2073

OTHONA COMMUNITY SITE
EASTEND ROAD
BRADWELL-ON-SEA
ESSEX

ARCHAEOLOGICAL EXCAVATION

Essex County Council

FIELD ARCHAEOLOGY UNIT
January 2010

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SUMMARY

Client: The Othona Community
FAU Project No.: 2073
NGR: TM 03074 08347
Planning Application No.: FUL/MAL/09/00507
Site Code: BROT09
Dates of Fieldwork: 21/09/09 – 01/10/09

A small archaeological excavation was carried out by the Essex CC Field Archaeology Unit at the Othona Community site, within the footprint of a proposed new residential block to the south of the current main building. The site is located 120m north of the late Roman 'Saxon Shore' fort of Othona, built in c. AD 260-70, and the middle Saxon church of St-Peter-on-the-Wall, which stands on the west gate of the Roman fort. The fort and church are protected as a Scheduled Monument (SM 24883), but the excavation was located outside the scheduled area. A previous excavation in 1992-3 immediately to the north of the site recorded a series of natural gullies related to the salt marsh, a few prehistoric features, a large number of late Roman features representing extra-mural activity to the north of the fort, and a Saxon pit, all sealed by an early medieval estuarine flood deposit (Medlycott 1994).

The earliest evidence recorded within the 2009 excavation area comprised two gullies loosely dated to the prehistoric period. The majority of the archaeological evidence represents late 3rd to late 4th century extra-mural activity related to the Roman fort. Parts of two ditched enclosures were recorded, together with a short length of a late 4th century rubble foundation, probably part of an outbuilding, and two rubbish pits. The Roman features and finds complement those from the 1992-3 excavation, but with a larger animal bone assemblage, which contained evidence for primary butchery of cattle. A large assemblage of shells also indicates that oysters, with smaller amounts of whelks, cockles, mussels and clams, were being gathered and formed part of the Othona diet. No later finds

or features were present, including no further evidence of Saxon activity related to the church of St Peter-on-the-Wall. A Second World War tank trap and several modern drains truncated several of the archaeological features.

The 2009 excavation area straddles the 4m AOD contour and is slightly higher than the 1992-3 excavation area to the north. The evidence of the 2009 excavation suggests that this area lay marginally beyond the limits of the ancient salt marsh and estuarine flooding. The Roman enclosures in the 2009 excavation area are related to similar features in the south of the 1992-3 excavation, but this activity forms a sharp contrast with the natural channels created by repeated inundations of the salt marsh in the northern half of the 1992-3 area.

Topographical survey of the wider area (Wilkinson and Murphy 1995; Heppell 2000; Medlycott 2000) has demonstrated that the late Roman fort was established on a low promontory, with estuarine alluvium and creeks to both north and south. Fieldwalking and geophysical surveys suggest the presence of Roman extra-mural activity to the west and south-west of the fort (Germany 2000; Wardill 2000). The 2009 excavation, although limited in size, has confirmed the existence of Roman extra-mural activity to the north of the fort also, extending up to the limits of the salt marsh on that side.

1.0 INTRODUCTION

This report presents the results of an archaeological excavation at the Othona Community Site, Eastend Road, Bradwell-on-Sea, Essex (NGR TM 03074 08347), conducted by Essex County Council Field Archaeology Unit (ECC FAU) before the construction of a new residential block to the south of the current main building. The fieldwork was undertaken in response to a condition placed on planning consent (FUL/MAL/09/00507) by Maldon District Council, following specialist advice from the Essex County Council Historic Environment Management Team (ECC HEM) given in line with Planning Policy Guidance note 16 (DoE 1990). The fieldwork was carried out in accordance with a brief issued by ECC HEM (2009) and a written scheme of investigation by ECC FAU (2009) and was monitored by ECC HEM on behalf of the local planning authority.

The proposed development is divided into two phases. Phase 1 comprises the western two-thirds of the building, including the entrance porch on its south side, while Phase 2 comprises the eastern end of the building, which will be added at a later date. As a result the Phase 2 area was backfilled after the excavation, with Phase 1 left open for ground-works.

Bound and digital copies of this report will be supplied to the Othona Community and their agent (including a copy for the Local Planning Authority), ECC HEM and the Essex Historic Environment Record. A digital copy of the report will be uploaded on the online access to the index of archaeological investigations (www.oasis.ac.uk). The site archive and copies of the report will be deposited at the Colchester and Ipswich Museum.

2.0 BACKGROUND

2.1 Location, Geology and Topography (Figs 1-3)

The Othona Community (NGR TM 03074 08347) is located at the north-eastern point of the Dengie Peninsula (Fig. 1), adjacent to the Roman 'Saxon Shore' fort of Othona and the middle Saxon monastic church of St Peter-on-the-Wall, which are protected as a Scheduled Monument (SM 24883). The proposed development is located outside the scheduled area, 120m to the north of the northern wall of the Roman fort, and 50m to the south of the main

residential building of the Othona Community (Fig. 1). The excavation was located within the footprint of the proposed new development, totalling 263m².

The site lies on a surface geology of clay with gravel patches. Layers of sterile clayey silt were also present overlying the natural clay substrate. Topographical studies, including borehole sampling, have shown that the Roman fort was positioned on a low promontory, with salt marsh and creeks to both north and south (Wilkinson and Murphy 1995; Heppell 2000) (Fig. 2).

Archaeological trial trenching (1991) followed by an excavation (1992-3) was undertaken prior to the construction of the main residential block to the north of the current development site (Medlycott 1994). The earlier excavation revealed a series of natural salt marsh erosion gullies, along with a small number of prehistoric, Roman, Saxon, medieval and modern features. The current excavation area is situated at a height of c. 4.2m AOD, at a slightly lower level than the fort and chapel to the south, but around 1m higher than the previous excavation to the north.

2.2 History and Archaeology (Figs 2-3)

The following archaeological and historical background is based on the Essex Historic Environment Record (EHER), the 1992-3 excavation at the Othona Community site to the north of the current excavation (Medlycott 1994), and a survey of the Roman fort and its surrounds commissioned by English Heritage. This comprised a desk-based assessment (Medlycott 2000), landscape survey (Heppell 2000), fieldwalking survey (Germany 2000) and geophysical survey (Wardill 2000).

The site is located 120m to the north of the Roman 'Saxon Shore' fort of *Othona* (EHER 31; SM 24883), constructed in *c.* AD 260-70 as one of a chain of shore forts along the east coast and its estuaries from the Wash to the Channel to defend Britain from Saxon raiders. A hiatus in activity followed the end of the Roman period until St Cedd founded a religious community within the walls of the fort in AD 654 (EHER 32). The Saxon church of St Peter-on-the-Wall, built on the site of the west gate of the Roman fort, is one of the oldest surviving places of Christian worship in England. The monastic settlement developed during the 8th and 9th centuries, until its presumed destruction by the Danes.

The site was recorded as *Effecestra* in Domesday Book (Rumble 1983) and documentary evidence indicates that sea incursions were gradually destroying the settlement by the late

11th century. The area has been prone to flooding throughout history with the first documentary evidence noted in the Anglo-Saxon Chronicle in 1099. Subsequent incursions were documented by Randulphus Niger and William Camden (Medlycott 1994). Bradwell is first documented in the 13th century possibly indicating a shift of settlement inland (Heppell 2000). Sea level changes since the Roman period are also evidenced by the disappearance of half of the Roman fort through erosion by the sea.

Previous archaeological investigations have been carried out in the area of the fort, and the results of previous trenching and survey work have been collated in the desk-based assessment of the fort and its setting (Medlycott 2000).

Previous archaeological work has been undertaken in the immediate vicinity of the site. Four trial trenches were excavated in 1991; trenches 1 and 2 were situated to the north of the current development, trench 3 to the north-east and trench 4 to the south-west. In 1992-3 trench 1 was expanded into a targeted open area excavation within the footprint of the main Othona Community building (Medlycott 1994). The main period of activity fell between the late 3rd and late 4th centuries. A range of stakeholes, postholes, pits, gullies, ditches and a hearth were interpreted as part of a system of Roman horticultural land use and drainage. Many of the gullies, however, are likely to represent naturally eroded channels which formed part of the salt marsh.

A hiatus of activity ensued until the medieval period, though one Saxon feature was identified. The environmental sampling yielded very low quantities of plant macrofossils. However, the molluscan material found within samples taken from layer 554, which sealed all Saxon and earlier features, indicated that it represented a salt-water estuarine incursion, containing a few sherds of pottery dated to the 13th to early 14th century. Two later medieval features were cut into this deposit. The last phase of activity comprised modern land drains and tank traps to the north and east of the site.

3.0 AIMS AND OBJECTIVES

3.1 Aims

The aim of the archaeological excavation was to preserve, by record, any archaeological features or deposits affected by the construction of the new building and to establish the

location, extent, and character of any surviving archaeological remains within the proposed development area.

3.2 Objectives

The specific objectives of the evaluation were to determine:

- The date and nature of any settlement activity;
- The faunal and environmental evidence through an effective sampling strategy;
- The relationship of any finds, features and deposits to the evidence identified during the earlier excavations (Medlycott 1994);
- The relationship of any activity on site to that of the occupation of the Roman fort of Othona and the middle Saxon monastery established within it.

4.0 METHOD

The archaeological fieldwork was carried out in accordance with the Institute of Field Archaeologists *Standards and Guidance for Archaeological Excavation* (IFA 1999) and the Association of Local Government Officers' *Standards for Field Archaeology in the East of England* (Gurney 2003). The ECC FAU uses its own recording system (ECC FAU 2006).

The site was investigated by a targeted excavation within the footprint of the proposed structure, totalling 263m² (Fig. 1). The initial removal of topsoil by machine was conducted under archaeological supervision. All identifiable archaeological deposits were investigated and recorded by hand. Context numbers assigned during the 2009 excavation began at 1000 to avoid duplication of numbers used in the earlier excavations carried out in 1992-3.

The excavation was conducted during a particularly dry period of the early autumn, making it difficult to identify the edges of features, which were filled with light coloured clayey silt similar to the natural. A second machine-scrape of the central and western area of the excavation area was conducted before backfilling to ensure no features were missed.

An alteration to the original environmental sampling strategy was made when it became apparent that flood layer 554, found during the previous investigation, was absent. Samples were taken from three ditches, all of which produced late Roman finds, but none of these has been processed due to very low organic content.

5.0 FIELDWORK RESULTS

The excavation revealed a total of 22 features, the majority of which were Roman, dating to the late 3rd to 4th centuries. Two prehistoric gullies, one undated posthole and five probable natural features were identified, with the remaining Roman features comprising three pits, one gully, eight ditches, one stakehole and a wall. There was a total absence of post-Roman, pre-modern finds and features, indicating that the land was not occupied during this time. Several modern drains, including two which cut through archaeological features and a World War Two tank trap were also present.

All of the features were cut through a varied natural substrate comprising silty clay, gravel, and clay with chalk, and were sealed by *c.* 0.5m of topsoil, and contained clayey and sandy silt fills. A modern track was present within the topsoil aligned east to west along the western half of the southern area of the site. The topsoil in this part of the site was noticeably more compacted. A plough scar in the central area of the site indicates that the site had been cultivated. Its disturbance of a natural feature (1029) demonstrates that it had penetrated to the level of the archaeological features.

Layer 554, waterlain estuarine silt deposited during the 13th to 14th centuries, was recorded in the previous excavation (Medlycott 1994). This was not present in the current excavation area because it lies slightly higher above sea level and therefore avoided extensive flooding.

5.1 Natural features (Fig. 4)

Five natural features were present. Two probably natural gullies (1031 and 1029) were sinuous in nature with irregular sides and bases. Natural depressions or disturbances were also present across the site (1023, 1035 and 1037). They all contained similar clayey silt fills and 1023 contained tiny sherds of Roman pottery, presumably residual. These features may have been created by animal burrowing.

5.2 Prehistoric (Fig. 4)

Gully 1057 was situated towards the western end of the site, extending from the limit if excavation on a north to south alignment. It contained two sherds of prehistoric pottery and cut through an earlier, possibly natural gully (1059). Gully 1057 was cut by an undated drain at the point of its intersection with natural gully 1031. The gullies did not conform to any other feature alignments, perhaps indicating different site conditions during the prehistoric

period. One sherd of residual pottery was recovered within pit 1011 and another was found within ditch 1039, thus indicating that prehistoric features were disturbed at the time the Roman features were backfilled.

5.3 **Roman** (Figs 4 and 5)

The majority of the features are dated by pottery and coins to the Roman period, more specifically to the late 3rd to 4th centuries, with a group of later 4th century features, and are thus contemporary with the late Roman fort. Several ditches formed two enclosures, one replacing the other. A short length of a late 4th century wall, probably from a small outbuilding, was also recorded, and three pits. The fills of these features contained finds indicative of domestic and butchery refuse.

5.3.1 Enclosure ditches

The ditches forming two enclosures (1005/1027 and 1003/1020) were generally around 1m wide and up to 0.4m deep, with broad, shallow irregular profiles. Despite detailed differences between them, the enclosure ditches could be distinguished as a group from the natural gullies (e.g. 1031) and later additions to the enclosure ditch system (e.g. 1045). A third set of possible enclosure ditches (1039/1041) was recorded in the extreme east of the excavation area, but their relationship with the other enclosures could not be determined.

The earliest enclosure was partially revealed and was formed by ditches 1005 and 1027 in the centre and south of the site (Plate 1). Ditch 1005 (Plate 2) formed a corner with ditch 1027 (Plate 3), and although their precise relationship was not fully understood, they formed the south-western and south-eastern sides of a ditched enclosure. This occupied the eastern half of the excavation area, extending beyond its northern and eastern limits. The enclosure is dated to the late 3rd to 4th century, with a tiny sherd of later 4th century pottery in ditch 1005 considered to be intrusive. A modern drain ran parallel to ditch 1027, perhaps indicating that the enclosure ditches were aligned to aid site drainage. This may also explain the irregular nature of the profile of ditch 1005; water erosion would have disturbed its original profile and created an uneven base.

Ditches 1005 and 1027 were backfilled and cut by ditch 1003 (Plates 3 and 4), which formed the south-eastern side of a later enclosure. Ditch 1003 ran alongside the earlier ditch 1027, most likely as its replacement. Two copper alloy coins were recovered from fill 1004 of ditch 1003. They date to between AD 330 and 340 and were little worn (see section 6.3 below), indicating that the ditch was backfilled at that date or soon after. Ditch 1020 (Plate 5) was

located to the north-west, running roughly parallel to 1027, and probably formed the north-western side of the enclosure. Ditches 1003/1020 appear to represent a replacement of the original enclosure by extending it to the west. All the enclosure ditches followed a similar alignment to the ditches recorded in the south of the 1992-3 excavation area (Fig. 3).

Ditches 1039 and 1041 were located at the eastern area of the excavation area, separated from the enclosure ditches to the west by a World War Two tank trap. The area to their north was obscured by a modern field drain and a general area of disturbance, so that the north-western end of ditch 1039 could not be traced. Both ditches extended beyond the eastern limit of the excavation.

Ditch 1039 appeared to form an irregular corner, with ditch lengths extending to the north-west and north-east. Ditch 1041 to its south was roughly parallel to 1039, although more gradually curved in plan, and was a little narrower and deeper, with a darker fill (1042). The fills of both ditches contained late Roman pottery, animal bone and tile, including box flue tile fragments. The ditches were therefore broadly contemporary with the ditches recorded further west, and presumably represent a further part of the system of enclosures, although their precise relationship with it cannot be established.

5.3.2 Ditch 1045 and wall 1043

Ditch 1045 (Plate 6) was aligned north-west to south-east and may have formed the south-western edge of the later of the two enclosures, although its profile and fills differed considerably to those of the other ditches. Ditch 1045 had a narrow V-shaped profile (Fig. 5), in contrast with the much wider and shallower profile of the other ditches, and it is therefore likely that it formed an internal division within a larger enclosure.

The fills of ditch 1045 differed strikingly to those of the other enclosure ditches recorded during the excavation. Its second fill (1047) contained a very large quantity of shells, including oyster, whelk and cockle (Plate 6); indeed the majority of 1047 comprised shell in a matrix of clay. Its upper fill (1048) was charcoal-rich indicating that it may have been backfilled with hearth waste. Both these fills contained pottery dated to the later 4th century, again suggesting that ditch 1045 was a later addition.

In the extreme west of the excavation area, a short length of a wall (1043) was recorded, terminating against the south-western edge of ditch 1045, and although the wall was not quite perpendicular to the ditch they must have been contemporary. The wall comprised a

foundation, 0.30m wide and 0.19m deep, built of rubble, comprising two roughly laid courses of flint nodules and tile fragments, with large fragments of Kentish ragstone and septaria (Fig. 4; Plate 7). The rubble walling material was not mortared, but was packed in yellow-grey clayey silt (1044), within a foundation trench (1053) with a regular square-cut profile (Fig. 5). A circular stake-hole (1054), 0.20m in diameter and 0.20m deep, lay beneath the end wall stones, and was cut from the base of the foundation trench to stabilise the base of the wall (Plate 8). No evidence of a stake remained, only a clay-silt fill (1055), and it must have totally decayed. Further flint nodules and tile fragments (1056) were recorded to the south of wall 1043, but it is uncertain whether these represent a further length of wall or merely residual rubble, as this area was extensively disturbed by an animal burrow.

The form of wall 1043, narrow and built of unmortared rubble, suggests that it was not a substantial structure, and it was most likely a foundation for a timber superstructure. The clayey silt 1044, within which the rubble walling material 1043 was packed, contained later 4th century pottery, confirming that it was contemporary with ditch 1045 which it abutted.

In the north-western corner of the excavation area, a small gully (1025) aligned north-west to south-east terminated against the edge of ditch 1020 (Plate 9). Like wall 1043/1044 and ditch 1045, gully 1025 contained later 4th century pottery, suggesting that it too was one of a group of very late Roman features in the west of the excavation area.

5.3.3 Pits and post-holes

A large pit (1011) was located in the centre-north of the site. It contained two naturally silted fills (1012 and 1013) at its base, indicating that the pit was dug and left open for a while (Fig. 5; Plate 10). The remaining three fills (1014, 1015 and 1016) contained a large amount of animal bone, comprising primary butchery waste (see section 6.5 below) and domestic refuse. The pit was cut by a smaller pit (1017) whose fill (1018) contained a high percentage of charcoal and finds associated with domestic refuse. Pit 1017 contained later 4th century pottery.

A post-hole (1061) was located close to the presumed intersection of ditches 1045 and 1020. Its clayey silt fill (1062) containing a fragment of Roman tile. The southern end of narrow gully (1033) recorded in the north-centre also contained Roman tile. To its south was a second post-hole (1051) which yielded no finds. No other post-holes within the immediate area were present, and its location very close to the tank trap suggests that any potentially associated features have been destroyed. None of these features can be interpreted further.

6.0 FINDS AND ENVIRONMENTAL MATERIAL

By Joyce Compton

Finds were recovered from a total of twenty-eight contexts. All of the finds have been recorded by count and weight, in grams, by context. Full quantification details can be found in Appendix 2. The main assemblage components are animal bone, mainly recovered from the fills of pits 1011/1017, and Roman brick and tile. The finds are described by category below.

6.1 Pottery

Twenty-two contexts produced pottery, amounting to 162 sherds, weighing 1406g, almost all of Roman date. Small body sherds of flint-tempered prehistoric pottery, total weight 10g, were found in three contexts, two as residual single sherds in pit 1011 and ditch 1039 and two in gully 1057. No other finds were present in the latter, suggesting a prehistoric date for the feature.

Roman pottery (158 sherds, weighing 1396g) was recorded in twenty-one contexts. The pottery has been recorded to basic archive standard by count and weight, in grams, by context, and the details entered onto a spreadsheet which forms part of the archive. Pottery fabrics were recorded using standard ECC FAU fabric descriptions and the vessel forms were identified using the typology devised for Chelmsford (Going 1987, 13-54). The assemblage is fragmentary, average sherd weight 8.8g, but otherwise in relatively good condition. No pierced sherds were recorded, nor any with notches, stamps or graffiti.

Only one context (fill 1048 of ditch 1045) contained more than thirty sherds of pottery. Fourteen contexts (two-thirds of the total) contained five sherds or fewer. Nevertheless, sufficient fabrics and forms were recorded to provide close dating for two-thirds of the contexts with pottery. The assemblage is late Roman in character, with fourteen contexts dating to the late 3rd and 4th centuries. Six are more firmly dated to the second half of the 4th century by the presence of Oxford ware (OXRC) and late shell-tempered ware (LSH).

Twelve fabrics and fabric groups were identified (full details in archive). The assemblage is dominated by locally-made coarse wares. Collectively, these form more than 67% by weight of the total pottery recovered, with sandy grey wares accounting for a third. Late Roman fabrics account for just under a quarter by weight of the total. There are no imported wares,

except for two small wine amphora body sherds, found in the fill of ditch 1003. Regional industries are well-represented, with pottery from Oxford, Hadham, Harrold (Bedfordshire) and the Nene Valley all present in small quantities. Of the identified vessels, dishes, jars and beakers form the major components. Bowl-jars were also recorded, along with single examples of flagons and mortaria. The vessel types are all consistent with a late Roman domestic assemblage, where dishes take precedence over other vessel classes.

The pottery compares well with that from the previous excavation nearby (Horsley 1994). Horsley suggested that activity commenced in the mid 3rd century and the pottery from the current excavation supports this suggestion. However, there are no late Roman imports in the current assemblage, thus activity continuing into the 5th century is not certainly established. It should be noted that no Saxon or later pottery was recovered either, in contrast to the small quantities found previously (Medlycott 1994, 67).

6.2 Brick and tile

Brick and tile fragments, all of Roman date and amounting to 229 pieces, weighing just over 13kg, were collected from twenty contexts, which include two finds spots. In addition to the basic recording noted above, the fragments in each context have been categorised and then weighed and measured by category. These details have been entered onto a spreadsheet which forms part of the archive. The six categories are as follows; *tegula* and *imbrex* (both of which are roof tile types), brick (normally identified by thickness), box-flue (representing hypocaust tiles), undiagnostic flat tile and spall (small flakes, usually with no remaining surfaces). The undiagnostic flat tile category will include *tegula* and box-flue by default, especially if the pieces are small and have no remaining identifying features.

Almost half of the tile by weight falls into the undiagnostic and spall categories, with most contexts containing either or both types. In part, this is a reflection of the fragmentary nature of most of the brick and tile assemblage. Brick fragments were recorded in ten contexts, representing almost one third by weight of the total. Ditch 1003 and pit 1011 both contained appreciable amounts of relatively large pieces. *Tegula* and *imbrex* roofing tiles were found in eleven contexts, representing 15% by weight of the total. Of interest are the fragments of box-flue tile, probably derived from hypocausts. Fragments were recorded in six contexts and further plain fragments are probably included with the undiagnostic tile. Box-flue tile normally displays combed or incised keying on most surfaces. All of the pieces from Othona have combed keying, some of it irregular, but the piece from gully 1025 has incised-lattice keying on its upper surface. Keying may assist in retaining outer plaster coatings but more

elaborate examples must be for decorative purposes. The purpose for the keying on the Othona pieces is not immediately clear.

Just over 12kg of tile was recovered during the previous excavation (Major 1994, 68-9) although the assemblage appears to be more fragmentary than that from the current work. Box-flue and roof tiles were noted but there is no mention of brick in the report.

6.3 Metalwork

Few items of metalwork were recorded. Two coins were recovered from fill 1004 of ditch 1003. Both are copper alloy and in poor condition and were therefore submitted for cleaning at Colchester and Ipswich Museum. These form the subject of a separate report below. The remaining metalwork is all iron, found in five contexts and mainly comprising nails. A possible blade was identified in fill 1022 of ditch 1020 and two small fragments from a second unidentifiable object came from fill 1028 of ditch 1027.

Five coins were recorded from the previous work, all of late 3rd and 4th century date (Wallis 1994, 68; McMichael 1994, 68). Two copper alloy fragments and fifteen iron items, nine of which were nails, were also recorded (Major 1994, 68). The iron included parts of a knife with a bone handle, but most items were not identifiable.

6.3.1 Coins by Mark Curteis

The coins are dated to roughly within the same period, AD 330-40, and are comparatively common issues. Both coins are little worn and it is likely that they were deposited during the 330s or 340s. The reverse of SF2 is illustrated in Plate 11 and on the front cover of the report.

SF1. House of Constantine

Obv: No details visible

Rev: [GLORIA EXERCITVS] 1std, slightly worn, mint-mark; AD 335-340

SF2. Constantinopolis

Obv: CONSTAN-TINOPOLIS

Rev: Victory on prow, slightly worn, mint-mark: AD 330-337

Five coins were recovered during previous fieldwork (Medlycott 1994). Most of these were in poor condition, although one was positively identified to *c*. AD 330-35, while another was slightly earlier and dated AD 324-25. An earlier coin was a possible radiate copy which would date to *c*. AD 275-80. All of the coins fit within the accepted dates for the 'Saxon

Shore' fort at Bradwell which is thought to have been constructed in the late 3rd century AD (after *c*. AD 260) and continued at least until the end of the 4th century. Over 200 coins, with issues ranging from Gallienus (AD 253-68) to Arcadius (AD 395-408), have been recovered from the fort, with coins of Constantine (AD 306-37) being the most common (EHER 31).

6.4 Unworked stone and flint

Eight contexts produced pieces of unworked stone and a further two (fills 1016 and 1018) contained burnt flints. Fill 1018 of pit 1017 also contained a single unworked flint lump. The unworked stone mainly comprises septaria fragments, amounting to at least sixteen pieces, weighing just over 1.2kg. Other unworked stone types include tufa and Kentish ragstone. A substantial block of the latter was recovered from wall 1043. All of the recorded stone types were used as building stone in the Roman period. Septaria fragments, described as building rubble, were found in the assemblage from the previous excavation (Major 1994, 68), along with a piece of Kentish greensand.

6.5 Animal bone

More than 10kg of animal bone was recorded, with three-quarters by weight of the total retrieved from the fills of pits 1011 and 1017. The bone was scanned for condition and completeness, and basic identifications of the taxa and the skeletal elements present were carried out, where possible, using Schmid (1972). The assemblage is fragmented, although several contexts contained large elements. The bone is in good surface condition, except for that in fills 1006 and 1034. Cattle is the predominant taxon, recorded in ten contexts; small quantities of sheep/goat were also identified. Pig and bird bones were each noted in two contexts and antler/deer in three. Several horse bones were found in the fill of gully 1025.

Most of the bone is fragmentary and in small amounts per context, but the cattle bones in pits 1011 and 1017 and, to some extent, in ditches 1003 and 1045, are large enough and in sufficient quantity for further comment. The combined weight of animal bone for these four contexts is 9.5kg, almost all of which is cattle. Bone fragments, such as ribs and vertebra, which have been ascribed to large mammal, are also likely to derive from cattle. The bone elements consist almost entirely of mandibles, maxillae, loose molars and lower limb and foot bones; that is, predominantly head and foot elements. This is indicative of primary butchery waste, where the extremities were removed from the carcass during skinning, perhaps in preparation for the utilisation of the removed hide. The largest amount by far came from the fills of pit 1011, and chop marks were noted on the bone from two of the fills

(1004 and 1015). Although other finds types were also found in pit 1011, it would appear that the pit was mainly used for the disposal of primary butchery waste.

Cattle was the predominant taxon from the previous work (Luff 1994, 69) but no butchery marks were evident. In contrast to the bone from the current work Luff states that the assemblage was fragmented and in a poor state of preservation. Nevertheless, cattle, horse, pig and sheep/goat were all identified, with both meat-bearing and non-meat-bearing elements present.

6.6 Shell

Seven contexts produced shell, although almost 98% by weight came from a single context (fill 1047 of ditch 1045). A total of 159 shells, weighing 1499g, was recovered; oyster formed the largest proportion, but cockle, whelk and mussel were also noted. Fill 1047 also produced several Venus clam shells. The oyster in fill 1047 is mainly composed of large examples in good condition and a minimum of twenty-five individuals was estimated. This deposit of shells most likely represents disposal of domestic refuse, although very little else was recorded in the context. Other fills in the ditch, however, contained a range of finds types, including animal bone, supporting this view.

6.7 Other finds

Baked clay fragments, amounting to five pieces, weighing 56g, were recovered from three contexts. The pieces are too small and undiagnostic for further comment. The remaining finds, both from ditch 1003, comprise a piece of slag and a small sherd of blue-green glass from a prismatic bottle of Roman date.

6.8 Comments on the assemblage

A range of predominantly late Roman finds, albeit in small quantities, was recovered. The assemblage is comparable with that from previous work (Medlycott 1994), although in smaller amounts and with a more restricted range of finds types. Activity from the late 3rd to the end of the 4th century is suggested, although evidence for 5th-century occupation is not certainly attested. The finds indicate domestic activity, with suggestions of a demolished building, probably a bath-house, in the vicinity. Primary butchery was also evidently taking place.

Further work is not required on any of the finds, mainly due to the small amounts present. The Roman pottery has been recorded to the minimum archive standard recommended by

the Study Group for Roman pottery (1994). The tile and animal bone have also been recorded to archive standard. The coins have been conserved and identified, and the ironwork does not merit x-radiography. Other categories of finds are in very small quantities.

Smaller brick and tile fragments have been discarded following recording, as have the small shell fragments from three contexts. All of the remaining finds should be retained, although the unworked stone, nails, slag and baked clay could be discarded at the archiving stage.

7.0 CONCLUSIONS

The earliest evidence revealed by the excavation comprised two loosely dated prehistoric gullies and a small quantity of residual prehistoric pottery. The majority of the features were Roman, contemporary with the late Roman fort of Othona. There is no evidence of later features or deposits, either related to the middle Saxon church of St Peter-on-the-Wall, or to early medieval flooding. The Roman features were sealed by topsoil and showed little evidence of later disturbance, apart from a World War Two tank trap and modern field drains in the east of the excavation area.

The excavation revealed Roman enclosure ditches, pits and a probable outbuilding, dating to the late 3rd to late 4th centuries, representing extra-mural activity related to the late Roman fort. These complement the Roman features and finds encountered during the previous excavation to the north of the current site (Fig. 3). Two main phases of ditched enclosures were identified (Fig. 4). Ditches 1005 and 1027 appear to have formed the south-western and south-eastern sides of an initial enclosure in the eastern area of the site, and were replaced by ditches 1003 and 1020, forming a larger enclosure extending to the west. Coins recovered from ditch 1005 of the second phase of the enclosure are dated to between AD 330 and 340. Ditches 1039 and 1041 in the east of the excavation area may also have been part of the enclosure complex, but their relationship with the other enclosure ditches could not be determined.

A group of features at the western end of the excavation area represented a later phase of activity dated to the later 4th century (Fig. 4). Ditch 1045 was narrower and steeper-sided than the other enclosure ditches and is interpreted as a sub-division of a larger enclosure. Wall 1043, which abutted ditch 1045, probably represents part of a small outbuilding, and its unmortared rubble foundation suggests it would have had a timber rather than a stone

superstructure. These features suggest that the enclosure complex was modified and remained in use up to the end of the 4th century.

The enclosures were aligned along the same axes as the late Roman ditches recorded in the south of the the1992-3 excavation (Medlycott 1994), interpreted in the present report as enclosure and drainage ditches at the edge of the ancient salt marsh (Fig. 3). Two ditches excavated in evaluation trench 4 to the south-west of the current site appear to have formed part of an enclosure following the same south-west to north-east alignment as recorded elsewhere (Medlycott 1991). Altogether, the evidence from all these areas indicates that the land to the north of the fort was occupied by a complex of enclosures (Figs 3 and 6). The alignment of the enclosures, however, was not that of the fort, but instead reflected the natural topography. Ditch 1005 of the earliest enclosure phase ran along the 4m contour, and the enclosure complex in general conforms closely to the natural lie of the land. The main axis of the enclosure ditches, from south-west to north-east, would have aided drainage down the natural slope in that direction.

The medieval estuarine flood deposit 554, recorded in the 1992-3 excavations immediately to the north (Medlycott 1994), was not encountered in the current excavation area (Fig. 3). This is due to a slight rise in the land towards the south-west, so that the current site is marginally higher above sea level. Only two natural gullies were identified in the current excavation, compared with the dense pattern of natural erosion and drainage gullies across the northern half of the 1992-3 excavation area. This suggests that the limit of the salt marsh originally ran through the southern part of the 1992-3 area, around 25-30m north of the current excavation. This accounts for the contrast in the character of the Roman remains between the 1992-3 and the current excavation areas.

The finds recovered from the late Roman features recorded in the current excavation are typical of domestic refuse, although there is some evidence of more specific activities. The animal bone assemblage indicates that butchery occurred on or close to the site, as primary butchery waste (cuts from the extremities of the limbs and heads of the animals) was deposited within several of the features, especially in pit 1011. This process would have enabled the animals to be skinned for their hides before being further butchered into meat joints. Cattle formed the major part of the assemblage, although small amounts of sheep and pig were also present. A large quantity of molluscan evidence was also recovered, the majority of which came from one ditch (1045), whose second fill (1047) contained a large quantity of oyster shells, with smaller amounts of cockle, mussel, whelk and clam shells.

This indicates that a range of shellfish was being collected and formed part of the diet. The concentration of shells most likely represents a deposit of sorted domestic refuse. An initial interpretation that the shell deposit indicates processing of shellfish is considered unlikely; as shellfish usually remain in the shell, which is discarded during food preparation or eating.

8.0 ASSESSMENT OF RESULTS

The earliest archaeological evidence on the site is dated to the prehistoric period but only two features were recorded and none of the prehistoric pottery was closely datable. The earlier excavation in 1992-3 to the north of the site revealed six tentatively dated prehistoric features (Medlycott 1994), although early activity in the site area is implied by the recovery of a Neolithic or Early Bronze Age flint leaf-shaped arrowhead dating to between *c.* 3500 and 1300 BC (Austin 1994). The current excavation confirms the presence of prehistoric activity in the area to the south of the previous excavation, but does not add significantly to the overall interpretation.

The excavation identified significant new evidence of extra-mural activity dated to the late 3rd to late 4th centuries related to the late Roman fort. This comprised two main phases of ditched enclosures, the latest of which was sub-divided in the later 4th century, and rubbish pits. These features were similar to those encountered in the 1991 evaluation trenches and the south of the 1992-3 excavation area both in date and type, and provide clear evidence for an extensive complex of enclosures north of the fort (Figs 3 and 6). A major difference from the 1992-3 excavation was that a wall of a later 4th century building was recorded, although it was not substantially built and probably represents an outbuilding.

Significantly, the excavation enabled the limit of the ancient salt marsh to be identified, and a clear distinction to be drawn between the enclosure complex to the south-west and the natural erosion and drainage gullies recorded in the north and east of the 1992-3 excavation area. The south-west to north-east alignment of the enclosures conformed to the outline of the slightly higher ground at the edge of the salt marsh rather than the alignment of the fort (Figs 3 and 6). The outbuilding, however, was aligned on the fort rather than the enclosures.

The finds from the excavation comprise typical domestic refuse, including pot sherds, brick and tile, animal bone, shell, and occasional coins, similar to the range and quantity of finds recovered from the earlier excavation (Medlycott 1994). No military-type finds were

recovered from the 2009 excavation, although this perhaps not surprising. Large-scale investigation of the extra-mural settlement at the Roman 'Saxon Shore' fort at Brancaster, Norfolk recovered only quite small quantities of military artefacts (e.g. weapons and military belt buckles) and the majority of the finds were unequivocally domestic in character (Hinchcliffe and Sparey-Green 1985, 179).

The major difference in the 2009 finds assemblage was the large quantity of animal bone, with evidence for primary butchery, mainly of cattle. Evidence of butchery, again mostly of cattle, was also recorded at Brancaster, but taking place within domestic enclosures, and there was no clear distinction between zones of domestic and "other" activities such as butchery (Hinchcliffe and Sparey-Green 1985, 176-7). At Othona, without further fieldwork it is impossible to conclude whether the enclosures to the north of the fort represent a peripheral part of an extra-mural settlement, or whether they were specifically used for corralling and slaughtering livestock.

The presence of box flue tile within many of the features indicates that a building with a hypocaust (under-floor heating system), most likely a bath house, was present outside the fort. The existence of a bath house near the creek to the south of the fort has been attested to in previous investigations, as box flue tiles were discovered in a large dump of material in this approximate area.

The absence of later activity within the 2009 excavation conforms to the evidence revealed during the previous excavations, where only three post-Roman, pre-modern features were identified. Though 13th-14th century pottery was recovered from the previous excavation, this was confined to the waterlain flood layer 554 and is therefore not representative of on-site activity. It is likely that the land fell into disuse once the fort was abandoned. Although a Saxon pit was recorded in the previous excavation area, the 2009 excavation adds no further evidence of activity to the north of the fort contemporary with the subsequent middle Saxon church and monastery. Due to the site's location close to the shoreline and the Blackwater estuary, once the sea levels had increased in the late Saxon and early medieval periods, it would not have been an attractive settlement location (Fig. 6).

The environmental sampling strategy was abandoned once it became clear that there was no evidence on site for natural channels related to the salt marsh, or of post-Roman flooding of the site, and therefore no suitable organic deposits for analysis. The site was very

dessicated, partly due to the dry late summer and early autumn weather, and partly due to the insertion of land drains when the Othona Community was built in the mid 1990s.

With the exception of the World War Two tank trap and the modern drains no evidence of post-Roman activity was revealed during the excavation. There were no intrusive finds within the Roman features, indicating that the reliability of the dating evidence is strong. Several areas of animal burrowing were identified, with one area causing particular trouble to the interpretation of the relationship between wall 1043 and ditch 1045.

The aims and objectives of the excavation have mainly been achieved. All archaeological features within the footprint of the new building were investigated and the date, location, extent and character of the archaeological remains have been established. The excavation has not only established the character of extra-mural activity to the north of the late Roman 'Saxon Shore' fort, but has also enhanced the interpretation of the 1992-3 excavation, especially in defining the limits of the ancient salt marsh. It has also added to the wider understanding of the fort and its surrounds (Figs 2 and 6), by establishing that late Roman extra-mural activity north of the fort extended right up to the edge of the salt marsh. However, the excavation provided only a snapshot of one small area of extra-mural activity, and there is still some doubt as to whether this represented extra-mural settlement or merely a convenient area outside the fort for livestock management and butchery. The final objective of the excavation, to assess the relationship of site activity to the middle Saxon church and monastery could not be achieved due to the complete absence of Saxon evidence on the site.

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APPENDIX 1: FIELDWORK DATA

All dimensions are given in metres.

Context	Feature	Category	Details	Period
1000		Topsoil	Friable to firm, dark brown slightly clayey silt present to a maximum depth of 0.51m across the site. Contained frequent CBM and charcoal.	
1002		Natural	Varied across site. Light yellow clayey silt, orange clay with chalk as well as gravel towards the eastern end of the site.	
1003	1003	Ditch	Slightly curvilinear ditch orientated roughly NE to SW (6.5m+ x 1.15m x 0.37m). Contained 1004, 1008 and 1019.	Late Roman
1004	1003	Upper fill	Firm greyish brown clayey silt fill of ditch 1003.	Late Roman
1005	1005	Ditch	NW to SE orientated ditch base (13.5m+ x 1.15m x 0.20m). Contained 1006, 1009 and 1010.	Late Roman
1006	1005	Upper fill	Firm greyish brown silty clay fill of ditch 1005 (N segment). Same as 1009.	Late Roman
1008	1003	Second fill	Friable greyish orange sandy silt fill of ditch 1003.	Late Roman
1009	1005	Upper fill	Firm dark brownish grey silty clay fill of ditch 1005 (S segment). Same as 1006.	Late Roman
1010	1005	Primary fill	Compact orange grey clayey silt fill of ditch 1005 (S segment). Not present in N segment.	Late Roman
1011	1011	Pit	Large pit (2.31m x 1.63m x 0.81m). Contained 1012, 1013, 1014, 1015 and 1016.	Late Roman
1012	1011	Primary fill	Loose mid brown orange silty sand in pit 1011	Late Roman
1013	1011	Second fill	Firm mid brown orange clayey sandy silt in pit 1011	Late Roman
1014	1011	Third fill	Loose mid brown orange silty sand in pit 1011	Late Roman
1015	1011	Fourth fill	Firm light orange grey clayey silt in pit 1011.	Late Roman
1016	1011	Upper fill	Firm slightly grey yellow slightly clayey silt in pit 1011.	Late Roman
1017	1017	Pit	Oval shaped pit (1.05m x 0.91m x 0.27m).	Late Roman
1018	1017	Fill	Firm dark grey clayey silt with frequent charcoal. Only fill of pit 1017.	Late Roman
1019	1003	Primary fill	Firm orange grey clayey silt in ditch 1003	Late Roman
1020	1020	Ditch	NE–SW aligned ditch (5.0m+ x 1.08m x 0.33m). Contained 1021 and 1022.	Late Roman
1021	1020	Primary fill	Yellowish brown friable silty clay in ditch 1020.	Late Roman
1022	1020	Upper fill	Greyish brown friable silty clay in ditch 1020.	Late Roman

1023	1023	Natural feature	Irregular oval (0.9m x 0.54m x 0.10m).	Natural
1024	1023	Fill	Moderately hard, yellow grey brown silty clay in natural feature 1023.	Natural
1025	1025	Gully	Aligned SE-NW (0.5m+ x 0.45m x 0.23m). Contained 1026.	Late Roman
1026	1025	Fill	Friable dark greyish brown silty clay in gully 1025.	Late Roman
1027	1027	Ditch	SW-NE aligned ditch (5.5m+ x 0.66m x 0.23m). Contained 1028	Late Roman
1028	1027	Fill	Firm mid brown grey clayey silt in gully 1028.	Late Roman
1029	1029	Natural gully	Curvilinear gully (1.2m x 0.8m x 0.13m). Contained 1030	Natural
1030	1029	Fill	Compact yellow grey sandy silt in natural gully 1029.	Natural
1031	1031	Natural gully	Sinuous gully orientated roughly SE to NW (7m+ x 1m x 0.13m)	Natural
1032	1031	Fill	Friable light greyish brown silty clay fill of natural gully 1031.	Natural
1033	1033	Gully	Shallow, gully aligned N-S (0.97m+ x 0.36m x 0.05m). Contained 1034.	Natural
1034	1033	Fill	Firm light grey orange clayey silt in gully 1033.	Natural
1035	1035	Natural depression	Irregular oval feature (0.60m x 0.47m x 0.07m). Contained 1036.	Natural
1036	1035	Fill	Compact light grey orange clayey silt in natural feature 1035.	Natural
1037	1037	Natural feature	Slightly oval (0.40m+ x 0.72m x 0.04m). Contained 1038.	Natural
1038	1037	Fill	Compact light yellow grey silt in natural feature 1037.	Natural
1039	1039	Ditch	Curvilinear ditch orientated roughly SE-NW (3.4m+ x 1.26m x 0.21m).	Late Roman
1040	1039	Fill	Firm mid grey orange brown slightly clayey silt fill of ditch 1039.	Late Roman
1041	1041	Ditch	Curvilinear ditch (3.8m+ x 0.72m x 0.30m)	Late Roman
1042	1041	Fill	Firm mid grey brown clayey silt in gully 1041.	Late Roman
1043	1053	Wall	Orientated SSW to NNE. Rubble construction. Within packing 1044 and construction cut 1053.	Late Roman
1044	1053	Wall packing	Firm light yellow grey clayey silt in foundation trench 1053.	Late Roman
1045	1045	Ditch	Orientated NW-SE (3.2m+ x 0.62m x 0.51m). Contained 1046, 1047, 1048	Late Roman

1046	1045	Primary fill	Firm greyish orange gravely clay in ditch 1045.	Late Roman
1047	1045	Second fill	Firm brownish orange clay in ditch 1045.	Late Roman
1048	1045	Upper fill	Firm black clayey silt with frequent charcoal in ditch 1045.	Late Roman
1049		Finds	Pottery recovered from area of burrowing next to wall 1043 and foundation trench 1053.	Late Roman
1050		Finds	Pottery, animal bone and tile recovered during cleaning around ditches 1039 and 1041.	Late Roman
1051	1051	Posthole	Slightly oval (0.29m x 0.20m x 0.15m).	Undated
1052	1051	Fill	Firm light brown grey clayey silt in Posthole 1051	Undated
1053	1053	Foundation trench	Very disturbed edges, where present vertical with concave base (0.45m+ x 0.31m x 0.19m) Contained 1043 and 1044.	Late Roman
1054	1054	Stakehole	Oval (0.19m x 0.16m x 0.19m) cut into base of 1053	Late Roman
1055	1054	Fill	Firm light grey orange clayey silt in stakehole 1054.	Late Roman
1056		Finds	Pottery and tile recovered from animal burrow to S of Wall 1043.	Late Roman
1057	1057	Gully	N-S shallow gully (3.17m+ x 0.27m x 0.11m). Contained 1058	Prehistoric
1058	1057	Fill	Firm light grey brown clayey silt in gully 1057.	Prehistoric
1059	1059	Gully	N-S shallow gully (2.22m+ x 0.41m+ x 0.07m). Contained 1060	Prehistoric
1060	1059	Fill	Compact light yellow grey silt in gully 1059.	Prehistoric
1061	1061	Pit	Oval (0.42m x 0.27m x 0.07m) contained 1062.	
1062	1061	Fill	Firm light grey yellow clayey silt in pit 1061.	Roman
1063		Finds	Recovered from around ditches 1003 and 1027.	Late Roman

APPENDIX 2: FINDS AND ENVIRONMENTAL MATERIAL

Context	Feature	Count	Weight	Description	Date
1000	Topsoil	1	16	Pottery; base sherd, sandy grey ware	Roman
1004	1003	1	<1	SF1, Copper alloy coin, poor condition	Late Roman
		1	2	SF2, Copper alloy coin	4th C
		87	835	Animal bone; cattle mandible fragments and molars, some loose; cattle tibia, distal end, in two pieces, cattle horn core; cattle calcaneus and phalanges, incomplete; scapula, glenoid cavity and part-pelvis, ?sheep/goat; fragments, inc rib and vertebra, large mammal, some with chop marks	-
		5	1345	Unworked stone, inc septaria and tufa	-
		1	32	Slag	-
		1	2	Glass; base or body sherd from blue-green prismatic bottle, 7mm thick	Roman
		34	2745	Tile fragments, inc brick, tegula and box-flue tile (15/294g small pieces discarded)	Roman
		19	168	Pottery; B5 dish rim sherd, fine grey ware; dish base, Nene Valley colour-coated ware; flagon handle, pink fabric; jar rim sherd, Hadham oxidised ware; body sherds, amphora, fine and sandy grey wares	Roman
1006	1005	3	22	Iron nails	-
		34	258	Animal bone; most in poor condition; molars, sheep/goat; mandible fragment and radius, proximal end, large mammal; tibia, distal end, incomplete, ?pig; tibia, proximal end, unfused, plus part of epiphysis, sheep/goat; fragments	-
		4	94	Septaria fragments	-
		2	42	Baked clay	-
		56	1075	Tile fragments, inc overfired brick, imbrex and box-flue tile (42/242g small pieces discarded)	Roman
		19	130	Pottery; B1 dish rim sherd, sandy grey ware; jar rim sherds, fine grey ware and black-surfaced ware; base and body sherds, inc tiny Oxford red colour-coated ware	Roman
1009	1005	1	8	Septaria	-
		3	96	Tile fragments	Roman
		3	16	Pottery; joining jar base sherds, Rettendon ware; rim sherd, red ware	Roman
1014	1011	94	4125	Animal bone; cattle mandibles and fragments, most with molars; cattle skull and maxilla fragments, some with molars; cattle tibia, proximal end lacking, phalanx, calcaneus, astragali, naviculo-cuboid, radius and metacarpus, distal ends, metapodial, proximal end; astragalus and tibia, distal end, pig; vertebra, large mammal; fragments	-
		7	1150	Tile fragments, mostly brick	Roman
1015	1011	59	1780	Animal bone; cattle mandibles, each with molars, and fragments; cattle metacarpus, metatarsus, proximal end, humerus, distal end, hoof, astragalus, unfused; skull, maxilla and vertebrae fragments, large mammal; ulna/radius, proximal end, large mammal; bird humerus, proximal end; fragments, some with chop marks; ?antler fragments	-
		4	515	Tile fragments, inc brick and imbrex	Roman
		3	80	Pottery; beaker base, Nene Valley colour-coated ware; joining body sherds, sandy grey ware	Roman

Context	Feature	Count	Weight	Description	Date
1016	1011	39	1460	Animal bone; cattle atlas vertebra, molar, naviculo-cuboid, phalanges, metacarpus x 2, humerus, distal end and proximal condyle, acetabulum; fragments, inc rib and vertebrae, large mammal	-
		4	8	Shell; oyster fragments (Discarded)	-
		1	24	Burnt flint	-
		11	1030	Tile fragments, inc brick and box-flue tile	Roman
		9	164	Pottery; G35 jar rim sherd, base and body sherds, sandy grey ware	Roman
		1	2	Pottery; body sherd	Prehistoric
1018	1017	1	6	Iron nail	-
		32	600	Animal bone; cattle scapula, proximal end; cattle maxilla fragment with two molars; loose cattle molars; cattle tibia, distal end, metapodial distal condyle and naviculo-cuboid; fragments, inc rib from large mammal	-
		2	1	Shell; cockle, two valves	-
		1	26	Flint lump	-
		2	76	Burnt flints	-
		13	920	Tile fragments, inc tegula	Roman
		2	66	Pottery; body sherd, BB1; beaker base, ?Oxford red colour-coated ware	Roman
1019	1003	1	2	Animal bone; ?rib fragment, large mammal	-
1021	1020	6	16	Animal bone; fragments	-
		2	18	Shell; oyster, one valve and fragment	-
		2	140	Septaria	-
		6	390	Tile fragments, inc brick corner (4/36g discarded)	Roman
		5	42	Pottery; G24 jar rim sherd, flinty sandy grey ware; H6 beaker rim sherd, red ware; body sherds, fine and sandy grey wares	Roman
1022	1020	1	10	Iron object; ?blade fragment	-
		12	68	Animal bone; cattle incisor, worn; fragments	-
		1	108	Septaria	-
		14	1340	Tile fragments (8/170g discarded)	Roman
		11	100	Pottery; B1 dish and jar rim sherds, sandy grey ware; footring base sherds, black-surfaced ware; body sherds, fine and sandy grey wares and Hadham oxidised ware, one decorated	Roman
1024	1023	3	6	Pottery; joining body sherds, late shell-tempered ware	Roman
1026	1025	18	218	Animal bone; horse phalanx, distal end missing, perhaps unfused; horse metapodial, distal end; sheep/goat molar, phalanx and femur condyle; fragments, one part-burnt	-
		2	456	Septaria	-
		1	6	Baked clay	-
		5	414	Tile fragments, inc box-flue tile	Roman
		2	6	Pottery; body sherds, red ware and late shell-tempered ware	Roman
1028	1027	2	6	Iron object, incomplete	-
		10	42	Animal bone; cattle molar; bird bone; fragments	-
		2	48	Tile fragments, inc tegula flange	Roman
		7	52	Pottery; base and body sherds, sandy grey ware and red ware	Roman
1034	1033	2	10	Animal bone; fragments, poor condition	-
		3	224	Tile fragments	Roman

Context	Feature	Count	Weight	Description	Date
1040	1039	10	204	Animal bone; tibia, distal end, ?deer; vertebra fragments, large mammal; fragments	-
		1	118	Tile fragment	Roman
		1	14	Pottery; B6 rim and flange sherd, Nene Valley colour-coated ware	Roman
		1	2	Pottery; body sherd	Prehistoric
1042	1041	8	266	Animal bone; cattle humerus, distal end; fragments, inc rib and vertebra	-
		8	316	Tile fragments, inc box-flue tile	Roman
		8	138	Pottery; B6 dish rim and base sherds, fine grey ware; beaker base, Nene Valley colour-coated ware; body sherds, sandy grey ware and Hadham oxidised ware	Roman
1043	1053	1	394	Septaria	-
		1	4010	Kentish ragstone block	-
		1	268	Tile fragment	Roman
1044	1053	1	146	Tile fragment	Roman
		3	8	Pottery; joining G27 jar rim sherds, late shell-tempered ware	Roman
1046	1045	1	4	Shell; oyster fragment	-
1047	1045	1	14	Animal bone; antler fragment, ?sawn at one end, abraded	-
		145	1465	Shell; oyster, mainly large examples, forty-five valves and fragments; two whelks and fragments; mussel fragments; cockle, six valves and fragments; Venus clam, four valves and fragments	-
		1	2	Pottery; base sherd, late shell-tempered ware	Roman
1048	1045	10	70	Iron nails	-
		60	700	Animal bone; cattle scapula, glenoid cavity; ?cattle humerus, distal end and radius, proximal end, both fragmented; cattle molars; cattle astragalus; fragments, inc second scapula	-
		1	1	Shell; oyster fragment (Discarded)	-
		2	8	Baked clay	-
		5	58	Septaria	-
		49	2020	Tile fragments, inc brick, tegula and box-flue tile (33/400g discarded)	Roman
		46	202	Pottery; G35 jar rim sherd, sandy grey ware; H41 beaker rim sherd, Nene Valley colour-coated ware; jar rim sherd, Hadham oxidised ware; body sherds, fine and sandy grey wares, late shell-tempered ware, black-surfaced ware and Nene Valley colour-coated ware, most of these with barbotine and one rouletted	Roman
1049	Finds	2	22	Pottery; body sherds, Nene Valley colour-coated ware and fine grey ware	Roman
1050	Finds	4	104	Pottery; mortarium rim sherd, Oxford white ware; jar rim sherd and dish base sherds, black-surfaced ware	Roman
1056	Finds	1	12	Tile fragment	Roman
		5	30	Pottery; base and body sherds, black-surfaced ware (all same vessel); body sherd, sandy grey ware	Roman
1058	1057	2	6	Pottery; joining body sherds	Prehistoric

Context	Feature	Count	Weight	Description	Date
1062	1061	2	1	Animal bone; fragments (Discarded)	-
		1	66	Tile fragment; tegula flange	Roman
1063	Finds	7	66	Animal bone; cattle molar; fragments	-
		4	2	Shell; cockle fragments (Discarded)	-
		9	288	Tile fragments (6/70g discarded)	Roman
		4	30	Pottery; B5 dish rim sherd, fine grey ware; B10 dish rim sherd, red ware; body sherds, sandy grey ware	Roman

APPENDIX 3: ARCHIVE INDEX

OTHONA COMMUNITY SITE, EASTEND ROAD, BRADWELL-ON-SEA, ESSEX (BROT09)

Index to the Archive

File containing:

1. Introduction

1.1 Brief for Excavation
1.2 WSI for Excavation.

2. Research Archive

2.1 Published Report
2.2 Excavation Report
2.3 Analytical Reports
2.3.1 Pottery Report
2.3.2 Conservation Reports
2.4 Catalogues
2.4.1 Context Finds Record
2.4.2 Roman Pottery Catalogue
2.5 Miscellaneous Finds Catalogue
2.6 CD Rom

3. Site Archive

3.1 Context Index
3.2 Context Record Register
3.3 Original Context Records 1000 to 1063 (1001 and 1007 voided)
3.4 Soil Sample Register
3.5 Soil Sample Record Sheets
3.5.1 Plans Register
3.5.2 Sections Register
3.6 Levels Register
3.7 Sample Register
3.8 Survey Data
3.9 Photographic Register
3.10 Photograph Contact Sheet
3.11 Miscellaneous maps and plans

Not in Files:

Site Drawings (3 permatrace sheets)
4 boxes of finds

APPENDIX 4: EHER SUMMARY SHEET

Site Name/Address: Othona Community Site, Eastend Road, Bradwell-on-Sea, Essex	
Parish: Bradwell-on-Sea	***District:*** Maldon
NGR: TM 03074 08347	***Site Code:*** BROT09
Type of Work: Archaeological Excavation	***Site Director/Group:*** Phillippa Sparrow ECC FAU
Date of Work: 21/09/09-01/10/09	***Size of Area Investigated:*** 256m²
Location of Finds/Curating Museum: Colchester and Ipswich Museum	***Funding Source:*** Othona Community
Further Work Anticipated? No	***Related EHER Nos:*** EHER 31-32, SM 24883
Final Report: EAH shorter note	***OASIS Ref.*** essexcou1-65787
Periods Represented: Prehistoric Roman Modern	

SUMMARY OF FIELDWORK RESULTS:

A small archaeological excavation was carried out by the Essex CC Field Archaeology Unit at the Othona Community site, within the footprint of a proposed new residential block to the south of the current main building. The site is located 120m north of the late Roman 'Saxon Shore' fort of Othona, built in c. AD 260-70, and the middle Saxon church of St-Peter-on-the-Wall, which stands on the west gate of the Roman fort. The fort and church are protected as a Scheduled Monument (SM 24883), but the excavation was located outside the scheduled area. A previous excavation in 1992-3 immediately to the north of the site recorded a series of natural gullies related to the salt marsh, a few prehistoric features, a large number of late Roman features representing extra-mural activity to the north of the fort, and a Saxon pit, all sealed by an early medieval estuarine flood deposit (Medlycott 1994).

The earliest evidence recorded within the 2009 excavation area comprised two gullies loosely dated to the prehistoric period. The majority of the archaeological evidence represents late 3rd to late 4th century extra-mural activity related to the Roman fort. Parts of two ditched enclosures were recorded, together with a short length of a late 4th century rubble foundation, probably part of an outbuilding, and two rubbish pits. The Roman features and finds complement those from the 1992-3 excavation, but with a larger animal bone assemblage, which contained evidence for primary butchery of cattle. A large assemblage of shells also indicates that oysters, with smaller amounts of whelks, cockles, mussels and clams, were being gathered and formed part of the Othona diet. No later finds or features were present, including no further evidence of Saxon activity related to the church of St Peter-on-the-Wall. A Second World War tank trap and several modern drains truncated several of the archaeological features.

The 2009 excavation area straddles the 4m AOD contour and is slightly higher than the 1992-3 excavation area to the north. The evidence of the 2009 excavation suggests that this area lay marginally beyond the limits of the ancient salt marsh and estuarine flooding. The Roman enclosures in the 2009 excavation area are related to similar features in the south of the 1992-3 excavation, but this activity forms a sharp contrast with the natural channels created by repeated inundations of the salt marsh in the northern half of the 1992-3 area.

Continued

Topographical survey of the wider area (Wilkinson and Murphy 1995; Heppell 2000; Medlycott 2000) has demonstrated that the late Roman fort was established on a low promontory, with estuarine alluvium and creeks to both north and south. Fieldwalking and geophysical surveys suggest the presence of Roman extra-mural activity to the west and south-west of the fort (Germany 2000; Wardill 2000). The 2009 excavation, although limited in size, has confirmed the existence of Roman extra-mural activity to the north of the fort also, extending up to the limits of the salt marsh on that side.
Previous Summaries/Reports: Medlycott, M. 1994. *The Othona Community site, Bradwell-on-Sea, Essex: the extra-mural settlement* Essex Archaeol. Hist., Vol. **25**, 60-71

Author of Summary: Phillippa Sparrow and Patrick Allen	***Date of Summary:*** 19/01/10

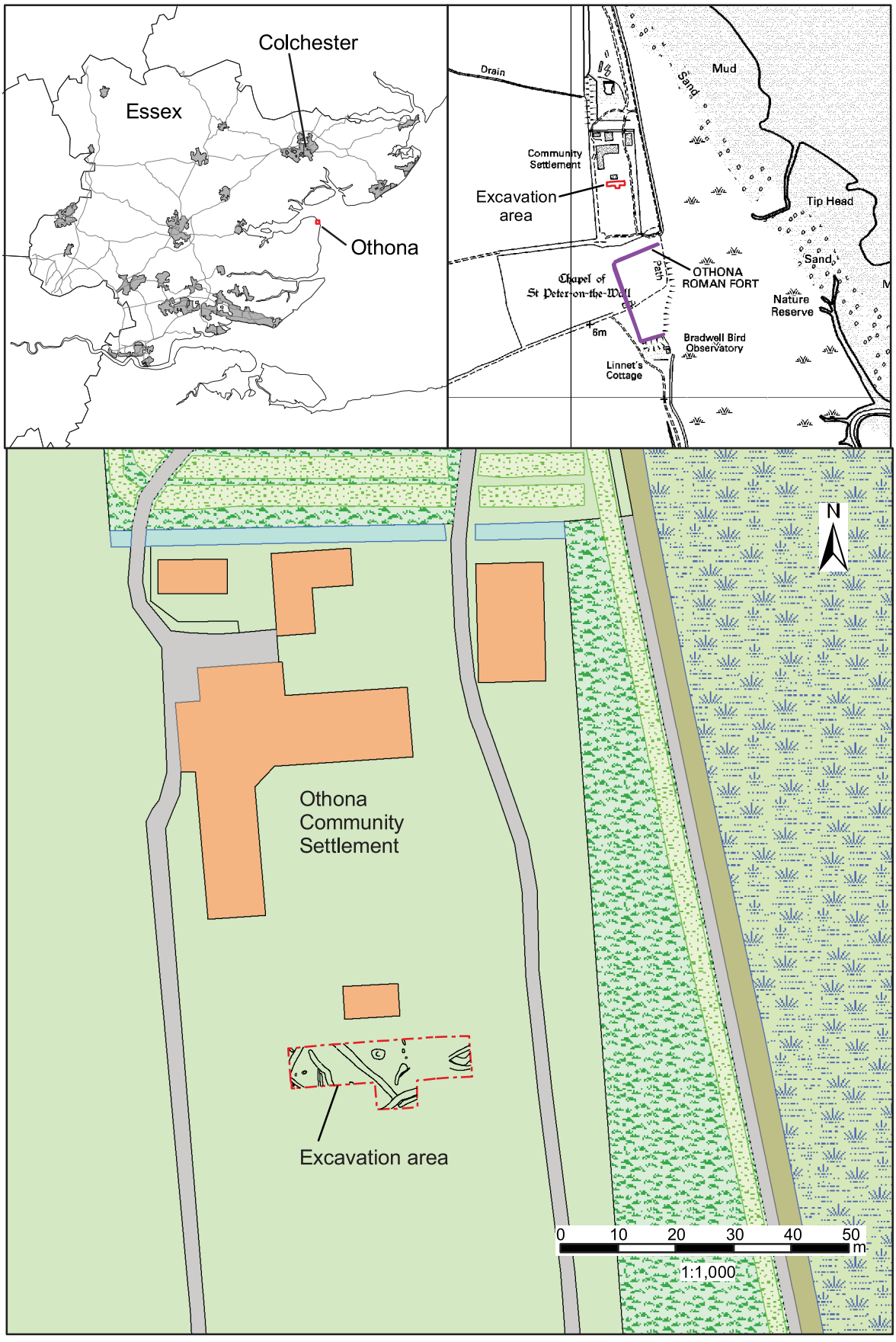

Fig.1. Site location

Essex County Council
Field Archaeology Unit

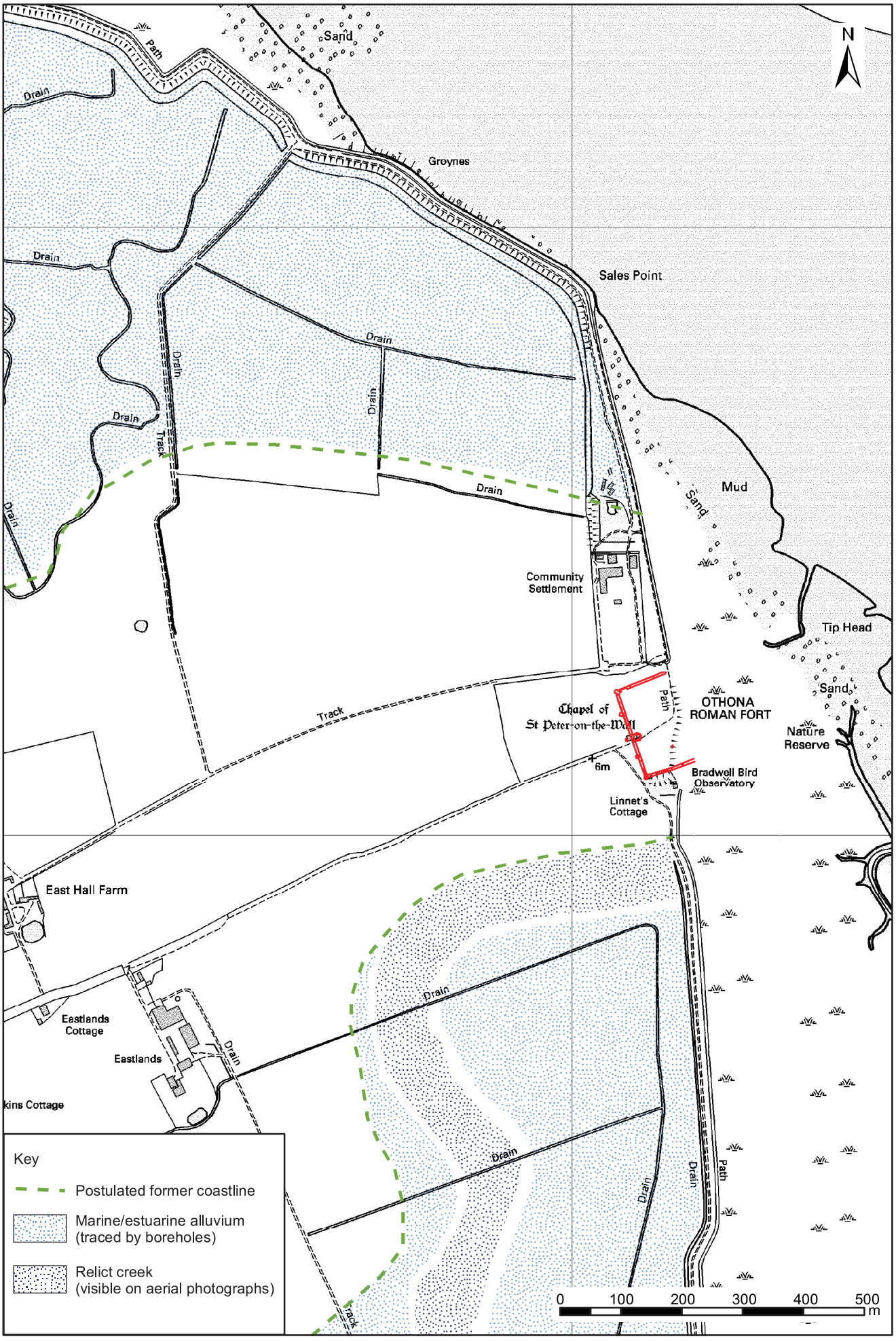

Fig.2. Postulated former coastline (based on Wilkinson & Murphy, 1995, fig.119)

Essex County Council
Field Archaeology Unit

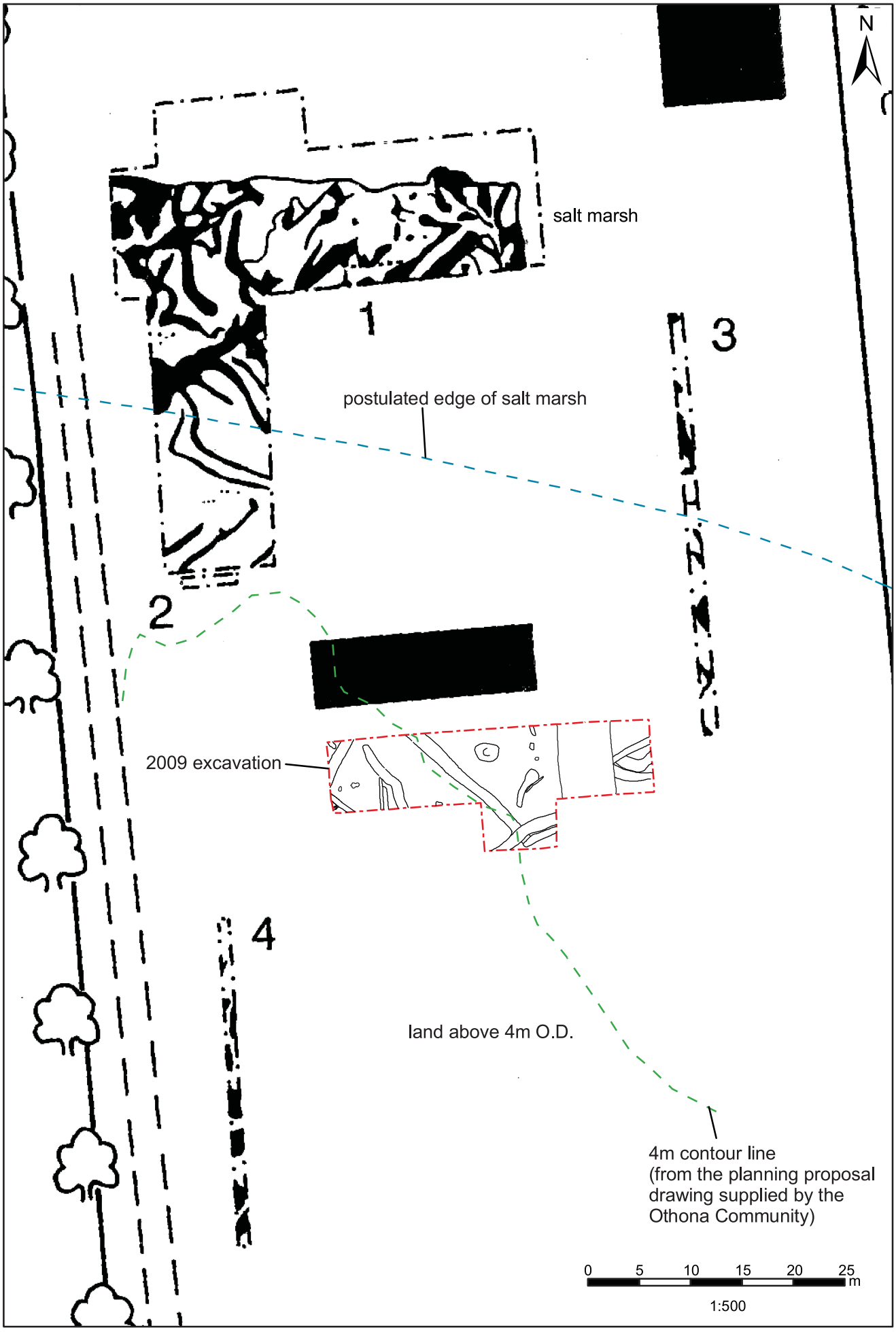

Fig.3. Current excavation together with previously excavated areas (Medlycott 1994)

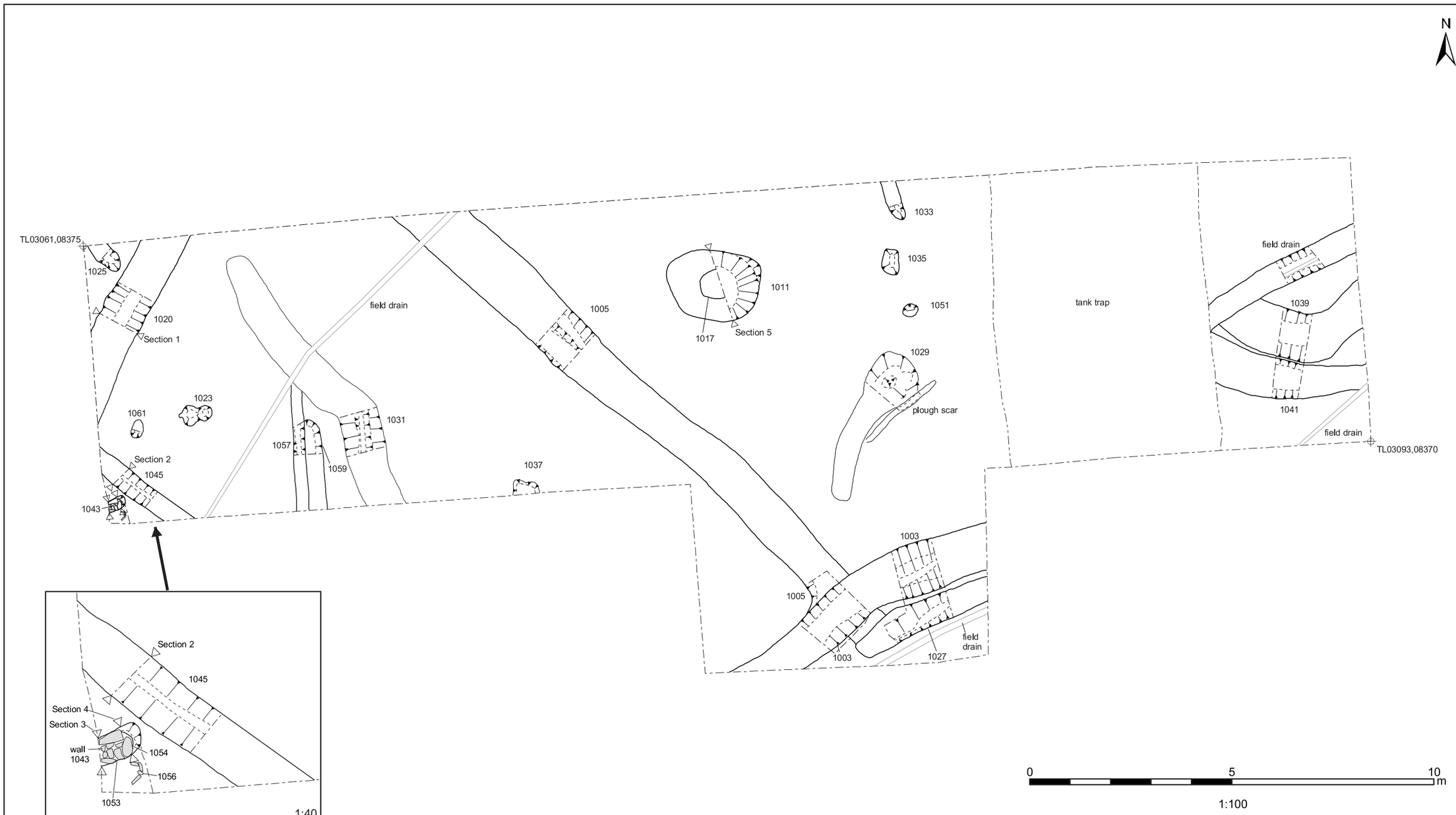

Fig.4. Excavated features

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Field Archaeology Unit

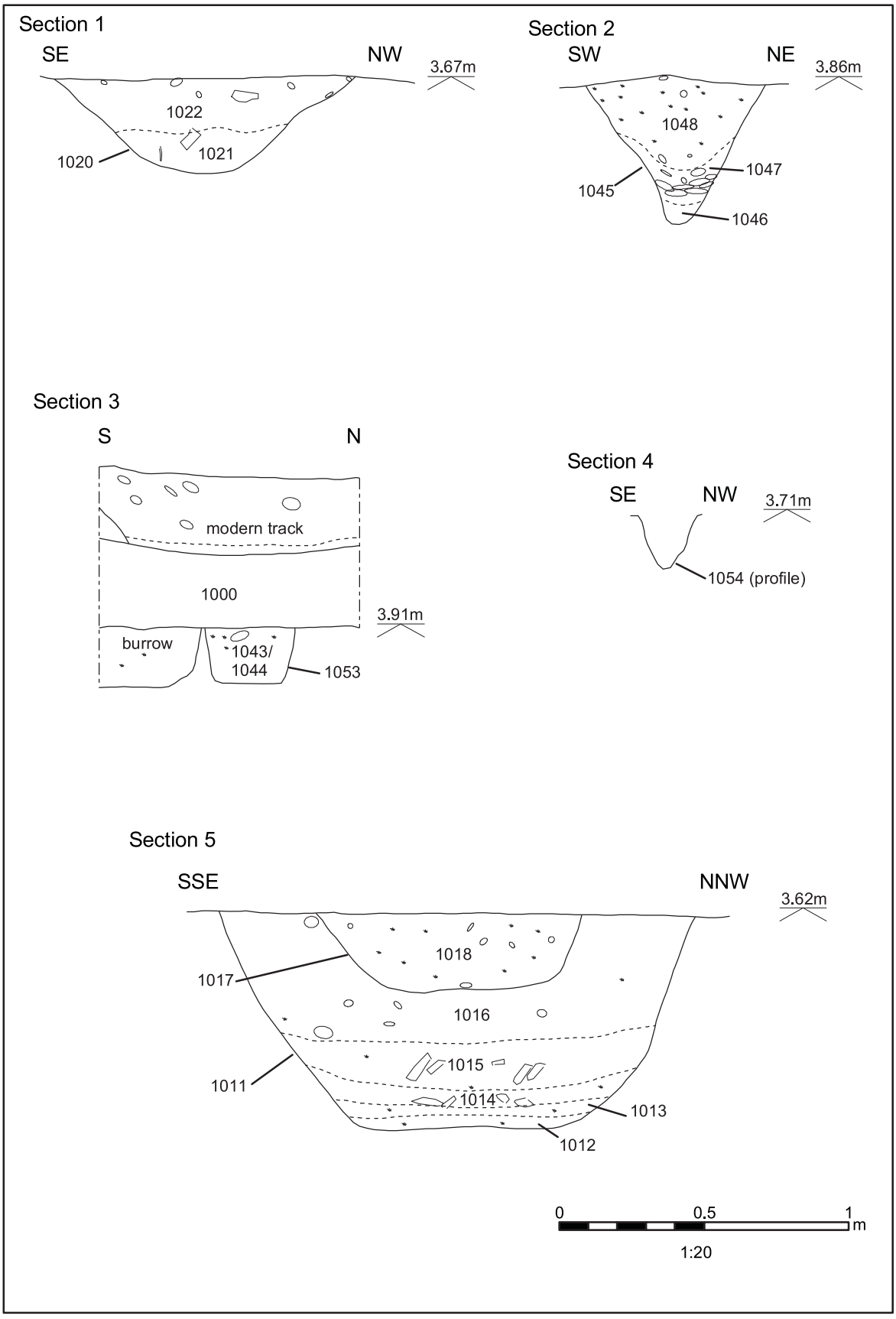

Fig.5. Sections

Essex County Council
Field Archaeology Unit

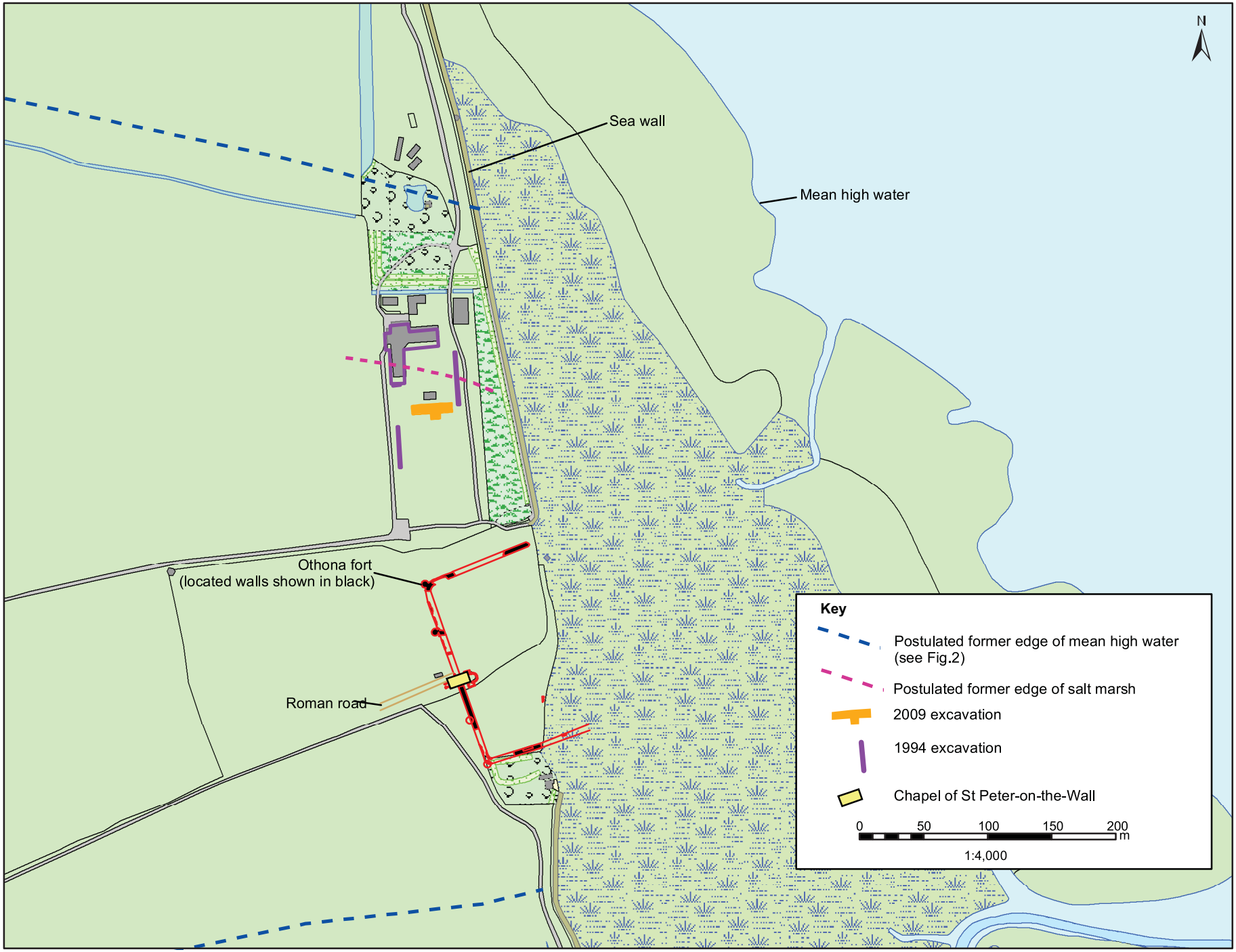

Fig.6. Othona Roman fort and topography

Essex County Council
Field Archaeology Unit

Plate 1. Ditches 1027, 1003 and 1005 (background), looking north-west

Plate 2. Ditch 1005, looking south-east. 1m scale

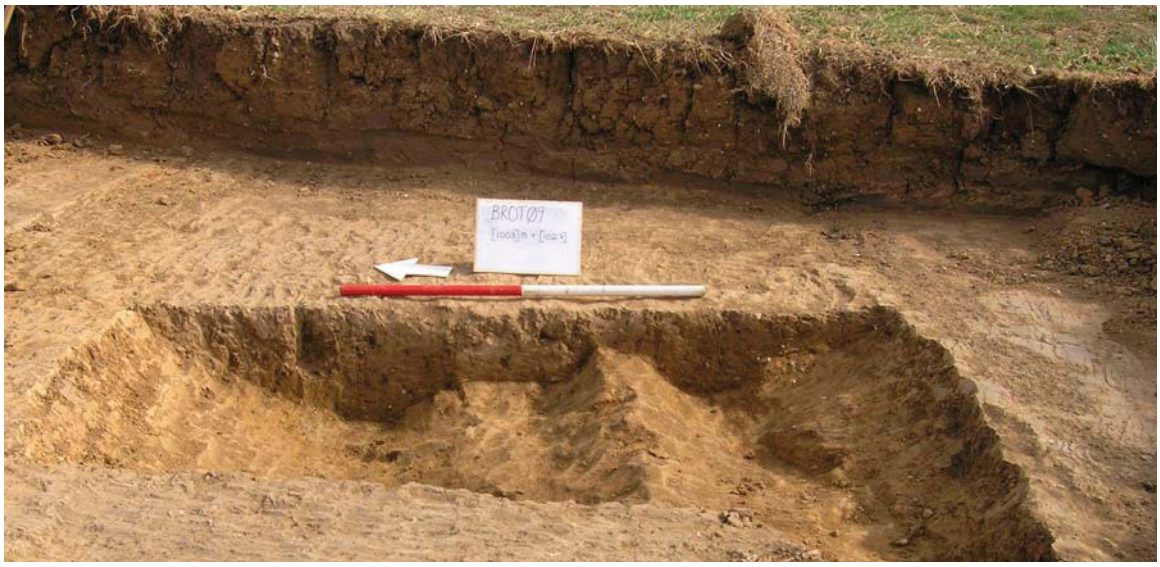

Plate 3. Ditches 1003 and 1027, looking east. 1m scale

Plate 4. Ditch 1003, looking south-west. 1m scale

Plate 5. Ditch 1020, looking north-west. 1m scale

Plate 6. Ditch 1045m, looking north-west.1m scale

Plate 7. Ditch 1045 and wall 1043, looking south-east. 0.5m scale

Plate 8. Stakehole 1054, construction cut 1053 of wall 1043. 0.5m scale.

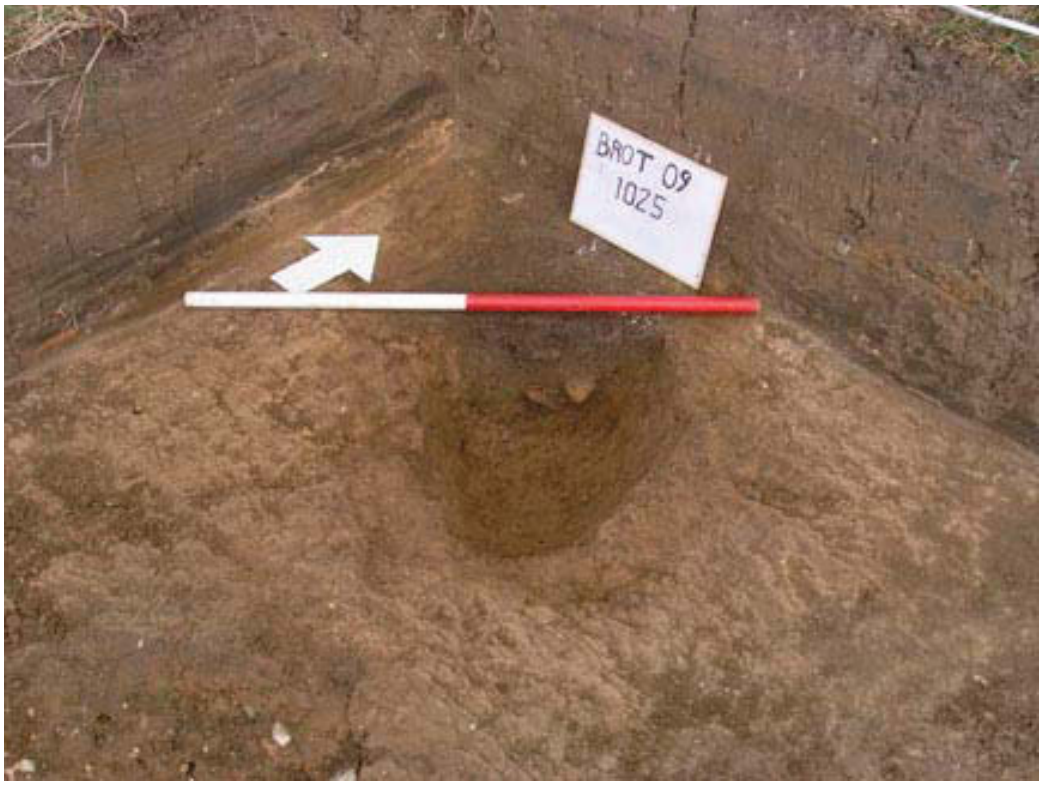

Plate 9. Gully 1025, looking north-west. 1m scale

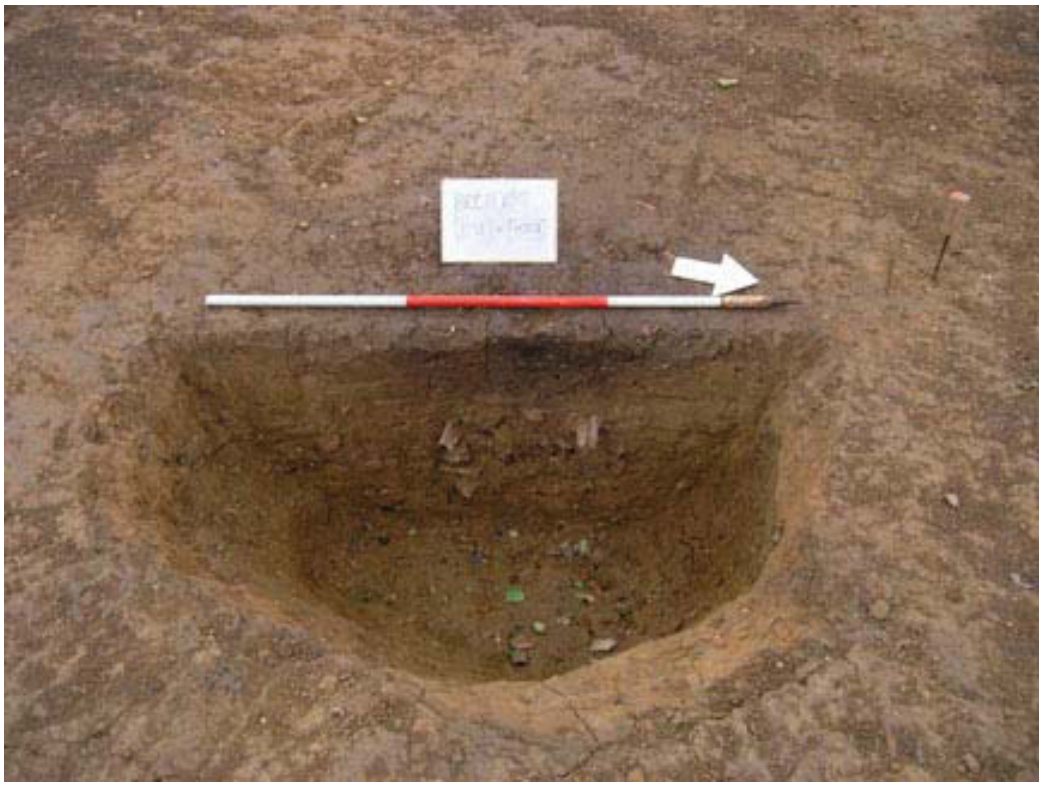
Plate 10. Pits 1011 and 1016, looking west-south-west. 1.5m scale

Plate 11. Copper alloy coin, Constantinopolis issue (AD 330-337) from ditch 1003 (fill 1004; SF 2). X5 actual size