Report 2712

nps archaeology

Archaeological Evaluation of Land North of Half Acre, Cross Lane, Brancaster, Norfolk

ENF126541

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Contents

Figures

Plates

Tables

Location:	Land of Cross Lane, Brancaster, Norfolk
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Summary

In May 2011 NPS Archaeology completed an archaeological evaluation of land to the north of Cross Lane, Brancaster. This work took place prior to the construction of a new residential dwelling, within what is currently an area of allotments and gardens.

The site lies close to the Roman fort of Branodunum, which is known to have been surrounded by large areas of civilian settlement, these having been revealed through both excavation and cropmarks recorded by aerial photography. In spite of its proximity to the fort the archaeological potential of the Cross Lane area was previously somewhat unclear; the presence of houses and gardens throughout the 20th century having limited the opportunities for such evidence to be identified.

This evaluation revealed a number of well-preserved archaeologically significant features. The majority of these remains were of likely or probable Roman date, including a partially clay-lined flue (associated with some form of agricultural or light industrial process), several substantial ditches and a pit. This evaluation therefore provided clear evidence that remains found elsewhere in the vicinity of the fort continue not only into the Cross Lane area but also the proposed development area itself. Although there was no evidence to suggest that the main areas of habitation extended this far, the presence of the clay-lined feature provides clear evidence that the site lies within a Roman activity area of some kind. At least some of the ditches revealed are likely to represent a continuation of the patterns of trackways and enclosures seen closer to the fort.

There was no evidence to suggest that the site was anything other than open, presumably agricultural land in the post-Roman period. Evidence for earlier, prehistoric activity was similarly limited.

1.0 INTRODUCTION

(Fig. 1)

An archaeological evaluation was undertaken by NPS Archaeology of land to north of Cross Lane, Brancaster. This work took place in response to an application to construct a new residential dwelling on the site, the main footprint of which would cover an area of approximately 550m^2.

The proposed development site lies within an area of former allotments and gardens, bounded to the west, south and east by the gardens associated with several residential dwellings of varying age. To the north a wall and a footpath are all that separate the site from Brancaster Marsh. The site is crossed by several

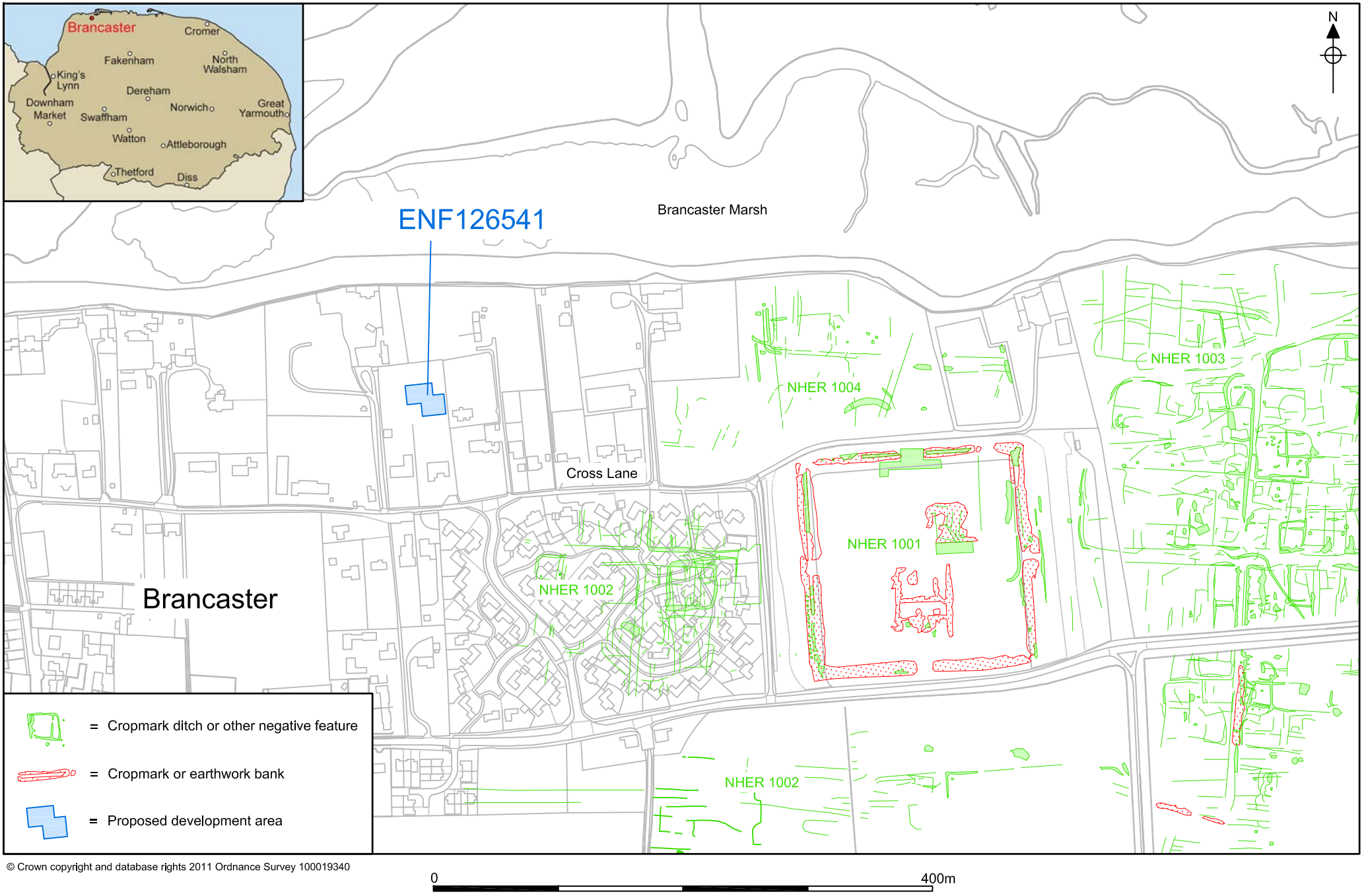


Figure 1. Site location and archaeological context. Scale 1:4000.

lines of reasonably mature trees (many of which will be preserved by the proposed development) and was somewhat overgrown at the time of this work.

This evaluation will inform a Heritage Statement produced to accompany the planning application (planning ref 10/02172/F) and was carried out at the request of Norfolk Historic Environment Service (formerly Norfolk Landscape Archaeology), archaeological advisors to Kings Lynn and West Norfolk Borough Council. The evaluation was conducted in accordance with a Project Design and Method Statement prepared by NAU Archaeology (Ref. BAU2712/NP).

This programme of work was designed to assist in defining the character and extent of any archaeological remains within the proposed redevelopment area, following the principles set out in Planning Policy Statement 5: Planning for the Historic Environment (Department for Communities and Local Government 2010). The results will enable decisions to be made by the Local Planning Authority about the treatment of any archaeological remains found.

The site archive is currently held by NPS Archaeology and on completion of the project will be deposited with the Norfolk Museums Service, following the relevant policies on archiving standards.

This work was commissioned by Jane Snape of Thomas Faire Chartered Architects, on behalf of their client.

2.0 GEOLOGY AND TOPOGRAPHY

The site lies a little way from the centre of Brancaster, situated towards the base of an area of elevated, gently sloping land, overlooking the coastal salt marshes to the north. The proposed development area itself has a maximum elevation of approximately 9.20m O.D, at its southern end.

Along this stretch of the coast the underlying geology comprises a mix of Hunstanton Till (a reddish brown sandy clay) and marine sand and gravel (BGS 1991). This evaluation demonstrated that the latter predominates within the proposed development area. These quaternary deposits overlie a solid geology of Upper Cretaceous chalk (BGS 1985).

The soils present in this area consist of Typical Argillic Brown Earths (Lawes Agricultural Trust 1973), which are fertile and easily worked.

3.0 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

Information on past archaeological discoveries near Cross Lane comes primarily from the Norfolk Historical Environment Record (NHER). A brief examination of relevant cartographic sources and readily available aerial photographs has also provided a measure of additional information on the site's more recent history.

Finds recovered from in and around Brancaster suggest that the area saw at least a degree of activity during most prehistoric periods. Although there has been a diffuse scatter of Neolithic and Bronze Age objects recovered from the area none have been found in the immediate vicinity of the site in question. Iron Age finds have been similarly scarce.

By far the most significant site in the vicinity of the proposed development is the Roman stone-walled fort of Branodunum (NHER 1001) (Fig. 1). One of several

‘Saxon Shore’ forts Branodunum appears to been built in the first half of the 3rd century AD, making it one of the earliest in this chain of fortifications; its role therefore perhaps as much to do with controlling trade as repelling barbarian invaders. There appears to have been large areas of extra-mural settlement beyond the fort with cropmarks revealing a ‘gridded’ arrangement of ditched trackways and enclosures to both the west and east of the fort (NHER 1002, 1003). Similarly aligned boundaries have also been identified to the north of the fort (NHER 1004), although these appear to be much less numerous. A doubled-ditched feature with rounded corners may represent part of a smaller, earlier fort. Excavation of the area to the west of the fort prior to housing development (NHER 1002, Hinchliffe and Sparey Green 1985) has suggested that occupation may have begun in the late 2nd century, prior to the construction of the later fort. This may explain the slight difference in alignment between the fort and the surrounding settlement remains. Although structural evidence was limited, the amount of domestic debris recovered was sufficient for the small enclosures to be interpreted as ‘house plots’ (Hinchliffe and Sparey Green 1985). The site itself lies beyond the previously suggested extent of this *vicus*, although it should be noted that the complete absence of cropmarks is almost certainly due to the nature of present and recent land use. It is likely that the area around the site saw at least some degree of activity during the Roman period, although its nature is uncertain. Clear evidence that similar features may extend into the area north of Cross Lane was uncovered during the construction of house footings to the east of Mow Creek Cottage (NHER 50282), with three Roman ditches being recorded. Significantly, the pottery recovered was of early to mid 2nd century date, providing clear evidence that activity predated the construction of the later fort by at least half a century (Bradley-Lovekin 2007). Of potentially much greater significance is the suggestion that a Roman mosaic was exposed during the 1960s within the caravan park to the west of the site (NHER 31152). Apparently these remains were exposed during construction work, although they were immediately covered up, so this report is impossible to verify. A small number of Roman finds have also been recovered from the Cross Lane area, almost all of which have been single coins (NHER 1365, 1374, 1381, and 24224). Other Roman objects recovered from near the site include a stone seal (NHER 1381).

Although there are now many properties to both the north and south of Cross Lane, these are largely the result of relatively recent developments. It would appear that the site was probably open ground throughout much of the post-Roman period. The earliest detailed maps of Brancaster suggest that during the late 18th and early 19th century most dwellings lay along the main road through the village and London Street to the east of the church. There was also a row of properties strung out along the margins of Brancaster saltmarsh, to the north of Cross Lane. The tithe map (NRO DN/TA 483) confirms that many of the properties to the north of the site were present by the 19th century, including The Croft and Mow Creek Cottage (the dwelling known as Marshlands appears to have been an unoccupied barn or similar at this time. The other buildings near the site are much more recent, White Acre and Half Acre having been built in the first half of the last century and Minster House and Tolls House built after 1960.

From at least the mid 19th century the area to the north of Cross Lane appears to have been laid out as a series of somewhat irregular strips of land. The origin of these boundaries is uncertain, although some may date back to the medieval

period. The site and the two properties to the south – Minster House and Tolls House – all lay within what was until recently a single block of land. The boundary between these two properties (which recent mapping suggests may have extended through the site itself) is therefore comparatively recent in origin.

There is no evidence for any development or non-agricultural land use within or near to the site itself. All of the readily available 19th- and 20th-century maps show the site as open ground, as do the aerial photographs consulted. Anecdotally the site has long been allotments gardens, something which appears to be confirmed by aerial photographs taken by the RAF in 1946, with a series of square plots clearly visible at this time. The trees that now cover much of the site appear to have been mostly planted since 1946, although they are clearly visible on aerial photographs taken in 1988.

4.0 METHODOLOGY

The objective of this evaluation was to determine as far as reasonably possible the presence or absence, location, nature, extent, date, quality, condition and significance of any surviving archaeological deposits within the development area.

It was decided, in consultation with Norfolk Heritage Environment Service, that two trenches, one measuring 20m x 1.8m and one measuring 10m x 1.8m would be excavated in order to provide an appropriate sample of the proposed development area (Fig. 2). The aim was to place these trenches as close to the centre of the building footprint as possible, although the presence of trees, root protection zones, services and standing garden structures meant there was little flexibility in where trenches could be placed.

Machine excavation was carried out with a mini-digger-type excavator equipped with a toothless ditching bucket and operated under constant archaeological supervision.

Spoil, exposed surfaces and features were scanned with a metal-detector. All metal-detected and hand-collected finds, other than those which were obviously modern, were retained for inspection.

All archaeological features and deposits were recorded using NAU Archaeology pro forma. Trench locations, plans and sections were recorded at appropriate scales. Monochrome and digital photographs were taken of all archaeologically significant features and deposits.

The temporary benchmark used during the course of this work was transferred from an Ordnance Survey benchmark with a value of 5.04m OD, located on the north-eastern corner of the dwelling known as Marshlands.

Three environmental samples were taken, during the course of the evaluation (all from a single feature), two of which were processed and assessed.

Site conditions were good, with the work taking place in fine, dry weather.

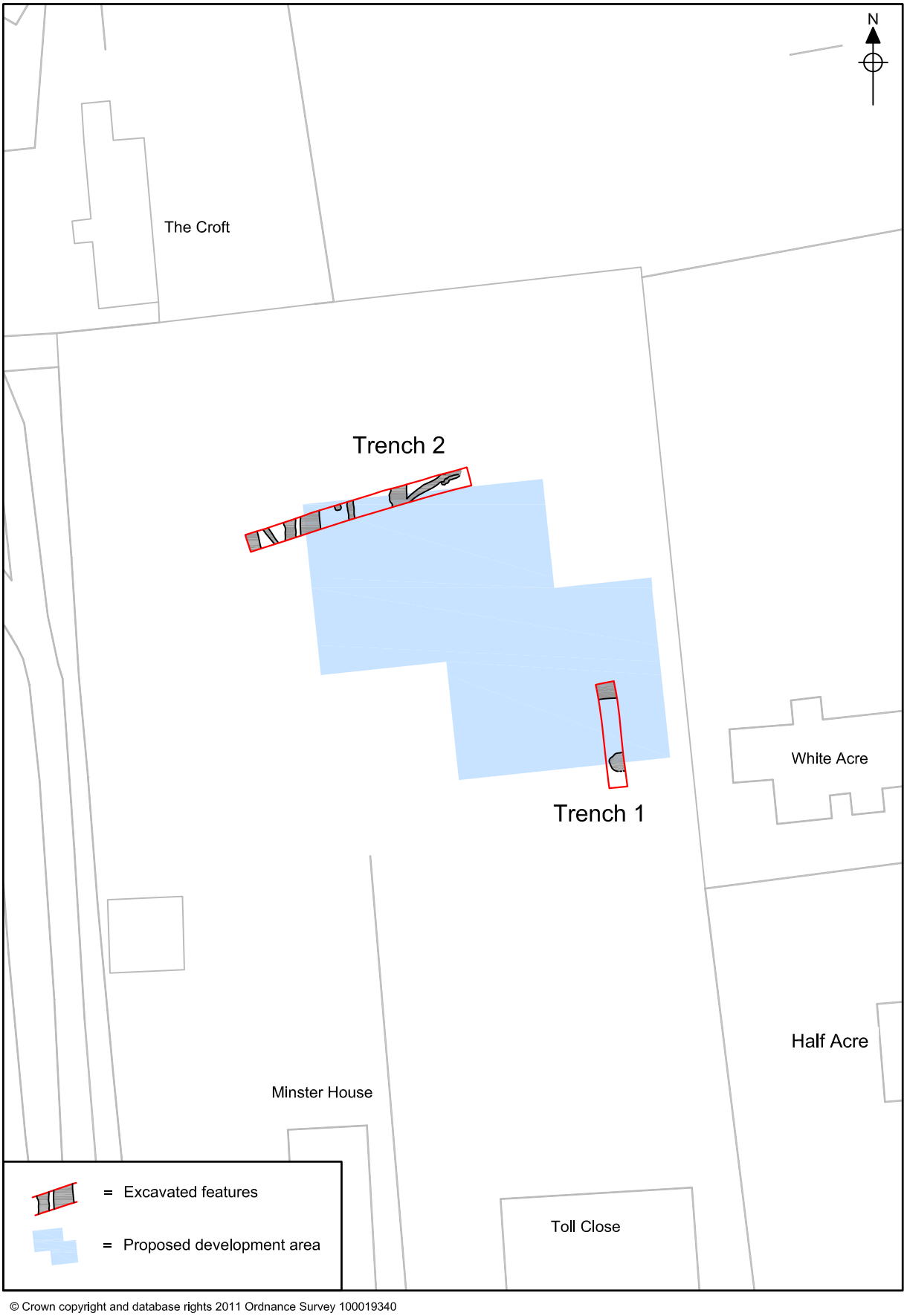


Figure 2. Trench locations. Scale 1:500.

5.0 RESULTS

(Figs 2-6)

The two trenches were both excavated to geological 'natural' deposits, which proved to be fairly fine, pale brown yellow sands. These deposits contained small to medium angular flint inclusions, with patches of reddish orange sand and pockets of small flint and chalk fragments present in Trench 2.

In both trenches the overlying soils proved to be deep and of a rich, humic nature, with a thick mid grey brown sandy subsoil underlying the topsoil (see Table 1 below). There was no evidence for recent disturbance of any kind, other than the activities associated with the site's use as allotments and gardens.

Trench	Topsoil depth	Subsoil depth
1	0.45m	0.55m
2	0.30m	0.45m

Table 1. Average soil depths

Both trenches revealed archaeologically significant remains.

5.1 Trench 1

(Figs 3-4)

Trench 1, the shorter of the two trenches, revealed two archaeological features; a ditch partially exposed at its northern end and a pit at its southern end (Plate 1). The ditch ([01]) was aligned east-to-west, approximately 0.45m deep[1] and appeared to have been reasonably substantial, being at least 1.2m wide. It was filled with a mid orange brown sandy silt (02).

The pit ([03]) appeared to be ovoid and was somewhat poorly-defined in plan, although excavation showed it be a reasonably convincing feature, surviving to a depth of approximately 0.6m. The profile of this feature was fairly unremarkable, with steep concave sides and a rounded base. It fairly sterile mid yellow brown silty sand fill (04) also provided no evidence for its function or use.

Both features produced sherds of Roman pottery and most likely dated to this period, although they can only be ascribed a broad late 2nd- to 4th-century date. Pit [03] also produced a single fragment of animal bone.

Unstratified finds recovered during the excavation of Trench 1 included two post-medieval metal objects and three further sherds of Roman pottery.

[1] All depth values given represent depth below base of trench

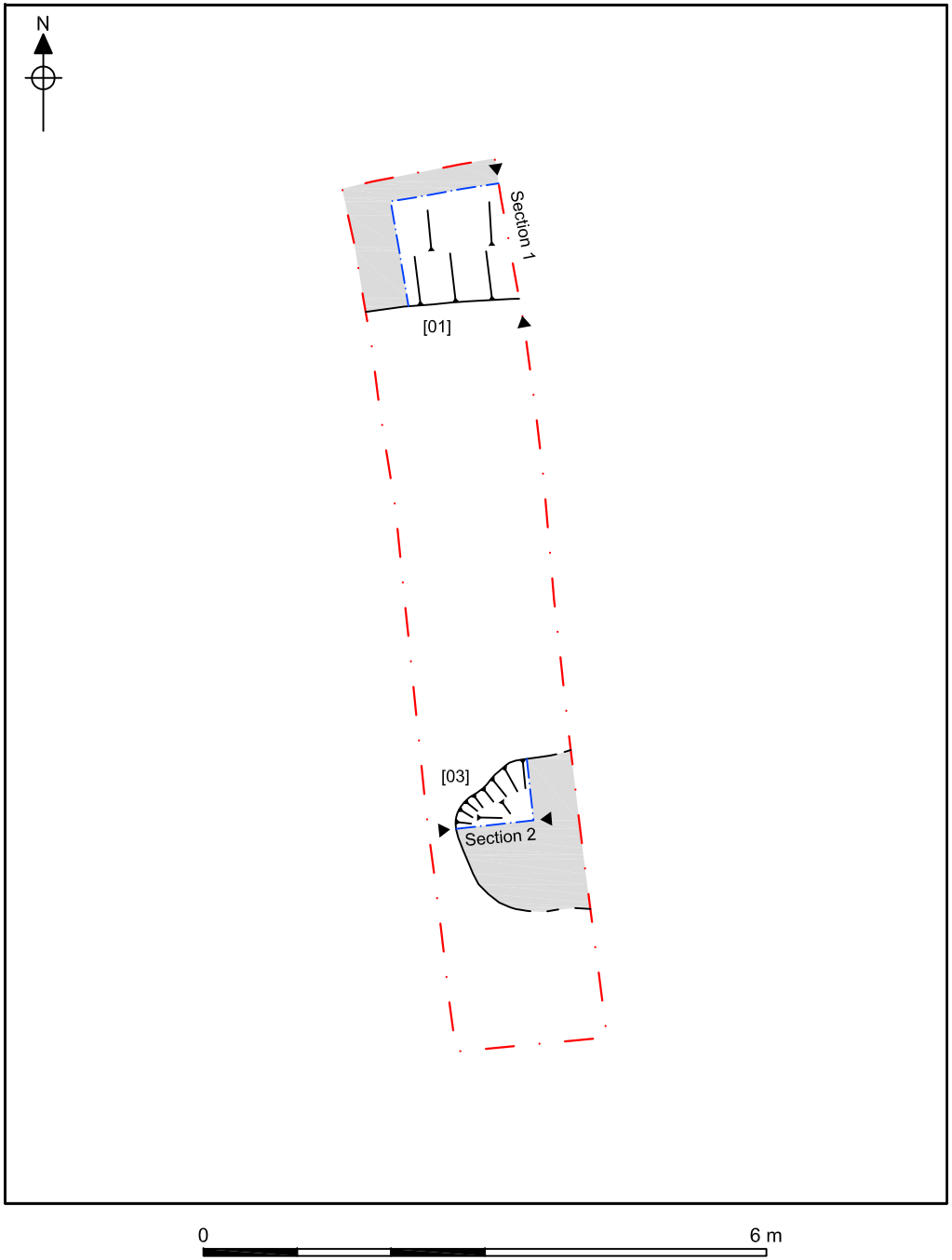


Figure 3. Trench 1 plan. Scale 1:75.

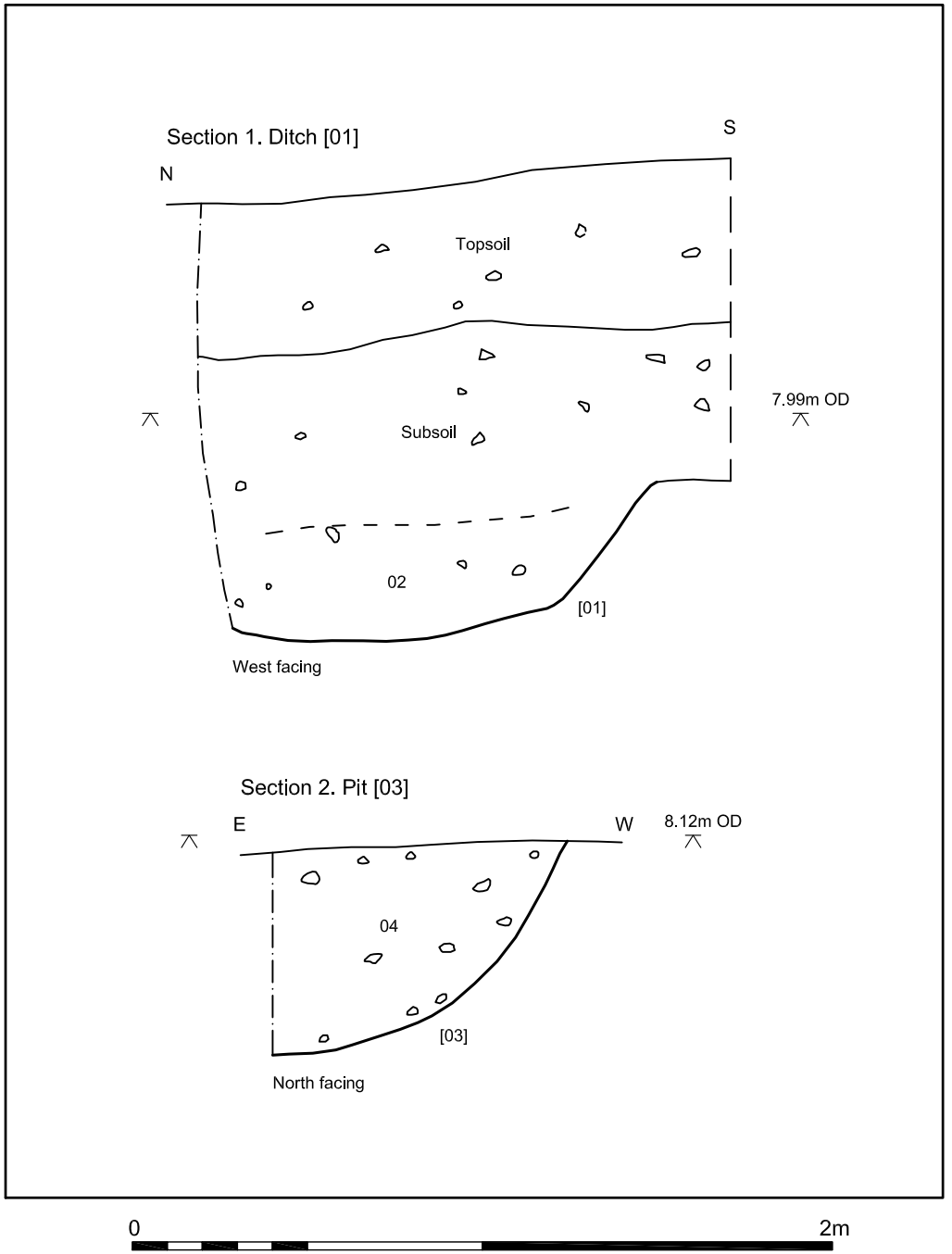


Figure 4. Trench 1 sections. Scale 1:20.

Plate 1. Trench 1 prior to excavation, looking north (pit [03] in foreground).

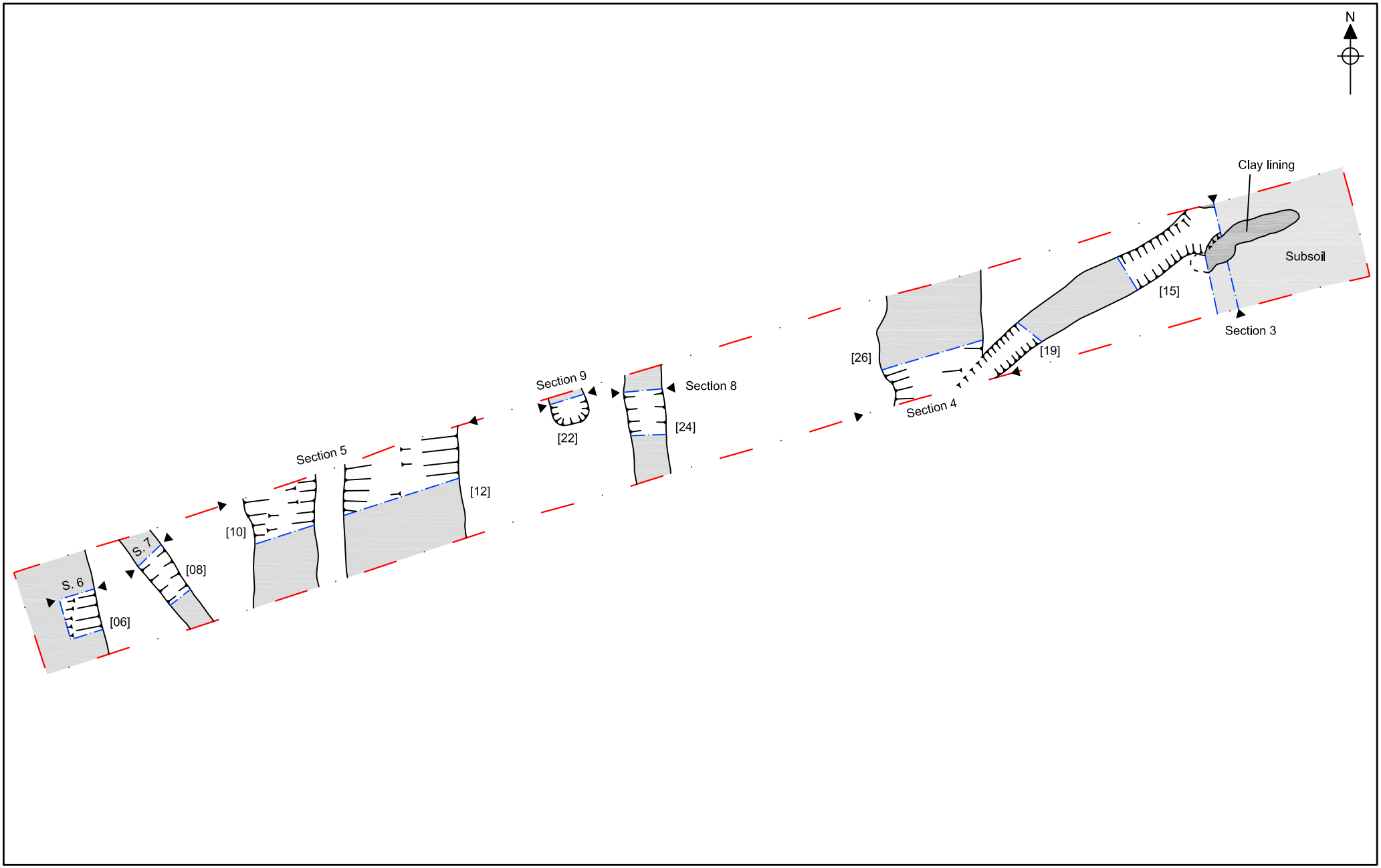
5.2 Trench 2

(Figs 5-6)

Trench 2 revealed eight archaeologically significant features, the majority of which were either convincingly dated to the Roman period or of probable Roman date.

Roman clay-lined ?flue

The most interesting feature exposed was a partially clay-lined channel present at the eastern end of the trench ([15]/[19], Plate 2). Due to its significant nature and the fact it was not fully exposed this feature and its associated deposits were left largely *in situ*, with two sample slots dug to assess its form, function and date. The main channel crossed the trench on a north-east to south-west alignment and was more than 5m long; its south-western end lying outside of the excavated area. A 2m stretch of its eastern end appeared to be clay-lined, this lining surviving above the level of the natural deposit, within the subsoil layer. At its south-western end this lining was somewhat thicker, the walls of the structure flaring outwards slightly. The clay itself was firm, relatively free of inclusions and appeared to have be slightly heat reddened. It is possible that the point where the clay was no longer visible marked the north-eastern end of the feature, although this could not be confirmed. The channel survived to a depth of approximately 0.4m at its north-eastern end, where it had a flat-based, steep-sided 'U' shaped profile. At this point two deposits could be identified within the channel; with a charcoal-flecked dark grey brown sandy silt primary fill overlain by a much thicker, more sterile mid grey brown deposit (17). This upper fill was the only deposit to be identified in the slot



0 6 m

Figure 5. Trench 2 plan. Scale 1:75.

excavated in the unlined portion of the channel ([19]), where its profile was somewhat more rounded.

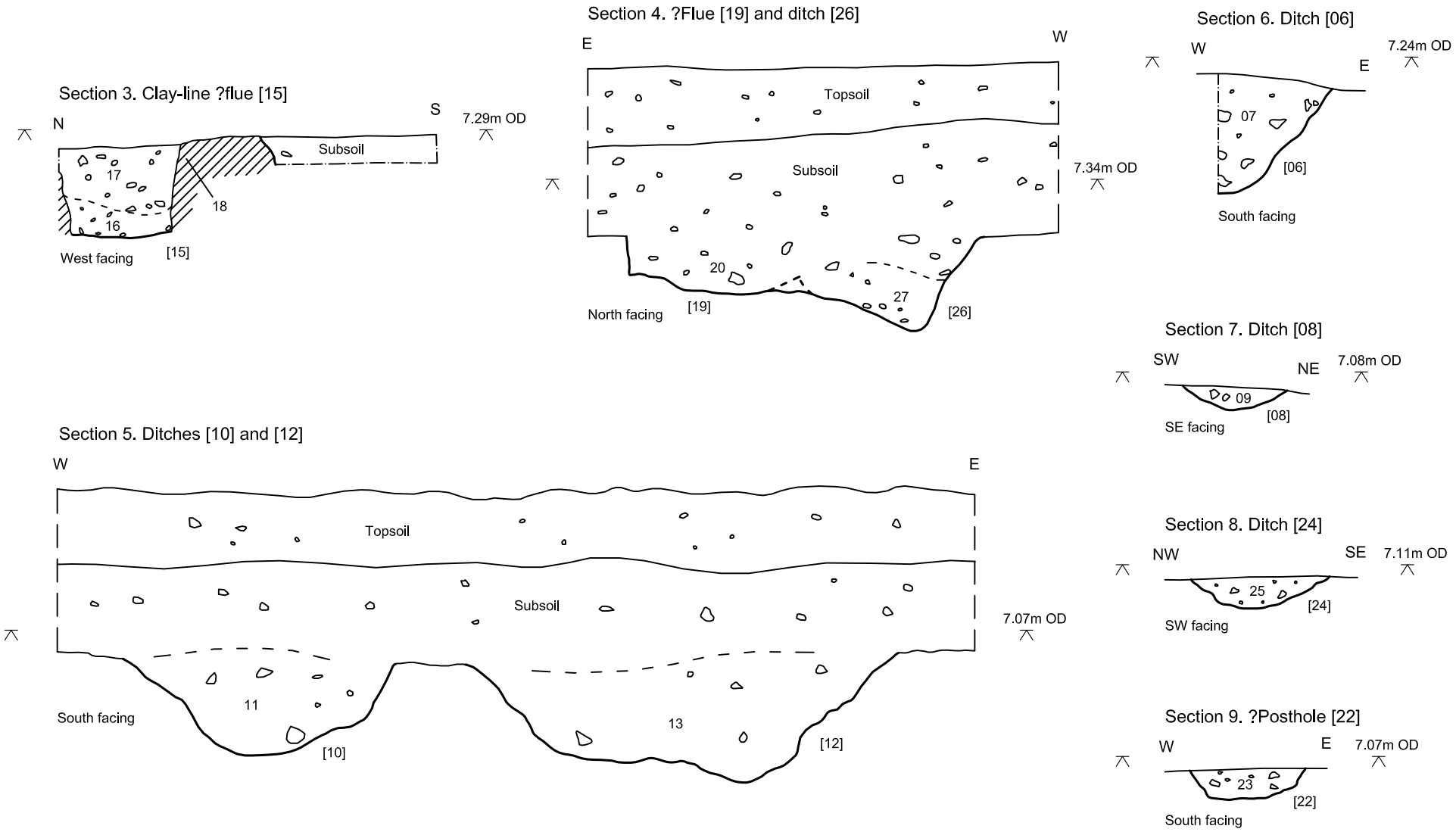
Plate 2. Partially clay-lined ?flue [15]/[19], looking east (the centre of the scale rests on one of the clay walls)

Fourteen sherds of Roman pottery were recovered from the various fills of this channel, the nature of which suggests it was probably in use between the late 2nd and mid 3rd century AD. Its precise function remains less clear although its form and the heat-reddening to the clay suggests that it acted as some form of flue, perhaps associated with the drying or malting of grain. Long, often entirely unlined flues similar to this example have been encountered in many parts of the country and are generally seen as having formed part of fairly ephemeral structures created in order to dry grain (Percival 2009). Although two samples taken from this feature were processed the results shed little light on its precise function, although they are consistent with its use as a flue. Cereal grains were noted, although the overall character of the plant macrofossil assemblage suggests this material was most likely derived from crop processing debris being burnt as a fuel, rather than material that had been accidentally charred.

Roman ditches

Six ditches were exposed within the trench, of which three were of probable Roman date. These three ditches ([10], [12] and [26]) had identical north-south alignments and were all relatively substantial. It is the easternmost ditch ([26]) that can be ascribed a Roman date with the greatest degree of confidence, having producing eight sherds of pottery, all of 2nd- to mid 3rd-century date. Although the number of sherds is not great the material surrounding them was quite dark and ‘sooty’ suggesting it probably represented dumped debris of some kind. Although the intersection between ditch [26] and the clay-lined channel was carefully investigated no relationship could be discerned (Plate 3).

The other two ditches of probable Roman date lay in close proximity towards the western end of the trench (Plate 4). The larger of the two ([12]) was 0.50m deep and approximately 1.75m wide, although its slightly ‘W’ shaped profile suggests that its considerable width was probably due to at least one episode of recutting.



0 2m

Figure 6. Trench 2 sections. Scale 1:25.

Its fairly sterile-looking mid yellowish grey brown sandy fill produced two sherds of late 2nd- to mid 3rd-century Roman pottery and an iron object that appears to be a Roman artillery projectile.

Plate 3. Intersection of ?flue [15]/[19] and ditch [26], looking south-west

Plate 4. Ditches [10] and [12], looking north-east

Ditch [10] has been ascribed a probable Roman date based on the similarity of its depth, fill and alignment to those of adjacent ditch [12].

Other potentially Roman features

The other three linear features exposed within this trench were harder to date, although they produced no clear evidence to suggest that they post-dated the Roman period.

The largest of these was ditch [06], which was partially exposed at the western end of Trench 2. This north-south aligned ditch survived to a depth of 0.5m and may have been of a similar size to ditch [26]. It contained a mid-dark slightly yellowish grey brown silty sand that produced a single sherd of undiagnostic Roman pottery.

Features [08] and [24] were much narrower (0.45m and 0.55m respectively), presumably representing shallower ditches that had been truncated to a much greater degree when the trench was excavated. Both were less than 0.15m deep and filled with unremarkable mid brown grey silty sands. Neither produced any dating evidence.

A narrow, shallow, flat-based feature ([22]) exposed midway along the trench was probably a posthole of some kind, although it is conceivable that it was a small pit or the terminus of a linear feature. Its sterile fill (23) produced a single sherd of Roman pottery.

Unstratified and residual finds

Objects recovered from topsoil and subsoil contexts included two struck flints of probable Neolithic date. An additional struck flint, of less certain date, was found as a residual object within ?flue [15].

Other unstratified finds included nine sherds of Roman pottery (broadly similar to those recovered from the excavated features), two sherds of medieval pottery and a single sherd of post-medieval pottery. A medieval silver halfpenny was also recovered.

6.0 THE FINDS

The finds recovered from this site are described below by material, and ordered by date. A summary list of all finds ordered by context can be found in Appendix 2a

6.1 Roman Pottery

by Andrew Peachey

6.1.1 Introduction

Evaluation excavations recovered a total of 51 sherds (482g) of Roman pottery, in a slightly abraded condition (Appendix 3). The bulk of the pottery comprises products of the Nar Valley pottery kilns in north-west Norfolk, with sparse sherds of East Gaulish samian ware, an oxidised beaker with painted decoration and other regional coarse wares also present (Table 2). The assemblage includes only limited diagnostic rim sherds or form types, but the fabrics and forms that are present suggest a date ranging from the late 2nd to mid 3rd centuries AD, possibly extending into the 4th century AD.

6.1.2 Methodology

The pottery was quantified by sherd count, weight and R.EVE. Fabrics were examined at x20 magnification and assigned a code from the National Roman Fabric Reference Collection (Tomber & Dore 1998), or assigned an alpha-numeric code based on this system. All data was entered into a Microsoft Excel spreadsheet that will be deposited as part of the archive.

6.1.3 Fabric Descriptions

TRI SA Trier samian ware (Tomber and Dore 1998, 41).

RHZ SA Rheinzabern samian ware (Tomber and Dore 1998, 39).

NAR RE1 Nar Valley reduced ware 1 (Gurney 1990, 89; Andrews 1985, 89). The colour of this fabric is not always consistent and sometimes mottled in appearance, with surfaces and

cores ranging from very dark grey to dark 'burnt' orange, dark red-brown and black. Inclusions in the fabric comprise common sub-rounded quartz generally in the 0.25-0.50mm size range, occasionally to 2mm, with sparse fragments of flint (1-5mm, occasionally larger) and sparse iron rich grains (predominantly black and <0.5mm). The fabric has an irregular fracture and a slightly granular break. Kilns producing this fabric have been recorded at East Winch (Gurney 1990; Peachey forthcoming), Pentney and Shouldham.

NAR RE2 Nar Valley reduced ware 2. The fabric is hard and consistently dark grey sometimes with a white slip on the rim and upper body, and superficially similar to pottery from Horningsea, Cambridgeshire (Evans 1990, 35-37). Inclusions are as NAR RE1, although the quartz tends to be slightly finer and sparse to common, with sparse mica also apparent. The fabric has an irregular to hackly fracture and a more granular break than NAR RE1. This fabric is a product of kilns in the Nar Valley possibly at Shouldham, Pentney or Snettisham (Lyons 2004).

GRS Sandy grey ware. A moderate to hard mid grey fabric with inclusions of common quartz (0.1-0.4mm, occasionally larger), sparse fine mica, sparse iron rich inclusions (0.1-1.0mm) and occasional flint (<5mm). The ubiquitous type of Romano-British sandy grey ware produced throughout the region.

OXF1 Mid to dark orange surfaces fading to a mid grey core, sometimes with white painted/barbotine decoration. Inclusions comprises common fine quartz (0.1-0.2mm) with sparse larger quartz grains (<0.5mm), sparse red clay pellets (0.2-0.5mm) and sparse fine mica. The fabric has slightly abrasive to slightly powdery surfaces, and a slightly irregular break. This fabric is close to types produced at Cherry Hinton, Cambridgeshire (Evans 1990), but may also have been produced at Pakenham, the Lower Nene Valley and West Stow.

WAT RE Wattisfield/Waveney Valley reduced ware (Tomber and Dore 1998, 184).

HAR SH Harrold shell-tempered ware (Tomber and Dore 1998, 115).

Fabric Type	Sherd Count	Weight (g)	R.EVE
TRI SA	1	1	0.00
RHZ SA	1	10	0.00
NAR RE1	26	232	0.05
NAR RE2	11	123	0.00
GRS	9	95	0.00
OXF1	1	15	0.20
WAT RE	1	2	0.00
HAR SH	1	4	0.05
Total	*51*	*482*	*0.30*

Table 2. Quantification of Roman fabric types

6.1.4 Commentary

The assemblage does not include any significant concentrations of sherds but a total of 11 sherds (121g) are contained in flue [15], with a further 8 sherds (33g) recovered from subsoil (21) associated with the flue. The bulk of this group comprises body sherds of NAR RE1 and NAR RE2, with a single sherd (1g) of East Gaulish samian ware (TRI SA) and a small everted bead rim of HAR SH also contained in Flue [15] (17). None of the pottery contained in flue [15] exhibits any characteristics that suggest burning or being waster material, therefore it appears that these sherds may represent domestic refuse backfilled into an oven or hearth. The same conclusion may be drawn from the three body sherds (25g) of NAR RE1 contained in flue [19] (20). Nar Valley reduced wares (NAR RE1 and NAR RE2)

were being produced at kilns at East Winch (Gurney 1990; Peachey forthcoming), Snettisham (Lyons 2004), Pentney and Shouldham (De Bootman 1983 and 1984) from the late 2nd century AD through the 4th century AD, and consumed in high quantity at the Shore fort at Brancaster and its extra mural settlement (Andrews 1985). The imported sherds that occur in association with the Nar Valley sherds in the flue features suggest they belong to the earlier half of this period, probably within the late 2nd to mid 3rd centuries AD.

The remaining Roman pottery in the assemblage was contained as sparsely distributed sherds in ditch, pit and posthole features, or as unstratified material. Notably this included an OXF1 globular beaker contained in ditch [26] (27). The beaker was decorated with a large dot of white paint on the shoulder, which combined with the fabric and form, strongly suggests this vessel was manufactured at Cherry Hinton, Cambridgeshire. Numerous types of globular beakers are known to have been produced at Cherry Hinton from the late 1st/early 2nd centuries AD onwards (Evans 1990, 24) but the nature and extent of the production centre is relatively poorly understood. Comparably decorated beaker sherds have also been recorded at kilns at Pakenham (Smedley and Owles 1961: fig.7c) and West Stow (West 1990, 84: fig.60.293-4). It appears likely this beaker was in circulation in the 2nd to mid 3rd centuries AD, probably complementing local coarse wares such as the Nar Valley fabrics, and imported fine wares such as the East Gaulish samian ware (RHZ SA) contained in ditch [12] (13). Despite the predominance of the Nar Valley fabrics, form types are limited to a dish with an external groove under the rim (Andrews 1985, 116: type 153; Peachey forthcoming: fig.36.4) contained in Pit [3] (4), and a body sherd from a jar with rusticated decoration recovered from un-stratified layer (14). Both types were common products of the Nar Valley kilns from the late 2nd to 4th centuries AD, whose distribution saturates north-west Norfolk and is sparse in other areas of East Anglia.

6.2 Post-Roman Pottery

by Peter Thompson

Two sherds (17g) of medieval pottery and a single sherd (4g) of early modern pottery were recovered as unstratified finds from Trench 2.

The two medieval sherds (17g) comprise Grimston ware, probably manufactured between the mid 13th and 15th centuries. One sherd is from an un-glazed base with finger-impressed decoration, and a thin strip of glaze adhering to the underside of the fragment, suggesting the vessel was stacked during firing with glazed vessels. A comparable base was recorded at Site 24054, Vong Lane, Grimston (Leah 1994, 82-3). The other Grimston ware sherd comprises a small fragment of glazed rim, probably from a jug.

The early modern sherd (4g) recovered from topsoil/subsoil (14) comprises a body sherd of black-glazed, red earthenware produced between the late 18th and early 20th centuries.

6.3 Flint

by Andrew Peachey

Evaluation excavations recovered a single residual fragment of a earlier Neolithic blade (2g) contained in a Roman feature, with two further flakes (4g) of earlier Neolithic debitage recovered as un-stratified material from topsoil/subsoil (14) (Appendix 4). The blade occurs in very pale grey natural flint and the debitage as mid to dark grey natural flint, all of which was probably sourced from locally available, secondary gravel deposits derived from the chalk belt that underlies north Norfolk.

The blade contained in Roman flue [15] (16) was snapped in antiquity and may have been discarded because of this. The flake used was struck using a soft hammer from a blade core with a pre-prepared (abraded) striking platform. It has a width of 19mm and thickness of 3mm with shallow re-touch applied to sharpen one lateral edge, and abrupt re-touch to blunt the opposing parallel lateral edge. The end product would have been a backed blade, possibly with a serrated edge, with the implement and the technology used to produce it characteristic of the earlier Neolithic period. The debitage flakes recovered from topsoil/subsoil (14) are also blade-like in appearance with parallel dorsal scars, suggesting that they are the bi-product of earlier Neolithic flint technology.

6.4 Metal Finds

by Rebecca Sillwood

6.4.1 Introduction and Methodology

Archaeological evaluation at land off Cross Lane, Brancaster recovered a total of four metal artefacts; of which one was a coin and is reported on separately below. The remaining three objects were counted and weighed, and are presented below in order of period, and then by their context number.

6.4.2 Roman

A single metal find of Roman date was recovered from the site, and came from context (13); the single fill of ditch [12]. This object is of iron, and is most likely to be a bolt-head or missile-head from a catapult, ballista, or similar. The piece is 126mm long, and appears complete (Plate 5). The shaft is circular and socketed, with a split at the join, measuring 15mm in diameter, it then changes to a rectangular section, and tapers to a blunt point. The dimensions of this part of the object are 15mm by 14mm.

Manning (1985) notes the great variation in the lengths of these objects (1985, 170) and this is thought to be due to differing calibres being used. This piece appears to be longer than most depicted in Manning, although a similar example, measuring 110mm has been noted (Plate 85, V251). Excavations at the Saxon Shore fort of Brancaster (*Branodunum*) in the 1970s recovered several of these ‘missile-heads’, which were divided into two groups. The first group are those with broad, square sectioned heads tapering quite sharply, and with a broad socket projecting immediately from the base of the head. The second form is where the current piece sits most aptly, with narrower, more gently tapering points and a neck of solid metal beneath the head, and a narrower socket (Sparey Green and Hinchliffe, 1985, p.48).

The find of a probable bolt-head or missile-head of Roman date is interesting, if not entirely surprising given the site location near the Roman fort of Branodunum.

Although the area from which this bolt-head came is likely to be civilian in nature, a certain amount of encroachment by soldiers and military apparatus cannot be ruled out, and this may account for the presence of this object within the ditch.

Plate 5. Roman iron missile-head recovered from ditch [12]

6.4.3 Post-medieval

A copper alloy forked tongue from a buckle was recovered from the unstratified spoil (05) of Trench 1. This piece is shaped like a pitchfork, with one end hinged for the (missing) chape. These tongues are common in the large shoe buckles of the 1720s to the 1790s (Whitehead 1996, p.103).

A lead seal was also found in spoil (05) of Trench 1, and is of the 'bulla' style, more commonly used for the transportation of bags of guano. The object is a thick disc with a lipped edge, and a slot through the middle. One face has embossed lettering comprising of 'H.B. Fearon & Son', with the obverse reading 'London'.

Both objects are of a common type, and represent stray losses in the area.

6.5 The Coin

by Andrew Barnett

A single silver coin was recovered by metal detector survey during the evaluation. The coin, a cut halfpenny of Henry III 1217-1272, was found in Trench 2 and lay in the subsoil directly above the clay-walled structure.

Introduced to try to alleviate the illegal practice of clipping, the voided long cross coinage was issued from 1247-1279 which included the first seven years of Edward I's (1272–1307) reign i.e. 1272-1279. This particular form of cut halfpenny was issued between 1251 and 1272. It is a Class V type, although its subclass has not been identified. Class V is the largest and most common of voided long cross series and has nine sub-classes (North 1994, Wren 1993).

This halfpenny was cut, either at the mint or through trade and was initially a full sized penny. It was used as small change in minor transactions. Consequently they are quite a common find and in all likelihood, due to its size, represents a stray loss.

6.6 Animal Bone

by Lucy Talbot

Five pieces of large domesticated mammal bone, weighing 213g in total, were recovered from the fill of pit [01] (02) and the fill of ditch [04] (05).

7.0 THE ENVIRONMENTAL EVIDENCE

7.1 Plant Macrofossils and Other Remains

By Val Fryer

7.1.1 Introduction and method statement

Two 10 litre samples (Samples <1> and <2>) taken from the primary and upper fills ((016) and (017)) of clay-lined flue [15] were processed in order that the context and preservation of any plant macrofossil assemblages could be assessed.

The samples were processed by manual water flotation/washover and the flots were collected in a 300 micron mesh sieve. The dried flots were scanned under a binocular microscope at magnifications up to x16 and the plant macrofossils and other remains noted are listed in Appendix 5; nomenclature follows Stace (1997). All plant remains were charred. Modern fibrous and woody roots, and seeds were also recorded.

The non-floating residues were collected in a 1mm mesh sieve to be sorted when dry. All artefacts/ecofacts are retained for further specialist analysis.

7.1.2 Results

Cereal grains, chaff and weed seeds were present at a low to moderate density in both samples. Preservation was, however, very poor, with all the grains and most seeds being severely puffed and distorted, almost certainly as a result of combustion at very high temperatures.

Barley (*Hordeum* sp.) and wheat (*Triticum* sp.) grains were recorded, with barley occurring most frequently. Spelt wheat glume bases were present within both assemblages, along with seeds of common segetal weeds including brome (*Bromus* sp.), black bindweed (*Fallopia convolvulus*), wild radish (*Raphanus raphanistrum*), dock (*Rumex* sp.) and vetch/vetchling (*Vicia*/*Lathyrus* sp.). A single fragment of hazel (*Corylus avellana*) nutshell was recorded within the assemblage from Sample <2>. Charcoal/charred wood fragments and pieces of charred stem were present at a very low density in both samples.

The fragments of black porous and tarry material were almost certainly residues of the combustion of organic remains (including cereal grains) at very high temperatures. Other remains occurred less frequently, but did include a fragment of bone and pieces of burnt/fired clay and coal.

7.1.3 Conclusions

In summary, both assemblages are consistent with material derived from either a corn drier/oven or from a similar 'industrial' context. Glumed wheats like spelt require parching to separate the grains from the glumes, and during the Roman period, this operation was often carried out on an 'industrial' scale. However, such a process frequently resulted in accidental fires, which would destroy a proportion of the crop being parched. Grain crops were also dried prior to storage. Although the current assemblages could be derived from either of these processes, it is almost certainly of note that both are barley-dominant and both also contain seeds, which are of a similar size to the grains. The Romans considered that barley was an inferior crop, suitable only for cattle fodder or for brewing. The occurrence of this grain alongside weed seeds, which would have been too large for separation by winnowing, may indicate that these assemblages are derived from a final stage of processing, where contaminants (including unwanted grains) were removed by hand immediately prior to consumption. During the Roman period, such processing waste, along with chaff and other dried plant materials, was often used as kindling or fuel for a range of domestic and light industrial uses.

Although both of the current assemblages are small (<0.1 litres in volume) they clearly show that plant macrofossils, with the potential of providing very valuable data about the functioning of the site, are preserved within the archaeological horizon at Brancaster. If further interventions are planned within the immediate area, it is strongly recommended that additional plant macrofossil samples of approximately 20–40 litres in volume are taken from all dated and well-sealed contexts recorded during excavation.

8.0 CONCLUSIONS

This evaluation revealed a number of archaeologically significant features, the majority of which are of probable Roman date. Several features could be convincingly dated to the Roman period, the remainder producing either smaller amounts of Roman pottery or no dating evidence. It is of course possibly that one or more of the less well-dated features could be post-Roman in date, although there is little evidence to suggest this. Very little post-Roman material was recovered from the site (none from excavated features) and it is clear from the map regression that any ditches are highly unlikely to represent later post-medieval or modern boundaries.

Given the alignments of the Roman ditches exposed during this evaluation it is highly probable that they represent a continuation of the regular, planned arrangement of trackways and enclosures that has been shown to extend beyond the fort. The probable late 2nd- to 3rd-century date for these remains is certainly consistent with this conclusion; excavations having shown that the settlement area to the west of the fort (NHER 1002) was in existence before the end of the 2nd century (Hinchliffe and Sparey Green 1985, 178). The precise function of the ditches exposed during this evaluation is of course uncertain at present, although it is worth noting that the distance between ditches [12] and [26] – two of the larger examples – is almost exactly the width of the north-south aligned ditched trackways observed in the vicinity of fort.

Although there are clearly a number of Roman features present on this site it should however be emphasised that, unlike the site excavated to the south-east, the quantities of Roman material recovered were relatively small. It therefore seems unlikely that the proposed development area lies within one of the main areas of Roman settlement. The discovery of a possible corn drier within the site also suggests that this was a peripheral area, although its presence raises the possibility that other remains associated with agricultural production or craft and light industrial activities are also present. The location of the possible Roman artillery projectile is interesting, although as an isolated find, it adds little to our understanding of this site.

The remains uncovered proved to be reasonably well preserved; something shown most clearly by the survival of the clay-built structure within the subsoil layer. This degree of survival is almost certainly due to the nature of the site's past use – as little other than gardens and allotments in recent times. It is therefore likely that any other remains present within the site are similarly well preserved. Any features lying beneath the canopies of the larger trees may however have suffered a degree of root disturbance, although this damage is unlikely to be severe, particularly given the depth of soil present. This degree of preservation is significant as the settlement area excavated to the south-east was shown to have been significantly plough-damaged and the same is likely to be true of the unexcavated remains preserved to the east and south of the fort. The remains exposed during this evaluation have clearly benefitted from not having been exposed to recent, intensive agricultural practices.

The depth of soil present on the site makes it likely that archaeological deposits are only likely to be disturbed by the most intrusive elements of the proposed development; those associated with the structures themselves.

Recommendations for future work based upon this report will be made by Norfolk Historic Environment Service.

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Bibliography

Andrews, C.	1985	'The Coarse wares,' in Hinchliffe with Sparey-Green (eds) Excavations at Brancaster 1974 and 1977. *East Anglian Archaeology* 23, 82-124
BGS (British Geological Survey)	1991	*East Anglia*, Sheet 52N 00 Quaternary, 1:250,000 series
BGS (British Geological Survey)	1985	*East Anglia*, Sheet 52N 00 Solid Geology, 1:250,000 series
Bradley-Lovekin, T.	2007	*Archaeological Watching Brief on land at Tranquillity, Marsh Lane, Brancaster, Norfolk*. Archaeological Project Services Report No. 082-07 (unpublished).
De Bootman, M.	1983	Report on the Excavations of a Roman Kiln Site at Pentney. *Quarterly Journal of the Norfolk Archaeological Rescue Group* 35, 13-15
De Bootman, M.	1984	A Preliminary Report on a Romano British Kiln excavated at Pentney, 1981 (Kiln C). *Quarterly Journal of the Norfolk Archaeological Rescue Group* 39, 19-22
Communities and Local Government	2010	*Planning policy Statement 5: Planning for the Historic Environment*, London TSO
Evans, J.	1990	'The Cherry Hinton Finewares,' *Journal of Roman Pottery Studies* 3, 18-29
Gurney, D.	1990	'A Romano-British Pottery Kiln at Blackborough End, Middleton,' *Norfolk Archaeology* 41, 83-92
Hinchliffe, J. & Sparey Green, C.	1985	*Excavations in Brancaster 1974 and 1977.* East Anglian Archaeology No. 23
Lawes Agricultural Trust	1973	*Soil Survey of England and Wales. The Soils of Norfolk. 1:100,000.*
Leah, M.	1994	*The Late Saxon and Medieval Pottery Industry of Grimston, Norfolk: Excavations 1962-92.* East Anglian Archaeology 64
Lyons, A.	2004	Romano-British industrial activity at Snettisham, Norfolk. Norfolk. *East Anglian Archaeology Occasional Paper* 18

Manning, W.H.	1985	*Catalogue of the Romano-British Iron Tools, Fittings and Weapons in the British Museum.* British Museum Publications Ltd.
North, J.J.	1994	*English Hammered Coinage Volume I. 600-1272.* Spink
Peachey, A.	*forthcoming*	'Middle Iron Age and Roman Pottery' in Lally, M., Nicholson, K., O'Brien, L. and Peachey, A. A Romano-British Industrial Site at East Winch, Norfolk. *East Anglian Archaeology forthcoming volume*
Percival, S.	2009	*Archaeological Excavation and Monitoring of the Anglian Water Pipeline from Cressing to Terling, Essex.* NAUA report No. 1648 (unpublished)
Smedley, N., and Owles, E.J.	1961	'Some Suffolk kilns: III: A small kiln at Grimstone End, Pakenham'. *Proceedings of the Suffolk Institute of Archaeology* XXIX Part 1, 67-72.
Stace, C.	1997	*New Flora of the British Isles*. Second edition. Cambridge University Press
Tomber, R. & Dore, J.	1998	*The National Roman Fabric Reference Collection*. Museum of London, London
West. S.	1990	*West Stow the Prehistoric and Romano-British Occupations*. East Anglian Archaeology 48
Whitehead, R.	1996	*Buckles 1250-1800.* Greenlight Publishing
Wren, C.R.	1993	*The Voided Long-Cross Coinage 1248-1279.* Plantagenet Books

Appendix 1a: Context Summary

Context	Trench	Type	Description	Date
1	1	Cut	Cut of ditch	?Roman
2	1	Deposit	Fill of ditch [1]	?Roman
3	1	Cut	Cut of pit	?Roman
4	1	Deposit	Fill of pit [3]	?Roman
5	1	U/S Finds	Trench 1 topsoil and subsoil finds	-
6	2	Cut	Cut of ditch	?Roman
7	2	Deposit	Fill of ditch [6]	?Roman
8	2	Cut	Cut of ditch	?
9	2	Deposit	Fill of ditch [8]	?
10	2	Cut	Cut of ditch	?Roman
11	2	Deposit	Fill of ditch [10]	?Roman
12	2	Cut	Cut of ditch	?Roman
13	2	Deposit	Fill of ditch [12]	?Roman
14	2	U/S Finds	Trench 2 topsoil and subsoil finds	-
15	2	Cut	Cut of partially clay-lined ?flue	Roman
16	2	Deposit	Lower fill of ?flue [15]	Roman
17	2	Deposit	Upper fill of ?flue [15]	Roman
18	2	Deposit	Clay walls of ?flue [15]	Roman
19	2	Cut	Cut of ?flue	Roman
20	2	Deposit	Fill of ?flue [19]	Roman
21	2	U/S Finds	Finds recovered during the initial cleaning and definition of partially clay-lined ?flue [15]/[19]	-
22	2	Cut	Cut of ?posthole	?Roman
23	2	Deposit	Fill of ?posthole [22]	?Roman
24	2	Cut	Cut of ditch	?
25	2	Deposit	Fill of ditch [24]	?
26	2	Cut	Cut of ditch	Roman
27	2	Deposit	Fill of ditch [26]	Roman

Appendix 1b: OASIS Feature Summary

Period	Feature type	Quantity
Roman	Partially clay-lined channel (flue?)	1
	Ditch	3+
	Pit	1
	?Posthole	1

Appendix 2a: Finds by Context

Context	Material	Qty	Wt (g)	Period
2	Pottery	2	39	Roman
4	Animal Bone	1	21	Unknown
	Pottery	2	43	Roman
5	Copper-Alloy	1	1	Post-medieval
	Lead	1	14	Post-medieval
	Pottery	3	8	Roman
7	Pottery	1	5	Roman
13	Iron	1	69	Roman
	Pottery	2	11	Roman
14	Flint – Struck	2	4	Early Neolithic
	Pottery	9	93	Roman
		2	17	Medieval
		1	4	Post-medieval
	Silver	1	1	Medieval
16	Flint – Struck	1	2	Prehistoric
	Pottery	1	21	Roman
17	Pottery	10	101	Roman
20	Pottery	3	25	Roman
21	Pottery	8	33	Roman
23	Pottery	1	4	Roman
27	Animal Bone	4	192	Unknown
	Pottery	9	99	Roman

Appendix 2b: OASIS Finds Summary

Period	Material	Total
Prehistoric	Flint – Struck	1
Early Neolithic	Flint – Struck	2
Roman	Iron	1
	Pottery	51
Medieval	Pottery	2
	Silver	1
Post-medieval	Copper-Alloy	1
	Lead	1
	Pottery	1
Unknown	Animal Bone	5

Appendix 3: Pottery

Context	Qty	Wt (g)	FABRIC	Context spotdate
2	2	39	NAR RE1	Late 2nd - 4th century
4	2	43	NAR RE1	Late 2nd - 4th century
5	2	6	NAR RE1	N/A
	1	2	GRS1	
7	1	5	GRS1	Late 1st – 4th century
13	1	10	RHZ SA	Late 2nd - mid 3rd century
	1	1	NAR RE1	
14	7	56	NAR RE1	N/A
	1	35	GRS1	
	1	2	WAT RE	
	2	17	GRIM	
	1	4	LBW	
16	1	21	NAR RE1	Late 2nd - 4th century
17	1	1	TRI SA	Late 2nd - mid 3rd century
	3	24	NAR RE1	
	5	72	NAR RE2	
	1	4	HAR SH	
20	3	25	NAR RE1	Late 2nd - 4th century
21	4	13	NAR RE1	N/A
	4	20	NAR RE2	
23	1	4	NAR RE1	Late 2nd - 4th century
27	2	31	NAR RE2	2nd - mid 3rd century
	6	53	GRS1	
	1	15	OXF1	

Appendix 4: Flint

Cxt	Qty	Wt (g)	Type	Colour	Re-touch	Cortex	Comment
14	1	2	Tertiary flake	Mid-dark grey		-	Blade-like; dorsal scars
	1	2	Uncorticated flake	Mid-dark grey		Off white; slightly pitted	Blade-like; dorsal scars
16	1	2	Snapped blade	Very pale grey	Yes	-	Part of blade with one edge sharpened by shallow retouch, and the other blunted by steep retouch, creating a backed (?serrated) blade. Soft hammer struck (very shallow bulb of percussion) from a pre-prepared striking platform

Appendix 5: Plant Macrofossils and Other Remains

Sample No.	1	2
Context No.	**016**	**017**
Cereals		
Hordeum sp. (grains)	x	xcf
Triticum sp. (grains)	xcf	xcf
(spikelet bases)	x	
T. spelta L. (glume bases)	x	x
Cereal indet. (grains)	xx	x
Herbs		
Bromus sp.		x
Fallopia convolvulus (L.)A.Love	xtf	xtf
Medicago/*Trifolium*/*Lotus* sp.	xcf	
Poaceae indet.	x	
Raphanus raphanistrum L.	xsilfg	x xsilfg
Rumex sp.	x	
Vicia/*Lathyrus* sp.	x	x
Tree/shrub macrofossils		
Corylus avellana L.		x
Other plant macrofossils		
Charcoal <2mm	x	x
Charcoal >2mm		x
Charred root/stem	x	x
Other remains		
Black porous 'cokey' material	xx	x
Black tarry material	x	x
Bone	x	
Burnt/fired clay	x	x
Small coal frags.	x	x
Sample volume (litres)	**7**	**14**
Volume of flot (litres)	**<0.1**	**<0.1**
% flot sorted	**100%**	**100%**

Key to Table

x = 1–10 specimens xx = 11–50 specimens

cf = compare tf = testa fragment sil = siliqua fg = fragment