

ARCHAEOLOGICAL FIELD EVALUATION REPORT

LAND OFF SCOTHERN LANE, DUNHOLME

LINCOLNSHIRE

Site Code: ✓SLD99
LCNCC Acc No. 294.99

od/31

EVENT L12469
SOURCES L17084 L17085
S3148 Rem
S4604 L182120 Essex
S3156 Med
S4605 L182121 MSax
S4606 L182122 Med
S3158 Med
S3157 PMed
S4607 L182123 Undated

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Site Code: LSLD99
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NGR SK 0245 7925

TF

od31

Report prepared for Sharward Construction Ltd
by M Allen

Pre-Construct Archaeology (Lincoln)
61 High Street
Newton on Trent
Lincoln
LN1 2JP
Tel. & Fax. 01777 228155

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Summary

- ◆ An archaeological evaluation involving the excavation of seven trenches took place to the south-east of Dunholme in advance of a residential development.
- ◆ Remains of Dunholme Manor and a medieval wall, possibly part of a structure pre-dating the Manor, were revealed in Trench 01 at the western end of the site.
- ◆ A wall and a quantity of green-glaze medieval tile probably relating to the Bishop's Manor House were uncovered in Trench 07 at the eastern end of the site.
- ◆ A number of other medieval and post-medieval features and deposits were exposed in Trenches 01 & 02, including two stone drains associated with Dunholme Manor in Trench 01, and a stone wall in Trench 02 that may relate to a building noted on an 1844 Tithe map.
- ◆ Earlier remains, including a Romano-British and/or early Saxon field system with associated structures, a possible early Saxon structure, and a probable mid-late Saxon settlement, were uncovered on relatively high ground on the east side of the site. Mid-late Saxon activity was also evident at the eastern end of the site, in Trench 07.
- ◆ The development may disturb much of the medieval and later archaeology. The earlier deposits, sealed by windblown sands on the eastern half of the site, may be less vulnerable.

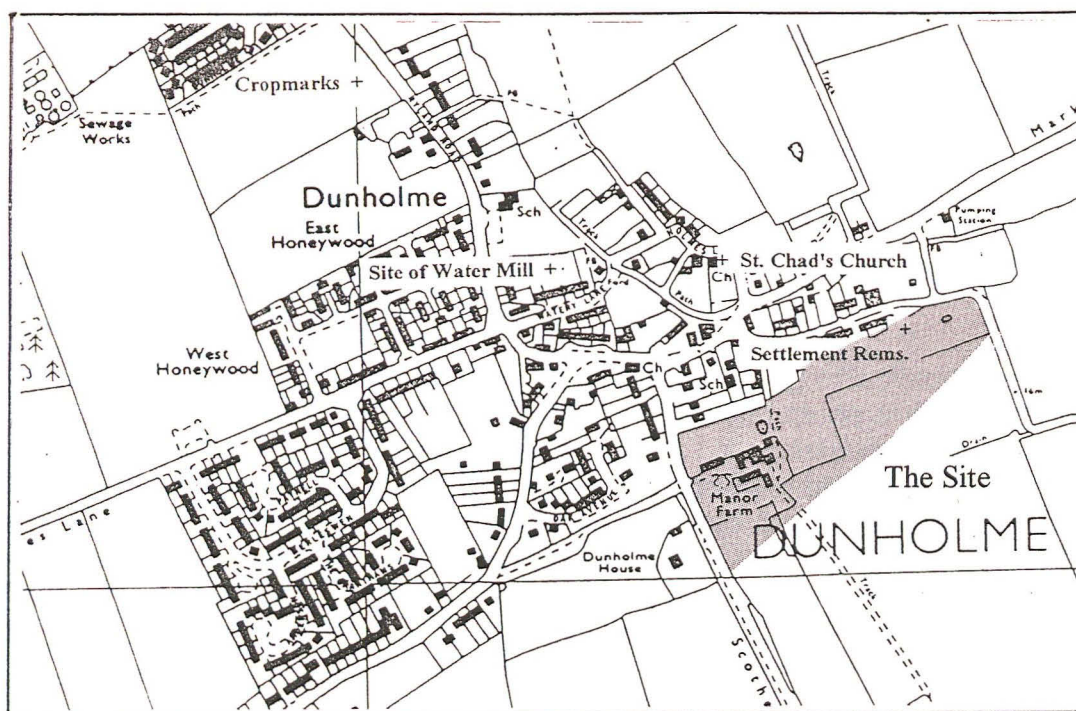


Figure 1: Location map of proposed development (Scale 1: 10 000)
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1.0 Introduction

A ten-day program of archaeological trial excavation was carried out on a large sub-rectangular unit of land, to the east of Scothern Lane on the south side of Dunholme Village. The work was commissioned by Stephen Roberts Associates on behalf of their client, Sharward Construction Ltd. The commission was requested to fulfill a planning requirement issued by the LCC Archaeology Section, who advise on behalf of West Lindsey District Council.

The results of this report will assist the local planning authority to assess the archaeological significance of the site, the potential impacts which may be imposed by development and the requirement/non-requirement for further archaeological investigation in advance of or during development.

2.0 Site Location

Dunholme village lies approximately 6.5km north-east of Lincoln and 4km east of Ermine Street, within the administrative district of West Lindsey. The village is situated on the banks of Dunholme beck and at the foot of several low hills.

The proposed development consists of a sub-rectangular unit of land to the south-east of the village, within the angle of Scothern Lane (west) and the Dunholme bypass (south), at NGR SK 0245 7925 (Fig. 1; Plate 1).

The site lies within an area of drift deposits of sand and gravel that are generally less than 1m thick and overlie the solid Jurassic Kellaway Clays.

The site can be split into two main areas either side of a track which runs NNW-SSE across the middle of the proposed development. The western half is generally low-lying, although rising fairly gradually to the east, with a large amount of modern brick rubble and a number of modern concrete building platforms present. The eastern half is within an area of rough pasture, gradually sloping down towards the northeast corner of the development area.

3.0 Planning Background

West Lindsey District Council requested the undertaking of a field evaluation to assess the archaeological potential of the site in advance of the proposed development. The results of this evaluation will be assessed by the District Council and decisions relating to the future management of the archaeological resource and the development will be taken on this basis. This approach is consistent with the advice set out in *Archaeology and Planning: Planning Policy Guidance Note 16, 1990*.

4.0 Archaeological and Historical Background

This site has been the subject of a desk top assessment and a gradiometer survey (Cope-Faulkner 1998).

The earliest evidence for occupation within the proposed development was a Neolithic polished flint axe, although this was found immediately to the east of the site, and is likely to indicate forest clearance or the loss of an artefact, possibly by mistake.

Several Bronze Age flints, including tools and cores, were found during the construction of the Dunholme Bypass (Tann 1987). This small assemblage of flints does not tell us very much however, beyond the fact that some activity occurred here during the Bronze Age.

Iron Age occupation to the north of the village core, along Ryland Road is known from archaeological monitoring during the construction of a water pipeline (Albone 1997). A total of eight late Iron Age ditches were discovered.

Field system cropmarks, along with a small scatter of Romano-British pottery, are located east of the proposed development site. This, coupled with the results from an earlier geophysical survey across the site, suggest that the Romano-British field systems encroach into the study area.

An unknown quantity of Roman, Saxon, medieval and post-medieval pottery was recovered from Dunholme in 1976 (White 1976, 71), immediately to the north of the study area. Several Saxon sherds were also discovered to the south and southwest of the development (Tann 1987). This small assemblage does not provide enough data to demonstrate whether Dunholme was settled in the Saxon period or not, although the village was first mentioned in the Domesday Survey of 1086 as '*Duneham*' (Mills 1996), meaning 'Homestead or village at a hill', from the Old English *dun* and *ham*.

During the medieval period Dunholme witnessed substantial activity, with at least three Manor Houses being built at one time or another. Two of these, Dunholme Manor and the Bishop's Manor House are located within the proposed development.

A date for the construction of Dunholme Manor is unknown, although the house was originally owned by the Grantham family, who are first mentioned as owning land in Dunholme in 1452 (Leach 1964, 21). The house consisted of two wings running west and south, forming a right-angle, and was located 'by the road to Scothern' (Leach 1964, 20), within the western half of the study area. The house was eventually demolished in 1898, when the stone was reused in the construction of Grange Farm, itself demolished in 1990.

The Dunholme Tithe Award map of 1844 shows a number of buildings within the western half of the proposed development, including two that may show Dunholme Manor. In all probability the Manor relates to the most northerly of

the two buildings as it consists of a west wing and a south wing and is located nearer to Scothern Lane (see above).

Little is known of the Bishop's Manor House, save that it was demolished prior to a survey in 1647 (Leach 1964, 24). Locating the Bishop's Manor has also been problematical, though it is known it existed to the southeast of the village core, within a field still known today as Grange Close (in the eastern half of the development area). A number of stone walls were uncovered during an extension to the churchyard and, prior to ploughing and levelling in the late 1940's, a number of mounds were still visible here (Leach 1964, 25). Fieldwalking immediately to the east of the development located a large amount of building material, including stone and medieval green-glazed roof tile.

A water mill at Dunholme dating from at least the beginning of the thirteenth century to the end of the seventeenth, was partially excavated in 1968 (Whitwell & Wilson 1969, 114). The mill was located to the north of the village centre, and therefore outside the development area.

In the mid nineteenth century Dunholme was almost completely rebuilt, using locally-produced yellow 'Dunholme bricks' (Leach 1968). The use of these bricks attest to the presence of a local brickmaking industry at the time.

In 1898 the Manor of Dunholme was demolished and Grange Farm was built in its place. Grange Farm was built to the south of the Manor, reusing some of the earlier demolition material, and was itself demolished in 1990. During its occupation, a number of modern red brick farm buildings were added, which are visible today as concrete platforms and mounds of brick rubble.

5.0 Methodology

The majority of the trenches measured 20m x 2m, although trench 02 was 40m x 2m, and trenches 01 and 07 were extended after potential archaeological deposits were uncovered. Trench 01 was originally 20m x 2m with an 8.5m x 2.5m extension added to the eastern end, whilst trench 07 was also originally 20m x 2m and was extended a further 6m to the south.

A JCB, fitted with a smooth ditching blade, was used to remove all topsoil and overburden, to the top of the first significant natural or cultural archaeological horizon. The desired depths were achieved by removing graded spits under strict archaeological supervision. All further excavation was by hand.

During controlled excavation, archaeological contexts (e.g. layers, feature fills, pits, ditches) were described using standard context record sheets. All features were drawn in plan and section at scale 1:20 or 1:50 and, when fully or partially excavated, were photographed in colour. Artefacts (pottery, animal bones and individual finds) were coded according to their stratigraphic contexts and were subsequently removed from the site for processing and specialist assessment reports, as were soil samples.

Excavation was carried out under the direction of the writer, assisted by three experienced field archaeologists, Pete Barnes, Wayne Livesey and Rene Mouraille. Andrew Hardwick was used as a replacement for one member of the team for three days.

6.0 Results

Of the seven trenches examined (Fig. 1a), six showed high concentrations of archaeology. Trench 03 contained no archaeological features or deposits of any kind.

6.1 Trench 01

6.1.1 Introduction

The trench, orientated ENE-WSW, was located in the north-west corner of the proposed development area, and originally measured 20m x 2m, with a further extension of 8m x 2.5m added to the eastern end (Fig. 2). The location of the trench was chosen to attempt to uncover remains of 'The Manor' (depicted in 1844 map).

6.1.2 Archaeological Results

The topsoil 100, which was 0.2m-0.25m thick, covered a number of modern deposits and brick walls, which in turn sealed earlier material. Directly below the topsoil was layer 102, a modern demolition layer that occurred across the whole trench. This deposit contained late 18th - 19th century pottery, and is therefore likely to date to the 1898 demolition of Dunholme Manor.

6.1.3 Modern (post-1898)

A modern ceramic pipe was uncovered towards the middle of the trench (129), running approximately north-south. It seems likely that the pipe was associated with the modern Grange Farm buildings (1898-1990).

It was not possible to fully record the drain, or a number of deposits in the middle of the trench, as disturbance caused by the high water table masked them soon after they were uncovered by the machine, and continuous draining using a water-pump appeared to have little effect.

6.1.4 Post-medieval/Modern (pre-1898)

A number of deposits and walls pre-dating the 1898 demolition layer (102) were uncovered throughout the trench.

A brick structure (cut **127**), with an internal width of c. 2m, was located towards the middle of the trench, in the southern trench section. The walls, of which six courses still remain, were constructed of yellow bricks measuring 10" x 5" x 2.5". These bricks, called 'Dunholme brick', are of local construction and were manufactured in the mid 19th century (Leach 1968). The structure, which was built in the mid 19th century and demolished in 1898, had been backfilled with its own brick rubble and a large quantity of limestone fragments (126). This stone probably included material from the demolition of Dunholme Manor.

Another wall (cut **124**) constructed from yellow 'Dunholme brick' was found 7m to the east of the above. This wall (120) ran north-south and consisted of approximately four courses of brick, before the machine removed three of the courses during the machine-stripping. The wall cut through a number of medieval deposits and an earlier stone wall (Plate 2).

Two other features (stone drains) were exposed within the trench that are likely to be of post-medieval date.

Stone drain **104** was the most substantial of the two (Plate 3). The drain consisted of large limestone flagstones for the base, with smaller limestone used for the walls, and large flags used for capping. The drain ran east-west before curving round to the northwest at its western end. A section excavated through the fill of the drain revealed that it sloped to the northwest (a 0.1m drop from southeast to the northwest). A single piece of abraded medieval pottery (late 14th - mid 15th century) and the stem of a clay pipe were recovered from the fill 106.

The second drain, **112**, was of similar construction, although without the flagstone base that would have made drain **104** so effective. Drain **112** appeared to follow a similar alignment to **104** and also to slope downwards towards the north. A large single fragment of fourteenth - sixteenth century medieval green-glaze pottery was recovered from the fill (114), although this is likely to be residual.

The two drains may be contemporary, perhaps draining from two different areas into a single soak-away. This is possible as the two appear to link up within the northern trench section. The other possibility is that drain **104** was constructed as a replacement for the less effective drain **112**. Both pre-date the 1898 demolition of Dunholme Manor, and certainly respect the building, although it is very unlikely that they date to its construction. It seems more likely that the drains were built at a later date, while the manor was occupied. The stone used to build the drains is likely to have been re-used from earlier stone-built features. A good candidate for this recycling is an earlier stone wall (**115**) that both drains overlie (see below).

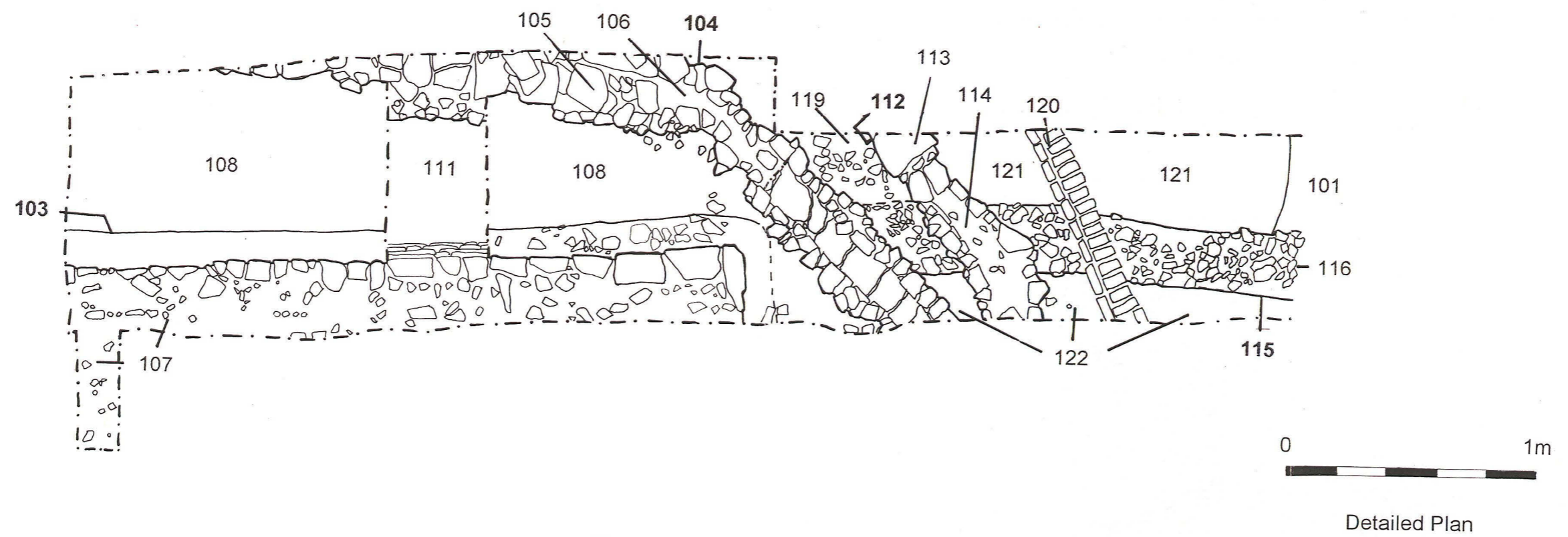
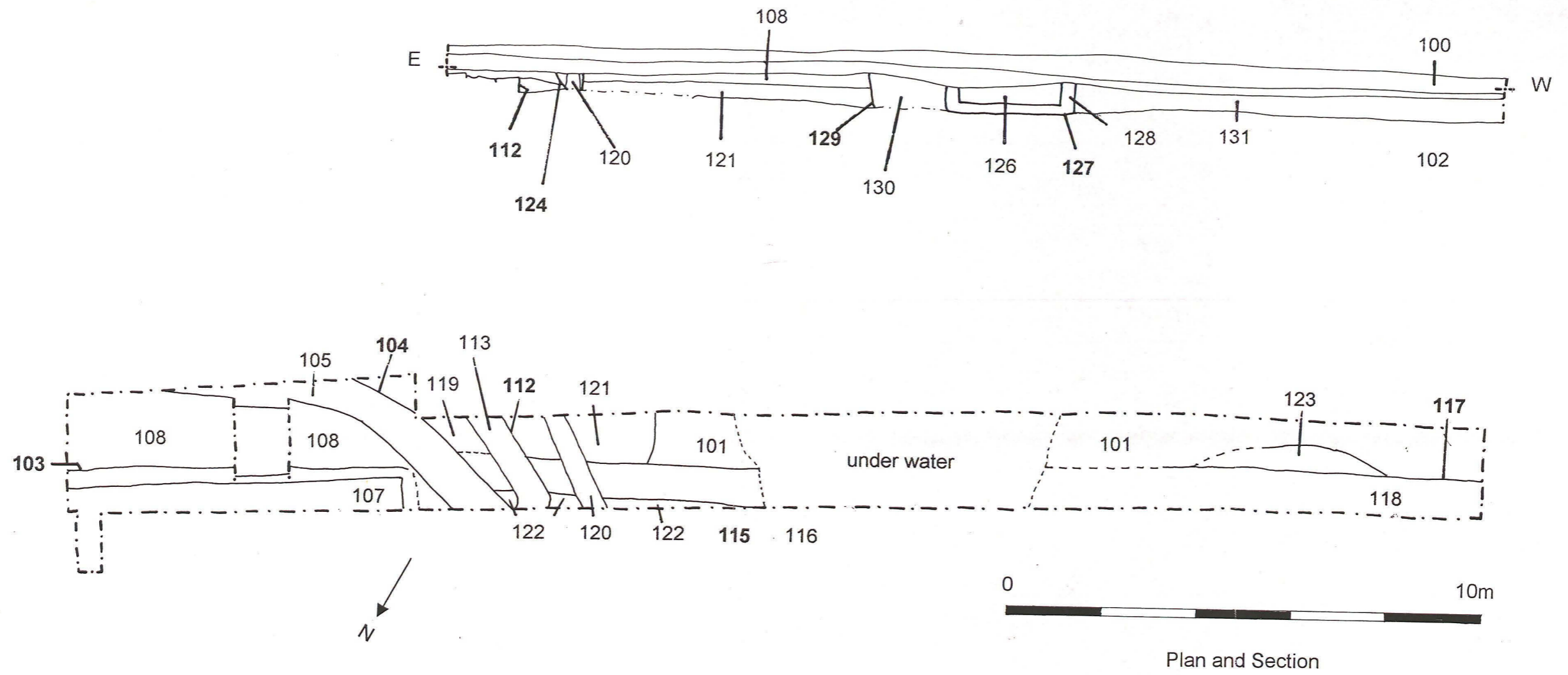


Figure 2: Trench 01 plans and section

6.1.5 Medieval

Remains of Dunholme Manor were uncovered at the eastern end of trench 01, resulting in an 8m x 2.5m extension to the trench to uncover a greater amount of the structure. The wall that was exposed, 107, consisted of medium-very large sized limestone dressed stone bonded with a mix of clays (Plate 4). A slot was excavated against the wall to examine its profile and determine its depth. Unfortunately the water table was too high to fully uncover the foundation stones, although it was possible to see that over seven courses of foundations existed, to a depth of 0.6m.

A second slot was excavated at the northeast corner of the trench to try to ascertain the width of the wall, although this showed that either the slot had been placed at the junction of an internal wall, or perhaps more plausibly, that the stone was part of the house platform and not simply a wall.

The first slot against the wall 107 showed that its foundation cut **103** was cut through a number of deposits dating to the medieval period. These deposits consisted of a number of silting layers and a small lens of burnt limestone fragments (110). The earliest of the deposits, 111, was not fully excavated due to difficulties caused by the high water table. Pottery from this layer dated the deposit to the late 13th - mid 14th century.

The foundations of a stone wall (cuts **115** & **117**) were uncovered extending east-west along the trench from the western end through to the beginning of the extension towards the east end (Plate 5). This wall had been almost completely robbed, with only some of the foundation stone remaining. The eastern end of the wall was truncated by the mid 19th century brick wall cut **124** and had been built over by the drains **104** & **112**. The wall was not visible beyond the stone drains, and it is possible that it turned southwards, as a concentration of stone rubble was exposed between the two drains (119). The wall, which was over 1.4m wide, was probably a precursor to, or part of a previously unknown structure, pre-dating Dunholme Manor.

A number of layers were exposed within the trench that overlay the natural clayey sand 101 and were truncated by the early wall cut **115/117**. These layers appeared to be medieval silting deposits dating from the 13th - 14th century that had been truncated and sealed by other medieval and post-medieval deposits.

6.2 Trench 02

6.2.1 Introduction

Trench 02 was orientated NNW-SSE and measured 40m x 2m. It was located on the southern side of Area 1 within an area of modern brick rubble and concrete building platforms (Fig. 3; Plate 6). The trench was positioned to attempt to sample the remains of buildings shown on an 1844 map, and to

look for traces of a moat, thought to have been visible until the early 20th century.

6.2.2 Archaeological Results

The topsoil 200 was sporadic in places due to disturbance caused by structures associated with Grange Farm. Below the topsoil were a number of features, although some of these were sealed by a windblown sand deposit 201, which, in turn was sealed by the topsoil. The natural 202 was a mix of light yellow and orange sands, which appeared to rise near to the modern trackway, before dropping sharply towards the northern end.

6.2.3 Modern (1898-1990)

At its southern end, the trench was positioned immediately to the west of a demolished brick building. The middle of the trench appeared to cross a trackway, whilst the northern half of the trench was positioned over a concrete platform. All of the above were of modern construction, relating to Grange Farm, which was built in 1898 and demolished in 1990.

A number of modern pits containing the individual remains of livestock (sheep) were located throughout the southern half of the trench. These were left mainly unexcavated.

At the northern end of the trench a number of modern slurry and other pits were also exposed after machining. Again, these were all directly associated with Grange Farm and were left unexcavated, partly due to the wet ground conditions.

6.2.4 Medieval/post-medieval

All of the medieval/post-medieval features were located in the southern half of the trench.

At the south end of the trench a number of features were exposed that were sealed by the windblown sand 201. These included two shallow gullies (**209** & **211**) and a linear feature (**210**), all running east-west. The gullies were all fairly narrow and may have been structural slots for wooden beams, although without further investigation it was not possible to prove this. Ditch **210**, was cut through gully **211**, and had a fairly rounded profile. It was probably built for drainage, or as a boundary. No dateable finds were recovered from the fills, although it seems likely they are earlier than the Grange Farm phase.

A single possible linear (**242**) at the very end of the excavation was not excavated as the majority of it was beyond the trench. The fill was similar to those of other features uncovered nearby (see above) suggesting they are probably all of a similar date.

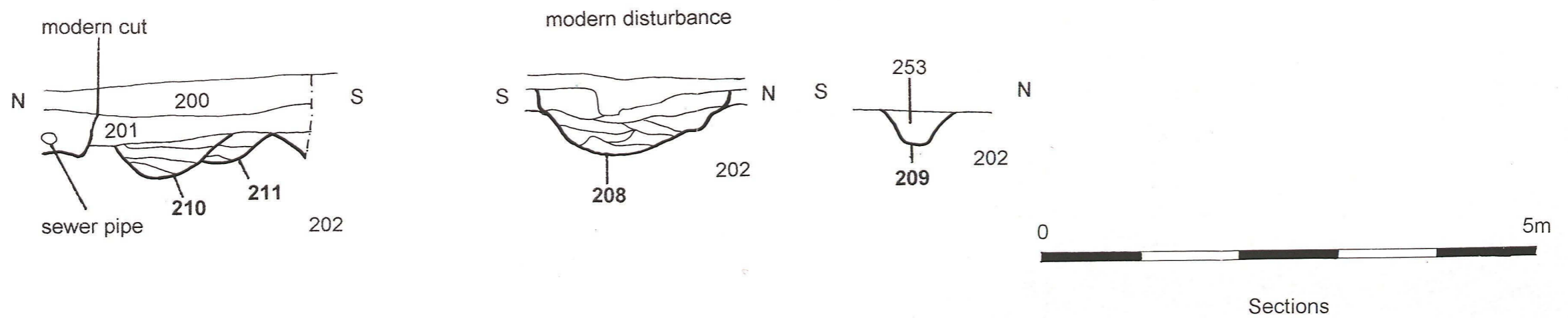
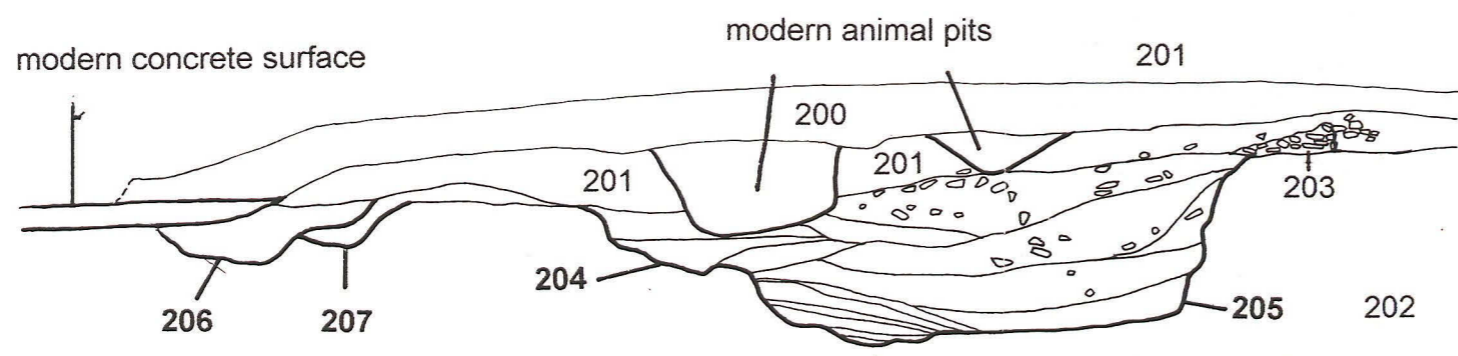
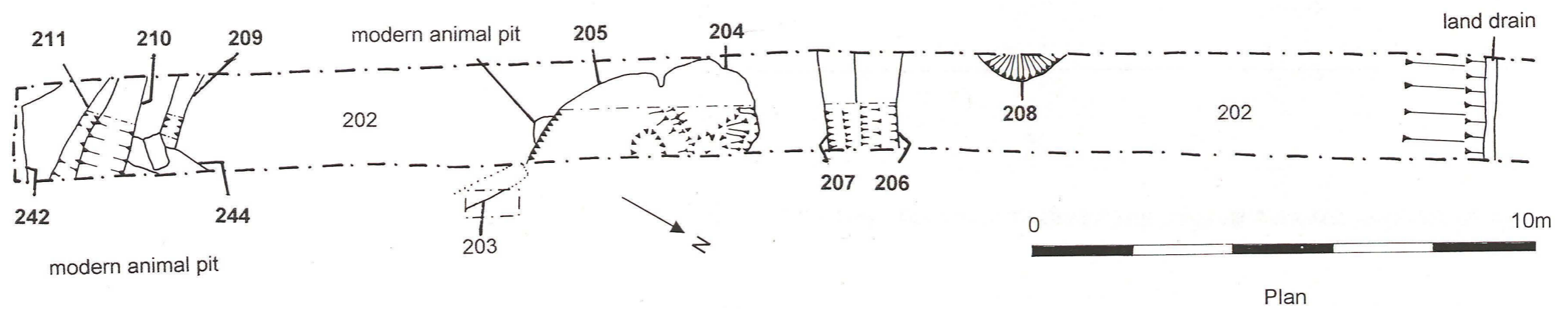


Figure 3: Trench 02 plan and sections

Approximately 5.5m further to the north, a limestone wall (203) was uncovered within the eastern trench section. As very little of the wall was showing within the machine-cut trench, a small slot was excavated by hand immediately to the east of the original section (Plate 7). This showed that the wall, which ran east-west, survived to a height of around 0.2m (3 courses), with collapse from the wall evident throughout the windblown sand deposits that sealed it. The wall probably relates to building remains seen on the 1844 tithe map.

Immediately north of the wall was a very large double pit (204 & 205): over 10m wide and 1.1m deep, below the subsoil 201, with vertical edges and a flat base (Plate 8). The two pits appear to account for a total of fifteen different deposits, mainly lenses of windblown sand and natural silts. It seems probable that the pits were either dug for quarrying the natural sand, or, more likely, that they functioned as a well pit. If this is the case, then the shallower of the two (204) probably formed a platform into the main water-collecting pit. Contemporaneity with the wall 203 seems likely for several reasons. Firstly, the wall appears to respect the pits as it ends adjacent to them, and secondly, evidence of the walls collapse can be seen in the silting and windblown deposits within the pits themselves. Several fragments of tile recovered from two of the fills of the large pit 205 indicated that the pit was medieval in date.

Two shallow ditches (206 & 207) running SW-NE were excavated to the north of the large pits. Both are likely to be either boundary or drainage ditches, with 206 possibly a recut of 207.

The edge of a pit (208) was also uncovered along the west side of the trench, around 1m north of the above ditches. The pit had very steep sides and was likely to have been a well-pit, or quarry-pit, similar to 204/205 above.

The number of features probably dating to the medieval period, all within the southern half of the trench, attest to a high degree of activity in the medieval period occurring in the vicinity of the trench.

6.3 Trench 03

6.3.1 Introduction

This trench, located towards the southwestern corner of the development site, ran NW-SE, and was positioned to assess the archaeological potential of this area (Plate 9).

6.3.2 Archaeological Results

The topsoil 300 (0.3m-0.45m deep) overlay a colluvial layer 301 consisting of a mid orange/grey clayey sand approximately 0.25m-0.3m deep. Below the colluvium was the natural 302, a mid orange/brown clay.

No archaeological features or other deposits were uncovered within the trench.

The lack of archaeological features within this area may be due in part to the high water table (approximately 0.35m below the surface).

6.4 Trench 04

6.4.1 Introduction

The trench, orientated WNW-ESE, was placed to investigate a range of magnetic anomalies detected as a result of a recent gradiometer survey (Fig. 4; Plate 10).

6.4.2 Archaeological Results

The topsoil 400 sealed a subsoil deposit 401. The subsoil 401 was a light-mid brown/grey sand that seemed to have formed through aeolian (windblown) processes. This deposit, containing several fragments of pottery dating from the 5th to 7th century, sealed another layer 417, a mid-dark grey/brown sand with some charcoal flecking and occasional fragments of burnt limestone. Layer 417 was also probably a windblown deposit, although the presence of burnt stone and charcoal suggests that some human activity (burning) was occurring nearby at the time that it formed. This layer sealed a number of archaeological features and deposits that were, in turn, cut into the natural light yellow and mid orange sands 402.

It was possible to separate the features tentatively into two main phases (Roman and late Saxon), based on the stratigraphic relationships, fill structures and artefacts.

6.4.3 Late Saxon & Saxo-Norman

A number of features at the southern end, and in the middle of the trench, appeared to be late Saxon or Saxo-Norman in date (late 9th - early 11th century AD).

The southernmost feature **403** was a shallow ditch measuring 2.2m wide and 0.2m deep, and orientated ENE-WSW, with an irregular base and sides. The sole fill 404 was a mid-dark grey silty sand with fairly frequent flecks of charcoal. Although no finds were recovered, it is possible that some of the material attributed to deposit 405 above may have derived from this fill.

Immediately north of ditch **403** the natural rose slightly, forming a shallow natural bank, before dropping again (partly due to animal disturbance) to gully **406**.

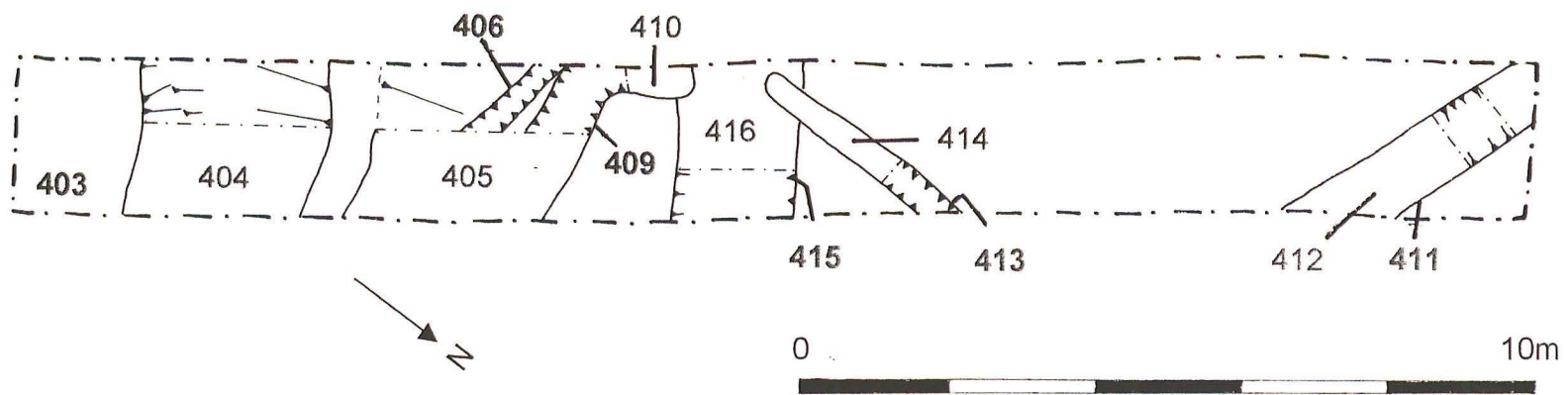
Gully 406 was 0.42m wide and 0.14m deep, with steep, slightly concave, sides and a flattish base (Plate 11). It was orientated E-W and contained two fills, 407 & 408. It seems likely that the gully was structural, with the primary fill 408 representing a beam slot within the gully, and the charcoal lens (407) above providing some evidence that a burning event occurred at a later date. This burning event appears to be related to the gully and may indicate that the associated timber structure was destroyed or damaged by fire. This hypothesis is further strengthened by a dump of material (405) found to seal the gully 406 and ditch 403 to the south. A single fragment of pottery from 408 suggested that the possible beam slot was constructed in the late 9th - early 11th century.

The dump of material 405, measuring 5.8m in length and 0.3m deep, was a dark grey/black silty sand with moderate fragments of burnt limestone, occasional heat-shattered river pebbles and a large volume of charcoal (flecks and larger fragments). It also contained a substantial quantity of finds, including a very large number of animal bones, late ninth to mid tenth century Saxon pottery and wattle-impressed fired clay. Samples taken from the deposit showed that the material included debris from what may be a burnt down daub or mud walled structure. The dump is represented within the section as a mound of material, and for it to have retained its shape, it must have been sealed fairly quickly. This was from a wind-blown sand deposit (417) which covered the dump and all other archaeology within the area. The material from 405 is very interesting as the quantity of animal bone and pottery, coupled with the charcoal content, show that the majority of the dumping related to domestic rubbish. This is not the full story however, as structural material (wattle-impressed fired clay) was also present, suggesting that the dump also contained demolition material, possibly associated with a timber structure relating to gully 406, and possibly gully 413.

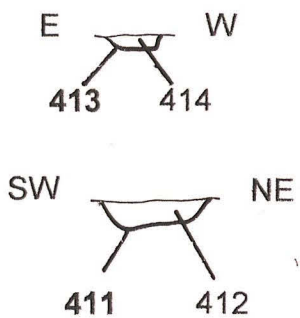
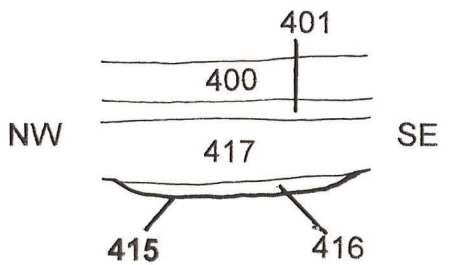
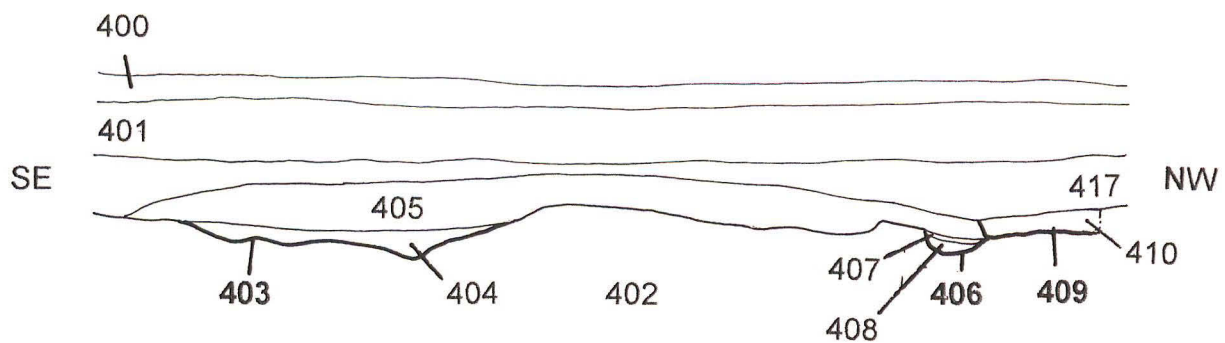
It seems that after 405 was deposited, the material was almost immediately truncated by a slightly later curved ditch (409). Ditch 409 was shallow (0.13m deep and 0.7m wide), with steep sides and a flat base. It ran ENE-WSW before terminating after turning NWN at the WSW end. The fill 410 was mid-dark grey silty sand with very occasional burnt limestone fragments and a large amount of charcoal flecking, suggesting that some burning was occurring at the time the ditch silted. That the ditch 409 was dug almost immediately after 405 seems clear, as both were sealed by the wind-blown sand which preserved the shape of the preceding mound.

North of ditch 409 was gully 413. This was 0.4m wide and 0.1m deep, with fairly steep sides and a flat base. The gully, orientated north-south and butt-ending within the trench at its southern end, may be part of a timber structure that included gully 406, as they are at right-angles to each other.

This, the second phase dating to the late Saxon period, shows an increase in activity, with large quantities of charcoal, animal bone, pottery and some wattle-impressed fired clay. The material perhaps associated with several gullies (Gullies 406 & 413) that may represent a single beam-slot structure, and a number of ditches (Ditches 403 & 409), which may be associated with



Plan



Sections

Figure 4: Trench 04 plan and sections

the possible structure. The possibility that such a structure was destroyed by fire is attested by the quantities of charcoal, especially the thin lens (407) which sealed gully 406. This phase of activity was then sealed by a wind-blown sand (417), preserving the features and artefacts, and limiting the effects of erosion and weathering on the archaeology.

It is possible that the late Saxon date is misleading as early Saxon material (5th - 7th century AD) was recovered from the windblown sand 701 sealing the archaeology. Also early Saxon features were found in trench 05, immediately to the north, showing that the site was inhabited throughout the Saxon period.

6.4.4 Roman

The middle of the trench contained a linear running northeast-southwest (415) that was truncated by several later (Saxon) features. The linear was very shallow (0.1m deep) with fairly steep sides and a flat base. A single fill 416, formed through natural silting, was devoid of finds.

At the northern end of the trench was another linear feature. This shallow ditch (411) measured 0.8m wide and 0.2m deep. It was orientated east-west, and had fairly steep sides and a flattish base. The fill 412 was a light brown/grey silty sand containing very occasional charcoal flecks, formed through natural silting, and incorporating a single small abraded piece of Roman or early Saxon tile.

The two possible phases of archaeological features that are found within the trench appear to represent very different activities. Although little of the two Roman features remain (Ditches 411 & 415), it seems likely that (on such well-draining soil) the ditches were dug primarily as boundaries and not for drainage. This, coupled with the fact that a number of prehistoric/Roman enclosure cropmarks are known to the east of the proposed development area, suggests that they are the remnants of a similar field system.

what is fill sealed by?
/ Not really good R. evid only pre L-Saxon.

6.5 Trench 05

6.5.1 Introduction

The trench, orientated NW-SE, was located towards the centre of the proposed development to look for remains of the 'Bishop's Manor House' and related medieval remains (Fig. 5; Plate 12).

no fa geophysics anomalies.

6.5.2 Archaeological Results

The topsoil overlay a dark brown sandy subsoil (501) that was 0.3m-0.4m deep and appeared to have formed through aeolian (wind-blown) processes. This deposit overlay a number of archaeological features that were cut into the natural yellow/orange sand 502. Several periods of activity were

represented within the trench, and these will be examined chronologically, starting with the latest.

6.5.3 Early Saxon

Towards the northern end of the trench was a substantial ditch and a series of postholes (Plate 13).

The ditch (503) was orientated E-W and measured 3m wide and 1m deep, with fairly steep, but slightly irregular sides and a flattish base. The ditch contained a total of four fills (509, 510, 511 & 512), all a mixture of natural silts and windblown sands. The primary fill, 512, contained some animal bone, and a single sherd of pottery with finger-impressed decoration, of a very rare type dating to the early Saxon period (Fifth to seventh century AD).

Immediately north of the ditch was a series of four postholes. Three of these (504, 505 & 506) formed a line with very regular spacings between posts, whilst the fourth (507) formed a right angle at the eastern end of the arrangement (with posthole 506). All four postholes were circular in plan with near vertical sides, and were of a similar size (0.48m-0.54m diameter & 0.17m-0.25m deep). The fills were similar; dark brown and yellow sandy silts formed through backfilling. This, coupled with the fact that no postpipes were visible within the posthole sections, suggests that either the posts were removed and the holes backfilled, or that the postpipes simply do not survive due to local soil conditions. Very few finds were recovered; single fragments of animal bone from postholes 504 & 506. All of the postholes contained charcoal flecking and a number of fragments of white and red chalky fragments (possibly minute fragments of burnt daub). These may provide evidence for the function of the alignment, with evidence of burning perhaps attesting to the final destruction of the posts.

The isolated posthole 507 (although it appears to be truncated by the alignment of three postholes) is likely to be of similar date as they are all of a similar shape and size. The most plausible explanation for the outlier is that, with posthole 506, it forms a double posthole, providing extra support.

The posthole alignment is likely to be of a similar date to the early Saxon ditch (503) as they are of a similar alignment. As only a small number of postholes were uncovered within the trench it is difficult to be certain what the function of the posts was. Two main theories present themselves, namely that the posts form part of a fenceline, or were part of a posthole structure. The size of the posts and the possible presence of burnt daub suggests that the latter is perhaps the most likely. If this is the case, then the posts may represent part of a rectangular wooden building, or 'hall', similar to numerous examples across the country, such as at West Stow in Suffolk (Welch 1992, 21). Although the remains of only a single possible structure were uncovered within the trench, it would be very unlikely that this indicated an isolated dwelling. In all probability there is likely to be a number of other structures forming an early Anglo-Saxon settlement at Dunholme, of an unknown size.

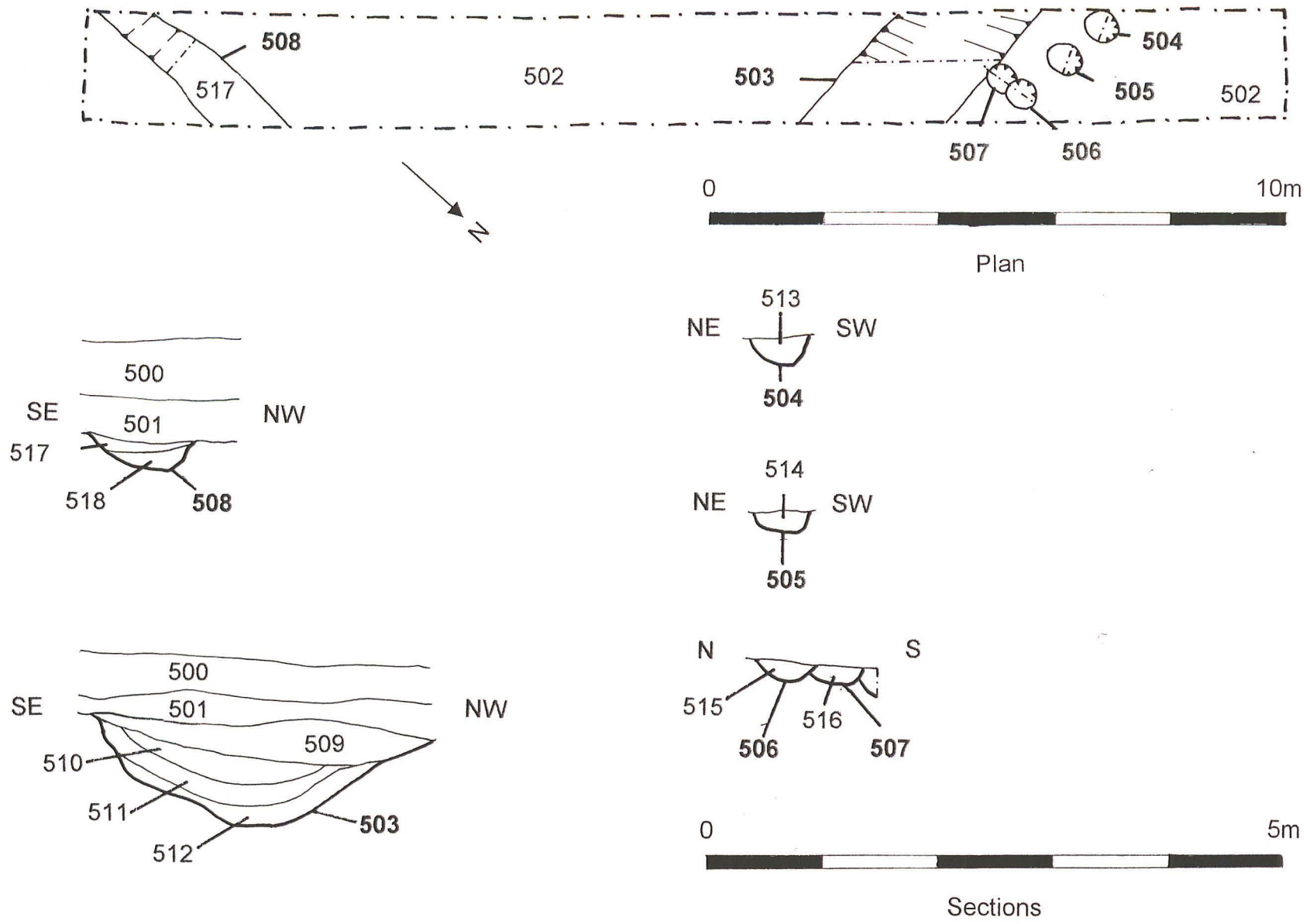


Figure 5: Trench 05 plan and sections

6.5.4 Roman

A single ditch **508** was exposed towards the southern end of the trench. This was 0.96m wide and 0.25m deep, with fairly steep sides and a flat base. The excavated section contained two fills, 517 & 518. The primary fill 518, a mid brown sandy silt formed through natural silting, contained no finds. The secondary/final fill 517, a backfilling event, contained animal bone and a single sherd of Roman pottery.

The ditch may link up with ditch **603** in Trench 06 (see below), which would suggest that it was over 60m in length. It is possible that the ditch is part of a network, possibly forming an enclosure system across the site. Such a theory is strengthened by results from a prior geophysical survey (EAS) which show a series of enclosure ditches to the north and northeast of trench 05.

6.6 Trench 06

6.6.1 Introduction

The trench, orientated ENE-WSW, was positioned to sample remains of the bishop's manor house and related medieval remains (Fig. 6; Plate 14).

6.6.2 Archaeological Results

The topsoil 600 (0.3m-0.4m deep) overlay subsoil 617, a windblown sand deposit which contained a single fragment of residual Roman pottery. This, in turn, sealed another windblown deposit (601), containing early Saxon pottery (fifth to seventh century AD), which overlay natural orange sand 602.

6.6.3 Roman - early Saxon

A large number of archaeological features were uncovered within the trench, with all but one being excavated.

The main concentration of features, at the western end of the trench comprised a series of linears running approximately north-south. These included a ditch (**603**) cut into the natural sand, followed by a total of four recuts (**605**, **606**, **607** & **608**) suggesting that the boundary had migrated progressively eastwards.

The final recut **608** contained three fragments of pottery within its secondary silting deposit (623). This shows the original ditch **603** was finally recut in the fifth to seventh century, proving that the field system continued in use after the Roman period and into the Saxon. It appears that after the final recut (**608**) was partially silted, (622), the features were completely sealed by windblown sand 601. After this, it appears that a double-ditch (**613** & **614**) was dug immediately over the earlier boundary, following the same alignment. This

suggests that the boundary was in use for a long period of time, and that it survived as a visible hollow after the windblown sand had sealed it. Material adjacent to ditch **614** (deposit 621), and probably associated with it, contained a single fragment of fifth-seventh century pottery. This deposit was either upcast from the digging of ditch **614**, remains of a soil bank, or field clearance material next to the ditch.

A number of other features were exposed within the trench which appear to be of a similar date to ditch **603** and its recuts.

Ditch **604**, approximately 5.5m east of recut **608**, ran north-south, and had vertical edges and a flat base. It is possible that the ditch was structural, containing a beam-slot, although its very size (0.7m wide) would perhaps make this unlikely. The most plausible explanation would be that the feature functioned as a boundary.

The ditch cut an earlier possible pit (**615**) that was not excavated due to a lack of time.

Five metres east of ditch **604** was gully **609**. This was orientated north-south, with vertical edges and a flat base (Plate 15). It was probably structural; part of a beam-slot, and although its fills did not contain finds, the feature is likely to be of a similar date to ditches **603** & **604**: they all ran parallel with each other, and had been sealed by windblown sand 601.

Approximately 2m north of **604**, the edge of a pit (**610**) was exposed in the northern edge of the trench. This was a steep-sided, flat-based feature, cut through windblown sand deposit 601. This tells us that it post-dates the majority of the features within the trench, although it is possibly of a similar date to the double-ditch (**613** & **614**) at the western end of the trench.

At the western end of the trench, it appears that the original ditch **603** (and its recuts) follows a similar alignment to ditch **508** in trench 05 (see above). If this is the case then the later recuts must follow a different alignment, as there was no evidence for them in Trench 05.

The majority of features within the trench are likely to be Roman to early Saxon in date, as pottery from both periods was recovered. The features that cut through the windblown sand (double-ditch **613** & **614** and pit **610**) must post-date the wind-blown sand which seals the fifth - seventh century material within ditch recut **608**.

Dating the original system of ditches to the Roman period is entirely plausible as Roman pottery has been found here. Such a ditch complex may well be associated with a series of Roman enclosure cropmarks to the east of the proposed development, and a number of ditches located by geophysics.

That the later ditches and pit may simply be a continuation of the earlier enclosures, is suggested, as the later ditches are orientated similarly and overly the recuts of the original ditch **603** to the west.

ll

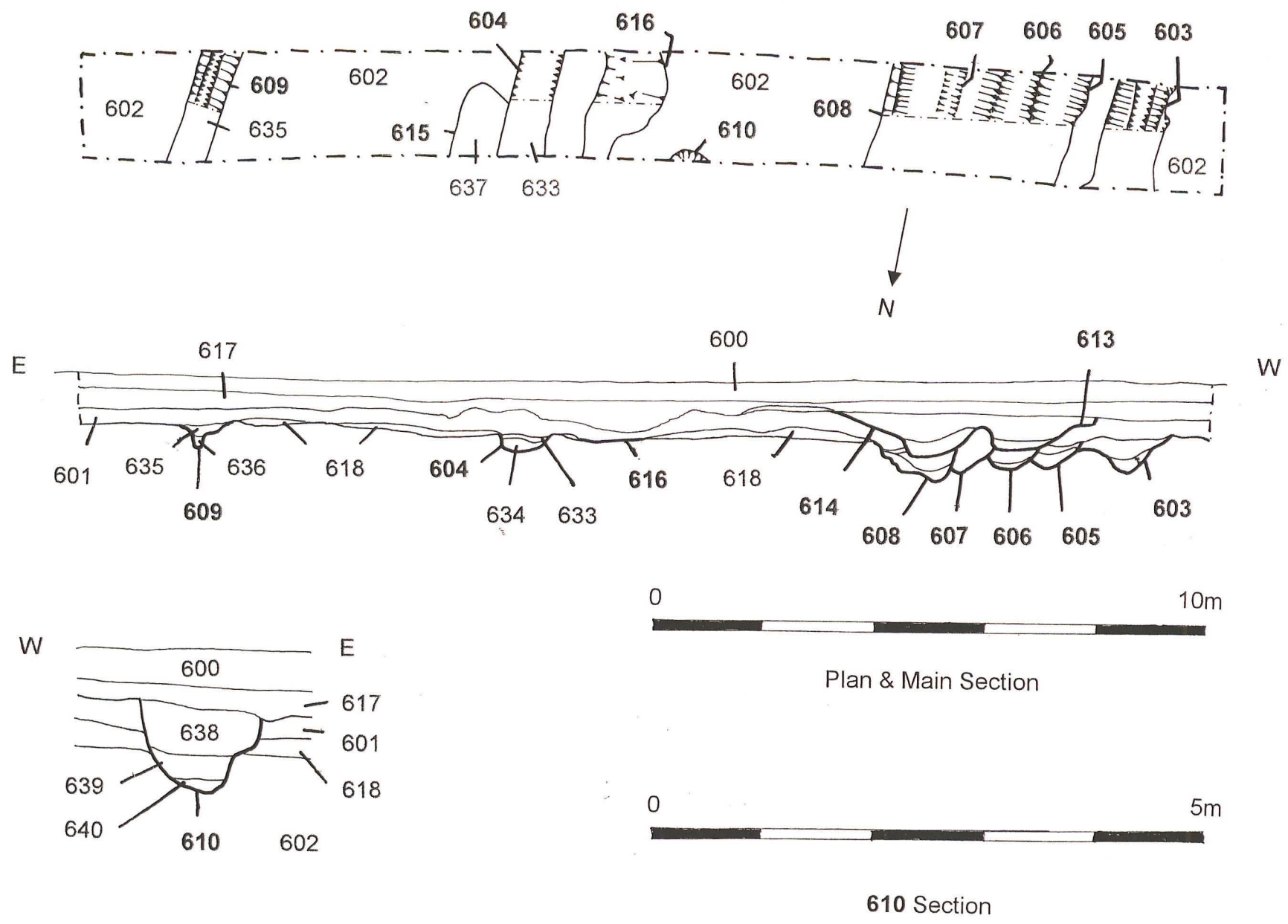


Figure 6: Trench 06 plan and sections

Dating the beam-slot structure suggested by gully 609 is problematic due to the lack of finds. It may well be associated with either the Roman or early Saxon features.

6.7 Trench 07

6.7.1 Introduction

The final trench was orientated NNW-SSE, and was located at the east end of the site to sample remains of the Bishop's Manor House and related medieval remains (Fig. 7; Plate 16).

6.7.2 Archaeological Results

The topsoil (700) sealed a colluvial layer (716), which in turn sealed the archaeology and the natural clay 602. The machining showed that there was a drop of 0.7m in the natural from the southern end of the trench to the northern end.

A number of archaeological features and deposits were exposed within the trench, including some sandstone debris and green-glaze roof tile, which resulted in the trench being extended a further 6m southwards.

6.7.3 Medieval

After cleaning, the sandstone rubble (703) was found to seal a substantial wall (704), of which only a single course survived (Plate 17). The most likely explanation for the overlying rubble 703 is that it represents demolition from the wall superstructure. The wall itself was approximately 0.8m wide, running east-west, with large sandstone blocks forming the outer facings and smaller material representing the core. There did not appear to be a construction trench for the wall, instead it seems it was built directly onto an area of colluvium (701) overlying the natural clay. The substantial size of the wall suggests that it is likely to relate to a structure of several storeys, whilst the large quantities of roof-tile (including green-glaze) indicates that the building probably had a tiled roof. Although no dateable pottery was recovered, the roof-tile from the topsoil and subsoil layers above was dateable to the thirteenth century. 1m.
12/13.

Two other features were found, sealed by the demolition material; namely a ditch (707) 2m to the north of the wall, and a natural hollow or shallow ditch (706) immediately to the south of it.

Ditch 707 ran east-west, and had steep sides and a narrow slot within the base (Plate 18). The ditch had silted-up naturally, with a single fragment of medieval green-glaze tile and several pieces of sandstone recovered from the

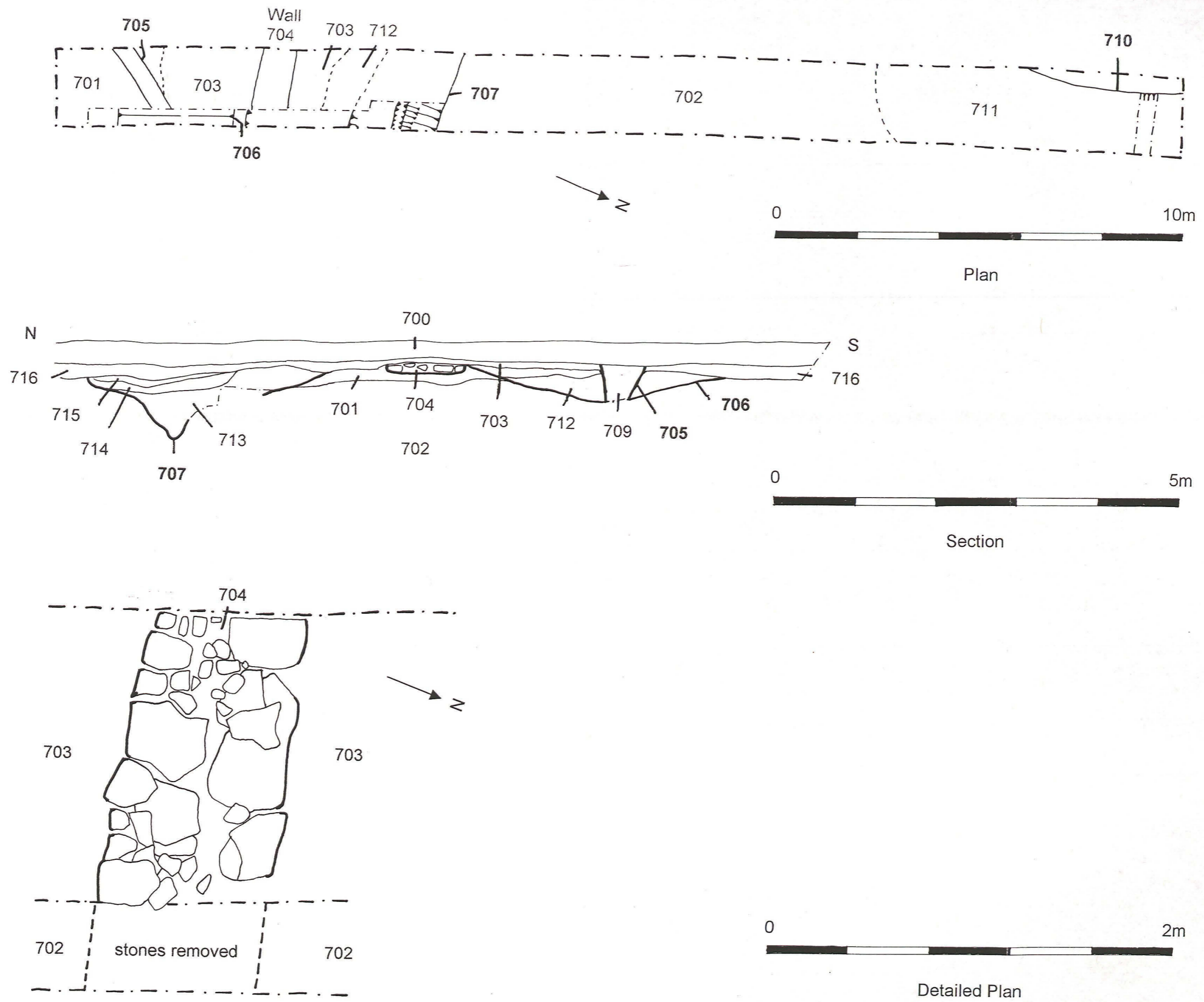


Figure 7: Trench 07 plans and section

primary silts 713. The most likely date and function of the ditch is that it was for drainage during the medieval period, probably whilst wall 704 was in use. The presence of medieval building material (tile and stone) within the primary fill, and the fact that the ditch was later sealed by the demolition material 703, shows that the ditch was open whilst the wall was standing, but had fully silted-up by the time of its demolition.

Feature **706** immediately to the south of the wall was wide and shallow, although its shape in plan could not be ascertained with any degree of accuracy due to the limited nature of its excavation. It is possible that it was a shallow drainage ditch associated with the wall, or a natural hollow/depression.

The substantial stone structure with tiled roof (suggested by wall 704) probably relates to either the Bishop's Manor House itself, or to an associated structure.

The conditions within the trench attested to the poor drainage that may have prevailed within this part of the site, suggesting that the ditch (**707**) is likely to have been a drainage ditch.

6.7.4 Mid-late Saxon

At the northern end of the trench there was a curvi-linear feature (**710**) which ran north-south, before turning westwards at its southern end. The ditch was shallow, but wide, with vertical edges and a flat base, and contained a single fragment of late eighth to late ninth century pottery. The ditch, which pre-dated the medieval deposits at the southern end of the trench, probably functioned as a drain in an area likely to have poor natural drainage.

7.0 Discussion and Conclusions

It is very clear from the descriptive accounts of all the trenches (save trench 03), that the archaeological potential for much of the whole site is high.

7.1 Romano-British

The earliest evidence for occupation dates to the Romano-British period. Roman ditches were uncovered within trenches 05 & 06, and possibly 04, showing that an extensive Romano-British field system is likely to be found across the whole of the eastern half of the development. Evidence for a beam slot in trench 06 suggests that at least one, and possibly more structures, are also likely to exist.

Although Romano-British field systems are not particularly uncommon in parts of Lincolnshire (or nationally), little is known of the Roman occupation of the surrounding area.

The evaluation suggests that Romano-British archaeology is likely to extend throughout much of the eastern half of the site, with the lack of finds to the west of the path (in the middle of the site), suggesting that it does not extend this far. All of the Roman features were found to be sealed by a substantial deposit of wind-blown sand, and the features are between 0.6m and 0.9m below the modern ground surface. It is possible that at this depth the archaeology will remain for the most part protected from development, although this may depend on the construction methods employed by the developer.

7.2 Early Saxon (5th - 7th century AD)

Material from trenches 04, 05 & 06 all suggested the presence of an important early Saxon settlement at Dunholme. High status occupation is suggested by the rare pottery fragment from the ditch associated with the probable posthole structure.

Such a settlement within the area of an earlier Romano-British field system complex perhaps suggests some continuity of occupation at Dunholme, this argument is strengthened by the numerous recuts, including at least one probable 5th - 7th century recut, of a Roman field ditch in trench 06.

7.3 Mid-Saxon to Saxo-Norman (7th - 11th century AD)

The wealth of mid-late Saxon material within Trench 04 is of interest as it points to a previously unknown settlement of that period. Although remains of probably only a single beam-slot wooden structure were uncovered within the trench, the volume of material, including pottery and animal bone, suggests that the structure was probably one of a number of buildings on this prominent part of the site.

The Saxon pottery assemblage included remains of a pouched lug vessel that may have come from the Belgian coast (Frisian). The pot itself is very rare and unusual, with no other examples known from the county. It is certainly possible that cultural links with Frisia had been established as it is known that Frisians had come to settle in Britain after the Romans had abandoned the province. In fact, the Frisians are known to have played a major part in the recovery of English trade with the Continent (Myers 1998, 48). Such a vessel would not have simply entered the assemblage after being used to transport other products, instead, the vessel was probably traded for its own desirable characteristics (Orton, Tyers & Vince 1997, 226-7), namely the 'pouched lug'. Such a vessel would have been suspended over a fire for cooking purposes, and the pouched lug would protect the knotted ends of the ropes from the fire (J. Young pers. comm.).

Although the majority of the mid-late Saxon archaeology appears to be limited to Trench 04, it is likely that the remains are more extensive. Furthermore, the settlement was most likely to be a continuation of the early Saxon remains

located only 50m to the north in trench 04, and in trench 06 (100m to the north). The mid-late Saxon occupation is probably extensive as associated material was recovered from trench 07, about 125m away, to the northeast.

The settlement remains, coupled with the important overseas trade link element, help to put the phase into context, and show that the site is of regional, if not of greater importance.

It is possible that the archaeology may be preserved *in situ* as the features were all between 0.8m and 1.0m below the modern ground surface, (sealed by a substantial windblown sand deposit). The large dump of Saxon material however, was only 0.55m below the ground surface.

7.4 Medieval

Whilst Trench 01 was opened to locate the remains of Dunholme Manor (with positive results), a number of earlier deposits and a wall over 20m long were also uncovered. These show that medieval occupation of the site dated from before the construction of the Manor, perhaps as early as the late twelfth century. The substantial wall may well be part of a building, perhaps a precursor to the Manor itself, or an altogether unrelated building.

Part of Dunholme Manor, possibly the southwestern corner of the west wing, was uncovered within Trench 01. Pottery evidence from earlier deposits that have been truncated by the construction of Dunholme Manor show that the Manor was probably built around, or after, the mid fourteenth century. If this is the case then Dunholme Manor appears to have stood for around 500 years, before its demolition in 1898.

Remains of a substantial stone wall were uncovered in Trench 07 at the eastern end of the site. This wall was probably either part of the Bishop's Manor House itself, or a building associated with the Manor. Pottery and roof tile from the topsoil and subsoil deposits showed that the associated structure was in use during the thirteenth century. This may well provide the date for the construction of the Bishop's Manor, which was out of use by 1647.

Medieval remains were also uncovered in Trench 02, including a wall, possibly part of a building, and several well-pits. Although a date for the wall was not obtained, it is possible that it relates to a building shown on the Tithe map of 1844. The date for the construction of the wall however, is likely to be much earlier.

Little is known of either Dunholme Manor or the Bishop's Manor House, or associated buildings, with both being of major importance to providing knowledge for the history of Dunholme itself. Although not particularly rare, excavation of the buildings and features would provide information of regional importance.

The archaeological evaluation suggests that the medieval archaeology is limited mainly to the western half of the site (except for the southwest corner), and to a limited area towards the northeastern edge of the site.

All of the medieval deposits were of insufficient depth to expect their survival during construction, although preservation *in situ* would be desirable.

7.5 Post-Medieval

Associated with Dunholme Manor, although probably of a later construction date, were two stone drains. The date for their construction is unknown, and although it is possible they date to the construction of Dunholme Manor, this seems unlikely. In all probability they were built after the Manor was constructed. The drains would have taken water away to the northwest, away from the house.

Although these features are not particularly important on a regional basis, they do provide evidence for the later phases of activity at Dunholme, and help to show how the modern village has evolved.

The post-medieval features all appear (on current evidence) to be concentrated at the northwestern corner of the site in Trench 01.

7.6 Modern

Evidence for building work in the 19th century was found within Trench 01, namely a small structure and solitary wall. Both were built using 'Dunholme brick', a locally-produced brick from the mid 19th century, suggesting construction work during the mid-late nineteenth century. Both the building and the wall were demolished in 1898, as part of the building works for Grange Farm.

Although remains of Grange Farm itself were not uncovered within the areas investigated, the large quantities of brick rubble and concrete platforms in the western half of the development area attest to its existence. This, the latest phase of activity on the site, saw construction in 1898, and then demolition in 1990.

As with the post-medieval archaeology, the modern deposits are important only as a record of activities at Dunholme, indicating how the village has evolved. All excavated modern deposits were to be found in the western half of the site, apart from the southwest corner. Surface remains confirmed this, although a single demolished breeze-block structure was visible, probably a septic tank, within the eastern half of the site.

8.0 Effectiveness of methodology

The specification for the archaeological trial excavation proved to be very effective as it fulfilled the needs of both the archaeology and the client at this stage of the development.

The trenching has helped to define the extent of the medieval occupation across the site, and has highlighted earlier activities from the Roman and Saxon periods. In fact, it is evident that occupation at Dunholme has been from at least the late Iron Age (Albone 1997), through to the present day, a total of approximately two thousand years.

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10.0 Acknowledgements

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Plate 1: Aerial photo showing the development area, looking NE.



Plate 2: Trench 01, looking E. Modern 'Dunholme brick' wall 120 cutting medieval wall 115.



Plate 3: Trench 01, looking SE. Stone drain 104.



Plate 4: Trench 01, looking E. Remains of Dunholme Manor (wall 107).



Plate 5: Trench 01, looking E. Robbed-out medieval wall 116.



Plate 6: Trench 02 after cleaning, looking N.



Plate 7: ?Medieval wall 203 within hand-dug slot, east of trench 02, looking south.



Plate 8: Trench 02, looking east. Medieval pits 204 & 205.



Plate 9: Trench 03 after machining, looking north-west.



Plate 10: Trench 04 after cleaning, looking approximately west.



Plate 11: Trench 04, looking west. East-facing section showing gully 406 and deposit 405.



Plate 12: Trench 05 after cleaning, looking south-east.



Plate 13: Ditch 503 and early Saxon posthole structure, looking south-east.



Plate 14: Trench 06 after excavation, looking approximately east.



Plate 15: Trench 06, looking south. Roman/early Saxon structural gully 609.



Plate 16: Trench 07 after excavation, looking approximately north.



Plate 17: Trench 07, looking west. ?Remains of Bishop's Palace (wall 704).



Plate 18: Trench 07, looking east. Drainage ditch 707 adjacent to wall 704.

Appendix 11.3 - Pottery Report and Archive

Archive Report on the Pottery from an evaluation at Dunholme (LSLD99)

Jane Young

Lindsey Archaeological Services

1. Introduction

A total of 73 sherds of pottery (representing an estimated 45 vessels) were examined. The material ranges in date from the Roman to the early modern period. The pottery was examined both visually and microscopically at X20 magnification and then recorded using locally (Lincolnshire) and nationally agreed codenames.

2. Condition

The material is in variable condition with most vessels being of reasonably fresh appearance while others are abraded. A small number of vessels are freshly broken. Several vessels have obvious signs of use for cooking or the heating of liquids as they have external soot residues. Most of the shell-tempered vessels are heavily leached.

3. The provenance of the material

The date range of the contemporary pottery (or tile when only tile is present in the context) from each context is listed below in Table 1.

Table 1: Date of pottery and tile groups

context	date
102	late 18th to 19th
106	late 14th to mid 16th
108	late to post-medieval
109	late 12th to 13th
111	late 13th to mid 14th
114	14th to 16th
118	late 12th to 15th
122	13th
201	late 9th to late 10th
218	medieval
220	medieval
401	5th to 7th
405	late 9th to mid 10th
408	late 9th to early 11th
412	Roman to early modern

512	5th to 7th
518	Roman
601	5th to 7th
617	Roman
621	5th to 7th
623	5th to 7th
700	13th
701	13th
711	late 8th to late 9th
713	medieval
716	late 12th to 13th

4 The range and variety of materials

The Saxon and later pottery has been identified to ware/common name and sub-fabric levels where possible. In total 62 sherds (representing an estimated 34 vessels) of post-Roman pottery were recovered (Table 3).

Table 3: Post-Roman pottery codenames and total quantities by sherd and vessel count

cname	full name	period	sherds	vessels
BL	Black-glazed wares	pmed	4	4
BS	Brown stoneware	emod	1	1
CHARN	Charnwood ware	emsax	3	1
ELFS	Early Fine-shelled ware	msax	1	1
ESGS	Anglo-Saxon Greensand quartz	emsax	1	1
FE	Ironstone tempered	emsax	3	3
HUM	Humberware	med	2	2
IMP	Unidentified imported wares	nk	15	1
LEMS	Lincolnshire Early Medieval	emed	3	3
LFS	Lincolnshire Fine-shelled ware	sn-emed	4	4
LKT	Lincoln kiln-type shelly ware	lsax	1	1
LSH	Lincoln Shelly ware	lsax	13	3
LSLOC	Late Saxon Local Fabrics	lsax	1	1
MISC	Unidentified wares	nk	4	2
R	Roman pottery	ROM	11	11
SST	Saxon sandstone-tempered	emsax	4	4
ST	Stamford Ware	lsax	1	1
TGE	Tin-glazed earthenware	pmed	1	1

Roman Pottery

Only four sherds of Roman date were recovered from the site.

Anglo-Saxon Pottery

A total of nine vessels are identifiable as of Anglo-Saxon products. The date of the earliest post-Roman pottery is difficult to determine as several fabric types are thought to continue into the middle-Saxon period. Most of the Anglo-Saxon vessels are plain undecorated jars or bowls, although one vessel has rusticated decoration.

Middle Saxon Pottery

A single Early Fine-shelled ware vessel is identifiable as being of middle Saxon date. Some of the leached miscellaneous shell-tempered sherds may also be of this date.

Late Saxon and Saxo-Norman pottery

Five vessels are of late 9th to late 10th century date and a further five belong to the 11th century. The vessels, mainly jars, include material made in Lincoln and Stamford.

Fifteen sherds from a single vessel with a 'swallow's nest' type lug in a shell-tempered fabric are a unique find in the county. Similar vessels are known from Anglo-Saxon sites in the county (Leahy 1993, 24), however all are in typical Anglo-Saxon fabrics. The shell-tempered fabric of this vessel has not been noted in the county before and it is possible that the vessel is a Frisian import or English copy from outside of the area. The vessel is associated with both Anglo-Saxon and late Saxon material (context 405) and dependant on a closer identification may date to either period.

Medieval and later pottery

Only a small number of medieval and later sherds were recovered from the site. Three Local Early Medieval Shelly ware vessels date to the 12th or 13th centuries and the two Humberware sherds belong anywhere between the 14th and 16th centuries.

Statement of potential

The material from this site forms a small but informative assemblage. The presence of Anglo-Saxon, middle Saxon and late Saxon pottery indicates occupation in the vicinity of the site. The small number of medieval sherds cannot be used to assess the potential for medieval activity in the area as the ceramic material may just reflect the pattern of rubbish disposal at this period.

The possible Frisian vessel should be drawn for archive or publication and should also be sampled scientifically to determine the source of the shell-temper.

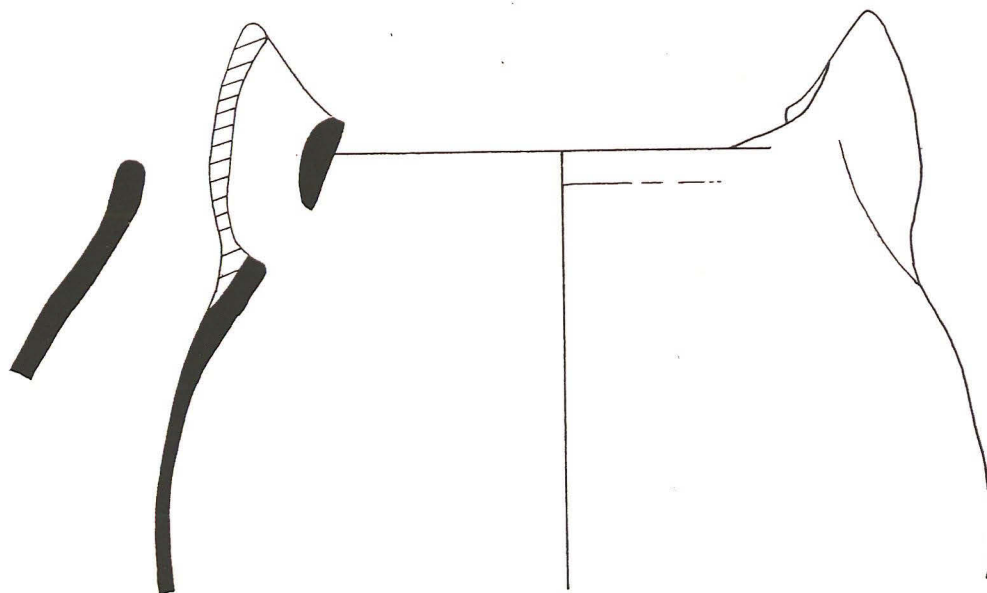
Storage and curation

All of the pottery should be retained for future study. Some restoration work could be done to make the swallow's nest lugged vessel displayable.

Bibliography

Leahy, K., 1993 'The Anglo Saxon Pottery' in Field, F.N. and Leahy, K., *Prehistoric and Anglo-Saxon Remains at Nettleton Top, Nettleton, L.H.A.* 28, 9-38

Profile drawing of ?Frisian Swallows Nest Lugged Vessel
(illustrated at half actual size)



pottery archive lsld99

context	cname	sub fabric	form type	herds	vessels	decoration	part	action	description
102	BL		?	1	1		base		L17-18th
102	BL		?	1	1		BS		int glaze; 17-18th
102	BL		?	1	1		BS		small frag; 17/18th
102	BL		bowl	1	1		rim		L18-20th
102	BS		jar?	1	1	machine dec	BS		
102	TGE		?	1	1	BL/W dec	BS		18th
106	HUM		jug/jar	1	1		BS		worn
109	LFS		?	1	1		BS		
109	LFS		?	1	1		base		soot; leached surfaces
109	ST		jar/pitcher	1	1		BS		int soot; glaze; 11th
111	LFS		jar	1	1		BS		soot
111	LSH		jar	3	1		BS & base		soot; ?ID or LSLOC high % Fe in fabric
114	HUM		jug	1	1		BS		covered in white deposit
118	LFS		bowl	1	1		rim		simple upright rim; soot; prob 11th
201	LSH		jar	1	1		BS		
401	FE		bowl	1	1		rim		simple upright rim; fabric incl mod ?chaff voids and mod fine quartz
401	R		?	1	1		rim		
401	SST		?	1	1		base		mixed fabric; common very fine to fine aggregate
405	CHARN		?	3	1		BS		
405	IMP		swallow nest pouched jar	15	1		rim & BS	draw;section	fabric incl comm shelly (limestone) + comm mixed fine to med quartz + occ Fe; edges leached; ?ID as Frisian; heavy soot
405	LKT		jar	1	1		BS		? ID; completely leached
405	LSH		bowl	9	1		rim & base		almost completely leached and discoloured black; everted rim; or?LKT

context	cname	sub fabric	form type	herds	vessels	decoration	part	action	description
405	R		?	1	1		BS		very abraded
405	R		mortaria	1	1		rim		very abraded
405	SST		?	1	1	finger grooved?	BS		burnish ext; mixed SST + occ limestone/chalk + occ carbonised veg + occ Fe
408	LSLOC		jar	1	1		BS		soot; shell fabric + comm Fe + mod limestone; leached
512	ESGS		?	1	1		BS		rusticated dec; fabric incl greensand + occ carbonised veg + occ muscovite + mod Fe
512	SST		bowl	1	1		rim		fine fabric; comm fine aggregate; occ Fe
518	R		?	1	1		base		
518	R		?	1	1		base		508
601	FE		?	1	1		BS		very thick sherd; abun large Fe frags; mod chaff; mod fine sub-rounded quartz; occ limestone
601	R		?	1	1		handle		very abraded
601	R		?	1	1		rim		
601	R		?	1	1		BS		
617	R		?	1	1		rim		
621	SST		?	1	1		BS		abun fine sub-rounded quartz + occ larger + occ aggregate + occ chaff
623	FE		?	1	1		BS		abun large Fe frags + carbonised veg voids; mod sub-rounded quartz
623	R		?	1	1		rim		
623	R		?	1	1		BS		
700	MISC		?	2	1		BS		?ID; completely leached; incl comm subrounded quartz + comm fine subrounded Fe; prob MSAX
701	LEMS		bowl	1	1		base		completely leached
701	LEMS		?	1	1		BS		completely leached

context	ename	sub fabric	form type	herds	vessels	decoration	part	action	description
701	LEMS		?	1	1		base		?ID; completely leached
701	MISC		?	2	1		BS		completely leached small frags; shell tempered
711	ELFS		jar	1	1		BS		soot; ?ID

Appendix 11.4 - Tile Report and Archive

Medieval and later Ceramic building material from Dunholme (LSLD99). Archive Report.

Claire D Angus, Lindsey Archaeological Services

A total of 52 fragments representing a maximum of 45 tiles were recovered during the evaluation at Dunholme; the material included medieval and later tile, with one possible Roman fragment.

Range and variety of material

The material has been identified to common type and sub-type levels when possible. Table 1 shows the broad range of ceramic building material present on the site.

Table 1 : Tile codenames and total quantities by fragment and tile count

Cname	full name	period	sum of frags	tiles
DAUB	Daub	Med-pmed	1	1
GPNR	Glazed untyped	Med	10	7
INDUS	Industrial	Roman-pmed	2	2
NIB	Nib	Med-pmed	5	5
PANT	Pan	Med-pmed	2	2
PNR	Untyped	Roman-pmed	31	28
RFURN	Roof furniture	Med	1	1

The majority of the fragments recovered were flat, roof tiles, a number of which were glazed. The glazed tiles were early in date, dating to the period between the mid 12th-13th century. The nibbed tiles recovered varied in date from early tiles dating to between the mid 12th and mid 13th to later post-medieval tiles from the 18th century. Some of the tiles appear to be Lincoln products whilst others are in unknown fabric types which may prove to be of local origin.

Condition

Most of the material was fresh, with a high proportion of large fragments among the tile recovered.

Statement of potential

The number of medieval fragments, most of which are flat roof tiles, indicates that there may have been a building in the vicinity. The presence of the glazed tiles indicates that this may have been a fairly high status building.

Storage and curation

All of the tile should be retained for further study of the fabric.

tile archive lsld99

Claire D Angus, Lindsey Archaeological Services

context	cname	sub type	fabric	frags	description	date
102	PNR			1	corner; soot; mortar; flat	medieval - post-medieval
102	PANT			1		18-20th
102	PANT			1		18-20th
108	NIB	Type 7		1	moulded nib; corner; large frag	15-18th
108	PNR			1	soot; large frag; flat	medieval
108	PNR			1	mortar; soot; burnt reverse; large frag; flat	medieval
108	PNR			1	mortar; soot reverse; corner; large frag; flat	medieval
108	PNR			1	corner; large frag; flat	medieval
108	PNR			1	mortar; large frag; flat	medieval
108	NIB	Type 4 cut		1	applied nib; mortar; large frag; corner	14-15th
108	NIB	Type 3		1	soot; corner; moulded nib; mortar	13-14th
108	PNR			1	sanded reverse; mortar; combed surface; large frag; flat	medieval
109	PNR			1	corner; flat	prob 13th
111	NIB	Type 3 cut		1	corner; soot	L13-M14th
118	PNR			1	?mortar; bedded on limestone + flint; odd fabric incl comm Fe + limestone; flat	medieval - post-medieval
122	GPNR			1	flat; green glaze; soot; mortar	13th
218	PNR			1	mortar	medieval
218	PNR			1	corner; mortar; flat	medieval
218	PNR			1	corner; flat; mortar	medieval
220	PNR			2	flat; mortar; odd fabric incl flint; single tile	
405	PNR			1	tiny frag	
405	INDUS			2	?mould or daub	
405	PNR			1	tiny frag	
405	PNR			1	tiny frag	
405	PNR			1	tiny frag; ?daub	
405	DAUB			1	wattle imp; ?burnt	
412	PNR			1	tiny frag	medieval

context	cname	sub type	fabric	frags	description	date
700	GPNR			3	single tile; splashed greenglaze; flat; common Fe	mid12th-e13th
700	GPNR			1	flat; mortar; splashed greenglaze	mid12th-e13th
700	GPNR			1	splashed greenglaze; flat; ?accidental curved corner	mid12th-e13th
700	RFURN		LSWA	1	thick, reduced splashed greenglaze; common Fe	medieval
700	GPNR			2	splashed greenglaze; 1 corner; flat; single tile	mid 12th-e13th
700	PNR			1	?daub	
700	PNR			3	single tile; flat	medieval
700	PNR			1	flat; common Fe	medieval
700	PNR			1	vitrified; flat	medieval
700	PNR			1		
700	NIB	Type 1/2		1	corner	mid12th-e13th
700	PNR			1	corner; finger marks on edge; flat	13-14th
701	PNR			1	odd fabric; ?date; ?Roman	?Roman
701	PNR			1		medieval
701	GPNR			1	splashed greenglaze	late12-13th
713	PNR			1	large frag; common Fe; flat; width; odd fabric; ?glaze spot; ?moulded on wood; medieval	
713	PNR			1	tiny frag; ?date	?date
716	GPNR			1	reduced greenglaze; ?bedded on flint; flat	L12-13th

Appendix 11.5 - Pottery and Tile Dating Archive

context	date	comments
102	late 18th to 19th	
106	late 14th to mid 16th	
108	late to post-medieval	tile only
109	late 12th to 13th	tile dates as residual pottery only
111	late 13th to mid 14th	tile dates as residual pottery only
114	14th to 16th	
118	late 12th to 15th	tile dates as residual pottery only
122	13th	tile only
201	late 9th to late 10th	
218	medieval	tile only
220	medieval	tile only
401	5th to 7th	
405	late 9th to mid 10th	
408	late 9th to early 11th	
412	Roman to early modern	tile only
512	5th to 7th	
518	Roman	
601	5th to 7th	
617	Roman	
621	5th to 7th	
623	5th to 7th	
700	13th	tile dates as pottery all residual
701	13th	
711	late 8th to late 9th	
713	medieval	tile only
716	late 12th to 13th	tile only

Appendix 11.6 - Environmental Report

Introduction

Evaluation excavations conducted by PreConstruct Archaeology on land off Scothern Lane, Dunholmme, uncovered features of Romano-British, Saxon and medieval date. During the excavation four samples were collected for environmental analysis (Table 1) and a sample of animals bones was hand collected.

Table 1: Samples taken for environmental analysis

site	sample	context	volume in l.	description	date
SLD99	1	111	4	waterlogged silting deposit	early med.
SLD99	2	121	12	waterlogged silting deposit	early med.
SLD99	3	405	12	dump of domestic & demolition material	mid-late Saxon
SLD99	4	513	9	post-hole fill	saxon/medieval

Methods

The soil samples were processed in the following manner. Sample volume and weight was measured prior to processing. The samples were washed in a 'Siraf' tank (Williams 1973) using a flotation sieve with a 0.5mm mesh and an internal wet-sieve of 1mm mesh for the residue. Both residue and float were dried, and the residues subsequently re-floated to ensure the efficient recovery of charred material. The dry volume of the flots was measured, and the volume and weight of the residue recorded. A total of 37 litres of soil was processed in this way.

The residue was sorted by eye, and environmental and archaeological finds picked out, noted on the assessment sheet and bagged independently. A magnet was run through each residue in order to recover magnetised material such as hammer scale and prill. The residue was then discarded. The float of each sample was studied under a low power binocular microscope. The presence of environmental finds (ie snails, charcoal, carbonised seeds, bones etc) was noted and their abundance and species diversity recorded on the assessment sheet. The float was then bagged. The float and finds from the sorted residue constitute the material archive of the samples.

The individual components of the samples were then preliminarily identified and the results are summarised below in Tables 2 and 3.

Results

The very calcareous character of the residues indicates that it is very unlikely that organic material will have survived without charring in these deposits. The uncharred elements in the flots are therefore considered to be intrusive and result from the movement of more recent material down through the soils. In the case of the wood in sample 2 (see below) it would appear that this material is the remains of recent tree or shrub roots. The few uncharred seeds that were present in the samples include seeds of elder, *Sambucus* sp. and goosefoots, *Chenopodium* sp., both groups with robust seeds, and a few other taxa. Small fragments of coal were present in two of the samples. These were rarely more than 2-3mm in diameter and in very low densities and are presumed to have entered the deposits in a similar manner to the 'modern' seeds.

Table 2: Finds from the samples

Sample	cont	vol	residue vol in l.	pot *	brick/ tile g.	fired clay g	coal	bone in g.	residue and comments
1	111	4	0.5	7/11	3		+	2	limestone brash and calcareous concretions
2	121	12	0.8	4/2	4		+	37	calcareous concretions, cinder?, possibly a hammerscale flake
3	405	12	0.55	2/3		148		118	fired earth with occasional limestone
4	513	9	0.1					1	mineralised soil and calcareous concretions

(*- sherd no/weight in g.; + - few fragments present; ++ - many fragments)

Sample 1, context 111.

The residue of this sample, approximately 12% by weight, was composed of limestone brash and calcareous concretions. The archaeological finds included small fragments of brick or tile, seven sherds of pottery and two grammes of animal bone. The brick/tile fragments were rarely more than 5mm in diameter and it is possible that this material is of more recent origin than the deposit having travelled down through the soil as a result of soil processes. One piece of bird eggshell, a single fish vertebra, a few fragments of common shrew, vole and amphibian bone were sorted from the residue.

The flot included numerous small fragments of charcoal, several charred cereal grains, preliminarily identified as wheat, barley and oats, a charred legume and a number of terrestrial mollusc shells. The latter included *Trichia hispida*, *Vallonia costata*, *Vallonia excentrica*, *Carychium* sp., *Lymnaea truncatula*, *Oxychilus* sp., *Cecilioides acicula* and *Planorbis leucostoma*. This small suite of shells, in which *Vallonia* sp. dominate, suggests an open country or grassland habitat with damp grassland or seasonally wet areas.

Sample 2, context 121.

The residue of this sample is entirely composed of calcareous concretions and for this reason the abundance of waterlogged wood in the sample is considered to be modern, deriving from the tree roots noted on site. The absence of other waterlogged material except for a few seeds of elder and a single ehippia of waterflea, *Daphnia* sp., tends to support this inference. As in sample 1 a few grammes of small fragments of brick/tile were recovered from the residue along with a few sherds of pottery and a number of fragments of animal bone, including a cattle tooth. A few small pieces of what appear to be cinder were also sorted from the residue with a few rodent and amphibian bones and pieces of eggshell.

The flot was dominated by the uncharred wood fragments, but charred cereal grain and a few mollusc shells were present. Wheat was preliminarily identified and *Trichia hispida*, *Vallonia* sp., *Vallonia costata*, *Discus rotundatus* and *Oxychilus* sp. were recorded among the shells. These include both grassland and shade loving taxa.

Sample 3, context 405

The residue of this sample is almost entirely composed of fired earth and suggests that the debris from a burnt daub or mud structure may be the main component of this dump. The absence of burnt bone suggesting that the firing was probably not *in situ*. Apart from the burnt daub, the

archaeological finds were limited to two sherds of pottery and a number of animal bones. The bones included fragments of horse, sheep, cattle, a duck (probably wild), and a mouse.

Charcoal was much more abundant in this sample than the others, and charred cereals (including wheat and barley), a few charred seeds and a single mollusc shell were recorded in the flot.

Table 3: Environmental finds from the samples

Sample	con	vol	flot vol	snail */#	ch'rd grain *	ch'rd seed *	Char coal *	egg- shell *	fish *	small mam- mal *	comment
1	111	4	4	2/2	2	1	3	1	1	1	wheat, barley, oat, legume, shrew, vole, fish, frog/toad
2	121	12	100	2/2	2	1	3	1		2	wheat, cattle, rodent, frog/toad, <i>Daphnia</i> sp., lots wood
3	405	12	25	1/1	2	1	5			1	wheat, barley, Brassica?, horse, sheep, cattle, duck, mouse
4	513	9	2		1	1	2		1	1	barley, oat, rodent, frog/toad, eel

* frequency of items: 1=1-10; 2= 11-100; 3=101-250; 4=251-500; 5=>500

diversity of molluscs as follows: 1=1-3; 2=4-10; 3=11-25; 4=26-50 taxa.

Sample 4, context 513

The residue of this sample was composed of mineralised soil, calcareous concretions and a little limestone. Finds sorted from the residue were limited to animal bone, including unidentifiable mammal bone, rodent, frog/toad and an eel vertebra. The flot was also relatively poor with a few fragments of charcoal and a few charred cereal grains and weed seeds. Barley and oats were tentatively identified.

Discussion

The samples are not rich and clearly there is some contamination by smaller fragments of coal, brick/tile and probably some modern seeds. Sample 2 was described by the excavator as including a tree root and this was clearly a recent rather than ancient tree. Despite the description of the early medieval silts of context 111 and 121 as waterlogged the occurrence of such large quantities of calcareous concretions in the sample indicate that it is only seasonally wet, with the concretions forming as the ground dries out during the summer months. A limited amount of domestic rubbish was finding its way into these two contexts, and on the basis of the absence of chaff and relative absence of charred weed seeds crop processing debris was making no contribution to the deposits. The occurrence of ephyppia of waterflea, a freshwater crustacean, probably reflects the recent, rather than ancient, environment of this part of the site and the single shell of *Planorbis leucostoma*, a snail species typically found in ditches or ponds that tend to dry up in summer, in 111 may have arrived with dumped vegetation and does not necessarily imply seasonally wet conditions in the past.

The dump deposit, context 405, clearly includes domestic rubbish (most of the hand collected animal bone derived from this layer) and debris from what may be a burnt down daub or mud walled structure. This one sample produced a broader range of taxa than were hand collected from this context.

The post-hole fill, context 513, contained little debris, most of it likely to derive from domestic rubbish on the site.

late 13-14

13

mid
14th-10th

5th-7th

The charred plant remains are in a generally poor condition and the small size of many of the charcoal fragments means that their potential for identification is low. Many of the charred cereal grains are too poorly preserved for identification but a number will permit the identification of the crops being grown.

Animal Bone

The small sample of animal bone collected by hand during the evaluation comprised 97 fragments and fifty four bones from a skeleton. This material was recorded and the catalogue is attached with a key indicating the codes for the data record. The bulk of the sample was recovered from a mid-late Saxon dump, context 405. The majority of the bone fragments are in good condition and very few show signs of erosion. It is unlikely that any bones have been lost as a result of the burial environment.

Table 4: Frequency of animal bone fragments

species name	Romano -British ?	mid-late Saxon	Saxon/ medieval	early? medieval	medieva 1	medieval ?
Horse		2		1		
Cattle	4	30		1	2	1
Cattle size	1	28	1			1
Sheep	1*					
Sheep or goat		8		2		
Sheep size		4				
Pig		5				
Indet		6				

* skeleton

Only cattle, sheep and pig bones were identified, with cattle bones dominating the assemblage from context 405. The secondary fill of recut 608 of Romano-British (?) ditch 603 included a large part of the skeleton of an immature sheep. The skull (but not the mandibles) and feet were missing and it is possible that the skin was removed before the carcass was discarded.

Context 405 includes juvenile and adult cattle and adult sheep but much larger samples would be required to reconstruct the pastoral husbandry.

Conclusions

The samples suggest that the bulk of the archaeological material in the deposits derives from domestic rubbish. Charred cereals include wheat, barley and oats, with possible legumes and brassicas also being cultivated. Cattle, sheep, pig, duck and eel were eaten, although the horse bones may not reflect food waste. At least one other, possibly freshwater, fish species was present but this has not been identified.

The high percentage of fired earth, and the larger charcoal component of context 405 suggests that this layer was composed of debris from a burnt daub or mud structure as well as domestic rubbish.

The palaeoenvironmental evidence is limited to the molluscan remains from context 111 and 121, which suggests an open country/grassland habitat in the early medieval period, with perhaps some indication of damper areas.

Recommendations

The condition of the animals bones was good, and although there was no waterlogged material on the site charred plant remains occurred in all the samples. While only a proportion of the latter are identifiable they do allow identification of the crops being exploited in the Saxon and Medieval periods. Two of the samples produced snail assemblages that could contribute some data to an understanding of the palaeoenvironment of the site and the few small vertebrate remains afford complimentary data.

If further archaeological work at the site is required then there is good potential for understanding the diet of the occupants, and the major elements of the pastoral and arable economy and any changes through time. The identification of the origin and character of individual contexts may also be possible. Sampling for such evidence should include bulk sampling, 30 litres of soil, from well dated contexts for charred material, animal bone and finds; column sampling suitable deposits (such as ditches or pits) for molluscs to assess the palaeoenvironmental changes on the site; and hand collection of animal bone.

If further field work is conducted then identification by an archaeobotanist of the charred plant remains in these evaluation samples should be included with the material from the further excavations. Otherwise no other post-excavation work is recommended on the environmental material from the evaluation.

Acknowledgments

I should like to thank Alison Foster and Jeremy Dubber for the sample processing.

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Key to codes used in the cataloguing of animal bones

SPECIES		BONE		SIDE	FUSION
BOS	cattle	SKL	skull	W - whole	Records the fused/unfused condition of the epiphyses
CSZ	cattle size	TEMP	temporal	L - left side	P - proximal; D - distal; E - acetabulum;
SUS	pig	FRNT	frontal	R - right side	N - unfused; F - fused; C - cranial; A - posterior
OVCA	sheep or goat	PET	petrous	F - fragment	
OVI	sheep	PAR	parietal	TOOTH WEAR - Codes are those used in Grant, A. 1982 <i>The use of tooth wear as a guide to the age of domestic animals</i> , in B.Wilson, C.Grigson and S.Payne (eds) <i>Ageing and sexing animal bones from Archaeological sites</i> , 91-108.	
SSZ	sheep size	OCIP	occipital	Teeth are labelled as follows in the tooth wear column:	
EQU	horse	ZYG	zygomatic	h 1dpm4/dupm4	f 1dpm2/dupm2
CER	red deer	MAN	mandible	H 1pm4/upm4	g 1dpm3/dupm3
CAN	dog	MAX	maxilla	I 1m1/um1	
MAN	human	ATL	atlas	J 1m2/um2	
UNI	unknown	AXI	axis	K 1m3/um3	
CHIK	chicken	CEV	cervical vertebra		
GOOS	goose, dom	TRV	thoracic vertebra		
LEP	hare	LMV	lumbar vertebra		
UNB	indet bird	SAC	sacrum		
MALL	duck, dom.	CDV	caudal vertebra	ZONES - zones record the part of the bone present. The key to each zone on each bone is on page 2	
GULL	gull sp.	SCP	scapula		
FISH	fish	HUM	humerus		
UNIB	bird indet	RAD	radius		
UNIF	fish indet	MTC	metacarpus	MEASUREMENTS - Any measurements are those listed in A.Von den Driesch (1976) <i>A Guide to the Measurement of Animal Bones from Archaeological Sites</i> , Peabody Museum Bulletin 1, Peabody Museum, Harvard, USA	
GSZE	goose size	MC1-4	metacarpus 1-4		
BEAV	beaver	INN	innominate		
CORV	crow or rook	ILM	ilium		
POLE	polecat/ferret	PUB	pubis		
PART	partridge	ISH	ischium	PRESERVATION	
ORC	rabbit	FEM	femur	1 - enamel only surviving	
ROD	rodent	TIB	tibia	2 - bone very severely pitted and thinned, tending to break up teeth with surface erosion and loss of cementum and dentine	
JACK	jackdaw	AST	astragalus	3 - surface pitting and erosion of bone, some loss of cementum and dentine on teeth	
OWL	owl indet.	CAL	calcaneum	4 - surface of bone intact, loss of organic component, material chalky, calcined or burnt	
AUR	aurochs	MTT	metatarsus	5 - bone in good condition, probably with some organic component	
DUCK	duck sp.	MT1-4	metatarsus 1-4		
		PH1	1st phalanx		
		PH2	2nd phalanx		
		PH3	3rd phalanx		
		LM1-LM3	Lower molar 1 - molar 3		
		UM1-UM3	upper molar 1 - molar 3		
		LPM1-LPM4	lower premolar 1-4		
		UPM1-UPM4	upper premolar 1-4		
		DLPM1-4	deciduous lower premolar 1-4		
		DUPM1-4	deciduous upper premolar 1-4		
		MNT	mandibular tooth		
		MXT	maxillary tooth		
		LBF	long bone		
		UNI	unidentified		
		STN	sternum		
		INC	incisor		
		TTH	indet. tooth		
		CMP	carpo-metacarpus		
		SKEL	skeleton		

ZONES - codes used to define zones on each bone

SKULL -	<ol style="list-style-type: none"> 1. paraoccipital process 2. occipal condyle 3. intercornual protuberance 4. external acoustic meatus 5. frontal sinus 6. ectorbitale 7. entorbitale 8. temporal articular facet 9. facial tuber 0. infraorbital foramen 	METACARPUS -	<ol style="list-style-type: none"> 1. medial facet of proximal articulation, MC3 2. lateral facet of proximal articulation, MC4 3. medial distal condyle, MC3 4. lateral distal condyle, MC4 5. anterior distal groove and foramen 6. medial or lateral distal condyle
		FIRST PHALANX	<ol style="list-style-type: none"> 1. proximal epiphysis 2. distal articular facet
MANDIBLE	<ol style="list-style-type: none"> 1. Symphyseal surface 2. diastema 3. lateral diastemal foramen 4. coronoid process 5. condylar process 6. angle 7. anterior dorsal ascending ramus posterior M3 8. mandibular foramen 	INNOMINATE	<ol style="list-style-type: none"> 1. tuber coxae 2. tuber sacrale + scar 3. body of ilium with dorso-medial foramen 4. iliopubic eminence 5. acetabular fossa 6. symphyseal branch of pubis 7. body of ischium 8. ischial tuberosity 9. depression for medial tendon of rectus femoris
VERTEBRA	<ol style="list-style-type: none"> 1. spine 2. anterior epiphysis 3. posterior epiphysis 4. centrum 5. neural arch 	FEMUR	<ol style="list-style-type: none"> 1. head 2. trochanter major 3. trochanter minor 4. supracondyloid fossa 5. distal medial condyle 6. lateral distal condyle 7. distal trochlea 8. trochanter tertius
SCAPULA	<ol style="list-style-type: none"> 1. supraglenoid tubercle 2. glenoid cavity 3. origin of the distal spine 4. tuber of spine 5. posterior of neck with foramen 6. cranial angle of blade 7. caudal angle of blade 	TIBIA	<ol style="list-style-type: none"> 1. proximal medial condyle 2. proximal lateral condyle 3. intercondylar eminence 4. proximal posterior nutrient foramen 5. medial malleolus 6. lateral aspect of distal articulation 7. distal pre-epiphyseal portion of the diaphysis
HUMERUS	<ol style="list-style-type: none"> 1. head 2. greater tubercle 3. lesser tubercle 4. intertuberal groove 5. deltoid tuberosity 6. dorsal angle of olecranon fossa 7. capitulum 8. trochlea 	CALCANEUM	<ol style="list-style-type: none"> 1. calcaneal tuber 2. sustentaculum tali 3. processus anterior
RADIUS	<ol style="list-style-type: none"> 1. medial half of proximal epiphysis 2. lateral half of proximal epiphysis 3. posterior proximal ulna scar and foramen 4. medial half of distal epiphysis 5. lateral half of distal epiphysis 6. distal shaft immediately above distal epiphysis 	METATARSUS	<ol style="list-style-type: none"> 1. medial facet of proximal articulation, MT3. 2. lateral facet of proximal articulation, MT4 3. medial distal condyle, MT3 4. lateral distal condyle, MT4 5. anterior distal groove and foramen 6. medial or lateral distal condyle
ULNA	<ol style="list-style-type: none"> 1. olecranon tuberosity 2. trochlear notch- semilunaris 3. lateral coronoid process 4. distal epiphysis 		

Archive Catalogue of Animal Bone from Scothern Lane, Dunholme - SLD99

site	cont.	species	bone	no.	side	fusion	zone	butchery	gnawing	toothwear	measurement	path.	comment	preservation
SLD99	111	OVCA	MAN	1	L		2			H13114J13K12			TOOTH ROW- M3 LOOSE	4
SLD99	111	OVCA	MTT	1	L		12						PROXIMAL THIRD-GRACILE	4
SLD99	121	BOS	RAD	1	L	PF	1						SPLIT PROX END AND SHAFT	4
SLD99	121	EQU	PH2	1	F	PJ	1						PROX HALF-SMALL PONY	3
SLD99	405	BOS	AXI	1	F	AN	4	CH					MOST OF CENTRUM-CHOPPED DOWN RIGHT SIDE	4
SLD99	405	BOS	CAL	1	L	PF	12						DISTAL END BROKEN OFF	4
SLD99	405	BOS	CEV	1	F	CNAN	1345						CENTRUM AND ARCH AND POST EPI- 2 PIECES	4
SLD99	405	BOS	HC	1	R		1	CH					BASAL HALF CORE-2 PIECES-CHOPPED THRU CORE	4
SLD99	405	BOS	HUM	1	R		69						2 PIECES-DISTAL SHAFT-SL POROUS-IMM	4
SLD99	405	BOS	HUM	1	R		60	CH	DG				SHAFT-PROX CHEWED-DISTAL HEAVILY CHOPPED	4
SLD99	405	BOS	HUM	1	R	DN	9						DISTAL SHAFT FRAGMENT	4
SLD99	405	BOS	INN	1	L		7		DG				ISCHIAL SHAFT WITH FRAG ACETAB-SL POROUS-IMM	4
SLD99	405	BOS	LI	1	L								WORN	4
SLD99	405	BOS	LMV	1	F	CFAF	12345						TRANS PORCESSES LOST AND PERIPHERAL DAMAGE	4
SLD99	405	BOS	LMV	1	F	CFAF	12345						CENTRUM AND ARCH-TRANS PROCESSES BROKEN OFF	4
SLD99	405	BOS	MAN	1	L					J8K4			RAMUS FRAG WITH M2 AND 3-M2 LOOSE- 3 PIECES	4
SLD99	405	BOS	MAN	1	L		2			GH11116J15K14			P2 CONGENITALLY ABSENT-TOOTH ROW COMPLETE- LOTS SURFACE DEPOSITS ON TEETH	4
SLD99	405	BOS	MAN	1	R		5						FRAG POST ASC RAMUS WITH CONDYLE	4
SLD99	405	BOS	MAN	1	R		23			fg10			DIASTEMAL FRAG WITH DP2 AND 3- 2 PIECES	4
SLD99	405	BOS	MTC	1	L	DF	345				Bd-64		DISTAL END-3 PIECES	4
SLD99	405	BOS	MTC	1	L	DF	12345				GL-188 Bp-53.7 Dp-33.1 SD-28.8 Bd-52 Dd-29.9		COMPLETE	4
SLD99	405	BOS	MTT	1	L	DN	5						DISTAL SHAFT	4
SLD99	405	BOS	MTT	1	L				DG				ANT PART PROX END AND SHAFT-BOTH ENDS CHEWED-POROUS-JUV	4
SLD99	405	BOS	PH1	1	R	PJ	12						PROX END BROKEN	4
SLD99	405	BOS	PH2	1	L	PF	12					P	BONE GROWTH AND REMODELLING OF PROX ARTIC-POSS DRAUGHT	4
SLD99	405	BOS	RAD	1	L	PF	12						PROXIMAL END	4
SLD99	405	BOS	RAD	1	L	PJ	13						PART PROX END AND SHAFT-CALF	4
SLD99	405	BOS	SAC	1	W	CF	12345						PERIPHERAL DAMAGE	4
SLD99	405	BOS	SCP	1	R	DF	12				GLP-60 LG-52.8 BG-40.3		GLENOID	4
SLD99	405	BOS	SKL	1	F								FRONTAL FRAG	4
SLD99	405	BOS	TRV	1	F	CFAF	12345						SPINE BROKEN AND PERIPHERAL DAMAGE	4
SLD99	405	BOS	ULN	1	R		2						SEMILUNARIS FRAG	4
SLD99	405	BOS	ULN	1	F								MIDSHAFT	4
SLD99	405	BOS	UM2	1	L					J15				4

site	cont.	species	bone	no.	side	fusion	zone	butchery	gnawing	toothwear	measurement	path.	comment	preservation
SLD99	405	CSZ	CEV	1	F								LATERAL FRAG NEURAL ARCH	4
SLD99	405	CSZ	HUM	1	F		1						PART PROX ARTIC	4
SLD99	405	CSZ	HUM	1	F								DISTAL SHAFT FRAGMENT	4
SLD99	405	CSZ	LBF	2	F								SHAFT FRAG	4
SLD99	405	CSZ	LBF	2	F								SHAFT FRAG	4
SLD99	405	CSZ	LBF	1	F								SHAFT FRAG	4
SLD99	405	CSZ	RIB	1	F								SHAFT FRAG	4
SLD99	405	CSZ	RIB	4	F								SHAFT FRAG	4
SLD99	405	CSZ	RIB	1	F								PROX SHAFT FRAG	4
SLD99	405	CSZ	RIB	1	F								SHAFT FRAG	4
SLD99	405	CSZ	RIB	1	L	PN							PROX HALF	4
SLD99	405	CSZ	SCP	1	F								BLADE FRAG	4
SLD99	405	CSZ	SKL	1	F								INDET	4
SLD99	405	CSZ	SKL	5	F								INDET	4
SLD99	405	CSZ	TIB	1	F								MIDSHAFT FRAG	4
SLD99	405	CSZ	UNI	2	F								INDET	4
SLD99	405	CSZ	UNI	1	F								INDET	4
SLD99	405	CSZ	VER	1	F	AN							FRAGM,ENT POST EPI	4
SLD99	405	EQU	DUPM	1	F								SHED CROWN OF DECIDUOUS PREMOLAR	4
SLD99	405	EQU	INN	1	L	EF	59						ACETABULUM	4
SLD99	405	OVCA	ATL	1	F		12345						DAMAGE TO RIGHT SIDE	4
SLD99	405	OVCA	INN	1	R		6						ANT MEDIAL PUBIC FRAG	4
SLD99	405	OVCA	INN	1	R	EF	7						ANT ISCHIAL SHAFT AND PART ACETAB	4
SLD99	405	OVCA	MAN	1	R		7			I15J13K12			POST RAMUS WITH MOLAR ROW- 3 PIECES	4
SLD99	405	OVCA	MAN	1	F								LATERAL FRAG HGORIZONTAL RAMUS	4
SLD99	405	OVCA	MAN	1	L		23			I18J16K14		P	HORI RAMUS WITH MOLAR ROW-ABCESS BELOW P4 AND M1	4
SLD99	405	OVCA	PH1	1	L	PF	12						COMPLETE	4
SLD99	405	OVCA	SCP	1	F								BLADE AND SPINE FRAG	4
SLD99	405	SSZ	LBF	1	F								SHAFT FRAG	4
SLD99	405	SSZ	LBF	1	F								SHAFT FRAG	4
SLD99	405	SSZ	RIB	1	L								PROX SHAFT FRAG	4
SLD99	405	SSZ	SKL	1	F								INDET	4
SLD99	405	SUS	INN	1	L	EF	4579	KN					ACETAB WITH PARTS ISCHIAL AND ILIAL SHAFT-CUT DORSALLY ON ILIUM	4
SLD99	405	SUS	LMV	1	F								FRAG NEURAL ARCH	4
SLD99	405	SUS	SKL	1	R								PARIETAL AND PART FRNT- TWO PIECES-SUTURE OPEN	4
SLD99	405	SUS	SKL	1	L		9			J9			MAXILLA AND FACIAL-M3 UP BUT CROWN BROKEN OFF	4
SLD99	405	SUS	SKL	1	L								NASAL	4
SLD99	405	UNI	HC	1	F			CH					TIP-CHOPPED ACROSS BASE-CATTLE OR RAM?	4
SLD99	405	UNI	SKL	5	F								INDET	4
SLD99	513	CSZ	UNI	1	F								INDET -POSS LBF	3

At a more technical level, I can see one or two things that have slipped through the net:-

Trench 1. It seems perfectly plausible to me that the heavily robbed east-west wall could have been part of the original medieval manor, not necessarily a precursor to it.

Trench 2. I am not too happy about the large pits being well pits, but it is not necessarily for me to question the interpretation of an individual archaeologist. Yes, they may have been well pits, but I think it more likely that they were quarries.

Trench 4. The section is a little clumsy, with a considerable amount of word repetition (style). Also, the dating of the ?Roman features is too tentative. I agree that these features may be Roman, but it has not been acknowledged that they could also be post-Roman. I think it perfectly reasonable to suggest that the RB field systems recorded to the east could (and probably did) extend into this site, but the evidence was not as clear-cut as Mark suggests.

Trench 5. You have a point about the 'rare C5th/7th pottery - this is indeed not backed up by the specialist account. Also, I think that there is danger of over-interpretation. I agree that the early Saxon occupation could be high status, but we do not really have the evidence from the present investigation, and the comparison with 'halls' at West Stow is a little fanciful and is certainly something that I would have removed (or requested the removal of), had we been graced with a little more time.

In fairness to Mark, I think that you will agree that a great deal of effort has gone into this report under quite difficult circumstances and strict deadlines. However, it could have been better structured and more speculative. At the end of the day, he may be correct as far as much of the interpretation is concerned, but the evidence on which conclusions have been constructed would not pass a test of academic scrutiny.

Despite its shortfalls, I hope that the report can serve the needs of yourself and of the client company. It is all there, but is perhaps a little difficult to get at. We can only try to improve on this next time, when we may not be quite as pressurised.

Best regards,

A handwritten signature in black ink, appearing to be 'CPH Palmer-Brown', written in a cursive style.

CPH Palmer-Brown.