

Event: L0611-

ID: SLO76267*

LAG/21/96

SKD 02

October

2002

MON: L076112 (pit, ditch)
MON: L077071 (quarry pit, building rubble, structure)
MON: L077072 (plough soil)
MON: L077073 (structure, pit, field boundary)
MON: L077076 (basement)

ASSESSMENT OF AN
ARCHAEOLOGICAL EXCAVATION
AT SKERNE ROAD,
ROYAL BOROUGH OF KINGSTON UPON THAMES

PRE-CONSTRUCT
ARCHAEOLOGY LTD.

**Assessment of an Archaeological Excavation at Skerne Road, Royal
Borough of Kingston upon Thames**

**Central National Grid Reference: TQ 1810 6970
Site Code: SKD 01**

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Pre-Construct Archaeology Ltd, October 2002

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CONTENTS

1	Abstract	3
2	Introduction	4
3	Planning Background and Research Objectives	7
4	Geology and Topography	9
5	Archaeological and Historical Background	10
6	Archaeological Methodology	13
7	The Archaeological Sequence	15
8	Research Questions	25
9	Contents of the Archive	30
10	Importance of Results and Publication Outline	31
11	Acknowledgements	33
12	Bibliography	34

Appendices:

1	Context Descriptions	35
2	Roman Pottery Assessment	40
3	Building Materials Assessment	44
4	Animal Bone Assessment	51
5	Post Medieval Pottery Assessment	58
6	Tobacco Pipe Assessment	60
7	Environmental Assessment	61
8	Lithics Assessment	63
9	Small Finds Assessment	67
10	Evaluation Summary Report	70
11	GLSMR Report Form	73

Illustrations:

Figure 1	The site location	5
Figure 2	The trench locations	6
Figure 3	Roman Features	19
Figure 4	Post Medieval features	24

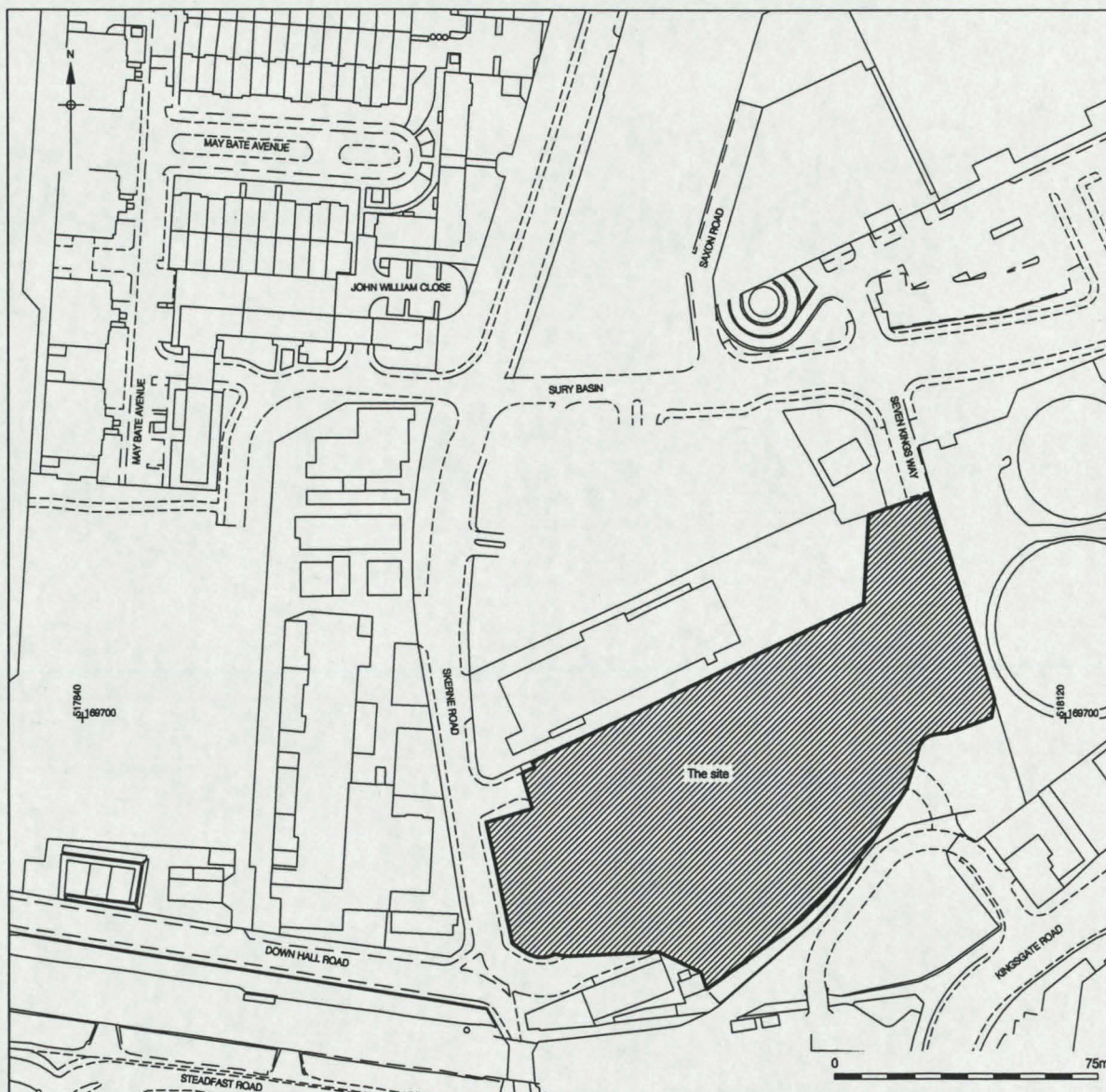
1 ABSTRACT

- 1.1 This report details the results and working methods of an archaeological excavation undertaken at Skerne Road, Royal Borough of Kingston upon Thames, between 7th and 29th January 2002. The site is centred at National Grid Reference TQ 1810 6970. The work followed an archaeological evaluation which was carried out between 28th November and 5th December 2001. All Fieldwork was undertaken by Pre-Construct Archaeology Limited under the supervision of the author and the project manager was Gary Brown.
- 1.2 The evaluation comprised the excavation of three trenches and one test pit. Trench 1, situated towards the north west of the site, revealed evidence of a pit and probable posthole yielding high concentrations of unabraded ceramic building material (CBM) and pottery dating to the Roman period. Trenches 2 and 3 produced evidence of a large flood deposit / channel, into which several late Post Medieval pits and post / stakeholes were cut.
- 1.3 Accordingly an excavation ensued, with a single trench being excavated in the car park area towards the north west of the site, and a further five test pits excavated in an area of demolished buildings immediately to the east (see fig. 2). The excavation revealed evidence of three phases of Roman occupation, the most significant being represented by two quarry pits backfilled with the full spectrum of domestic waste, and large quantities of CBM which appeared to have derived from a relatively high status building. Further probable flood residue deposits were also identified towards the west of the trench. Post Medieval features were predominantly in the form of pits and postholes, and the basement of a 19th century building was also recorded with associated probable garden features.

2 INTRODUCTION

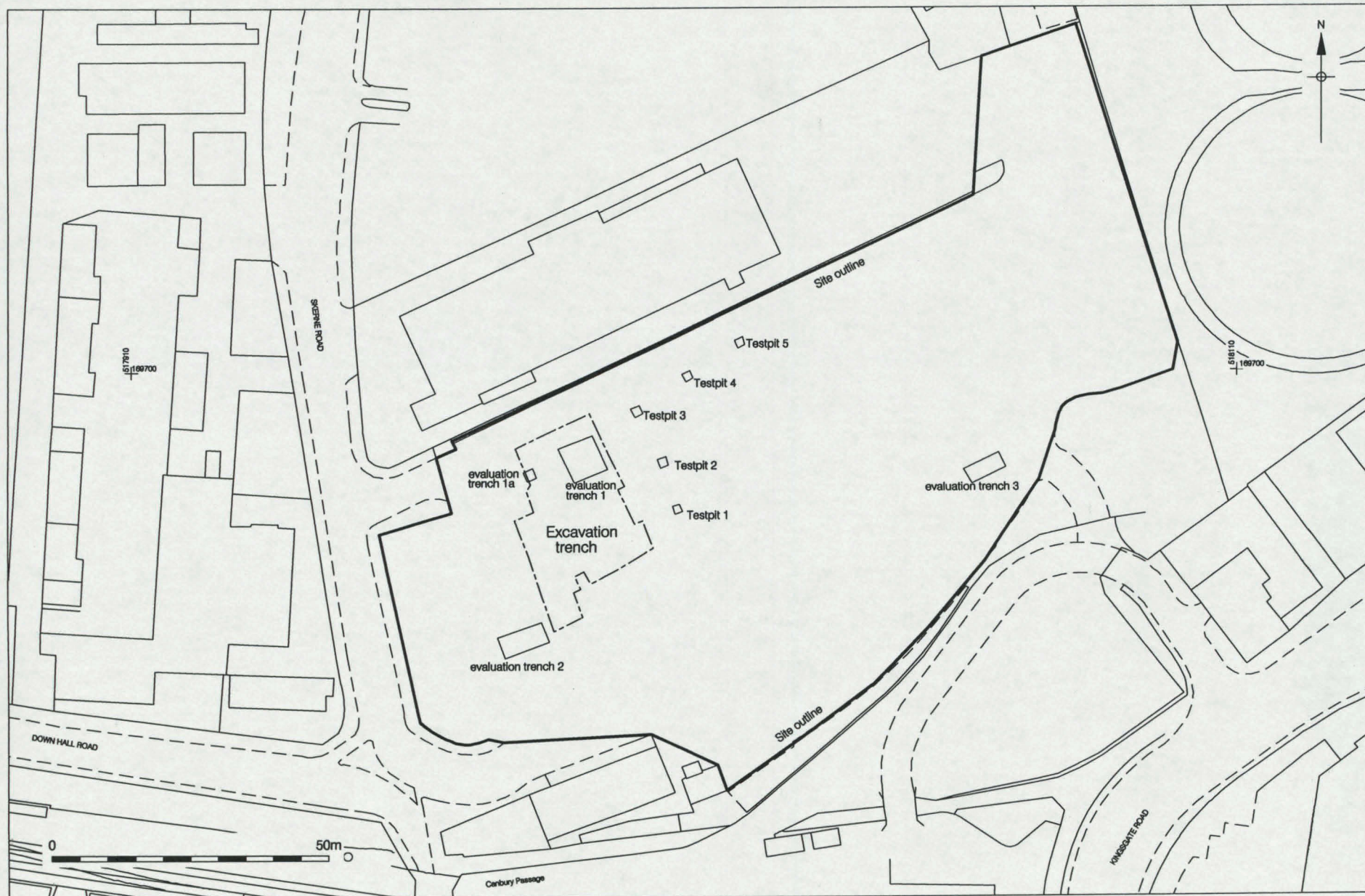
- 2.1 The archaeological excavation was carried out between 7th and 29th January 2002, following a field evaluation undertaken between 28th November and 5th December 2001 (the results of the evaluation can be found in Appendix 10 of this report). The site address is Skerne Road, Royal Borough of Kingston upon Thames and it is bounded to the west by Skerne Road (formerly Lower Ham Road), to the south by railway land, to the east by a gas storage facility, and to the north by a factory.
- 2.2 The project was commissioned by Duncan Hawkins of CgMs Consulting on behalf of St George West London. A desk-based archaeological assessment and specifications for an evaluation and excavation were prepared prior to the fieldwork.¹ The work was undertaken by Pre-Construct Archaeology Ltd under the supervision of Timothy Bradley and the project management of Gary Brown. David Divers managed the post-excavation work.
- 2.3 The fieldwork investigations were monitored by Duncan Hawkins on behalf of St George West London, and Mark Stevenson, English Heritage GLAAS.
- 2.4 The completed archive comprising written, drawn and photographic records and artifactual material from the evaluation and excavation will be deposited with the London Archaeological Archive Research Centre.
- 2.5 The site was allocated the site code SCN 01 (evaluation) and SKD 01 (excavation)

¹ Hawkins, 2001, 2002



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Figure 1
Site Location
1:2000



Reproduced from Ordnance Survey Superplan Data © Crown Copyright 2002

Figure 2
Trench Location
1:1000

3 PLANNING BACKGROUND AND RESEARCH OBJECTIVES

3.1 Planning Background

3.1.1 Prior to excavation the site was occupied by light industrial buildings post dating 1956. Ground level on the south east of the site was significantly higher than the surrounding area as the result of the presence of a former railway embankment. Despite the proposed development not being finalised, it was understood that as part of the development ground level would be reduced across the site to approximately that of Skerne Road. As a result it was considered unlikely that any archaeological deposits surviving on the site would survive the redevelopment process

3.1.2 The relevant development plan framework was provided by The Royal Borough of Kingston upon Thames Unitary Development Plan Written Statement, adopted in March 1998. This plan contains the following policy which provides a framework for the consideration of development proposals affecting ancient monuments and archaeology.

"POLICY BE19

- A) WHERE DEVELOPMENT PROPOSALS AFFECT KNOWN AREAS OF ARCHAEOLOGICAL SIGNIFICANCE, AS IDENTIFIED ON THE PROPOSALS MAP, THE COUNCIL WILL EXPECT PROVISION TO BE MADE FOR A SITE EVALUATION, WHERE REQUIRED, BY AN ARCHAEOLOGICAL ORGANISATION APPROVED BY THE LOCAL PLANNING AUTHORITY PRIOR TO THE DETERMINATION OF PLANNING APPLICATIONS.
- B) WHERE EVALUATION PROVES THE EXISTENCE OF ARCAEOLOGICAL REMAINS, THE FOLLOWING APPROPRIATE ACTION WILL APPLY;
 - i) FOR REMAINS OF MAJOR ARCHAEOLOGICAL IMPORTANCE, THE COUNCIL WILL EXPECT PROVISION TO BE MADE FOR PRESERVATION IN SITU AND WILL CONSIDER THE NEED FOR STATUTORY PROTECTION OF MONUMENTS OF NATIONAL IMPORTANCE;
 - ii) FOR OTHER REMAINS OF ARCHAEOLOGICAL IMPORTANCE, A FULL ARCHAEOLOGICAL EXCAVATION WILL BE REQUIRED PRIOR TO ANY DEVELOPMENT.

WHERE THERE ARE REASONABLE GROUNDS TO SUSPECT THAT ARCHAEOLOGICAL REMAINS MAY EXIST IN OTHER AREAS, PROVISIONS MADE UNDER A) AND B) WILL BE APPLIED.

3.1.3 The evaluation uncovered important archaeological remains towards the north west of the site. As discussed above, the proposed development of the site comprised ground works

which would impact severely on the archaeological resource. Consequently, a proposal for an archaeological excavation in advance of development was compiled.²

- 3.1.4 A single excavation trench together with five test pits were therefore excavated, their locations being determined by the extent of archaeological features found during the evaluation.

3.2 Research Objectives

The site specific research objectives, as set out by Duncan Hawkins in his Proposals For an Archaeological Excavation document, were as follows:

Roman Period

- Determine the date range, form and function of the Roman activity/settlement present on the study site.
- What evidence is there for trade contacts?
- What evidence is there for domestic occupation?
- What range of structures is represented on the site and how were these constructed?
- What evidence is there for Environmental conditions and agricultural practices/techniques?

Post Medieval Period

- Determine the colonisation date of the late Post Medieval activity on the site.
- What was the nature of the late Post Medieval activity on the site?

² Hawkins 2002

4 GEOLOGY AND TOPOGRAPHY

- 4.1 The Geology of Kingston reflects the change in levels and variation in flow rate of the River Thames through geological and more recent times. The underlying gravel and sand deposits of the Reading and Woolwich beds and the London clay underlying them, were formations of the Eocene period, laid in a basin 90,000 years ago.
- 4.2 The site is located to the north of the Latchmere River/Downhall ditch channel (now broadly represented by the railway line) which formed the northern boundary of the gravel island on which the centre of Kingston is located. This channel is thought to be the former arm of the river Hogsmill, and it is possible that the channel fill identified towards the south east of the site during the evaluation may represent a tributary of it.
- 4.3 During the evaluation the site was occupied by light industrial buildings which were subsequently demolished during the course of the excavation. Ground level on the south east of the site is significantly higher than the surrounding area as a result of the presence of a former railway embankment in this area. The excavation trench was located in tarmac surfaced car park situated towards the west of the site. Ground level in this area was recorded at a height of 7.85m OD.

5 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

The archaeological and historical background of the area is summarised from the Archaeological Desk Based Assessment.³

5.1 Prehistoric

- 5.1.1 A number of flint tools dating to the late upper Palaeolithic and Mesolithic periods have been discovered in Kingston town centre. A Palaeolithic flint blade was recovered in Penrhyn Road, a flint flake of the same period in Thames Street and a Mesolithic microlith in St. James Road. A Mesolithic axe was also recovered from the Thames between the modern Kingston Bridge and Railway Bridge in 1907:
- 5.1.2 Excavations at Eden Walk between 1965 and 1977 recovered Neolithic pottery from a braided river channel. A number of Neolithic axes were also recovered from the Thames at Kingston between 1904 and 1908. Excavations of Queens Cottages on Canbury Passage (KU80/ER35) revealed Neolithic flint tools sealed by Roman layers. A small assemblage of late Neolithic pottery was recovered from the former Kingston Power Station site during archaeological investigations in 1996 (KPS 96).
- 5.1.3 The main focus of Bronze Age activity appears to be Coombe Hill and Kingston Hill. However, a brushwood trackway was recorded within the braided channel at Eden Walk, which was radiocarbon dated to 1400BC, as well as a human skull of c.1000BC. The Thames at Kingston has also produced a very large assemblage of Bronze Age weaponry including swords, spears and axes.
- 5.1.4 Very little Iron Age evidence has been recorded in Kingston town centre. An Iron Age sickle was recovered from the Thames near Kingston Road Bridge. Iron Age activity has also been identified at Fairfield Road, where a ditch was discovered with associated finds.

5.2 Roman

- 5.2.1 Documentary evidence recorded by Edward Jesse⁴, William Biden⁵, and correspondence of Dr. Roots⁶ all suggests the presence of a Roman period inhumation cemetery at

³ Hawkins 2001

Canbury fields. The first accurate plan of the area shows Canbury field occupying the bulk of the area of the site.

- 5.2.2 Wakeford⁷ has shown that in the 14th century the part of 'Canbury' included in the area of the site was known as 'Walehulle' or the 'hill of the Britons'. This place name certainly suggests an awareness of Romano-British activity or settlement in this area in the Saxon and Medieval periods.

5.3 Saxon

- 5.3.1 There is an absence of archaeological evidence dating to the Saxon period from the area surrounding the site and from Kingston in general, despite the place name Canbury being Saxon in origin. Evidence from excavated sites in the vicinity suggests the possibility that the area of the study site was occupied by wet marshy land in this period.

5.4 Medieval and Post Medieval

- 5.4.1 The Domesday survey of 1086 describes Kingston as a 'vill' held directly as part of the Kings personal estate. The population of 86 villeins, 14 borders and 2 slaves were scattered throughout the manor from Ham to Old Malden. It is likely that the village type settlement was situated around the earliest version of the existing parish church of All Saints.
- 5.4.2 The area of the site lay north of the medieval town, the northern limits of which was represented by the Latchmere River/Downhall ditch channel. Skerne Road (then Barreway) was formerly the main exit road to the north out of the town crossing the channel over the "Bridge de la Barre", and which probably lay just south of the point where the railway now crosses Skerne Road. Throughout these periods the area of the site lay in open agricultural land, probably comprising a mix of arable and pasture.
- 5.4.3 The Kingston Tithe map of 1840 shows the bulk of the site still lying within agricultural land, with a few properties along the Skerne Road frontage. A single substantial property

⁴ Jesse 1832

⁵ Biden 1852

⁶ Roots 1854

⁶ Wakeford 1984

is also visible, which is known to be the home of George Phillipson, a local land owner. The area of the site remained unchanged until well into the 20th century, with the only notable change being the construction of a railway across the east of the site into the Kinston Gas Works by 1913. The embankment of this railway still survives as raised ground in the area of the former temporary car park. By 1932 the bulk of Canbury Field was allotment garden.

- 5.4.4 The site retained this form until 1956. Subsequently all pre-1956 buildings were cleared from the site and the warehouse structures standing prior to the excavation were constructed.

6 ARCHAEOLOGICAL METHODOLOGY

- 6.1 The archaeological evaluation was designed to sample a representative portion of the whole site. Evaluation trenches were spaced evenly across the site in order to uncover any potential archaeological deposits and features (if present), and to characterise their extent, nature, date and condition. Three trenches and one test pit were excavated across the site.
- 6.2 The evaluation identified the presence of Roman activity in Trench 1 towards the north west of the site. Considering the presence of a possible channel/flood deposit to the east, and the absence of any cut features in the northern area of the trench, it was considered likely that this activity would be confined to the area immediately to the south of Trench 1. With the exception of one undated feature, Trench 2, situated towards the extreme west of the site, revealed features dating solely to the Post-Medieval period, which suggested that Roman activity was restricted to the areas east of this trench. Trench 3 appeared to be situated within the fill of a large channel, possibly a tributary of the Hogsmill.
- 6.3 Further archaeological investigation was deemed necessary and, in consultation with Duncan Hawkins and Mark Stevenson, it was agreed that an area of open excavation would ensue. This trench was located in the north west of the site, covering the area encompassing the most significant archaeological features. This trench measured 33m N-S x 21m E-W with a maximum excavated depth of 1.20m, and was supplemented by 5 test pits situated to the east of the trench, each measuring 1.40m x 1.40m x 1.40m.
- 6.4 Prior to ground excavation a CAT scan was utilised in order to locate any live services. A considerable number of services were located around the perimeter of the trench, and where they were identified, the excavation area was altered in order to ensure a safe working distance was retained between them and the excavation area.
- 6.5 A 360° mechanical excavator with a wide bladed toothless ditching bucket and dumper truck were employed, under archaeological supervision, to break out and remove all hard standing and undifferentiated overburden in successive spits until the first significant archaeological horizon or structure was encountered. The spoil was stored in an area of open ground within the site, immediately to the west of the excavated trenches.
- 6.6 All archaeological features and structures revealed during machine excavation were subsequently cleaned and recorded using *pro-forma* context sheets and planned at a

scale of 1:20. Sections were drawn at a scale of 1:10. Contexts were numbered sequentially with contexts 1-55 recorded during the evaluation, and 56- 223 during the excavation. A photographic record was taken of the site.

- 6.7 A temporary benchmark was established on the site, located on the curb at the entrance of the car park area in the north west of the site, and had a value of 7.91m OD.

7 THE ARCHAEOLOGICAL SEQUENCE

7.1 Phase 1 – Natural

- 7.1.1 The earliest deposit encountered was a light brown fine sand with a highest level of 5.05m OD. This was overlain by a light brown sandy clay 'brickearth' which was identified across the majority of the trench and was recorded as [1]. This layer had levels of between 6.96m OD towards the north east of the trench, and 6.57m OD at the extreme south, with a maximum recorded thickness of 1.80m. The gradual downwards slope from north to south is likely to reflect the natural topography of the area, with the Latchmere River/Downhall ditch channel having run immediately to the south of the site, roughly on the E-W alignment with the existing railway line.
- 7.1.2 The brickearth deposit was also identified within the test pits situated to the east of the excavation trench. The level was lower in all cases than in the excavation trench, with the lowest level being recorded in the easternmost Test Pit 5 at 6.16m OD. Whilst it is possible that this incline or slope was caused during the construction of the pre-existing building, it is perhaps more likely that it reflects the natural topography of the area.
- 7.1.3 Evaluation Trench 3, situated in the far south east of the site, identified a 0.59m thick deposit of greyish green silty sand across the trench which suggested that this area of the site was within a channel, or at least on a lower lying and more waterlogged area.
- 7.1.4 Similar deposits of greyish green silty sand were recorded in the excavation trench. Towards the north of the trench this deposit, recorded as [2], measured 10.80m N-S x 9.50m E-W, with a highest level of 6.93m OD. In the extreme south of the trench a further area of silty sand was recorded as [218], and measured 6.67m N-S x 3.55m E-W with a highest level of 6.69m OD (Fig.3). Both deposits extended beyond the western limit of excavation. A slot cut through [218] revealed that this deposit was approximately 0.40m thick and filled a depression [219] eroded through the brickearth, suggesting that it had been laid down under high energy conditions. Chris Green, *Archaeoscape*, suggested during a site visit that these deposits were flood residues laid down in dynamic periods of water fluctuation. No dating evidence was recovered from either [2] or [218] to indicate when these flooding events took place, although the absence of significant archaeological features predating the Post Medieval period might suggest that these areas were still susceptible to flooding throughout the Roman and later periods.

7.2 Phase 2 – Early Roman; AD 43 – 70

- 7.2.1 A group of features were recorded which dated to the 1st century AD. All of these were cut into the brickearth, rather than the flood residue deposits in the north west and south west areas of the trench (Fig. 3).
- 7.2.2 Towards the extreme north of the site were four pits in close proximity to each other. The northernmost of these, [103], was sub-rounded in plan with steep sides and a rounded base; it measured 1.10m N-S x 0.65m E-W, with a maximum depth of 0.34m. A larger pit [93] which was sub-rectangular in plan with steep sides and a rounded base measured 1.00m N-S x 1.70m E-W with a maximum depth of 0.27m. A third pit [100] was sub-ovoid, measured 0.90m N-S x 0.67m E-W with a maximum depth of 0.20m, while the fourth pit [109] was small and rounded. The pits were all filled with a mid brown silty sand, with pits [93] and [103] both containing Roman pot, and pits [93], [100] and [103] containing both struck and burnt flint, which are likely to be residual.
- 7.2.3 Towards the south of the trench an irregular NE-SW linear feature [217] measured 1.50m NE-SW x 5.84m NW-SE with a maximum depth of 0.19m. It had gradual sides and a flat base, and appeared to grade away towards its north east and south west ends, rather than having obvious butt-ends. This would suggest that [217] would have had a greater extent in antiquity, possibly representing a drainage gully. The feature was filled with [216], a mid brown silty sand which yielded both 1st century pottery and struck and burnt flint. A sample recovered from this feature also produced evidence of seeds preserved by waterlogging, which may again suggest a possible drainage function.
- 7.2.4 A further three shallow sub-rounded features [163] (0.60m N-S x 0.48m E-W x 0.12m deep), [201] (1.21m N-S x 1.22m E-W x 0.13m deep) and [213] (1.11m N-S x 1.33m E-W x 0.09m deep) were identified within the trench. Whilst these features contained no anthropogenic material, they were filled with the same distinct mid brown silty sand as the other 1st century AD features, and were therefore interpreted as representing part of the same phase of activity.

7.3 Phase 3A – Later Roman; AD 240 – 300

- 7.3.1 The most significant features relating to this phase of activity were two large pits located along the eastern side of the trench, which were recorded as [115] (north) and [149] (south) (Fig. 3). Pit [115] was sub-ovoid in plan, measured 3.64m N-S x 2.57m E-W, and

had a maximum depth of 0.69m. Pit [149] was sub-rounded in plan and slightly larger than [115], measuring 3.20m N-S x 3.00m E-W with a maximum depth of 1.73m. It is likely that both [115] and [149] were dug to quarry the brickearth from this area of the site. Certainly both pits were excavated to the base of the brickearth, but did not intrude into the underlying sand.

- 7.3.2 Subsequent to brickearth extraction, both pits were utilised for the dumping of refuse. Quarry pit [115] was filled with [110] (primary), [107] (secondary) and [95] (tertiary), which all had a sandy silt composition, and contained 3rd century pottery, bone and large quantities of unabraded mid 1st - 2nd century CBM, including roofing tile, brick, box flue tile and small amount of Opus Signinum. In particular, the frequent fragments of box flue tile suggested that the building from which they derived had contained a hypercaust system.
- 7.3.3 Whilst pit [149] also contained large amounts of CBM and pottery in its fills [139] and [148], it was more notable for its unusual faunal assemblage. The presence of a few largely complete animals (predominantly cattle and horse) suggested disposal of carcass portions that were unsuitable for human consumption, possibly due to disease. Certainly it did not represent a typical domestic assemblage. Whilst the fills of these two pits were distinct from each other, dating evidence suggested that the backfilling events were contemporaneous, and possibly derived from the same source(s). Certainly they are suggestive of significant activity in the vicinity of the site.
- 7.3.4 Four shallow postholes were also recorded between the two pits (Fig. 3). These were aligned NW-SE and were recorded as [87], [134], [177] and [179], and the alignment measured a maximum of 9m. Postholes [134], [177], and [179] all yielded small fragments of CBM. Their dimensions and shallow depth suggest that these postholes are part of a timber framed building.

7.4 Phase 3B - Later Roman; AD 330- 400

- 7.4.1 Phase 3B was represented by a single deposit recorded as [92] in the extreme north east of the trench (Fig. 3). This was an orange brown silty sand which measured 5.60m N-S x 2.20m E-W and extended into both the north and east limits of excavation. It had a maximum thickness of 0.24m.
- 7.4.2 It is likely that [92] represents an agricultural deposit formed from re-worked natural, possibly caused by plough action. A single unabraded jar rim sherd was recovered which

suggested that the deposit was being reworked into the late Roman period, although residual struck and burnt flint of possible Mesolithic or Neolithic date were also retrieved. Agricultural deposit [92] was recorded in the area of the trench with the higher levels for the natural brickearth, and it is likely to have extended to the north, away from the Hogsmill and possible associated areas of flooding identified in the area of the trench.

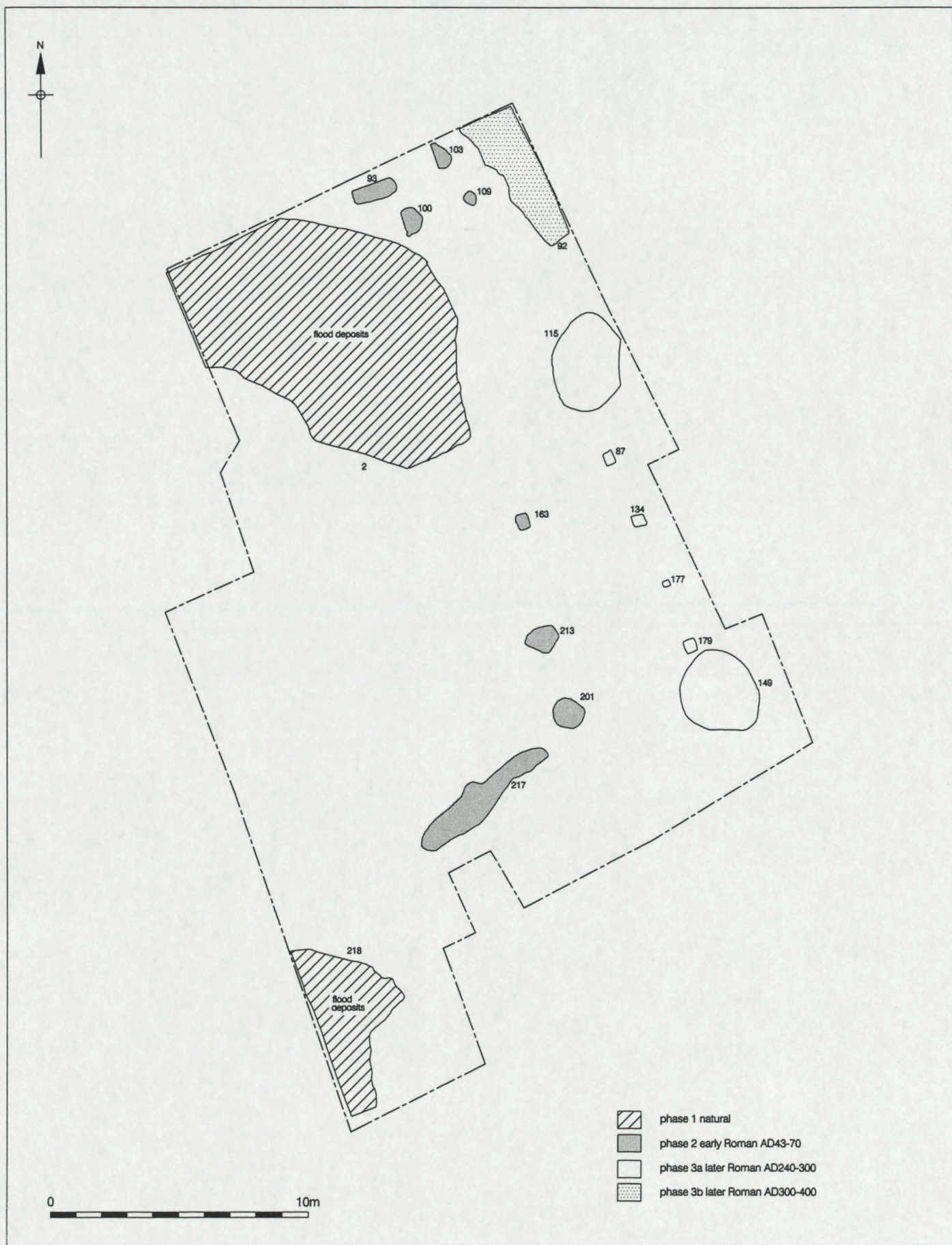


Figure 3
Flood deposits and Roman features
1:200

7.5 Phase 4 - Post Medieval; 1485 – 1800

7.5.1 The archaeological features dating to the Post Medieval period consisted largely of small postholes, shallow pits, gullies and beam slots (Fig. 4). Dating evidence from these features was scarce, but where retrieved, finds generally dated to the later Post Medieval period (1670-1850). The fills of these features were, however, clearly distinct from those of the later phases. The dimensions of the postholes identified from this phase of activity are listed in the table below:

Cut	Fill	Dimensions (m)	Description
61	60	N-S 0.16 E-W:0.24 Depth 0.27	Circular Posthole
63	62	N-S 0.41 E-W 0.28 Depth 0.08	Sub-Rectangular Small Pit / Posthole
81	80	N-S 0.25 E-W 0.27 Depth 0.15	Square Posthole
99	98	N-S 0.28 E-W 0.24 Depth 0.05	Square Shallow Posthole
122	121	N-S 0.40 E-W 0.44 Depth 0.05	Irregular Shallow Posthole
126	125	N-S 0.20 E-W 0.18 Depth 0.33	Circular Posthole
127	128	N-S 0.22 E-W 0.22 Depth 0.18	Sub-Circular Small Pit / Posthole
129	130	N-S 0.26 E-W 0.37 Depth 0.16	Sub-Ovoid Small Pit / Posthole
132	131	N-S 0.35 E-W 0.47 Depth 0.38	Ovoid Posthole
138	137	N-S 0.42 E-W 0.42 Depth 0.38	Square Posthole
141	140	N-S 0.18 E-W 0.19 Depth 0.06	Square Shallow Posthole
143	142	N-S 0.23 E-W 0.25 Depth 0.05	Square Shallow Posthole
187	186	N-S 0.14 E-W 0.13 Depth 0.31	Sub-Ovoid Posthole
211	210	N-S 0.20 E-W 0.25 Depth 0.05	Sub-Square Shallow Posthole

7.5.2 Towards the north west of the trench a sub-rectangular pit [91] was recorded which measured 0.95m N-S x 1.07m E-W with a maximum depth of 0.20.

7.5.3 Five postholes were identified immediately to the south of [91], and were recorded as [63], [126], [127], [129] and [132]. It is likely that these postholes formed part of a small structure such as a shed associated with horticultural / agricultural activity. The distribution of these postholes suggest that this shed would have measured approximately 3m x 2m. Certainly historic maps of the area suggest that there were no significant structures on the site until the mid 19th century.

7.5.4 A shallow linear feature [124] was recorded in the centre of the trench, which appeared to extend NE-SW between postholes [122] and [99], before returning south east to posthole [138] and then running back to the north east for a further 2.0m. It is likely that [124]

represents a small beam slot of a structure. The shallow nature of the postholes and beam slot suggest that the structure would not have been significant, possibly representing a further shed, small barn or storage building. Whilst the full extent of this building cannot be ascertained, the extent of the beam slot suggests its NE-SW length would have been approximately 6m. Two shallow sub-rectangular depressions located immediately to the north east and recorded as [97] (2.10m N-S x 1.02m E-W x 0.04m deep) and [117] (1.20m N-S x 2.08m E-W x 0.12m deep) may also have been associated with this building, as may postholes [81], [141] and [143] to the south.

- 7.5.5 Two further features from this phase of activity were identified in the extreme south of the trench. An NE-SW orientated rectilinear feature [193] was recorded which had a V-shaped profile and measured 0.30m NE-SW x 4.34m NW-SE x 0.11m deep. This feature may represent the line of a fence or small ditch / gully demarcating the boundary between two horticultural plots or agricultural fields. A posthole [187] situated immediately to the north west may also be associated with this possible boundary.

7.6 Phase 5 - 19th Century

- 7.6.1 The sub-basement of a building [118] was recorded along the central eastern side of the trench (Fig. 4). This was constructed of frogged red bricks, with the floor of the basement being tiled. It appeared that the entire 10.5m NW-SE extent of the building was exposed, although only approximately 5m of its NE-SW length was revealed within the confines of the trench. A NE-SW orientated dividing wall was recorded approximately 4m from its northern end. The building had been demolished to just above the level of the brickearth, with the basement floor being recorded at 6.31m OD. The basement was backfilled with rubble, presumably from the demolition process. A service trench [120], containing a lead pipe, extended from the south east corner of the building in a north northerly direction. It extended 10m to the NNW where it fed into a domed brick and concrete structure [113]. The function of [113] was unclear, but it is possible that it represented a water tank for supplying the building.
- 7.6.2 The Kingston Tithe Map of 1840 is the first map to show the substantial house of George Phillipson, a local landowner. It is possible that basement [118] represents part of this house. The Ordnance Survey maps in which it is featured certainly suggest it was located very close to the excavation trench.

7.6.3 Immediately to the south of basement [118] a high concentration of features were located within an area broadly demarcated by a series of postholes; [165], [167], [173] and [189] running NE-SW, and [169], [175] and [221] running NW-SE. These postholes appeared to demarcate an area of horticultural activity associated with the building. The features identified within this area are likely to represent planting beds, shrub and root holes. Of particular note was a series of four shallow features, the details of which are tabulated below:

Cut	Fill	Dimensions (m)	Description
153	152	1.25 N-S x 0.50 E-W x 0.13 Deep	Sub-rectangular shallow pit
155	154	1.40 N-S x 0.86 E-W x 0.22 Deep	Sub-rectangular shallow pit
157	156	1.50 N-S x 0.65 E-W x 0.16 Deep	Sub-rectangular shallow pit truncated by [151]
159	158	1.50 N-S x 0.69 E-W x 0.16 Deep	Sub-rectangular shallow pit truncated by [151]

These features were located immediately to the south of building [118]. The regular nature of these beds suggests they were laid for vegetables such as asparagus. Cuts [157] and [159] were truncated by a later amorphous cut [151], possibly representing disturbance associated with shrub rooting.

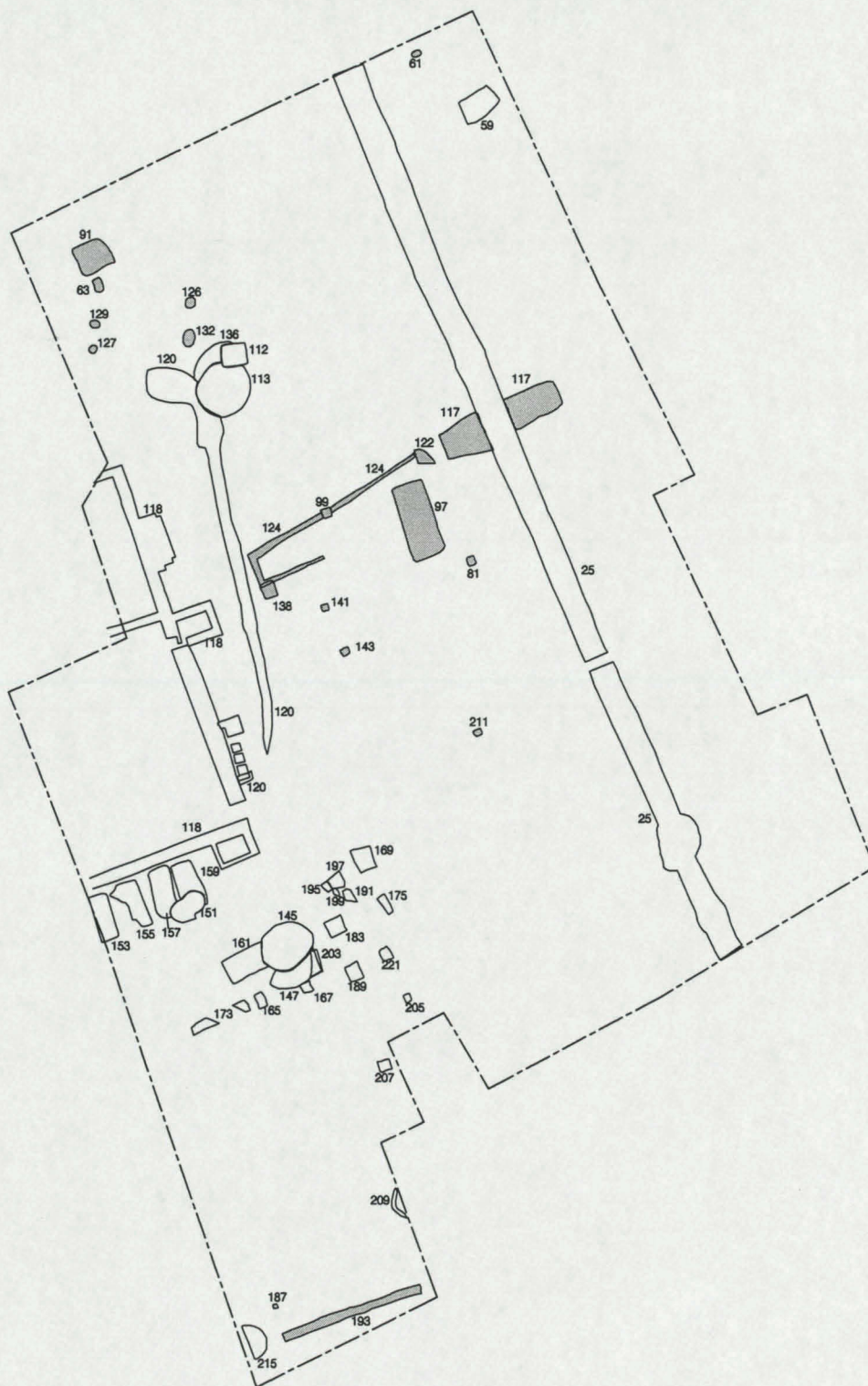
7.6.4 To the south of this area of concentrated horticultural activity were two bricklined pits, [215] extending into the western limit of excavation, and [209] extending into the eastern limit of excavation. Both pits had a diameter of 0.90m, with [209] having a maximum depth of 0.49m and [215] a maximum depth of 1.11m. These brick lined features were too shallow to be wells, and the lack of staining on the internal faces of the bricks precluded a cess pit function. The frequent occurrence of waterlogged seeds within the fills might suggest a horticultural function. It is possible that they represent some form of ornamental planters associated with the 19th century building but beyond the limits of the vegetable plot to the north.

7.6.5 Further 19th century activity was represented by a linear feature [25], which was orientated NW-SE and extended throughout the length of the trench, with a maximum depth of 1.10m. Although no service pipe was identified within its base, the vertical nature of the sides of the cut suggested that it was a service trench rather than a ditch.

7.7 Phase 6 - Modern

7.7.1 All modern truncations across the site were recorded as [222] and were generally restricted to the south of the site. Two rubbish pits and a series of four land drains were

identified. Two concrete foundation beams were also observed running NE-SW across the centre of the site. These were the only remains of the greenhouses which occupied this area of the site prior to the demolition and subsequent excavation.



0 10m

phase 4 post-medieval
phase 5 19th century

Figure 4
Post-Medieval features
1:200

8 ORIGINAL RESEARCH QUESTIONS

- 8.1 The Proposals document compiled before the commencement of the excavation contained the following Research Objectives as approved by Mark Stevenson, English Heritage GLAAS.

ROMAN PERIOD

- **Determine the date range, form and function of the Roman activity/settlement present on the study site.**

The excavation identified three phases of Roman activity.

AD 43-70

Several features were identified across the area of the trench which were interpreted as being pre-Flavian in date. These consisted predominantly of pits, although the remains of a probable ditch or gully was also identified towards the south of the trench. The exact function of these pits is uncertain, but they were all identified on the higher ground across the centre of the trench, rather than to the east or west, where it appeared that the ground was lower lying and therefore more susceptible to flooding. The presence of pits, whether for the disposal of rubbish, storage etc. does at least represent some form of settled activity. The presence of a probable gully towards the south of the trench may represent part of a drainage system on the margins of the higher ground where flooding may still have been a problem, at least on a seasonal basis.

AD 240-300

Two large sub-rounded pits recorded across the eastern side of the trench were interpreted as brickearth extraction pits. These were subsequently utilised for the disposal of rubbish. Whilst the full spectrum of domestic refuse was represented within these pits, the concentration of certain assemblages is unusual. High concentrations of CBM were recorded, particularly within the northern pit. This consisted mainly of roof tile, either tegula or imbrex, as well as significant amounts of box flue tile dating to the mid 1st – 2nd century AD. This assemblage would suggest the presence of a large 1st/2nd century building(s) in the vicinity of the site which had been demolished or altered during the 3rd century. It is most likely that this would have been located further to the north, given the low lying nature of the land elsewhere. The presence of a hypocaust system is implied by the prevalence of the box flue tiles, which would in turn suggest a fairly significant building.

Four shallow sub-rectangular postholes were also identified in a NW-SE alignment between the two quarry pits. The fills of these postholes yielded small fragments of 3rd century AD CBM suggesting that they were associated with the same period of activity. These postholes are likely to have formed part of a small timber framed barn or storage building which may have extended beyond the eastern limit of excavation. No other features or deposits were recorded from this phase or activity.

AD 330-400

A single deposit was identified representing this later phase of Roman activity. In the extreme northern corner of the site a silty sand was identified extending beyond the limits of excavation. It is likely to be an agricultural layer formed of natural deposits re-worked through plough action or other intrusive agricultural practices. A single unabraded pottery rim sherd suggested that this layer dated to the later Roman period. This deposit was located in the area with the highest level for the brickearth, suggesting that this area and further to the north would have provided the most suitable topographic position for agricultural activity.

▪ What evidence is there for trade contacts?

Evidence for trade contacts is provided almost entirely from the large pottery assemblage recovered from the southernmost quarry pit. This assemblage included cooking and storage jars, bowls and dishes, all of which appeared to have originated in southern England, including Dorset, Kent and Oxfordshire. A small collection of local colour coated and micaceous finewares were also recovered which had previously been encountered at Brentford,⁸ and seem to have been supplied to settlements along the banks of the River Thames to the west of London. Indeed, the Thames is likely to have provided a vital trading route for any settlement activity in the area of Kingston at this time.

▪ What evidence is there for domestic occupation?

The pits and gully dating to the 1st century AD indicate a degree of settled activity in the area at this time. The fragments of probable storage and bead-rim jars, as well as fragments of cattle (and other indeterminate mammalian bones) would certainly suggest that this occupation would have been at least to some extent domestic.

⁸ Lyne 1994

Further evidence of domestic occupation on the site is provided by the cultural material recovered from the two quarry pits. As has been discussed, the large amounts of unabraded CBM suggest that a 1st/2nd century building was located in the immediate vicinity of the site, which was either demolished or altered during the 3rd century. The presence of a hypercaust system, as inferred by the large amounts of box flue tile, indicate that this building was relatively high status. This building may have been a villa or bathhouse, but would almost certainly have been associated with domestic occupation.

The large quantities of pottery recovered from the southernmost of the two quarry pits would also suggest domestic activity. The presence of unabraded cooking pots, bowls and storage jars suggest that household refuse was being deposited here from nearby, possibly from the same source as was represented by the building material.

A significant assemblage of animal bone was also recovered from this pit. The primary fill yielded high concentrations of partially articulated cattle and horse carcass portions. These may well have been disposed of because they were unsuitable for human consumption, possibly due to disease. The exceptionally large nature of the pit would provide a suitable location to discard carcasses of this kind. The possible presence of bones from game birds such as grouse would imply a diverse diet for the nearby inhabitants, with access to these food sources being somewhat of a luxury. Again, this might suggest the presence of high status domestic activity in the vicinity of the site.

▪ **What range of structures is represented on the site and how were these constructed?**

As has been discussed, the presence of a high status building(s) in the immediate locality was suggested by the presence of large amounts of CBM including roofing tile, brick, box flue tile, and small amounts of Opus Signinum. It would have been roofed mainly in tile of imbrices and tegulae, although stone pegged tiles may also have been used. The presence of a hypercaust system is inferred from the significant numbers of box flue tiles recovered. Probably brick, and possibly stone, was used for the flooring, although the material used for the walling is not known. Whilst the exact nature of the building(s) cannot be ascertained, the material may derive from a villa or associated buildings.

A line of small sub-rectangular postholes aligned NW-SE along the eastern limit of excavation also suggest that a timber framed structure would have occupied this area of

the site. This building would probably have been a barn or storage area, possibly associated with the more significant structure(s) in the vicinity.

- **What evidence is there for environmental conditions and agricultural practices/techniques?**

Evidence recorded during the excavation suggests that the trench was situated on an area of higher ground during the Roman period, with lower lying land situated to the east, south and west, which would have been susceptible to flooding, at least on a seasonal basis.

It is known that to the south of the site lay the Latchmere stream / Downhall ditch, and the levels of the brickearth within the site did decline from north to south, probably respecting the natural topography of the area. Two large deposits of greenish grey silty sand were identified in the north and south of the site which were interpreted by Chris Green, *Archaeoscape*, as being probable flood residues, laid down under high energy conditions. Evaluation trenches located both to the east and west of the excavation trench revealed further deposits of this flood residue. No features pre-dating the Post Medieval period were cut into it, suggesting that the majority of the area was susceptible to flooding from the Roman period to at least the 15th century.

The area of higher ground identified in the parameters of the trench appears to continue to the north. A probable arable deposit was identified in the extreme north of the site, which would indicate that this area of higher ground, and presumably further to the north, would have been most suitable for agriculture and settlement. The prevalence of cereal grains recovered from the primary fill of quarry pit [149] would certainly suggest that arable farming was a contemporary concern in the area.

Post Medieval Period

- **Determine the colonisation date of the late Post Medieval activity on the site.**

The fill of a shallow sub-rectangular pit produced the handle and rim of a Cheam redware jug, dated to 1480-1550, and several small pits / postholes produced pottery dating to the 18th century. These features were likely to be associated with agricultural or horticultural activity. However, the Post Medieval colonisation of the site took place predominantly

during the 19th century, with the construction of a building, the sub-basement of which was recorded in the western side of the trench, along with associated garden features.

▪ **What was the nature of the late Post-Medieval activity on the site?**

The small number of features interpreted as pre-19th century are likely to derive from structures associated with agricultural or horticultural activity. Historic maps suggest that the area was entirely agricultural land until the 19th century and the absence of significant archaeological features corroborate this. Those features identified are likely to represent lightweight agricultural structures such as sheds or small barns.

The Kingston Tithe Map of 1840 is the first map to show the substantial house of George Phillipson, a local landowner, and its location suggests that the sub-basement identified during the excavation may well represent part of it. A number of features were identified immediately to the south of this building which are likely to be associated with it. A number of probable vegetable plots and shrub root holes were identified within an area delineated by postholes, whilst two possible ornamental planters were recorded beyond this in the extreme south of the trench.

9 CONTENTS OF THE ARCHIVE

The Paper Record

Context Sheets	220
Plans	78
Sections	6
Colour photos	22
Black and White photos	38
Colour slides	25

The Finds

No Boxes

Pottery	4
Animal Bone	7
CBM	16
Stone	5
Tobacco Pipe	1
Glass	1
Metal: Fe	1
Cu	1
Lithics	1

10 IMPORTANCE OF RESULTS AND PUBLICATION

- 10.1 Despite numerous archaeological investigations in area of Kingston since the 1960's, there has been a noticeable absence of *in situ* archaeological finds and features dating to the Roman period recorded in the area. Previous investigations have generally revealed residual finds of pottery and occasionally building material.⁹ The project as a whole has therefore added significantly to the body of evidence suggesting that the land immediately to the north of medieval and early post medieval Kingston town centre was occupied between the 1st and 4th centuries AD, with the material recovered during the excavation suggesting that some of this occupation may have been relatively high status.
- 10.2 The late 3rd century pottery assemblage recovered from the two quarry pits on site allows the pattern of supply to this area to be considered for the first time. Further research should include a comparison of the Skerne Road pottery with other similarly dated assemblages from the lower Thames Valley. Such sites include Brentford, Fulham Palace, Putney and Southwark.¹⁰
- 10.3 Further analysis should also be undertaken of the unusual animal bone assemblage from the lower fill of quarry pit [149]. The remains suggest the possible disposal of cattle and horse portions that are unsuitable for human consumption. Are there examples of similar assemblages from other Romano-British sites, and what conclusions can be drawn from them? Further analysis should also be made of the possible presence of grouse within the assemblage. Confirmation would suggest a diverse diet and therefore potential high status for the nearby population.
- 10.4 Additional examination of the environmental evidence recovered may also shed further light on the environmental conditions in the area during the Roman period. Whilst it is known that the site was situated on marginal land susceptible to at least seasonal flooding, charred cereal grains and charcoal from the fill of the southern quarry pit should provide valuable information on diet, land-use and woodland exploitation.
- 10.5 More generally, a review of the Roman sites and finds within the vicinity of the site, both antiquarian and modern, in the light of the evidence recovered from Skerne Road, will help develop models for the occupation and settlement of Kingston during the Roman

⁹ Hawkins 1996

¹⁰ Lyne 1994

period. To the east of the site Roman burials were identified during the construction of the Gas Works. An excavation at Canbury Passage also revealed Roman pottery recovered from "within the Kingston brickearth".¹¹ Significant sites have also been identified at the junction of Fairfield Road and Fairfield West, near the centre of Kingston, where postholes and a shallow scoop of possible Roman date were identified,¹² and at 82 Eden Street, where a small silted up river channel yielded 350 ritually deposited coins, as well as jewellery and rolled lead strips.¹³ These and other sites in the area might allow similarities to be drawn, or alternatively how and why does the evidence of occupation and activity differ in the area.

10.6 Publication Programme

The results of the Skerne Road excavation have added significantly to the knowledge of Roman activity to the north of Kingston town centre from the 1st – 4th centuries AD. These results therefore merit publication in the 'Surrey Archaeological Collections'. The report should also consider the results of other archaeological investigations in the vicinity in the light of the Skerne Road excavation. The publication programme will involve further background research, pottery, bone and environmental analysis, illustration and the writing of an integrated report.

¹¹ Field & Hinton 1981

¹² Canham 1968

¹³ Hawkins 1996

11 ACKNOWLEDGMENTS

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12 BIBLIOGRAPHY

- Biden, W.D. 1852, The History and Antiquities of the Ancient Royal Town of Kingston Upon Thames 1-7
- Brown, G. 1995. An Archaeological Evaluation at 6 Cromwell Road, Royal London Borough of Kingston upon Thames. Pre-Construct Archaeology Ltd. unpublished report
- Canham, M.P. 1968. Extracts from the Bulletins of 1967 (No's 25-36). *Surrey Archaeological Collections* 65
- Field, D. & Hinton, D.A. 1981. Canbury Passage, Kingston, summary in *London Archaeologist* 4, no. 2
- Finny, W.E. 1929. Roman Tile and Pottery in Kingston. *Surrey Archaeological Collections* 38
- Hawkins, D. 2001. Proposal for an Archaeological Field Evaluation of Land at Skerne Road, Kingston upon Thames. CgMs Consulting Unpublished Report
- Hawkins, D. 2002. Proposals for an Archaeological Excavation of Land at Skerne Road Kingston in the Royal Borough of Kingston upon Thames. CgMs Consulting Unpublished Report
- Hawkins, D. 1996. Roman Kingston-upon-Thames: a Landscape of Rural Settlements in *London Archaeologist* 8, no. 2
- Hinton, M. 1984. Ancient Burial Ground in Canbury Field, Kingston upon Thames. *Surrey Archaeological Collections* 75
- Jesse, E. 1832. Roman Antiquities at Kingston Gelanings in Natural History with local recollections, Kingston Heritage Local History Collection, pamphlets, Vol 44
- Lyne, M.A.B. 1994. Late Roman Handmade Wares in South-East Britain, Unpublished PhD thesis, University of Reading
- Roots, a manuscript letter dated 27th June 1854 from Dr Roots to Alderman Gould, Mayor of Kingston in *Alderman Gould's Scrapbook* Kingston Local Heritage Collection R. 4700 (900)
- Wakeford, J. 1984. Two *Wharl* names in the fields of Kingston. *Surrey Archaeological Collections* 75

APPENDIX 1

Context Index

Context	Type	Description	Phase	Same as	Sample	Plan	Sctn.	Small Finds
1	layer	Natural sandy brickearth	1	34				
2	layer	Greyish green silty sand natural	1	218		2		
3	void							
4	fill	Fill of [5]	3A					
5	Cut	Small pit/post hole - EVAL	3A			5		
6	cut	fill of quarry pit - EVAL	3A	110			1	
7	cut	cut of quarry pit - EVAL	3A	115		7	1	
8	void							
9	layer	Modern make - up layer - EVAL	6				2	
10	layer	Ground raising deposit - EVAL	6				2	
11	layer	Plough/agricultural soil - EVAL	4	16&33			2	
12	layer	Greyish green silty sand natural	1	2&218			2	
13	layer	Natural sandy clay - EVAL	1				2	
14	layer	Natural sand - EVAL	1				2	
15	layer	Mixed modern make-up layer	6				1	
16	layer	Plough/agricultural soil	4	11			1	
17	fill	fill of [27] - EVAL	1	30			1	
18	fill	fill of [19] - EVAL	3A				1	
19	cut	Small pit cut - EVAL	3A				1	
20	fill	fill of [7] - EVAL	3A				1	
21	fill	fill of [7] - EVAL	3A				1	
22	fill	fill of [25]	5				1	
23	fill	fill of [25]	5				1	
24	fill	fill of [25]	5				1	
25	cut	19 th century drain	5				1	
26	layer	Make - up dump EVAL	5				1	
27	cut	cut of flood deposit - EVAL	1	219&32			1	
28	layer	Modern make - up layer - EVAL	6				3	
29	layer	Modern make - up layer - EVAL	6				3	
30	fill	fill of [32] - EVAL	1	17			3	
31	fill	fill of [32] - EVAL	1	2&218			3	
32	cut	cut of flood deposit - EVAL	1	219&27			3	
33	layer	Plough/agricultural soil - EVAL	4	11&16			3	
34	layer	Natural sandy brickearth - EVAL	1				3	
35	fill	fill of [36] EVAL	3A?					
36	cut	circular pit - EVAL	3A?			36		
37	fill	fill of [38] - EVAL	4				4	
38	cut	sub-rectangular pit - EVAL	4			38	4	
39	fill	fill of [40] - EVAL	4				4	
40	cut	stake hole - EVAL	4			43	4	
41	layer	natural brickearth - EVAL	1				4	
42	fill	flood deposit - EVAL	1	2&218			4	
43	cut	flood deposit cut - EVAL	1	219		43	4	
44	fill	fill of [45] - EVAL	4					
45	cut	post hole - EVAL	4			45		

Context	Type	Description	Phase	Same as	Sample	Plan	Sctn.	Small Finds
46	fill	fill of [47] – EVAL	4					
47	cut	post hole – EVAL	4			45		
48	fill	backfill of pit [49] – EVAL	5					
49	masonry	circular brick pit – EVAL	5			49		
50	fill	fill of [51] – EVAL	5					
51	cut	cut for [49] – EVAL	5			49		
52	layer	make - up dump EVAL	6				4	
53	layer	make - up dump EVAL	6				4	
54	layer	make - up dump EVAL	6				4	
55	layer	plough/agricultural soil - EVAL	4				4	
56	cut	root hole	4					
57	fill	fill of cut [56]	4					
58	fill	fill of cut [59]	5					
59	cut	19th century pit	5			59		
60	fill	fill of cut [61]	4					
61	cut	post hole	4			61		
62	fill	fill of cut [63]	4					
63	cut	probable post hole	4			63		
64	fill	fill of root hole 65	4					
65	cut	natural root hole	4			65		
66	cut	19th century pit	5			66		
67	fill	fill of cut [66]	5					
68	fill	fill of cut [69]	4					
69	cut	natural/plough feature	4			69		
70	fill	fill of [71]	4					
71	cut	natural/plough feature	4			69		
72	fill	fill of [73]	4					
73	cut	natural/plough feature	4			69		
74	fill	fill of [75]	4					
75	cut	natural/plough feature	4			69		
76	void							
77	void							
78	cut	19th century pit	5			78		
79	fill	fill of [78]	5					
80	fill	fill of [81]	4					
81	cut	post hole	4			81		
82	fill	fill of [83]	4					
83	cut	post hole	4			83		
84	fill	fill of [85]	4					
85	cut	shallow scoop/post hole	4			85		
86	fill	fill of [87]	3A					
87	cut	post hole	3A			87		
88	fill	fill of [88]	5					
89	cut	19th century pit	5			78		
90	fill	fill of [91]	4					
91	cut	small pit/post hole	4			91		
92	layer	probable Roman layer	3B			92		
93	cut	pit cut	2			93		
94	fill	fill of [93]	2					

Context	Type	Description	Phase	Same as	Sample	Plan	Sctn.	Small Finds
95	fill	fill of [115]	3A					
96	fill	fill of [97]	4					
97	cut	shallow pit	4			97		
98	fill	fill of [99]	4					
99	cut	post hole	4			99		
100	cut	pit / natural feature	2			100		
101	fill	fill of [10]	2					
102	fill	fill of [103]	2					
103	cut	pit cut	2			103		
104	void							
105	void							
106	void							
107	fill	fill of [115]	3A					1
108	fill	fill of [109]	2					
109	cut	small pit / post hole	2			109		
110	fill	fill of pit [115]	3A					
111	fill	fill of [112]	5					
112	cut	19th century pit	5			112		
113	cut	19th century water tank	5			113		
114	fill	fill of cut [113]	5					
115	cut	Roman quarry pit	3A			115		
116	fill	fill of cut [117]	4					
117	cut	large shallow pit	4			117		
118	masonry	19th century basement	5			118		
119	fill	fill of cut [120]	5					
120	cut	cut for 19th century lead pipe	5			120		
121	fill	fill of [122]	4					
122	cut	post hole	4			122		
123	fill	fill of cut [124]	4					
124	cut	probable small beam slot	4			124		
125	fill	fill of cut [126]	4					
126	cut	post hole	4			126		
127	cut	post hole	4			127		
128	fill	fill of cut [127]	4					
129	cut	possible post or root hole	4			127		
130	fill	fill of cut [129]	4					
131	fill	fill of cut [132]	4					
132	cut	pit cut	4			132		
133	fill	fill of [134]	4					
134	cut	post hole	3A			134		
135	fill	fill of cut [136]	3A					
136	cut	heavily truncated pit cut	4			136		
137	fill	fill of cut [138]	4					
138	cut	post hole	4			138		
139	fill	fill of cut [149]	3A				5	2,6
140	fill	fill of cut [141]	4					
141	cut	shallow post hole	4			141		
142	fill	fill of cut [143]	4					
143	cut	post hole	4			143		

Context	Type	Description	Phase	Same as	Sample	Plan	Sctn.	Small Finds
144	fill	fill of cut [145]	5					
145	cut	19th century pit	5			145		
146	fill	fill of cut [147]	5					
147	cut	heavily truncated pit cut	5			147		
148	fill	fill of cut [149]	3A		1		5	3,4,5,7-32 inclusive
149	cut	Roman quarry pit	3A			149	5	
150	fill	fill of cut [151]	5					
151	cut	19th century garden feature	5			151		
152	fill	fill of cut [153]	5					
153	cut	19th century garden feature	5			153		
154	fill	fill of cut [155]	5					
155	cut	19th century garden feature	5			155		
156	fill	fill of cut [157]	5					
157	cut	19th century garden feature	5			155		
158	fill	fill of cut [159]	5					
159	cut	19th century garden feature	5			155		
160	fill	fill of cut [160]	5					
161	cut	19th century garden feature	5			161		
162	fill	fill of cut [163]	2					
163	cut	small pit / post hole	2			163		
164	fill	fill of cut [165]	5					
165	cut	19th century post hole	5			165		
166	fill	fill of cut [167]	5					
167	cut	19th century post hole	5			167		
168	fill	fill of cut [169]	5					
169	cut	19th century post hole	5			169		
170	fill	fill of cut [171]	5					
171	cut	19th century stake hole	5			171		
172	fill	fill of cut [173]	5					
173	cut	19th century beam slot/post hole	5			173		
174	fill	fill of cut [175]	5					
175	cut	19th century post hole	5			175		
176	fill	fill of cut [177]	3A					
177	cut	post hole	3A			177		
178	fill	fill of cut [179]	3A					
179	cut	post hole	3A			177		
180	fill	fill of cut [181]	5					
181	cut	19th century root action	5			181		
182	fill	fill of cut [183]	5					
183	cut	19th century post hole	5			183		
184	fill	fill of cut [185]	4					
185	cut	shallow scoop/post hole	4			185		
186	fill	fill of cut [187]	4					
187	cut	post hole	4			187		
188	fill	fill of cut [189]	5					
189	cut	19th century post hole	5			189		
190	fill	fill of cut [191]	4					
191	cut	post hole	4			191		

Context	Type	Description	Phase	Same as	Sample	Plan	Sctn.	Small Finds
192	fill	fill of cut [193]	4					
193	cut	Gully	4			193		
194	fill	fill of cut [195]	5					
195	cut	19th century post hole	5			195		
196	fill	fill of cut [197]	5					
197	cut	19th century post hole	5			197		
198	fill	fill of cut [198]	5					
199	cut	19th century post hole	5			199		
200	fill	fill of cut [201]	2					
201	cut	shallow pit	2			201		
202	fill	fill of cut [203]	4					
203	cut	probable post hole	4			203		
204	fill	fill of cut [205]	5					
205	cut	19th century post hole	5			205		
206	fill	fill of cut [207]	5					
207	cut	19th century post hole	5			207		
208	fill	fill of cut 209	5					
209	cut	19th century brick lined pit	5			209		
210	fill	fill of cut [211]	4					
211	cut	post hole	4			211		
212	fill	fill of cut [213]	2					
213	cut	probable pit	2			213		
214	fill	fill of cut [215]	5					
215	cut	19th century brick lined pit	5			215		
216	fill	fill of cut [217]	2		3			
217	cut	linear pit / gully	2			217		
218	fill	fill of cut [219]	1	2	2		6	
219	cut	cut of flood deposit	1			219	6	
220	fill	fill of cut [221]	5					
221	cut	post hole	5			221		
222	cut	all modern truncations	6					
+								33

APPENDIX 2

ROMAN POTTERY ASSESSMENT

By Malcolm Lyne

1.INTRODUCTION

The site produced 544 sherds (7580 gm.) of Roman pottery from 11 contexts, most of which is mid-to-late third century in date and comes from the fills of two quarries. A few pre-Flavian assemblages are also present.

2.METHODOLOGY

All of the assemblages were quantified by numbers of sherds and their weights per fabric. Fabrics were identified using a x8 magnification lens with built-in metric scale for determining the natures, sizes, forms and frequencies of added inclusions and classified according to the codings formulated by Museum of London Archaeological Services (Anon 2000). Most of the assemblages are too small for quantification by Estimated Vessel Equivalents (EVEs) based on rim sherds (Orton 1975) but that from Pit 149 fill context 148 is sufficiently large for this.

3.THE ASSEMBLAGES

Phase 2. c.AD.43-70

Three features (Pits 93 and 103 and Cut 217) produced small assemblages of this date. Pit 93 yielded 3 fragments from a storage-jar in North Kent Shell-tempered ware, Pit 103 had sherds from bead-rim jars in Highgate Wood B and North Kent Shell-tempered fabrics and fragments from another Highgate Wood B bead-rim came from linear feature 217.

Phase 3A. c.AD.240-300

The two quarry-pits produced mid-to-late third-century pottery assemblages. The fills of Quarry pit 115 (Contexts 95, 107 and 110) yielded 41 sherds (960 gm.) of freshly broken pottery derived from just a few vessels of c.AD.240-270 date. Quarry pit 149 fills 139 and 148 produced a considerably-larger 485 sherd (6310 gm.) pottery assemblage of slightly

later c.AD.250-300 date and mainly made up of Alice Holt/Farnham industry products. These include both c.AD.200-300 dated self-slipped products and c.AD.270-300 dated black/white slipped wares. Forms include everted-rim cooking-pots, developed beaded-and-flanged bowls, straight-sided dishes and storage-jars. A somewhat smaller but still significant quantity of third century Verulamium Region Whitewares is also present and almost entirely made up of jar fragments. Small amounts of Dorset Black-Burnished ware, BB2 ware from North Kent, Lower Nene Valley and Oxfordshire Colour-coated wares are also present as are fragments from Oxfordshire Whiteware mortaria. Of particular interest is a small collection of local colour-coated and micaceous finewares of late-third-century date. These have previously been encountered at Brentford and were supplied to settlements along the banks of the River Thames to the west of London.

Phase 3B. c.AD.330-400+

This ceramic phase is represented by a single jar rim sherd in Overwey/Portchester D fabric from layer 92.

4.RECOMMENDATIONS

The Phase 2 pottery can be written up without recourse to illustration by referring to already published form parallels from London and Southwark.

The small assemblage from Quarry pit 115 should be published with perhaps six pot drawings and the more substantial assemblage from Quarry pit 149 with as many as 20 illustrations. The latter assemblage should also be quantified by Estimated Vessel Equivalents based on rim sherds per fabric. The pattern of pottery supply to Kingston during the late third century so revealed by this quantification can be compared with EVEs quantifications for similarly dated assemblages from Brentford, Fulham Palace, Putney, Southwark and London already published elsewhere (Lyne 1994) and incorporated in a note on late-third-century pottery supply within the lower Thames valley. This will add little to the cost of the final report as much of the work has already been done and is awaiting an opportunity for publication.

BIBLIOGRAPHY

- Anon 2000 *Museum of London Specialist Services Pottery Codes*
Lyne, M.A.B. 1994 *Late Roman Handmade Wares in South-East Britain*, Unpublished PhD thesis University of Reading.
Orton, C.J. 1975 'Quantitative Pottery Studies, Some Progress, Problems and Prospects', *Science and Archaeology* 16, 30-5

Catalogue

Context	Fabric	Form	Date-range	No. of sherds	Weight in gm.	Comments
92. Roman layer	PORD	Jar	AD.330-400+	1	12 gm.	Fine fabric
94. Fill of Pit 93	NKSH	Store-jar	AD.50-70	3	126 gm.	
95. Fill of Quarry pit 115	AHFA	Cl.1-26 jar	AD.200-300			Self slip
		Cl.5B X2	AD.240-270			Self slip
		Cl.6A dish	AD.200-300	17	388	Self slip
	BB1	Cooking-pot	AD.225-270	2	54	Obtuse lattice, no groove
	HOO	Flagon	AD.43-270	1	100	
	VRW	Jar	AD.250-280	1	74	
	Total			21	616 gm.	
Date. c.240-270						
102. Fill of Pit 103	HWB	Bead-rim	AD.40-70	5	66	Fresh
	NKSH	Lid-seated bead-rim	AD.43-80	1	40	Fresh
	Total			6	106 gm.	
107. Fill of Quarry pit 115	AHFA	Closed		1	16	
	HOO	Flagon		1	10	
	SAND	Closed		1	16	
	VRW	Closed		4	176	
	Total			7	218 gm.	
110. Fill of Quarry pit 115	AHFA	1.26 Jar	AD.200-300	7	64	all one pot same as in 95
	HOO	Flagon		4	52	all one pot
	VRW	Closed		2	10	
	Total			13	126 gm.	
114. Fill of 19th c. water tank	AHFA	Jar	AD.200-400	1	12 gm.	
130. Fill of PH.129	AHFA	Beaker	AD.250-370	1	2 gm.	
139. Fill of Quarry 149	AHFA	1.26 jar	AD.200-300	1	4	self-slipped
		1A jar	AD.200-300			self-slipped
		3B jar	AD.270-400			White-slipped
		4 storage-jar	200-300			
		3A jar	AD.200-250	45	602	
	AMPH	Amphora		1	22	ribbed
	BB1			1	10	
	FINE	DR.38	AD.240-300+	1	34	local c.c.
		Closed		1	20	local micaceous
	HOO			1	14	Abraded
	KOLN	Beaker	AD.130-200+	1	2	
	NKFW	Closed		1	12	
	OXMO	Closed		2	12	
	SAND	Closed		4	94	
	TSK	Necked-jar	AD.170-230	1	44	Monaghan 3H8
	VRW	Closed		4	72	
	Total			64	942 gm.	

148.

AHFA	Cl.3B	AD.270-400	17	234	W/S
	1.26 jar	AD.200-300			S/S
	3A jar	AD.200-250	16	214	
	3A jar	AD.200-250			
	2X3B jars	AD.270-400			W/S
	5B.6 Bowl	AD.270-400	60	830	B/S
	1.26 Jars	AD.200-300			S/S X4
	3B jars	AD.270-400			W/S X6
	3B Jar	AD.200-300			S/S
	3A Jars	AD.200-250			
	3C Jar	AD.200-300			
	5A Bowl	AD.170-220			S/S
	6A Dishes	AD.200-300	103	1012	S/S
	Store-jar	AD.270-400	3	304	W/S
	Cl.2 beaker	AD.200-300	49	328	
	3A Store-jar	AD.200-250			
	5D Bowl	AD.200-270	33	536	
BB1	Dog-dish	AD.200-300	4	38	
	Cooking-pot	AD.225-370	9	74	
BB2	Pie-dish		2	34	refired
	Pie-dish	AD.170-250	6	118	
FINE	Open form	Late 3rd c.	2	34	int.deep red cc
					local
	C47 Bowl	AD.250-300	2	110	local cc
			2	24	local no cc
	Pie-dish		5	66	local
	Closed		5	50	local micaceous
GROGSA	Jar		1	48	bubbly
HOO	Closed		1	2	
HWB			1	6	Abraded
KOLN	Beaker	AD.130-200+	1	2	
LVNCC	Beaker	AD.270-400	2	12	White fabric
	Box		4	44	
	Beaker		1	2	
MOSL	Beaker	AD.200-276	5	14	
NKEW	Closed	AD.43-270	1	6	
OXMO	Mortaria	AD.240-400	6	168	
OXRC	Wall-sided				
	mort	AD.240-400	3	50	
RHENISH	Beaker	AD.270-370	2	6	
SAMLZ	DR.33	AD.120-200	1	4	
	DR.31	AD.150-200	1	6	
	?		2	14	
SAND	Jar		2	24	
	B+Fl bowl		2	38	
VCWS	Closed		1	8	
VRG	Closed		1	12	
VRW	Bowl	3rd c.	7	142	
	Jar	Late 3rd c.	58	754	
Total			421	5368	gm.
Tile			3	30	gm.

Date. c.AD.250-300

216. Fill of Cut 217

HWB	Bead-rim	AD.40-70	6	56 gm.
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APPENDIX 3

BUILDING MATERIAL ASSESSMENT

(JOHN BROWN)

1.0 METHODOLOGY

- 1.1 The building materials were examined using the London system of classification. A fabric number is allocated to each object, specifying its composition, form, method of manufacture and approximate date range. The material was examined under magnification (x20), quantified and weighed. A description of the fabrics appears at the end. Examples of the fabrics can be found in the archives of PCA and/or the Museum of London.
- 1.2 Quantification of items was undertaken and the data entered onto a computer database (Microsoft Access 97). After analysis the common fabric types were discarded, with a type sample kept for archive. Unusual pieces or uncommon fabrics were also kept for archive.
- 1.3 Where large amounts of material in a context were seen to be from the same fabric group, a sample was examined under magnification, while the remainder was scanned and discarded.

2.0 QUANTITY AND CONDITION

- 2.1 Total No. CBM boxes: 16
- 2.2 Total No. Stone boxes: 5
- 2.3 Building material was recovered from 25 contexts weighing 96.5kg, 506 individual sherds were assessed. All of the material was fragmentary, although several pieces showed at least two quantifiable dimensions.

3.0 DATE RANGES

- 3.1 There now follows a list of possible dates for the material within the contexts. The **Date range** is the earliest date for the earliest CBM within the context and the latest date of the latest material in the context. The **Latest Date** is the range for the latest dated CBM type and the **Deposition Date** is the suggested date of deposition for the materials in the context. Also noted is the number of sherds present in each context (**Size**). Groups are determined as (S)mall (1-30 sherds), (M)edium (31-100 sherds) or (L)arge (over 100 sherds).

3.2 CBM by context with size and date ranges

Context	Size	Date range	Latest Date	Deposition Date
57	S	m1 to e19	l17 to e19	late 17th to early 19th
60	S	m1 to 140/200	m1 to 140/200	Mid 1st to 140/200 R
62	S	m1 to 140/200	m1 to 140/200	Mid 1st to 140/200 R
67	S	m1 to 140/200	m1 to 140/200	Mid 1st to 140/200 R
79	S	m1 to 140/200	m1 to 140/200	Mid 1st to 140/200 R
90	S	m1 to 1500+	1150/1180 to 1500+	1150/1180 to 1500+ R
92	S	m1 to 140/200	m1 to 140/200	Mid 1st to 140/200 R
94	S	Uncertain	Uncertain	uncertain
95	M	50/60 to 140/200	m1 to 140/200	50/60 to mid 2nd century
98	S	m1 to e19	l17 to e19	Late 17th to Early 19th century I
107	S	m1 to 3	140/180 to 3	140/180 to 3rd century
110	S	55/70 to 140/200	100 to 120	100 to 140/100
114	S	1380/1400 to c.1900	1480/1520 to c.1900	1480/1520 to c.1900
119	S	l17 to 19	l17 to 19	Late 17th to 19th century
123	S	m1 to 140/200	m1 to 140/200	Mid 1st to 140/200 R
131	S	m1 to 140/200	m1 to 140/200	Mid 1st to 140/200 R
133	S	m1 to 140/200	m1 to 140/200	Mid 1st to 140/200 R
135	S	m1 to 140/200	m1 to 140/200	Mid 1st to 140/200 R
139	L	50/60 to 3	l2 to 3	140/180 to 3rd century
148	L	50/60 to 3	l2 to 3	140/180 to 3rd century
176	S	m1 to 140/200	m1 to 140/200	Mid 1st to 140/200 R
178	S	m1 to 140/200	m1 to 140/200	Mid 1st to 140/200 R
186	S	m1 to 140/200	m1 to 140/200	Mid 1st to 140/200 R
208	S	1480/1520 to c.1900	1480/1520 to c.1900	1480/1520 to c.1900
214	S	1480/1520 to c.1900	1620/1640 to 1800+	1620/1640 to c.1900

Contexts in italic are samples from masonry contexts.

[I] Possibly inclusive material

[r] Residual material

4.0 DISCUSSION

- 4.1 The majority of the material assessed consisted of Roman ceramic building materials and stone fragments associated with Roman dumps. The remainder of the material was comprised of some post-medieval fabrics and one or two abraded medieval tile fragments. Materials of different periods and forms are discussed below. Fabrics that appear both in Medieval and Post Medieval forms are described in the first instance and noted in the second.

- 4.2 **Roman brick and tile Fabrics:** 2452, 2459a, 2459b, 3004, 3006 (fabric group 2815); 2453, 2457(Southern fabric group); 3018, 3238 (3108 fabric group), 3060.

- 4.2.1 Nearly all of the Roman material came from two large dumps from pits [115] (fills [95] and [107]), and [149] (fills [139] and [148]). Those other contexts that contained Roman fabrics had only small amounts, and in most cases the material was abraded and probably residual in nature. Common forms were represented, with large amounts of roofing tile, either tegula, imbrex, or tile fragments of unidentified form. Brick fragments were identified by their thickness and finish, with no example giving any other dimension. In terms of special forms, there were no indications of tesserae for mosaics, or opus spicatum bricks, but significant amounts of Box flue tile were recovered, with some pieces showing breadth and depth. All but one of the box flue fragments showed keying that was scored rather than roller-impressed. Quantification of basic forms is given below with percentages rounded to two decimal points.

4.2.2 Brick and tile forms and % of Total Roman CBM assemblage by sherd and by weight

Type	No. Sherds	% Total	Weight kg	% Total
Box flue	32	7.92	10.938	13.86
Brick	37	9.15	11.824	14.98
Imbrex	99	24.50	11.658	14.77
Tegula	73	18.06	21.867	27.71
Unidentified tile	163	40.34	22.615	28.66
Total	404		78.902	

- 4.2.3 Almost all of the Roman CBM was seen to be in fabrics from the local mid-first to second century fabric group 2815. These fabrics were produced at numerous sites around London, particularly to the north-west of Central London and towards St Albans. Included in the large dumps of this material however were occasional examples of late second to third century fabrics from further afield. In particular some examples of fabrics 2453 and 2457 from the south of England were found. The small amounts of this material suggest minor repairs to existing structures, or rebuilding with large-scale reuse of earlier fabrics, as was common during the third and fourth centuries. In either case, both the dumps mentioned above appear to be contemporary, and probably represent demolition debris from a building or buildings, at least one of which was supplied with a hypocaust. The lack of abrasion on most of the fragments from these contexts suggests a deposition date relatively soon after the destruction of the structure(s), perhaps during the third century AD.
- 4.2.4 Several CBM sherds showed signs of sooting or reduction of the fabric, some tegulae showed sooting on their underside, which may indicate destruction by fire, or possibly the use of material in hearths. One substantial fragment of brick or tile had 'ghost' marks on its surface, including one very well defined rectangular mark, and several sub-oval marks.

The marks are caused by heating of the tile while objects rested upon its' surface, as in a kiln.

4.3 Opus signinum, mortar and Daub: 3104, 3101, 3102

4.3.1 Only one fragment of opus signinum was recovered, although a few brick fragments showed residue of this material on their bases. Some tegula showed lime mortar residues, generally concentrated along their flanges, presumably to fix the corresponding imbrices in position. Just one abraded piece of daub was recovered with residual Roman material, although wood impressions can be clearly seen.

4.4 Stone fabrics: 3105(Kentish ragstone), 3106 (Hassock Stone), 3108 (Medium-grained laminated sandstone), 3121 (Fine-grained laminated sandstone), 3132 (Forest marble).

4.4.1 Significant numbers of stone slab fragments were recovered in association with the Roman ceramic material, the majority of which were fragments of medium-grained micaceous sandstone, reddish purple to greenish grey in colour. The reddish colour was seen in some cases at least to be caused by heat. This material probably represents paving slabs, with one example showing chamfered or bevelled edges.

4.4.2 At least one stone fragment was an unusual example of a stone roof tile, of Forest marble. It had a distinct nail hole and was similar in form to ceramic pegged roof tiles, although larger in size with minimum dimensions of 275x158x20mm. Other smaller fragments of the same stone type was found, suggesting that stone peg tiles may have been used instead of tegulae and imbrices for roofing at least part of a structure.

4.4.3 One fragment of rubblestone, of Kentish Rag, was recovered. This material was in common use in the Southeast during and after the Roman period. No dimension stones (building stones) were recovered from the site, although these were often reused after demolition of the original building.

4.5 Medieval and post-medieval fabrics: 2271, 2276, 2279 (roof tile), 2318, 2320 (floor tile), 3032, 3034, 3047 (brick).

4.5.1 No medieval or post-medieval fabric types showed more than five sherds. Very small amounts of medieval building material was recovered, just one fragment of tile in fabric 2271, which was abraded and may actually be residual Roman material. Post-medieval roof tile fabrics included peg tiles in fabric 2276 and pan tiles in fabric 2279.

4.5.2 Two fragments of Flemish type floor tiles were recovered, one in silty fabric 2318 and the other in sandy fabric 2320.

4.5.3 The only substantial brick fragments were three pieces of brick in fabric 3047, a fabric commonly used for paving or drainage. The other fabrics 3032 and 3034 are indicated by small fragments that may in some cases be intrusive material.

5.0 CONCLUSIONS

5.1 The nature of the Roman CBM suggests the presence of a building or buildings in the vicinity of the site roofed mainly in tile of imbrices and tegulae, although stone pegged tiles may also have been used. The presence of a hypocaust system is inferred from the significant numbers of box flue tiles recovered. Brick and stone may have been used for flooring, although the material used for walling is not known. The burnt nature of some of the material, of both ceramic and stone, points to the possibility of fire as a reason for destruction. A deposition date for the material is likely to be some time during the third century.

5.2 The lack of medieval material suggests a hiatus of building activity on the site until the post-medieval period, and probably until the later post-medieval period.

5.3 The limited amount of post-medieval fabrics suggests that any structures (utilising ceramic materials) built during this period were built towards the end of the post-medieval period or the beginning of the modern period (19th century). Such structures are probably still standing or recently demolished.

6.0 RECOMMENDATIONS

6.1 The Roman material may be worth publishing as an assemblage if the site itself is published, although its value is limited by the fact that the material seems to have been removed from the actual site of the building. However the nature of the material does indicate the presence of a building of some status, particularly with the presence of significant amounts of box flue tiles.

6.2 Several items of interest should be drawn for archive and/or publication, in particular the box flue tiles and the stone pegged roof tile.

6.3 The post-medieval material is of no interest and does not merit further work.

7.0 FABRICS

Brick:

3032	Usually hard fabric with a surface very resistant to damage by abrasion. Less well fired examples can be brittle. Yellow and white calcium carbonate specks and iron oxide show throughout the fabric. Both stock moulded and machine examples occur. Some machine-pressed bricks have shallow frogs, stock moulded are usually unfrogged.
3034	Most obvious inclusions are calcium carbonate and clinker. The matrix is streaky, fabric fairly hard and sandy. Stock moulds and wire-cut machine-pressed bricks occur. The latter usually have shallow frogs. Apart from lensing this fabric is very similar to 3032.
3047	Fine sandy fabric, moderate quartz <0.4mm, dark red iron oxide <6.0mm, fine quartz moulding sand <0.1mm on outside

Floor tile:

2318	Sandy fabric, abundant quartz <0.5mm, frequent red iron oxide & clay inclusions <2.0mm; cream silty bands & lenses
2320	Fine sandy fabric, moderate quartz <0.3mm, occasional black iron oxide <1.0mm; c. carbonate & rock fragments <2.0mm

Tile:

2271	Hard, well fired fabric with fine texture, occasional coarse quartz <0.6mm, occasional calcium carbonate and red iron oxide <0.5mm, occasional muscovite mica <0.05mm.
2276	Hard, well fired fine texture with few visible inclusions - occasional quartz <0.6mm, occasional calcium carbonate and red iron oxide <0.5mm, muscovite mica <0.05mm. Same as [2271] except with fine moulding sand.
2279	Fine well fired texture, sandy fabric with moderate quartz <1.0mm, occasional black/red iron oxide & calcium carbonate inclusions <1mm.

Roman Fabrics:

2452	Fairly fine fabric. Fine but varying amounts of quartz <0.5mm. Usually with occasional limestone, siltstone and iron oxide <2.0mm.
2453	Frequent yellow-white clay inclusions <0.6mm; often mottled clay matrix; occasional i.o. <1.0mm; some e.g. 's have frequent quartz <0.3mm
2457	Abundant limestone with occasional quartz <0.2mm in background clay matrix, mottled appearance; few coarser inclusions except occasional shell <6.0mm, quartz <0.8mm, i.o. Some tiles have brown or red msand
2459a	Fine sandy fabric; few quartz grains <0.2mm; occasional i.o. 2459a - normal msand; 2459b - fine msand; 2459c - straw moulding
2459b	Fine sandy fabric; few quartz grains <0.2mm; occasional i.o. 2459a - normal msand; 2459b - fine msand; 2459c - straw moulding
3004	Sandy fabric with moderate quartz <0.7mm, occasional iron oxide and limestone <0.7mm
3006	Covers the fabric range between 2459a (normal msand) and 3004. Individual tiles vary. most have frequent quartz < 0.3mm with occasional iron oxide and limestone
3009	Sandy fabric, abundant quartz <0.6mm; coarse clay, angular silt/siltstone, sandstone and i.o. <10mm
3018	Fine clay matrix. Frequent orange clay/siltstone bands and inclusions, iron oxide, varying amounts of occasional quartz <1.0mm. frequent silty bands and nodules in certain examples
3026	Frequent quartz <1.0mm with occasional grains <3.0mm. Occasional i.o. and rounded silty inclusions <3.0mm.
3060	Frequent quartz <0.2mm; moderate fine black iron oxide <0.1mm; occasional coarser red iron oxide <1.0mm. Some tiles have less black iron oxide, 3060b = coarse msand
3238	White silty streaks, occasional/moderate medium quartz, mottled clay matrix, occasional red i.o.

1 Stone Fabrics:

3105	Kentish Rag	Sandy limestone, micritic calcite matrix, common Glauconite inclusions <0.1mm, generally tough and brittle. Huge ammonites & shell fragments. East Kent Variation - small bore holes caused by molluscs (Pinnocks) = intratidal zone SE. Coast of Kent.
3106	Hassock Stone	Moderately hard calcareous argillaceous sandstone with Glauconite <0.1mm and mica inclusions, fossil inclusions are usually crushed flat (ammonites, lamellibranchs, brachiopods, echinoids)
3108	medium grain laminated sandstone	Covers all medium-grained laminated brown, red & grey sandstone. Principle mineral is quartz, grain size 0.05-0.5mm; other minerals include mica, feldspars. Jurassic sandstone's often coloured brown, yellow-brown, by limonite i.o. with sub-angular,

		sedimentary grains. New Red Sandstone (West Midlands) rounded, wind-blown grains, coloured by hematite, pinkish-red
3121	fine-grained laminated sandstone	Covers all fine grained, laminated brown, red & grey sandstone with particle <0.05mm. Principle mineral is quartz, other minerals include mica. Jurassic sandstone's often coloured brown, yellow-brown, by limonite i.o. with sub-angular, sedimentary grains. New Red Sandstone (West Midlands) rounded, wind-blown grains, coloured by hematite, pinkish-red
3131	Pennant Sandstone (Grit)	Coarse grained quartz and muscovite mica, current bedded, feldspathetic, micaceous gritstone. Often angular particles, granular texture
3132	Forest Marble	Shelly, false-bedded, hard limestone's, crystalline calcite matrix, abundant shell debris and occasionally oolitic. Variations: Somerset – conspicuously false-bedded, blue shelly limestone's largely composed of oyster fragments (Bowden Marble); Cirencester-Fairford = tilestones 'Poulton Slates'. Lowest part consists of two brachiopod beds. Lowest = Boueti Beds - Herbury = whitish marl with abundant fossils inc. many encrusted with worm tubes and polyzoa, brachiopods = Goniorhynchia, Avonothyris, Digonella. Digona bed = Digonella replaces Goniorhynchia

Additional fabric codes:

3101-mortar
3102-daub
3104-Opus Signinum

APPENDIX 4

ANIMAL BONE ASSESSMENT

Lisa Yeomans, June 2002

INTRODUCTION

A total of 378 fragments of mammalian bone and 5 fragments of bird bone were recovered from the excavations at Skerne Road, Kingston. Almost the entire faunal assemblage (96%) originated from the Roman phase of land use; as a result much of the interpretation concerning animal utilisation at the site is limited to this period of occupation.

METHODOLOGY

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

ANALYSIS OF FAUNAL ASSEMBLAGE BY PHASE

Table 1 displays counts of animal bone fragments by phase and, where sample size is sufficient, percentages identifiable to each species represented by the faunal remains. The proportion of bones that could be identified to species level is relatively low and this was caused by a combination of poor preservation in the early Roman contexts and the presence of many taxonomically indistinct elements in the later Roman features such as ribs and vertebral fragments.

Species/Animal Size Category	Fragment Count By Phase			
	Phase 2	Phase 3	Phase 4	Phase 5
Cattle (<i>Bos taurus</i>)	2	128 (83.1%)		
Horse (<i>Equus cf. caballus</i>)		4 (2.6%)	1	
Pig (<i>Sus scrofa</i>)	1	5 (3.2%)	1	
Sheep/Goat (<i>Ovis aries/Capra hircus</i>)		11 (7.1%)		
Sheep (<i>Ovis aries</i>)		2 (1.3%)	1	
Dog (<i>Canis familiaris</i>)		2 (1.3%)		
Indeterminate Mammalian Bone (Horse/Cattle/Red Deer Size)	2	132		
Indeterminate Mammalian Bone (Pig size)		14		
Indeterminate Mammalian Bone (Sheep/Goat/Large dog Size)		48		2
Indeterminate Mammalian Bone	4	18		
cf. Red Grouse (<i>Lagopus lagopus</i>)		2 (1.3%)		

Species/Animal Size Category	Phase 2	Phase 3	Phase 4	Phase 5
Large Bird (Species Indeterminate)			1	
Medium Bird (Species Indeterminate)		4		
No. mammalian bone fragments identified to species level	3	128	3	0
Total no. of mammalian bone fragments	9	364	3	2
Proportion of fragments identifiable to species level	33.3	35.2	100.0	0.0

Table 1. Fragments identified to species or size category by phase.

Phase 2: AD 43 - 70

Animal bone was recovered from just two of the pits interpreted as early Roman in date. Four fragments from an indeterminate mammalian bone were contained within the fill of [217]; together these specimens may have originally formed part of a single bone but were in such a degraded condition that it is difficult to be certain. The faunal remains obtained from the excavation of an irregular linear feature [217] had also suffered from a biological degradation, although 3 fragments could still be identified to species level (table 1). Bone density in the early Roman features of the site is low; however this may not be an accurate reflection of the quantity of material originally deposited within these cut features since decay of the faunal remains is at an advanced stage.

Phase 3A: AD 200 – 300

A substantial quantity of animal bone was recovered from the two Roman quarry pits [115] and [149], although in disproportionate quantities. The fills of [149], particularly the primary fill (148) contained the majority of the bone; even considering the difference in size of the two pits the deposition of bone was extremely skewed with almost 98% of the fragments originating from the larger cut [149]. This difference is interesting, especially since the date of infilling of these pits is roughly contemporary with both occurring during the 3rd Century AD. Large amounts Roman building material were recovered from [115] and its unabraded condition suggest the demolition of buildings in the vicinity. Whereas, frequent pot and bone within the fills of [149] may imply refuse of a more domestic nature resulting from everyday activities.¹⁴ A more detailed examination of the animal bone may yield additional information on the depositional circumstances relating, in particular, to pit [149] where larger sample size permits detailed analysis.

In general the animal bone from pit [149] was relatively well preserved and the surfaces of the material were largely intact displaying minimal signs of weathered. Despite this anthropogenic modifications in the form of cuts and chopmarks were notably absent indicating an actual lack of butchery traces rather than this evidence being obscured by poor preservation. Further to this many of the bones were complete with minimal fragmentation and during excavation it was noted

¹⁴ Bradley, T. 2002. *Phased Summary of an Archaeological Excavation on Land at Skerne Road, Royal Borough of Kingston Upon Thames*. PCA Report.

that much of the bone was situated in discrete concentrations of articulated skeletal regions. Taken together this implies that the bone deposited represents parts of carcasses that were not heavily utilised as the disarticulation and fracturing normally found in bone assemblages typical of domestic waste was absent.

Not all the bone represents this mode of deposition; occasional bones displayed evidence of significant weathering and it is also interesting that while less than 1% of the bones identified as cattle showed signs of carnivore gnawing, 25% of those identified as caprine displayed this type of modification. This evidence seems to imply that whilst the cattle bones were buried fairly rapidly, many of the caprine bones had laid around for extended periods of time where dogs could have access to the bones to gnaw on. Additionally, only one of the caprine bones and none the pig elements were complete and this seems to suggest a situation whereby the bones of these animals represent domestic waste that eventually became incorporated into the fills of [149]. The presence of a few articulated cattle skeletons would also explain the domination of the assemblage by cattle bones compared to standard at most Roman sites. Although cattle were often the most frequent animal identified in the faunal remains from Roman sites there is a tendency for only later military sites to have frequencies that greatly exceed 70%.¹⁵

There are examples of pits filled solely with the remains of cattle; one such example was excavated at Little Chester, Derby. In this case, however, the bones had been split and it was suggested that they represented waste from bone boiling that was performed in order to extract the grease and fat.¹⁶ The bones from this military site consisted entirely of splint cattle longbones and represents disposal of a completely different type of animal waste in the larger quarry pit at Skerne Road.

Anatomical Portion	Side	139	148	Anatomical Portion	Side	139	148
Skull			4	Ilium	Right		5
Mandible (horizontal ramus)	Left		5	Ischium	Left		4
Mandible (horizontal ramus)	Right		2	Ischium	Right		3
Mandible (ascending ramus)	Left		2	Pubis	Left		3
Mandible (ascending ramus)	Right		3	Pubis	Right		1
Atlas			3	Proximal Femur	Left		
Axis		1	1	Proximal Femur	Right		2
Sacrum			4	Distal Femur	Left		1
Scapula	Left		3	Distal Femur	Right		

¹⁵ King, A. 1978. A Comparative Survey of Bone Assemblages from Roman Sites in Britain. *Bulletin of the Institute of Archaeology* 15: 207-232.

¹⁶ Askew, S. 1961. In Webster, G. Excavations at Little Chester, Derby, 1960. *Derbyshire Archaeological Journal* 81:85-110.

Scapula	Right			Proximal Tibia	Left		
Proximal Humerus	Left			Proximal Tibia	Right		1
Proximal Humerus	Right			Distal Tibia	Left		
Distal Humerus	Left			Distal Tibia	Right		1
Distal Humerus	Right	1	2	Astragalus	Left		
Proximal Radius	Left		2	Astragalus	Right		
Proximal Radius	Right		3	Calcaneus	Left		1
Distal Radius	Left		2	Calcaneus	Right		
Distal Radius	Right		1	Proximal Metatarsal	Left		2
Ulna	Left		3	Proximal Metatarsal	Right		2
Ulna	Right		3	Distal Metatarsal	Left		1
Proximal Metacarpal	Left		2	Distal Metatarsal	Right		
Proximal Metacarpal	Right		3	First phalanx			2
Distal Metacarpal	Left		2	Second Phalanx			1
Distal Metacarpal	Right		2	Third phalanx			2
Ilium	Left		4				

Table 2. Minimum number of elements for anatomical regions of the skeleton for the cattle bones from (139)-primary fill and (148)-secondary fill of [149].

A MNI (minimum number of individual) value was calculated based on the cattle bones from the fills of [149], this provided a value of 1 for the secondary fill (139) and 5 from the primary fill (148). These figures were based on the data in table 2; this shows the (MNE) minimum number of elements for various portions of the skeleton, the low ratio of MNI to NISP (number of identified specimens) suggests the deposition of a few, largely skeletally complete animals.

Table 2 also allowed the reconstruction of body part data show in figure 1. There is no notable bias towards any particular element within the fills of quarry pit [149]; all areas of the skeleton are present, although the occurrence of the upper-limb bones and the skull is moderately more frequent. This is particularly unusual since the upper limbs are the major meat bearing elements and a possible interpretation of a pit where these are found partially in articulation might be as a dumping location where the carcasses of diseased or animals otherwise unsuitable for consumption could be disposed of. The exceptionally large pit left by the quarrying of brickearth would seem to be a suitable location to discard carcasses of this kind. The lack of bone in the other quarry pit may also be interpreted as the selective disposal of articulated portion of bone within the deeper pit. Indeed, it is the lower fill of pit [149] that contained the majority of the bone and during excavation it was noted that more of the bone from this fill was articulated.

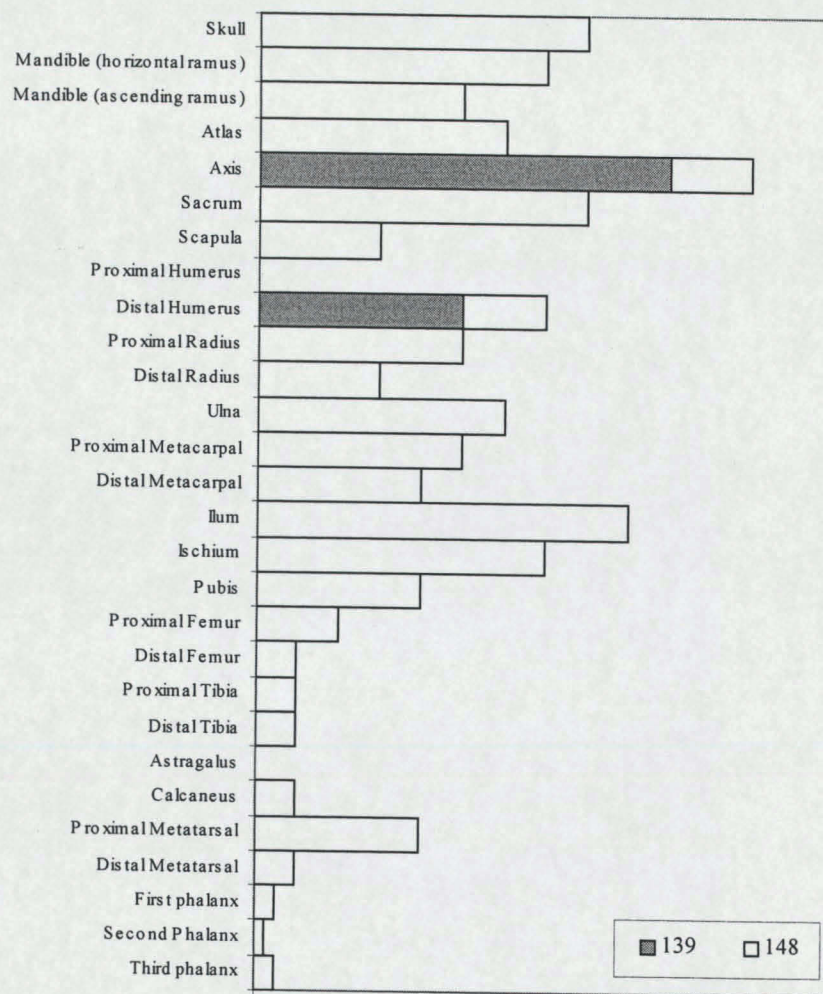


Figure 1. Comparison of element frequency in fills 139 and 148, corrected for frequency of actual representation with a complete skeleton and based on the expected frequency calculated from the MNI for each fill.

If the above interpretation is correct then it is worth examining osteological data to check for evidence regarding the condition or age of the cattle. Six mandibles with intact dentition were recovered from the pit and all were from the primary fill (148); the wear stages of the teeth contained within these jaws are shown in table 3. As the cattle remains from the pit appear to be from a few, relatively complete animals and mandibles are well represented in the table of minimum number of elements, it is suggested that wear of the mandibular dentition would be the best method of age assessment. Fusion data is of limited use in this case since it is impossible to estimate the age of animals after they have reached maturity; the wear of the dentition on the other hand continued through the life of the animal and can be used to estimate the age of death in adult animals.

Whilst table 3 indicates that the majority of the animals were adult, none of the cattle lived into old age. Further to this there is no evidence of pathological conditions on any of the animal bone identified to this taxonomic group. However, the use of the pit for disposing of diseased animals cannot be ruled out since only pathologies that result in skeletal remodelling will be traceable in the archaeological record. Diseases affecting the soft tissues of the body are likely to lead to a carcass being deemed less suitable for consumption.

Grant Wear Stage of Individual Tooth					
Side	dp4	P4	M1	M2	M3
Left		-	O	l	-
Left		-	-	-	j
Left	l		G	g	-
Right		g	L	k	h
Left		g	K	-	j
Right		g	N	l	k

Table 3. Wear stages of individual teeth found in the cattle mandibles with dentition based on the recording method devised by Grant.¹⁷

It is not only the cattle bones from the fills of [149] that are not typical of domestic waste; four fragments of equid remains, identified as horse (*Equus caballus*) on the basis of enamel patterning in the dentition, were also recovered from (148). King¹⁸ has argued that horsemeat was rarely consumed in Roman Britain as the bones of these animals are rare finds in urban contexts; generally they would have been kept into old age since they were of considerably more value alive. The equid bones from the larger quarry pit at Skerne Road included a practically complete skull that was from sub-adult animal based on the presence of heavily worn deciduous premolars. None of the bones displayed evidence of butchery; a plausible explanation for the presence of a young horse, which would normally be kept into old age as a work animal, could be that it died naturally or was slaughtered because of the condition of its health.

Apart from caprine and pig, other species represented in pit [149] include two dog bones and two bird humeri that compare favourably with red grouse; these were probably from the same individual. Although four bird bones are unidentified to species at this stage; two of these were complete (an articulating radius and ulna); these will probably be distinguishable to species with access to a suitable reference collection. The bones from these birds probably come from the domestic part of the waste deposited in the pit and represent the hunting of game birds and/or wild fowl.

¹⁷ Grant, A. 1982. The Use of Tooth Wear as a Guide to the Age of Domestic Ungulates. In (Wilson, B., Grigson, C. and Payne, S. eds.) *Ageing and Sexing Animal Bones from Archaeological Sites*. pp. 91-108. Oxford: British Archaeological Reports British Series 109.

¹⁸ King, A. 1978. A Comparative Survey of Bone Assemblages from Roman Sites in Britain. *Bulletin of the Institute of Archaeology* 15:207-232.

Phase 4: Post-Medieval

Only three fragments of mammalian bone and one from bird were recovered from the features dating to the post-Medieval period; each was retrieved from a different context.

Phase 5: 19th Century

Three bones, unidentifiable to species, were present in contexts of this date.

CONCLUSIONS AND FURTHER RESEARCH

Only the bone from the Roman utilisation of the area now adjacent to Skerne Road, Kingston is particularly informative. The unusual faunal assemblage from at least the primary fill of largest quarry pit [149] could be evidence of the disposal of cattle and horse carcass portions that are unsuitable for human consumption. It would be interesting to extend the background reading on this aspect to search for similarities within Roman Britain.

Conformation of the presence of grouse within the assemblage could be performed by checked the elements in question against suitable reference material and identifying the remaining bird bones to get a fuller picture of the resources utilised by the nearby inhabitants. If these do indeed represent game birds and/or wild fowl they would imply a diverse diet with access to these food sources that were probably somewhat of a luxury.

APPENDIX 5

POST-MEDIEVAL POTTERY ASSESSMENT

Chris Jarrett

Quantity:

Total number of boxes of Post-Roman pottery: 2

MEHTODOLOGY

The Museum of London Archaeology Specialist Service's pottery type codes have been used to classify the ceramics. Pottery was quantified for each context, by fabric and vessel shape using sherd counts (with fresh breaks discounted), and the information entered onto a database, Access 97. A report produced from the database is available as part of the archive.

Context	Size	Date range	Latest dated pottery type	Suggested Deposition date
[67]	S	1770-1880	1775-1880	Early 19 th century
[98]	S	1480-1550	1480-1550	1480-1550
[111]	S	1770-1880	1775-1880	Early 19 th century
[119]	S	1775-1880	1775-1880	Early 19 th century
[131]	S	1775-1900	1800-1900	19 th century
[150]	S	1580-1900	1775-1880	Early 19 th century
[154]	S	1770-1850	1770-1850	1770-1850
[156]	S	1080-1900	1670-1900	18 th century
[208]	M	1755-1900	1800-1900	19 th century
[214]	S	1580-1900	1830-1900	mid to late 19 th century

Table 1. List of contexts containing pottery, the date range of the pottery, the latest fabric and suggested deposition date.

CONDITION OF POTTERY:

The pottery from the site was unabraded in its condition and occurred as small to large sized sherds with some near complete vessels.

GENERAL CHARACTERISTICS COMMENTS:

The pottery consisted of 94 stratified sherds in nine contexts and dated mostly to the late 18th early 19 century. The pottery occurred as small and medium sized groups (1-30 and 31-100 sherds). There is one sherd of medieval pottery and 93 sherds of Post-medieval pottery. The pottery is discussed by period.

1480-1550 – Contexts: [98]

Deposit [98] produced the handle and rim of a Cheam redware jug, dated 1480-1550, but similar transitional redware wasters have also been found in Kingston (Nelson, 1980).

Late 18th –early 19th century – Contexts: [67], [111], [119], [150], [154], [156]

The main pottery types in this group occurred as sherds of Developed Creamware (CREA DEV), dated 1775-1880 and Pearl ware (PEAR), dated 1770-1850. There was nothing remarkable about the pottery in these groups.

19th century – Contexts: [131], [137], [208], [214]

These contexts also produced Developed Creamware and Pearl ware, but additionally produced 19th-century Refined white earthenware, often transfer-printed, and Yellow ware (YELL) dated 1800-1900. Deposit [208] also produced English Hard-paste porcelain as two bowls and a saucer, both with a Chinoiserie over-glaze red-transfer and enamelling dating to the early 19th century.

POTENTIAL AND RECOMMENDATIONS:

The pottery from this site is unremarkable and does not add to our understanding of local ceramic studies. No further work is recommended.

BIBLIOGRAPHY:

Nelson, S. 1981. A group of Pottery waster material from Kingston. London Archaeologist Vol. 4. No. 4, 96-102.

APPENDIX 6

CLAY TOBACCO PIPE ASSESSMENT.

Chris Jarrett

QUANTITY:

Total number of boxes: 1

METHODOLOGY

The typology used to classify the clay tobacco pipe bowls follows the guidelines set out in D. Atkinson and A. Oswald (1969), coded AO, but the 18th century pipes have been referenced to Adrian Oswald, *Clay Pipes for the Archaeologist* (BAR 1975) and coded OS.

CONDITION OF CLAY TOBACCO PIPES: The clay tobacco pipe bowls were very fragmentary and therefore classification of bowl types was difficult.

GENERAL COMMENTS: There were a total of 13 clay tobacco pipe fragments in eight contexts. All the tobacco pipe fragments were stratified and consisted of 7 stems and two heels. The clay tobaccos pipe bowls ranged in date from c.1660-1800 and are discussed by context.

Clay tobacco pipe stems occurred in contexts [60], [67], [111], [130], [137] and [154] and can only give a general post 1580 date to the contexts.

Deposit [79] produced the heel of a possible AO type 18 bowl, dated 1660-1680. The spur of an AO type 26 bowl, dated 1740-1800 was present in deposit [88]. This bowl appears to be of an armorial type, but was too fragmentary to be certain of the design. The heel was initialled R C which could possibly refer to two makers with the same name, Richard Cole. The first maker is known to have been making pipes between 1742-1800 and the second is known to have been working in 1763 at Whitecross Street and died in 1800 at Golden Lane.

POTENTIAL AND RECOMMENDATIONS: This is a very poor assemblage of clay tobacco pipe material and no further work is recommended.

BIBLIOGRAPHY:

D. Atkinson and A. Oswald. (1969), London clay tobacco pipes. *Journal of British Archaeology Association*, 3rd series, Vol. 32, 171-227.

Oswald, A. (1975). *Clay pipes for the Archaeologist*, British Archaeological Reports, British series, No.14.

APPENDIX 7

ENVIRONMENTAL ASSESSMENT

ArchaeoScape Unpublished Report

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INTRODUCTION

This report presents the results of an environmental archaeological assessment carried out by ArchaeoScape at Skerne Road, Kingston upon Thames. Bulk samples were obtained from the site, and the following methods were used to assess their potential for further, more detailed, investigation of past environmental conditions and subsistence practices: (1) flotation of the samples using standard procedures developed by PCA Ltd and ArchaeoScape; (2) extraction and recording of fossilised biological remains, in particular seeds, fruits, charcoal, Mollusca, coleoptera and bone from each sample. Following the extraction procedures, both flots and residues were systematically scanned using a low-power zoom-stereo microscope.

RESULTS

The results of the assessment are presented in Table 1. Sample 1 contains sufficiently high concentrations of charred cereal grains and charcoal to recommend further sample processing and full analysis. The grains may have been accidentally burnt during food processing or deliberately thrown into a fire along with small weed seeds and unwanted organic debris. The remaining samples also contain cereal grains (sample 2), seeds preserved by waterlogging (sample 3) and charcoal. However, the concentrations are too low to recommend further analysis.

RECOMMENDATION

Approximately thirty litres of sample 1 from fill 148 should be processed to recover charred cereal grains and charcoal. They will provide valuable information on diet, land-use and woodland exploitation.

Table 1: Skerne Road Assessment

Code: SKD01

Context No.	Sample No.	Fraction	Waterlogged seeds	Charred seeds	Charcoal	Mollusca	Coleoptera	Bone	Analysis (Yes/No)
216	3	Flot	Yes cf. Ranunculus sp. (cf. buttercup) Rumex sp. (docks and sorrels)	No	No	No	No	No	No
216	3	Residue	No	No	Yes	No	No	No	No
218	2	Flot	No	Yes Triticum (wheat)	Yes	No	No	No	No
148	1	Residue	No	No	No	No	No	Yes	No
148	1	Residue	No	Yes cf. Triticum (wheat) cf. Hordeum (barley) cf. Avena (oats)	Yes	No	No	No	Yes
148	1	Flot	No	Yes cf. Triticum (wheat) cf. Hordeum (barley) cf. Avena (oats)	No	No	No	No	Yes

APPENDIX 8

LITHIC ASSESSMENT

Barry John Bishop

INTRODUCTION

Excavations at the above site recovered 64 struck flints and just under 1kg of burnt flint fragments. This report quantifies and describes the material, offers some comments on its significance and suggests recommendations for further work. As the material was only cursorily examined, a more detailed examination of the material may alter or amend any of the interpretations offered here.

QUANTIFICATION

Context	Decorated Flakes (>50% cortex)	Flakes	Flake fragments	Blades	Broken Blades	Narrow Flakes	Core rejuvenation flakes	Scraper	Chunks	Core	Total Struck per context	Burnt (g)	Burnt (No)
+ 105/220					1						1		
+ 105/225	1	1				2					4		
+ 110/230					1						1		
57		1									1		
67												77	2
79												33	2
92		1				1				1	3	88	12
94												139	10
101			1								1	22	2
102	1		1							1	3	43	8
119	2									1	3		
123	1										1		
125	1									1	2		
130							1				1		
135	3										3		
137	1				1						2		
139		1		1						1	3	138	3
148	6	4	1	4	4	7	1	2	1	2	32	243	19
200	1										1		
216	1				1						2	143	10
Total	18	8	3	5	8	9	2	2	1	7	64	926	68

Table 1: Quantification of lithic material by context

BURNT FLINT

A total of 68 pieces of otherwise unmodified burnt flint weighing 926g was recovered from nine different contexts. The flint was variably burnt but all to the degree that it had changed colour and become 'fire-crazed', consistent with burning in a hearth. It was distributed widely with no significant quantities present within any individual context.

STRUCK FLINT

Raw material

Two types of raw material were present, a few small and heavily rolled gravel pebbles and also larger sub-angular cobbles exhibiting a weathered chalky cortex. No true chalk nodules were identified. The rolled pebbles were of limited knapping potential, their size only allowing a few flakes to have been produced from each pebble and their thermal and mechanical faults precluding any attempts at systematic reduction. The larger cobbles also suffered from thermal faulting although their size would have permitted better platform preparation and greater control over flaking. The limited knapping potential of the rolled gravel pebbles would have been offset by their ease of procurement, as they would have been easily obtained from the local terrace gravel deposits. The better quality raw material may have been obtained from nearer the parent chalk although it is possible that similar cobbles would have been present at least in localised patches within the local terrace gravels, although their selection may suggest a greater degree of effort was expended in locating them and that their relatively better qualities were appreciated.

Condition

The assemblage was generally in a good condition although many pieces did show minor chipping and abrasion, especially to the thinner edges, and several pieces were broken. This would be consistent with their assumed residuality within later contexts, although none of the pieces suggest any extensive post-deposition movement.

Debitage

Debitage formed over 95% of the assemblage. It was dominated by blades, narrow flakes and flakes with parallel dorsal scars, with high proportions of edge trimmed striking platforms, diffuse bulbs of percussion and feather distal terminations present. Not surprisingly considering the size of the raw materials, most flakes were of small size with no complete examples reaching 60mm maximum dimension.

Of the seven cores recovered, four represented blade or narrow flake cores (contexts [92], [119], [139] and [148]). These had between one and four striking platforms, many of which had been edge trimmed, the presence of two core rejuvenation flakes confirming a concern with striking platform preparation and maintenance. Of the remaining cores, one consisted of a single platformed flake core (context [148]), another a burnt core fragment (context [102]) and the last a thermally shatter core fragment (context [125]). All of the cores were of irregular shape presumably due to the constraints imposed by the small size of raw materials utilised. The presence of decortication flakes, cores and core tablets would indicate core reduction occurring at the site, although the high number of decortication flakes and other cortical flakes was probably also partially due to the small size of raw materials.

Although the assemblage generally appeared reasonably homogenous some thicker, squatter and more crudely produced pieces were present, often manufactured from rolled gravel pebbles. These may be the product of later industries, being most characteristic of traditions dating to the Middle Bronze Age or after. However, due to the statistically small size of the assemblage and absence of any diagnostic pieces any identification of later material within the assemblage must remain tentative.

Retouched

Only two pieces showed definite evidence of secondary working, both consisting of scrapers from context [148]. One was a competently manufactured end and side scraper made on a relatively large flake with retouch continuing most of the way around the perimeter, and which appeared to have been resharpened at least once. The other consisted of a rather worn short end scraper manufactured on a small primary flake. Two possible piercers, both minimally retouched, were also from the same context. As with many of the flakes from the assemblage as a whole, the possibility of accidental or post-depositional damage precluded confident identification of minimal or irregular retouch or any utilisation traces on these.

DISCUSSION

Although all from residual contexts at least the bulk of the flintwork appeared to be reasonably homogenous and broadly contemporary, characterised by a concern with blade production achieved through systematic core preparation and reduction, typical of flintworking traditions dating to the Mesolithic and Early Neolithic. However, it cannot be demonstrated that the assemblage is from a single occupation, and there is no way of establishing over how long a period the assemblages was created. Some of the more crudely produced pieces may possibly indicate that flint reduction was occurring at the site as late as the Middle Bronze Age or after.

Only one context, [148] produced more than four pieces of struck flint. As with the assemblage as a whole these pieces generally appeared homogenous although again the presence of a small quantity of extraneous material cannot be discounted. The retouched implements were undiagnostic although the presence of blade cores, blades, and a core rejuvenation tablet suggest a Mesolithic or Early Neolithic for the bulk of it. The retouched component consisted of scrapers and possibly piercers, tools often associated with hide working, an activity frequently associated with riverine locations (Bradley 1978). As the material was recovered from a Roman feature it is assumed that this either truncated earlier features or was backfilled with material derived from such features.

Evidence of prehistoric occupation from at least the Mesolithic is fairly prolific along the river margins at Kingston, although most of the evidence tends to consist of residual and often small artefact scatters. Some concentrations are known, such as to the north of the site at Ham Fields

(Field 1983) and to the south at Eden Walk (Penn et al. 1984; Serjeantson et al. 1992) and around East and South Lanes and Woodbine Avenue (Bishop 2001; Hawkins et al. forthcoming) although no extensive settlement foci have yet been identified.

RECOMMENDATIONS

This report is all that is required of the material for the purposes of the archive and no further analytical work is proposed. The material does contribute to the growing body of evidence for prehistoric activity in the Kingston area and a short description of the assemblage, preferably including a few illustrations, should be included in any published account of the excavations.

BIBLIOGRAPHY

- Bishop, B. 2001 A Multi-Period site at Woodbines Avenue, Kingston. *Surrey Archaeological Society Bulletin* 350, 4-5.
- Bradley, R. 1978 *The Prehistoric Settlement of Britain*. Routledge and Kegan Paul. London.
- Field, D. 1983 Ham: The Edwards Collection. *Surrey Archaeological Collections* 74, 169-184.
- Hawkins, D., Kain, A. and Woolridge, K. forthcoming Archaeological Investigations at East Lane and South Lane, Kingston, 1996-1998. *Surrey Archaeological Collections*.
- Penn, J., Field, D. and Serjeantson, D. 1984 Evidence of Neolithic Occupation in Kingston: excavations at Eden Walk, 1965. *Surrey Archaeological Collections* 75, 207-224.
- Serjeantson, D., Field, D., Penn, J. and Shipley, M. 1992 Excavations at Eden Walk II, Kingston: environmental reconstruction and prehistoric finds (TQ 180 692). *Surrey Archaeological Collections* 81, 71-90.

APPENDIX 9

SMALL FINDS ASSESSMENT

By Lynne Keys (May 2002)

1 INTRODUCTION

- 1.1 All the small finds examined for this assessment were of metal, the majority of them iron nails. Only two copper objects were recovered – a copper coin (still in Chatham undergoing treatment and not seen) and a (possible) mount. All these finds were very corroded and identification, with the exception of some of the nails, was obtained from the x-ray plates.

2 CHARACTER OF THE ASSEMBLAGE

- 2.1 The assemblage mainly consists of iron objects (principally nails) from Phase 3A cut features dated to the Roman period. Iron objects found in cut (149) were two keys of a type with angled bit, a buckle with trace of the tongue remaining, a (?) horse harness mount, a broken (?) agricultural tool, a piece of a flat bar, and what may be a fragment of a vessel or water pipe. The only copper alloy object examined appeared to be some kind of mount.
- 2.2 The number of nails, the bar fragment, and a very small amount of iron smithing slag may imply some construction or rebuilding work took place nearby or perhaps the small-scale manufacture of nails and (possibly) other objects or their repair.
- 2.3 Finds from other phases consisted of a couple of iron nails - which could be residual from the Roman phase.

3 POTENTIAL OF THE ASSEMBLAGE

- 3.1 The assemblage is of interest in view of the number of Roman objects recovered from a relatively small excavation. There was undoubtedly some kind of Roman presence in the immediate vicinity, although what this might be cannot be determined for certain from the finds. The number of nails suggests some kind of building or demolition activity while conversely the nails together with the iron bar and slag may suggest some limited smithing activity related to a military or civilian settlement.
- 3.2 The copper alloy coin was not available for examination at assessment so its date is not known. Although unstratified, if Roman it may provide a date for the rest of the assemblage.

4 RECOMMENDATIONS FOR FURTHER WORK

- 4.1 Some objects require better x-rays to clarify details.
- 4.2 Further research is needed to positively identify (and date?) the mounts, buckle and tool.
- 4.3 The copper alloy coin has yet to be examined and dated. This should be done on its return from conservation.

THE SMALL FINDS

SKD01 Skerne Road, Kingston upon Thames					
s.f. no.	Context	material	Identification	Period	comment
1	107	iron	Nail	Roman	
2	139	iron	tool?	Roman	broken
3	148	iron	Nail	Roman	
4	148	iron	Nail	Roman	
5	148	iron	Nail	Roman	
6	139	iron	Nail	Roman	
7	148	copper	mount?	Roman	
8	148	iron	Nail	Roman	
9	148	iron	Nail	Roman	
10	148	iron	Nail	Roman	
11	148	iron	Nail	Roman	
12	148	iron	Nail	Roman	
13	148	iron	Nail	Roman	
14	148	iron	Nail	Roman	
15	148	iron	Nail	Roman	
16	148	iron	Nail	Roman	
17	148	iron	Nail	Roman	
18	148	iron	Nail	Roman	
19	148	iron	Nail	Roman	
20	148	iron	Nail	Roman	
21	148	iron	smithing hearth bottom	Roman	wt. 109g; dimen.(mm): 70x50x50
22	148	iron	Buckle	Roman	
23	148	iron	Mount	Roman	harness attachment?
24	148	iron	vessel/water pipe?	Roman	fragmentary
25	148	iron	smithing slag	Roman	wt. 51g
26	148	iron	Nail	Roman	
27	148	iron	Nail	Roman	
28	148	iron	mount?	Roman	
29	148	iron	Nail	Roman	
30	148	iron	Unidentified	Roman	flat bar?
31	148	iron	Key	Roman	angled bit
32	148	iron	Nail	Roman	
33	0	copper	Coin		not seen yet
34	57	iron	Nail	Phase 4	
35	186	iron	Nail	Phase 4	
36	148	iron	Key	Roman	angled bit
	148	iron	smithing slag		wt. 168g
	214	iron	Nail	Phase 5	

APPENDIX 10

Summary of Results

Land at Skerne, Road Kingston, London Borough of Kingston upon Thames

T. Bradley 06.12.01

The following is a summary of results from three trenches and one test pit evaluated on land at Skerne Road Kingston, conducted by Pre-Construct Archaeology Ltd between 28th November and 5th December 2001. The locations of these trenches and test pit area shown on figure 1.

Trench 1

Trench 1 measured 6.80m x 7.0m and was situated in the car park area towards the north west of the site. The earliest deposit encountered was a mid orange brown clayey sand representing the pristine natural stratum. The highest level for this deposit was 7.06m OD. To the west of the trench the eastern edge of a natural channel was identified running N-S throughout the length of the trench. This was filled by a mid greyish brown fine silty sand. The extreme western edge of this channel was identified in a further test pit situated approximately five metres to the west of Trench 1.

A sub-rounded pit with steep sides and a flat base was identified to the south east of the trench, extending into the southern limit of excavation. This pit measured 0.78m N-S (exposed) x 1.44m E-W, with a highest level of 7.05m OD and a maximum depth 0.70m. The fills of this pit were relatively devoid of anthropogenic material. However, a single sherd of unabraded pottery dating to the Roman period recovered from the secondary fill of this feature would suggest this pit was Roman in date.

Truncating this was a further shallow pit recorded in section, which measured 1.55m E-W, and had a maximum depth of 0.32m. The highest level was 7.07m OD. This pit was filled with a dark greyish brown fine silty sand, from which was recovered a significant amount of Roman building material and pottery. The building material consisted predominantly of large fragments of box flue tile and a single fragment of brick, all of which dated to between the mid 1st and late 2nd centuries AD. A single roof tile likely to date to the Medieval period was also recovered from this pit, but the quantity and unabraded nature of the Roman material would strongly suggest that this single tile fragment was intrusive, rather than the Roman material residual. Moreover, the relatively large quantity of building material recovered would suggest the presence of a Roman building(s) within the immediate vicinity.

Situated to the east of these features was a further sub-rectangular pit with shallow sides and a flat base, which measured 0.84m N-S x 0.46m E-W. The highest level for this feature was 6.76m OD, with a maximum depth of 0.16m. This pit was filled with a mid orangey brown silty sand from which a single sherd of Roman pottery was recovered, suggesting further evidence for Roman occupation from this area of the site.

Truncating this feature to the east was a linear N-S orientated ditch / service trench containing pottery dating to the 19th century. This feature was excavated to a maximum depth of 1.0m, but the base of the ditch was not observed. Sealing all these features was a dark reddish brown clayey sandy silt with a highest level of 7.35m OD and a maximum thickness of 0.34m. This deposit is likely to represent a 19th century plough soil. This in turn overlay a make-up deposit for the overlying tarmac surface.

Trench 2

Trench 2 measured 3.80m N-S x 3.20m E-W and was situated to the south west of Trench 1 in an area of disused greenhouses. The earliest deposit encountered was a mid orangey brown sandy clay brickearth deposit at a height of 7.09m OD. The southern side of a channel was also identified running E-W across the northern side of the trench.

To the east of the trench a circular pit with steep sides and a flat base measuring 0.88m N-S x 0.89m E-W was identified cut into the brickearth. The highest level was 6.97m OD, with a maximum excavated depth of 0.15m. No anthropogenic material was recovered from this pit, although the indistinct nature of the fill might suggest a considerable age for the feature.

The bases of two roughly squared post-holes were identified in the centre of the trench. These post-holes measured 0.57m x 0.34m and 0.44m x 0.48m, and were aligned E-W. The fill of these post-holes produced material dating to the later Post-Medieval period. A further stake hole was identified to the north of these post-holes, which may have formed part of the same structure.

A further two post-medieval features were identified in the north of Trench 2, and both were cut into the fill of the natural channel. The first extended into the northern limit of excavation in the centre of the trench and measured 0.57m N-S (exposed) x 1.15m E-W, with a maximum depth of 0.28m. The second was a brick lined pit situated approximately 1m to the west. This pit measured 0.78m x 0.80m with a maximum depth of 0.33m. All features were sealed by a dark greyish brown silty sand with a highest level of 7.40m OD and a maximum thickness of 0.32m. This deposit is likely to represent a 19th century plough soil. This in turn was sealed by a series of consolidation dumps and a concrete slab.

Trench 3

Trench 3 measured 3m N-S x 7m E-W and was situated in the car park area at the south of the site. This trench was excavated to a maximum depth of 2 m, and no cut features were recorded within the strata. A series of three greenish grey silty sand deposits were identified which contained no anthropogenic material. These were interpreted as channel fills, and had a highest level of 6.51m OD. These deposits were sealed by a dark brown clayey sandy silt with a highest level of 6.75m OD and a maximum thickness of 0.31m. This deposit is likely to represent a 19th century plough / agricultural soil. This was in turn sealed by three consolidation dumps, and a tarmac surface at 7.32m OD.

Conclusions

The evaluation has identified the presence of Roman activity in Trench 1 towards the north east of the site. The presence of unabraded Roman pottery and building material, particularly from the latest of the three recorded pits, would suggest the presence of at least one significant structure within the immediate vicinity of the trench. Considering the presence of a channel to the west, and the absence of any cut features in the northern area of the trench, it is likely that this activity is confined to the area immediately to the south of Trench 1. With the exception of one undated feature, Trench 2 revealed features dating solely to the Post-Medieval period, which would suggest that Roman activity is restricted to the areas east of this Trench. Trench 3 appeared to be situated within the fill of a large channel, possibly a tributary of the Hogsmill.

APPENDIX 11

Greater London Sites and Monuments Record

1. TYPE OF RECORDING

Evaluation

Excavation✓

Watching brief

Other (please specify)

2. LOCATION

Borough: Royal London Borough of Kingston upon Thames

Site address: Skerne Road, Kingston

Site name: Skerne Road, Kingston

Site code: SKD 01

Nat. Grid Refs.:

Centre of site: TQ 1810 6970

Limits of site: a) Factory Buildings to the north b) Gas Storage facility to east
c) Railway land to the south d) Skerne Road to west

3. ORGANISATION

Name of archaeological unit/ company/ society: Pre-Construct Archaeology Ltd.

Address: Unit 54, Brockley Cross Business Centre, 96, Endwell Road, Brockley, SE4 2PD.

Site director/ supervisor: Timothy Bradley
Funded by:

Project manager: Gary Brown
St. George west London

4. DURATION

Date fieldwork started: 28th November 2001

Date finished: 29th January 2002

Field work previously notified?

YES/NO

Fieldwork will continue?

YES/ NO/ NOT KNOWN

5. PERIODS REPRESENTED

Palaeolithic

Roman✓

Mesolithic✓

Saxon (pre-AD 1066)

Neolithic ✓

Medieval (AD 1066 -1485)

Bronze Age

Post-Medieval✓

Prehistoric (Iron Age)

Unknown

6. PERIOD SUMMARIES. Use headings for each period (Roman; Medieval; etc.), and continue on additional sheets as necessary.

Roman

The excavation revealed evidence of three phases of Roman occupation, including two quarry pits backfilled with the full spectrum of domestic waste, large quantities of CBM which appeared to have derived from a relatively high status building, and a probable agricultural deposit.

Post Medieval

Post Medieval features were predominantly in the form of pits and postholes, and the basement of a 19th century building was also recorded with associated probable garden features. Further probable flood residue deposits were also identified towards the west of the trench.

7. NATURAL. (state if not observed; please DO NOT LEAVE BLANK)

Type: Brickearth

Height above Ordnance Datum: Between 6.96m OD and 6.16m OD

8. LOCATION OF ARCHIVES.

a) Please indicate those categories still in your possession:

Notes✓	Plans✓	Photos✓	Negatives✓
Slides✓	Correspondence✓	Manuscripts (unpub. reports etc.)✓	

b) ~~All/ some records have been/~~ will be deposited in the following museum:
Museum of London

c) Approximate year of transfer: 2003

d) Location of any copies:

e) Has a security copy of the archive been made? YES/ NO

If not, do you wish RCHME to consider microfilming? YES/NO

9. LOCATION OF FINDS.

a) In your possession? Yes

b) ~~All/ some finds have been/~~ will be deposited with the following museum/ other body:
Museum of London

c) Approximate year of transfer: 2003

10. BIBLIOGRAPHY.

Bradley, Timothy, 2002, *Assessment of an Archaeological Excavation at Skerne Road, Royal Borough of Kingston upon Thames*. PCA Unpublished Report

SIGNED:

NAME (Block capitals): TIMOTHY BRADLEY

DATE: