

# The results of an archaeological evaluation in advance of the construction of an RSPCA Animal Centre at land between Queensdown Road and Woodchurch Road near Margate, Kent.

SWAT. Archaeology

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### Contents

1. Introductionpage 3.
2. Summary of resultspage 4.
3. Geological and Historical Backgroundpage 4.
ii) Earlier prehistorypage 7.
iii) Later prehistorypage 7.
v) Romano-Britishpage 9.
vi) Anglo-Saxonpage 10.
vii) Post medievalpage 11.
4. Kent Sites and Monuments recordspage 12.
5. The archaeological potentialpage 13.
6. Results of the evaluationpage 14.
7. Conclusionspage 19.
8. Referencespage 20.
9. Figurespages 21, 22, 23, 24.

### List of Illustrations

Front cover: This is a section of an Ordnance Survey map from the early nineteenth century. It shows with some clarity the island of Thanet as a crossroads on the sea routes of eastern England.

- Figure 1. Site location plan. Scale 1:2500.
- Figure 2. Trench location plan. Scale 1:800.
- Figure 3. Plan of Trench 3. Scale 1:140.
- Figure 4. Section of Trench 3.
- Figure 5. Roman nail: Trench 3. Scale 1:1.
- Figure 6. Roman nail: Trench 3. Scale 1:1.

### 1. Introduction

In March 2005, the Swale and Thames Archaeological Survey Company was commissioned by the Duncan and Graham Partnership to carry out an archaeological evaluation in advance of the construction of an RSPCA Animal Centre at land between Queensdown Road, Castlemayne Avenue and Woodchurch Road in Woodchurch near Margate in Kent.

The site (see Figs. 1&2), which has an area of approximately 1.27ha, lies on open sloping ground (between 25.3m and 32.4m OD) centred on National Grid Reference 632878 167472, approximately 2.5km south west of Margate.

The archaeological investigation took the form of the archaeologically monitored and supervised mechanical excavation of thirty-eight test trenches, each measuring 10m by 2m and cut to the depth of significant archaeological remains or, in their absence, to the surface of Upper Chalk.

The work took place in compliance with an archaeological specification (Kent County Council August 2004) issued by the Heritage Conservation Group of Kent County Council, and attached to Thanet District Council Planning Application Number TH/02/1161.

The area subject to investigation (1.27ha) was about 3.75% of the whole (Fig. 2).

The fieldwork, which began on the 14th March and was completed on 19th March 2005, was designed to assess the archaeological potential of the land which is intended for development as an RSPCA Animal Centre with associated single storey buildings and parking.

# 2. Summary of Results

The evaluation trenches were devoid of features apart from Trench 3 which exposed part of a Roman cemetery on the northern boundary of the site (Fig 2&3.). This consisted of four inhumations aligned east/west with the head to the west in Grave D. The grave cuts were enclosed by a possible fenced area indicated by post holes M, L, K, J, I, H, G, E, F.

Grave D was sampled by a keyhole excavation which exposed a left shin bone at the east end of the grave cut and two iron nails were retrieved, found with their points uppermost.

The nails have been identified as of Roman origin by Museum of London Specialist Services and the assessment recommendation is that 'no further work is required'. (Fig. 4,5).

In most of the rest of the site a layer of humic soil, clearly a modern agricultural soil, overlay the plough-truncated surface of chalk to a depth of between 0.24m to 0.41m, although in some areas intermediate deposits of granulated chalk in a clay-like paste overlay chalk. These deposits are probably the result of freeze and thaw on the chalk surface during the Devensian.

Given the small exposure in percentage terms represented by the thirty eight evaluation trenches, it is not surprising that no other archaeological features were exposed during the investigation. However, as is also the case for other sites in the vicinity, the investigation demonstrated that severe mechanical ploughing and sub-soiling on the site is likely to have destroyed all but the most deeply cut archaeological features or those lying below the chalk surface in Brickearth deposits yet to be exposed.

# 3. Geological Background

### i) Geology and geo-archaeology

Much of the surface geology of the Manston area (and indeed most of upland Thanet) consists of Upper Chalk, albeit much punctuated by solution pipes and hollows, some of considerable size. The pipes and hollows often contain basal periglacially-formed stiff orange-brown sandy clay, the sand probably representing remnants of the Thanet Beds (Allen and Green 2003, 2-3), which are of Tertiary (Palaeogene) origin and which now occur mostly to the south of Monkton immediately over Chalk. The sandy clay within the pipes and hollows is in turn commonly overlain by Brickearth of Loessic origin, defined in the Geological Survey as Quaternary Head Brickearth (Osborne-White 1928, 65-67).

Pegwell Bay, situated some 4.2km (2.6 miles) south-east of Manston, contains what is probably the most substantial deposit of Loess in Britain (Evans 1978, 63). Loess is a wind-deposited (aeolian), silt-dominated material occurring commonly on the North European plain. In Britain it occurs principally in the South East and is usually referred to under the generic name of Brickearth, of which it is a fine-grained and un-reworked example.

The Pegwell Bay Brickearth was first identified as Loess by Pitcher et al in 1954 and has subsequently been the subject of much specialist study (see, for example, Weir et al 1971, Dangerfield 1973, Shephard-Thorn 1977, Murton et al 1998, 35-38 and Murton et al 2003). In its original form Loess was laid down in an open environment with little or no ground cover, where the wind was able to abrade exposed surfaces and re-deposit the abraded material, often at considerable distances from its point of origin (Weir et al 1971, 131). It is therefore thought to have been a product of the dry, tundra-like periglacial conditions that prevailed in southern Britain during much of the last Ice Age.

The presence of less substantial Loess-like deposits on the uplands of Thanet north-west of Pegwell Bay has been noted in the Geological Memoir, particularly north of Minster, in the general area of Manston and the present development, where the material 'thins out on the rising ground of the chalk' (Osborne-White 1928, 66). The head of a drift-filled valley extending northwest as far as Grenham Bay occupies this area, and so the Loess-like material lying north of Minster a may form a continuous unit with Loess deposits identified at Grenham Bay, these providing an upper date of c. 12,000 BP (Murton et al 2003, 218, 236, 237). This is of particular interest in relation to an ancient land surface underlying a 0.4m-thick band of Loess identified on Cheeseman's Farm, some 500m south-west of the present site, which land surface was the probable source of several distinctive and well-preserved Upper Palaeolithic flint tools also found on the site (see below and Allen and Green 2003).

A relatively recent study of exposures of Devensian deposits on Thanet (Murton et al 2003) has revealed two broad periods when periglacial conditions prevailed, one dated to c. 88,000 - c. 74,000 BP and one dated to c. 24,000 - c. 12,000 BP. The two date-ranges approximate to Oxygen Isotope Stages 4 and 2 respectively, these being cold periods within the last Ice Age (Darvill 1994, 28). Indeed, the later period can be identified in particular with the glacial maximum (c.18,000 BP) and in general with the coldest part of the Devensian (the Dimlington Stadial), conventionally considered to have prevailed from c. 26,000 to c. 13,000 BP (Preece and Bridgland 1998, 11).

Many of the dates discussed above are derived from optically stimulated luminescence (OSL) dating of aeolian Loessic sands and silts, on the basis of which dating it is possible to sub-divide the Late Devensian deposits of Thanet into three phases. Consequently, four distinct episodes of Devensian aeolian sand deposition have been identified, one dated to c. 88,000 - c. 74,000 BP, one to c. 24,000 - c. 74,000 BP, one to c. 24,

c. 21,000 BP, one to c. 15,500 BP and one to c. 12,800 BP. The latter approximates either to the relatively warm period known as the Allerød or Windermere Interstadial, usually dated to about 12,000 BP, or, more likely, to the slightly earlier Bølling Interstadial (c. 13,000 BP, see, for example, Champion et al 1992, 23, 24). One or both of these interstadials saw the re-colonisation by man of North-West Europe as the ice retreated, for which much evidence with radiocarbon dates clustered around c. 12,800 BP is available (Housley et al 1997, 31).

The Allerød/Windermere Interstadial was followed, from about 10,300 BP (Preece and Bridgland 1998, 11) or about 10,000 to 9,300 BP (Champion et al 1992, 90) by a renewal of glacial/periglacial conditions of some 700 years duration known as the Loch Lomond Stadial, when Britain (still part of the European mainland) may once again have been abandoned as a region suitable for permanent occupation.

In addition to the above, much of the archaeological importance of the Thanet Loess lies in its role in the Neolithic revolution, in particular in regard to the first cereal cultivation in Britain, some 5000 – 6000 years after the last glaciation. Approximately five kilometres east of the present development site the discovery of a causewayed camp at Chalk Hill, near Ramsgate (Dyson et al 2000, 470-472) provides evidence for large-scale Neolithic activity on Thanet, whilst the evidence described in Part 3iii below attests both to the widespread nature and intensity of that activity. A significant factor in this respect, and for Neolithic and Bronze Age activity on Thanet in general, was undoubtedly the presence of extensive area of nutrient-rich Loess on the island, which, as was the case for the more widespread deposits on the Continent, 'were avidly sought out and settled by Neolithic communities' (Evans 1978, 63).

It had been proposed that agricultural practises during the Bronze and Iron Ages led to the eventual loss of most of the Loess, either physically as areas cleared for cultivation were gradually denuded by the wind and rain (Favis-Mortlock et al 1997, 79-89) or, in ill-drained terrain, as the Loess became waterlogged and than acidified or lost its nutrients (Evens 1978, 137). In the case of the free-draining chalk uplands of Thanet, the former has been shown to be the most probable cause of post-Devensian (Holocene) loss, with Loess eroded from the intensively cultivated higher-lying areas gradually accumulating in the lower-lying areas such as Pegwell Bay (Branch et al 2001). However, on the basis of datable Holocene soil horizons in the Pegwell Bay Loess sequence, this process appears to have commenced during the Neolithic, probably c. 5000 BP, rather than during the Bronze or Iron Age (Kerney 1965, 269-274; Weir et al 1971, 135).

Previous work on the land immediately south-west of the present site (Perkins et al 1998), on land at Cheeseman's Farm, some 500m to the south-west (Allen and Green 2002) and on Kent International Airport car park, 1.25km to the south-east (Allen 2004a) has shown that the local post-Devensian topography has not always been as flat as it is at present. All the above sites were characterised by chalk punctuated by large pits, hollows, pipes and series of semi-parallel gullies, the great majority probably formed by the natural processes of wind erosion and solifluction during the last Ice Age.

The wind is the salient factor in Loess creation, which, as previously stated, is by definition a wind-created (aeolian) deposit. It may therefore deduced that, during the Devensian and later, the chalk uplands of Thanet, along with the overlying remnants of Thanet Sands, were progressively sculpted by the wind to make a continually changing surface characterised by ridges and hollows, as some parts of that surface were eroded away and others aggraded. The probable Upper Palaeolithic buried land surface exposed at Cheeseman's Farm at a depth of 0.6m beneath Loessic Brickearth illustrates this point clearly. Similarly indicative were four prehistoric features exposed beneath a 0.55m-thick band of Brickearth and 0.5m below an immediately adjoining chalk surface on the site of the new car park at Kent International Airport (Allen 2004b, 10).

Re-worked Loessic brickearth has many properties in common with the Loess from which it partly

originated, particularly in regard to ease with which it is moved. Thus, when cultivation takes place, similar processes occur to those associated with natural causes. For example, in two areas investigated some 200m south of the present development area 'the chalk descended, and these hollows had allowed the survival of man-made and natural horizons respectively' (Perkins 1998, 228).

The agricultural importance of the Thanet Loess is not just confined to later prehistory. Hasted (1800, 223), describing the soil as 'naturally very thin light land', remarks that Thanet 'has always been remarkable for its fruitfulness ... there is not perhaps another district in Great Britain, or in the world, of the same extent, in such a perfect state of cultivation'.

# ii) Earlier pre-history

Little Lower or Middle Palaeolithic cultural material is known from the Minster/Manston area, apart from chance finds of conical and bifacial handaxe-type implements, an example of the former having been found at Telegraph Hill, about 1.75k south of the present site (Osborne-White 1928, 66). Two Acheulian bifaces have been found in higher-lying areas of Thanet (exact locations unknown) and many implements of the Lower Palaeolithic and later periods have been found about eight kilometres (five miles) east of the development site beneath the cliffs at North Foreland, from which it is presumed that had fallen (pers. comm. Emma Boast). More recently, a bout coupé-type scraper-like tool with unifacial working and of probable Middle Palaeolithic manufacture was found during archaeological work adjacent to Hangar 3 of Manston Airfield, some 755m to the south of the development site (Allen and Green, forthcoming). This artefact lay on the surface of the Upper Chalk and was covered by Brickearth. The upper face of this artefact was heavily patinated but the lower was unpatinated, suggesting that it had remained undisturbed for a very long time.

At Cheeseman's Farm, south-west of the present site, Upper Palaeolithic flintwork was recovered that probably derived from an archaeological horizon in the form of a palaeosol sealed beneath a 0.4m-thick band of Loess, and which also produced the debitage of flintworking (Allen and Green 2003). As previously discussed, this flintwork may represent rare evidence for the re-occupation of Britain by man about 12,000 - 13,000 years ago, at the end of the last Ice Age, when Britain was still joined to the Continent. If so, it is comparable with similarly dated evidence for the re-colonisation of the near Continent (Housely et al 1997, 25-54).

Only three Mesolithic sites/find spots appear to be known on Thanet, and all are of uncertain character (Stuckey forthcoming). In contrast, the archaeological record for Neolithic, Bronze Age and Iron Age Thanet in the vicinity of the site is extremely rich.

### iii) Later prehistory

Apart from the earlier Neolithic causewayed camp at Chalk Hill, near Ramsgate, mentioned in Part 3i above, other Neolithic evidence occurs in Thanet in the upper part of the Loess at Pegwell Bay in the form of 'Fresh-looking Neolithic cores, flakes and implements of homogeneous black flint' (Osborne-White 1928, 66). These materials are often found in association with bone and pottery fragments, calcined flint, charcoal and occasional oyster shells.

In closer proximity to the present development site (3.85km to the east), part of a probable ditched enclosure with adjacent pits and gullies, all dated to the earlier Neolithic (c. 3600 – c. 3000 BC) on the basis of their associated flintwork and pottery, have been discovered during test trenching at Spratling Street, just north of Manston village (Moody 2004, 12, 13, 21, 22). The presence of a collared urn fragment on the site also suggests activity on the site during the Early-Mid Bronze Age (c. 2000/1700

-c. 1500 BC).

Additional and extensive evidence for Neolithic and/or Bronze Age occupation occurs in upland Thanet in the form of the many round barrows lying in and beyond the immediate locality of the development site, with aerial photography revealing at least ten such structures to be present within a radius of one kilometre or so of the site, and at least another nine being present within a two kilometre radius (see, or example, the images available on the 'Get Mapping Viewer' of Getmapping PLC, www. Getmapping.com).

A study of other aerial photographs of the site and its surrounds (a fine collection is held by Mr Struan Robertson, a local farmer) suggests that mortuary monuments dominated the entire area from the A253 Monkton Roundabout to the development site and beyond, creating a 'ritual landscape' of considerable magnitude during the Neolithic/Bronze Age. This view is supported by the results of extensive archaeological works completed prior to the dualling of the A253 between the Monkton and Minster Roundabouts (Bennett et al 1996, 20-27), between two and four kilometres west-south-west of the present development site. Here, three Neolithic crouched burials, at least six Early Bronze Age crouched burials and a long row of large pits, possibly a form of cursus or similar, were exposed within an area containing ten Neolithic/Bronze Age round barrows.

A round barrow with a crouched Beaker burial was also discovered some four kilometres to the east of the site (Perkins and Gibson 1990, 11-27). Further, much closer-lying evidence is represented by the discovery during an archaeological evaluation of at least six round barrows and a large circular enclosure on the site of Kent International Business Park (Perkins et al 1998, 217-255), of which the present site forms part (also identified were three sub-rectangular enclosures, one of Late Iron Age date, the others medieval, see below). The remains mentioned above lay in a dispersed group between 120m and 700m to the north and north-east of the present development site.

Other groups of remains have been exposed on Manston Airfield, south-east of the development site. Here, at a distance of approximately one kilometre, a curved section of ditch interpreted as part of a rare Mid-Late Bronze Age domestic enclosure, either a farmstead or village, was excavated in 'Area 1' by the Trust for Thanet Archaeology, the enclosure's date being established by the presence of pottery in the local Deverel-Rimbury tradition (Boast and Perkins 2001, 16-17).

Parts of known crop marks or associated features may have been exposed during previous archaeological work on the site of Kent International Business Park. A ditch (Feature 29) and a hearth-like pit (Feature 28) were partly excavated within a medieval enclosure (Site 14, a.k.a. Site 4/5) lying some 350m north of the present development site. The ditch is described as: 'a ditch or palisade ... of V-section, between 0.40 and 0.90m wide, with a depth of 0.40 and 0.60m' which 'yielded no finds, but was a sandy loam quite unlike any other horizon encountered on the site' (Perkins et al 1998, 219, 228).

Although any interpretation of the function of this impressive earthwork must be conjectural in the absence of more detailed investigation, it may be the remains of a prehistoric cattle enclosure, possibly a large-scale variant of a Mid-Late Iron Age 'banjo'-type enclosure (Cunliffe 2001, 220-223), but an earlier or later date can be precluded.

Areas 2 and 3 of the previously discussed Trust for Thanet Archaeology's excavations were located between 100m and 140m west of the airport terminal and about 2.50km east of the development site (Boast and Perkins 2001, 15, 16). Although no identifiable archaeological features were uncovered, a possible archaeological horizon was identified in the form of 'colluvial deposits that produced a surface scatter of pottery dating to the Early Iron Age'. These deposits also produced 'worked flint or debitage of prehistoric date' and 'pottery dating from the Early Bronze Age to the Late Bronze/Early Iron Age'. iv) Late Iron Age

A sub-rectangular ditched enclosure with an internal partition, the whole measuring approximately 240m north-west-north by 165m east-south-east, was exposed in 1994 and 1996 (Perkins et al 1998, 225) and is described as 'Belgic' (Late pre-Roman Iron Age) but has yet to be the subject of a detailed report. A plan (Perkins et al 1998, Fig. 1, 219) suggests that the southernmost part of this enclosure may lie within the present development site, although most must now lies beneath an unnamed service road and the Cummings building, immediately to the north.

The possible archaeological horizon and some of the archaeological materials discovered in the Trust for Thanet Archaeology's Areas 1 and 2 as discussed above may have been associated with important archaeological remains exposed nearby, some 100m east of Kent International (Manston) Airport terminal and 2.3km (1.4 miles) east of the present site, during the construction of a new car park (Allen 2004a). Here, on what was clearly an extensive multiphase Late Iron Age/early Roman-period settlement site, a sunken-floored circular hut of 5.55m diameter, a large sunken-floored rectangular building measuring 13.1m east-west and 4.3m north-south, four sub-rectangular storage pits (two with depths of almost a metre), four urned cremation burials and a large quarry pit containing the largely intact remains of a 'key-hole' kiln were exposed, along with other features such as post holes, enclosure ditches and a variety of pits.

Remains of the same broad date in the form of Late Iron Age/'Belgic' graves were exposed andrecorded by the Trust for Thanet Archaeology during the cutting of a gas pipeline at 'Point Y' (Perkins 1985, Fig 1, 44), in the vicinity of Thorne Farm, just south of the A253 and 2.5km south of the present development site. These graves, along with other features of the same or similar date, occurred in sufficient size and number for the excavator to observe that 'the Late Iron Age/Belgic remains ... are surprising in terms of area and density, suggesting heavy and continuous settlement' (Perkins 1985, 59). Perkin's observation is consistent with the presence of Romano-British remains exposed during the construction of the new car park as described above.

In closer proximity to the present site, two small groups of post holes were exposed on Cheeseman's Farm, approximately 240m to the north-east. A small quantity of associated grog-tempered comb ware suggests these were the much-truncated remains of two 'Belgic' Late Iron Age structures (Allen and Green 2003, 6).

# v) Romano-British

A sub-rectangular enclosure, the ditches and banks of which were levelled to make a paddock in 1988, is recorded at Cheeseman's Farm, south-west of the present development site. The enclosure was identified as Romano-British on the basis of much associated pottery of that period (see Thanet Sites and Monuments Record 132, also Perkins et al 1998, 219, 220).

The Trust for Thanet Archaeology Area 1 excavation discussed above revealed a single Roman-period feature in the form of a pit containing pottery dated to c. AD 50 - c. 150. As it is thought to be part of an extensive Late Iron Age/Romano-British industrial complex, part of which was excavated in the 1940s, it may have formed part of a very dispersed settlement to which the early Roman-period remains exposed east of the airport terminal also belonged. The results of the 1940s excavation were never published and the whereabouts of the records are unknown, but one of the round barrow exposed as part of the same programme of works in the eastern part of the airfield is described as lying 'some distance east of the concentration of Iron Age pits and other features to be described in Volume II of these reports' (Grimes 1960). Volume II was apparently not forthcoming.

The Late Iron Age/'Belgic' graves exposed at 'Point Y' during the cutting of the gasline described

above occurred in very close proximity to other graves containing Romano-British grave goods, probably indicating continuity of use for the cemetery from the Late Iron Age into the Roman period (Perkins 1985, 44). Similar continuity of use from the Late Iron Age, the 'Belgic' Iron Age and the early Roman period is indicated by the dates of the pottery recovered (some from urned cremation burials) from the previously discussed remains on the car-park site east of the airport terminal.

# vi) Anglo-Saxon and medieval

A small group of Anglo-Saxon burials was discovered some 2.5km west of the present site during the dualling of the A253 between the Monkton and Minster Roundabouts (Bennett et al 1996, 20-27). The present writer knows of no other remains of this period in the immediate vicinity of the site, although the large and much excavated Anglo-Saxon/Jutish cemetery at Sarre lies some 7km to the west (see, for example, Breat 1863, 305-322), and the Anglo-Saxon abbey of St. Mildred's (Minster Abbey) lies 2.5km (1.5 miles) to the south.

In 1996 two substantial medieval ditched enclosures were exposed in close proximity to the present site. One (Site 18) lies some 150m north-east of the southern edge of the present development site, the other (Site 14, also called Site 4/5) lies approximately 500m to the north-east (see Perkins et al 1998, 226-239).

Site 18 comprised a large ditch (average depth 0.8m, average width 2.75m) describing an elongated sub-rectangle measuring approximately 55m north-south and 25m east-west. It was discovered by use of magnetic survey, being for the most part covered by up to 1.5m of colluvium.

Amongst a complex arrangement of archaeological features within the Site 18 enclosure were the remains of two structures, one being a substantial foundation trench in the form of an open-ended rectangle. The foundation appears to have supported a building measuring roughly eight metres north-south and five metres east-west, the walls of which were made of flint nodules and local Thanet Bed 'dogger' boulders bonded with a sandy calcareous mortar.

The second structure was a sunken-floored building with a corner partition containing a hearth- or kiln-like feature. Datable pottery recovered from both sets of remains suggests a period of use from c. 1075 or a little earlier to c. 1250. The enclosure was interpreted conjecturally as a 'farming compound with barns, byres and huts for labourers' (Perkins et al 1998, 235), with the sunken-floored building and its heath-/kiln-like feature being associated with 'secondary agricultural processes such as baking, drying or brewing' (ibid, 239).

The Site 4/5 enclosure measured approximately 53m by 38m, the long axis being north-east-north/south-west-south. The enclosing ditch was characteristically 1.5m wide and 0.70m deep. However, the land surface into which the ditch was originally cut has long disappeared, having been subject to massive truncation from intensive sub-soiling and erosion (Perkins et al 1998, 227). This has led to the total disappearance of Loessic Brickearth on this part of the site (in contrast to Site 18, 220m to the south – see above). Therefore, the original Site 4/5 enclosure ditch was certainly both deeper and wider than when excavated, and was probably defensive in function.

Few features were exposed within the enclosure ditch, presumably because of the severity of the truncation, which left only the basal parts of the most deeply cut features intact. Amongst the surviving features were two post-hole complexes, fifteen pits, sill-beam slots and rammed chalk floors (from sunkenfloored building?). The remains overall were interpreted as a large farming compound (Perkins et al 1998, 230) and, more conjecturally, as 'a small manor, with Site 4/5 as its farming compound ... occupancy, at least in terms of ceramic dating, seems to have ended for both enclosures in the mid fourteenth century, ?coincidental with the arrival of the Black Death' (ibid, 235).

# vii) Post medieval

Hasted (1800, 221-224) supplies a detailed description of the state of agriculture on Thanet before the introduction of the mechanical plough, laying great stress on the fertility of the soil: Hasted points out that the chalk ridges of the Thanet upland are covered with 'dry, loose chalky mould, from four to six inches deep, it has a mixture of small flints, and is without manure a very poor soil'. He goes on to say: 'the vales between the ridges, and the flat lands on the hills [such as the present development site] have a depth of dry, loamy soil, from one to three feet, left mixed with chalk, and of much better quality'.

Hasted's 'dry, loamy soil' is almost certainly for the most part the Loessic Brickearth previously discussed, albeit much reworked by long-term cultivation, including intensive manuring, usually using seaweed (Hasted 1800, 223, 224). The thin, dry and highly friable nature of this soil, which is a direct consequence of its aeolian origin, means that it is still easily moved by the wind and by other colluvial processes. Indeed, the wind is, and has always been a significant factor on Thanet in this and other respects, and this applies particularly to the uplands:

'... the general aspect of the island being exposed towards the north and east, and there being so very few hedges and inclosures to shelter it, causes the situation to be very bleak towards the sea, and those few trees, which are growing hereabouts, are for the most part scrubby and unthriving, from being to much subject to the sea winds, which often blow very strong, and at times blast almost every thing in their way. This island too is less pleasant, from there being scarce any medium here, between a stalk calm and an outrageous storm, owing to its being so much exposed to the sea, without any kind of shelter.' (Hasted 1800, 221-222).

### 4. Kent Sites and Monument Records

A summary of the known Sites and Monuments Record entries within a 800m radius of the boundaries of the site include:

**TR 36 NW 370.** Field walking had revealed Romano-British pottery sherds in this area which is about 700m south-west of the development site. The pipeline strip for the Sparrow Castle to Manston water main located a v-sectioned ditch aligned roughly eastwards.

TR 36 NW 352. A stripped surface yielded white patinated waste flakes of flint derived from ploughing out Prehistoric barrows and field systems in the vicinity. The area is located about 750m north of the development site.

TR 36 NW 21. The remains of the medieval chapel and cemetery of St Mary Magdalene is located about 720m north of the development site.

**TR 36 NW 51.** A large rectangular enclosure was identified from aerial photographs taken in 1974. The enclosure, some 425m north of the development site is defined by double ditches and is scheduled (No. 365). It is thought to be possibly late Iron Age or early Roman. Other features can be identified, both internally and externally.

TR 36 NW 140. A length of track running north to the above site whilst TR 32876800 is another fragment of the same track, both identified from aerial photographs.

TR 36 NW 79. Just to the north of the rectangular enclosure and about 700m north of the development site are cropmarks thought to be of a medieval village.

TR 36 NW 80. Some 750m to the east of the development site is the cropmarks of an enclosure. It is thought that it may be banking of a reservoir to serve the nearby wind pump.

TR 36 NW 83. The cropmarks of enclosures, barrows and field systems are located about 720m east of the development site. Other enclosures and tracks have been identified some 600m north of the development site at at TR 36 NW 122. The site was identified during transcription of features recorded on air photographs.

TR 36 NW 123. The same exercise identified a possible barrow some 800m north east of the development site and at TR 36 NW 136 numerous cropmarks suggest enclosures with internal divisions and multiple pit features.

TR 36 NW 80. Possible Bronze Age barrow site about 700m east of the development site.

TR 36 NW 138. About 400m east of the development site another enclosure was identified from air photographs.

TR 36 NW 139. RCHME air photographs shows a single ringed ditch with central pit features. It is located about 650m west of the development site.

TR 36 NW 206. The cropmarks of a Roman villa have been identified some 325m north west of the development site. The linear cropmarks of this scheduled site have been interpreted as the footings of a Roman villa.

# 5. The Archaeological Potential

"Thanet is an area which is extremely rich in archaeological remains and the application site lies in an area of considerable archaeological potential." (KCC Specification August 2004).

Less than 300m away on the south east facing downslope of Woodchurch are the postulated remains of a Roman villa (TR 36 NW 206).

Tucked into the hillside it faces south east, the classic location of a Roman villa.

The development site at Queensdown Road lies within the curtilage of this Roman estate, and the development area would have been within the environs of the Roman villa buildings, most likely within the courtyard area or just outside.

If within then it would be likely to have barns, workhalls, stables, and if outside shrines and cemeteries.

Woodchurch Road which is the north west boundary of the development site can be traced back to the medieval period and if its origins are Roman it is likely to have a cemetery strip leading away from the main gate of the Roman villa.

Of equal importance is the large rectangular double ditched enclosure identified from aerial photographs (TR 36 NW 51).

Thought to be late Iron Age or early Roman it sits in a defensive position on the brow of a range of hills which overlook the modern town but ancient anchorage of Margate.

Of particular interest is the possible remains of a medieval village adjacent to this enclosure (TR 36 NW 79).

Everitt is not convinced that medieval villages are a feature of the Kent landscape and it just maybe that this medieval village is somewhat earlier, if not Roman.

There is an urgent need for field work to resolve the extent and status of both these sites.

Given the number of Roman remains in the proximity of the development site it is not surprising that a Roman cemetery, possibily enclosed, was exposed during evaluation work on the development site - on the north west side where it was most likely to be found.

### 6. Results of the Evaluation

### Archaeological Methodology

The evaluation was carried out in accordance with the Specification for an Archaeological Evaluation in advance of the Construction of an RSPCA Animal Centre at land between Queensdown Road, Castlemayne Avenue and Woodchurch Road in Woodchurch near Margate in Kent. (KCC August 2004).

Thirty-eight evaluation trenches were excavated by a tracked JCB with a toothless ditching bucket, and monitored by staff from SWAT Archaeology.

The location of the evaluation trenches were recorded by SWAT Archaeology and plotted on to the OS grid superimposed onto the architects drawing (Fig.2).

In the absence of archaeological features from thirty-seven of the evaluation trenches, thirty-seven trench recording sheets were utilised to record the natural geology.

Levels were calculated from a OD datum point situated in Woodchurch and Queensdown Roads. A digital photographic record was also kept.

The plough soil exposed within the thirty-seven test trenches varied in thickness from 0.21m to 0.46m and was notably devoid of any archaeological materials excepting occasional roof-tile fragments and fragments of nineteenth- and twentieth-century pottery. The presence of semi-degraded organic matter within the topsoil indicated that it had been ploughed/sub-soiled relatively recently.

Intact Upper Chalk was exposed in Test Trenches 1-38 at depths of between of 0.28-0.34m across most of the site. The surface of the Chalk, which was commonly scarred by sub-soiling, contained within it occasional deposits of rounded chalk granule-like clasts in a paste of finely divided chalk. These were interpreted as the result of solifluction or similar natural processes during the Devensian or later. In most trenches, however, the topsoil immediately overlay chalk. In the southernmost part of the site Trench 23 exposed an apparently localised area of stiff orange-brown sandy material extending downward to 1.32m.

This deposit, which was a probable vestige of the Tertiary Thanet Bed sands that originally covered the area, may have been the fill of a large solution hollow/pipe (very common in this part of Thanet). This was almost certainly colluvially re-worked mixture of Loess, Thanet Beds sands and degraded chalk. Eleven metres to the south similar material of 1m thickness and bedded on chalk was also exposed in Test Trench 25 and 38.

The exposure of this material in two relatively distant test trenches on the south-western margin of the site suggests it may be widespread, if not horizontally continuous, and not necessarily confined to solution hollows/pipes.

Evaluation Trench 1, situated at the west end of the site and running east to west, measured 10m by 2m. The level at the top of the west end of the evaluation trench was 37.69m O.D. At the east end 37.72m O.D. Topsoil was 0.37m deep at the east end and 0.39m deep at the west end and sealed the natural strata of Upper Chalk. No archaeological features were encountered.

Evaluation Trench 2, situated at the west end of the site and running east to west, measured 10m by 2m. The level at the top of the west end of the evaluation trench was 37.61m O.D. At the east end 37.68m O.D. Topsoil was 0.34m deep at the east end and 0.38m deep at the west end and sealed the natural strata of Upper Chalk. No archaeological features were encountered.

Evaluation Trench 3, situated at the west end of the site and running north to south, measured 11m by 2m. The level at the top of the north end of the evaluation trench was 37.85m O.D. At the south end 37.87m O.D. Topsoil was 0.35m deep at the north end and 0.38m deep at the south end and sealed the natural strata of Upper Chalk. Four grave cuts into the chalk were exposed (Figs. 3), and whilst cleaning off the chalk surface nine post holes were revealed (Fig. 3).

In consultation with the KCC Archaeological Officer it was decided not to investigate further but to preserve the remains in situ. A small keyhole investigation was carried out in Grave D to clarify if indeed they were inhumation graves, and if possible, to date them.

On excavation the top of the grave cut, about 37.56m O.D. was seen to have moderately sloping sides with a slightly concave base, (CRN 010) the fill comprised a mix of small lumps of chalk and some midbrown sandy silty topsoil (CRN 011). A small part of the left shin bone was exposed but left in situ, and two iron nails (Figs 5, 6) retrieved from a vertical position, point uppermost from the east end of the grave cut. The grave cut bottomed out at 37.18m O.D. which was about 0.69m below ground level. These two nails have been identified as Roman by MoLSS.

Nine post or stake holes were also identified (Fig. 3) and if contemporary may indicate a possible fence around the cemetery area. One of the post holes were excavated- F, (CRN 017) and found to contain a black grey sandy silt (CRN 018) overlaying large flints probably used as packing around a post (CRN 019). No pottery or other identifiable artifacts were recovered.

**Evaluation Trench 4**, situated at the west end of the site and running north to south, measured 10m by 2m. The level at the top of the north end of the evaluation trench was 38.18m O.D. At the south end 38.21m O.D. Topsoil was 0.35m deep at the north end and 0.37m deep at the south end and sealed the natural strata of Upper Chalk. No archaeological features were encountered.

**Evaluation Trench 5**, situated at the west end of the site and running north to south, measured 10m by 2m. The level at the top of the north end of the evaluation trench was 37.66m O.D. At the south end 37.70m O.D. Topsoil was 0.38m deep at the north end and 0.39m deep at the south end and sealed the natural strata of Upper Chalk. No archaeological features were encountered.

Evaluation Trench 6, situated at the west end of the site and running east to west, measured 10m by 2m. The level at the top of the west end of the evaluation trench was 38.54m O.D. At the east end 38.62m O.D. Topsoil was 0.38m deep at the east end and 0.37m deep at the west end and sealed the natural strata of Upper Chalk. No archaeological features were encountered.

**Evaluation Trench 7**, situated at the west end of the site and running east to west, measured 11m by 2m. The level at the top of the west end of the evaluation trench was 39.71m O.D. At the east end 38.80m O.D. Topsoil was 0.36m deep at the east end and 0.38m deep at the west end and sealed the natural strata of Upper Chalk. No archaeological features were encountered.

Evaluation Trench 8, situated at the west end of the site and running north to south, measured 10m by 2m. The level at the top of the north end of the evaluation trench was 38.87m O.D. At the south end 38.91m O.D. Topsoil was 0.35m deep at the north end and 0.37m deep at the south end and sealed the natural strata of Upper Chalk. No archaeological features were encountered.

Evaluation Trench 9, situated at the north-west end of the site and running east to west, measured 10m by 2m. The level at the top of the west end of the evaluation trench was 39.51m O.D. At the east end 39.57m O.D. Topsoil was 0.36m deep at the east end and 0.40m deep at the west end and sealed the natural strata of Upper Chalk. No archaeological features were encountered.

Evaluation Trench 10, situated at the north-west end of the site and running north to south, measured 10m by 2m. The level at the top of the north end of the evaluation trench was 39.63m O.D. At the south end 39.71m O.D. Topsoil was 0.37m deep at the north end and 0.41m deep at the south end and sealed the natural strata of Upper Chalk. No archaeological features were encountered.

Evaluation Trench 11, situated at the south-west end of the site and running north to south, measured 10m by 2m. The level at the top of the north end of the evaluation trench was 39.69m O.D. At the south end 39.68m O.D. Topsoil was 0.38m deep at the north end and 0.39m deep at the south end and sealed the natural strata of Upper Chalk. No archaeological features were encountered.

Evaluation Trench 12, situated at the south-west end of the site and running east to west, measured 10m by 2m. The level at the top of the west end of the evaluation trench was 39.64m O.D. At the east end 39.81m O.D. Topsoil was 0.35m deep at the east end and 0.37m deep at the west end and sealed the

natural strata of Upper Chalk. No archaeological features were encountered.

Evaluation Trench 13, situated at the north-west end of the site and running north to south, measured 10m by 2m. The level at the top of the north end of the evaluation trench was 41.29m O.D. At the south end 41.36m O.D. Topsoil was 0.36m deep at the north end and 0.40m deep at the south end and sealed the natural strata of Upper Chalk. No archaeological features were encountered.

Evaluation Trench 14, situated at the north end of the site and running east to west, measured 10m by 2m. The level at the top of the west end of the evaluation trench was 41.30m O.D. At the east end 41.39m O.D. Topsoil was 0.34m deep at the east end and 0.37m deep at the west end and sealed the natural strata of Upper Chalk. No archaeological features were encountered.

Evaluation Trench 15, situated at the centre of the site and running east to west, measured 10m by 2m. The level at the top of the west end of the evaluation trench was 39.89m O.D. At the east end 41.40m O.D. Topsoil was 0.33m deep at the east end and 0.36m deep at the west end and sealed the natural strata of Upper Chalk. No archaeological features were encountered.

Evaluation Trench 16, situated at the centre of the site and running north to south, measured 10m by 2m. The level at the top of the north end of the evaluation trench was 41.41m O.D. At the south end 41.67m O.D. Topsoil was 0.33m deep at the east end and 0.37m deep at the west end and sealed the natural strata of Upper Chalk. No archaeological features were encountered.

Evaluation Trench 17, situated at the south end of the site and running east to west, measured 10m by 2m. The level at the top of the west end of the evaluation trench was 41.85m O.D. At the east end 41.95m O.D. Topsoil was 0.33m deep at the east end and 0.36m deep at the west end and sealed the natural strata of Upper Chalk. No archaeological features were encountered.

Evaluation Trench 18, situated at the south end of the site and running north to south, measured 10m by 2m. The level at the top of the north end of the evaluation trench was 41.72m O.D. At the south end 41.74m O.D. Topsoil was 0.33m deep at the north end and 0.35m deep at the south end and sealed the natural strata of Upper Chalk. No archaeological features were encountered.

Evaluation Trench 19, situated at the centre of the site and running north to south, measured 10m by 2m. The level at the top of the north end of the evaluation trench was 41.70m O.D. At the south end 41.72m O.D. Topsoil was 0.32m deep at the north end and 0.34m deep at the south end and sealed the natural strata of Upper Chalk. No archaeological features were encountered.

Evaluation Trench 20, situated at the centre of the site and running east to west, measured 10m by 2m. The level at the top of the west end of the evaluation trench was 41.68m O.D. At the east end 41.69m O.D. Topsoil was 0.30m deep at the east end and 0.31m deep at the west end and sealed the natural strata of Upper Chalk. No archaeological features were encountered.

Evaluation Trench 21, situated at the centre of the site and running north to south, measured 11m by 2m. The level at the top of the north end of the evaluation trench was 41.74m O.D. At the south end 42.01m O.D. Topsoil was 0.30m deep at the north end and 0.31m deep at the south end and sealed the natural strata of Upper Chalk. No archaeological features were encountered.

Evaluation Trench 22, situated at the centre of the site and running east to west, measured 10m by 2m.

The level at the top of the west end of the evaluation trench was 41.81m O.D. At the east end 42.07m O.D. Topsoil was 0.31m deep at the east end and 0.30m deep at the west end and sealed the natural strata of Upper Chalk. No archaeological features were encountered.

Evaluation Trench 23, situated at the centre of the site and running east to west, measured 10m by 2m. The level at the top of the west end of the evaluation trench was 41.94m O.D. At the east end 42.09m O.D. Topsoil was 0.31m deep at the east end and 0.30m deep at the west end and exposed an apparently localised area of stiff orange-brown sandy material extending downward to 1.32m (43.26m O.D.). No archaeological features were encountered.

Evaluation Trench 24, situated at the centre of the site and running north to south, measured 10m by 2m. The level at the top of the north end of the evaluation trench was 42.09m O.D. At the south end 42.10m O.D. Topsoil was 0.30m deep at the north end and 0.31m deep at the south end and sealed the natural strata of Upper Chalk. No archaeological features were encountered.

Evaluation Trench 25, situated at the east end of the site and running north to south, measured 10m by 2m. The level at the top of the north end of the evaluation trench was 42.08m O.D. At the south end 42.11m O.D. Topsoil was 0.31m deep at the north end and 0.32m deep at the south end and exposed an localised area of stiff orange-brown sandy material extending downward to 1.33m (43.41m O.D.). No archaeological features were encountered.

**Evaluation Trench 26,** situated at the east end of the site and running north to south, measured 10m by 2m. The level at the top of the north end of the evaluation trench was 42.08m O.D. At the south end 42.09m O.D. Topsoil was 0.31m deep at the north end and 0.30m deep at the south end and sealed the natural strata of Upper Chalk. No archaeological features were encountered.

Evaluation Trench 27, situated at the east end of the site and running east to west, measured 10m by 2m. The level at the top of the west end of the evaluation trench was 42.01m O.D. At the east end 41.98m O.D. Topsoil was 0.31m deep at the east end and 0.30m deep at the west end and sealed the natural strata of Upper Chalk. No archaeological features were encountered.

Evaluation Trench 28, situated at the east end of the site and running north to south, measured 10m by 2m. The level at the top of the north end of the evaluation trench was 42.04m O.D. At the south end 42.07m O.D. Topsoil was 0.31m deep at the north end and 0.29m deep at the south end and sealed the natural strata of Upper Chalk. No archaeological features were encountered.

Evaluation Trench 29, situated at the east end of the site and running north to south, measured 10m by 2m. The level at the top of the north end of the evaluation trench was 42.29m O.D. At the south end 42.31m O.D. Topsoil was 0.30m deep at the north end and 0.31m deep at the south end and sealed the natural strata of Upper Chalk. No archaeological features were encountered.

Evaluation Trench 30, situated at the east end of the site and running east to west, measured 10m by 2m. The level at the top of the west end of the evaluation trench was 42.18m O.D. At the east end 42.30m O.D. Topsoil was 0.29m deep at the east end and 0.30m deep at the west end and sealed the natural strata of Upper Chalk. No archaeological features were encountered.

Evaluation Trench 31, situated at the east end of the site and running north to south, measured 12m by 2m. The level at the top of the north end of the evaluation trench was 42.27m O.D. At the south end 42.30m O.D. Topsoil was 0.29m deep at the north end and 0.30m deep at the south end and sealed the natural strata of Upper Chalk. No archaeological features were encountered.

**Evaluation Trench 32,** situated at the east end of the site and running north to south, measured 10m by 2m. The level at the top of the north end of the evaluation trench was 42.31m O.D. At the south end 42.34m O.D. Topsoil was 0.30m deep at the north end and 0.31m deep at the south end and sealed the natural strata of Upper Chalk. No archaeological features were encountered.

**Evaluation Trench 33,** situated at the east end of the site and running east to west, measured 10m by 2m. The level at the top of the west end of the evaluation trench was 42.10m O.D. At the east end 42.29m O.D. Topsoil was 0.30m deep at the east end and 0.28m deep at the west end and sealed the natural strata of Upper Chalk. No archaeological features were encountered.

Evaluation Trench 34, situated at the east end of the site and running north to south, measured 10m by 2m. The level at the top of the north end of the evaluation trench was 42.33m O.D. At the south end 42.36m O.D. Topsoil was 0.28m deep at the north end and 0.30m deep at the south end and sealed the natural strata of Upper Chalk. No archaeological features were encountered.

Evaluation Trench 35, situated at the east end of the site and running east to west, measured 10m by 2m. The level at the top of the west end of the evaluation trench was 42.39m O.D. At the east end 42.41m O.D. Topsoil was 0.30m deep at the east end and 0.28m deep at the west end and sealed the natural strata of Upper Chalk. No archaeological features were encountered.

Evaluation Trench 36, situated at the east end of the site and running east to west, measured 10m by 2m. The level at the top of the west end of the evaluation trench was 42.09m O.D. At the east end 42.37m O.D. Topsoil was 0.31m deep at the east end and 0.30m deep at the west end and sealed the natural strata of Upper Chalk. No archaeological features were encountered.

Evaluation Trench 37, situated at the east end of the site and running east to west, measured 10m by 2m. The level at the top of the west end of the evaluation trench was 42.12m O.D. At the east end 42.11m O.D. Topsoil was 0.31m deep at the east end and 0.30m deep at the west end and sealed the natural strata of Upper Chalk. No archaeological features were encountered.

Evaluation Trench 38, situated at the east end of the site and running north to south, measured 10m by 2m. The level at the top of the north end of the evaluation trench was 42.12m O.D. At the south end 42.13m O.D. Topsoil was 0.30m deep at the north end and 0.30m deep at the south end and exposed an localised area of stiff orange-brown sandy material extending downward to 1.36m (40.77m). No archaeological features were encountered.

### 7. Conclusions

The development site, along with most of the surrounding area, appears to have been agricultural land from an indefinite period before the abandonment of the nearby medieval enclosure settlements described in Part 3vi above until the present time. During this protracted period the yearly cycle of harvesting, ploughing, manuring, furrowing and sowing, and in later years, of mechanical ploughing and sub-soiling, along with natural erosive processes, has clearly had a reducing and flattening effect on the sites topography, and the topsoil has effectively become an artificial growing medium.

As is evident on the present site, it is common practice for modern farmers to sub-soil the land to considerable depth, thus raking up the surface of the chalk and raking out what remains of the Loessic Brickearth and Thanet Bed sands within any surviving gullies and solution pipes. Thus, the following remarks, made in respect of the part of Kent International Business Park and Manston Car Park site immediately south-east of the present site, also apply in this case:

'Another problem affecting the evaluation was the heavy plough and sub-soiler damage to the site, a degree of attrition that one hopes, perhaps vainly, is not universal in Kent. The writer and others have been able to demonstrate that, over much of upland Thanet, up to one metre or so of topsoil has been eroded in the last sixty years, and in some areas perhaps 20 cm of chalk bedrock (Perkins 1998, 233-234).

In the light of the above it is likely that, apart from the archaeological features in Trench 3 that were present on the site, only the most deeply cut archaeological features will have survived. If so, they will be exposed during the removal of topsoil from the site.

The archaeological features exposed in Trench 3- part of a Roman cemetery- may extend along Woodchurch Road. The proposed development of the site includes the construction of a layby on the southern verge of Woodchurch Road.

It is likely that further Roman burials may be encountered here.

Tim Allen, Paul Wilkinson (text), Geoff Morley, Ronnie Jenkins, Mick Butler, Paul Wilkinson (fieldwork),

Will Monitos (graphics) 5th June 2005, updated 8th August 2005.

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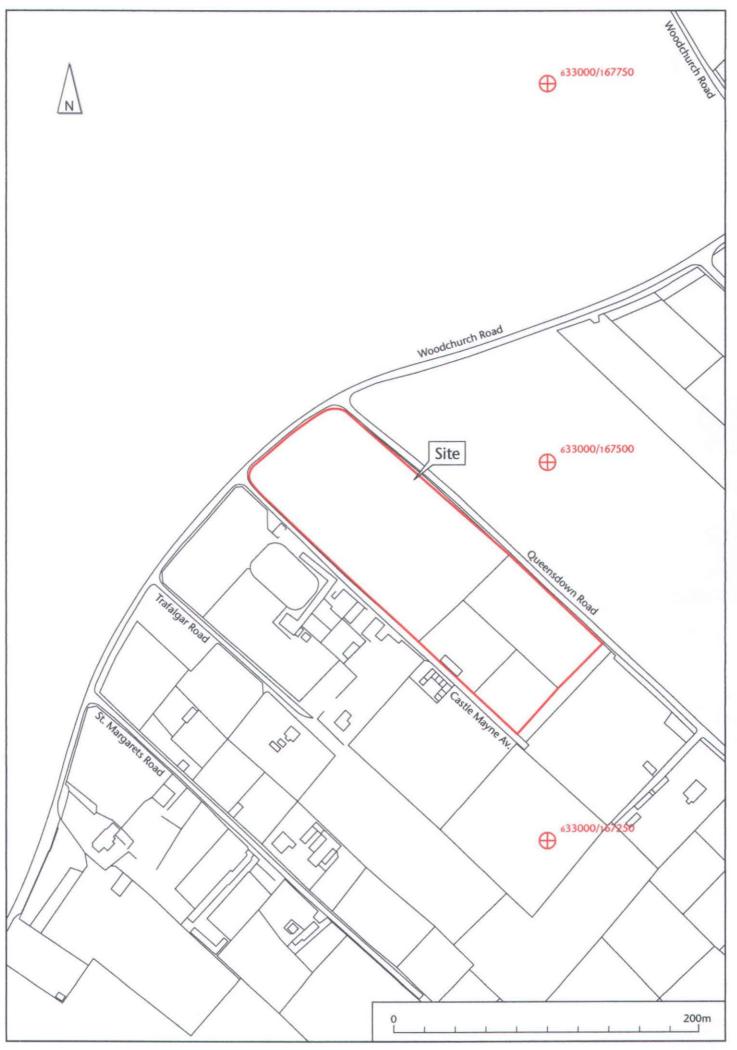
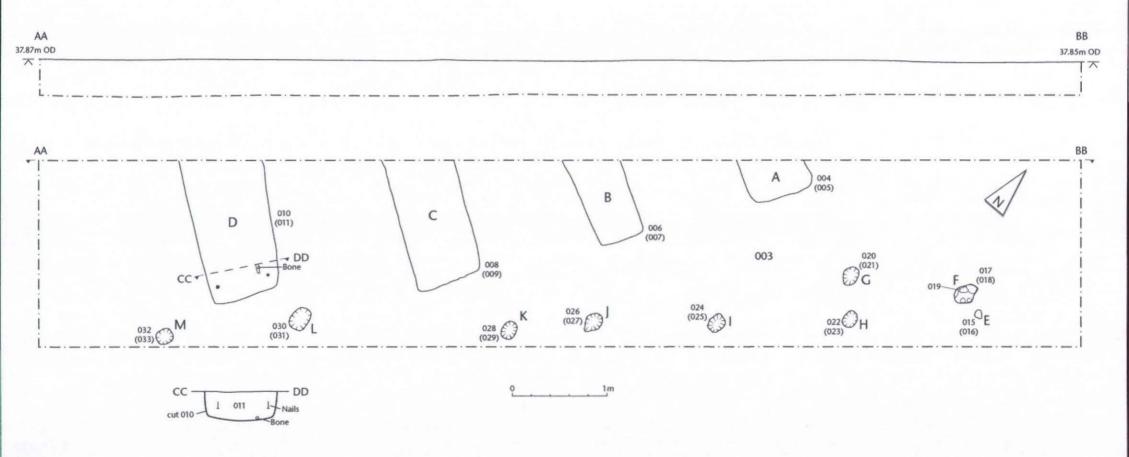


Fig 1 Location Plan Scale 1:2500





# 7) Figures

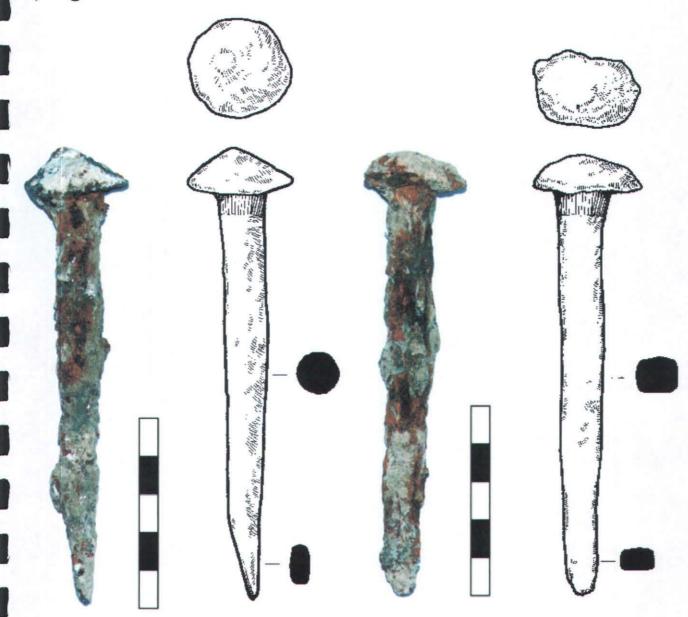


Fig. 4. Roman nail: Trench 3 Scale 1:1.

Fig. 5. Roman nail: Trench 3 Scale 1:1.