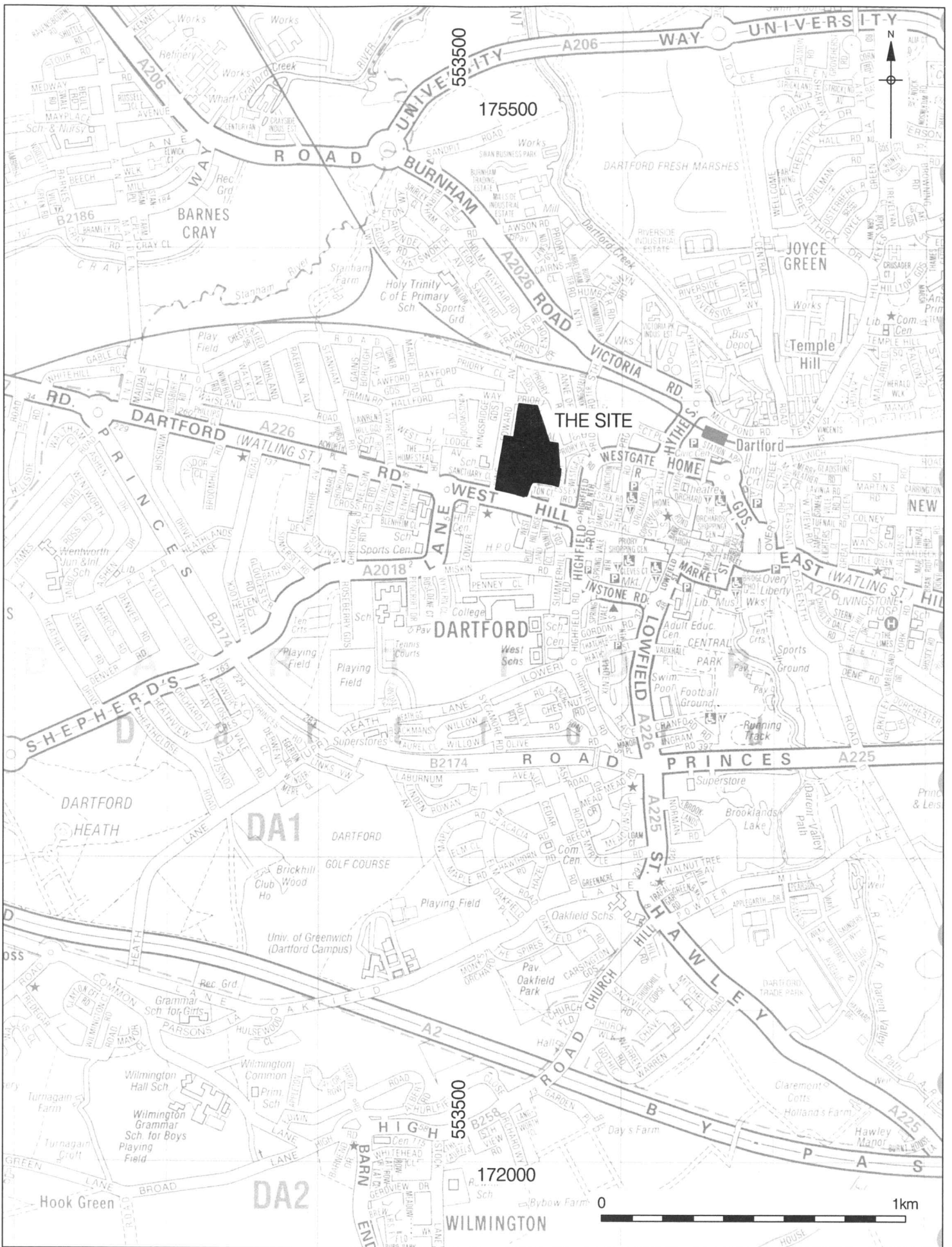


Figure 1
 Site Location
 Scale 1:1600

3 PLANNING BACKGROUND

3.1 The site at the former West Hill Hospital, Dartford, Kent has planning consent for residential development. An archaeological desk based assessment was submitted and planning consent was granted (DA/05/00283) subject to the completion of an archaeological impact assessment.¹ As a result the County Archaeological Officer recommended the need for archaeological fieldwork and a specification for an archaeological field evaluation was written.² The results of the evaluation led to the requirement of two areas of open area excavation where significant archaeological features were identified.

3.2 Dartford Borough Council attached the following planning condition to the planning consent:

No development shall take place until details of foundation designs and any other proposals involving below ground excavation have been submitted to, and approved by the Local Planning Authority. Development shall be carried out in accordance with the approved details.

No development shall take place until the applicant, or their agents or successors in title, has secured the implementation of

i archaeological field evaluation works in accordance with a specification and written timetable which has been submitted to and approved by the Local Planning Authority;

and

ii following on from the evaluation, any safeguarding measures to ensure preservation in situ of important archaeological remains and/or further archaeological investigation and recording in accordance with a specification and timetable which has been submitted to and approved by the Local Planning Authority.

¹ Darton and Gailey 2005

² Darton 2005

4 GEOLOGY AND TOPOGRAPHY

- 4.1 The British Geological Survey (sheet 271 Dartford 1998) shows the geological sequence at site as Upper Chalk capped by Boyn Hill gravels. However, the distribution of the Boyn Hill gravels is more complex and geotechnical investigations recorded a clayey Head deposit (with variable sand, gravel and chalk inclusions) capping the Upper Chalk in the north and west of the site with isolated pockets in the southeastern area of the site.³ The Head deposits were recorded as c.1m thick in the north and west of the site reducing to c. 0.65m towards the east. The gravel in the Head deposit is not in its primary depositional context having moved down-slope from river terrace deposits at higher levels.
- 4.2 The geological sequence in the eastern half of the site has been truncated with the Upper Chalk itself partially terraced away for the foundations of the hospital.
- 4.3 The site is located on the western side of the river Darent valley with the topography sloping gently from west to east. Foundations for the hospital were terraced into the natural slope of the land. The river itself is approximately 500m to the east of the study site.
- 4.4 West Hill, to the South of the site is on the line of the Roman road known as Watling Street. The southern part of the site is at a considerably higher level than that of the Roman road. It may be that the road's construction involved the reduction in height of the crest of the hill it was crossing.

³ Darton and Gailey 2005

5 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

5.1 Prehistoric

- 5.1.1 The site is situated close to the Boyn Hill Terrace, which is a gravel deposit that has produced Palaeolithic material. However, geotechnical pits and boreholes have shown that the gravel is absent from the site. Most of the area of the site has been truncated by terracing prior to the construction of the hospital.
- 5.1.2 In c. 1934 fragments of two Iron Age urns were discovered in the north part of the site suggesting that an Iron Age settlement or funerary activity may have been located in the vicinity.

5.2 Roman

- 5.2.1 Archaeological evidence for Roman occupation in Dartford is not substantial although a concentration of remains found in the town centre suggests that there was some form of settlement in the area. Dartford is located at a significant position in the landscape with Watling Street crossing the River Darent and the combination of resources offered by the river and the transport connections provided by the road would have provided incentive for development of settlement and industry. The River Darent would have supplemented communications by road, as it was wider during Roman period and probably sufficient in depth for navigation between Dartford to the River Thames⁴. The alluvial deposits of the Darent Valley would also have provided good land for agriculture⁵.
- 5.2.2 A consensus about nature of Roman settlement in Dartford has not been reached with Hutchings⁶ suggesting that the quantity of archaeological evidence would be consistent with a small town at the junction of the river and the road. Hicks⁷ raised the possibility that the remains uncovered in previous excavations could represent a further villa site since a number have been found along the Darent valley. However, the number of cemetery sites in the area implies that occupation in Dartford would have been more substantial than that represented by a few dispersed villas.
- 5.2.3 In terms of the dating evidence for Roman settlement, the foundations of a Roman building located on the High Street found in the 19th century⁸ had pottery associated,

⁴ Hicks 1991

⁵ Hicks 1991

⁶ Hutchings 2001

⁷ Hicks 1991

⁸ Spurrell 1889

pertaining to the 1st and 2nd century AD⁹. A metalled road found at Spital Street is believed to be part of the earlier alignment of Watling Street, and was dated to the 1st century AD. A substantial quantity of pottery was also recovered during the excavations at Spital Street and although it ranged from the middle of the 1st century AD through to the 4th century, the majority of the assemblage was dated to between the late 1st and mid 2nd century. Roman rubbish pits dated to the late 1st to 4th centuries were excavated at Lowfield Street. Although the evidence is limited, previous excavations suggest that a small town could be found at Dartford during the earlier Roman period and that there was subsequent decline in the 3rd and 4th century. Alternatively, the concentration of the settlement may have shifted eastwards. It is noteworthy that the extensive cemetery at East Hill, containing over 150 graves, is dated from the mid 2nd through to 4th century.

⁹ Dale 1971

6 ARCHAEOLOGICAL METHODOLOGY

- 6.1 The evaluation strategy was designed to assess the potential for surviving archaeological deposits and features at the site and excavation methodology aimed to provide a detailed record of the archaeological remains likely to be affected by the re-development of the site.
- 6.2 Following the specification for an archaeological field evaluation¹⁰ twenty-two evaluation trenches were positioned within the area of the site (Fig 2). These were stripped of made ground and subsoil down to the top of the natural with a mechanical excavator fitted with a toothless bucket under the supervision of an archaeologist. The trenches were planned and located with descriptions of the deposits recorded and a 2.5m section drawn in each trench. Four of the evaluation trenches (Trenches 2, 7, 14 and 18) could not be excavated because asbestos was encountered. Following the identification of archaeological features, Trenches 1 and 10 were extended to enable the extent of the archaeological remains to be recorded and excavated.
- 6.3 Archaeological features exposed after the machining and cleaning of the trenches were excavated by hand with 100% excavation of structural features and other contained features and a minimum of 10% of linear cut features being excavated. Bulk environmental archaeological samples were taken where appropriate.
- 6.4 All features were recorded onto *pro-forma* context record sheets. Contexts were numbered sequentially and are shown in this report within square brackets. Plans and section were drawn at a scale of 1:10 or 1:20 as appropriate. A photographic record of the trenches has been generated.
- 6.5 Six temporary benchmarks were established on the site, transferred from a local benchmark, with values of 21.70m OD, 24.72m OD, 24.88m OD, 26.79m OD, 28.45m OD and 29.20m OD.

¹⁰ Darton 2005

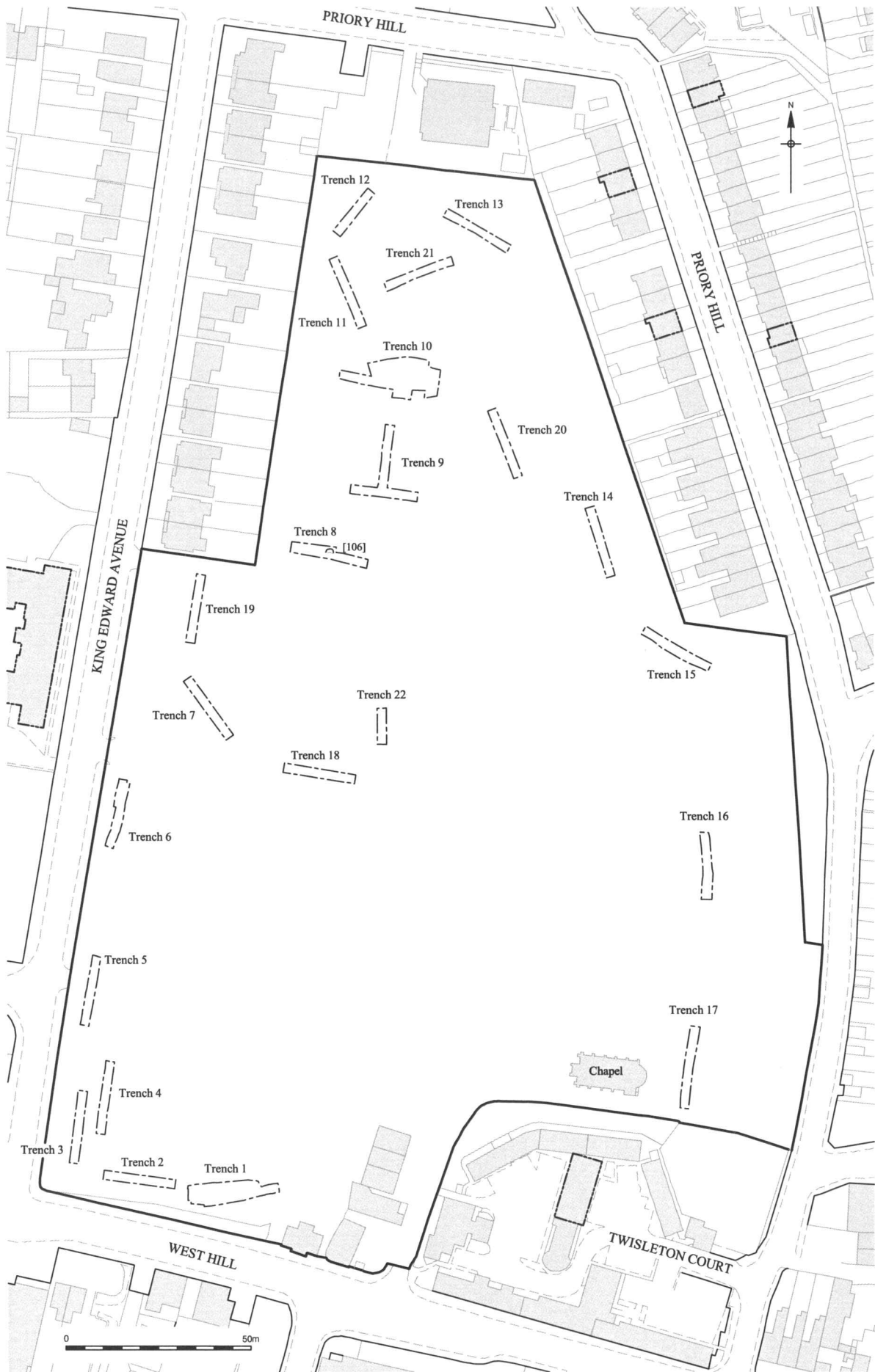


Figure 2
Trench Location
Scale 1:1500

7 THE ARCHAEOLOGICAL SEQUENCE

7.1 Trench 1

7.1.1 Trench 1 originally measured circa 20 x 2 m and was extended in area following the recording of archaeological features in the evaluation exercise with the final dimensions measuring 24.3m x 4.90m. Overburden deposits comprised of 0.55m of made ground. The natural was a Head deposit of mid orange brown clayey silt [17] (brickearth) encountered at 27.85m OD. A significant sequence of archaeological features was revealed in the evaluation trench and for this reason the trench was extended into an open-area excavation covering the area to the south of the footprints of the former hospital building.

7.1.2 Phase 2a: Late Bronze Age

7.1.2.1 Sparse evidence of Late Bronze Age date was recovered from Trench 1 indicating that, although there was human activity in the area during the Late Bronze Age, its nature is difficult to characterise. Two fragments of Late Bronze Age urns were recovered from the fill of cut [25] measuring 0.55m NS x 0.60 EW x 0.14m in depth at 27.76m OD (see Fig. 3). No other dating evidence was present and, although the primary archive indicates that possible coal fragments were present in the fill, considering that the pottery fragments were unabraded the feature is more likely to date to the Late Bronze Age rather than the post-medieval period. This is supported by the presence of a Late Bronze Age/Early Iron Age pottery fragment in posthole [33] measuring 0.33m NS x 0.20 EW x 0.14m in depth at 27.78m OD, immediately to the west of cut [25]. This was manufactured from the same fabric type as the urns and also unabraded. A small sherd of abraded Late Iron Age pottery was also recovered from the fill but is probably intrusive. Cut [25] extended beyond the limit of excavation southwards so it is not possible to be certain if it represented a pit rather than a N-S aligned ditch.

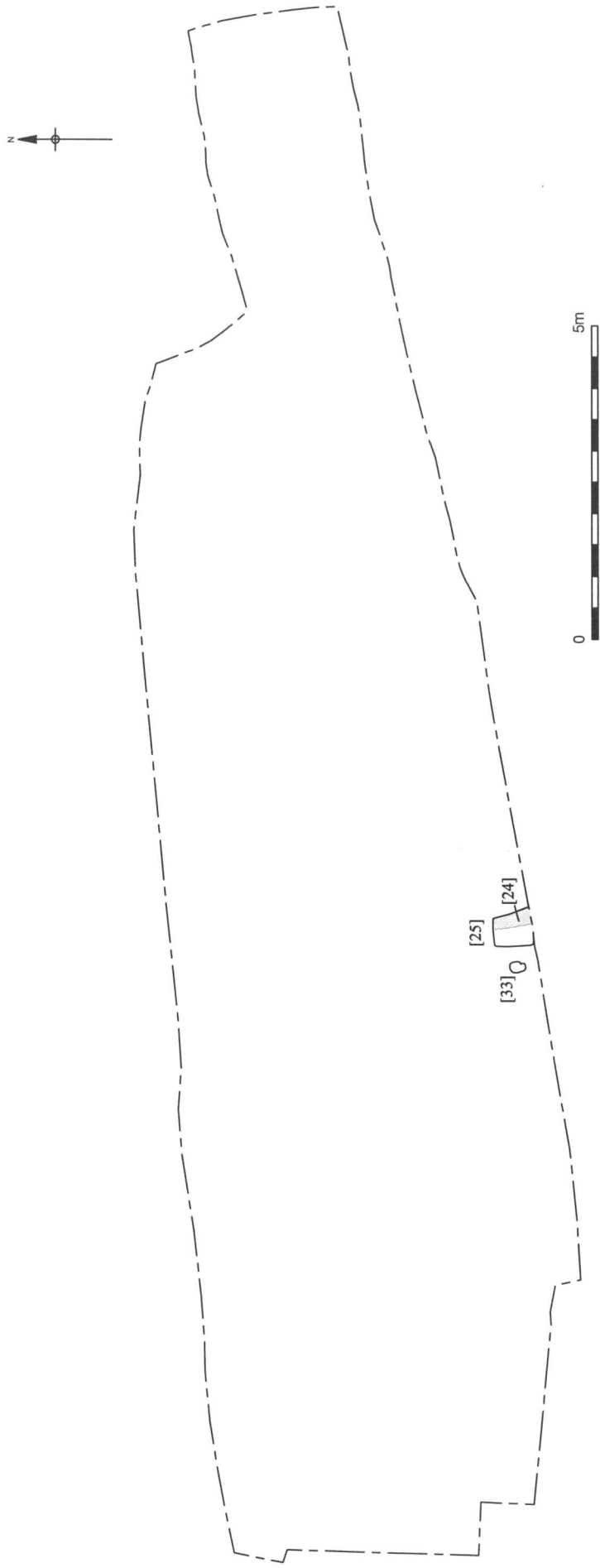


Figure 3
Late Bronze Age features in Trench 1
Scale 1:100

7.1.3 Phase 2b Mid-Late Iron Age

7.1.3.1 Evidence of Mid-Late Iron Age activity was also found in Trench 1. However, dating evidence was only recovered from a limited number of the features in the trench and, because there is also evidence for human presence during Late Bronze Age in the immediate vicinity, it is difficult to be certain which of the features represent Late Bronze Age and which represent Mid-Late Iron Age activity. Fig. 4 shows the position of the postholes containing Mid-Late Iron Age pottery fragments, as well as undated postholes and pit features which have been phased to the Mid-Late Iron Age. The semi-circular arrangement of a number of postholes (including [19], [29] and [35] which are dated to the Mid-Late Iron Age) suggests the present of a round house (with [21], [59], [112], [110] and [127] forming the south and west sides of the structure) (Table 1). As with the roundhouse identified in Trench 10 (see below), an activity area (and probably therefore the entrance to the structure) is located on the east side of the possible roundhouse. This may explain the presence of pottery in the eastern postholes since a build up of domestic refuse is likely to be found in the vicinity of the activity area and hence, when the structure is abandoned and the post removed or decayed, there is a greater probability of this waste becoming incorporated into the fills of the postholes located nearby.

Context	NS	EW	Depth	Level OD
19	0.20m	0.25m	0.13m	27.79m OD
29	0.13m	0.12m	0.08m	27.72m OD
35	0.30m	0.30m	0.10m	27.78m OD
21	0.24m	0.27m	0.19m	27.85m OD
59	0.36m	0.36m	0.12m	27.89m OD
112	0.30m	0.18m	0.11m	27.84m OD
110	0.34m	0.26m	0.26m	27.77m OD
127	0.30m	0.35m	0.08m	27.67m OD

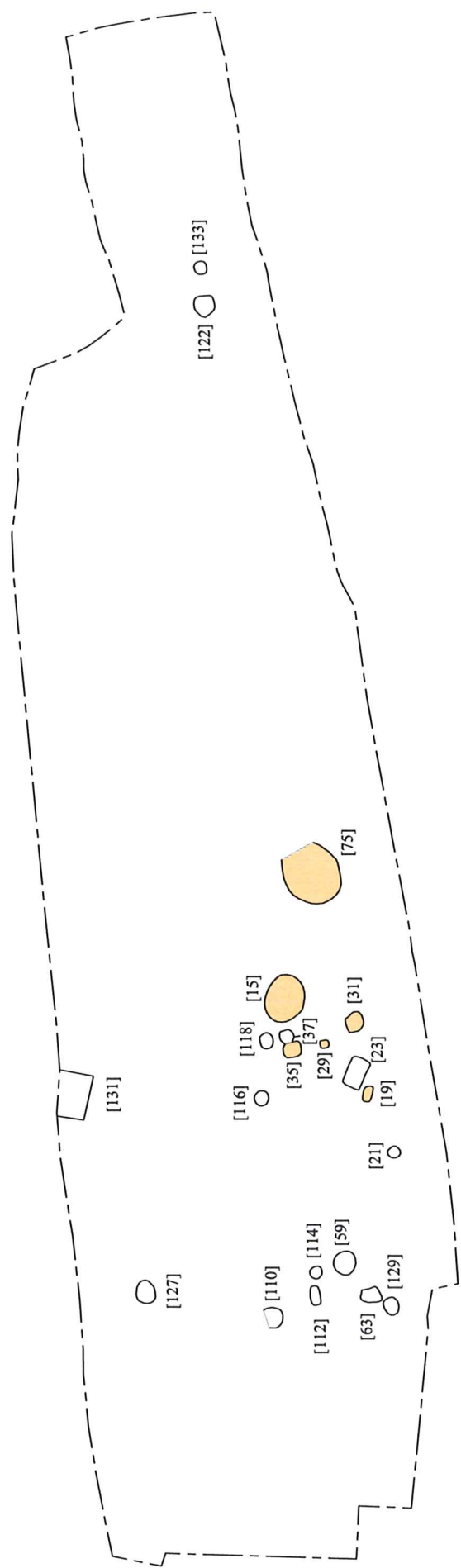
Table 1

7.1.3.2 Two features [15] measuring 0.68m NS x 0.75 EW x 0.23m in depth at 27.77m OD, and [75], measuring 0.90m NS x 0.75 EW x 0.37m in depth at 27.79m OD, outside the roundhouse represented by the postholes in Trench 1 were possibly associated with the preparation of food. During the initial assessment¹¹ of the archaeological evidence these were believed to be linked with the Roman cemetery, but pottery from the features dates

¹¹ Grosso 2005

to the Late Iron Age and the nature of the deposits is consistent with domestic activity. The fills also produced large quantities of burnt flint suggesting that these pits were used with heated stones for the boiling of water or heating of food. Pit [75] rather than being cut by [73] and [71] it is suggested that the feature contained 3 fills with [74] the primary fill, [72] the secondary fill and [70] the tertiary fill. The fills are consistent with three episodes of use of the pit; the primary fill produced no finds. The potential secondary fill [72] produced pottery, burnt flint and daub with the environmental sample <7> yielding a concentration of charcoal. Much of the pottery derived from a single large open formed pot. The probable tertiary fill [70] was noted as similar to [72] and was also sampled <6> again producing a quantity of charcoal. The species identified in the charcoal samples were *Quercus* sp. with limited pieces of *Fagus sylvatica* and *Prunus* sp. This suggests that the fuel used in the feature was mainly oak and beech reflecting that there was access to dry land species of tree.¹² Pit [15] was similar in size to [75]. The primary fill contained occasional burnt flint and pottery fragments. The secondary fill [13] was a very burnt ashy deposit with frequent burnt flint; the environmental sample <1> contained the same species as pit [75] but also limited quantities of maple and elm. Small amounts of calcined bone indicate that waste had been discarded into the pits when they were still alight since bone burnt to this level would not be caused by the cooking of meat.

¹² Branch *et al* 2006, this report



dated feature



Figure 4
Mid-Late Iron Age features in Trench 1
Scale 1:100

7.1.4 Phase 3: Early Roman

7.1.4.1 Trench 1 produced ceramic and funerary evidence that the area had been used for disposal of the dead during the early Roman period (Fig. 5). Three graves were identified and excavated within the limited area of Trench 1; two of which were N-S aligned. Only the central part of Grave [84] survived with both the northern and southern part truncated away by modern features, its truncated measurements were 0.30m NS x 0.50 EW x 0.23m in depth at 27.80m OD. The inhumation was probably buried in the extended, supine position and, on the basis of the few skeletal parts recovered was probably an adult. Grave [80] also contained an extended, supine burial and, although the grave had not been truncated, the bones were very degraded and could only be identified as possibly sub-adult, it measured 1.95m NS x 0.30 EW x unknown depth at 27.24m OD. The body had been interred within a coffin and numerous iron coffin nails were recovered from the fill of the grave. Additionally a number of iron studs or hobnails were found.

7.1.4.2 Grave [125] was on a different alignment to the other graves with an E-W orientation, it measured 0.50m NS x 1.60 EW x 0.26m in depth at 27.46m OD. Unfortunately no pottery was recovered from the fill and it is possible that the grave represents later burial on the site. The east-west alignment of the grave could indicate that the burial took place in accordance with Christian traditions but without dating evidence this may have been coincidental. The skeleton itself was very poorly preserved and it was not therefore possible to identify the burial position, age or sex of the skeleton.

7.1.4.3 A further grave may be represented by cut [120] and although no bones were recovered this is not unusual considering the preservation of the rest of the bone (both human and animal) at the site, it measured 1.98m NS x 0.64 EW x 0.23m in depth at 27.62m OD. The early Roman date of the feature from pottery in the fill and the orientation N-S is consistent with the other early Roman graves.

7.1.4.4 Inhumation burials are relatively uncommon for the early Roman period, when cremation is the more frequently used method for disposal of the dead.

7.1.4.5 Ditch [65] may have been boundary marker within the cemetery, although little dating evidence was recovered from the feature, fragments of CBM and oyster shell suggest that it was Roman in date. It measured 2.95m NS x 0.80 EW x 0.16m in depth at 27.72m OD

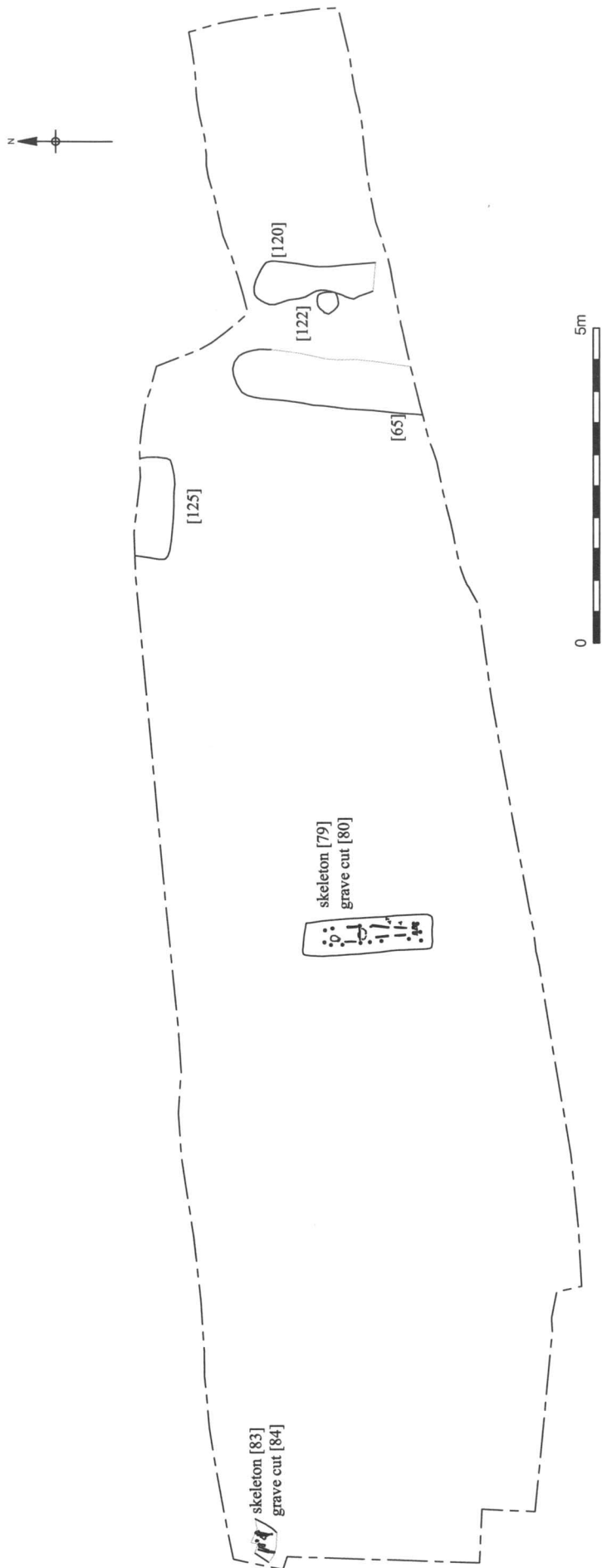


Figure 5
 Roman features in Trench 1
 Scale 1:100

7.2 Trench 2

7.2.1 Trench 2 could not be excavated because the area was contaminated with asbestos.

7.3 Trench 3

7.3.1 Trench 3 measured 19.5m x 2.5m. Overburden deposits comprised of 0.38m of made ground. Geological deposits were truncated down to the natural chalk [46] encountered at 28.28m OD. Localised deposits of sandy silt [11], sandy gravel [45] and mixed chalk and clay silt [6] were encountered at 24.24, 28.34 and 28.07m OD respectively within the chalk and presumably these represent the remains of material washed into solution holes. The central part of the trench was truncated down to a depth of 28.32m OD by a post medieval truncation [156] which extended the width of the trench and 3.75m north south. This had been backfilled partially with wood and CBM presumably during the 19th or 20th century. No other archaeological features were present.

7.4 Trench 4

7.4.1 Trench 4 measured 19.5m x 2.5m. Overburden deposits comprised of 0.43m of made ground. A 0.13m thick subsoil layer [10] of mid grey brown silt sand with chalk flecks, CBM and charcoal flecks inclusions was encountered at 28.40m OD. The natural was variable composed of a mid orange brown clay silt head deposit [12] (brickearth) present at 28.27m OD overlying natural chalk [134] at 28.08m OD. No archaeological features were present.

7.5 Trench 5

7.5.1 Trench 5 measured 19.0m x 2.35m. Overburden deposits comprised of 0.19m of made ground. A 0.33m thick subsoil layer [8] of mid grey brown silt sand with chalk flecks, with CBM and charcoal flecks as inclusions, which was encountered at 28.64m OD. The natural was variable with a sandy gravel [44] at 28.31m OD overlying a sandy silt gravel deposit [9] found at 28.25m OD. These in turn overlain natural chalk [135] present at 28.31m OD. An irregular feature [5] measuring 0.60m x 0.70m presumably representing a tree bole was excavated and contained a single sherd of medieval pottery. The geological sequence had been truncated down to the chalk [149] at 20.60 OD.

7.6 Trench 6

7.6.1 Trench 6 measured 18.75m x 2.5m. Overburden deposits comprised a 0.32m thick layer of made ground. A 0.08m thick subsoil layer [3] of mid grey brown silt sand with inclusions of chalk, CBM and charcoal flecks was encountered at 28.22m OD. The

natural was variable with a mid orange brown clay silt [7] (brickearth) head deposit at 28.05m OD overlying a sandy gravel deposit [42] at 27.99m OD. These in turn overlay natural chalk [43] at 27.97m OD. No archaeological features were present.

7.7 Trench 7

7.7.1 Trench 7 could not be excavated because the area was contaminated with asbestos.

7.8 Trench 8

7.8.1 Trench 8 measured 21.25 x 2.25m. Overburden deposits comprised a 0.13m thick layer of topsoil. The natural was a silty chalk with flint nodules [136] at 26.10m OD. This was cut by a large pit [106] measuring 2.10m E-W and surviving 1.10m N-S with the southern part of the pit being truncated by a modern concrete feature. The fill was 0.70m deep and contained a large quantity of burnt flint and some daub. No dating evidence was recovered from the feature but it may have been contemporary with the Mid-Late Iron Age activity found in Trench 10 (see below). An environmental sample <13> produced a significant quantity of charcoal and although this was not well preserved, oak as well as a range of other species were identified.

7.9 Trench 9

7.9.1 Trench 9 was T-shaped trench 2.5m in width with an 18.00m E-W dimension and a 15.5m N-S extension to the north. The overburden deposits comprised a layer of 0.90m of made ground and a layer of redeposited chalk [137] 0.30m thick. The natural was a sandy gravel [137] encountered at 27.50m OD. This material in turn overlay natural chalk [138] encountered at 27.40m OD. No archaeological features were present although in 1934 two fragments of Iron Age pottery were recovered from this part of the site. Much of the trench was, however, truncated by modern features.

7.10 Trench 10

7.10.1 Evaluation Trench 10 was extended after significant archaeological features were found. The final dimensions of this trench were 25.0m x c. 8.5m. Overburden deposits comprised of 0.73m of made ground. A 0.17m thick subsoil layer [107] of mid grey brown silt sand with chalk flecks, CBM and charcoal flecks as inclusions was encountered at 25.79m OD. The natural was a sandy gravel clay [108] at c. 27.64m OD. This was cut by a number of archaeological features.

7.10.2 Phase 2b: Mid-Late Iron Age

7.10.2.1 The presence of Iron Age occupation to the north of the site suggested by the recovery of two urn fragments during building work in 1934, is confirmed by the archaeological features excavated in Trench 10. In the eastern part of the trench a segment of a curvilinear ditch was revealed (Fig. 6). Three excavation slots produced a small quantity of Mid-Late Iron Age pottery and demonstrated that the ditch was 0.8m in width with a surviving depth of 0.24m. Adjacent to the ditch was a small sub-circular pit [67] with a diameter of 0.70m. The southern limit of the pit had been removed by modern truncations. Pottery of Mid-Late Iron Age was also recovered from the fill of the pit. This may have been used for cooking based on the presence of frequent charcoal fragments or the pit may have been reused for the discard of waste.

7.10.2.2 Despite the extensive truncation of the area surrounding Trench 10, a large enough section remained to reveal a group of nine postholes ([96], [98], [86], [88], [90], [100], [102], [104] and [92]) presumably representing the remains of a roundhouse with an approximate diameter of c.8m. The southern part of the structure had been truncated away (Table 2). Two additional postholes ([94] measuring 0.30m NS x 0.30 EW x 0.18m in depth at 25.29m OD and [77] measuring 0.48m NS x 0.42 EW x 0.26m in depth at 25.29m OD) may have formed part of a porch to the east of the structure providing early morning sunlight into the hut. Pottery recovered from the four of the eleven postholes was similar to the material from the curvilinear ditch [69] and pit [67] suggesting that the structure and the roundhouse were contemporary.

Context	NS	EW	Depth	Level OD
96	0.30m	0.30m	0.10m	25.63m OD
98	0.30m	0.30m	0.06m	25.56m OD
86	0.30m	0.30m	0.14m	25.47m OD
88	0.30m	0.30m	0.14m	25.44m OD
90	0.30m	0.30m	0.08m	25.37m OD
100	0.30m	0.30m	0.15m	25.31m OD
102	0.27m	0.27m	0.12m	25.33m OD
104	0.75m	0.30m	0.13m	25.41m OD
92	0.40m	0.40m	0.08m	25.37m OD

Table 2

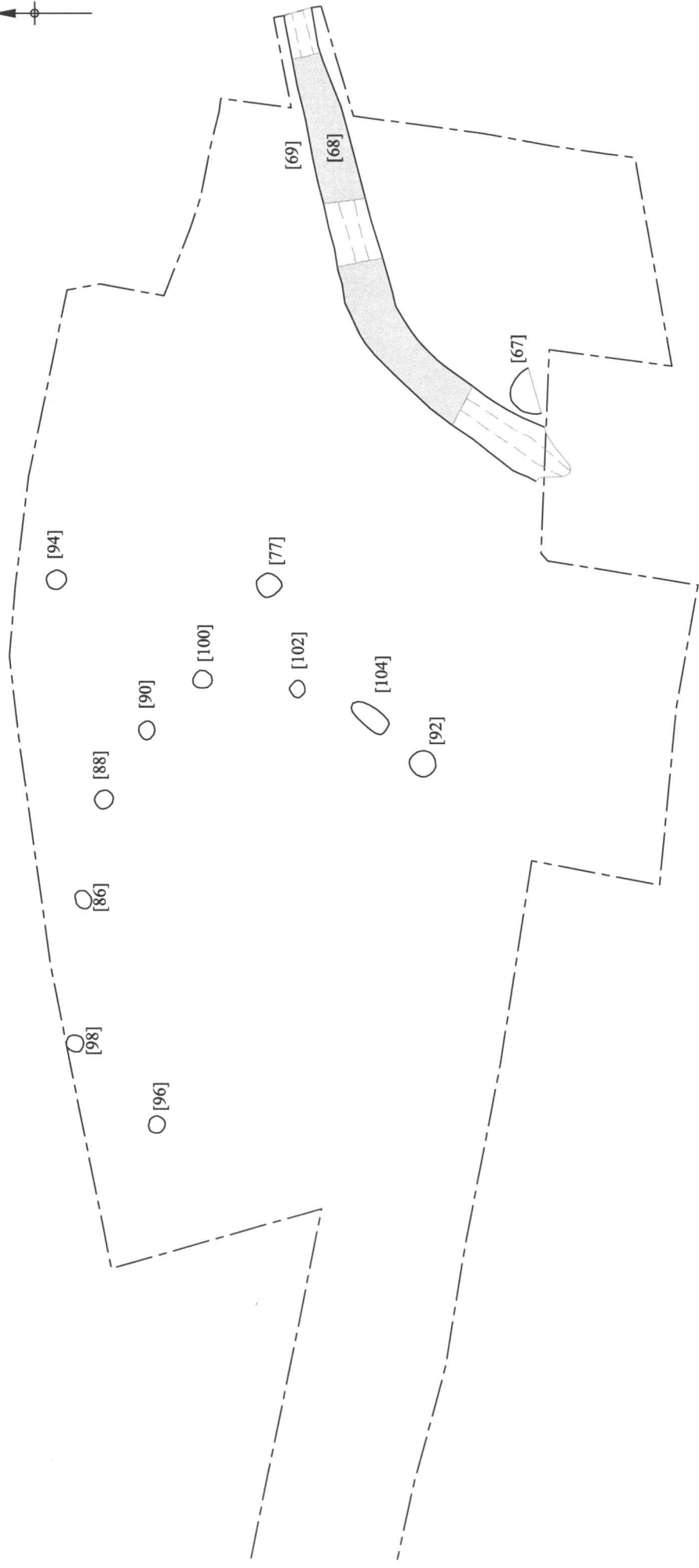


Figure 6
Mid-Late Iron Age features in Trench 10
Scale 1:100

7.11 Trench 11

7.11.1 Trench 11 measured 20.25m x 2.25m. Overburden deposits comprised 0.72m of made ground and a post-medieval layer [142] 0.06m thick at 25.87m OD. The natural was variable with sandy clay gravel [141] at 25.81m OD irregularly overlying natural chalk [140] which was also encountered at 25.81m OD. No archaeological features were present.

7.12 Trench 12

7.12.1 Trench 12 measured 15.0m x 2.5m. Overburden deposits comprised a layer of 0.40m of made ground. The natural was a silty gravel deposit [143] encountered at 25.65m OD. This overlay a sandy clay gravel [144] at 25.49m OD. No archaeological features were present.

7.13 Trench 13

7.13.1 Trench 13 measured 19.75m x 2.25m. Overburden deposits comprised of 0.38m of made ground. The natural was silty gravelly clay [146] at 24.60m OD overlying natural chalk [145] encountered at 27.58m OD. No archaeological features were present.

7.14 Trench 14

7.14.1 Trench 14 could not be excavated because the area was contaminated with asbestos.

7.15 Trench 15

7.15.1 Trench 15 measured 21.5m x 2.75m. Overburden deposits comprised of 1.06m of made ground with tarmac and scrap metal inclusions. The natural was a silty gravel deposit [147] at 21.23m OD. This in turn overlay natural chalk [148] at 20.95m OD. No archaeological features were present.

7.16 Trench 16

7.16.1 Trench 16 measured 18.m x 2.85m. Overburden deposits comprised of 1.22m of made ground and topsoil. No archaeological features were present.

7.17 Trench 17

7.17.1 Trench 17 measured 22.0m x 2.75m. Overburden deposits comprised of 0.41m of made ground and 0.60m of redeposited chalk [52] at 21.23m OD. This sealed a 0.30m thick post-medieval layer [53] comprised of mid grey brown sand silt with occasional CBM fragments. This in turn overlay a clean silty sand deposit [54] measuring 0.17m thick and

present at 20.20m OD. Natural chalk [55] was present at 20.33m OD. No archaeological features were found.

7.18 Trench 18

7.18.1 Trench 18 could not be excavated because the area was contaminated with asbestos.

7.19 Trench 19

7.19.1 Trench 19 measured 18.75m x 2.35m. Overburden deposits comprised 0.50m of made ground. A 0.15m thick subsoil layer [1] of mid grey brown silt sand with chalk flecks, CBM and charcoal flecks as inclusions was found with a top level of 27.73m OD. The natural was variable with mid orange brown clay silt [2] (brickearth) head deposit overlying a sandy gravel deposit [40] encountered at 27.58m OD. These in turn overlay natural chalk [41] encountered at 27.48m OD. No archaeological features were present.

7.20 Trench 20

7.20.1 Trench 20 measured 20.75m x 2.5m. The natural gravelly clay silt [150] was found at 23.80m OD overlying the natural chalk at 23.68m OD. No archaeological features were present.

7.21 Trench 21

7.21.1 Trench 21 measured 19.5m x 2.25m. Overburden deposits comprised of 0.57m of made ground. The natural was variable with silt clay gravel [153] at 25.20m OD overlying natural chalk [154] at 24.90m OD. No archaeological features were present.

7.22 Trench 22

7.22.1 Trench 22 measured 9.8m x 2.25m. Overburden deposits comprised of 0.35m of made ground. The natural was sandy clay gravel present at 26.63m OD. No archaeological features were found.

8 CONCLUSIONS

8.1 The natural comprised of Upper Chalk capped by a Head deposit of mid orange brown clay silt (brick earth), which were formed in an interglacial period. Gravel within the head deposit probably derived from hill wash from the Boyn Hill Terrace. Truncation of this geological sequence in the eastern part of the site was confirmed in the evaluation. Within the footprint of the West Hill Hospital the archaeology had not survived because the area was extensively terraced.

8.4 The evaluation and excavation trenches revealed evidence for Mid-Late Iron Age settlement activity but most of the site had been affected by modern truncations. This may have originally extended over some 225 metres with surviving evidence found in Trenches 1, 8 and 10. There was also some evidence that this was part of a long-term settlement at the site extending back into the Late Bronze Age. This settlement was apparently abandoned by the Roman period with settlement in the area developing in the centre of present day Dartford. With the site beyond the limited of the settlement the land started to be used as a cemetery close to the Roman road. It is impossible to establish the size of this cemetery since it would have spread along the alignment of the road but modern truncations within the habitation area have removed the archaeological deposits to the east and west of Trench 1, and the former Roman road itself lies at a low level with the brow of the ridge of the hill apparently having been removed in its construction.

8.4 The fact that the burials found are inhumations is of particular interest, as this practice is relatively uncommon in the early Roman period. It is therefore important to compare the practices observed here with those recorded on other contemporary sites in the vicinity.

8.4 Considering the extent of modern truncations, the archaeological work conducted at the site still effectively produced a record of past land use. The evaluation trenches were well placed to ascertain the potential presence of archaeological remains at the site and the extension of Trenches 1 and 10 into open area excavations enabled the surviving archaeology to be recorded.

9 RESEARCH QUESTIONS

- 9.1 The specifications for the fieldwork did not include a preliminary research questions.
- 9.2 The excavations at West Hill Hospital have raised a number of research questions about the nature of human presence in the area during the past. An attempt will be made to more accurately date the Mid-Late Iron Age settlement across the site to establish whether the different parts of the settlement excavated in different trenches were occupied at the same time or if they reflect a settlement shifting location over the course of time. C14 dating will be considered for appropriate deposits.
- 9.3 Comparisons for the Iron Age settlement in the area should be sought and consideration should be given to the topographical setting of the site to analyse the incentives that caused a group of Late Iron Age people to settle the area. It is worth considering that there may have been continuation of occupation since the Late Bronze Age and also to evaluate the evidence for Bronze Age settlement.
- 9.4 It is not possible to provide a detailed reconstruction of the environment from the evidence recovered in the excavation but the results allow a limited discussion of the use of wood types. In addition it may be possible to expand on the environmental assessment by referring to the assessment and analysis results from other sites looked at in the vicinity, either in the grey literature or published.
- 9.5 The discovery of part of a Roman cemetery within the area of the site raises questions of how this relates to other Roman archaeology in Dartford and, more specifically, can it be used to inform us about the nature and position of settlement activity in Dartford during the Roman period.
- 9.6 Can the inhumation evidence be interpreted as representing the remains of a formal Roman cemetery site or do the burials reflect other ritual activities associated with disposal of the dead in a Romano-British context.

10 IMPORTANCE OF RESULTS AND PUBLICATION

- 10.1 The results of the excavation at West Hill Hospital are of local and regional importance. It has confirmed the presence of a large Iron Age settlement in the area. The discovery of Romano British burials or of part of a Roman cemetery, along with the results from other excavations, suggests that there was a small town at Dartford during the Roman period.
- 10.2 The site will be published either as an article in *Archaeologia Cantiana* or as an article in the PCA occasional papers series. This paper will focus on how the Iron Age and Roman remains can be used to infer that there was a large Iron Age settlement at the site and they can be used as a proxy indicator of the nature of settlement in Roman Dartford. In addition the nature of the Romano-British funerary activities at the site will be discussed
- 10.3 The publication report will include the following:
- Background to excavations
 - Geology and topography
 - Archaeological and historical background
 - A description of the archaeological sequence that integrates the specialist reports to provide an interpretation of the nature of occupation in the Iron Age and Roman use of the area for disposal of the dead.
 - Comparisons of evidence from Bronze Age to Roman sites in the area.

11 CONTENTS OF ARCHIVE

11.1 Paper records

Contexts	156	
Sample sheets	17	
Sections	25	(26 sheets)
Plans		(112 sheets)

Photographs

Colour slides (35mm)	3	
Black and white prints (35mm)	1	

11.2 Finds

Lithics	1 box	
Pottery	1 box	
Animal bone	1 box	
Human bone	2 boxes	
Fe	1 box	
Bulk samples	15	

12 ACKNOWLEDGEMENTS

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12.2 Thanks are also extended to Ireneo Grosso for supervising the site and the onsite staff for their work. Also the author would like to thank Jon Butler for Project Management, Frank Meddens for Post-Excavation management and Nathalie Barrett for the surveying and Josephine Brown for the illustrations.

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Appendix 1: Context index

Context	Type	Description	Phase	Area	Plans	Highest Level	Section No.	Sample No.	Small Finds
1	Layer	Subsoil	4	Tr. 19	*	27.74m OD	1, 15	*	*
2	Layer	Brickearth	1	Tr. 19	Tr. 19	27.68m OD	1	*	*
3	Layer	Subsoil	4	Tr. 6	*	28.19m OD	2	*	*
4	Fill	Fill of Cut [5]	1	Tr. 5	*	28.29m OD	*	*	*
5	Cut	Tree Bole	1	Tr. 5	Tr. 5	28.29m OD	*	*	*
6	Deposit	Natural Clayey Gravelly Sand	1	Tr. 3	Tr. 3	28.07m OD	4	*	*
7	Layer	Natural Brickearth	1	Tr. 6	Tr. 6	28.07m OD	2, 16	*	*
8	Layer	Subsoil	4	Tr. 5	*	28.62m OD	3	*	*
9	Layer	Natural Brickearth	1	Tr. 5	Tr. 5	28.32m OD	3, 17	*	*
10	Layer	Subsoil	4	Tr. 4	*	28.40m OD	5	*	*
11	Layer	Natural Brickearth	1	Tr. 3	Tr. 3	28.24m OD	4	*	*
12	Layer	Natural Silty Clay	1	Tr. 4	Tr. 4	28.27m OD	5	*	*
13	Fill	Upper Fill Of Cut [15]	2	Tr. 1	*	27.77m OD	*	1	*
14	Fill	Lower Fill Of Cut [15]	2	Tr. 1	*	27.77m OD	*	*	*
15	Cut	Cut For 'Pot Boiler'	2	Tr. 1	15	27.77m OD	*	*	
16		Void							
17	Layer	Natural Gravelly Clay	1	Tr. 1	17	27.95m OD	21	*	*
18	Fill	Fill of Post Hole [19]	2	Tr. 1	*	27.79m OD	*	*	*
19	Cut	Post Hole Filled By [18]	2	Tr. 1	35	27.79m OD	*	*	*
20	Fill	Fill Of Post Hole [21]	2	Tr. 1	*	27.85m OD	*	*	*
21	Cut	Post Hole Filled By [20]	2	Tr. 1	35	27.85m OD	*	*	*
22	Fill	Fill Of Cut [23]	2	Tr. 1	*	27.79m OD	*	*	*
23	Cut	Cut Filled By [22]	2	Tr. 1	35	27.79m OD	*	*	*
24	Fill	Fill Of Cut [25]	2	Tr. 1	*	27.76m OD	*	*	*
25	Cut	Post Med Cut	2	Tr. 1	25	27.76m OD	*	*	*
26	Fill	Backfill Of Roman Grave Cut [27]	3	Tr. 1	*	27.75m OD	*	4	2, 3, 4, 5
27	Cut	Roman Grave Cut Filled By (26), (80) and (81)	3	Tr. 1	27	27.75m OD	*	*	*

28	Fill	Fill Of Post Hole [29]	2	Tr. 1	*	27.79m OD	*	*	*
29	Cut	Post Hole Filled By (28)	2	Tr. 1	35	27.79m OD	*	*	*
30	Fill	Fill Of Post Hole [31]	2	Tr. 1	*	27.82m OD	*	*	*
31	Cut	Post Hole Filled By (30)	2	Tr. 1	31	27.82m OD	*	*	*
32	Fill	Fill Of Post Hole [33]	2	Tr. 1	*	27.78m OD	*	*	*
33	Cut	Post Hole Filled By (32)	2	Tr. 1	33	27.78m OD	*	*	*
34	Fill	Fill Of Post Hole [35]	2	Tr. 1	*	27.78m OD	*	*	*
35	Cut	Post Hole Filled By (34)	2	Tr. 1	35	27.78m OD	*	*	*
36	Fill	Fill Of Post Hole [37]	2	Tr. 1	*	27.78m OD	*	*	*
37	Cut	Post Hole Filled By (36)	2	Tr. 1	37	27.78m OD	*	*	*
38	Fill	Fill Of Post Hole [39]	2	Tr. 1	*	27.78m OD	*	*	*
39	Cut	Post Hole Filled By (38)	2	Tr. 1	37	27.78m OD	*	*	*
40	Layer	Natural Sandy Gravel	1	Tr. 19	Tr. 19	27.58m OD	1	*	*
41	Deposit	Natural Chalk	1	Tr. 19	Tr. 19	27.48m OD	1, 15	*	*
42	Layer	Natural Sandy Gravel	1	Tr. 6	Tr. 6	27.99m OD	*	*	*
43	Deposit	Natural Chalk	1	Tr. 6	Tr. 6	27.97m OD	2, 16	*	*
44	Layer	Natural Sandy Gravel	1	Tr. 5	Tr. 5	28.31m OD	3, 17	*	*
45	Layer	Natural Sandy Gravel	1	Tr. 3	Tr. 3	28.34m OD	*	*	*
46	Deposit	Natural Chalk	1	Tr. 3	Tr. 3	28.28m OD	4, 18	*	*
47		Void							
48		Void							
49	Fill	Fill Of Small Pit [50]	3	Tr. 1	*	27.77m OD	*	*	*
50	Cut	Small Pit Filled By (49)	3	Tr. 1	50	27.77m OD	*	*	*
51	Layer	Natural Gravelly Clay	1	Tr. 22	Tr. 22	26.63m OD	24	*	*
52	Layer	Redeposited Chalk	4	Tr. 17	*	21.13m OD	6	*	*
53	Layer	Post Med Layer	4	Tr. 17	*	20.50m OD	6	*	*
54	Layer	Subsoil	4	Tr. 17	Tr. 17	20.29m OD	6	*	*
55	Deposit	Natural Chalk	1	Tr. 17	Tr. 17	20.10m OD	6	*	*
56	Fill	Fill Of Tree Bole [57]	1	Tr. 1	*	27.98m OD	*	*	*
57	Cut	Tree Bole Filled by (56)	1	Tr. 1	57	27.98m OD	*	*	*
58	Fill	Fill of Post Hole [59]	2	Tr. 1	*	27.89m OD	*	2	*

59	Cut	Post Hole Filled By (58)	2	Tr. 1	59	27.89m OD	*	*	*
60	Fill	Fill of Roman Post Hole [61]	3	Tr. 1	*	27.77m OD	*	3	6, 7, 8, 9, 10, 11, 12
61	Cut	Roman Post Hole Filled By (60)	3	Tr. 1	61	27.77m OD	*	*	*
62	Fill	Fill Of Post Hole [63]	2	Tr. 1	*	27.97m OD	*	*	*
63	Cut	Post Hole Filled By (62)	2	Tr. 1	63	27.97m OD	*	*	*
64	Fill	Fill Of Linear Feature [65]	3	Tr. 1	*	27.72m OD	*	5	*
65	Cut	Linear Cut Feature Filled By (64)	3	Tr. 1	65	27.72m OD	*	*	*
66	Fill	Fill Of Circular Pit [67]	2	Tr. 10	*	25.28m OD	*	9	*
67	Cut	Shallow Prehistoric Pit Filled By (66)	2	Tr. 10	67	25.28m OD	*	*	*
68	Fill	Fill Of Curvilinear Prehistoric Ditch [69]	2	Tr. 10	*	25.42m OD	20	8	*
69	Cut	Curvilinear Prehistoric Ditch Filled By (68)	2	Tr. 10	69	25.42m OD	20	*	*
70	Fill	Fill Of Small Pit/Post Hole [71]	2	Tr. 1	*	27.77m OD	*	6	*
71	Cut	Small Pit/Post Hole Filled By (70)	2	Tr. 1	71	27.77m OD	*	*	*
72	Fill	Fill Of Post Hole [73]	2	Tr. 1	*	27.69m OD	*	7	*
73	Cut	Post Hole Filled By (72)	2	Tr. 1	73	27.69m OD	*	*	*
74	Fill	Fill Of Large Post Hole/Pit [75]	2	Tr. 1	*	27.79m OD	*	*	*
75	Cut	Large Post Hole/Pit Filled By (74)	2	Tr. 1	75	27.79m OD	*	*	*
76	Fill	Fill Of Post Hole [77]	2	Tr. 10	*	25.29m OD	*	*	*
77	Cut	Post Hole Filled By (76)	2	Tr. 10	86	25.29m OD	*	*	*
78		Void							
79	Skeleton	Roman Skeleton Filling Grave Cut [27]	3	Tr. 1	79	27.20m OD	*	10	*
80	Coffin	Coffin For Skeleton (79) Filling Grave Cut [27]	3	Tr. 1	79	27.24m OD	*	*	1, 13-33
81	Fill	Primary Fill Of Grave Cut [27]	3	Tr. 1	*	27.24m OD	*	11	*
82	Fill	Backfill Of Roman Grave Cut [84]	3	Tr. 1	*	27.81m OD	*	12	*
83	Skeleton	Roman Skeleton Filling Grave Cut [84]	3	Tr. 1	83	27.61m OD	*	*	*
84	Cut	Grave Cut For Skeleton (83)	3	Tr. 1	84	27.80m OD	*	*	*
85	Fill	Fill Of Post Hole [86]	2	Tr. 10	*	25.47m OD	*	*	*
86	Cut	Post Hole Filled By (85)	2	Tr. 10	86	25.47m OD	*	*	*
87	Fill	Fill Of Post Hole [88]	2	Tr. 10	*	25.44m OD	*	*	*
88	Cut	Post Hole Filled By (87)	2	Tr. 10	86	25.44m OD	*	*	*
89	Fill	Fill Of Post Hole [90]	2	Tr. 10	*	25.37m OD	*	*	*

90	Cut	Post Hole Filled By (89)	2	Tr. 10	86	25.37m OD	*	*	*
91	Fill	Fill Of Post Hole [92]	2	Tr. 10	*	25.37m OD	*	*	*
92	Cut	Post Hole Filled By (91)	2	Tr. 10	86	25.37m OD	*	*	*
93	Fill	Fill Of Post Hole [94]	2	Tr. 10	*	25.29m OD	*	*	*
94	Cut	Post Hole Filled By (93)	2	Tr. 10	86	25.29m OD	*	*	*
95	Fill	Fill Of Post Hole [96]	2	Tr. 10	*	25.63m OD	*	*	*
96	Cut	Post Hole Filled By (95)	2	Tr. 10	86	25.63m OD	*	*	*
97	Fill	Fill Of Post Hole [98]	2	Tr. 10	*	25.56m OD	*	*	*
98	Cut	Post Hole Filled By (97)	2	Tr. 10	86	25.56m OD	*	*	*
99	Fill	Fill Of Post Hole [100]	2	Tr. 10	*	25.31m OD	*	*	*
100	Cut	Post Hole Filled By (99)	2	Tr. 10	86	25.31m OD	*	*	*
101	Fill	Fill Of Post Hole [102]	2	Tr. 10	*	25.33m OD	*	*	*
102	Cut	Post Hole Filled By (101)	2	Tr. 10	86	25.33m OD	*	*	*
103	Fill	Fill Of Post Hole [104]	2	Tr. 10	*	25.41m OD	*	*	*
104	Cut	Post Hole Filled By (103)	2	Tr. 10	86	25.41m OD	*	*	*
105	Fill	Fill Of Semicircular Cut [106]	2	Tr. 8	*	25.84m OD	*	13	*
106	Cut	Semicircular Cut Feature Filled By (106)	2	Tr. 8	106	25.84m OD	*	*	*
107	Layer	Post Medieval Agricultural Soil	4	Tr. 10	*	25.84m OD	19	*	*
108	Layer	Natural Clayey Gravel	1	Tr. 10	108	25.87m OD	19	*	*
109	Fill	Fill Of Post Hole [110]	2	Tr. 1	*	27.77m OD	*	*	*
110	Cut	Post Hole Filled By (109)	2	Tr. 1	110	27.77m OD	*	*	*
111	Fill	Fill Of Post Hole [112]	2	Tr. 1	*	27.84m OD	*	*	*
112	Cut	Post Hole Filled By (111)	2	Tr. 1	112	27.84m OD	*	*	*
113	Fill	Fill Of Post Hole [114]	2	Tr. 1	*	27.84m OD	*	*	*
114	Cut	Post Hole Filled By (113)	2	Tr. 1	114	27.84m OD	*	*	*
115	Fill	Fill Of Post Hole [116]	2	Tr. 1	*	27.77m OD	*	*	*
116	Cut	Post Hole Filled By (115)	2	Tr. 1	116	27.77m OD	*	*	*
117	Fill	Fill Of Post Hole [118]	2	Tr. 1	*	27.77m OD	*	*	*
118	Cut	Post Hole Filled By (117)	2	Tr. 1	118	27.77m OD	*	*	*
119	Fill	Fill Of Linear Cut Feature [120]	3	Tr. 1	*	27.62m OD	*	14	*
120	Cut	Linear Cut Feature Filled By (119)	3	Tr. 1	120	27.62m OD	*	*	*

121	Fill	Fill Of Post Hole [122]	2	Tr. 1	*	27.60m OD	*	*	*
122	Cut	Post Hole Filled By (121)	2	Tr. 1	122	27.60m OD	*	*	*
123	Fill	Backfill Of Grave Cut [125]	3	Tr. 1	*	27.46m OD	*	15	*
124	Skeleton	Skeleton For Grave Cut [125]	3	Tr. 1	*	27.46m OD	*	*	*
125	Cut	Grave Cut For Skeleton (124)	3	Tr. 1	125	27.46m OD	*	*	*
126	Fill	Fill Of Post Hole [127]	2	Tr. 1	*	27.67m OD	*	16	*
127	Cut	Post Hole Filled By (126)	2	Tr. 1	127	27.67m OD	*	*	*
128	Fill	Fill Of Post Hole [129]	2	Tr. 1	*	27.95m OD	*	*	*
129	Cut	Post Hole Filled By (128)	2	Tr. 1	129	27.95m OD	*	*	*
130	Fill	Fill Of Rectangular Pit [131]	2	Tr. 1	131	27.73m OD	*	17	*
131	Cut	Rectangular Pit Filled By (130)	2	Tr. 1	131	27.73m OD	*	*	*
132	Fill	Fill Of Post Hole [133]	2	Tr. 1	*	27.64m OD	*	*	*
133	Cut	Post Hole Filled By (132)	2	Tr. 1	133	27.64m OD	*	*	*
134	Deposit	Natural Chalk	1	Tr. 4	Tr. 4	28.08m OD	*	*	*
135	Deposit	Natural Chalk	1	Tr. 5	Tr. 5	28.14m OD	17	*	*
136	Deposit	Natural Chalk	1	Tr. 8	Tr. 8	26.10m OD	9	*	*
137	Layer	Natural Clayey Gravel	1	Tr. 9	Tr. 9	25.48m OD	10	*	*
138	Deposit	Natural Chalk	1	Tr. 9	Tr. 9	25.52m OD	10	*	*
139	Deposit	Post Medieval Redeposited Chalk	4	Tr. 9	*	25.80m OD	10	*	*
140	Deposit	Natural Chalk	1	Tr. 11	Tr. 11	25.81m OD	14, 22	*	*
141	Layer	Natural Sandy Clayey Gravel	1	Tr. 11	Tr. 11	25.81m OD	14	*	*
142	Layer	Post Medieval Layer	4	Tr. 11	Tr. 11	25.87m OD	14	*	*
143	Layer	Natural Silty Gravelly Clay	1	Tr. 12	Tr. 12	25.74m OD	12	*	*
144	Layer	Natural Clayey Gravel	1	Tr. 12	Tr. 12	25.66m OD	12	*	*
145	Deposit	Natural Silty Chalk	1	Tr. 13	Tr. 13	24.58m OD	11	*	*
146	Layer	Natural Silty Clay	1	Tr. 13	*	24.60m OD	11	*	*
147	Layer	Natural Silty Gravel	1	Tr. 15	*	21.23m OD	8	*	*
148	Deposit	Natural Silty Chalk	1	Tr. 15	Tr. 15	20.95m OD	8	*	*
149	Deposit	Natural Silty Chalk	1	Tr. 16	Tr. 16	20.11m OD	7	*	*
150	Layer	Natural Clayey Silt	1	Tr. 20	Tr. 20	23.80m OD	*	*	*
151	Deposit	Natural Chalk	1	Tr. 20	Tr. 20	23.68m OD	23	*	*

152	Layer	Natural Gravelly Clayey Silt	1	Tr. 21	Tr. 21	25.34m OD	13, 25	*	*
153	Deposit	Natural Clayey Gravel	1	Tr. 21	Tr. 21	25.20m OD	13	*	*
154	Deposit	Natural Silty Chalk	1	Tr. 21	Tr. 21	25.08m OD	13	*	*
155	Fill	Fill Of Post Medieval Cut [156]	4	Tr. 3	Tr. 3	28.42m OD	4	*	*
156	Cut	Post Medieval Cut Filled By (155)	4	Tr. 3	Tr. 3	28.32m OD	4	*	*

Appendix 2: Pottery Assessment

Malcolm Lyne

Introduction

The site yielded just over 200 fragments (1092gm) of pottery and fired clay from 22 contexts. Most of these fragments are Middle to Late Iron Age in date and include briquetage. Small amounts of Early Roman pottery are also present: there is nothing, apart from a single medieval fragment, which need be later than AD 200.

Methodology

All of the assemblages were quantified by numbers of sherds and their weights per fabric. These fabrics were identified using a x8 magnification lens with inbuilt metric graticule for determining the natures, sizes, forms and frequencies of added inclusions and two numbered series were drawn up for the Prehistoric and Roman fabrics with the prefixes P and R respectively. None of the assemblages are large enough for further, more detailed, quantification.

The Assemblages

Phase 1. Late Bronze Age – Early Iron Age

Two Late Bronze Age urn fragments from Cut [25] and a residual jar sherd of Late Bronze Age or Early Iron Age date from Posthole [33] indicate activity of that date in the vicinity.

Phase 2. Middle to Late Iron Age

The fills of Pit 15 in Trench 1 (Contexts [13] and [14]) yielded 6 sherds (100gm) of pottery between them, including fragments from a shell-tempered ?briquetage container in fabric P14 and other sherds in sparse shell tempered fabric P10 and glauconitic fabric P15: a Middle Iron Age to c.25BC date range is inferred in the absence of 'Belgic' type fabrics. Postholes [19], [29], [31], [33] and [35] in the northern part of the same trench yielded tiny assemblages of calcined-flint tempered pottery and daub suggestive of a similar date-range

The fills of curvilinear ditch 69 in Trench 10 (Context [68]) yielded a further 6 sherds (22gm) of similar date, including one each in chaff-tempered and chaff-and-sand tempered briquetage Fabrics P12 and P13. Pit 67 produced a further 20 sherds of Middle Iron Age to c.25BC date range, including eight more fragments of briquetage: tiny amounts of similar material came from Postholes [77], [86], [88] and [94] in the same trench. The pottery from Posthole [94] includes two fresh fragments from a Middle Iron Age saucepan-pot in fabric P3 with profuse very-finely-crushed flint filler.

Phase 3. Early Roman

The fill of Grave [27] (Context [26]) in Trench 1 yielded 14 sherds of pottery and fired clay, of which the bulk are residual: the three Roman sherds include a jar fragment in BB2 fabric; suggesting a second century date for the internment. The two other graves in this trench lacked pottery. Pit [50] in the same trench yielded a fresh jar sherd in the same fabric.

Phase 4

A small late medieval jar rim sherd came from the fill of the tree bole in Trench 5, suggesting land clearance at that time.

Recommendations

There is only one rim sherd present in the material from this site and it is recommended that the pottery be written up as a short note without recourse to illustration.

Fabrics

Prehistoric

P.1. Handmade lumpy fabric with profuse protruding up-to 5.00mm calcined flint filler. Late Bronze Age

P.2. Handmade lumpy fabric with profuse up-to 3.00mm calcined-flint filler

P.3. Hard handmade smooth brown fabric with profuse 0.50 to 1.00mm calcined-flint filler

P.4. Handmade fabric with sparse up-to 0.50mm calcined-flint filler and occasional up-to 3.00mm fragment

P.5. Polished handmade black fabric with sparse up-to 3.00mm calcined flint filler

P.6. Handmade fabric with sparse-to-moderate up-to 1.00mm calcined flint and profuse up-to 0.20mm quartz filler

P.7. Polished handmade fabric with sparse up-to 0.30mm quartz and up-to 1.50mm calcined flint filler

P.8. Handmade black fabric with sparse up-to 0.50mm quartz filler

P.9. Polished handmade brown/black fabric with sparse up-to 0.30mm calcined flint, ferrous and glauconite inclusions

P.10. Handmade grey-black fabric fired brown with profuse glauconite and sparse up-to 1.00mm calcined flint

P.11. Handmade silt-tempered fabric with occasional up-to 2.00mm calcined flint inclusion and sparse chaff impressions

P.12. Handmade fabric with sparse 0.50 to 1.50mm calcined-flint, grog filler and grass impressions

P.13. Handmade chaff-tempered fabric

- P.14.Handmade lumpy fabric with profuse coarse shell filler and external wipe marks
P.15.Handmade polished black silt-tempered fabric with sparse up-to 1.00mm shell inclusions
P.16.Handmade fabric with shell and sparse up-to 2.00mm calcined-flint filler
P.17.Coarse 'Belgic' grog-tempered ware
P.18.Fine 'Belgic' grog-tempered ware

Roman

- R.1.Pink-brown fabric with profuse up-to 0.10mm quartz filler
R.2.Oxford fine silt-tempered greyware
R.3.BB2
R.4.Thameside greyware
R.5.Misc amphora fabrics

Catalogue

Context	Fabric	Form	Date-range	No of sherds	Wt in gm	Comments
+	P2		Early Iron Age	2	5	Abraded
	P4		E.I.A.-M.I.A.	1	4	
	P9	Jar	M.I.A.-25BC	1	15	
	P11	Jar	M.I.A.-25BC	1	42	
	R3	Open form	c.AD.170-250	1	16	
	R4	Jar	c.AD.150-300	1	3	
	Fired clay			1	2	
				8	87gm	
4	Late Med	?Jar	c.1400-1600	1	5gm	Phase 1 Tr 5
13	P14	?Briquetage	Late Iron Age	2	64gm	Phase 3 Tr 1
14	P10		M.I.A.-25BC	1	13	
	P15	Jar	M.I.A.-25BC	3	23	
				4	36gm	Phase 3 Tr 1
18	P5		M.I.A.-25BC	1	2gm	Phase 2 Tr 1
24	P1	Urn	Late Br Age	2	46	Fresh
	P4	Jar	M.I.A.-25BC	1	9	
			Residual in post-Med context	3	55gm	Phase 4 Tr 1
26	P2	Jar	M.I.A.-25BC	3	6	Fresh
	P6	Jar	Late Iron Age	2	19	
	P14		Late Iron Age	1	3	
	P17		c.25BC-AD.80	1	15	
	P18	Closed	c.25BC-AD.50	1	4	
	R2		c.AD.43-200	1	3	
	R3	Jar	c.AD.70-200	1	3	
	R5	Amphora		1	10	
Fired clay			3	8		
			2 nd c.AD	14	71gm	Phase 3 Tr 1
28	Daub			2	6gm	Phase 2 Tr 1
30	Daub			1	1gm	Phase 2 Tr 1
32	P1	Jar	L.B.A.-E.I.A	1	29	Fresh
	P6		Late Iron Age	1	4	
			Late Iron Age	2	33gm	Phase 2 Tr 1
34	Fired clay			2	4gm	Phase 2 Tr 1
49	R3	Jar	c.AD.110-250	1	7gm	Phase 3 Tr 1

60	P6	Storage-jar	Late Iron Age	2	5	Fresh
	P14		c.AD.50-170	3	29	
	P18		c.25BC-AD.80	1	5	
	R3	Ac latticed cooking-pot	c.AD.110-250	1	3	Fresh
			2 ^{no} c.AD	7	42gm	Phase 3 Tr 1
66	P7	Briquetage	M.I.A.-25BC	12	146	Fresh
	P11		M.I.A.-25BC	3	30	Abraded
	P15		M.I.A.-25BC	5	16	
			M.I.A.-25BC	20	192gm	Phase 2 Tr 10
68	P8	Briquetage	M.I.A.-25BC	1	3	Abraded
	P11		M.I.A.-25BC	3	12	Abraded
	P12	Briquetage	M.I.A.-25BC	1	6	Abraded
	P13	briquetage	M.I.A.-25BC	1	1	abraded
				6	22gm	Phase 2 Tr 10
72	P14	Jar	L.I.A.	1	11	Abraded
	P18	Large open form	L.I.A.	4	333	Fresh joining
R1			Early Roman?	1	1	Abraded
			L.I.A.-AD.50+	6	345gm	Phase 2 Tr 1
76	P11		M.I.A.-25BC	2	8	Abraded
	P16		M.I.A.-25BC	1	5	Abraded
				3	13gm	Phase 2 Tr 10
83	Fired clay			100+	21gm	Phase 3 Tr 1
85	P3		Middle Iron Age	2	8gm	Phase 2 Tr 10
87	P4	Jar	M.I.A.-25BC	13	74gm	Phase 2.Tr 10
93	P3	Saucepan pot	Middle Iron Age	2	6	Fresh joining
	P14	Briquetage		1	1	Abraded
				3	7gm	Phase 2.Tr 10
119	R1		Early Roman	1	2gm	Phase 3.Tr 1

Appendix 3: Human bone assessment

Kathelen Sayer

Introduction

A group of three Roman inhumation burials were excavated from West Hill Hospital, Dartford. Modern service trenches and wall foundations heavily truncated two of these burials.

Methodology

The skeletal remains were analysed to assess the condition of the remains and where possible the age, sex and stature of the individual, any gross pathology present was recorded to site and morphological changes described.

The condition and completeness of a skeleton affects the amount of data that can be recorded. The condition of the bone was recorded according to the stages of surface preservation suggested by McKinley (2004) and the completeness of the skeleton was based on a complete skeleton consisting of:

Skull	20%
Torso	40%
Arms	20%
Legs	20%

Age was assessed using the stages of epiphyseal fusion, measurement of long bone length, dental eruption, dental attrition (Brothwell, 1981), changes within the pubic symphysis (Brooks and Suchey, 1990) and the auricular surface (Lovejoy, 1985).

Sexually dimorphic traits in the pelvis and skull were used to ascertain the sex of the individual. Each individual was placed into one of the following categories: male, female (positive identification), male?, female? (compares favourably to a sex but not conclusive), "I" (intermediate) and '?' (inconclusive).

The living stature of the skeletons was, where possible, calculated from the long bone lengths using the regression equations devised by Trotter and Gleser (1958). The choice of long bones used was based on the preservation of the skeleton and the order of preference suggested by Brothwell and Zakrzewski (2004) for the regression equations.

The dentition was recorded in the following way: -

	Right								Left							
Maxilla	8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8
Mandible	8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8

/	lost post-mortem	X	lost ante-mortem
-	tooth present but jaw missing	U	present
NP	not present	PE	partially erupted

O	tooth erupting		B	broken
V	tooth unerupted	--		tooth and jaw not present
PU	pulp exposed		R	root only

Dental pathology was recorded to site and severity. Brothwell (1981) devised the scoring system used for calculus and the following grading system of severity was used for caries:

1	Pit/fissure
2	<half crown destroyed
3	>half crown destroyed
4	All crown destroyed

Results

Condition

The quantity of bones present has been affected by the heavy truncation of two of the burials, in addition the soil conditions have severely affected the preservation of skeletal elements. The surfaces of the bones that have survived have been severely eroded and the ends of the bones have not survived. The remains from all three burials were in very poor state. The resulting condition of the remains has limited the amount of data that could be recorded.

Skeleton 79

Although burial 79 had not been truncated only c.30% of the skeleton was present. The skeletal elements present were a few very small skull fragments, pelvis fragments, shaft fragments of the left and right humeri, radii and ulnae and shaft fragments of the left and right femora, tibiae and left fibula. The areas used for both aging and sexing were absent, however the small size of the long bones suggest that this individual was a sub-adult. No pathology was observed and no metrical data recorded.

Skeleton 83

Only c.15% of Skeleton 83 survived. The skeletal elements present were the left and right distal humeri, fragments of the left and right ulnae, the right radius, a carpal and two metacarpals from the right hand, fragments of the proximal left and right femora and a tarsal and two metatarsals of the right foot. Although no areas required for aging and sexing were present this individual was probably an adult. No pathology was observed and no metrical data recorded.

Skeleton 124

Only c.5% of Skeleton 124 survived in the form of long bone fragments, some of which were possibly from a humerus. No other data could be recorded.

Recommendations

Due to the very poor condition of the remains no further work is necessary. The text for publication can be derived from the existing assessment report.

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Appendix 4: Animal bone assessment

Lisa Yeomans

Introduction

The small quantity of animal bone recovered from the excavation at West Hill Hospital was in poor condition. Very few of the fragments retained morphological features that allowed identification to species level.

Methodology

The animal bone was identified to species/taxonomic category where possible and to size class in the case of unidentifiable bones such as ribs, fragments of longbone shaft and the majority of vertebra fragments. Recording follows the established techniques whereby details of the element, species, bone portion, state of fusion, wear of the dentition, anatomical measurements and taphonomic (including natural and anthropogenic modifications) to the bone were registered.

Results

The number of bones recovered, and their species identification where possible, are given in Table 1. A single bone fragment was found in the fill of a tree bole [5] in Trench 5. From the Iron Age features only one indeterminate fragment was recovered from the fills of a postholes [37] and also a single indeterminate fragment from fill [72] in Trench 1. The majority of the animal bone was recovered from early Roman contexts; these were all in Trench 3 and included a small quantity of bone in a grave backfill, linear cut and small pit. The largest quantity of bone was found in the upper fill of a pit [15] however, none of the bone was burnt and it seems that it must have accumulated in the pit after it fell into disuse or alternatively had been placed in this position purposefully. This is confirmed by the species present and the bones probably intrusive from Roman period since horses were often discarded outside or purposefully placed on the boundary of settlements where cemeteries are also located. In addition to the faunal remains given in Table 1, some burnt bone fragments were recovered from the environmental samples and these probably represent waste discarded in to a fire.

Species/animal size class	Context						
	4	13	26	36	49	72	119
Cattle (<i>Bos taurus</i>)		3			1		
Horse (<i>Equus caballus</i>)		2					
Small-medium equid		1					
Indeterminate (horse/cattle size)	1	4	1	1			1
Indeterminate (pig size)		2	1			1	
Indeterminate (sheep/goat/dog size)		3			1		

Table 1: Number of animal bones from different contexts identified to species or animal size class in features of different phases.

Recommendations for further work

No further work is recommended on the faunal remains from West Hill Hospital; the size of the assemblage is too small to provide any further information on the use of animals during the use of the site in the Iron Age and early Roman periods. The assessment report can be used to summarise the publication text for the article to be written on the archaeology of the site

Appendix 5: Iron nails assessment

Märit Gaimster

Metal finds recovered from the Former West Hill Hospital site consist of some 30 nails, the majority comprising coffin nails from Burial [27]. A handful of nails were also retrieved from the fill of posthole [61].

Burial [27]

In total, eighteen nails were recovered from Burial [27], mostly incomplete; these are presumably coffin nails. At least two different sizes of nails were present, with the larger size represented by the incomplete nail <4>. A further type is represented by nail <18>. Additionally, there were six studs or hobnails.

context	sf	description
26	3	iron coffin nail; incomplete; square section with off-centre flat rectangular head; L 45mm
	4	iron coffin nail; incomplete; square section with off-centre flat rectangular head; L 70mm
	5	iron coffin nail; incomplete; square section with off-centre flat rectangular head; L 50mm;
80	1	iron coffin nail; incomplete; L 40mm:
	13	iron coffin nail; incomplete; square section with off-centre flat rectangular head; L 45mm
	14	iron coffin nail; incomplete; square section with off-centre flat rectangular head; L 35mm
	15	iron coffin nail; complete but in two pieces; square section with flat roundish head; L 60mm;
	16	iron coffin nail; incomplete; square section with off-centre flat rectangular head; L 45mm
	17	iron coffin nail; tip only; square section
	18	iron coffin nail; complete; square section with only part of head; L 45mm;
	19	iron coffin nail; two fragments; square section with flat head;
	21	iron coffin nail; complete but in two pieces; square section with slightly off-centre flat oval head; L 55mm;
	22	iron coffin nail; fragment of shaft only; square section
	23	iron coffin nail; near-complete; square section with roundish head; L 45mm;
	24	iron coffin nail; tip only; square section
	25	iron coffin nail; complete but in two pieces; square section with flat rectangular head; L 60mm;
	26	iron stud or hobnail
	27	iron stud or hobnail
	28	iron stud or hobnail
	29	iron stud or hobnail
	30	iron stud or hobnail
	31	iron stud or hobnail
	32	iron coffin nail; incomplete; square section with off-centre flat rectangular head; L 45mm;
	33	iron coffin nail; incomplete; square section with off-centre flat rectangular

		head; L 25mm
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Table 1: Iron nails from grave cut [27]

Posthole [61]

Posthole [61] yielded seven nails of a similar type to those from Burial [27]. Both slightly larger, exemplified by small find <6>, and smaller nails are represented. Two fragments of flattish, rectangular-section nails were also retrieved.

context	sf	description
60	6	iron coffin nail; complete; square section with off-centre flat rectangular head; L 100mm
	7	iron coffin nail; complete but in two pieces; square section with off-centre flat roundish head; L 65mm
	8	iron coffin nail; incomplete; square section with off-centre flat roundish head; L 30mm;
	9	iron coffin nail; incomplete; square section with only part of head; L 25mm;
	10	iron coffin nail; incomplete; square section with off-centre flat head; L 30mm;
	11	iron coffin nail; incomplete; square section with off-centre flat head; L 40mm;
	12	two fragments of flat rectangular-section iron nail; tip of incomplete square-section iron nail

Table 2: Iron nails from posthole [61]

Recommendations

No further work is recommended for this small assemblage; however, the nails should be included in the publication text for the site.

Appendix 6: Environmental assessment

N.P. Branch, G.E. Swindle, C.P. Green and I. Poole

Introduction

This report summarises the findings arising out of a environmental archaeological assessment undertaken by *ArchaeoScape* in connection with the development at West Hill Hospital, Dartford, Kent (Site Code: KWHH 05; National Grid Reference: TQ 537 743). The archaeological excavation permitted an examination of the local sediment successions (contexts) within a range of features uncovered in three trenches (1, 8 and 10), and thus provided an opportunity to establish their environmental archaeological significance. The features have been provisionally dated to the late Iron Age (Phase 2) and Early Roman period (Phase 3), with one sample from a Post-medieval period (Phase 4). The exercise consisted of an assessment of fossilised macro-remains (e.g. charcoal and seeds), to evaluate their potential for reconstructing local environmental conditions, and the economy and diet of the former inhabitants.

Geological context

According to the British Geological Survey, the site is on the bluff between the Boyn Hill Terrace above and the Taplow Terrace below, and at a level only slightly above 20m. The site is mapped as Upper Chalk with no Drift cover and this is consistent with its altitude, which is below the level of the base of the nearby Boyn Hill Terrace sediments. The site slopes gently from west to east towards the valley of the River Darent, but the natural ground surface has been very extensively modified by levelling, associated with building construction. Across most of the eastern two-thirds of the site, terracing has cut down the natural topography to expose the bedrock Chalk. Only in a relatively narrow strip of ground adjoining the western boundary of the site are superficial geological deposits preserved, and even here the natural soil horizons have been removed and the surviving deposits are interrupted by numerous remnants of foundations and drainage works and in many places are overlain by made ground.

Methods

Fifteen bulk samples were assessed from a range of archaeological features including pits, ditches and postholes from three trenches (1, 8 and 10). Six samples were dated to Phase 2 (Late Iron Age), eight samples were taken from Phase 3 (Early Roman), and one sample was from Phase 4 (Post-medieval). Sample volume ranged from 10 to 20 litres. The bulk samples were processed by flotation by Pre-Construct Archaeology Ltd using 1mm and 300µm mesh sieves. All flots and residues were assessed for their plant macrofossil and charcoal content (Table 1 and Table 2).

Plant macrofossil assessment

The flots were scanned using a low-power zoom-stereo microscope and the residues were sorted 'by eye'. Recommendation for further analysis was based on the density, diversity and standard of preservation of the material. Plant nomenclature follows Stace (1997). The results of the plant macrofossil assessment are summarised in Table 1.

Charcoal assessment

The ten bulk samples containing identifiable charcoal were scanned using a low power zoom-stereo microscope. The material was prepared using standard techniques (Gale and Cutler 2000) and examined using an Olympus BX41 microscope. The charoalified material was examined using reflected light with magnifications of up to 400x. Material was identified from three planes of section whenever possible and compared, when necessary, with relevant literature (e.g. Schweingruber 1990). Where abundant material was provided (sample <105>, context (13)) only charcoal samples c. 2mm or greater were studied as smaller pieces lack diagnostic character suites needed for identification. Material categorised as 'unidentifiable' could not be assigned with confidence to a specific taxon due to small size and/or quality of anatomical character preservation. When a genus is represented by a single species in the native British flora it is named as the most likely origin of the wood although it must be noted that wood anatomy alone is often not enough to secure identification to individual species. Classification follows that of Tutin et al (1964-1980). The results of the charcoal assessment are summarised in Table 2. The charcoal from each sample was sorted into glass vials by taxa and then labelled individually for possible ¹⁴C dating purposes (Table 2).

Results

The results of the assessment are presented by trench then by phase. No charred or waterlogged seeds were present in any of the samples. A total of 234 charcoal fragments were examined, of which 138 fragments were unidentifiable. From the ninety-six fragments, which were identifiable the following 8 taxa were determined:

Corylus avellana (Hazel)

Fagus sylvatica (Beech)

Maloideae: includes - *Crataegus* (Hawthorn), *Sorbus* (Rowan, Whitebeams, Wild Service tree), *Malus* (Apple), and *Pyrus* (Pear)

Prunus sp. (Blackthorn, Cherries)

Quercus sp. (Oak)

Ulmus sp. (Elm)

Acer sp. (Maple)

?*Euonymus* (Spindle tree)

The anatomy of the material was consistent with the taxa or groups of taxa given in the Table. All material appeared to be from relatively mature wood as determined by growth ring curvature.

Some charcoal specimens were black and shiny in appearance indicative of having been heated to high temperatures (up to but probably not exceeding 400°C; Menzel and Poole unpublished data). The preservation of the anatomical structures needed for identification, in these specimens, were obscured and thus rendered the material 'unidentifiable'. Since this material had been subject to relatively high temperatures, which may in turn affect the radiocarbon dates, use of unidentifiable material for potential 14C dating is not recommended.

Trench 1

Phase 2: Late Iron Age

Trench 1 was located in the southeast area of the site and immediately north of West Hill (Watling Street). A series of postholes, mainly concentrated in the north area of the trench, represented the deposits in this trench. Their fills produced very occasional fragments of prehistoric pottery that were interpreted as Iron Age in date. It is possible that these postholes represent more than one structure with the latest phase possibly associated with the early Roman Cemetery (Grosso 2005). Sample <2> context [58], sample <7> context [72] and sample <16> context [126], were taken from postholes and assessed. Sample <2> contained a few fragments of unidentifiable charcoal. Sample <7> contained one fragment of *Fagus sylvatica* and 9 fragments of *Quercus* sp. Sample <16> contained 1 fragment of *Quercus* sp. All samples from Phase 2 in Trench 1 contained a small quantity of Mollusca.

Phase 3: Early Roman

Sample <3> context [60] and sample <6> context [70] were both taken from possible postholes thought to be associated with the early Roman Cemetery (Phase 3). Both contained Mollusca. Context [60] contained 1 fragment of *Prunus* sp., 2 fragments of *Quercus* sp. and 1 fragment of *Fagus sylvatica*. Context [70] from the fill of a small pit/post hole [71] contained 16 fragments of *Quercus* sp., 1 fragment of *?Corylus avellana*, 1 fragment of *?Euonymus* and 1 fragment of *Maloideae*. Context [70] also contained a small amount of unidentifiable animal bone.

Sample <1> context [13] taken from the upper fill of a small pit [15] measuring 0.68m north-south, 0.75 east-west and 0.23 deep, contained two fills (lower and upper) with very frequent burnt material (animal bone fragments, pottery and burnt flints), and was interpreted as a 'pot boiler' pit (Grosso 2005). Sample <1> contained 7 fragments of *Fagus sylvatica*, 9 fragments of *Quercus* sp., 1 fragment of *Acer* sp. and 1 fragment of *Ulmus* sp. The sample also contained a few fragments of Mollusca.

A group of graves represented by grave cuts [27], [84] and [125] were also present within Phase 3. Only grave cut [27], and its associated contexts [81] and [26], survived without major

truncation. Sample <11> context [81] and sample <4> context [26] contained unidentifiable charcoal and a small quantity of Mollusca. Sample <12> context [82] from grave cut [84] was heavily truncated by modern service trenches and the foundation walls but contained 1 fragment of *Acer* sp., 2 fragments of *Quercus* sp and a small quantity of Mollusca.

Linear features [65] and [120], located in the east area of Trench 1, produced occasional Roman CBM and were interpreted as property / boundary ditches (Grosso 2005). Sample <5> context [64] from feature [65] contained 3 fragments of *Quercus* sp. and 6 fragments of *Fagus sylvatica*, and a small quantity of Mollusca. Context [119] from feature [120] contained a small quantity of unidentifiable charcoal fragments and Mollusca.

Phase 4: Post-medieval

This phase is represented by cut [25], a 0.14m deep square pit [131], which did not produce any dating material but was interpreted as post medieval (Grosso 2005). Sample <17> context [130] was taken from its fill. It contained a small quantity of unidentifiable charcoal fragments and Mollusca.

Trench 8

Phase 2: Late Iron Age

Sample <13> context [105] was taken from Trench 8 during the evaluation phase of the site. This sample was taken from the fill of a semicircular cut [106] and contained 84 fragments of charcoal. Most of these were unidentifiable, however 16 fragments of *Quercus* sp., 2 fragments of ?Maloideae, 1 fragment of ?*Fagus sylvatica* and 3 fragments of ?*Alnus* sp. were identified.

Trench 10

Phase 2: Late Iron Age

In Trench 10, Phase 2 is represented by a curvilinear group of post holes located in the north area of the trench. Their fills produced occasional fragments of prehistoric pottery and the cuts are believed to be part of a structure, possibly a round house (Grosso 2005). To the south of the postholes a curvilinear shallow ditch [69], measuring ca. 0.30m deep, was observed. Very occasional prehistoric pottery was recovered for the ditch fill, which is thought to represent a boundary or enclosure (Grosso 2005). It is possible that this ditch was heavily truncated by terracing for the former West Hill Hospital. Sample <8> context [68] taken from this ditch contained a small quantity of Mollusca. To the southeast of Trench 10 and inside the enclosure / boundary ditch [69] a very shallow semicircular pit [67], was truncated on its north side by a modern intrusion. Its fill, sample < 9>, context [66], contained pottery fragments, CBM and a

small quantity of Mollusca. Context [66] also included 9 fragments of *Quercus sp.* and 1 fragment of *?Alnus sp.*

Interpretation

Phase 2: Late Iron Age

The charcoal data from Phase 2 indicates the exploitation and utilisation of mainly beech and oak woodland, but also species of the apple sub-family and alder, for fuel and possibly construction. It has not been possible to ascertain whether these tree taxa represent managed woodland. However, they do suggest that two main ecosystems were being exploited, one consisting of dryland taxa and containing oak and beech, and the other wetland taxa (near rivers, ponds, streams and lakes), containing alder.

Phase 3: Early Roman

The charcoal data from Phase 3 indicates the exploitation and utilisation of a wider range of tree taxa, including beech and oak woodland, but also blackthorn, hazel, and possibly spindle. Again it has not been possible to ascertain whether these woodland taxa represent managed woodland. They suggest, however, the exploitation of dryland woodland, and the greater range of taxa may reflect the need to utilise other woodland due to depletion of oak and beech.

Recommendations

Due to the low concentration of identifiable charcoal, and the generally poor state of preservation, the assemblages have little potential for reconstructing the local economy. No further analysis is recommended. The Mollusca assemblage consisted of mainly one taxon (unidentified), and therefore has low potential for providing a detailed reconstruction of the past environment. No further analysis is recommended. The results of the charcoal assessment should be incorporated in the final publication report to provide a general comment on those tree taxa utilised by the site's inhabitants for fuel wood and/or timber for construction.

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Table 1: Bulk sample assessment of samples from land at the former West Hill Hospital, Dartford, Kent (KWHH05)

Context	Sample	Phase	Trench	Description	Sample vol. processed (l)	Sample vol. remaining (l)	Charcoal	Charred seeds	Waterlogged seeds	Mollusca	Bone
58	2	2	Tr. 1	Fill of Post Hole [59]	10	0	+1	-	-	+2	
72	7	2	Tr. 1	Fill Of Post Hole [73]	10	10	++2	-	-	+2	
126	16	2	Tr. 1	Fill Of Post Hole[127]	10	0	+2	-	-	+2	
60	3	3	Tr. 1	Fill of Roman Post Hole [61]	10	10	+2	-	-	++2	
70	6	3	Tr. 1	Fill Of Small Pit/Post Hole [71]	10	0	++2	-	-	++2	+1
13	1	3	Tr. 1	Upper Fill Of Cut [15]	10	20	++2	-	-	++2	
81	11	3	Tr. 1	Primary Fill Of Grave Cut [27]	10	10	+1	-	-	++2	
26	4	3	Tr. 1	Backfill Of Roman Grave Cut [27]	10	10	+1	-	-	++2	
82	12	3	Tr. 1	Backfill Of Roman Grave Cut [84]	10	5	+2	-	-	++2	
119	14	3	Tr. 1	Fill Of Linear Cut Feature [120]	10	10	+1	-	-	++2	
64	5	3	Tr. 1	Fill Of Linear Feature [65]	20	10	+2	-	-	++2	
130	17	4	Tr. 1	Fill Of	10	0	+1	-	-	++2	

				Rectangular Pit [131]							
105	13	2	Tr. 8	Fill Of Semicircular Cut [106]	10	10	+++2	-	-	-	
68	8	2	Tr. 10	Fill Of Curvilinear Prehistoric Ditch [69]	10	10	-	-	-	++2	
66	9	2	Tr. 10	Fill Of Circular Pit [67]	10	0	++2	-	-	++2	

Key:

Concentration		Preservation		Provisional Dates		
-	= Absent	1	Unidentifiable	Phase 2	LIA	Late Iron Age
+	= 1-10	2	Some Identifiable	Phase 3	ER	Early Roman
++	= 11-50			Phase 4	PM	Post-medieval
+++	= 51-150					
++++	= + 150					

Table 2: Charcoal assessment of samples from land at the former West Hill Hospital, Dartford, Kent (KWHH05)

Context	Sample	Phase	Trench	Description	Charcoal			
72	7	2	Tr. 1	Fill Of Post Hole [73]	++2	--	<i>Fagus sylvatica</i>	1
						A	debris & unidentifiable	3
						B	<i>Quercus</i> sp.	9
126	16	2	Tr. 1	Fill Of Post Hole[127]	+2	A	<i>Quercus</i> sp.	1
						B	debris & unidentifiable	2
60	3	3	Tr. 1	Fill of Roman Post Hole [61]	+2	A	Unidentifiable	1
						B	<i>Prunus</i> sp.	1
						C	<i>Quercus</i> sp.	2
						D	<i>Fagus sylvatica</i>	1
70	6	3	Tr. 1	Fill Of Small Pit/Post Hole [71]	++2	A	Unidentifiable	5
						B	<i>Quercus</i> sp.	16
						C	? <i>Corylus avellana</i>	1
						D	? <i>Euonymus</i>	1
						B*	Unidentifiable	16
						C*	Maloideae	1
13	1	3	Tr. 1	Upper Fill Of Cut [15]	++2	A	<i>Fagus sylvatica</i>	7
						B	<i>Quercus</i> sp.	9
						C	<i>Acer</i> sp.	1
						D	<i>Ulmus</i> sp.	1
						In bag	unidentifiable	3
81	11	3	Tr. 1	Primary Fill Of Grave Cut [27]	+1	A	debris & unidentifiable	18
82	12	3	Tr. 1	Backfill Of Roman Grave Cut [84]	+2	A	<i>Acer</i> sp.	1
						B	<i>Quercus</i> sp.	2
						C	debris & unidentifiable	5
64	5	3	Tr. 1	Fill Of Linear Feature [65]	+2	A	<i>Quercus</i> sp.	3
						B	<i>Fagus sylvatica</i>	6
						C	debris & unidentifiable	15
105	13	2	Tr. 8	Fill Of Semicircular Cut [106]	+++2	A	Unidentifiable	62
						B	<i>Quercus</i> sp.	16
						C	?Maloideae	2
						D	? <i>Fagus sylvatica</i>	1
						E	? <i>Alnus</i> sp.	3
66	9	2	Tr. 10	Fill Of Circular Pit [67]	+2	A	Unidentifiable	8
						B	<i>Quercus</i> sp.	9
						C	? <i>Alnus</i> sp.	1

* Taken from 0.3mm flot

Appendix 7: Lithic Assessment

Barry John Bishop

INTRODUCTION

Excavations at the above site recovered 21 struck flints and just over 6.5kg of burnt flint fragments. This report quantifies the material by context according to a basic technological/typological scheme (see Table 1), assesses its ability to contribute to further understanding of the nature and chronology of the activities identified during the project, and recommends any further work required.

QUANTIFICATION

Context	Decorticated on flake	Flake	Blade-like flake	Flake fragment	Core	Core Tool	Retouched	Concoidal Chunk	Burnt no. >10mm	Burnt wt. (g)
+						1			43	1080
013									38	2630
014									1	63
020									5	38
026									9	170
034	1						1			
049									3	41
056		1							3	42
058	1								28	294
060									3	175
066									1	37
068		1		1				3	16	410
072									2	170
076	1	1			1			1	16	245
078		1					1			
082									1	84

085	1									
087		3							2	15
091			1							
105									24	925
111									1	60
113									2	155
123									1	14

Table 1: Quantification of Lithic Material by Context

BURNT FLINT

Burnt stone, consisting of otherwise unmodified fragments of heat affected flint with a small component of quartzite pebbles, was recovered from 19 contexts.

It had nearly all been heated to a very high temperature, resulting in it becoming heavily 'fire-crazed', attaining a uniform grey-white colour, and it had undergone considerable shattering, although individual fragments frequently exceeded 100g in weight.

It was clear that large nodular cobbles had been selected and deliberately burnt, characteristic of 'pot-boilers', and it appears likely that it had arisen from an intentional process, rather from accidental burning of natural flint from casual hearth use, which would cause differential burning. Although there were not the very high quantities such as recorded from 'burnt mound' sites, the concentrations and the degree of burning suggest the intensive and deliberate use of burnt flint, usually identified with processes such as cooking or perhaps other 'industrial' activities.

The highest quantity, nearly 2kg, came from Late Iron Age pit [15], almost all of it from its upper fill [13]. It is unclear whether its placement in the upper fill was part of a purposeful act or not.

Late Iron Age pit [106] also produced substantial quantities, to which over 1kg of additional burnt flint recovered from an intrusion through the pit may be added. A sample taken from fill [13] also contained nearly 0.75kg of very small burnt spalls and fragments. This represents several thousand pieces, suggesting that the stone was burnt and had fractured *in situ*.

The majority of the remaining burnt flint was recovered from Late iron Age features and may have derived residually from the activities associated with pits [15] and [106]. Several of the postholes from this phase produced quite sizeable quantities where it may have been utilized as post-packing, such as that from postholes [59], [61], [73] and [77].

Some burnt flint was recovered from Roman contexts. This may derive from activities connected with rituals associated with the placement of the dead, although it is likely that at least some represents residual deposition from the Iron Age phase.

STRUCK FLINT

Raw Material

The struck material was manufactured from a fine-grained black flint containing varying, but generally high, proportions of 'swirly' grey or white cherty inclusions, typical of North Downs flint. Where preserved, it had a weathered but thick and rough cortex and many pieces exhibited ancient, heavily recorticated, thermal scars. The raw materials appeared to comprise angular to nodular-shaped cobbles such as would be present in peri-glacially affected derived deposits and which would be commonly present at and around the site.

Condition

Condition of the assemblage as a whole was variable, with most pieces exhibiting some degree of edge chipping and abrasion; in some cases, this could be quite heavy. There was no evidence of *in situ* flintworking and it is possible that all of the struck flint was residually deposited.

Technology/Typology

The only typologically diagnostic pieces consisted of an obliquely truncated cortical blade from context [78]. This effectively consisted of the accentuating of the convergent distal end of the blade, and the implement almost certainly represents a piercing tool. Truncated blades are mostly found in Mesolithic assemblages although may occasionally be present in Early Neolithic industries. The remaining retouched implement consisted of a narrow but irregularly struck flake with what may be a blunt spur formed on its left lateral margin by shallow notching. Such pieces can be found in industries dating from the Mesolithic to the Bronze Age.

A single core was recovered, consisting of a minimally worked, angular pebble with incipient Hertzian cones on its striking platform, suggesting it was abandoned after further flakes could not be dislodged. A possible core tool, consisting of a thermal chunk with a series of flakes removed, resembling a denticulated chopping tool, was also present, although it is uncertain whether the flakes were removed deliberately or fortuitously.

The remainder of the assemblage consisted of a number of rather crudely struck flakes and conchoidally fractured chunks. With a few pieces, principally some of the decortication flakes and conchoidal shatter, there was some doubt as to whether they had definitely been deliberately produced. They could be the products of a very crude industry but, equally, may have been accidentally struck during activities such as pit or ditch digging.

The convincingly struck pieces mostly consisted of thick and squat flakes with wide striking platforms. These were the product of a casual and opportunistic knapping strategy, typical of the flintworking traditions of the Middle or Late Bronze Age (cf Brown 1991; Herne 1991), and which possibly continued into the Iron Age (eg Pollard 1996; Young and Humphrey 1999), although the

presence of one or two more carefully produced flakes, such as the truncated blade and the blade-like flake from context [091], indicate limited earlier activity at the site.

DISCUSSION

The struck assemblage was small and mostly the product of a crude industry. There was some uncertainty whether every piece was deliberately produced, although at least some could be attributed to Middle Bronze Age or later industries, and at least one piece, the truncated blade, is most likely of Mesolithic or possibly Early Neolithic derivation. The size of the assemblage indicates that flint use was never an important aspect of the occupation of the site during any of the periods represented.

Although good evidence for a continuation of flintworking into the Iron Age has recently been advanced (Young and Humphrey 1999; Humphrey 2003), there was little evidence that any of the flintwork was associated with the Late Iron Age occupation identified in the structural record here. The relatively large quantities of burnt stone recovered would suggest either cooking or industrial activities, apparently associated with pits [15] and [106].

RECOMMENDATIONS

Due to its size and paucity of chronologically diagnostic artefacts, this report is all that is required of the material for the purposes of the archive and no further analytical work is proposed.

Nevertheless, the material does contribute to the body of evidence for prehistoric activity in the area and a short description of the assemblage should be included in the account to be published of the fieldwork.

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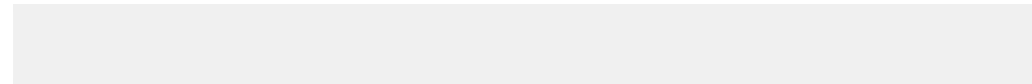
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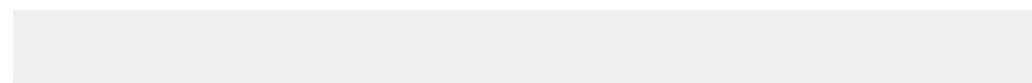
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OASIS ID: preconst1-13542



Project details

Project name West Hill Hospital, Dartford, Kent

Short description of the project The excavation produced tentative evidence of Late Bronze Age activity and evidence for a Mid-Late Iron Age settlement, which included the remains of two roundhouses. Subsequently the area was used for funerary activity during the Roman period, comprising the remains of three inhumation burials.

Project dates Start: 26-09-2005 End: 18-10-2005

Previous/future work No / No

Type of project Field evaluation

Site status None

Current Land use	Vacant Land 1 - Vacant land previously developed
Monument type	ROUND HOUSE (DOMESTIC) Iron Age
Monument type	CEMETERY Roman
Significant Finds	POTTERY Middle Iron Age
Significant Finds	BURNT FLINT Late Iron Age
Significant Finds	HUMAN REMAINS Roman
Methods & techniques	'Trial trenches'
Development type	Housing
Prompt	Direction from Local Planning Authority - PPG16
Position in the planning process	After full determination (eg. As a condition)

Project location

Country	England
Site location	KENT DARTFORD DARTFORD West Hill Hospital
Postcode	DA1
Study area	2.00 Hectares
National grid reference	TQ 537 743 Point
Height OD	Min: 25.00m Max: 29.00m

Project creators

Name of Organisation	Pre-Construct Archaeology Ltd
Project brief originator	CgMs Consultants Ltd
Project design	CgMs Consultants Ltd

originator

Project Jon Butler
director/manager

Project supervisor Ireneo Grosso

Sponsor or funding Barratt Homes
body



Project archives

Physical Archive Local museum
recipient

Physical Contents 'Animal Bones','Environmental','Human Bones','Metal'

Digital Contents 'Stratigraphic'

Paper Archive Local Museum
recipient

Project

bibliography 1

Grey literature (unpublished document/manuscript)

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