

SWANS COMBE (KE)
& GREENHITHE

NFESEV
605/P9

National Grid Company

Northfleet East GIS Substation, Springhead, Kent

ARCHAEOLOGICAL EVALUATION REPORT

Planning application no. GR 19970813

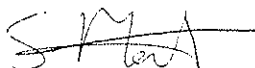


OXFORD ARCHAEOLOGICAL UNIT

February 1999

Northfleet East GIS Substation, Springhead, Kent

ARCHAEOLOGICAL EVALUATION REPORT

Planning application no. GR 19970813

Prepared by: 
Date: 11/2/99
Checked by: 
Date: 12/2/1999
Approved by: 
Date: HEAD OF FIELDWORK 15/2/1999

OXFORD ARCHAEOLOGICAL UNIT

February 1999

Northfleet East GIS Substation, Springhead, Kent

ARCHAEOLOGICAL EVALUATION

LIST OF CONTENTS

	SUMMARY	1
1	INTRODUCTION	2
1.1	Location and scope of work	2
1.2	Geology and topography	2
1.3	Archaeological background	2
2	EVALUATION AIMS	4
3	METHOD	4
4	RESULTS: GENERAL	5
4.1	Soil and ground conditions	5
4.2	Distribution of archaeological deposits	5
4.3	Presentation of results	5
5	RESULTS: DESCRIPTIONS	5
5.1	Trench descriptions	5
	5.1.1 Trench 1	5
	5.1.2 Trench 2	6
	5.1.3 Trench 3	6
5.2	Animal bone by B M Charles	7
5.3	Flint by T Durden	8
5.4	Pottery by P Blinkhorn	8
5.5	Fired clay by P Blinkhorn	9
5.6	Worked stone by S Mortimer	10
6	DISCUSSION AND INTERPRETATION	10
6.1	Reliability of field investigation	10
6.2	Overall interpretation	10
	6.2.1 Summary of results	10
	6.2.2 Significance	10

Bibliography

Appendix

- 1 Context inventory

List of Figures

- Fig. 1 Site location map
Fig. 2 Trench location plan
Fig. 3 Plans of trenches 1, 2 and 3 with section drawings

List of Tables

Table 1	Number of bones identified to element and species
Table 2	Flint described by weight and context
Table 3	Pottery occurrence by number and weight (in g) of sherds per context fabric type
Table 4	Fired clay by number and weight (in g) of fragments per context by Fabric type

SUMMARY

The Oxford Archaeological Unit carried out a field evaluation at Springhead, Northfleet East GIS Substation, Kent (NGR TQ 6230 7245) on behalf of the National Grid Company in January 1999. The evaluation revealed a probable medieval ploughsoil containing pottery of the 11th-12th centuries, which overlay a number of pits and ditches which produced pottery of similar date, along with animal bone, burnt clay and fragments of Niedermendig lava quern. The features lay towards the crest of a slope overlooking the site of Springhead Roman Town.

A flint flake and burnt flints, of probable prehistoric date, and three sherds of Roman pottery were also recovered, but this material was associated with medieval or later pottery and was therefore residual in character.

1 INTRODUCTION

1.1 Location and scope of work

- 1.1.1 Between 25th January 1999 and 28th January 1999, the Oxford Archaeological Unit carried out a field evaluation at Northfleet East Substation, Pepper Hill Lane, Northfleet, Kent (NGR TQ 6230 7245) on behalf of the National Grid Company. This work was in respect of planning application GR19970813, for the erection of a 400kv indoor GIS (Gas Insulated Switchgear) double busbar substation and associated terminal towers at this site. It is anticipated that the development will remove approximately 4m depth of deposits for the main substation and that there will be some excavation for the two terminal towers. The evaluation comprised three trial trenches covering an area of approximately 180 m² located in the area of rough pasture adjacent to the present Balfour-Kirkpatrick works compound (Fig. 2).

1.2 Geology and topography

- 1.2.1 The underlying drift geology for the area is recorded as Pleistocene Head deposits. Solid geology comprises Cretaceous Upper Chalk, with overlying caps of Palaeocene Thanet Beds forming the higher ground (Ordnance Survey 1977). A watching brief conducted by the Oxford Archaeological Unit for the National Grid Company on the site of pylon NGC YN69, immediately to the east of the proposed Northfleet East substation, found the Thanet Beds to be in excess of 3.7 m in depth.
- 1.2.2 The three trenches were located on an area of rough pasture to the west of the former Seeboard depot. The ground rose from 27.68 moD in the south-western corner of the site to 31.47 moD at the north-eastern extent. Evaluation of the area of the depot was not undertaken because it had clearly been terraced into the hillside, truncating any deposits. It was also deemed impractical because of the presence of live underground and overhead services, together with former petrol and oil tanks and a concrete slab in the area.

1.3 Archaeological background

- 1.3.1 The Springhead area has been of interest to antiquaries and archaeologists for at least two hundred years. The vast majority of the finds in the area have been Roman although the area also contains a number of prehistoric sites. There are two important Scheduled Ancient Monuments of Mesolithic/Neolithic date in the Ebbsfleet valley, to the north of the site. Prehistoric pottery and flintwork has been found to the south of Springhead Scheduled Ancient Monument (SAM Kent 158) during an evaluation of the Garden Centre site undertaken by Kent Archaeological Rescue Unit (Philp & Chenery 1997). The Springhead site may contain Iron Age or earlier activity, with a complex system of early ditches and pits of votive character underlying the Roman levels. The first reported discovery was the site of a Roman walled cemetery, discovered by the Rev. Peter Rashleigh in 1801. A large number of Roman coins and metal implements have been recovered and there are a number of references to structural remains being unearthed including a Bath house found in 1814, a substantial building found in 1864 and building foundations found in 1889.
- 1.3.2 In 1921 and 1922 the old Rochester-Dartford Road, which followed the line of the present A2, was significantly widened and partially re-routed. A number of archaeological sites within the area of the town were revealed during this operation,

including sections of at least three Roman roads, (one of which was probably Watling Street) a number of rubbish pits, a kiln and a number of human burials both inside and outside the area of the walled cemetery. A large proportion of the site of the walled cemetery, which probably lay on either side of the present road was probably destroyed during the 1922-3 road building and the subsequent construction of the CEGB Switching station to the east of the railway embankment.

- 1.3.3 The site was scheduled as an Ancient Monument in 1954, encompassing the area of known archaeology together with an area to the west where it was thought at the time that Watling Street ran. The Ordnance Survey still shows the line of the Roman road as crossing this field, although fieldwork in the last twenty years has established its true line runs across the Springhead Nursery to the north (Harker 1979, Smith 1991). In the 1950's a local group, working under the auspices of the Gravesend Historical Society began the systematic excavation of Springhead Roman Town, as the site had come to be known. This work, which spanned the years 1952-1988, was mostly concentrated on the Scheduled area to the south of the A2. These excavations produced the remains of a number of large stone structures, interpreted as temples, the site of a bakery, evidence of industrial activity including kilns and corn-driers and part of the Roman Watling Street.
- 1.3.4 Excavations by Brian Philp in advance of a second carriageway constructed between 1964 and 1966 and which runs through the centre of the Roman town, resulted in the discovery of six new buildings, an early Roman earthwork and a number of other features. In Autumn 1994 the Oxford Archaeological Unit excavated approximately 860m of cable trench on behalf of Seeboard Plc (Boyle & Early 1998). The cable ran roughly east-west across the area of the Scheduled Ancient Monument, passing approx 200m to the south of the southern edge of the A2. This phase of work was preceded by a desktop assessment, a surface collection survey and a geophysical survey and supplemented by a watching brief, which ended in January 1995. Part of the excavated cable trench passed through the Scheduled Ancient Monument to the west of the railway line. No archaeological deposits or features were encountered. The remaining length of the trench ran through the scheduled area to the east of the railway. Excavation in this section provided evidence for Roman activity dating from the 1st to 4th century and characterised by ditches, gullies, pits (some showing evidence for metalworking), postholes, floor layers and a succession of road surfaces.
- 1.3.5 Investigations carried out by Oxford Archaeological Unit in 1997/1998 revealed a previously unrecorded Romano-British cemetery approximately 0.5 km to the south of the Roman town of Springhead (Vagniacae), during works connected with the relaying of Seeboard electricity supply cables (Williams *et al* 1998). The cemetery, as exposed within the stripped cable easement, is at least 40m long and up to 25m wide and is sited beside a Roman road, which survives as a metalled hollow-way. Excavation to date has revealed at least 500 burials of both cremation and inhumation rite in approximately equal numbers. Many more burials are likely to survive, both within the stripped area and in the arable field to the north. The burials range in date from late 1st to probably mid 3rd century, although further detailed assessment of the pottery is required.

- 1.3.6 Wessex Archaeology conducted a 41 trench evaluation on a site known as Temple East of Springhead (NGR TQ 62300 71900) between April and May 1997 (Wessex Archaeology 1997a). A small number of features were identified, including ditches, postholes a relict watercourse and a possible terrace. There was no evidence to suggest that the Romano-British temple, or any associated features extended into the evaluation area.
- 1.3.7 Wessex Archaeology conducted an 85 trench evaluation between May and June 1997, on a site centred on NGR grid point TQ 61700 72800, in Springhead (Wessex Archaeology 1997b). The earliest dated features were one, or possibly two Iron Age ditches, however the bulk of the features were of early Romano-British (1st – 2nd century AD) date and were concentrated on the lower ground in or towards the valley floor. These comprised a variety of features including a probable road leading out of the settlement to the north-west, enclosure and boundary ditches, wall footings, postholes, inhumation burials (probably part of a small cemetery), pits and various spreads and deposits probably representing floor or yard surfaces, occupation deposits and middens. The only later Roman features (3rd to 4th century AD) were two substantial enclosure/boundary ditches and a shallow gully located on the higher ground to the east of the site.

2 EVALUATION AIMS

- 2.1 The following aims of the evaluation were set out in the Written Scheme of Investigation:
- 2.2 To establish the presence/absence of archaeological remains within the proposal area.
- 2.3 To determine the extent, condition, nature, character, quality, date, depth below ground surface and actual thickness of any archaeological remains present.
- 2.4 To establish the ecofactual and environmental potential of archaeological deposits and features.
- 2.5 To make available the results of the investigation.

3 METHOD

- 3.1 Three trenches were opened using a JCB excavator under close archaeological supervision. Trench 1 measured 20 m by 1.6 m. Trench 2 measured 30.5 m by 1.6 m and Trench 3 measured 29.5 m by 1.6 m and a further 5.3 m by 1.6 m trench was excavated at its southern extent. The location of the trenches is shown on Fig. 2.
- 3.2 Trenches were machined to the top of the underlying natural geology, the Thanet Beds. Archaeological features were hand cleaned and excavated. All trenches and archaeological features were planned at 1:50 or 1:100 and the plans were related to the Ordnance Survey grid. Sections were drawn of all excavated features at a scale of 1:20 and trench sections were also drawn, where appropriate. Black-and-white and colour slides were taken of all excavated features and as a general record of the work.

- 3.3 The machine-excavated spoil was scanned for finds.
- 3.4 Site procedures were otherwise as defined in the Oxford Archaeological Unit Field Manual (Wilkinson 1992).

4 RESULTS: GENERAL

4.1 Soil and ground conditions

- 4.1.1 The Thanet Beds were located at a depth of between 0.4 m and 0.7 m below the ground surface in the three trenches. A layer of medieval ploughsoil overlay the natural and was in turn overlain by modern topsoil. Layers of modern dumped material overlay the recent topsoil in Trenches 1 and 2.

4.2 Distribution of archaeological deposits

- 4.2.1 There were no significant archaeological remains in Trench 1.
- 4.2.2 Trench 2 contained two ditches which were overlain by a layer of subsoil, possibly a former ploughsoil.
- 4.2.3 Trench 3 contained a buried ploughsoil, probably the same as that recorded in Trench 2. The former ploughsoil overlay two pits and a ditch. A third pit was cut from beneath the modern topsoil.

4.3 Presentation of results

- 4.3.1 In the following sections the deposits are described trench by trench. There is additional comment on the finds and the reliability of the results. A quantification and description of the pottery, burnt clay, flint and animal bone is given in Section 5.

5 RESULTS: DESCRIPTIONS

5.1 Trench descriptions

5.1.1 *Trench 1* (Fig. 3)

Trench 1 was located on the south-western extent of the site. It was aligned from north-east to south-west and it was cut into the south-western slope. It was typically 1.6 m wide and it varied in depth from 0.6 m to 0.7 m. A sondage was cut to a depth of 1 m approximately 2.5 m from the north-eastern extent of the trench.

No archaeological features were identified within the trench. The Thanet Beds were overlain by a buried soil horizon, 106, which was encountered in Trench 2 as Layer 200 and in Trench 3 as Layer 301. A further buried soil, or possible colluvial horizon, 104 was found at the south-western end of the trench. Layer 104 was sealed by a recent topsoil, which was in turn sealed by two modern dump layers, 102 and 103. A layer of modern turf, 100, overlay the dump layers.

5.1.2 *Trench 2 (Fig. 3)*

Trench 2 was aligned from north-west to south-east and was excavated across the south-east facing slope.

The Thanet Beds, Layer 207 were encountered at depth of c. 0.60 m. Two ditches cut the natural bedrock

Ditch 206 was 0.50 m wide, a maximum of 0.40 m deep, and had a flat base and fairly steep, straight sides. It was filled with mid yellowish-brown silty sand, 205. No finds were recovered. Ditch 206 was cut by Ditch 204.

Ditch 204 was up to 1 m wide, 0.56 m deep, and had a rounded base and steep, slightly convex sides. It was filled with a mid yellowish-brown silty sand, 203, that produced two sherds of medieval pottery, a sherd of Romano-British pottery, animal bone and burnt flint.

Both ditches were sealed by a former ploughsoil, 208. A recent topsoil, 202, containing burnt flint and 19th century pottery, overlay the ploughsoil. This was in turn overlain by a dump layer, 201, which was sealed by modern turf, 200. These layers were cumulatively a maximum of 0.85 m thick.

5.1.3 *Trench 3 (Fig. 3)*

Trench 3 was aligned from north-west to south-east. The north-eastern extent of the trench extended onto the plateau at the top of the slope and the remainder of the trench was excavated into the south-eastern slope.

The Thanet Beds were encountered at a depth of approximately 0.6 m. The natural bedrock was cut by three pits and a ditch. The natural bedrock was overlain in the south-eastern half of the trench by Layer 301, a former ploughsoil which was thought to be the same as Layer 208, in Trench 2. The ploughsoil produced seven sherds (76 g) of pottery dated to the 11th–12th century, together with two sherds of Romano-British pottery, a struck flint, burnt flints, animal bone, oyster shell, fired clay and 3 fragments of Niedermendig lava quernstone. It is therefore probable that the ploughsoil was medieval in date.

Pit 308 extended beneath the western trench edge and was cut by Ditch 307 such that its shape was not seen fully. The pit had a flat base and where visible it had straight and fairly gently sloping sides. It measured 1.64 m north-south by 1.40 m east-west within the trench and it had a maximum depth of 0.40 m. The primary fill of the pit, 309, was a layer of mid greyish-yellow sand, 0.38 m thick, which produced a single animal bone and an oyster shell. The upper fill, 310 was a dark brownish-grey silty sand layer, 0.38 m thick, which contained a sherd of pottery of 11th to 12th century date, together with animal bone, oyster shell, fired clay and frequent charcoal flecks. It was overlain by Layer 301.

Pit 306 extended beneath the eastern trench edge. It had a maximum width of 1.45 m and it was 0.40 m deep. The pit had a gently sloping base and irregular sides. The pit was filled with orange/yellow sandy silt, 305 which contained no finds. It was overlain by Layer 301.

Pit 303 extended beneath the western trench edge. It was 1.53 m wide, 0.16 m deep with a flat base and short, fairly steep, straight sides. The pit was filled with mid brown silty sand, 302, which contained 19th century pottery. Pit 303 was cut from immediately below the topsoil, 300.

Ditch 307 was aligned from north-east to south-west. It was 0.46 m wide and 0.28 m deep with an irregular base and steep, slightly convex sides. The ditch was filled with yellow brown silty sand, 311. No finds were recovered.

5.2 Animal bone *by B M Charles*

Fifty-three fragments of bone were retrieved from Contexts 203, 205, 301, 309 and 310. This is tabulated in Table 1.

Context 301 provided the largest assemblage with 38 fragments of bone mostly consisting of cattle long bones with a few fragments of pig and sheep. The majority of the bones from this context were in good condition with little attritional damage. Two of the tusks were identified as coming from male pigs. Two fragments of bone were retrieved from each of Context 203 and 309, all of which were unidentifiable to species level. Context 205 contained the partial remains of a cattle radius with heavy chemical etching. Context 310 contained 10 fragments of bone, with all identifiable fragments being cattle or pig.

The lack of sheep bones in the assemblage is unlikely to be due to bad preservation since the condition of the pig bones, which are more porous and less likely to survive, indicates that the preservation is good.

Butchery damage was only observed as knife marks on a cattle radius and on a sheep metatarsal from context 301.

The assemblage is too small to make any assumptions as to their relevance to the site as a whole.

Table 1 Number of bones identified to element and species.

Context	Element	Cattle	Pig	Sheep	Unidentified
203	Unidentified	0	0	0	2
205	Radius	1	0	0	0
301	Horn core	2	0	0	0
	Maxillae	0	1	0	0
	Mandible	1	1	0	0
	Tooth	0	2	0	0
	Tusk	0	1	0	0
	Humerus	1	0	0	0
	Radius	2	0	1	0
	Ulna	1	0	0	0
	Femur	1	0	0	0
	Tibia	1	1	0	0
	Metatarsal	0	0	1	0
	P.Phalanx	1	0	0	0
	Unidentified	0	0	0	20
309	Unidentified	0	0	0	2
310	Horn core	2	0	0	0

Context	Element	Cattle	Pig	Sheep	Unidentified
	Tusk	0	1	0	0
	Tooth	0	1	0	0
	Metacarpal	1	0	0	0
	Innominate	1	0	0	0
	Unidentified	0	0	0	4
Total		15	8	2	28

5.3 Flint by T Durden

Twelve pieces of burnt unworked flint and a single struck flake were recovered from the evaluation. The flake is broad and relatively thick, with a plain butt, but on its own not datable.

Table 2 *Flint described and weighed by context*

Context	Description	Weight (burnt flint)
202	2 burnt unworked	31 g
203	1 burnt unworked	20 g
301	9 burnt unworked; 1 struck flake	262 g

5.4 The pottery by P Blinkhorn

The pottery assemblage comprised 21 sherds with a total weight of 323 g. The pottery occurrence by number and weight of sherds per context by fabric type is shown in Table 3.

The material was all medieval or later with the exception of three sherds (81 g) of Romano-British types. The medieval wares were both types common in London, and the Museum of London fabric codes have been used (Vince 1985, 38):

Shelly Limestone Ware (SHEL). Late 11th – late 12th century. 8 sherds, 93 g.

Early Medieval Sand and Shell Ware (EMSS). Early 11th-late 12th century. 2 sherds, 39 g.

The post –medieval wares were:

English Stonewares: White/grey stoneware with a white salt glaze. Made at numerous centres, such as Staffordshire, London and Nottingham, from the later 17th century onwards, in a wide range of utilitarian forms. 4 sherds, 93 g.

Ironstone China: Hard white earthenware, often with blue or red transfer-printing. Wide range of tablewares, first made in 1810. 4 sherds, 16 g.

Table 3 Pottery occurrence by number and weight (in g) of sherds per context by fabric type

Context	RB		SHEL		EMSS		English Stoneware		Ironstone China		Date
	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	
202							3	87	3	11	19 th C
203	1	70			2	39					11 th -12 th C
301	2	11	7	76							11 th -12 th C
303							1	6	1	5	19 th C
310			1	17							11 th -12 th C
Total	3	81	8	93	2	39	4	93	4	16	

Despite the fact that the medieval assemblage is very small, it is worthy of some comment. The fact that only 11th – 12th century pottery types occur suggests that the medieval activity in the vicinity of this site may date solely to that time. The lack of later medieval wares, such as glazed London-type ware (Vince 1985; Pearce et al 1985) in either stratified or redeposited contexts suggests that any activity may have ceased before the later 12th century, as such wares are relatively common in the London area.

5.5 Fired Clay by P Blinkhorn

A total of 21 fragments of fired clay were noted, weighing 148 g. The group could be divided into two fabrics, both of which occurred solely within medieval contexts:

F1: Slightly soft, grey, sandy fabric with few visible inclusions. Numerous linear voids created by the burning out of vegetable temper.

F2: Soft, orange-red, slightly sandy and micaceous fabric with few visible inclusions. Sparse, small rounded voids.

Their occurrence is shown in Table 4.

The physical nature of the fragments suggest that each fabric originated from a different source. The fragments of F1 are relatively large, with some fragments exhibiting flat surfaces, suggesting that they were building daub, whereas the F2 material comprises entirely small, burnt fragments in a finer fabric. They may originally been part of an oven lining.

Table 4 Fired clay by number and weight (in g) of fragments per context by fabric type

Context	F1		F2		Pottery Date
	No	Wt	No	Wt	
301			16	33	11 th -12 th C
310	5	115			11 th -12 th C

5.6 Worked stone *by S Mortimer*

Three fragments from the base of a Niedermendig lava quern were recovered from Context 301. The largest of the fragments measures 0.07 m by 0.06 m by 0.025m. The smaller fragments measured 0.035 m by 0.025 m by 0.02 m and 0.025 m by 0.025 m by 0.02 m respectively. The larger fragment has a flat facet, (the base) and evidence of use (a slightly concave profile) on the opposing face. It was found within a layer of sealed ploughsoil, which also contained 7 sherds (76 g) of 11th-12th century pottery.

6 DISCUSSION AND INTERPRETATION

6.1 Reliability of field investigation.

- 6.1.1 Many of the features recorded were sealed by a former ploughsoil of probable medieval date indicating that there has been only limited recent disturbance of the archaeological deposits in the area of rough pasture. In Trench 1, some recent disturbance was recorded, although this may be related to the construction of the works compound to the west.
- 6.1.2 No trenches were excavated within the works compound itself. It is clear from visual inspection that much of this area was heavily truncated during the construction of the compound. However, it is possible that small, isolated areas of archaeological deposits survive.
- 6.1.3 Although the assemblage of medieval pottery was small, the relatively large sherd size and the lack of later pottery from the majority of contexts suggests that the 11th-12th century date for many of the features is reliable.

6.2 Overall interpretation

6.2.1 *Summary of Results*

A single flint flake and 12 unworked burnt flints, characteristic of prehistoric activity were recovered in secondary contexts in Trenches 2 and 3. Their presence may indicate a low level of prehistoric activity in the area.

Three sherds of Roman pottery were recovered, again from secondary contexts in Trenches 2 and 3.

The majority of the dated features probably date to the 11th-12th centuries, either on the artefactual evidence or on stratigraphic grounds. These include a ditch and its probable re-cut in Trench 2, along with two pits and a ditch in Trench 3. Several of the features were sealed by a former ploughsoil, which also contained pottery of medieval date.

A single pit in Trench 3 produced pottery of 19th century date.

6.2.2 *Significance*

The single flint flake and twelve burnt flints may indicate a low level of prehistoric activity in the area.

Given the proximity of the site to the Roman Town at Springhead, the presence of sherds of Roman pottery is not unexpected. However, there is no indication that the complex archaeological deposits associated with Springhead Roman town extend into the evaluation area.

The concentration of features containing relatively large sherds of medieval pottery in Trenches 2 and 3, along with the relatively large quantity of animal bone and other finds, does suggest that some form of occupation site, probably domestic, existed in the immediate vicinity. Most of the artefactual material, including animal bone, pottery and burnt clay, was recovered from deposits in Trench 3, suggesting that the focus of medieval activity lay at, or beyond the crest of the slope on which the evaluation area lies. This impression is strengthened by the quantity of material recovered from the former ploughsoil in Trench 3. At least some of this material may have been derived from plough damaged features beyond the crest of the slope.

The significance of the site is enhanced by the 11th-12th century date of the pottery, as very few sites of this date have been excavated in Kent (Champion and Overy 1989, 57 and 69).

Bibliography and references.

- Boyle A & Early R 1998 *Excavations at Springhead Roman Town, Southfleet, Kent.* In prep.
- Burnham B C & Wacher J *The 'Small Towns' of Roman Britain.*
- Champion T & Overy C 1989 *Archaeology in Kent.* A report compiled for the Historic Buildings and Monuments Commission
- Drewett P, Rudling D & Gardiner M 1988 *The South-East to AD 1000.* Batsford.
- Harker 1979 S. R. Harker, 'Springhead: a brief re-appraisal', in *Temples, churches and religion in Roman Britain* (ed. W Rodwell) Brit. Arch. Rep. Brit. Ser. 77, Oxford, 258-88.
- Pearce, JE, Vince, AG, and Jenner, MA, 1985 *A Dated Type-Series of London Medieval Pottery Part 2: London-type Ware,* LAMAS Special Paper 6
- Penn 1957 W. S. Penn, 'The Romano-British settlement at Springhead, excavation of the bakery, Site A', *Arch. Cant.* 71, 53-105.
- Penn 1958 W. S. Penn, 'The Romano-British settlement at Springhead, Excavation of the Watling Street, Shop and Pedestal, Site B', *Arch. Cant.* 72, 77-110.
- Penn 1965 W. S. Penn, 'Springhead map of discoveries', *Arch. Cant.* 82, 105-23.
- Penn 1969a W. S. Penn, 'Springhead: miscellaneous excavations', *Arch. Cant.* 83, 163-92.
- Penn 1969b W. S. Penn, 'Springhead', *Arch. Cant.* 83, 257.
- Philp and Chenery 1997 B. Philp and M. Chenery, *A Roman site at Springhead (Vagniacae) near Gravesend,* Kent Special Subjects Series No. 9, Canterbury
- Pollard 1988 R. J. Pollard, *The Roman pottery of Kent,* Kent Archaeol Soc Monograph Ser 5, Maidstone.
- Smith 1991 V. Smith 'The Roman road (R2) at Springhead', *Arch. Cant.* 109, 332-3.
- URL 1994 *Channel Tunnel Rail Link: Assessment of Historic and Cultural Effects. Final Report.* (4 vols.).

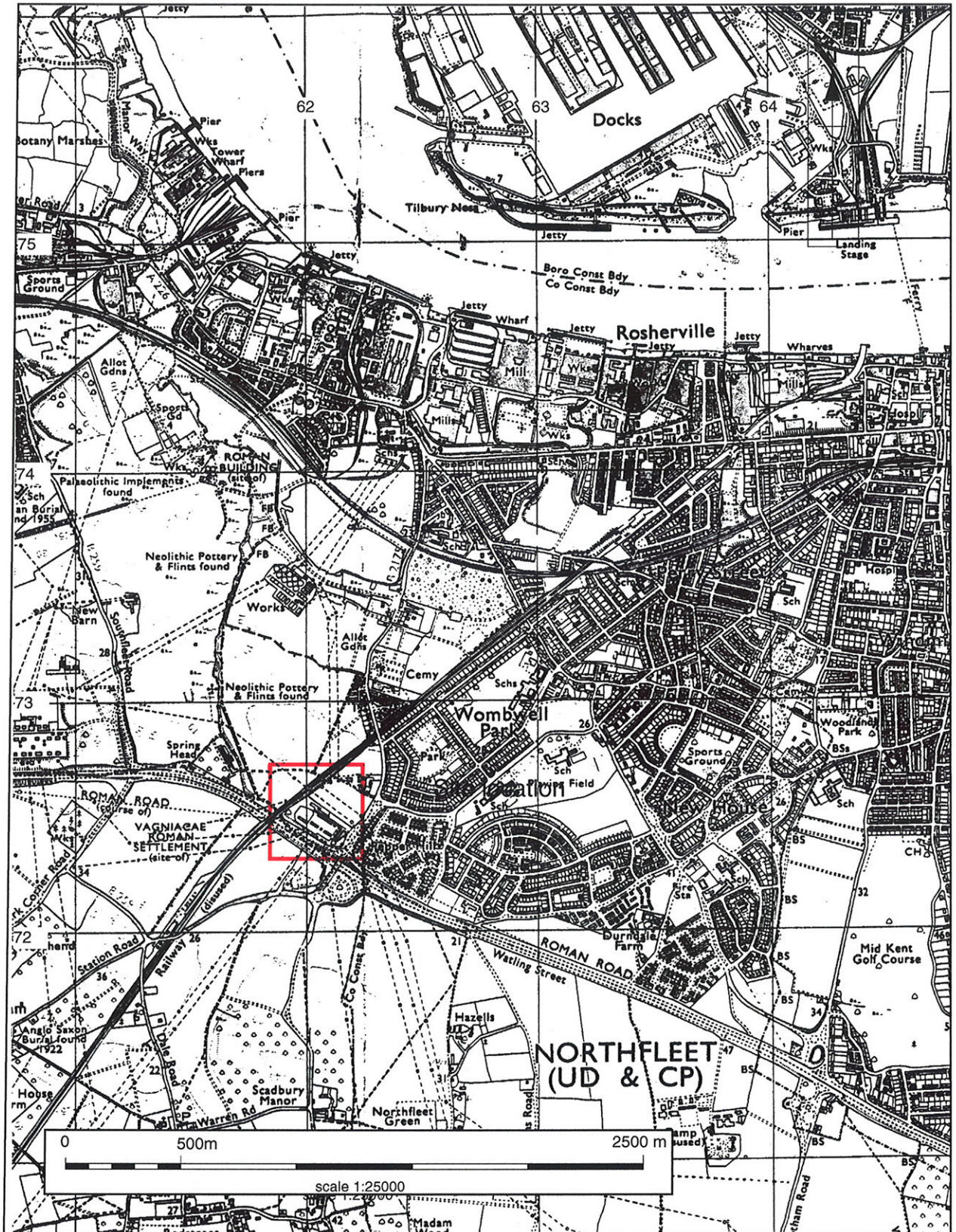
- URL 1995 *Channel Tunnel Rail Link: Assessment of Historic and Cultural Effects (Supplementary Fieldwork Report).*
- Vince, AG. 1985 The Saxon and Medieval Pottery of London: A review *Medieval Archaeology* **29**, 25-93
- Wessex Archaeology 1997a *Archaeological Evaluation at Temple East of Springhead (ARC STP 97), Gravesend, Kent.* Wessex Archaeology Report no. 43500c.
- Wessex Archaeology 1997b *Archaeological Evaluation at Springhead (ARC SPH 97), Gravesend, Kent.* Wessex Archaeology Report no. 43501d.
- Wilkinson D (ed) 1992 *Oxford Archaeological Unit Field Manual* (unpub.)
- Williams R, Booth P. 1998 *Pepper Hill, Kent Roman Cemetery.* First Interim, Boyle A & Report, Pirelli Construction Company Ltd for Murray P Seeboard (unpublished client report).

Appendix 1 Context Inventory.

NFES99: NORTHFLEET EAST GIS SUBSTATION, KENT							
TRENCH 1							
CNT No	TYPE	DESCRIPTION COMMENTS	DEPTH (M)	WIDTH (M)	LENGTH (M)	FINDS	DATE
100	LAYER	TURF	0.14				
101	LAYER	DUMP	0.18				
102	LAYER	DUMP	0.25				
103	LAYER	TOPSOIL	0.24				
104	LAYER	PLOUGHSOIL	0.14				
105	LAYER	THANET BEDS					
106	LAYER	PLOUGHSOIL	0.16				

TRENCH 2							
CNT No	TYPE	DESCRIPTION COMMENTS	DEPTH (M)	WIDTH (M)	LENGTH (M)	FINDS	DATE COMMENT
200	LAYER	TURF	0.08				
201	LAYER	DUMP	0.18				
202	LAYER	TOPSOIL	0.30			Pottery Flint	19 th C
203	FILL	FILL OF DITCH 204	0.56			Pottery Flint Bone	11 th -12 th C
204	CUT	DITCH	0.56	1.00	2.80		
205	FILL	FILL OF DITCH 206	0.40			Bone	
206	CUT	DITCH	0.50	0.50	2.80		
207	LAYER	THANET BEDS					
208	LAYER	PLOUGHSOIL	0.29				

TRENCH 3							
CNT No	TYPE	DESCRIPTION	DEPTH (M)	WIDTH (M)	LENGTH (M)	FINDS	DATE
300	LAYER	TOPSOIL	0.34				
301	LAYER	PLOUGHSOIL	0.42			Pottery Flint Bone Oyster shell Lava quem Fired clay	11 th -12 th C
302	FILL	FILL OF PIT 303	0.16			Pottery	19 th C
303	CUT	PIT	0.16	1.53			
304	LAYER	THANET BEDS					
305	FILL	FILL OF PIT 306	0.40				
306	CUT	PIT	0.40	1.45			
307	CUT	DITCH	0.28	0.36			
308	CUT	PIT	0.40	1.40	1.64		
309	FILL	FILL OF PIT 308	0.38			Bone Oyster shell	
310	FILL	FILL OF PIT 308	0.38			Pottery Bone Oyster shell Fired clay	11 th -12 th C
311	FILL	FILL OF DITCH 307	0.28				
312	LAYER	DISTURBED NATURAL	0.14				



Based on the Ordnance Survey's 1:25000 map of 1997
with the permission of Her Majesty's Stationary Office
© Crown Copyright. Licence NO. AL 854166

Fig. 1: Site location

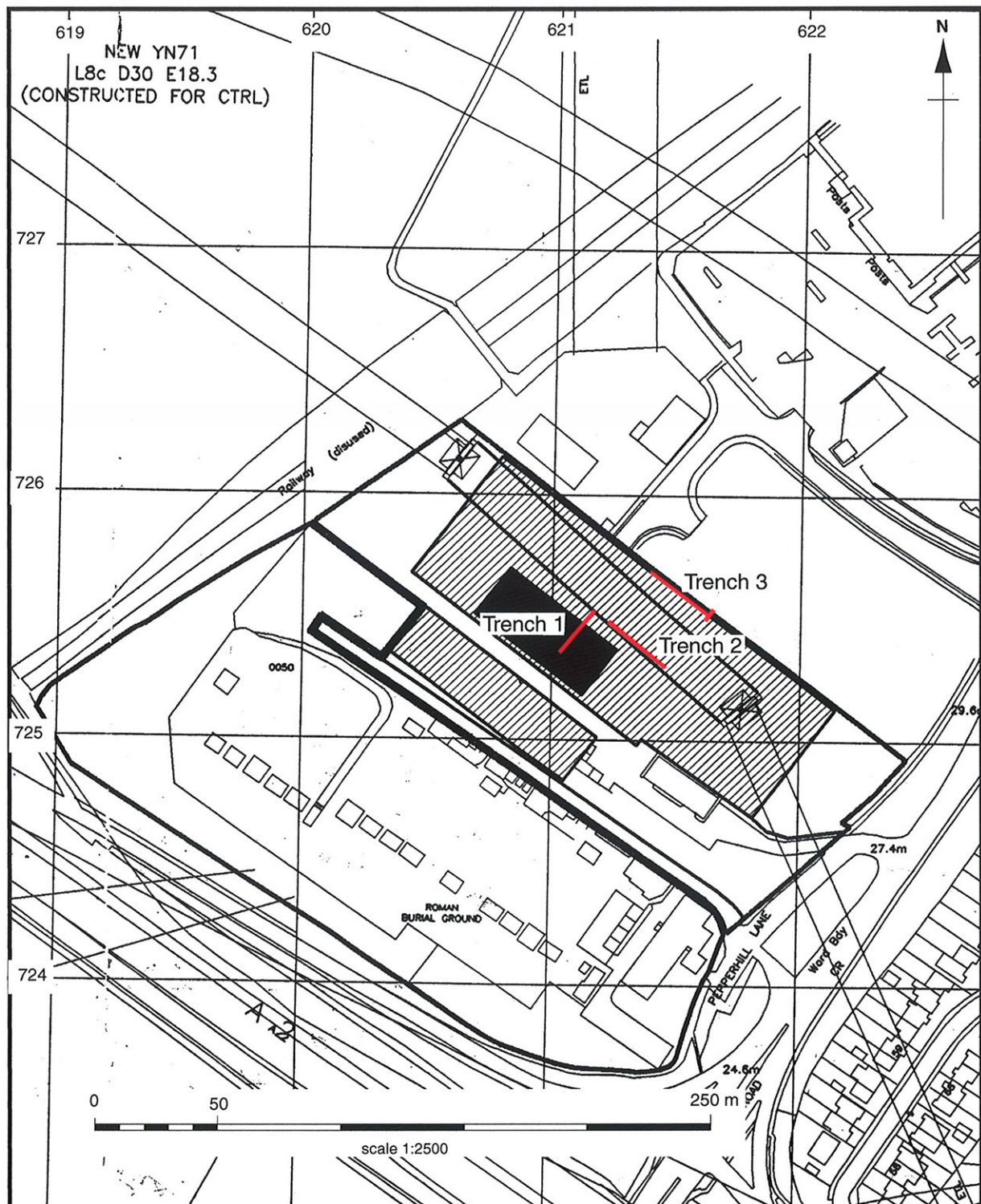


Figure 2: Trench location

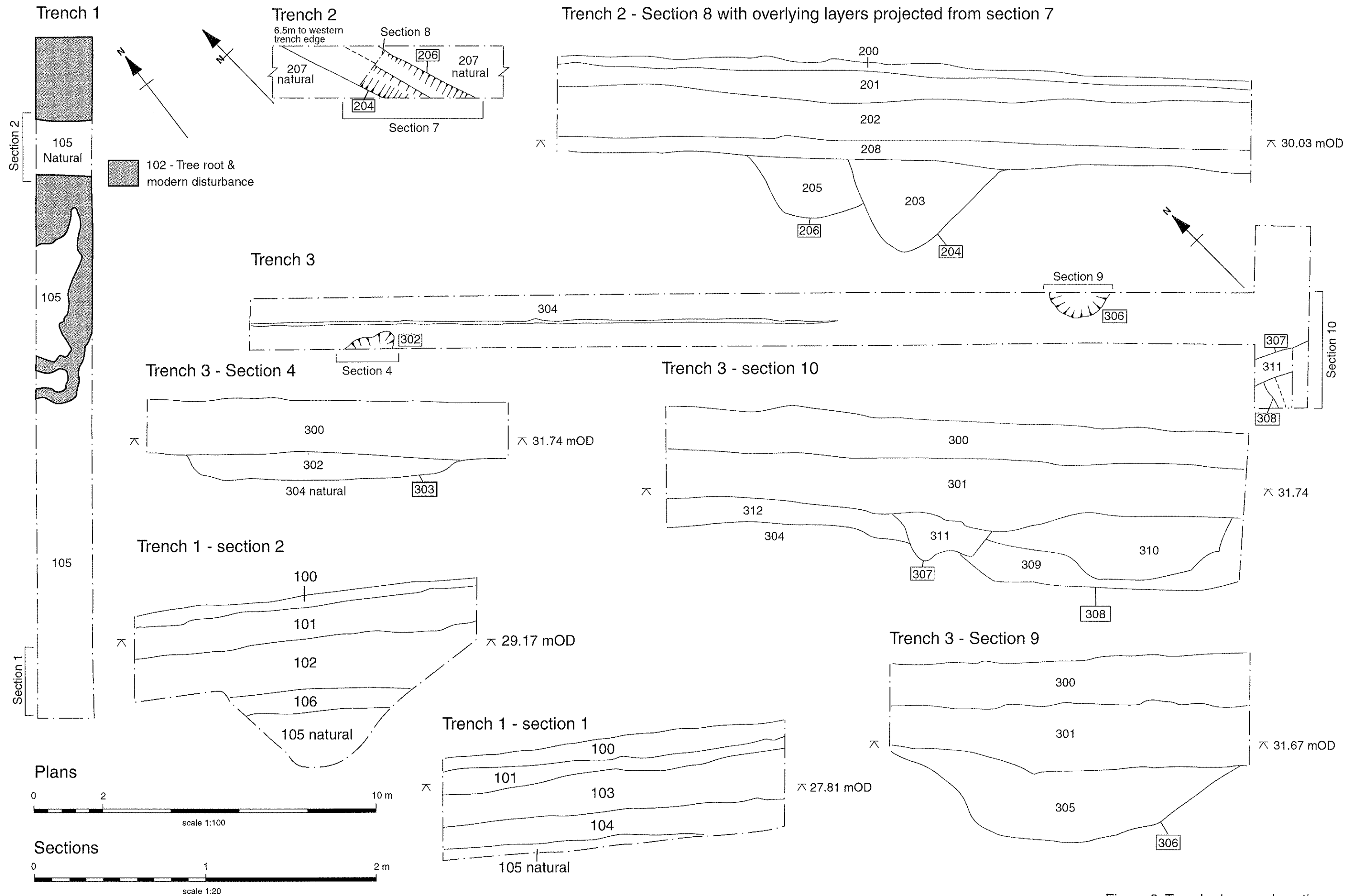


Figure 3: Trench plans and sections



OXFORD ARCHAEOLOGICAL UNIT

Janus House, Osney Mead, Oxford, OX2 0ES

Tel: 01865 263800 Fax: 01865 793496

email: postmaster@oau-oxford.demon.co.uk

