An Archaeological Excavation of Iron Age and Romano Settlement at Leicester General Hospital, Crown Hills, Evington, Leicester (SK 621 041)

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By

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1. Summary

An archaeological evaluation and excavation was undertaken on development land adjacent to Leicester General Hospital, Crown Hills, Evington, Leicester. The numerous features excavated provided evidence for transitional activity on the site between the Iron Age and the Romano British periods. A well preserved Iron Age ring-ditch, indicating the presence of a single roundhouse, was seen to have been partly destroyed by later Roman features. The Romano British activity on the site suggests that the land was used extensively for agriculture, perhaps associated with a nearby farm house or villa which once lay at the centre of Evington parish.

2. Introduction

The site lies approximately 6km west of Leicester City centre, in the centre of the medieval parish ward of Evington (Figure. 1; SK 621 041). The site comprises *c.*1.8 ha of land, at a height of *c.*95-100m O.D., on a gentle northwest slope to the northeast of the current General Hospital. The Ordinance Survey Geological Survey of Great Britain (sheet 156) indicates that the underlying geology is Glacial Boulder Clay overlying Lower Lias Clays and Limestone.

Since the Leicester Sites and Monuments Record (SMR) detailed numerous significant findspots in the surrounding area (Appendix 1), an archaeological investigation of the site was initiated as a condition to the proposed development of the site by Leicestershire Mental Health Service. It was proposed that a new Mental Health Hospital (Planning Application 98/1303), was to be built to replace the old Towers Hospital, Leicester.

Initial test pitting was carried out in 1995 by civil engineers Stewart.J.Morris and Associates (Morris 1995), confirming the underlying geology as previously noted. Following this, a scheme of archaeological investigation began with a desk-based assessment of the site (Marsden 1998) which highlighted the high archaeological potential of the site based on numerous SMR entries in the region. It was also clear, by the faint survival of medieval ridges and furrows, that subsequent farming and development had not been overly destructive. It seemed likely therefore that archaeological deposits, if present, would survive intact below the topsoil.

To determine the extent and nature of any archaeological deposits, a scheme of geophysical survey was undertaken, across the whole development area, using magnetic prospection (Butler 1998). A total of 1.28 ha of the proposed development 'footprint' was surveyed, using a fluxgate gradiometer, for slight variations in magnetic intensity. Archaeological features commonly show up in this manner, having either lower or higher magnetic

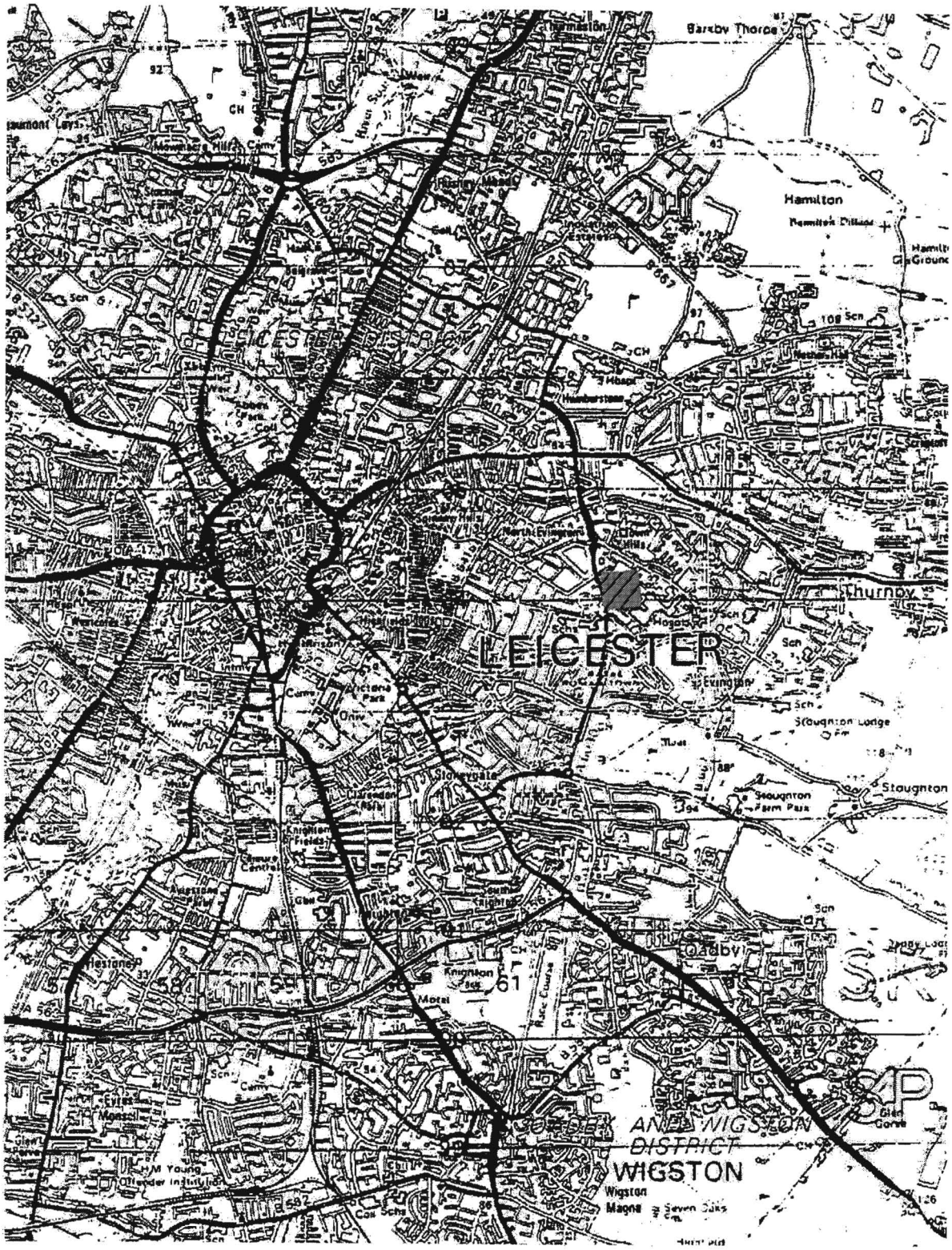


Figure 1. Site location, Scale 1:50000.
Reproduced from the 1996 Ordnance Survey 1:50000 Leicestershire Coventry and Rugby area map 140, with the permission of the controller of HMSO, © Crown Copyright, ULAS licence no. AL 51800A0001.

susceptibility than that of the surrounding soils. The survey identified the presence of several northnortheast southsouthwest aligned positive features (probably representing medieval field systems), other more faint features were seen to be grouped in the centre of the site and running in a northeastsouthwest direction (Figure.2).

Since the proposed development of the site would potentially be destructive to buried archaeological deposits, an archaeological evaluation was requested by the City Archaeologist at Leicester City Council. A mitigation strategy, to deal with surviving archaeological deposits, was drawn up by University of Leicester Archaeological Services (as detailed in, Clay 1999.a), in consultation with the city archaeologist. The procedure and results of these stages of work are outlined in the following report.

3. Archaeological and Historical Background

It has been suggested that a prehistoric track once ran from Tilton through the Crown Hills ridge and on toward Spinney Hills. Early Bronze Age artefacts (*c.*2,000 B.C.), including flint tools and arrow heads were certainly recorded during building work in the Spinney Hill area (Wilshere.3 1983).

There is evidence to suggest the possible presence of a Roman villa site in the region of Crown Hills itself, lying in the geographic centre of the later parish. Numerous finds of Roman artefacts (pottery, tile, brick, *tesserae*, coins etc.) dating *c.*267-338 AD, have been found between Crown Hills and Rowlatt's Hill and in the vicinity of the later parish church. Although this villa appears to have disappeared by 400 AD it is possible that some of its boundaries continued to be used through the Saxon and medieval periods to ultimately influence the positioning of the later parish boundaries (Wilshere.3 1983) (Figure. 3).

Place name evidence points to the foundation of Evington prior to the Scandinavian invasions of the 9th century. The 'ington' ending is certainly consistent with a tribal Saxon settlement, perhaps dating as far back as the 7th century (Wilshere.3 1983). The literal translation of the name refers to the place as the 'tun' (or town) of Aefa's people. The later Saxon settlement shifted more toward the church, unusually situated in the southeast corner of the parish.

The Doomsday Book records Evington parish as it was in 1086, the extract relating to a main manor held by Hugh de Grantesnil, and a small secondary manor held by Robert de Buci;

'Ivo holds of Hugh (de Grantemesnil) in Avintone 10 ½ carucates of land. There is land for 7 ploughs. In demesne (the land retained for his own use by the manorial lord) there are 3 ploughs and 6 serfs; and 25 villeins with 2 bordars have 5 ½ ploughs. There (is) a mill rendering 2 shillings and 20 acres of meadow. It was (in the time of Edward the Confessor) worth 40s; now lOOs.'

'Robert (de Buci) holds 1 carucate of land in Avintone. There he has half a plough in demesne, and 4 villeins have 1 plough. It was and is worth 5s'.

(quoted in, Wilshere.4 1983).

It is estimated that Evingtons 11½ carucates, in modern measurements would have

Figure 2. Interpretation of Geophysical anomalies.

comprised *c.*1,150 acres, which were intensively worked by 10 plough teams. The current parish church was founded in 1219, though there must have been earlier buildings on the site in the 12th century.

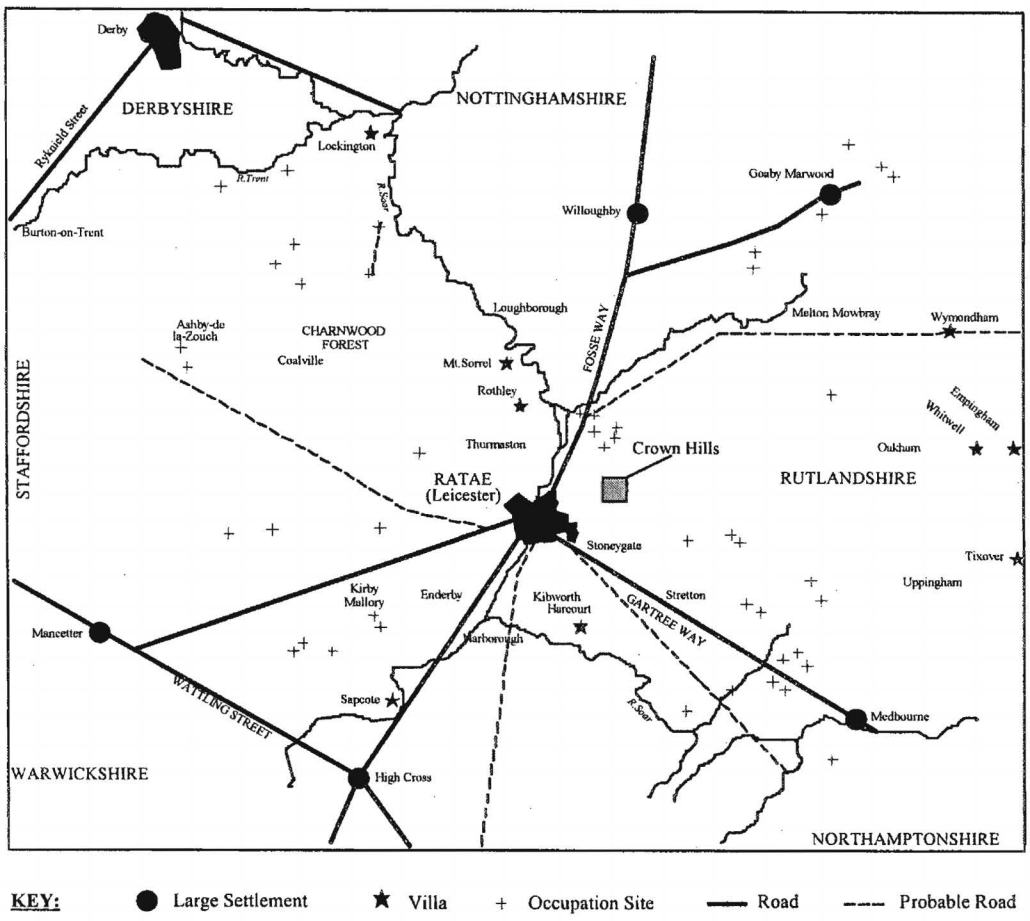


Figure 3. Roman Leicester and region. Location of Crown Hills is represented by grey square.

A second detailed land survey was carried out in 1308, following the death of Henry de Grey. This mentions a thriving manor house worth 40 shillings annually, and having a net annual income of £33.11s. 6d, from 69 tenants. The survey also mentions 'eastments of houses and gardens, a dovehouse, a water mill and windmill, two fishponds, two ovens'. It is estimated that there were 340 residents living Evanston in 1308, a figure not reached again until 1870 (Wilshere.10 1983) following the decline of the manor after the death of Richard de Grey in 1335.

No detailed early maps exist of the site. There was no Enclosure map for Evington and the 1852 Tithe map does not show the area of the site itself. The first edition 1888 OS map shows the site as partly incorporating a field, while later OS maps, of 1957 and 1982, show its continued status as a 'greenfield' site.

4. Aims and Methods

Initial evaluation work began on site in June 1999. As a result of this, due to the locating of numerous 'earthfast' archaeological features, a subsequent 'open area' strip followed

immediately within 'Area A' (Figure.4). The aims of the subsequent excavation were to adequately record and sample any archaeological deposits under threat of destruction by the proposed development.

The Evaluation

To determine the extent, nature and preservation of any archaeological features within the proposed development area, eight 30m evaluation trenches (numbered 1-8) were excavated across the site (Figure.4), especially targeting anomalies previously highlighted by geophysical survey' (Figure 2). Topsoil and interface layers were removed using a JCB 3C wheeled excavator, fitted with a 1.6m toothless ditching bucket, under archaeological supervision. Trenches were excavated either to the archaeological interface or to a total depth of 1.2m (according to health and safety regulations), whichever came first. Natural boulder clay and mudstone substrata were reached in all trenches except for T.8 which resided within an area of heavily made up ground, and was not excavated beyond 1.2m.

The excavated areas were hand cleaned, and the locations of archaeological deposits were recorded in plan (drawn at 1:50 scale), and plotted in 3D, in relation to the Ordanance Survey Datum, using a Topcon GTS-212 Electronic Distance Measurer (EDM) linked to a Psion hand held data logger. All features were half sectioned for finds (for dating), soil samples (for environmental evidence, see chapter 6.6) and for recording in section (drawn at 1:10 scale). All procedures adhered to the Institute of Field *Archaeologists Standard and guidance for archaeological excavations.*

The Excavation

Continuing immediately after the completion of the evaluation phase, a large scale 'open area' strip was carried out over 'Area A' in its entirety. The discovery of numerous archaeological deposits during the evaluation (see below) had indicated that significant archaeological remains would be destroyed in the course of the proposed development. Topsoil and subsoil layers were removed from 'Area A', under archaeological supervision, by a 360° tracked excavator fitted with a 2m toothless ditching bucket. Archaeological features were tagged and numbered in sequence using U.L.A.S conventions (in the following text context/fill numbers are denoted by a number in parenthesis e.g.(34), cut numbers are denoted by square brackets e.g. [33], where multiple numbers appear in square bracket e.g. [402/159/300] this indicates a single cut feature revealed in various places along its length). Due to the large area being stripped and the unfavourably hot and dry conditions, at the time of stripping, a detailed running EDM plot was maintained throughout the exercise. This ensured that features were accurately recorded in plan while they still looked fresh and clear to the eye.

Due to the onset of the development at this stage, the stripped area was divided into six *c.*50m x 50m blocks and each was prioritised according to the sequence of development. Excavation of features within each block thus took place in a 'leap-frog' manner, each block being released to the developers immediately upon completion by the archaeologists. In this manner it was possible for both the archaeology and the development to proceed with minimum disruption to both parties.

Discrete archaeological features were recorded in plan, subsequent to hand cleaning, (both EDM and hand drawn, at 1:20 scale) and some excavated. Circular and subrectangular features were half sectioned, while long linear features were sectioned in various places along their length. Wherever possible sections were placed in areas of feature inter-relationships, to determine the sequential ages of intercutting features. All sections were drawn (at scale 1:10) and photographed in colour slide and monochrome print. Heights and locations of section lines, in relation to Ordnance Survey Datum, were recorded with a Topcon GTS-212 Electronic Distance Measurer (EDM) linked to a Psion hand held data logger. Archaeological deposits were fully recorded, in terms of their appearance, and all finds were labelled and bagged for later analysis and dating. Soil samples were collected from features with a suspected high environmental potential (e.g. charcoal rich deposits). The entire site was also subjected to a comprehensive metal-detector survey (carried out by Mr Brian Kimberley). The positions of all metal finds were plotted in 3D on the EDM plan of the site .

All methods employed adhered to standard guidelines, recorded in the ULAS Field Manual, and the Institute of Field Archaeologists *Standard and guidance for archaeological excavations.*

Aims of the project

The aims of the excavation program were:

- To assess the local, regional and national importance of any deposits.
- To contribute to the study of the impact of the Roman invasion on rural Iron Age Settlements.
- To contribute to the study of the evolution of Roman; rural settlement, agricultural and craft technology, and trade routes.

Objectives

- To further investigate the areas of archaeological potential as revealed by the evaluation.
- To establish the nature, character and extent of any archaeological deposits within the development area.
- To retrieve dating evidence in order to produce a chronological sequence for the archaeological deposits.
- To record and sample the archaeological deposits excavated.
- To produce both detailed hand plans, sections and EDM surveys of archaeological features encountered.

5. Results

5.1 The Evaluation

All trenches were aligned roughly north-south, and distributed in all areas of the development area (Figure.4), (table 1). All trenches were excavated down to natural boulder clay, at the archaeology interface, except for trench T.8 which was on made up ground (natural was not reached). Half of the excavated trenches (T.2,5,6 & 7) were found to contain archaeological deposits (Figure. 5), delineating the extent of archaeology within the centre of the site, an area hereafter to be known as 'Area A'. The remainder of the site, 'Area B', appeared to be devoid of archaeology.

Table 1. Details of Evaluation trenches.

Trench	Length (m)	Topsoil Depth (m)	Trench Depth (m)	Features
1	35.4	0.35 - 0.49	0.45 - 0.59	None
2	30.3	0.27 - 0.43	0.36 - 0.67	(1,2,3,4,33)
3	30.6	0.2 - 0.5	0.49 - 0.7	None
4	30.5	0.24 - 0.3	0.47 - 0.56	None
5	28.1	0.28 - 0.42	0.35 - 0.6	(8,9,10,11,12,13,14,15,16,31,40)
6	28.7	0.37 - 0.45	0.5 - 0.63	(5,6,7,25,28,30,32)
7	29.3	0.3 - 0.57	0.38 - 0.7	(17,18,19,20,21,22,23,24,213)
8	27.6	0.4 - 0.7	0.58 - 1.2	None

Trenches containing archaeological deposits are worthy of more detailed consideration:

Trench 2 (Figure. 5)

Trench two was positioned on the east side of 'Area A' to investigate several northeast-southwest aligned anomalies detected by geophysics. Upon excavation, five discrete archaeological deposits were readily identifiable as mid to dark grey silty clay deposits, on a background of otherwise natural red-brown boulder clay. Most of the features identified were of linear nature, crossing the complete width of the trench in a east-west alignment. These included; context (1) in the far southwest of the trench, found to contain 4th century Roman pottery (see chapter 6.1) and a single iron stud (SF.43); context (2) a feature rich in burnt sandstone; context (33) a narrow gully like deposit; and context (4) a slightly curving ditch like feature apparently synonymous with one of the anomalies detected by geophysics. A single pit like feature, context (3) was also identified in the middle of this trench.

Trench 5 (Figure. 5)

Trench five was positioned in the centre 'Area A', to investigate several northeast-southwest aligned anomalies detected by geophysics. Upon excavation, eleven discrete archaeological deposits were readily identifiable as mid to dark grey silty clay fills, spread evenly throughout the trench. Both linear 'ditch like' and circular/round 'pit/post-hole' like features were equally represented. Two narrow gully like features, contexts (8) and (11) occupied the southwest half of the trench (each containing 4th century Roman pottery

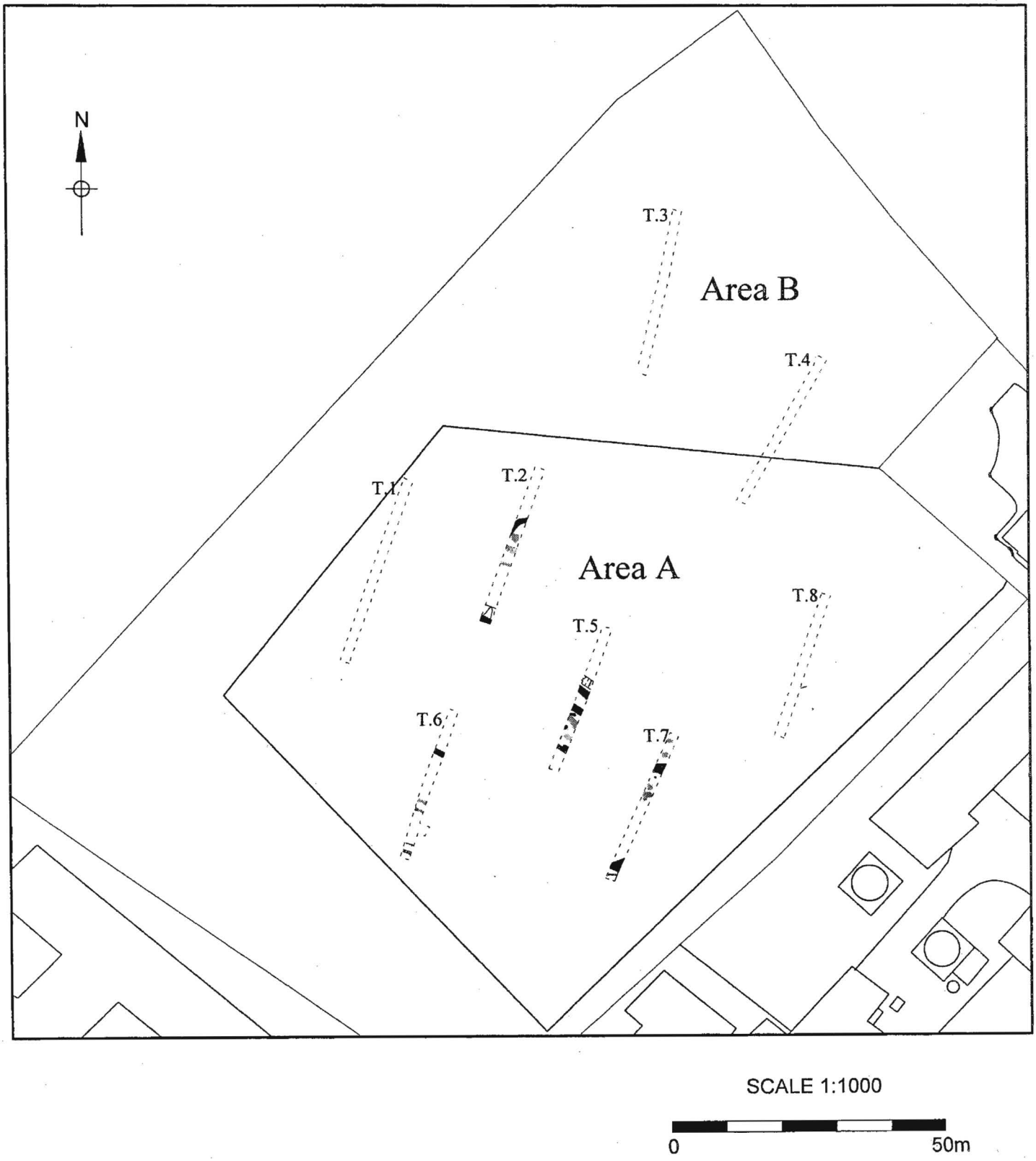


Figure 4. Locations of Evaluation Trenches, Scale 1:1000.

sherds, see chapter 6.1), while the northeastern half was dominated by three closely associated parallel ditches, contexts (12), (13) and (14), each in excess of 1.5m in width and all containing 3rd-4th century AD Roman pottery (see chapter 6.1) and building materials (see chapter 6.2). At the southwestern end of the trench, enclosed between the two gullies, were four 'pit-like' features, contexts (9), (10), (15) and (16). The full extent of these was uncertain, and it is feasible that some of these may have been the terminal ends of linear ditch/gully features. Context (10) was the earliest, containing fragments of Iron Age/early Roman pottery fragments (,see chapter 6.1) while (16) contained 1st century Roman pottery. Contexts (15) and (16) also contained bone fragments (see chapter 6.5), in (16) this bone was burnt and associated with a charcoal rich fill, perhaps indicating the disposal of hearth ash. Two 'post-hole' like features, contexts (31) and (40) were identified in the centre of trench 5 between ditches (11) and (12). These also contained Roman pottery and tile fragments.

Trench 6 (Figure.5)

Trench six was positioned in the southwestern extent of 'Area A'. Upon excavation, seven discrete archaeological deposits were readily identifiable as mid to dark grey silty clay fills. The southwestern end of the trench was dominated by three intercutting ditches, contexts (5), (25) and (30). Although all of these produced finds of Roman date it appears that (30) was earliest; this was then intercut by (25) and then a subsequent recut (5) was added. A little to the northeast of these ditches was a burnt stony feature (7) which, at first, fully crossed the trench (appearing like a crude wall footing), the trench was extended at this point and the full extent of the feature was apparent. The feature was ovoid in plan (1.3m x 0.6m) and stood slightly proud of the natural clay. The association of heat shattered stones and some burnt bone fragments with a charcoal rich fill (see chapter 6.6), implies that this feature may represent a 'hearth'. No dating evidence for this feature was found, though environmental samples were taken (see chapter 6.6). The remaining three features, contexts (6), (28) and (32), were all narrow linear features, crossing the width of the trench in an east-west direction. Context (6) was notable since it contained fragments of Iron Age pottery (see chapter 6.1), while the others contained no finds.

Trench 7 (Figure. 5)

Trench seven was positioned in the southeastern extent of 'Area A'. Upon excavation, nine discrete archaeological deposits were readily identifiable as mid to dark grey silty clay fills. At the southwestern end of the trench was a large linear feature (213) aligned in a northeast-southwest direction, producing 2nd-4th century Roman pottery sherds upon excavation (see chapter 6.1). The remaining features were bunched in the northeast half of the trench and consisted of circular 'post-hole' sized features (17), (19) and (22), context (17) was the only one to contain 1st-2nd century Roman pottery sherds, while the others were devoid of finds; several 'pit-like' features (21) and (23), the latter of which contained bone fragments (see chapter 6.5) ; and two ditch/gully features (18) and (20) , the former of which contained Roman tile and bone.

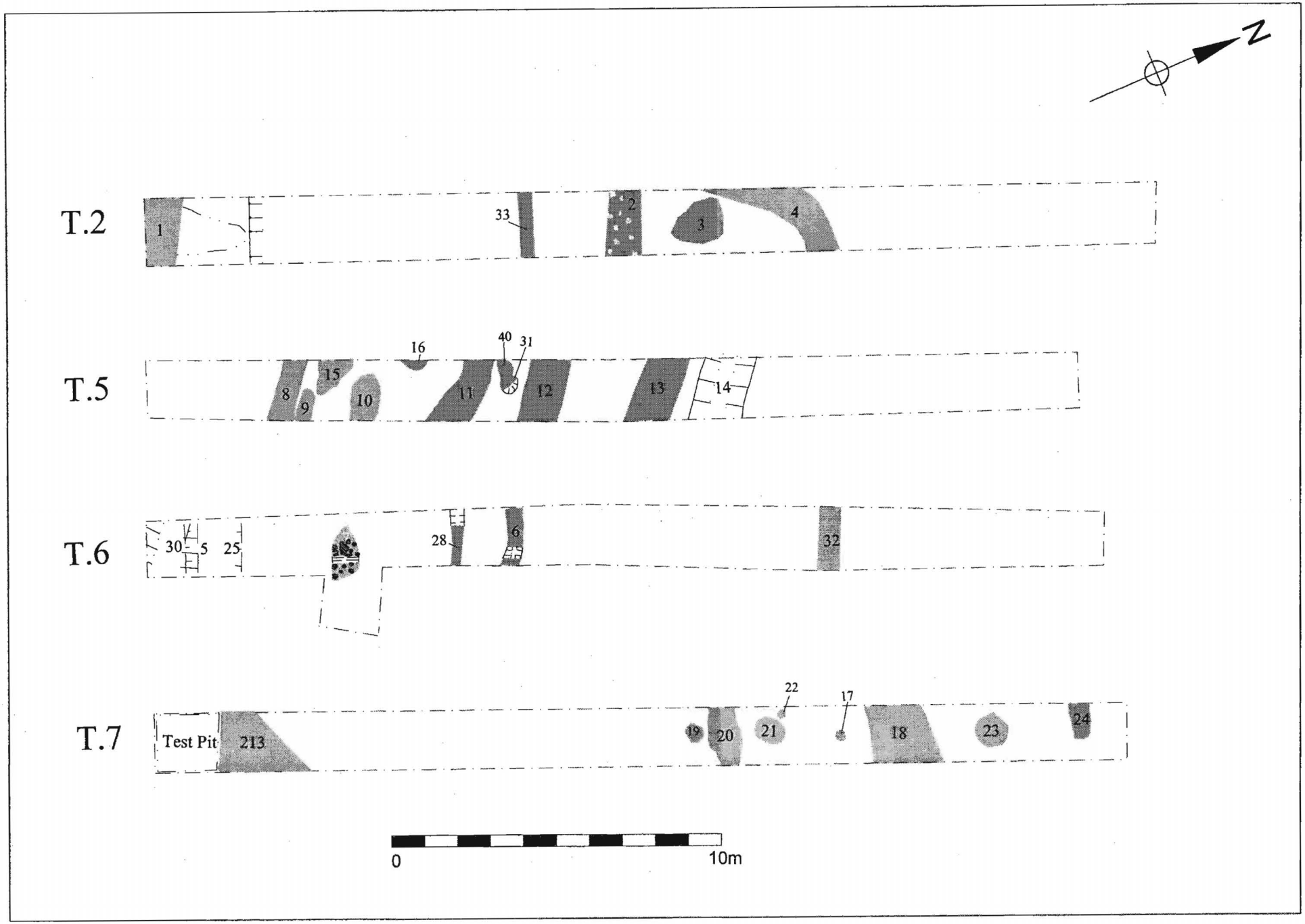


Fig 5. Evaluation trenches containing Archaeology within Area A of Crown Hills, Evington, Leicester.

Discussion

A total of 31 archaeological deposits were revealed during the evaluation stage of this project. These were located in four of the eight trenches excavated, all of which resided in the centre of the development area, 'Area A'. Limited excavation of these features demonstrated that the site contained several phases of archaeological activity, including Iron Age and Romano British features. Since such a broad spread of features were observed within Area A, it was necessary that a much larger area be opened up in order to determine the extent, preservation and significance of the features observed. Many of the features observed in the trenching were not fully excavated during the evaluation stage, these were mostly just plotted onto EDM plan and left for more detailed recording following further controlled stripping of Area A, i.e. during the subsequent phase of excavation (see below).

5.2 The Excavation

Once the topsoil and subsoil layers had been removed from Area A it was evident that the site had suffered considerable damage from medieval ploughing. At least ten evenly spaced plough scars were seen to cross the site in a northnortheast to southsouthwest direction (Figure. 21), each measuring between 1.5m-2.3m in width. In addition a 360m² area of modern disturbance was apparent on the eastern side of Area A, in a region (extending down the eastern side of the site) of made up ground. These areas of modern and medieval disturbance, comprising *c.*2,365m² (*c.*19%), of the site may have destroyed or hidden any archaeological features formerly present in these areas.

A large number of archaeological features were, however, apparent in areas of undisturbed natural. Most of these were visible as mid to dark greyish brown silty clay deposits residing in negative features, cut into the natural boulder clay.

The excavation of the extant features revealed activity on the site from mid-late Iron Age, 4th century BC-1st century AD (phase I); through the early stages of the Roman Conquest in the 1st century AD (phase II); the height of the Roman occupation of Britain in the 3rd-4th centuries AD (phase III); and into the Medieval period (phase IV).

5.2.1 Phase I, The Iron Age Features (Figure. 6)

The Iron Age activity on the site appears to be localised to the southeastern side of Area A, and is represented by: a single ring-gully, probably representing a round-house, encircling a possible central 'hearth' feature; a large pit, associated with a number of post-holes; one large possible enclosure ditch; five ditch/gully features and four pit/post-hole features. Most of these features had been significantly truncated by later Roman (phase II and III) features, and by medieval (phase IV) ploughing. It can thus be presumed that the full extent of Iron Age activity has been lost, and the surviving plan of activity (Figure. 6) should be regarded as fragmentary.

The ring-gully [34]

The dominant feature of the Iron Age phase is a circular gully with an opening or 'entrance', in the southsouthwest of the site (Figure. 7, Plate 1). The gully was

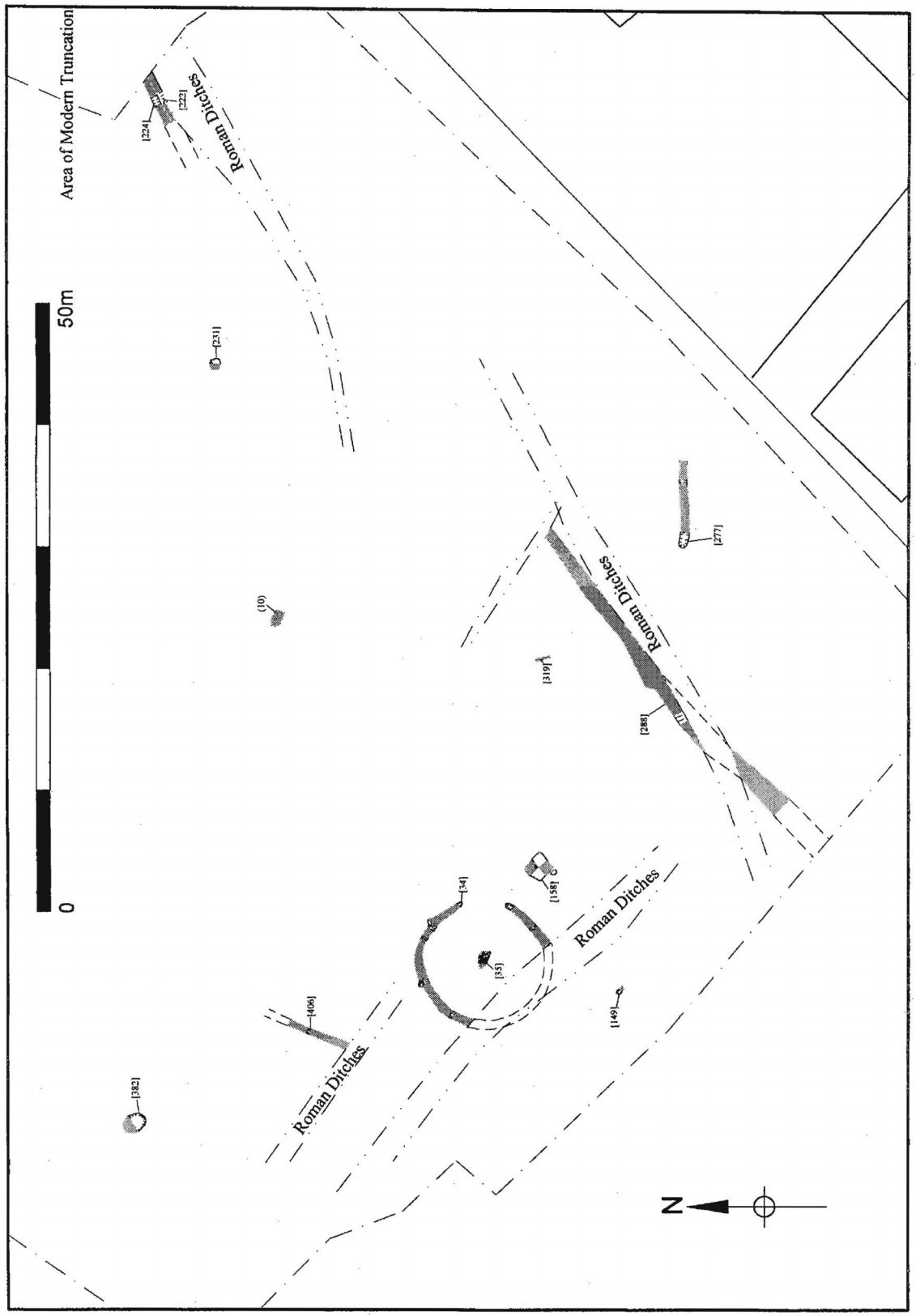


Figure 6. Phase one , Iron Age features at Crown Hills. Plan at 1:500 scale

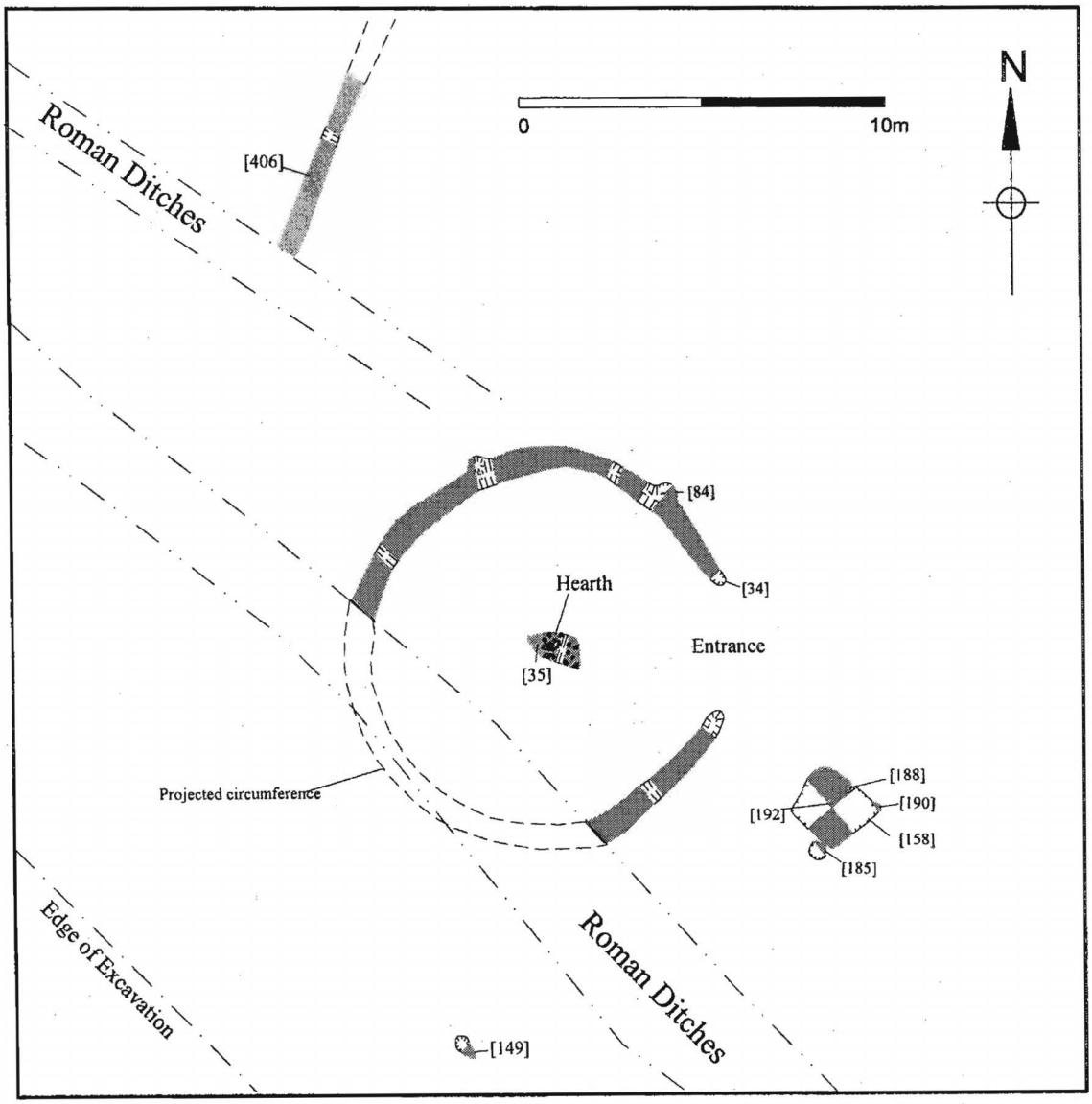


Figure 7. Detail of Iron Age features centred around a ring gully, at Crown Hills. Plan at 1:200 scale

truncated on its southwestern side by later Roman ditches, but it has been possible to project its circumference to give an idea of scale. The gully measured between 10-12m in diameter, and enclosed an internal area of 72m². The opening or 'entrance', was 3.5m wide and faced east. The gully was examined in seven sections (see Figure.8, sections 1.08, 1.10, 1.12, 14.12 and 16.11) revealing a surviving depth of between 0.17-0.31m. The cut, [34] was filled by two distinct silty layers (the primary layer numbered (65), (66), (85), (390) and (396) in different sections, and the secondary numbered (63), (64), (82), (389) and (393) in different sections).

In two places, the outer circumference displayed noticeable bulges, which, when excavated (see Figure. 8, sections 1.12 and 16.11), appeared to suggest that least one 'post-hole' [84] had been excavated into the outside edge of the ring-gully. Since both gully and post-hole both contained Iron Age Scored ware pottery (see chapter 6.1) it is presumed that both may becontemporary.

Hearth [35] (7)

In the centre of the ring gully a burnt stony feature, [35] (7), was found. This feature was previously located in evaluation trench 6 (see above). It appeared likely that this represented a central 'hearth' within the circular building. Although no ceramic dating evidence was found for this feature, fragments of burnt bone and heat affected stone were, however, evident (Figure. 7 & Figure. 8, section 1.04).

Pit [158]

Immediately to the southeast of the ring gully (*c*.5m) lay a large sub-rectangular pit feature measuring 2.03 x 1.76m, its base was fairly flat and cut to a depth of 0.4m into natural clay (Figure. 7 & Figure.8, sections 3.04/5). Two distinct silting layers were observed, an upper (61) and a lower (156). The pottery from these fills (see pottery report, chapter 6.1) suggest that the pit may have been open toward the end of the Iron Age phase of activity, since Iron Age pottery fragments (see chapter 6.1) were found in the lower fill, but had silted up completely during the first phase of Roman activity on the site, since the upper fill contained 1st century Roman pottery sherds. Alternatively the Iron Age pottery sherds may have been residual.

Pits (10), [231], [382].

Three pits of Iron Age date were observed to the northnortheast and northnorthwest of the ring-ditch. Each of these appeared isolated and lacked any close association with other securely dated features of this phase. They measured between 1-2m in diameter, had been cut to a depth of between 0.15-0.3m, and contained single friable sandy clay fills and fragments of Iron Age pottery (see chapter 6.1). Pit [231] also contained moderate amounts of charcoal, and pits [231] and [382] contained fragments of animal bone (see chapter 6.5). The pits lay between 26-48m from the ring-gully, perhaps representing refuse pits on the periphery of the settlement. However, as has previously been mentioned, so much of the Iron Age phase will have been lost by the subsequent Roman occupation as to make the interpretation of discrete features difficult.

'Enclosure' ditch [288]

A segment of a large ditch, measuring 29.8m long, 1.85m wide and 0.95m in depth, was

observed running in a northeast to southwest direction *c.*20m to the southeast of the ring-gully (see Figure. 6, & Figure. 9, section 10.01). The full extent of the original ditch could not be ascertained, due to heavy truncation by later Roman features and by the limits of the excavation area. Numerous stages of infilling were observed in section 10.01 (Figure. 9). The primary fill (286) appears to represent a tipping layer of charcoal rich soil (see chapter 6.6) deposited from the southern side of the ditch (i.e. the 'outside' if this is a segment of surviving enclosure ditch surrounding a settlement). Samples of this layer were taken for environmental analysis (chapter 6.6, sample 2). Subsequent layers (280), (285) and (278/246) were all horizontally bedded in sequence above the tipping layer, presumably indicating a gradual silting up of the in three phases. Iron Age pottery fragments (see chapter 6.1) were retrieved from the secondary (280) and quaternary (278/246) layers, suggesting that the ditch had silted up entirely within the Iron Age occupation of the site.

Ditches [222] and [224]

A small segment of two narrow ditches was seen in the northeast of the site, *c.*70m from the ring-gully (see Figure. 6). As with the 'enclosure' ditch, the full extent of these was masked by later Roman features and by an area of modern truncation. The ditches had an observable length of *c.*4.7m and a width (seen in section 5.05, Figure. 9) of 0.41m and 0.57m respectively. The ditches ran parallel to one another in a northeast to southwest direction. It is clear from the section (Figure. 9, section 5.05) that ditch [222] pre-dated ditch [224] since the former is cut by the latter. Since ditch [224] was found to contain pottery fragments of Iron Age (see chapter 6.1) date a slightly earlier date must be presumed for ditch [222]. Ditch [222] was subsequently cut by a large Roman date ditch [218] on its southern edge.

Gullies [277], [319] and [406]

Three narrow gullies [277], [319] and [406] were also located (Figure. 6), each dated by pottery finds (see chapter 6.1) to the Iron Age. These measured 7.21m x 0.67m; 1.31m x 0.26m; and 5.14m x 0.55m respectively and each was cut into natural clay to a depth of between 0.08m and 0.36m. The full extents of each of these features was obscured by later Roman activity and by horizontal truncation, presumably due to medieval ploughing. Only gully [319] contained fragments of animal bone (see chapter 6.5). Their isolation and lack of relationship with other securely dated Iron Age features makes further interpretation of these features somewhat tenuous.

Post-hole [149]

One single post-hole [149] was observed *c.*5.8m south of the ring-gully (Figure. 8, section 1.14). Its dimensions were 0.78m x 0.39m and was steeply cut 0.41m into the natural clay. The post-hole was surrounded by later Roman features thus it is impossible to say whether it was once associated with other post-holes with any structural affiliation. Two stages of infilling were represented by a primary (148) and secondary (51) fill, the former being typical of post packing, while the latter seems to represent the infilling of the void left by a degraded post. The feature was dated by the presence of Iron Age pottery fragments in the secondary fill (51).

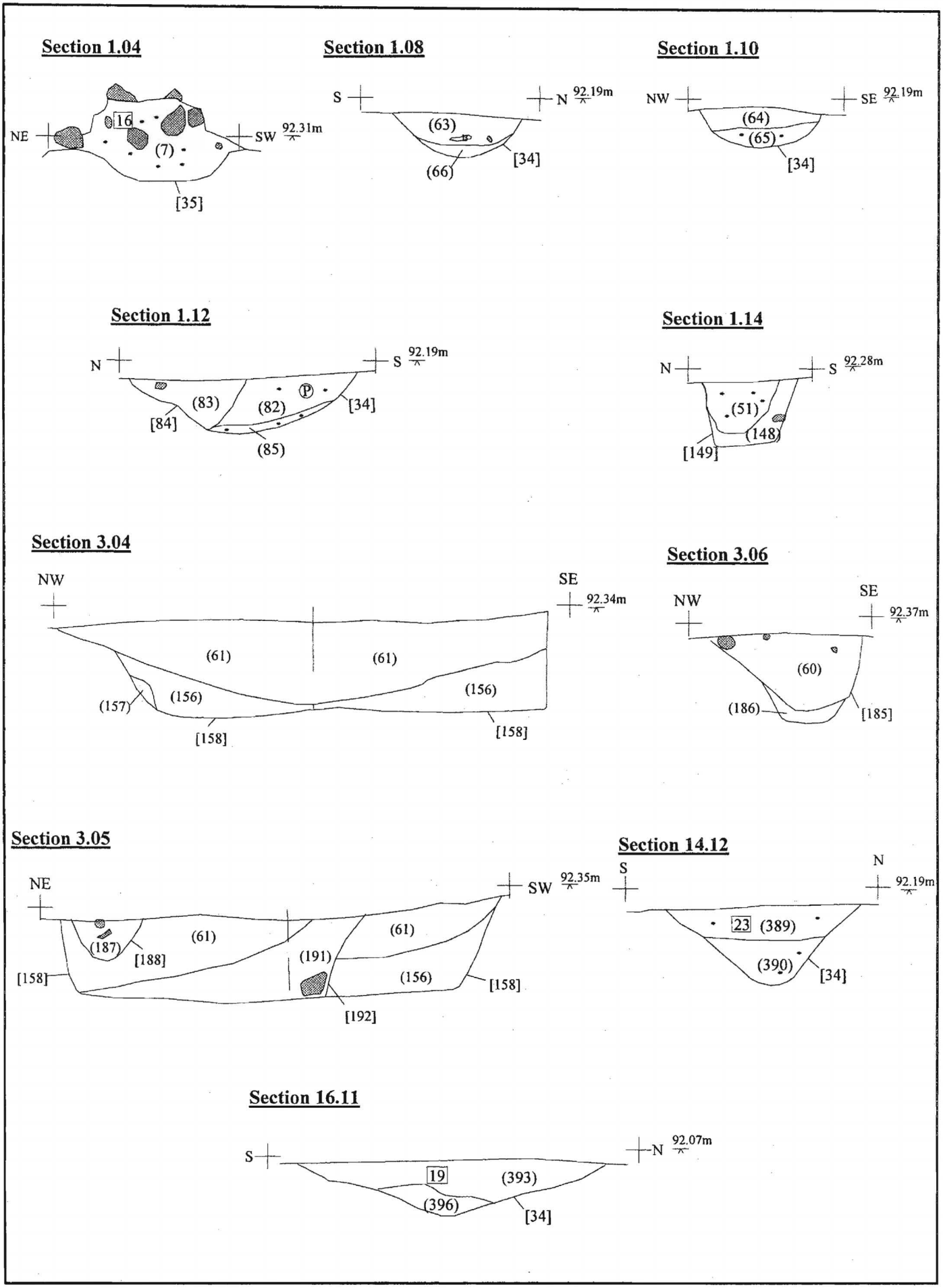


Figure 8. Section drawings of a selection of phase I (Iron Age) features from Crown Hills. Scale 1:20

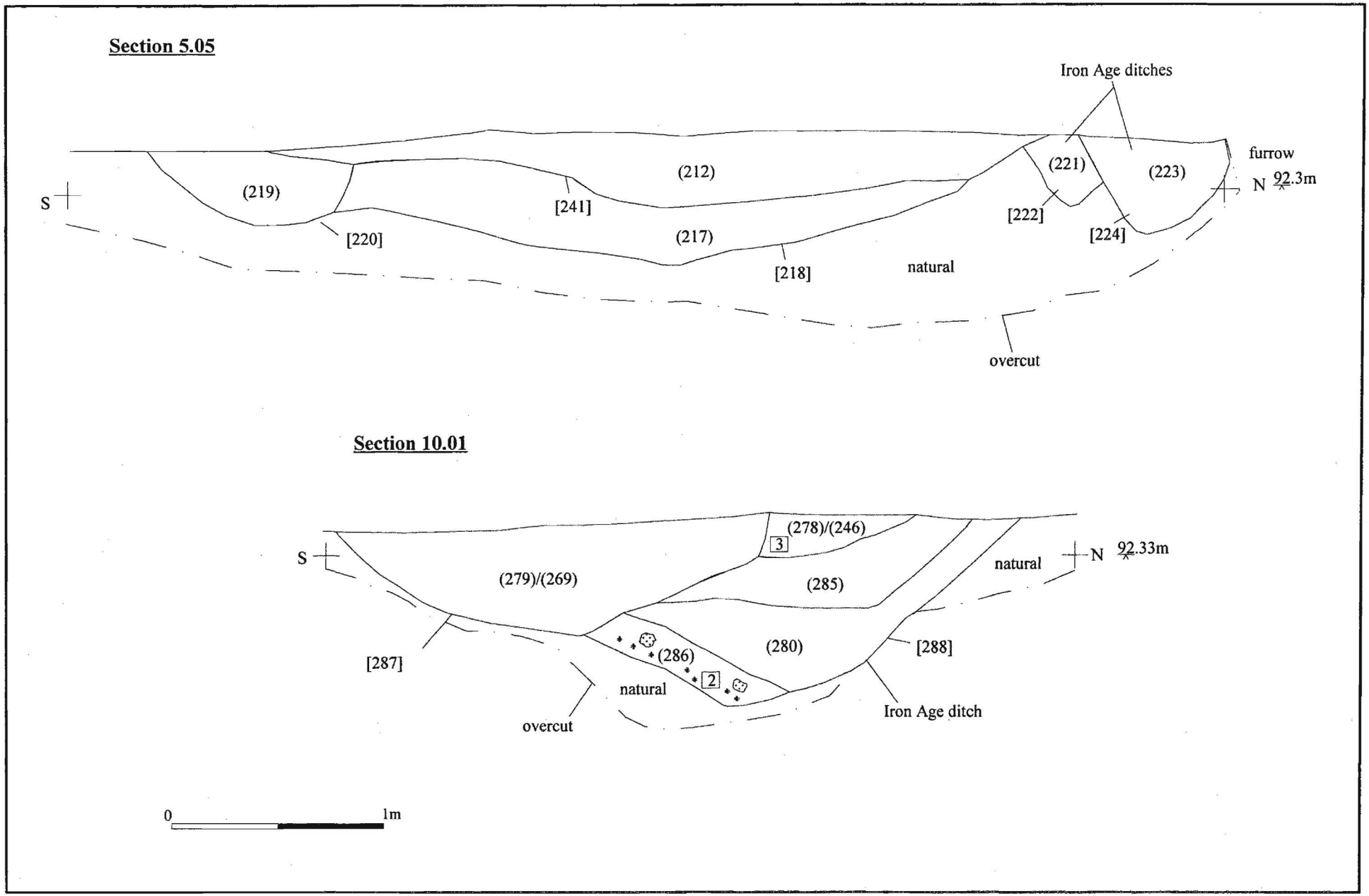


Figure 9. Section drawings of phase I (Iron Age) ditches from Crown Hills.

Discussion

In the absence of any intercutting between datable Iron Age features it may be suggested that all the Phase I deposits were contemporary, being deposited as a single sequence over a relatively short period of time. However, the high levels of truncation inflicted upon this phase by later Romano British (phase II and III) and medieval (phase VI) activity may have destroyed evidence of Iron Age sub-phases.

The Iron Age deposits recorded at Crown Hills seem to represent the remains of a small scale rural settlement incorporating at least one circular dwelling (Figure. 7) and a small group of associated pits and ditches (Figure. 6). In the absence of any securely dated or obvious internal structural features within the circular ring-gully, interpretation of the building structure can only be tentative (Guilbert 1981, 30).

It is presumed that the ring gully itself provided a footing for an outer circular wall, as was observed at Danebury (Cunliffe 1983,94), while the possible post-holes in the northern half of its circumference may represent settings for vertical posts which braced the wall in position. Similarly built structures are certainly known locally, for example at Wanlip, Leicestershire, a single middle Iron Age 'ring-gully' was seen to be associated with concentric external post-holes (Beamish 1998), similarly a group of late Iron Age circular ring-gullies (interpreted as drainage gullies) were seen to be associated with concentric rings of internal post-holes at Grove Farm, Enderby, Leicestershire (Clay 1992).

In comparison with other local examples, the Crown Hills 'structure' is of relatively small size (see table 2), though its basic layout is comparable. The 3m wide east facing entrance (a feature shared also by the Wanlip and Grove Farm examples) is consistent with research carried out by Oswald (1997) who discovered that east facing entrances were by far the most common, hypothesising that these may have been aligned to the sunrise on the equinoxes and mid-winter, though the advantages of facing a doorway away from the cold northerly and prevailing southwesterly winds are also obvious.

The internal 'hearth' feature [35], residing in the centre of the ring gully, is of particular note. Hearths were also found in association with the round-houses at Wanlip (Beamish 1998) and Humberstone (Charles et al 2000), but in each of these cases these were external features representing outdoor cooking activities. At Bromham 1, Bedfordshire (Tilson 1975), however, a suspected hearth was recorded within a circular post-built structure. An alternative interpretation might be that this feature represents a central post padding (though no associated post-hole was found) used to stabilise a central roof supporting post as at Brigstock 1, Northamptonshire (Jackson 1983).

Table 2. Dimentions of the Crown Hills ring-gully compared to other local examples.

Site	Diameter	Internal Area	Gully Depth	Entrance
Crown Hills	10-12m	72m²	0.17-0.31m	3.5m
Wanlip	14m	130m²	0.11-0.24m	4m
Elm Farm	15m	160m²	0.12-0.25m	3m
	17.5m	194m²	0.12-0.3m	4m

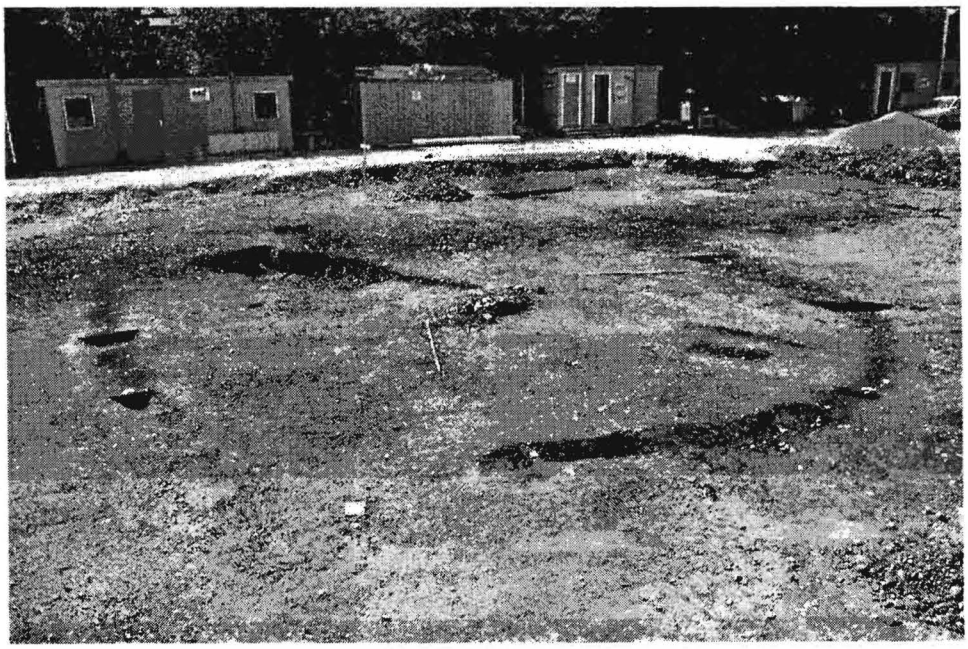


Plate 1. Iron Age roundhouse viewed from north-east showing eastern entrance, at Crown Hills.

Plate 2. Phase III Romano British Threshing Floor, at Crown Hills.

The various ditches associated with the phase I, Iron Age settlement were severely truncated by later Romano British activity. The large ditch [288] to the southeast of the ring-gully, however, does seem to fit the model of a possible enclosure ditch. In size and shape comparisons can be made with other Leicestershire enclosure ditches observed at Grove Farm, Enderby (Clay 1992,21), Wanlip (Beamish 1998,5) and Gimbro Farm, Castle Donnington (Derrick 1999). That this ditch disappears into the southwestern baulk of Area A may imply that the Iron Age settlement has only been partially exposed, its main focus perhaps lying further to the southwest of the excavation area (in a region now occupied by hospital buildings).

The discovery of an Iron Age farmstead settlement on Leicestershire claylands is certainly significant, providing valuable evidence for the Iron Age exploitation of boulder clays, in line with recent research (Clay 1996). Few such sites have been excavated from this period and vicinity, despite the fact that fieldwalking and aerial photography has revealed *c.*100 probable Iron Age settlements in the county (Clay 1992.36.Figure.22). The settlement revealed at Crown Hills may thus represent a partial survival of a small agricultural settlement in the hinterlands of what had become a high status centre, Leicester, just 2 miles to the west. That Leicester had developed as a cultural centre by the mid-first century B.C. is certainly suggested by pottery evidence (Pollard 1994,72-4), though it has been suggested (Clay 1985,30) that this was a minor centre in comparison to Lincolnshire. Iron Age Leicester had, however, developed into a more significant settlement and market centre in the first half of the 1st century A.D (Clay 1985.30). The Crown Hills settlement may have mirrored other hinterland sites such as Grove Farm (Clay 1992) 3.2 miles to the south of Leicester. However, unlike Grove Farm, the Crown Hills settlement displays continuity into the Roman period with the phase II and III settlement of the site.

5.2.2 Phase II, Early Roman conquest features (1st-2nd century AD).

Phase II, Roman conquest (1st-2nd century) features were observed in very small quantities within Area A of the development area. No localisation of activity was discernible.

Post-Holes

Several early Roman post-holes [192]; [188]; [190]; [185], were seen to cut the late Iron Age pit [158] (see Figure. 8, section 3.05), described in phase I above. Since the pit was still apparently partially open during this phase it seems likely that the post-holes may have been intentionally associated with the earlier phase pit.

Two other post-hole/pit sized features (16) and (17) (see Figure. 5 trenches 5 and 7) could also be assigned to the 1st-2nd century (chapter 6.1). Both of these were isolated, and apparently not associated with any other features from this phase of activity. These had a diameter of 0.61m and 0.3m respectively and contained dark grey brown fills. Context (16) was notable by its highly charcoal rich fill (see chapter 6.6), fragments of burnt bone (see chapter 6.5), and large quantities of pottery (see chapter 6.1). Context (16) had also suffered from truncation by the later cutting of a 2nd century AD pit/post-hole [144].

Pit [272]

A single pit was observed in the north east of Area A (Figure. 11). This was found during the excavation of the Phase III 'threshing floor' (described below) which post-dated it. The pit measured 1.5 x 1.1 and survived to a depth of 0.1m. The pit could be dated by the presence of 1st-2nd century Roman pottery fragments (see chapter 6.1), and a single small iron reaping knife was also associated (see chapter 6.4).

Discussion

Securely dated early Romano British activity on the site, dating from around the time of the conquest period in the mid 1st century, was very scarce and broadly dispersed across the excavation area. It seems likely that this phase of activity was either minimal or scarce in datable finds, thus other features of this phase may be among the numerous undated features from the site. Either way, it is not possible to give a meaningful description of activities carried out during this phase.

5.2.3 Phase III, The Late Roman features (3rd-4th century AD).

Phase III, late Romano British (3rd-4th century AD) features, were very common in all areas of development Area A (Figure. 10). A slight fall off in feature density was, however, observed in the western, northern and eastern limits of the excavation area. This was in contrast to the southern end of the site where numerous features were seen to continue under the southern baulk of Area A.

Threshing floor, (198)

A large deposit of ironstone rubble, 8.4 x 5.6m, was observed in the northeast of Area A (Figure. 11 & 15, Plate 2). This was composed of a rectangular pebble 'floor' (200) overlain with a large quantity of unmortared ironstone and sandstone 'hardcore', 100-500mm, (198). A deposit of dark charcoal flecked silty clay (199) occupied two shallow depressions in the pebble surface, and probably represents natural silting up of the surface. No structural features were discernible. The eastern side of the surface had been partially truncated by a medieval furrow, and additional cobbles and rubble (201) could be seen on the other side of the furrow, possibly being part of the larger surface. The feature was dated by the presence of numerous 3rd-4th century pottery fragments (see chapter 6.1) and a large quantity of ceramic roof tiles (of tegular and imbrex style, see chapter 6.2). This feature was also associated with ten iron nails, two unidentified iron objects, one small reaping blade, one razor shaped knife and a moulded bronze pin shaft (see chapter 6.4). Also, a discrete cluster of iron hobnails (226) was also found within context (198), possibly representing the surviving remains of a hobnail shoe or sandle.

Soil samples were taken for environmental analysis (see chapter 6.6)

The pebble surface described above, during excavation, was seen to cap the earlier (phase II) pit [272] described above.

Corn dryer/long hearth, [354]

A single 'corn dryer' or 'long hearth' was identified in the northeast of Area A (Figures. 11 & 16). This comprised a single long pit, cut 0.2m into natural boulder clay. It had a narrow linear 'flue', 0.47m wide and 1.27m long, and a bulb end 0.81m wide. The cut was lined with a friable burnt silty clay layer (352) containing large quantities of charcoal and carbonised plant material (see chapter 6.6). Samples were taken for environmental analysis (see chapter 6.6). The bulb end, although no deeper than the 'flue', contained numerous large burnt sandstone blocks. The northwest end of the flue displayed signs of scorching, in the form of red oxidised clay, although it is not clear whether this was at the entrance to the 'stokehole' since the true northwestern extent had been truncated by later medieval ploughing . It is notable that the deepest point of the feature was in the narrow 'stoking' end, not the wide bowl. No evidence of a superstructure was identified, and it is likely that horizontal truncation, by ploughing, would have reduced the original depth of the feature. The presence of this grain rich feature in close association with a possible threshing floor (198) *c.*9m to the east and a track, *c.*32m east, supports its diagnosis as a corn dryer according to the criteria defined by Morris (1979,9). The feature was datable by the presence of 3rd-4th century Roman pottery sherds (see chapter 6.1) in its disuse fill (163).

Trackway (196)

Running northeast to southwest, almost parallel to the eastern edge of excavation of Area A, was a cobble/pebble track. This survived in two main sections, represented by contexts (196) in the northeast (Figure. 11, & Figure.17, section 4.02), and (214) in the southeast (Figure. 13), these being interrupted by areas of disturbance and horizontal truncation. The largest of the surviving stretches of track was context (196), measuring 17m in length by 2.5m in. The second surviving section, context (214), was smaller and less well preserved measuring 12.3m in length by 2.13m in width. Smaller, yet patchy, clusters of pebble were located in between the two main surviving track sections, suggesting continuity between the two, though preservation was poor. Comparison of the heights of the two surviving sections (96.85m OD for context (196), 92.87m OD for context (214)) revealed that the track gently sloped upward as it ran further to the northeast, with a 4m rise over 58m. In excavation, context (196) was seen to comprise a plastic clay matrix embedded with numerous pebbles (*c.*30mm) and some larger cobbles (*c.*50mm), which overlay a second layer of clean plastic clay (197) (Figure.17, section 4.02). Both contexts were found to contain fragments of animal bone (see chapter 6.5).

Sunken Feature [350]

A particularly large pit was seen in the southwest of the excavation area (Figure. 14). Its dimensions 3.5m x 2.15m, and cut to a depth of 0.35m with steep sides and a flat base, are more in keeping with a structural excavation e.g. sunken feature building than of a refuse pit. Although predominantly an Anglo Saxon construction, sunken feature buildings (or Grubenhäuser) were known to occasionally be constructed in the late Roman period. This feature was found to contain fragments of animal bone (see chapter 6.5) , ceramic building materials (mostly roof tiles) and a single slate roof tile fragment (chapter 6.2). The feature was seen in section to cut the long northwest-southeast ditch [159], and was truncated by linear feature (53).

Pit/Post Hole Group A

A small group of circular and sub-rectangular features were seen to be clustered around the corn drier [354] in the northeast of Area A. This group comprises features (137), (138), (139), [238], [239], [240] and [276] (see Figure. 11). Contexts (137), (138) and (139) were very faint and shallow, but may represent a heavily truncated post-hole (the former) and possible shallow pits (the latter two). Each of these, however, were datable to the 3-4th centuries by the presence of pottery (chapter 6.1) and roof tile fragments (chapter 6.2). Two features [238] and [239] appeared to be intercutting though their precise relationship was not clear in section (Figure. 17, section 5.06). The pit-like feature [239] contained a fragment of quern-stone and several large burnt sandstone lumps (50-250mm), though there was no evidence of charcoal in the fill (164) itself. The smaller feature [238] may represent an associated post-hole. Again, dating evidence took the form of 3rd-4th century pottery fragments (see chapter 6.1). Feature [240] appeared to represent a small pit or large post-hole. It had a primary (242) and a secondary (168) silty fill, and was dug 0.26m into the natural. Its narrow tapering base may suggest a function as a post-hole, though no post-pipe was evident. A larger sub rectangular pit or truncated ditch/gully but end was seen to be cut by a medieval furrow. This feature was shallow (0.1m) with a flat(ish) base and gently sloping sides, the single fill (165) contained ironstone rubble and some fragments of 3-4th century pottery (see chapter 6.1).

Pit Group B

In the middle of the excavation area (Figures. 12 & 13) lay a large group of fairly well defined closely associated pits: [36], [137], (146), [333], [335], [336], [341], [342], [344], [345], [346], [347], [372]. These lay between two southeast-northwest ditches ([381/343/147] and [349/371]. Although all of these features could be well dated to the 3rd –4th centuries (by the presence of pottery and tile fragments in their silty fills) it is clear that they were not all excavated at the same time. In section it was clear that pits [347] and [335] post-dated the digging of the ditches, whereas pit (146) was truncated by, and thus pre-dated, ditch [147/381/343] (see section 16.03 Figure. 19). All of these features were shallow concave depressions, between 0.04m and 0.13m in depth, and undiagnostic in character. The finds from these were varied; [336] contained several iron hobnails, [344] contained a fragment of roof slate with a notch (see chapter 6.2) and [342] contained pot fragments (see chapter 6.1) and some animal bone (see chapter 6.5). There may be an association with several of the undated pits of this area (Figure. 22) i.e. (15), (87), (90), (141), [332], and the small pit (15) observed and described during evaluation (section 5.1).

Pit Group C

This broadly spread group of pits lay between ditch [147/381/343] and the line formed by ditches [279] and [216]. This group includes pits (120), (142), [328], [327], [375], [377] [378] and [408] (see Figure. 13 & Figure. 14) and potentially includes undated features (78), (79), (80), (86), (89), (116), (117), (118), (119) and [407] (Figure. 22). Context (120) represented the only datable feature in a large group of sub-rectangular and oval features (including undated features (78), (79), (80), (116), (117), (118) & (119)) close to the butt end of ditch [340]. Each of these were very shallow (0.4-0.8 m deep) flat bottomed, often intercutting and mostly devoid of finds. The remaining pits were all well dispersed with few relationships with each other, though all were relatively shallow (0.4m-0.13m deep) with fills of dark grey/brown silty clay. Most of the datable pits in this group were found to contain 3rd-4th century AD Roman pottery and ceramic tile fragments.

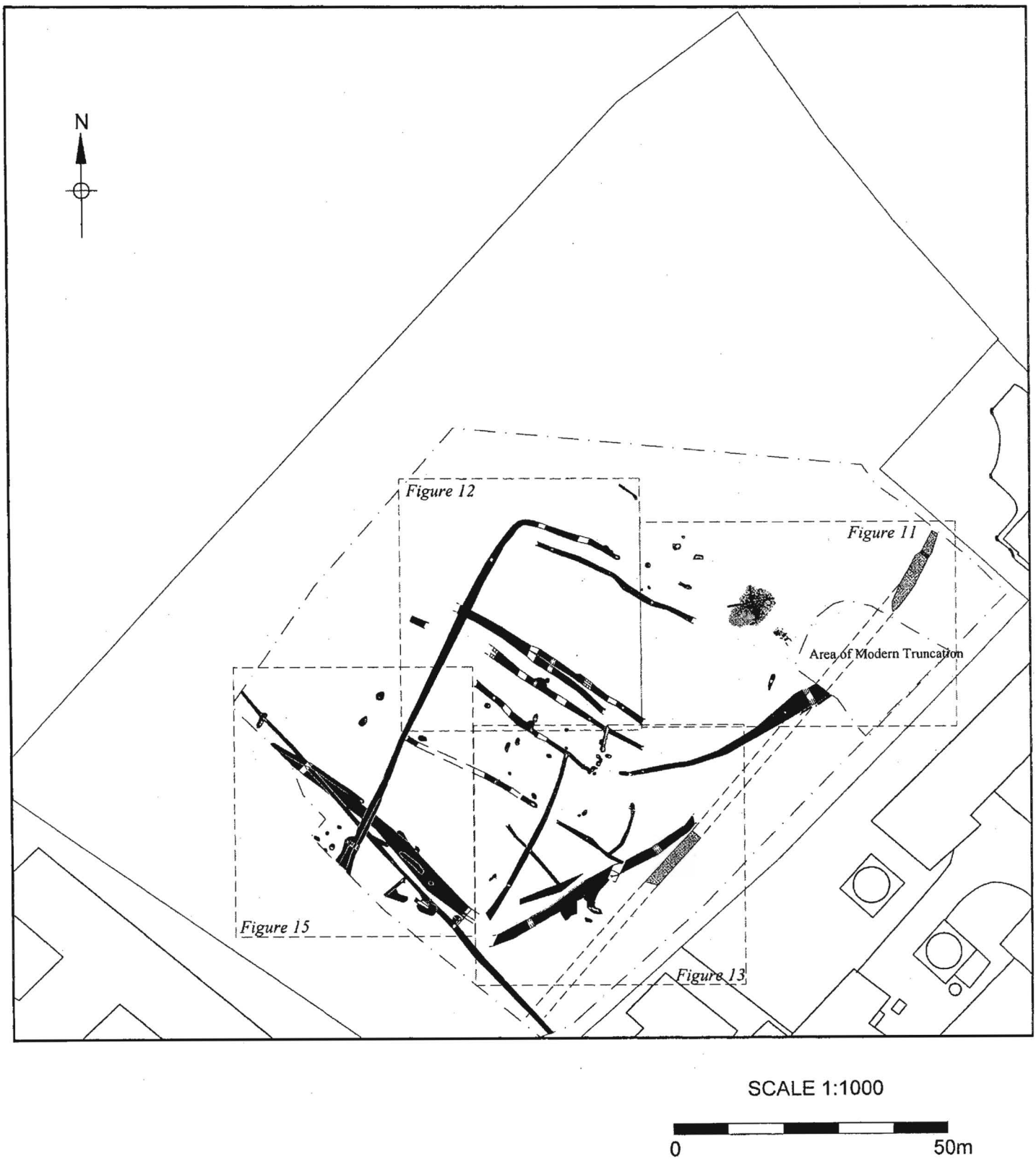


Figure 10. Phase III, 3rd-4th century Romano British Features

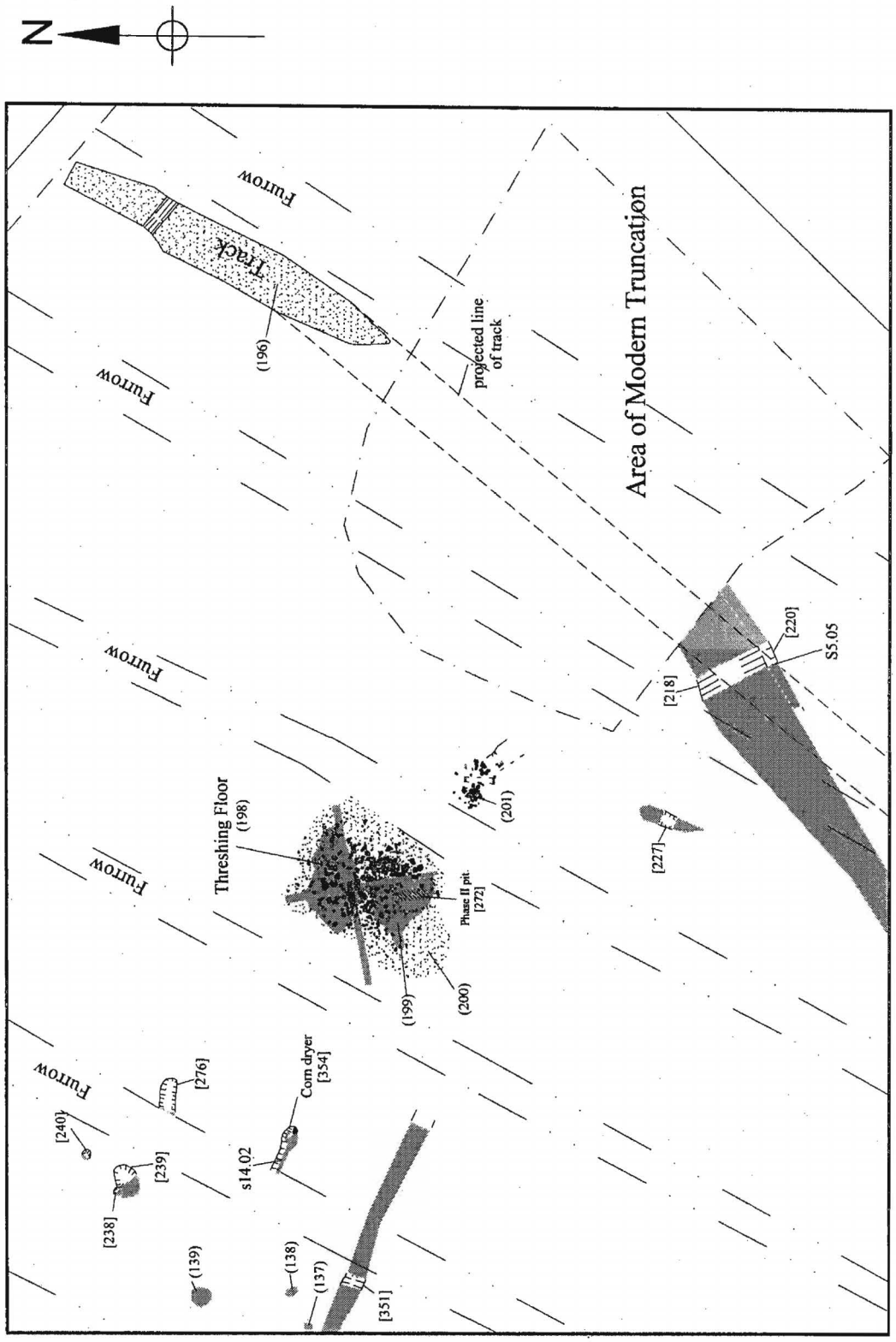


Figure 11. Phase III (3-4th century) Romano British features, detail of northeast of Area A, at scale 1:300

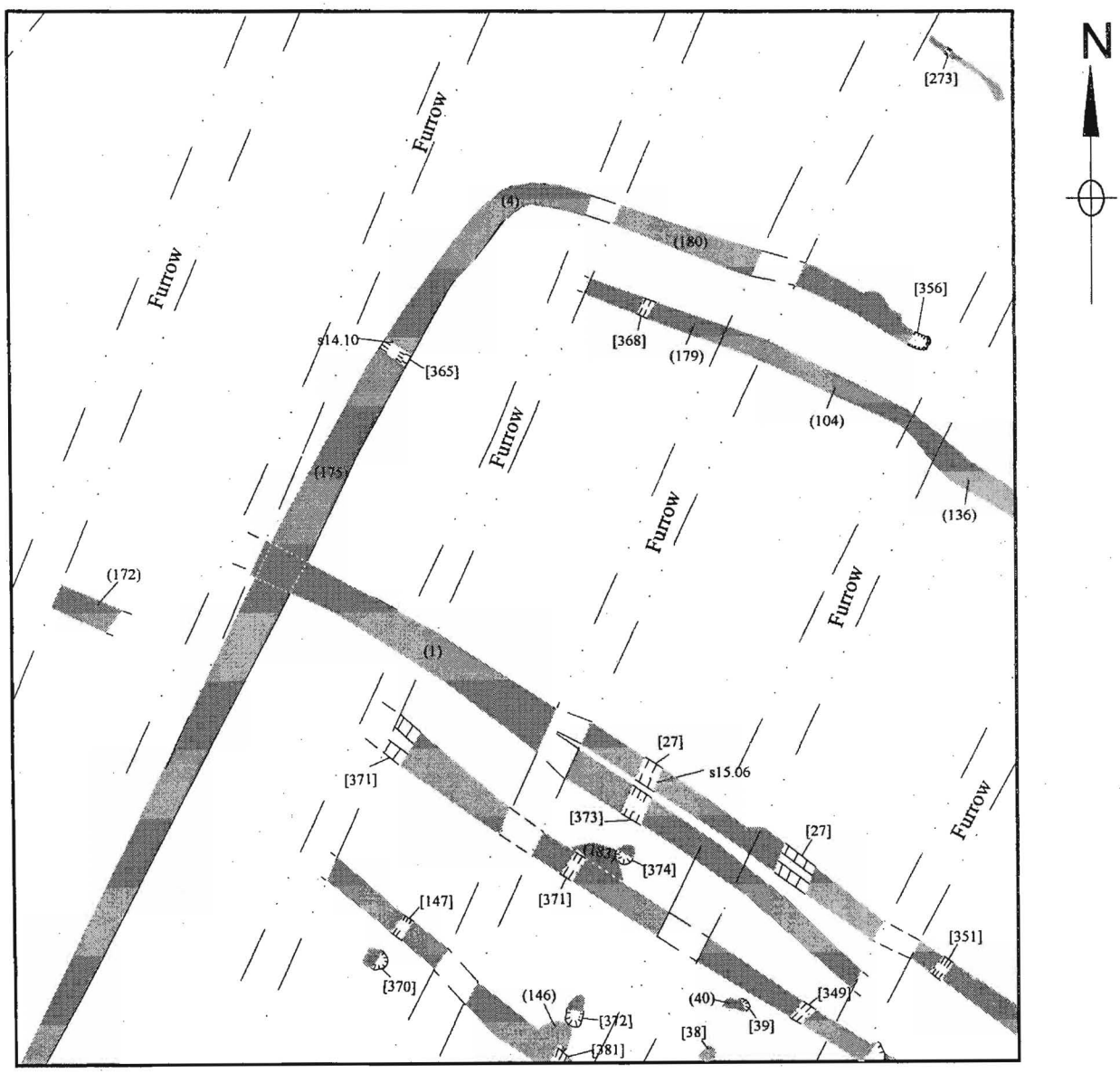


Figure 12. Phase III (3-4th century) Romano British features, detail of northwest of Area A, at scale 1:300

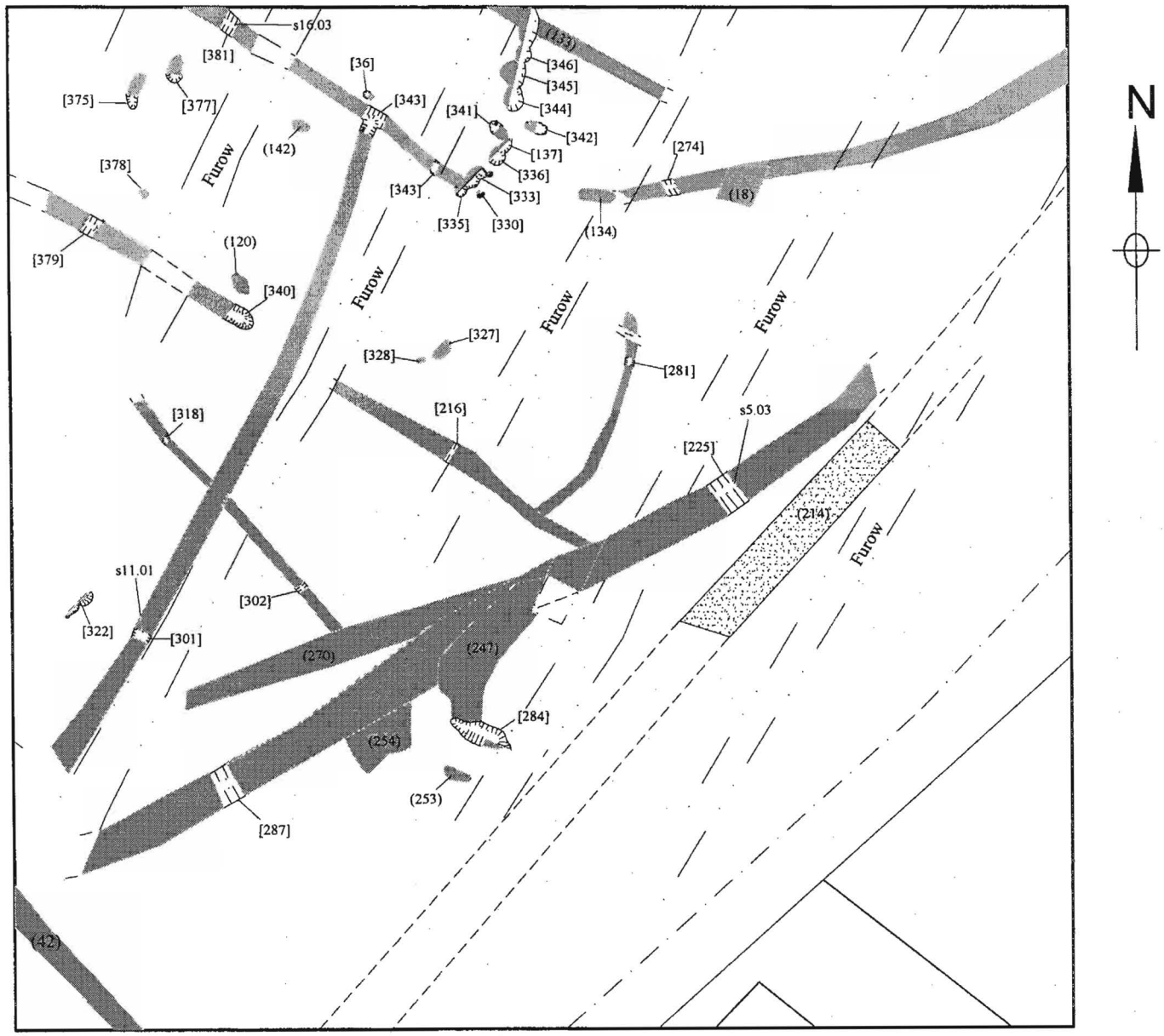


Figure 13. Phase III (3-4th century) Romano British features, detail of southeast of Area A, at scale 1:300.

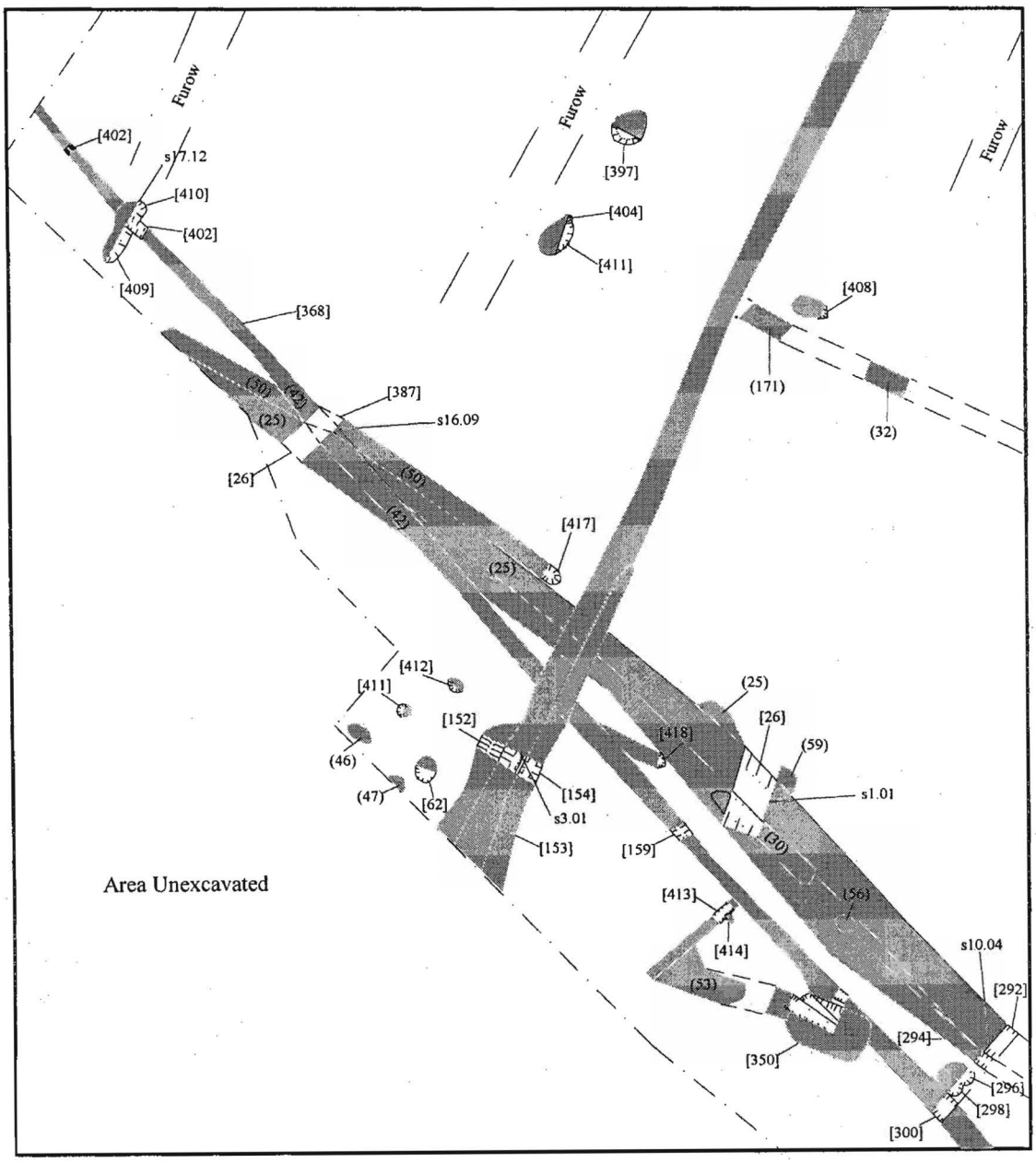


Figure 14. Phase III (3-4th century) Romano British features, detail of southwest of Area A, at scale 1:300.

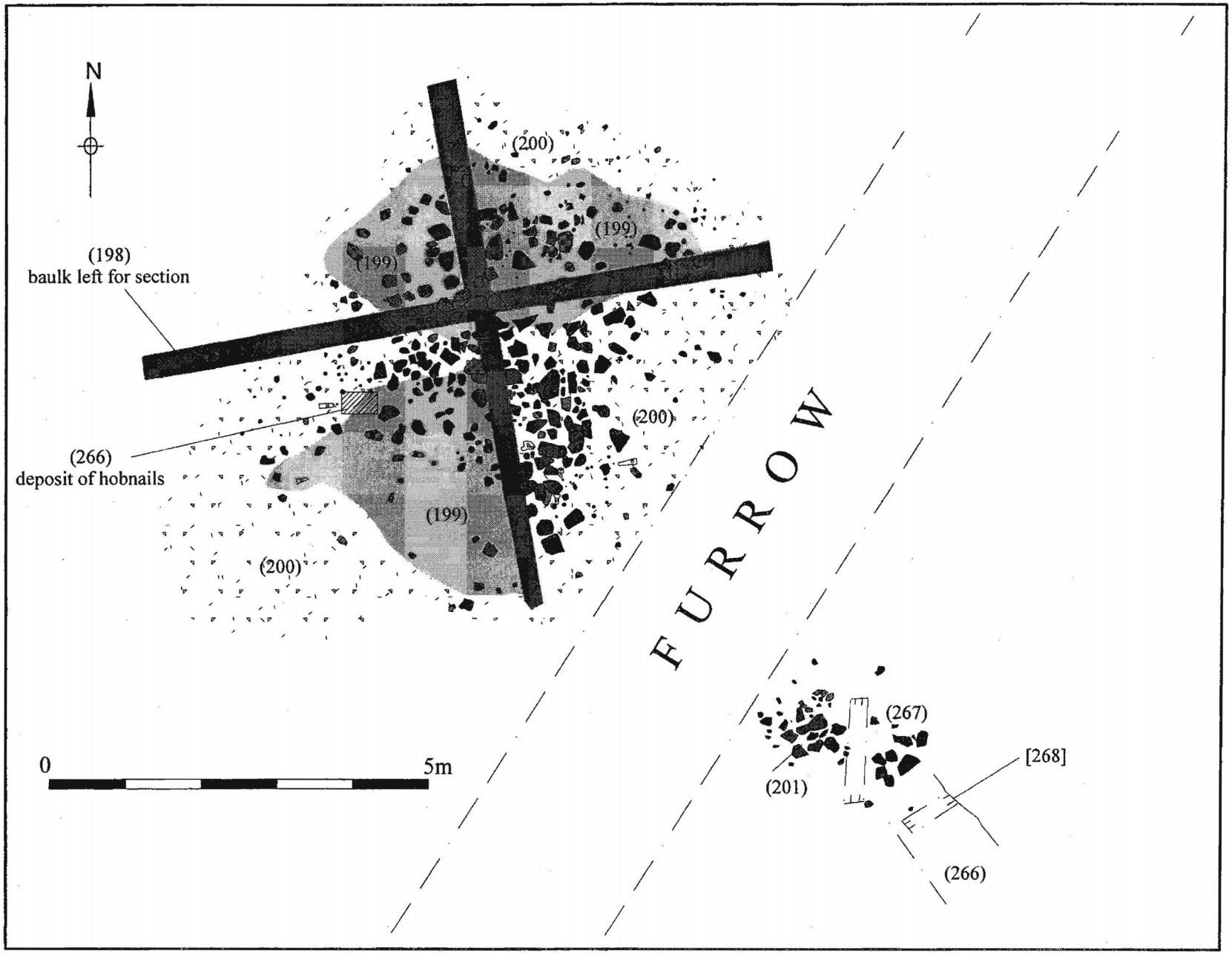


Fig. 15, Possible threshing floor, Phase III (3rd-4th century AD), Crown Hills.

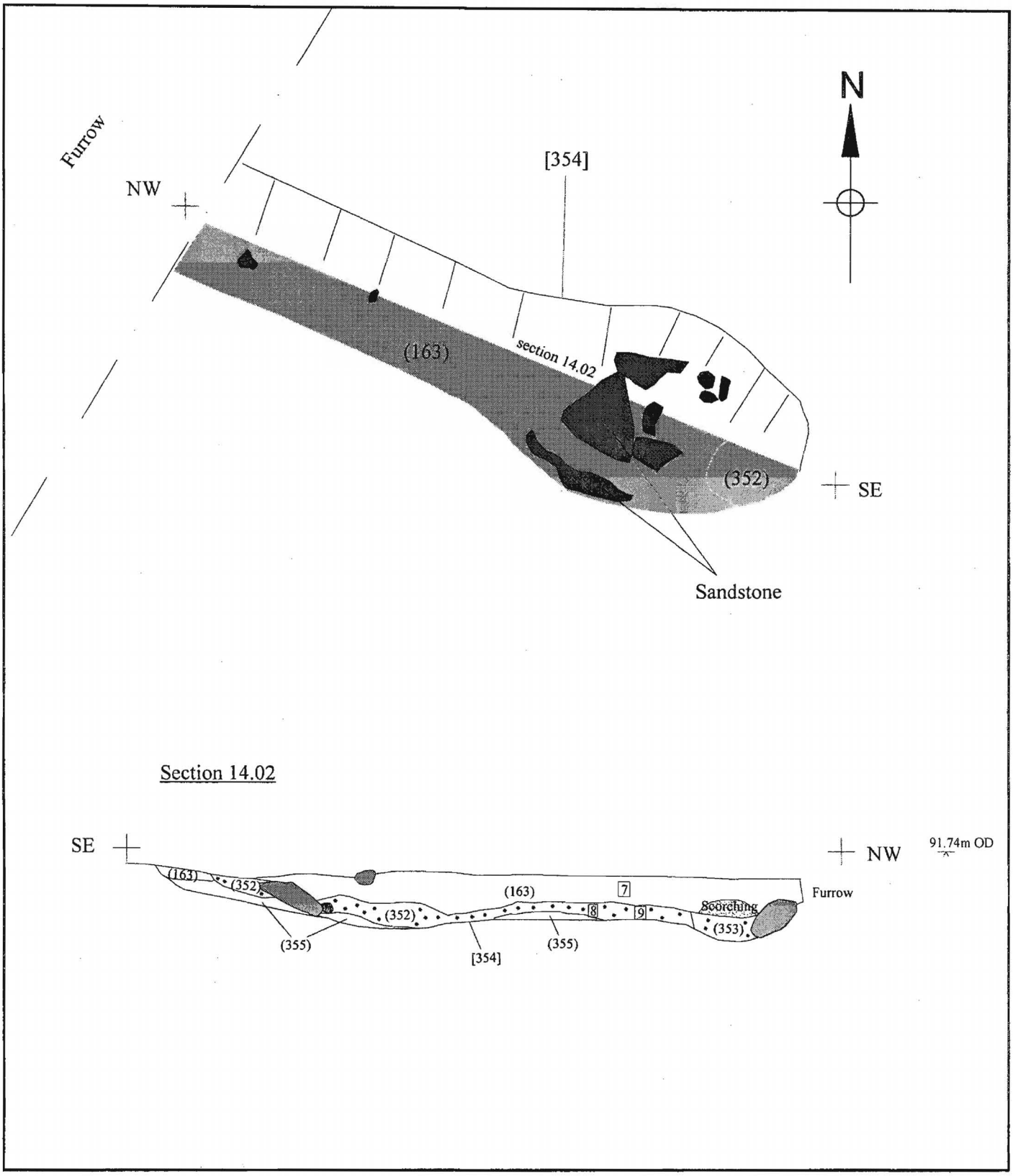


Figure 16. Detail of Corn dryer [354], reproduced at scale 1:20.

Pit Group D

The final concentrated group of pit-like features was located against the southwest baulk of excavation Area A (Figure. 14). This group comprises of features; (46), (47), [62], [411], and [412]. Each of these were round or oval features between 0.66m –1.21m in diameter, with depths between 0.4-0.15m deep, and flat bases. Fills were generally greyish or yellowish brown silty clay single fills. These were dated by the presence of Roman ceramic tile fragments to the 3rd-4th centuries (see chapter 6.1) . Functionality, however, remains unclear.

Other Pits

[284] Irregular shaped feature in southeast of Area A (Figure. 13 and Figure.17, section 10.02). It survived to 3m in length, 1.5m in width and was cut 0.3m into natural clay. In section it appears that a secondary cut [290] was made into the fill (289). Fills were plastic clays with charcoal flecks (see chapter 6.6) and occasional pebble. (289) was dated to the 3rd -4th century by pottery fragments (see chapter 6.1). The eastern extent was slightly truncated by a medieval furrow while its western end appears to truncate feature (247).

[296] & [298] Two intercutting pits were observed in the south west of the excavation area (Figure. 14) between ditches [294] and [300]. Although their relationship with one another was uncertain due to homogeneous fills and only a slight intercutting, it was apparent in section (Figure. 20, section 10.04) that they cut ditch [300] to the southwest. The fill of pit [298] was dated by the presence of Roman ceramic building materials.

[322] Irregular shaped pit, possibly two intercutting pits with homogenous fills, in southeast of Area A (Figure. 13), adjacent to ditch [301]. Found to contain fragments of Roman pottery (see chapter 6.1) and animal bone (see chapter 6.5). Close association with undated features (259), (260), (261), (262), (263) and (275).

[374] Pit adjacent to ditch [349] in the northwest of Area A (Figure. 12), dated to 3rd-4th century AD by pottery and tile evidence, but displaying no clear associations.

[397] Shallow (0.13m) oval pit-like feature in southwest of Area A (Figure. 14). Possibly associated with adjacent pit [411] to the south. Dated to the 3rd-4th century by the presence of ceramic building materials.

[411] Shallow (0.13m) flat bottomed oval pit-like feature in southwest of Area A (Figure. 14) cut by a post hole [404] in its northern end. Possibly associated with adjacent pit [397] to the north and undated post-hole [380] to the east. Dated to 3rd-4th century AD by the presence of pottery fragments in the post-hole.

[409] & [410] Two intercutting pits were observed in the southwestern corner of the excavation area (Figure. 14). Though their relationship was unclear it was apparent in section (Figure. 17, section 17.12) that they cut ditch [402].

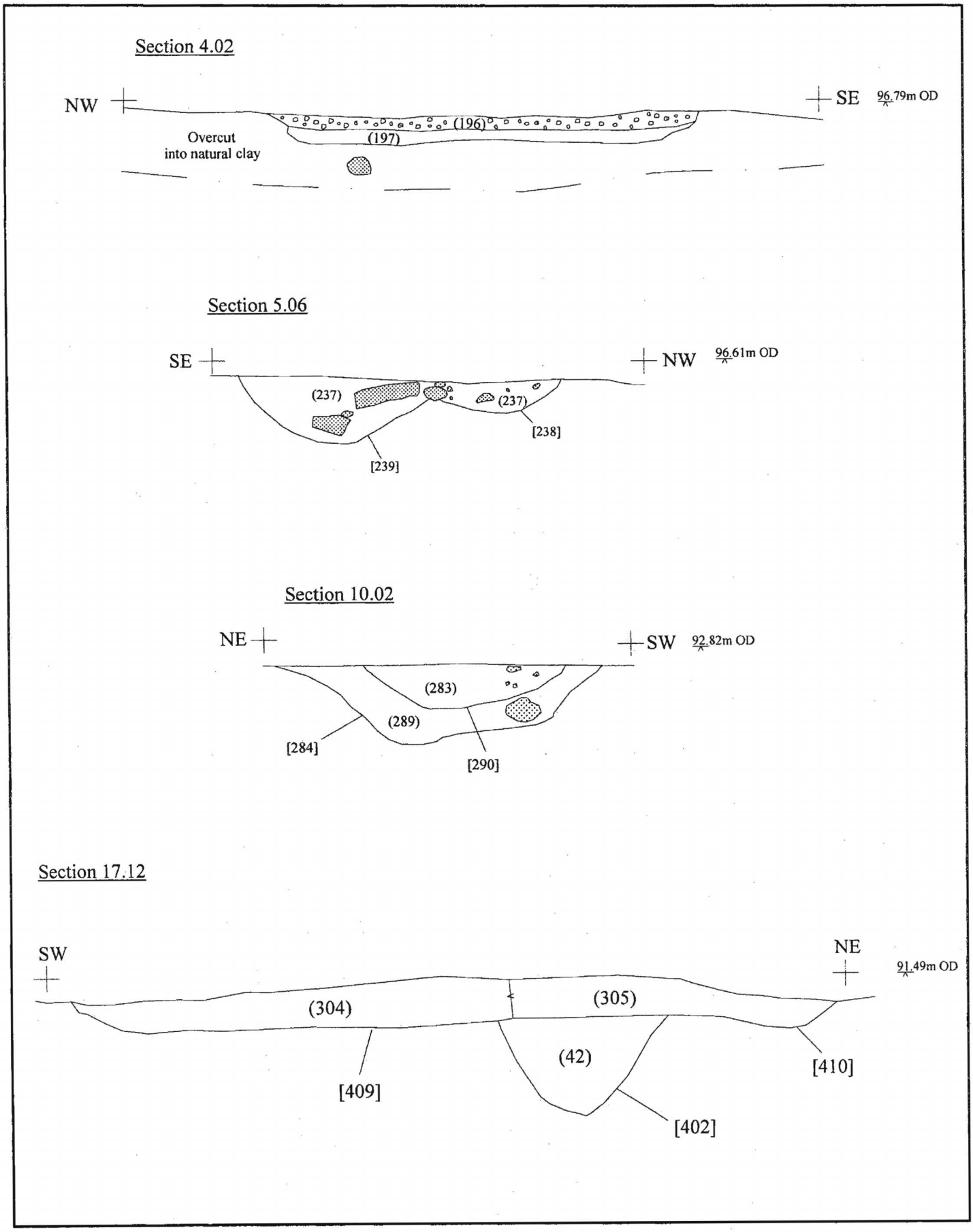


Figure 17. Section drawings of a selection of Phase III (3-4th century) Romano British features from Crown Hills. Scale 1:20

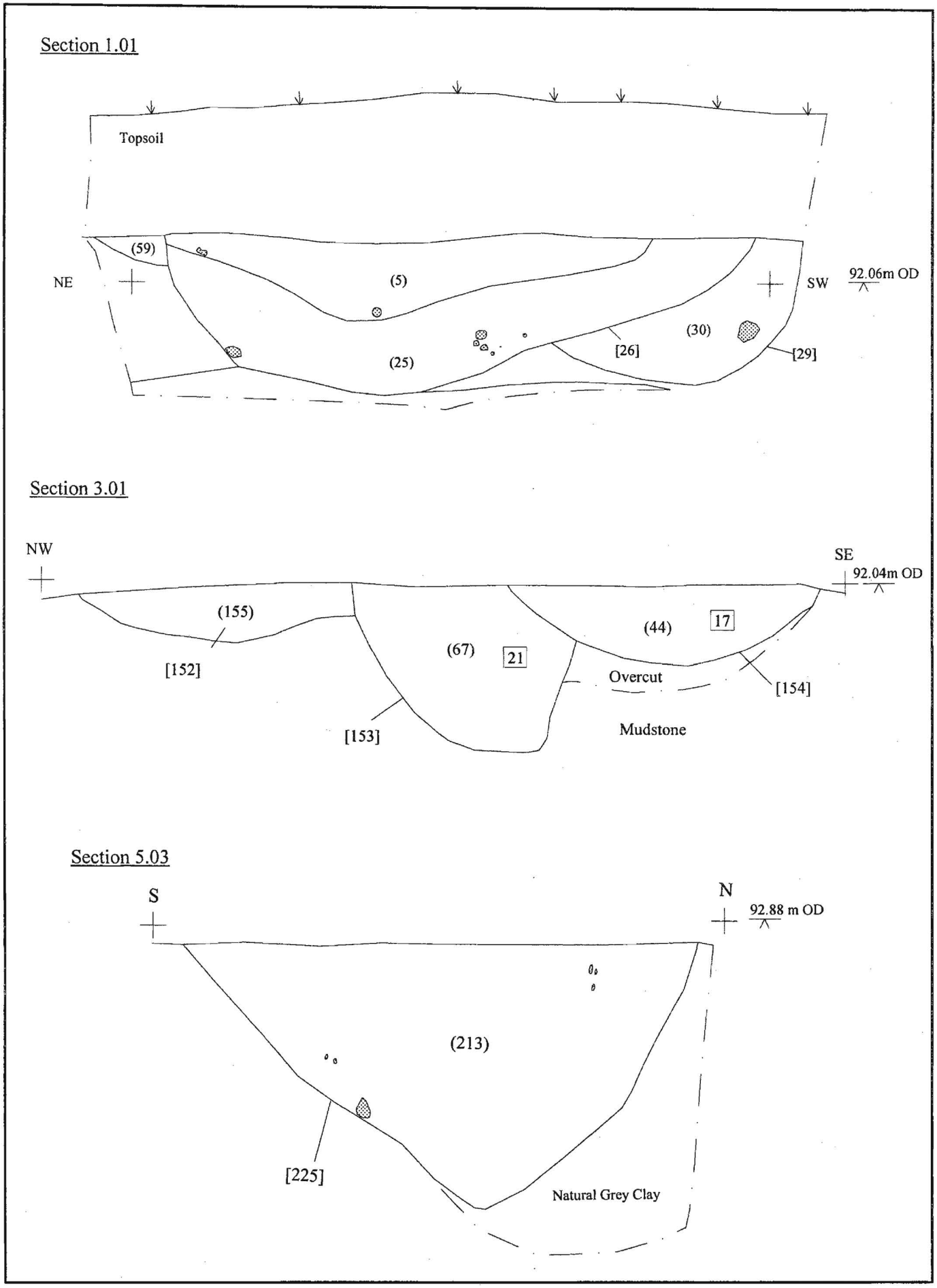


Figure 18. Section drawings of Phase III (3rd-4th century) Roman British ditches from Crown Hills. Scale 1:20.

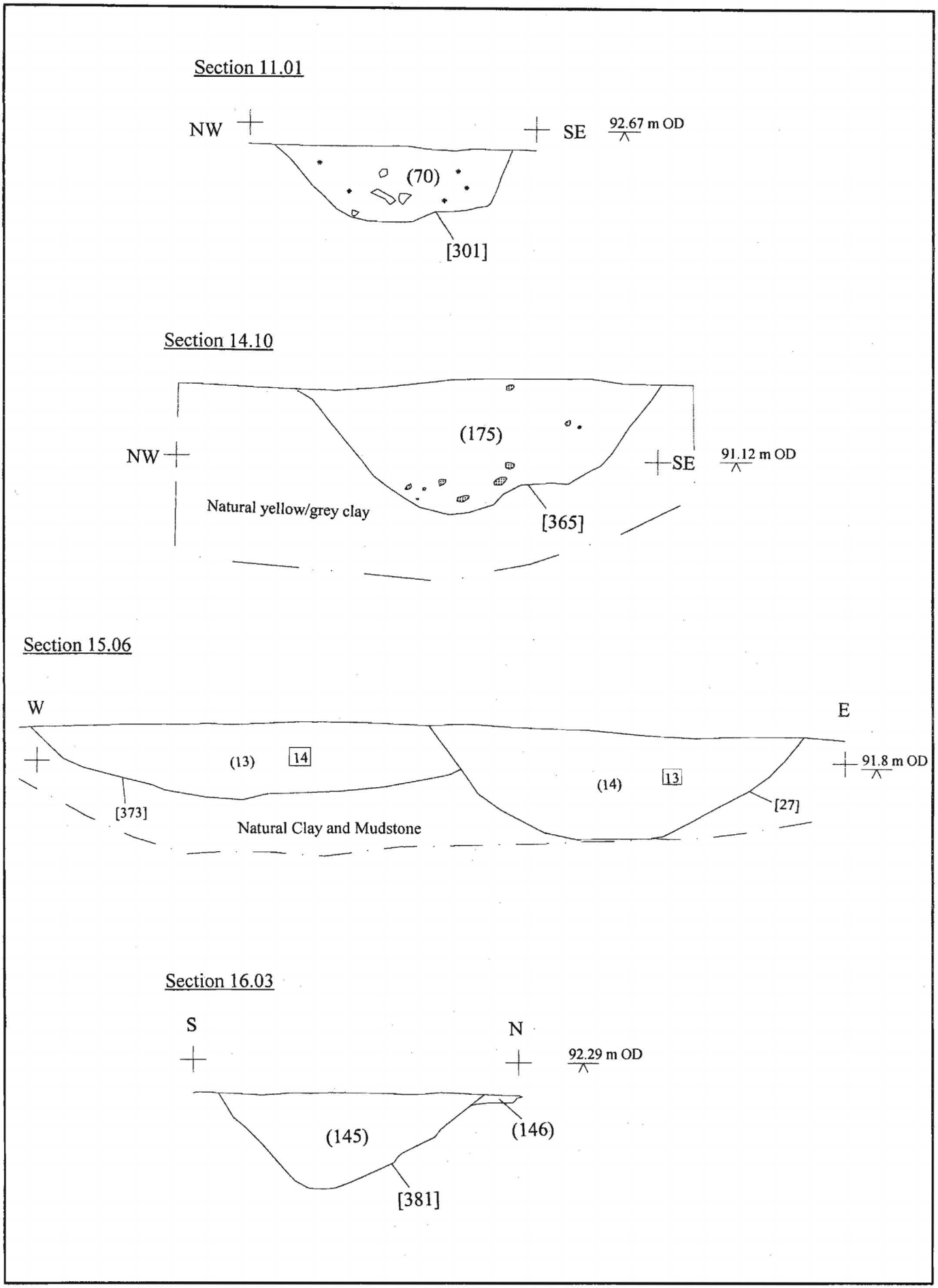


Figure 19. Section drawings of Phase III (3rd-4th century) Roman British ditches from Crown Hills. Scale 1:20.

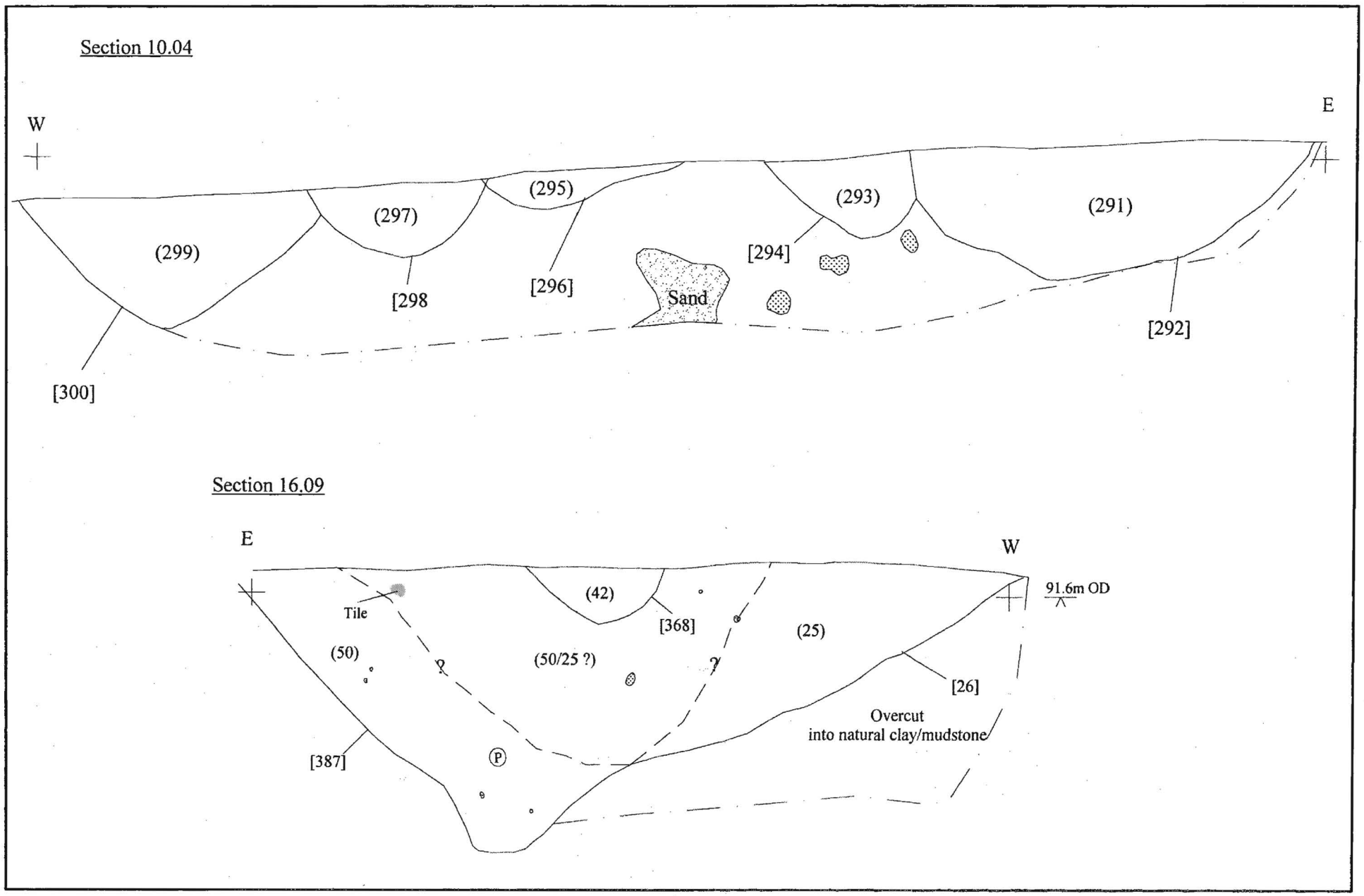


Figure 20. Section drawings of phase III (3rd-4th century) Romano British features from Crown Hills. Scale 1:20.

Ditch Group 'drainage ditches'

In the middle of Area A (Figures. 12 & 13) were a group of six roughly parallel ditches; [27/351], [373], [349/371], [147/343/381], [340/379] and [216]. Each of these crossed the site in a northwest to southeast direction for 25m-39 m. They ranged in width from 1m-1.4m and in depth from 0.2m-0.4m, with u-shaped profiles. All of these ditches were datable by the presence of 3rd-4th century AD Roman pottery fragments (chapter 6.1) and Roman ceramic tiles. In the case of ditch [349/371], the infilling of the ditch could be dated to the 4th century, by pottery evidence (see chapter 6.1) and a bronze coin (SF. 45, see small finds, chapter 6.4), of *Constantius* II 337/361 AD, was recovered from the fill.

Ditch [27/351] was seen to cut ditch [373] in section (Figure.19, section 15.06) then continue along a common line, observed on the surface as a single feature (1) which was subsequently cut by the possible enclosure ditch [153/356/365] at its northwestern end.

Ditch [147/343/381] (Figure.19, section 16.03) formed a T-junction with the northeast-southwest ditch [301] at which point were located several large fragments of worked masonry. This ditch appears to line up with the northeast-southwest curving ditch [274] but this is unclear due to furrow truncation and the shallowness of both features at this point. It is possible that they once formed a single 'enclosure' like ditch the full extent of which has been obscured at its northern extent.

Ditch [340/379], the furthest south of the group, was seen to share an alignment with ditch [216] a little further to the southeast. Although some damage, from medieval ploughing, was obvious the presence of a rounded terminal end to ditch [340/379] suggests that the break may have been intentional, leaving a 4.6m gap between the two segments. To the northwest the full extent of this ditch was obscured (perhaps due to stripping) but contexts (171) and (32) may be interpreted as surviving remnants. Ditch [216] displayed no terminal end since it was truncated by a medieval furrow; its southeast end it cuts the end of gully [281] and is cut at its end by ditch [225]. Ditch [340/379] could be well dated to the 4th century due to the presence of a bronze coin (SF. 34, see chapter 6.4).

Other Ditches

[26/294] This is a large northwest-southeast aligned ditch which runs parallel to the southwest baulk (Figure. 14) for *c.*46m, with a maximum width of 2m and depth of 0.95m (Figure. 18, section 1.01; Figure. 20, sections 16.09/10.04). Definition of this feature is made problematic as a result of numerous intercuttings with other ditches (i.e. [387/417], [159/300/402] & [292]) and features (i.e. (30) & (56)). In section 16.09 (Figure. 20), for instance, similarity in the fills of both [387/417] and [26/294] makes it impossible to see which ditch cuts which. It is clear, however, that it pre-dates the large 'enclosure' ditch [153/356/365] which cuts through its centre. Several Iron objects (SF 5 and 8) were recovered from the fill but ceramic dating evidence was absent. So this feature has been dated in terms of its stratigraphy with intercutting dated features, to 3rd-4th century AD. It is possible that this ditch might have joined with ditch [287] to the southeast, to form a right angle, representing a possible segment of an earlier 'enclosure' ditch predating the later one [153/356/365]

[152] This ditch, in the southwest of the excavation are ran parallel to and was cut by

the large 'enclosure' ditch [153/356/365] (Figure. 14). It emerges from the southeastern baulk and runs parallel to the enclosure ditch for 5.8m, at a width of 1.1m and depth of 0.25m. It was dated by the presence of 2nd-4th century Roman pottery fragments (see chapter 6.1) and ceramic building materials.

[153/356/365] *'Enclosure' ditch:* By far the longest ditch identified during excavations, this ditch emerged from the southwestern baulk, where it truncated an earlier ditch [152] in the same alignment, and was cut by a later ditch [154], again on the same alignment (Figures. 12 & 14), it runs for 72.3m in a northnortheast direction (cutting through earlier ditches [159/300/402] and [26/294]) then turns a right angle and heads east for a further 18.8m, at which point it terminates in a shallow butt end. Its shape in profile varied from almost v-shaped in section 3.01 (Figure. 18), irregular in its middle (Figure. 19, section 14.10), to a shallower bowl shape at its terminal end. Quantities of 3rd-4th century AD pottery, animal bone (see chapter 6.5), and ceramic building materials were recovered from its single fill. There may be some association with ditch [368] in the northwest of the excavation area (Figure. 12) which runs parallel to the enclosure ditch but with a slight overlap, appearing to form a 'corridor-like' entrance .

[154] This is the latest ditch in the group of three intercutting parallel ditches seen in the south west of Area A. It truncates the enclosure ditch [153/356/365] along its eastern edge for 15.2m. Its profile (Figure. 18, section 3.01) is of a gentle concave cut. In its northern end it cuts earlier ditches [159/300/402] and [26/294], and is itself dated to the 3rd-4th centuries by pottery evidence (see chapter 6.1). Animal bone fragments (see chapter 6.5) were also recovered from its fill.

[159/300/402] This ditch crosses the full width of the excavation area (Figures. 14 & 13), covering a total of 84.7m. Although its full extent is unknown. The ditch is narrow (1.2m at its thickest point) and preserved to various depths, *c.* 0.52m at the southeast (Figure. 20, section 10.04), 0.2m in the northwest (Figure. 17, section 17.12), with a v-shape to u-shape profile. It appears to pre-date the digging of the 'enclosure' ditch [153/356/365] and the sunken feature [350] but post-dates ditch [26/294]. The single fill was found to contain ceramic building materials in small quantities and a large iron spike/nail (SF. 102).

[218/274] & [220] These two ditches were identified in the northeast (Figure. 11) and southeast (Figure. 13) of Area A. The longest of the two curves in a northeast-southwest orientation and appears to align with ditch [147/343/381], possibly incorporating (134), but its northeastern end is lost by modern truncation. In section 5.05 (Figure. 9) it is apparent that this ditch had been recut [241] subsequent to its primary silting and later truncated by the cutting of the parallel ditch [220]. Only the fill of the recut (212) could be dated to the Roman phase of occupation (phase III), but it is clear that the earlier ditch [218/274] post-dated the Iron Age (phase I) ditches that it truncated on its northern edge (Figure. 9, section 5.05).

[225/287] Located in the southeast of Area A (Figure. 13) ditch [287] runs in a northeast-southwest direction for *c.*42m, with a maximum width of 2m, and depth of 0.55m (Figure. 18, section 5.03 & Figure. 9, section 10.01). At its southwestern end the ditch appears to curve toward the east, seemingly lining up with ditch [26/ 294] to continue in a northwestern direction. This, however, remains unclear since the

feature was disturbed at the point of the actual turn. If indeed this ditch did continue to form a right angle with ditch [26/294] it is possible that this represents a segment of an earlier 'enclosure' ditch pre-dating the later one [153/356/365].

[301] Forming a T-junction with ditch [147/343/381] in the southeast of Area A (Figure. 13), ditch [301] runs in a roughly north-south direction for *c.*34.2m, with a maximum width of 1m and depth of, and depth of 0.33m (Figure. 19, section 11.01) . At its centre it cuts through gully [302]. The ditch itself is well dated to 3rd-4th century AD by abundant pottery (see chapter 6.1) and ceramic building material fragments, as well as containing iron small finds (SF. 14 & 54, see chapter 6.4) and animal bone (see chapter 6.5).

[351/368] A northwest-southeast aligned ditch seen in the north of Area A (Figures. 11 & 12). This ditch forms a 'corridor like' entrance in conjunction with the 'enclosure' ditch, but it does run parallel to the five ditches described in the 'ditch group' (above), thus, like them, it remains possible that it pre-dated the 'enclosure' ditch [153/356/365]. This ditch runs for *c.*31m, at a width of up to 1m, with a flat based profile of up to 0.30m in depth, and a single charcoal flecked fill (136). It was datable by pottery fragments to 3rd-4th century AD (see chapter 6.1), it also contained, cerramib building materials (CBM) and an iron object (SF. 58, see chapter 6.4).

[387/417] In the south west of the excavation area ditch [387/417] runs parallel to ditch [26/294] along its northeastern edge. The great similarity of their fills however, made it impossible to determine which ditch cut which. It is, however, clear that this ditch predated ditch [159/300/402] which is seen to truncate it in section 16.09 (Figure. 20). The ditch runs for 20m then terminates in a shallow butt end close to the 'enclosure' ditch.

Gullies

[227] South of the threshing floor (*c.*10m), in the northeast of Area A (Figure. 11) lay a poorly defined shallow stony gully like feature [227]. Its shallow depth (0.05m) and broad plan (3.5m x 0.8m) suggests that it may be a horizontally truncated ditch or gully section, or more simply just an ancient infilling of a depression in the natural. Fragments of pottery in its fill (202) date this feature to the 3rd-4th century (see chapter 6.1).

[273] A single narrow gully section resided at the northern end of Area A (northwest detail, Figure. 12), this measured 4.34m in length 0.37-0.55m in width with a slightly bulbous end and was cut 0.17m into natural boulder clay. Its western end was truncated by a medieval plough furrow so its full extent was unclear. The feature was dated by the presence of Roman roof tile fragments within its fill (106).

[281] A long curving gully with unclear edges and poor definition was seen in the southeast of the excavation area (Figure. 13). It measured 11m in length, 0.53m in width and survived to a depth of 0.1m, running in a roughly north-south direction. Dating is uncertain but it is clear that it pre-dates ditch [216] since it is truncated by this in the south. The north also bears truncation by a narrow modern intrusion.

[302/318] This gully was identified in the southeast of the excavation area (Figure. 13) where it ran in a roughly southeast-northwest direction for 14m, at a width of 0.57m, and a surviving depth of 0.13m. Its base was flat and its sides steep. It was seen to be cut in its middle by ditch [301] 14m x 0.52m.

Post Holes

[39] Small circular feature in northwest of Area A (Figure. 12) , appears to cut adjacent post-hole (40). The feature was dated by the presence of 3rd-4th century Roman pottery (see chapter 6.1) and tile.

(40) Small circular feature in northwest of Area A (Figure. 12) , appears to be cut by *adjacent* post-hole [39]. Feature was dated by the presence of 3rd-4th century AD Roman pottery and tile.

NB. All features including those described in the above text are included in Appendix 2.

Discussion

The complex ditch system which make up the majority of the phase III features at Crown Hills, suggests that the land may have been parcelled up into manageable plots or 'enclosures' drained by shallow northwest-southeast drainage ditches. As described by Smith (1987,22), land may be enclosed for a variety of reasons including the containment of livestock, for the purposes of agriculture and horticulture and for the demarcation of property (potentially delineating individual holdings). Many such enclosed farming plots have been excavated and fully recorded, such as Godmanchester, Cambridgshire (Green 1975) and East Bridgeford, Nottinghamshire (Oswald 1952).

The earliest enclosure at Crown Hills appears to have been delineated by deep ditches [287] and [26,292] (Figures 13 & 14), which cuts through the earlier Phase I (Iron Age) ring-gully. The full extent of this enclosure remains uncertain, since *c.*70% of its circumference was either outside of the development area or was undetected during the excavation, although it seems likely that this enclosure encapsulated in excess of *c.*0.75 ha of land. The agricultural plot then appears to have been drained by the cutting of a series of shallow southeast-northwest aligned drainage ditches (Figure 12), inc. [27], [147], [371] and [379]. At some time subsequent to the digging of the drainage ditches it appears that a second enclosure ditch, this time with an 'entrance causeway' formed by ditches [153/356/365] and [351/368], was created. Again the full extent of this enclosure was undetected, possibly as a result of horizontal truncation obliterating the shallow cut ditches of this enclosure. A minimum of *c.*0.3 ha of land was, however, enclosed by this ditch on the Phase III plan (Figure 10).

The lack of stratigraphy between the enclosures and the enclosed features makes it difficult to link particular features with an associated enclosure. There are, however, a few exceptions to this rule in that several features in the north of the development area appear to reside outside of the area held by the later enclosure. The threshing floor (198), the corn dryer [354], the track (196) and pit group A, all lie outside of the later enclosure, to the

north and northeast of the enclosing ditches (Figure 11). It is thus likely that these features, at least, are associated with the earlier enclosure, and thus probably also pre-date the digging of the drainage ditches. The other enclosed features are, however, impossible to associate with either early or late enclosures, especially since the finds (pottery, tile etc.) are all of broadly similar date.

The function of the two enclosures described above is best investigated through a more detailed look at the features enclosed within them.

The appearance of a possible threshing floor (198) (Figures 11 & 15), is highly significant in our interpretation of land use in this instance. The Roman use of threshing floors, to beat and winnow grain from glumes is well attested in Italy and in Britain. The Roman writer Collumella, writing in the 1st century AD, mentions that grain might be threshed in the fields immediately after harvest, or taken to a threshing floor, or stored or dried, or if only the heads were cut off they might be threshed with a flail in the winter (2.20.3-4). Varro (1.51) describes an ideal threshing floor as a round or rectangular hardened surface (stone, pebble, compacted dry clay, *opus signinum* etc.) slightly risen above the damp soil; on high land, so as to expose it to wind (for winnowing) and sunshine (for drying); and, in poor climates, with a roof. A good Italian example was uncovered at Boscoreale, near Pompeii (White 1970,423). This was of rectangular construction (*c.*13 x 10m), enclosed by a low wall, on risen ground and paved with *opus signinum*.

In Roman Britain, however, the process of threshing may have been very different to in Italy. Certainly not much of the grain grown in Roman Britain would have been threshed immediately after harvesting, since spelt wheat (the most common crop of this time) required artificial drying prior to being threshed (Monkton 1995.35). It is thus more likely that threshing in Britain was a more piecemeal activity, carried out at different times of year, depending upon need and schedules of artificial ripening and drying of crops (Morris 1979,25-25). At Walton, Cambridgshire (Jones 1974) a surface was levelled with small pebbles; at Kettering, Northamptonshire (Jackson 1971) a limestone surface of 3rd-4th century AD date was found in association with a corn dryer; and at Appleby Magna, Leicestershire (Clarke 2000) several 3rd-4th century AD rubble floors, with some evidence of a superstructures (roofs ?), were found in association with a corn dryer.

The corn dryer [354] on this site was of simple yet readily identifiable form (Figures 11 & 16). It would have been used to parch or roast grain (usually spelt, barley and oats in this period) prior to satisfactory threshing and storage. A residual moisture content in such grains in storage would have resulted in germination, mildew, fungus and insect infiltration e.g. the grain weevil becomes active at 11% moisture (Morris 1979.5). Dry grain is also easier to mill, since it does not clog up the querns as moist grain does. Piggot (1958.12) suggests that grain might have been dried in order to ripen crop harvested early in the northern provinces (north of Northamptonshire, according to Piggot) in much the same way that barley was dried in northern and western Britain until recently (Scott 1951).

Detailed analysis of the environmental samples recovered from the Crown Hills corn drier (see chapter 6.6) confirmed that this structure was directly linked with the processing of grain. Cereal and grass grains, as well as processing by-products such as wheat and spelt glumes and chaff and oat awnes, were abundant in the corn drier fills. The grains in this case probably represent accidentally left behind product (i.e. dried grain), while the chaff and glumes may represent dehusking by-products (possibly from the associated threshing floor) reused as kindling/fuel for the corn drier. Alternatively the presence of chaff and

glumes may indicate that drying was carried out as an aid to threshing, rather than for storage.

Most of the corn dryers recorded archaeologically have been found in association with Roman villa sites, mainly of the 3rd-4th centuries. For example, at Great Casterton, Leicestershire (Corder 1954) both 'long flue' and 'circular' corn dryers, of 3rd-4th century AD, date were associated with a villa and aisled barns. Another was identified at Bonners Lane, Leicester (N.Finn pers.com.), though both of these examples were of grander scale and design to that identified at Crown Hills. A more comparable recent example was excavated at Appleby Magna, Leicestershire (Clarke 2000). Here a similarly sized and shaped corn dryer was associated with 3rd-4th century AD Roman agricultural features (inc. threshing floors), and also displaying a depression in the narrow stoking end.

The 'sunken feature' [350] recorded at Crown Hills (Figure 14) appears to represent a possible structural remnant known as a 'sunken feature building' or Grubenhäuser. Although predominantly Anglo Saxon constructions, sunken feature buildings were known occasionally to be constructed in the late Roman period. At Appleby Magna, Leicestershire, three sunken features, of comparable size to Crown Hills, were found to be associated with post holes, stake holes and large stones (Clarke 2000). At Crickley Hill, Gloucestershire, several sunken feature buildings were thought to date to 400AD (Jarret, pers.comm). Some of these had evidence of foundation wall stones and were thought to represent cob-walled structures. Stakeholes found in association with similar structures found on the lower terrace site at Tintagel, dated to 395AD, were thought to represent uprights used to support turf walls (Harry, 1997).

The close association, at Crown Hills, of field enclosures, drainage ditches, a threshing floor, a corn drying oven, a metalled track and various gullies and pits (including a possible sunken feature building) supports the notion that they formed part of a well established agricultural infrastructure based around a 3rd-4th Roman settlement somewhere in the close vicinity.

5.2.4 Phase IV, The medieval features.

Plough Furrows

The entire development area, both Areas A and B, was scarred by extensive medieval ploughing (Figure 21). Originally these would have stood proud of the land surface as distinctive ridge and furrow earthworks, but had long since been eroded flat. The plough scars ran in a northnortheast to southsouthwest direction in unbroken bands measuring *c.*150m in length and 1.5m-2.3m in width, with 5-7m spacing. As has previously been mentioned, these plough scars caused significant damage to earlier archaeological features, essentially destroying *c.*15% of the site.

Pit [229]

A single pit on the eastern side of the development area (Figure. 21), measuring 0.63m-

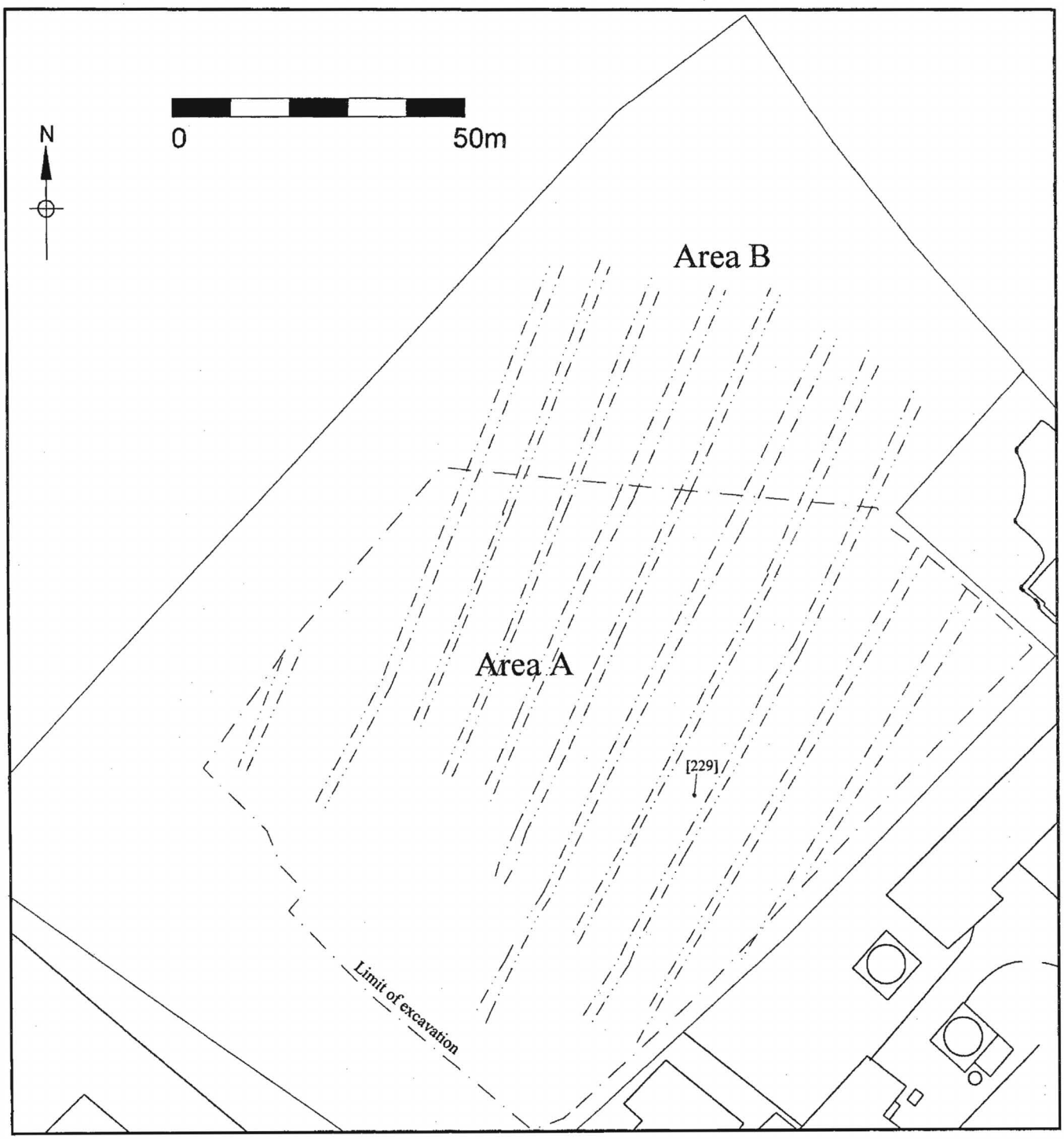


Figure 21. Medieval (Phase IV) features at Crown Hills, Evington, Leicester. Scale 1:1000

0.48m and cut to a depth of 0.08m into natural boulder clay, was found to contain fragments of medieval 'Potters Marsden' type pottery, dating c.1000-1300 AD. Aside from the pottery fragments its dark grey brown silty clay fill (209) gave no clues to its original function.

Discussion

The phase IV features at Crown Hills represent typical Medieval agricultural activities being carried out on the site between *c.*1100 and 1600. The preservation of the ridge and furrow field system was particularly poor, compared to numerous other local fields, presumably due to weathering and continuous field usage. Other than plough scars, only a single medium sized pit was observed. This contained 1100-1300 pottery but its function is unknown.

5.2.5 The Undated features.

Numerous features identified with area A could not be assigned to a phase (Figure. 22), due to both an absence of datable finds and of reliable stratigraphy. Primarily these features were 'pit-like' features or possible isolated post-holes. One ditch [388] and one gully [215] were also identified.

Ditch [388], in roughly the same southeast-northwest alignment as the 3rd-4th century group, this ditch runs for *c.*30m at a width of upto 1.3m, and depth of 0.2m, in the southwestern corner of Area A (Figure. 22). Although no datable finds were recovered from its single fill (217), stratigraphy suggests that it does pre-date the digging of the 'enclosure ditch' [153/356/365] and post-dates the Iron Age gully [406]. It is thus likely that this feature is contemporaty with the 3rd-4th century AD southeast-northwest ditches seen elsewhere in Area A.

Post-holes [357-362], the only post-hole group to be identified from Crown Hills were unfortunately undatable. The group, comprising of six equally spaced circular features; [357], [358], [359], [360], [361], & [362], were identified in the north of Area A, just inside the 'corridor' entrance formed by ditches [153/356/365] and [368]. The post-holes, each with a diameter of 0.35-0.45 m, and depth of just 7-0.12m, formed a 128° angle, with three post-holes on either arm of the angle. Unfortunately the eastern side of the group was truncated by a medieval furrow, making it impossible to say whether or not these may have once formed the foundations of a post-built structure.

All other undated features (as illustrated in Figure. 22) detailed in Appendix 2.

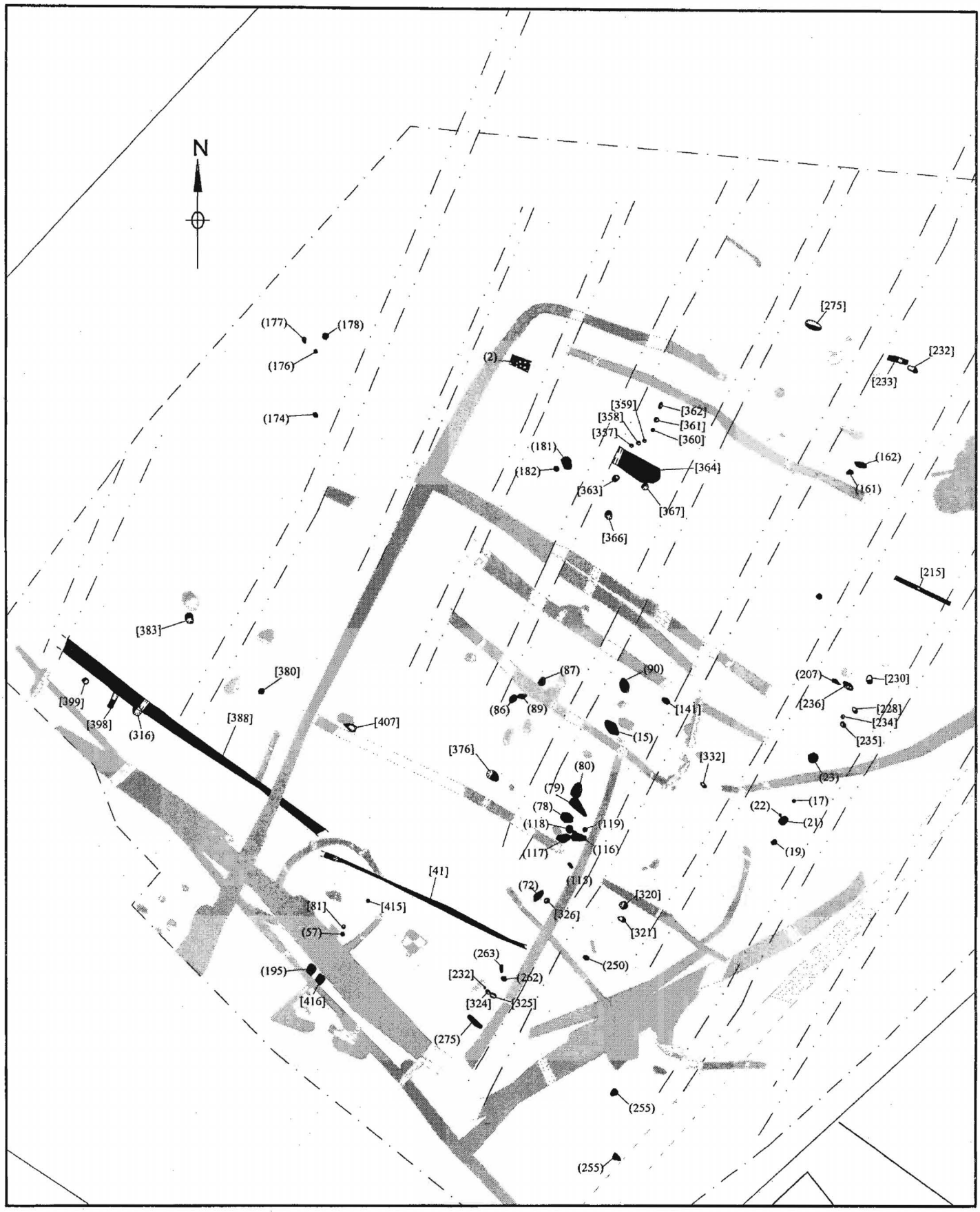


Figure 22. Undated features (black) recorded in Area A , dated features are shown in grey. Scale 1:500.

6. Specialist Reports

6.1 The Pottery by Patrick Marsden

The Iron Age Pottery

The prehistoric pottery (27 sherds weighing 236g) is of Iron Age date. Most of the Iron Age pottery is characteristic of the East Midlands scored ware tradition of the middle to late Iron Age (Elsdon 1992), with 60.7% of the pottery by weight displaying scoring. No forms are identifiable and the group is too small to draw many conclusions. However, the range of fabrics is broadly similar to those found amongst scored wares at Elms Farm, Humberstone, Leicester (Marsden 2000,a) and the West Bridge Area, Leicester (Pollard 1994, 73). A 1st century AD date is possible given the survival of the scored ware tradition alongside Romano-British pottery and the presence of a small number of early Roman forms (see below). A single sherd in fabric Q1 is thinner-walled and wheel-finished and may be of a middle 1st century date. (Context 271).

Table 3. Iron Age fabric totals by sherd number and weight (g)

Fabric	Sherd no.	Weight (g)
Q1 Quartz sand	3	11
Q2 Quartz sand with rock inclusions	9	83
R1 Rock	9	31
SR Shell and rock	4	14
S1 Shell-tempered	2	97
	27	**236**

The Roman Pottery

The Grey Wares

The grey wares are by far the largest pottery group (75.9 % by weight). The most common forms are necked vessels of a jar, bowl-jar or bowl form, bead and flange and plain-rimmed dishes. The necked forms have a broad date range of mid 2nd to 4th century. BB1 bead and flange dishes are typically at least late 3rd in date, and these grey ware copies probably date to the 4th century. The plain-rimmed dishes, again imitating the BB1 industry, are likely to be 3rd or 4th century date. Forms represented in smaller numbers include everted rim and ledged rim jars; high-flanged and beaded rim bowls; the 'incipient'-flange dish; a platter and a strainer or colander. The majority of the forms are typical of the later Roman repertoire. However, two bowls are present in contexts 16 and 17 respectively which are

characteristically earlier. These are a carinated bowl in a sandy grey ware fabric of a late 1st to early 2nd century date (Context 16, T5, pit/post-hole) and a necked bowl of a probable late 1st to 2nd century date (Context 17, T7, pit/post-hole).

Table 4. Roman fabric totals by sherd number, weight (g) and weight % (For Fabric descriptions see Pollard 1994, 112-114)

Fabric	Sherd No.	Wt (g)	Wt %
GW	408	7224	75.9
C2	53	918	9.6
C3	9	155	1.6
C11	1	18	0.2
C13	4	87	0.9
MO4	8	308	3.3
MO4/18	2	84	0.9
BB1	8	146	1.5
OW	9	79	0.8
CG1	50	311	3.3
CG1B	10	100	1.0
CG2	4	20	0.2
SAMIAN	2	13	0.1
WW	2	17	0.2
WW/C2	3	29	0.3
MCR	1	6	0.1
MCIA/R	2	6	0.1
	576	9521	100

Colour-coated wares

The range represented is mostly that of the late 3rd – 4th century part of the lower Nene Valley colour-coated ware industry. These are dominated by dishes of the bead-and-flange and plain-rimmed types (Howe et al fig. 7 nos. 79 and 87)) together with necked jars, bowl/jars or bowls (*ibid.* nos. 75-77). Two beaded rim bowls, a single fragment of a beaker and a flagon are also present. In addition, Oxfordshire industry products include a beaded rim and a flanged bowl (Young 1977, 160-161, Type C51 or C52) and are likely to date to the 4th century.

The Mortaria

The mortaria, which constitute 4.2 % by weight of the pottery, are all of a Mancetter/Hartshill source. All forms represented are hammerhead types. These include those of the late 2nd and 1st half of the 3rd century and also late 3rd to third quarter of the 4th century types.

Other Wares

BB1 constitutes only 1.5% by weight of the Roman pottery. No diagnostic pieces are present. The small amount of this fabric probably reflects the fact that local grey ware copies of BB1 forms, such as the plain-rimmed and the bead-and-flange dish, were successfully competing with the BB1 industry in the area during the late 3rd and 4th

centuries. However, at Causeway Lane, Leicester in Phase 6B, which dates to the second half of the 4th century, BB1 still comprises *c.* 12.3% of the final make-up (Clark 1999, 137). With the collapse of the industry around 370 AD such a small amount of BB1 from Crown Hills may reflect a date for the activity at the site in last quarter of the 4th or even early 5th century.

The complete lack of Derbyshire ware at the site may also be of significance. 21.2 % was produced by Phase III, probably late 3rd to mid 4th century in date, from the site at Jubilee Plantation, Normanton le Heath, Leicestershire (Marsden unpublished). A figure of 2.5% of the Roman pottery consists of Derbyshire ware at Appleby Magna, Leicestershire, a site which may date to the first half of the 4th century (Marsden 2000.b). At Causeway Lane, Leicester it was noted that 'Martin (forthcoming) has suggested Derbyshire ware ceased volume production during the mid-4th cent.AD '(Clark 1999, 136). Therefore it is possible the lack of this ware may indicate a date in the later 4th century for the activity at Crown Hills.

Summary of Key Deposits

Table 5. Context 70 (Ditch fill), 68 sherds weighing 2238g late 3rd-4th century

Fabric	Fabric % by weight	Forms
GW	74.0	Four bead and flange dishes; one 'incipient' flange dish ; two necked jar/ bowl/jar or bowls; re-worked base (counter?).
C2	11.9	Three bead and flange dishes and plain-rimmed dish.
C11	0.8	Necked jar/ bowl/jar or bowl
MO4	8.8	Two hammerhead forms
OW	1.4	
CG1	2.0	
CG1B	1.1	
TOTAL	100.0	

Table 6. Context 105 (Ditch fill), 111 sherds weighing 1319g late 3rd-4th century

Fabric	Fabric % by weight	Forms
GW	79.6	Two necked jar/ bowl/jar or bowls; two everted rim jars; ledge rim jar; plain-rimmed dish; bead and flange dish and strainer/colander.
C2	6.7	Necked jar/ bowl/jar or bowl
BB1	9.6	
CG1	2.7	
WW/C2	0.9	
MCR	0.5	
TOTAL	100.0	

Table 7. Context 128 (Pit 36), sherds weighing 1265g 4th century.

Fabric	Fabric % by weight	Forms
GW	94.1	Necked bowl-jar or bowl
C2	4.6	Flagon
CG1	1.3	
TOTAL	100.0	

Table 8. Contexts 198 199 and 200 (Threshing floor), 119 sherds weighing 1394g 4th

Fabric	Fabric % by weight	Forms
GW	76.2	Two necked jar/ bowl/jar or bowls; plain-rimmed dish; and bead and flange dish.
C2	13.0	Plain-rimmed dish and bead and flange dish.
C3	2.1	Plain-rimmed dish and beaded rim bowl.
C13	3.3	Flanged bowl
BB1	0.3	
CG1	2.4	
OW	2.0	
SAMIAN	0.7	
TOTAL	100.0	Residual late Bronze Age- Iron Age sherd weighing 18g also present.

General Discussion

Although there are two earlier grey ware vessels (see 'The Grey Wares' above) representing 1st or 2nd century activity at the site virtually the entire Roman assemblage appears have a late 3rd to 4th century date range. The latter group is most likely to date to the 4th century, and pottery characteristic of this date is present in ditches, pits and the threshing floor. However, ascertaining a definite date within this century is more problematic. Forms diagnostic of the second half of the 4th century are not present, perhaps implying a *c.*300-350 AD date. However, as discussed above the absence of Derbyshire ware and small amounts of BB1 may suggest a later 4th century date for the pottery assemblage.

Some of the pottery is very abraded, such as the Oxfordshire colour-coated ware sherds, which are likely to date to the 4th century, and lower Nene Valley colour-coated wares of the late 3rd and 4th centuries. In many cases the colour-coat is entirely or partly absent. This would suggest that one possibility is that sometime during the later 4th century or afterwards Roman pottery and other materials from a 4th century dwelling, including pottery and tile, was redeposited into features such as ditches, the threshing floor and pits.

Table 9. Feature dates based upon results of pottery analysis.

Context	Cut	Date
1		4th
6		IA
10		IA/RB
13		3rd-4th
16		1st
25		2nd-4th
44		3rd-4th
51		IA
53		4th
60		1st
63		IA-1st
68		3rd-4th
70		3rd-4th
76		2nd-4th
83		IA
93		2nd-4th
105		3rd-4th
108		2nd-4th
120		2nd-4th
124		2nd-4th
128		3rd
131		3rd-4th
134		4th
136		3rd-4th
138		4th
143		250 AD +
155		2nd-4th
160		4th
164		3rd-4th
168		2nd-4th
172		3rd-4th
177		2nd-4th
199		3rd-4th
201		MED
205		IA
212		RB
223		IA
249		IA
253		3rd-4th
265		RB
271		1st-2nd
280		IA
309		IA
389		RB
391		IA
405		IA

Context	Cut	Date
5		IA
8		4th
12		4th
14		3rd-4th
17		1st-2nd
31		RB
50		3rd-4th
52		RB
55		4th
61		RB
67		RB
69		2nd-4th
73		late 4th
82		IA
92		2nd-4th
104		3rd-4th
106		RB
112		3rd +
121		4th
126		2nd-4th
129		2nd-4th
132		3rd-4th
135		2nd-4th
137		2nd-4th
142		2nd-4th
147		2nd-4th
156		IA
163		3rd-4th
165		3rd-4th
170		3rd-4th
175		4th
198		4th
200		2nd-4th
202		4th
209		MED
213		2nd-4th
237		2nd-4th
252		IA
258		RB
269		2nd-4th
278		IA
304		2nd-4th
312		2nd-4th
390		RB
393		IA

6.2 The Building Materials by Anthony Gnanaratnam and Patrick Marsden

The Slate

A total of seven slates were found within the excavation area of Crown Hills. All of these came from local origin i.e. Swithland, and appear mostly to represent roofing slates typical of Roman occupation sites. Slates were recovered from various feature types (pits and ditches) with a slight locational bias to the middle of the site (roughly between evaluation trenches 5 and 7).

Table 10. Summary of slates from Crown Hills.

Context	Associated Date	Description
(55), [350]	4th century	Swithland slate, small fragment.
(129), [344]	2nd-4th century	Swithland slate, roof tile fragment with notch.
(134), [274]	4th century	Swithland slate, large roof tile with breaks, nail hole missing.
U/S T.5	-	Swithland slate, small fragment.
U/S c.T7	-	Swithland slate, small fragment.
U/S	-	Swithland slate, roof slate fragment with notch, and tool marks.
U/S	-	Swithland slate, roof slate fragment with notch.

The worked Stone

A slab of well rounded Lias mudstone , probably a natural flat boulder, but could have been used as working surface (for preparing food?). One flat side has dark deposit, and has been worn shiny in places, Technically u/s, but may originate from Roman drainage ditches of late 3rd-4th century date (Fiona Roe pers. comm.).

A single lower lias grey limestone *tessera* (mosaic floor tile) was also recovered from context (70), ditch [301]. Other tessera tiles have been noted from this area and are recorded in the SMR (Appendix 1). This may indicate the local presence of at least one mosaic tiled floor.

Two quern fragments were found during the excavations . Both are typical of Roman rotary querns and are of a Millstone Grit source.

1. Context 12. One fragment weighing 2.0 kg. Part of upper or lowerstone of rotary quern, maximum thickness *c.*5cm. Small indentations on upper and lower surfaces may indicate re-use as anvil. Fine-grained Millstone Grit. Not illustrated.

2. Unstratified. One fragment weighing 0.6 kg. Part of grooved lowerstone of rotary quern, maximum thickness *c.*3.5 cm. Millstone Grit. Not illustrated.

The Ceramic Building Materials (CBM)

The assemblage consisted of 172 fragments of *tegulae,* 125 fragments of *imbrices* and 201 tile fragments most of which were too small to identify. There were 21 fragments which

were probably not roof tile; these include six definite and one possible fragments of box flue tile. Only one fragment of wall tile, measuring 44mm thick, was recovered from context (1). Three other examples of tile, which could either be thick *tegulae* or wall tiles, were recovered.

The predominant building material were tiles used in roofing, with the robust flanged form (*tegula*) predominating over the more fragile curved (*imbrex*) tile. That several pieces of box flue (*tabulus*) tile were recovered is significant since it implies that some of the local buildings may have had hypocaust (under floor heating) systems. All types recovered are consistent with Romano British ceramic building materials used generally in Britain between the 1st and 4th centuries. The association of this assemblage, however, with well dated features suggests that most of these would have dated from the 3rd to 4th centuries AD.

One finger signature was recovered, along with one fragmentary impression of either an animal footprint or child's fingerprint. On the reverse of two tegula fragments were the impressions of some sort of basketry, possibly a mat.

Whilst scorching was evident on some of the tile, two tile fragments displayed a bluish upper surface which may be a deliberate feature. Blue coloured tile seems to have been deliberately produced and is known from the villa at Piddington, Northants.

Although no fabric analysis could be justified for this assemblage, a number of fabrics were discernible, and this was particularly evident in the groups of tile from the threshing floors, contexts (198), (199) and (200). This may suggest that the re-used tile derived from a number of different sources.

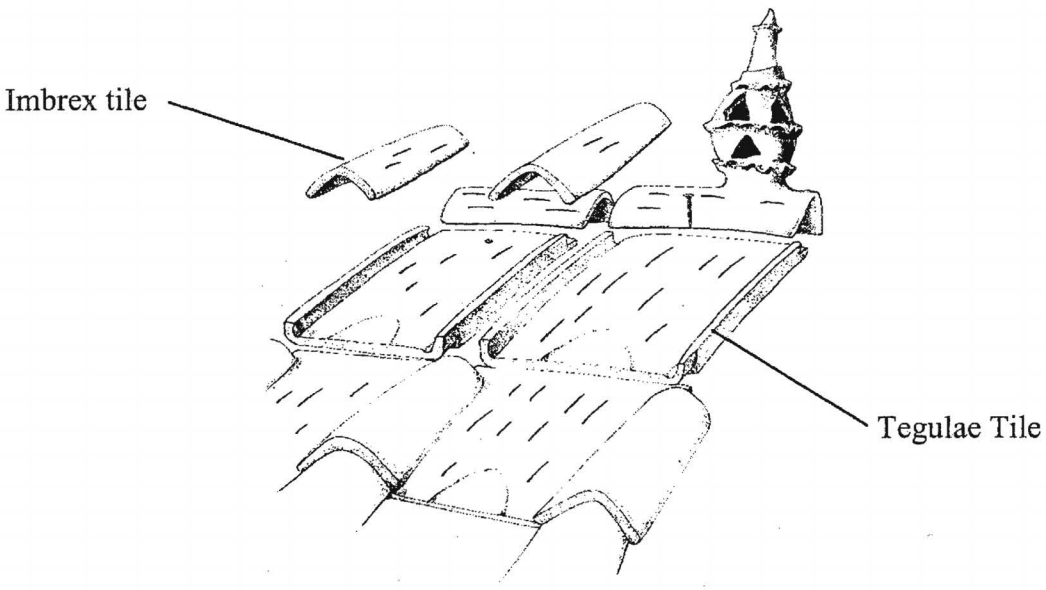


Figure 23. Reconstruction of a Roman Roof, showing flanged *tegulae* and curved *imbrex* tiles. (After de la Bédoyè 1989,109, fig 65).

Table 11. Summary of ceramic building materials recovered from Crown Hills.

Cont. no	Teg.	Imb.	Unc.	Other	Description
U/S	5	6	13	2	mod brick or Roman floor tile 60mm thick, unclassed tile22mm thick with hole either drilled through or made whilst clay was plastic 7mm wide at top 4mm at bottom.
U/S T2	0	0	9	0	
U/S T5	0	0	1	0	
U/S c.T5	1	0	0	0	
U/S T6	0	1	0	0	
U/S T7	0	0	1	0	
U/S c.T7	0	1	0	0	
U/S	1	1	1	0	
U/S	9	3	7	1	Box flue 23mm thick combed/impressed.
1	3	0	4	1	44mm thick 170+ mm - wall tile.
4	2	0	3	0	
5	0	0	2	1	teg./wall tile 35mm thick.
7	0	0	1	0	
8	1	4	6	2	Box flue12 15mm thick both combed, trace of cross .
9	2	0	2	0	
10	4	1	1	0	
12	2	1	2	5	teg./wall tile 42mm thick, some teg. and all teg./wall show burning on upper surface.
13	2	11	4	0	
14	1	1	1	0	
18	0	0	1	0	
20	1	0	0	0	
25	1	9	3	0	
26	0	0	1	0	
31	0	0	3	0	
42	1	1	3	1	Probable modern brick 60mm thick, 118mm wide, scorched, yellow brown fabric.
43	0	0	1	0	
44	5	3	6	3	teg./box flue, only 14mm thick .
45	0	0	1	0	
50	4	1	4	0	
53	1	1	3	0	
55	4	3	6	1	teg./wall tile 32mm thick.
56	0	1	0	0	
61	0	0	5	0	
68	9	3	2	0	teg. with double finger loop.
70	20	12	7	2	box flue, combed or rolled 15mm thick, box flue, combed , 16mm thick. Teg. with impression on reverse.
73	9	0	6	0	
77	0	0	1	0	
86	0	0	1	0	
91	1	0	0	0	
93	1	0	1	0	
104	4	1	0	0	
105	7	4	0	0	wicker? Impression on reverse of two tegulae.
106	2	1	3	0	
108	6	0	1	0	Finger/animal impression on reverse.
121	1	1	5	0	
124	0	1	0	0	
126	1	0	1	0	
128	1	3	1	0	
129	0	0	4	0	
130	1	0	0	0	
131	0	1	1	0	
132	0	3	4	0	
133	2	0	2	0	
134	2	1	0	0	
135	0	1	0	0	
136	5	1	5	0	Scorching on 2 tegs.
138	1	0	1	0	
139	0	0	5	0	
145	2	0	0	0	both scorched.
155	0	0	5	0	
163	2	0	4	0	

165	1	1	0	0	teg. Scorched.
169	1	0	0	0	
170	0	0	8	0	
175	0	1	2	0	
179	0	0	2	0	
198	17	19	12	2	box flue, both 18mm thick, combed? Teg. has blue grey upper surface.
199	13	11	9	0	2 tegs have signs of scorching.
200	7	11	6	0	1 teg. with light blue surface.
201	0	0	1	0	
209	0	0	1	0	
213	1	0	0	0	
271	2	0	0	0	
297	1	0	0	0	
304	0	0	2	0	
308	1	0	1	0	
334	1	0	0	0	poss. Scorching.
389	0	0	2	0	
Total	172	125	201	21	

Key: Teg. = Tegulae roof tile; Imb. = Imbrex roof tile; Unc. = Unclassified.

6.3 The Lithics by Lynden Cooper

The material used is small pebble flint probably from the local boulder clay deposits. The small size of the assemblage and lack of diagnostic pieces precludes much discussion. However, the presence of corticated and uncorticated pieces may indicate that the flint is from a palimpsest of activity. In the East Midlands region cortication can often be seen on Mesolithic worked flint. Some support for an earlier date for these pieces is given by their smaller size and finer technological quality. The remaining material could date anywhere between the late Neolithic to the Iron Age.

Table 12. Summary of flint artefacts recovered at Crown Hills.

Find No.	Context	Description	Cortication
-	T7	2ry flake	*
-	us	2ry flake	-
-	us	2ry flake	-
-	us	2ry blade-like flake, retouched	-
-	7	2ry flake	*
-	50	Natural	-
-	64	Small core	**
-	67	2ry flake	**
-	82	2ry flake frag	**
-	196	Chunk	**
-	198	2ry flake	*
-	205	2ry flake, burnt	-
-	283	Core	-
-	389	2ry flake	**
-	390	2ry flake	**
101	394	2ry flake, retouched	*

Cortication index: - = absent; * = slight; ** = heavy

Figure 24. Distribution of Small Finds wthin Area A. Grey = Features, Small Finds are marked in black. Scale 1:500.

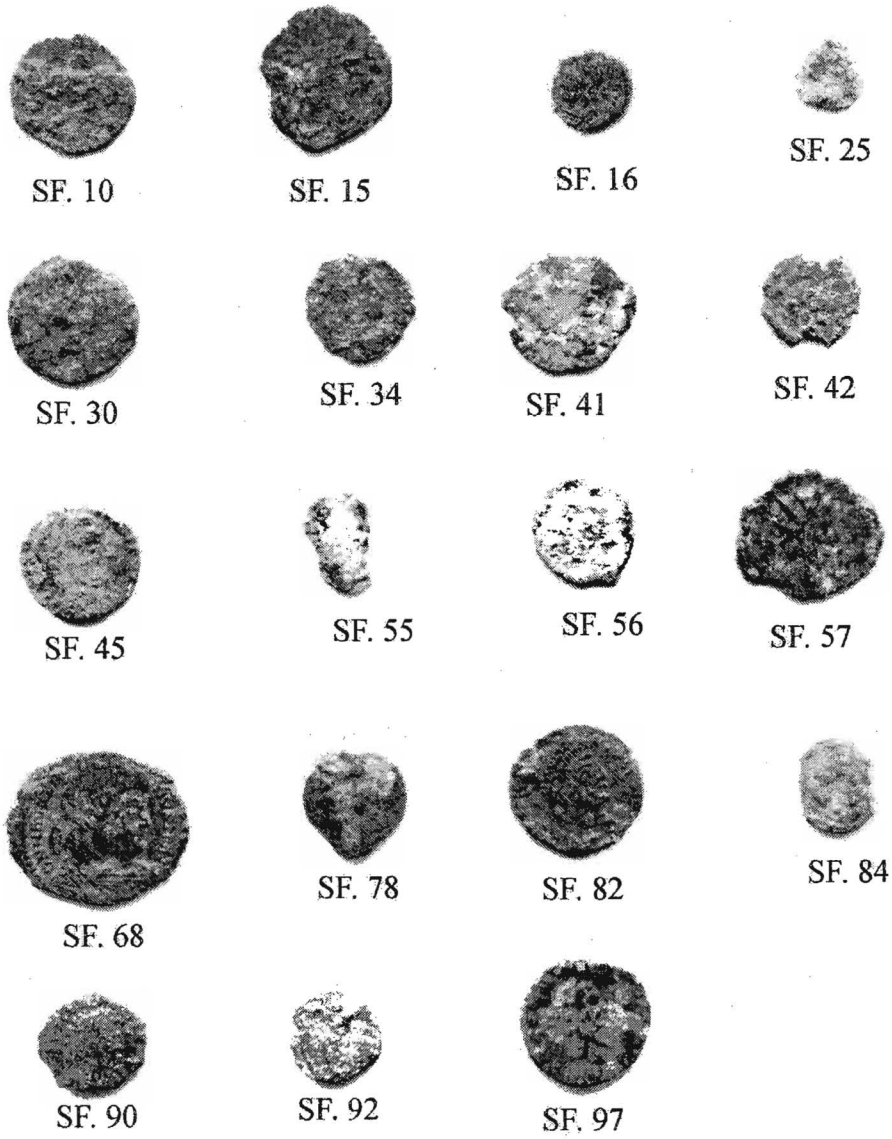


Plate 3. Romano British Coins from Crown Hills. Reproduced at actual size, Obverse sides shown.

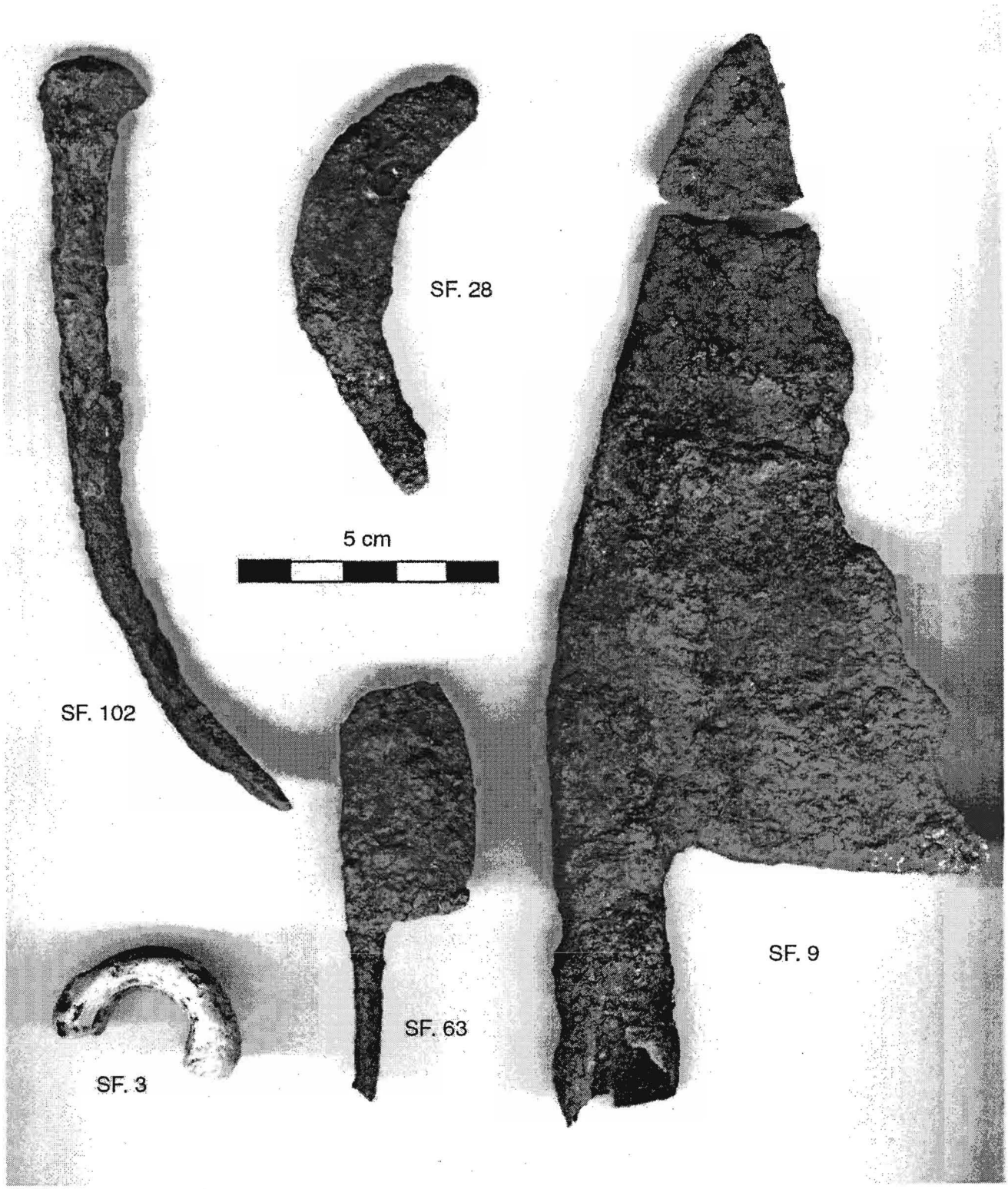


Plate 4. Selection of Small Finds recovered from Romano British contexts at Crown Hills.

6.4 The Small Finds By Nick Cooper & Martin Shore

The Coins

A total of nineteen bronze coins (Plate 3) were found, during the excavations and through metal detecting. These span from a period of 260AD to about 361AD. Of the coinage found, only seven could be identified. The remaining eleven were badly corroded, making identification almost impossible, except to say that they all appear to be classed as AE 3/4 size, which dates them from about 330-370AD.

A total of nine coins were found in features, five being identifiable. The other nine were unstratified, two only being identifiable.

Out of the seven identifiable coins (stratified and unstratified), three dated to 260-80AD (known as Radiate Heads), these being bronze Antoninianus, though in a poor state of preservation. One of these (small find 97) came from ditch [27]. Another, probably of TETRICUS 1 270-273AD (small find 57) came from ditch [351]. The other (small find 15) was unstratified.

Two bronze coins of CONSTANTIUS II 337-361AD (small finds 82/45) from pit [301], and ditch fill (173), have similar/same reverse designs and are both in a poor state of preservation.

Small find 16 (unstratified) is an interesting coin, known as a Barbarous AE (contemporary forgery), of a commemorative issue struck after the death of CONSTANTINE 1 337-346 AD. These are frequently found on Romano-British sites, usually with very crude and unreadable legends, but some are almost as good as the original coin. The final identifiable coin is a Centenionalis of MAGNENTIUS 350-353AD, small find 12, from pit [349] which is in a fair/good condition.

The Other Small Finds

Of the 86 other objects recovered (other than coins), 75 were of iron, four of copper alloy, five of lead, and two of glass (see Plate 4).

Iron Objects

As is typical of small finds assemblages of this period, the most common objects are iron nails, with at least 73 examples here, which probably derive from Roman timber building construction on the site. Most of them are incomplete and distorted, representing either the lower, tapering end of the shaft, or the upper part with the head preserved. Of those which could be identified, the most common are of Manning's (1985, 134) Type 1 with flat circular head and tapering square-sectioned shaft. Of these, all belong to type 1A of less than 150mm in length with 50-60mm being the typical length of those complete enough to measure. This is in line with other assemblages from Leicester, London and the legionary fortress at Inchtuthil and probably represents the standard nail size used in carpentry (Cooper 1999, 276). A single, complete example of Manning's much rarer Type 2 was however also represented (sf 102) from context 42, with a length of 160mm (Plate 4).

Most interesting amongst the iron work are the three examples of tools which may relate to agricultural activity on the site. Small find 9 from (30) is a near complete blade of a cleaver

(Plate 4), the tip of which is now broken (length 210mm). The socketed blade is of triangular form and corresponds to Manning's Type 4, the back angling down towards the tip. It is not a common form with only three known from Silchester, Hampshire. and one from London (Manning 1985, 123 and fig. 30). Such tools were probably used in the butchery of meat. Sf 63 is part of a small knife blade of Manning's Type 11a or 12 (1985, 114 fig.28), the tip of which is missing (Plate 4). Sf 85 is a curved blade fragment (Plate 4) which may come from a small sickle or reaping hook (Manning 1985, 53 and fig.14) although the lack of a preserved socket precludes exact identification. They are thought to be primarily used in the cutting of cereals.

Table 13. Summary of Small finds recovered from Crown Hills.

no.	Fill	Cut	Description	Date
1	16	38	Ferrous Nails x 2.	
2	u/s	u/s	Ferrous Object.	
3	u/s	u/s	Glass object , semi circular (broken)	
4	43	418	Ferrous Nail.	
5	25	26	Ferrous Nail.	
6	u/s	34	Lead Fragment	
7	62	-	Ferrous Object.(Cleaver).	
8	25	26	Ferrous Object ,Nail ?.	
9	30	29	Ferrous Object.	
10	u/s	u/s	Bronze Coin ,toopoor for full identification.	4th century
11	u/s	u/s	Ferrous nail.	
12	68	340	Bronze Coin , Magnentius 350-353 AD, Obverse reading, MAGNENTIVS .P.F.AVG. Reverse reading ,VICTORIAE.DD .NN.AVG. ET.CAE-Two victories standing , facing each other, resting shield, inscribed VOT.V.MVLT.X. Condition fair / good.	350-353 AD
13	73	379	Lead Fragment.	
14	70	-	Ferrous Nail.	
15	u/s	u/s	Bronze Coin (Radiate Head) 260-280. too poor for full identification	260-280 AD
16	u/s	u/s	Bronze Coin , (Class A/E 3/4) Post Constantinel ,Commemorative issue , after his death. Obverse reading ,V.R.B.S. ROMA , showing helmeted bust of Roma wearing imperial mantle. Reverse shows , she wolf standing , suckling Romulus and Remus. 330-346 AD ,condition fair. Contemporary forgery, (Barbarous A/E coin).	330-346 AD
17	u/s	u/s	Lead Fragment.	
18	u/s	u/s	Ferrous Nail.	
19	u/s	u/s	Ferrous Nail.	
20	u/s	u/s	Ferrous Nail.	
21	u/s	u/s	Ferrous Spike/Nail	
22	u/s	u/s	Lead Fragment.	
23	u/s	u/s	Ferrous Object.	
24	u/s	u/s	Ferrous Hook.	
25	u/s	u/s	Bronze Coin , fourth century, too worn for identification.	4th century
26	u/s	u/s	Ferrous Object.	
27	u/s	u/s	Large Ferrous Object , too corroded for identification.	
28	u/s	u/s	Ferrous Nail.	
29	u/s	u/s	Small Ferrous Nail.	
30	u/s	u/s	Bronze Coin ,fourth century ?, too worn for identification.	4th century
31	u/s	u/s	Ferrous Object/Nail ?.	
32	8	343	Ferrous Nails x 2.	
33	136	-	Ferrous Nails x 2.	
34	73	379	Bronze Coin , fourth century , too worn for identification.	4th century
35	u/s	u/s	Ferrous Object/Nail ?.	
36	u/s	u/s	Ferrous Nail.	
37	u/s	u/s	Ferrous Nail.	
38	67	153	Ferrous Object.	
39	156	158	Ferrous Nail Fragments x 5, plus small ferrous fragment, part of buckle ?.	4th century

40	u/s	u/s	Ferrous Nail.	
41	u/s	u/s	Bronze Coin , too corroded for any identification.	4th century
42	u/s	u/s	Bronze Coin , too corroded for any identification.	4th century
43	1	-	Small Ferrous Stud.	
44	173	-	Ferrous Nails x 2 .	
45	173	-	Bronze Coin , type AE 3 Probably of Constantius II. Obverse, no legend remaining. Reverse ,soldier advancing left,spearing fallen horseman. legend unreadable.Same type as small find 82.	337-361AD
46	u/s	u/s	Ferrous Nail.	
47	147	369	Copper Alloy Object.Small coin ?.	
48	u/s	u/s	Copper Alloy Fragment.	
49	u/s	u/s	Lead Musket Ball.	
50	u/s	u/s	Ferrous Object.	
51	u/s	u/s	Ferrous Nail	
52	u/s	u/s	Ferrous Nail.	
53	u/s	u/s	Lead Fragment	
54	70	301	Large Ferrous Nail.	
55	u/s	u/s	Bronze Coin , too corroded for any identification.	4th century
56	u/s	u/s	Bronze Coin , too corroded for any identification	
57	135	351	Bronze Coin ,probably an antoninianus of Tetricus I, (radiate head), legends are unreadable. 270-273AD.	270-273AD
58	136	348	Ferrous Object.	
59	198	-	Ferrous Nail.	
60	198	-	Large Ferrous Stud/Nail.	
61	199	-	Ferrous Nail.	
62	199	-	Ferrous Nail.	
63	199	-	Ferrous Object, probable razor, handle offset, similar to cut throat type.	
64	199	-	Ferrous Object.	
65	198	-	Ferrous Nail.	
66	198	-	Ferrous Object.	
67	199	-	Ferrous Nail.	
68	198	-	Ferrous Nail.	
69	198	-	Large Ferrous Stud/Nail	
70	198	-	Ferrous Nail.	
71	198	-	Large Ferrous Stud/Nail.	
72	199	-	Ferrous Nail.	
73	199	-	Ferrous Object,Nail ?.	
74	198	-	Ferrous Nail.	
75	198	-	Ferrous Nail.	
76	199	-	Ferrous Nail.	
77	199	-	Ferrous Nail.	
78	200	-	Bronze Coin, too corroded for any identification.	4th century
79	200	-	Ferrous Nail.	
80	134	274	Ferrous Object.	
81	134	274	Ferrous Nail.	337-361AD
82	70	301	Bronze Coin, probably of Constantius II,337-361AD	
83	70	301	Ferrous Nail.	
84	200	-	Bronze Coin, too corroded for any identification.	4th century
85	271	272	Ferrous Object, could be small reaping hook.	
86	165	276	Ferrous Nail.	
87	165	276	Ferrous Nail.	
88	165	276	Ferrous Object.	
89	50	387	Ferrous Nails x 2.	
90	u/s	u/s	Bronze Coin , to corroded for any identification.	4th century
91	u/s	u/s	Small Copper Alloy Fitting , 50mm in length, two rivets at either end, with a small central hole. Medieval clothing fitting ?	
92	308	397	Bronze Coin , too corroded for any identification.	4th century
93	u/s	u/s	Ferrous Nail.	
94	u/s	u/s	Large Ferrous Object.	
95	u/s	u/s	Ferrous Nail.	
96	70	301	Ferrous Nails x 2.	
97	14	27	Bronze Coin (radiate head) legends are unreadable, probable Antoninianus of 260-280AD.	260-280AD
98	u/s	u/s	Copper Alloy Object , part of a pin ?,with crude inscribed lines on shank,and stepped at one end.	

99	138	-	Ferrous Nail	
100	143	144	Ferrous Nail.	
101	394	34	Flint.	
102	42	402	Large Ferrous Spike/Nail.	
103	43	418	Ferrous Pin/Shaft.	
104	199	200	Copper Alloy Object , 15mm in length. Moulded segments , with fine central hole through the body.	

Copper Alloy
Sf 98 is possibly a Roman hairpin shaft (Cool 1990). Sf 91 is a riveted plate possibly from a belt fitting but not of Roman date.

Lead
Four objects, all unidentified

Glass
Sf 104 is a segmental glass bead (Crummy 1983; Guido 1978)

6.5 The Animal Bone by Jennifer Browning

Summary

During excavations on land adjacent to Leicester General Hospital, Crown Hills in July and August 1999, 1397 fragments of animal bone were recovered from Iron Age and Roman features. The bone was badly fragmented but the remains of cattle, sheep, horse, pig, dog, domestic fowl, crow and mouse were identified. The majority of bone fragments were recovered from the late Roman contexts. The cattle bones clearly dominated the assemblage, forming around half of the identified bone. However, it was possible to identify an increase in. the relative proportions of cattle to sheep between Iron Age and Roman contexts.

Introduction

A total of 1397 fragments of animal bone, weighing 3303g, was recovered from excavations on land adjacent to Leicester General Hospital, Crown Hills, Evington, Leicester. The majority of bone fragments (1053) were recovered by hand excavation of features, but 344 specimens were also retrieved from sieved samples. Features were selected for sampling on the basis that they were discrete, well-dated and had good potential for the survival of remains. These were processed in a York tank, with a 0.5mm flot sieve and a 0.5mm tank mesh (see section 6.4). Most of the bone was identified during the sorting of the coarse fraction (over 4mm). Sampling can provide important information on the quantity and variety of species present in excavated features, particularly small species, whose bones can easily be missed during hand excavation. It can also even out biases, such as poor light or bad weather during excavating and provide a more controlled recovery.

The animal bones derive from clay filled features that were excavated in the height of summer, factors that have resulted in a high degree of fragmentation. This is reflected by

the fact that only a fifth of the bone was positively identifiable to species.

Methodology

The bone was identified using comparative material from the reference collection at the University of Leicester. It was not possible to distinguish sheep from goat in the assemblage so the term "sheep" is used throughout this report to mean sheep and/or goat. Bone element, species, state of fusion, completeness and marks or damage on the bones were recorded to elicit information on elements recovered, species proportions and age profiles.

Two methods were used to calculate the species proportions of the assemblage. Firstly, a simple fragment count of every specimen that could be identified to species; Number of Identified Specimens (NISP). This mostly excluded ribs, some vertebrae and undiagnostic shaft and skull fragments (diagnostic skull fragments typically include the upper and lower orbits, petrous temporal and horncore). The NISP method often over-emphasises the importance of larger mammals, whose bones tend to fragment into more pieces than those of smaller animals. In an attempt to reduce this bias, a restricted fragment count was carried out using the epiphyses only method outlined in Grant (1975). To summarise, this method counts only those bones with a fusion surface present. A whole bone has two fusion surfaces and will therefore be counted twice except in the case of phalanges which are rarely broken. Adjustments are made where different species have different numbers of the same bone; for example, the number of horse phalanges is doubled in order to make the results comparable to those of cattle, sheep and pig who have two on each foot. Similarly, sheep and cattle have one metapodial on each leg, while a pig has four, so the abaxials are discounted and the remainder halved. Both methods have advantages and disadvantages; for example while the "epiphyses only" method is designed to combat the bias against smaller animals, if a species is represented only by a bone without an epiphysis then it will not be shown in the data at all. Estimation of the Minimum Number of Individuals present was not thought applicable in this case, due to the low number of identified specimens and the nature of the assemblage.

Results

A total of 1397 fragments was recovered, of which only 21% (287 bones) were positively identifiable to species. The remainder consisted mainly of undiagnostic shaft fragments, rib fragments and vertebrae and were divided, where possible, into the remains of small, medium or large mammal. 'Large mammal' is likely to represent mainly cattle or horse, although may possibly include red deer and large pig remains. Bone fragments classed as 'medium' are most likely to derive from sheep/goat and pig, with possibly roe deer and dog. Bones equivalent to or smaller than those of rabbit, cats, and hares have classed as 'small'. This method merely serves as a rough and ready way of extracting some information about bone fragments that would otherwise be classed together as 'unidentified'. Although no conclusions can be based on these 'identifications' they can provide support or demonstrate conflict with other evidence. If, for example, very few cattle or horse bones were identified in an assemblage but a large proportion of the undientified bone was 'large' we might conclude that rather than large species being absent, there is another reason, such as fragmentation or selective deposition that would account for the scarcity of larger species in the identified assemblage.

The assemblage has been divided into Iron Age, Early Roman (1st-2nd century AD) and Late Roman (3rd-4th century AD) and Medieval phases, in line with evidence from the rest of the site, using dating based on pottery identification. It is clear from the table below, that the majority of the recovered bone belongs to late Roman (mostly 3rd and 4th centuries) contexts. By contrast, only one fragment of bone was recovered from a medieval context; a single ox molar. One hundred and eighty-nine bones, or 13.5% of the total assemblage, were recovered from undated contexts and are consequently not included in the following analysis.

It is evident that a great deal of breakage and fragmentation has occurred, much of which appears recent. This is almost certainly due to the resistance of the matrix – for the most part a strong clay. Table 14 (below) shows particularly that the 'large' mammal bones, although not diagnostic enough to be assigned to species, comprised a significant proportion of the animal bone assemblage.

Table 14. A breakdown of the composition of the assemblage.

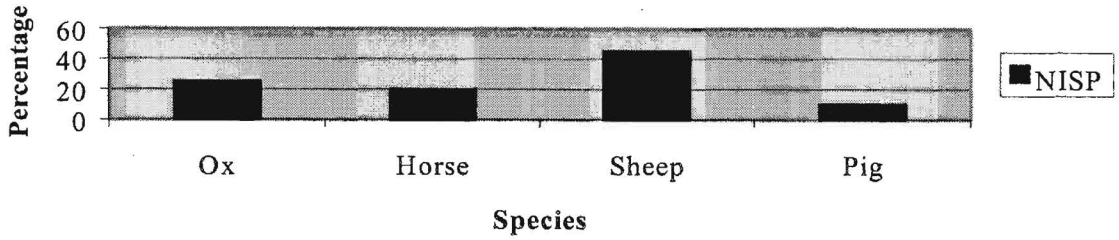
	IRON AGE		EARLY ROMAN	LATE ROMAN		TOTAL
Species	**Fragment Number**	**Percent**	**Fragment Number**	**Fragment Number**	**Percent**	**Fragment Number**
Cattle	10	3.6	0	122	13.2	132
Horse	8	2.9	0	50	5.4	58
Sheep/Goat	18	6.5	1	42	4.5	61
Pig	4	1.4	0	2	0.2	6
Domestic fowl	0	0	0	1	0.1	1
Crow	0	0	0	1	0.1	1
Large mammal	49	17.8	1	383	41.4	433
Medium mammal	38	13.8	2	81	8.7	121
Small mammal	0	0	0	0	0	0
Unidentified	149	53.0	1	244	26.3	394
Total	276	100	5	926	100	**1207**

Phase I, the Iron Age features.

A total of 276 fragments were recovered from features dating to the Iron Age. Of these only 40 (13.5%) were identifiable to species level. The NISP alone was based on fairly low numbers of identified specimens (see above table). However, when converted into percentages they suggest that sheep comprise almost half of the recovered bones (45%), while cattle make up 25% and horse 20% and pig 10%. An attempt to quantify the bones using the 'epiphyses only' method resulted in such low numbers of epiphyses (ox-2, horse-0, sheep-4 and pig-1) that it was not felt to be a useful exercise, although it might be noted that sheep is predominant. This provides an interesting contrast with the results from the later Roman contexts.

No age profiles have been attempted for this phase, given the extremely low numbers of bone fragments with intact fusion surfaces and the lack of sufficient teeth on which to base toothwear analysis.

Chart 1. Species proportions as shown by the NISP method.



Two instances of butchery marks were observed on the bones, both belonging to ox bones from context (391), part of the ring gully. A total of 30 bones were burnt, although this ranged from slight charring to almost completely calcined fragments. Most of them were small fragments derived from the samples. Only one of the burnt bones was identified- a sheep carpal.

Phase II, the Early Roman features.

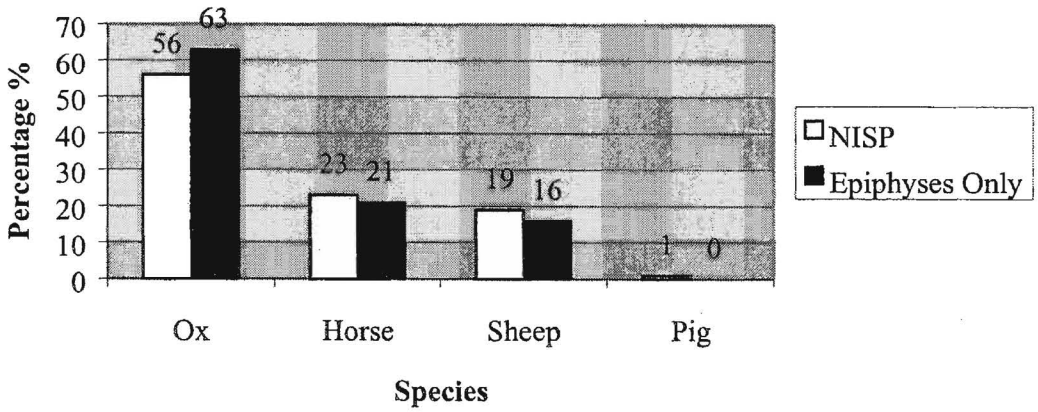
Only 5 fragments were retrieved from features dating from the 1st or 2nd centuries AD. Only one of these was positively identifiable to species; a sheep radius shaft from pit (16).

Phase III, the Late Roman features.

Features from the late Roman phases, contained 926 fragments of bone of which 218 (24%) were identified. The chart below illustrates the results of both the NISP (fragment) and the epiphyses count, using only bones that were assigned to species, and excluding domestic fowl and crow, who were each represented by only 1 bone. Both counts demonstrate clearly that cattle bones dominate the assemblage, comprising 56% of the total number of identified specimens and 62% using the 'epiphyses only' method. The second most frequently occurring species is horse, which is more common in the assemblage than sheep. The presence of pig is extremely small and it does not occur at all using the 'epiphyses only' method of calulation. The similarity in the percentages for both calculations suggests that these are fairly accurate representations of the species proportions present in the assemblage.

Very little information on age profile was obtained from the assemblage. As the epiphyses count demonstrates, few bones with intact epiphyses were recovered. Of 39 cattle epiphyses only 3 were unfused; 2 distal metatarsals and a proximal humerus. Only one unfused horse bone out of 13, was recovered and 2 unfused sheep epiphyses from a total of 10 with fusion surfaces. Although the actual ages at which bones fuse may have altered in the modern period (due to selective breeding designed to bring animals to maturity faster) this is unlikely to have affected the sequence of bone fusion. However, these numbers are simply too low to form a pattern and there is little point in attempting to 'age' individuals bones. Similarly very little information on age profiles could be elicited from looking at toothwear. This method of calculating relative age was designed for use on a body of data rather than for the ageing of individual mandibles.

Chart 2: A comparison of species proportions using NISP and 'Epiphyses only' methods.



Only 8 bones showed signs of burning and these were all classed as unidentified. Ten instances of butchery were observed on bones from late Roman contexts. These included 4 butchered ox bones, with 3 from context (70), the fill of a 3rd to 4th century ditch. The horncore of one beast had been deliberately removed, with part of the skull attached. Two cervical vertebrae had been chopped, a fairly common method of Roman butchery on large carcasses. A rib fragment had cut marks and was also cut through, which might have resulted from defleshing the carcass. Three horse bones with possible butchery marks were identified in the ditch fills (68) (135) and (136), two limb bones and an astragalus. All three appeared to have been chopped, although there is a possibility that one of these might be the result of breakage during recovery. A sheep tibia from ditch fill (13) had cut marks.

Conclusion

The general quality of the bone material from the Crown Hills excavations is fairly poor. Fragmentation is high, the bone is brittle and there has been some loss of the surface, inhibiting both identification and examination for butchery marks and pathological changes. The majority of the bone recovered consists of fragments from large mammal skeletons. There is a paucity of bird and small mammal bones, even in the sieved sample. The lack of species represented in the assemblage may also be noteworthy, in addition to those already mentioned, there was a single dog bone and a single mouse bone from undated contexts. Only 8 of the sieved bones were identifiable to species, the remainder being mostly unidentifiable shaft fragments of large and medium mammal bones. This suggests that the problems of recovery cannot wholly account for this trend. It is possible that smaller animals were not deposited at the site, either by human or other processes. On the other hand, the nature of the soil may be such that the smaller bones are simply not surviving.

Examination of the identifable bone reveals that there are a high proportion of cattle and horse bones in the Roman contexts, particularly compared with those of sheep and pig. The frequency of the larger mammals, particularly cattle, is confirmed by the high proportion of unidentified fragments from large mammal bones. Studies of Iron Age and Roman sites

have demonstrated that there is a general shift from a sheep-based husbandry in the Iron Age to an economy dominated by cattle in the Roman period (King 1978, 211). Although the size and quality of the Iron Age assemblage precludes hard and fast conclusions, this trend is echoed by the results at Crown Hills. It is perhaps worth commenting on the small proportion of pig bones deriving from the assemblage. These are often indicators of change in dietary preferences, in addition to inferring the utilisation of woodland habitats and are common in late Roman contexts. However, the paucity of them at Crown Hills may suggest association with a less Romanised settlement. King observed that in comparisons of 'native' with Roman settlements, the 'native' often have less than 10% pig bones while the Roman have more than 10% (King 1978, 216). However, the extremely small numbers retrieved from Crown Hills make this a tentative conclusion at best. The presence of horse in the Roman assemblage may derive from animals used for riding and perhaps for meat. Iron Age and Roman assemblages with many horse bones are often from sites where ranching would have been one of the major farming activities (King 1978, 226). Butchery marks on horse bones are not an uncommon find and have been noted at other sites, such as Danebury (Grant 1984, 521). There is little evidence of exploitation of wild species in the assemblage, which generally consists of the remains of domestic animals probably used for food.

6.6 The Charred Plant Remains By Wayne Jarvis

Introduction

ULAS staff sample excavated features including corn driers in order to collect carbonised plant material. This material includes cereal grains, weed seeds and other plant remains, which can provide evidence for food production and consumption, past agricultural practices, and environmental information. Corn driers have only been sampled at five other sites in Leicestershire and Rutland, and the Crown Hills samples are much richer in plant material and provide an important addition to this evidence.

Methods

Samples were selected on a judgmental basis from discrete datable contexts of good potential for preservation of remains (e.g. charcoal was visible). These were processed using flotation and sieving in a York Tank, with a 0.5mm flot sieve and 0.5mm tank mesh. Due to the clayey nature of the samples, sodium bicarbonate was added (40gm/l) to most of the samples whilst soaking to encourage particle separation (Van Horn and Murray 1982). Residues were air-dried, and the coarse fractions (over 4mm) were sorted for finds, which included pot, brick/tile, charcoal and occasional small bones and bone fragments (see chapter 6.5). 50% subsamples were examined of the large flots (contexts 163, 306, 352 and 391); this is indicated at the bottom of table 15. Flots were sorted using a x10 stereo microscope, with the plant remains being identified at x20 according to their morphology and modern reference material. A proportionate amount of the fine fraction of the flot-rich context 352 was also scanned using a x10 stereo microscope for remains. This was carried out in order to see if the preliminary results reflected a bias in the flotation procedure (i.e. that grain floats more readily than chaff), which could bias the assemblage. All remains were counted and tabulated with names following Stace (1991), and are seeds in the broad sense unless stated otherwise. The identified items are included in table 16 where relevant, and consisted of cereal grains, chaff, and weed seeds.

Results

Samples from 15 contexts were sieved, with a total sample volume of 133 litres (181.2 kg.). Of these, 14 samples were selected for further analysis based on the flot volume and the significance of the features from which they were collected. The Iron Age primary ditch fill (context 286) proved to contain no carbonised plant remains other than charcoal, and is not included in table 16. Scanning a proportion of the fine fraction of context 352 considerably increased the count of items, although not the proportions of grains: glumes: weeds, i.e. poorly preserved carbonised material in general does not readily float. A total of 1538 carbonised plant items were identified in the samples (table 16). 123 cereal grains were identified, with 67 further cereal fragments and cereal/large grass seeds. The cereal grains included the glume wheats *Triticum spelta* (spelt) and probably *T. dicoccum* (emmer). Most of the cereal grains could not be identified to species however, and could be either spelt or emmer. Of 1187 chaff items, the majority could also be either spelt or emmer (i.e. glume) wheat chaff, although some definite spelt glumes, rachis fragments and spikelets were identified. A few of the awns had a twisted appearance characteristic of oats (*Avena* sp.), but this may be wild oat, and in any case the small number suggests this was a weed in the main wheat crop. There is no evidence from the samples for the consumption of gathered foodstuffs such as nuts/berries. The presence of both spelt and small quantities of emmer wheat is often recorded in Iron Age and Romano-British assemblages, with emmer probably growing within the main spelt crop, either deliberately or accidentally (Moffett 1991).

The charred weed seeds (160 seeds and fragments) included plants of disturbed ground which are typical arable weeds, including fat hen (*Chenopodium album* type), red shank (*Persicaria* sp.), sheep's sorrel (*Rumex acetosella*), other docks (*Rumex* sp.), knotgrass (*Polygonum aviculare*), stinking mayweed (stinking chamomile, *Anthemis cotula*), black bindweed (*Fallopia convolvulus*) and smaller counts of other arable weeds. However, there are grassland weeds present, including timothy grass (cat's-tail grass, *Phleum* sp.), medick/clover (*Medicago/ Trifolium*), heath grass (*Danthonia decumbens*), ribwort plantain (*Plantago lanceolata*), yellow rattle (*Rhinanthus* sp.), and crested dog's-tail (*Cynosurus cristatus*) and a large number of unidentified grass seeds.

Also sixty two uncharred seeds were also identified, including fat hen type (*Chenopodium* sp.), buttercup (*Ranunculus repens/acris/bulbosus*), stitchwort/chickweed (*Stellaria* type), docks (*Polygonum* sp., *Rumex* sp.), raspberry/blackberry etc. (*Rubus*), elder (*Sambucus nigra*), and *Montia fontana* (water blinks). These are predominantly weeds of disturbed ground or waysides; water blinks prefers very wet conditions but does occur in damp pasture.

Phase I (late Iron Age)

Samples from ditch fill 278 and hearth context 7 produced a few items including a wheat glume fragment, a cereal/large grass fragment, and an indeterminate weed seed. The gully fill was more productive, and it does appear that there is an increase in material towards the terminals with context 391 being the richest. These samples produced predominantly glume wheat chaff, an odd cereal grain, weed seeds including fat hen, and cereal/large grass fragments.

Phase III (late Roman)

Samples from the ditch fills 14, 70 and 105 produced charred cereal grains, chaff and odd weed seeds. The cereals were represented by spelt wheat grains, probable emmer wheat grain and glume wheat chaff. The identified weed seeds included sheep's sorrel, medick/clover type, knotgrass, brome grass and stinking mayweed. These all occur as weeds in the arable field, although stinking mayweed is characteristic of basic/heavy soils like those found locally (Jones 1981). The floor surface (context 199) also produced glume wheat grains, cereal/large grass seeds, spelt and indeterminate glume wheat chaff, and typical arable weed seeds including medick/clover, stinking mayweed and sheep's sorrel. Additionally, seeds of heath grass and sedges were identified, and although these are today unlikely arable weeds, their presence in these samples may be due to changes in farming practices since the Roman period (Van der Veen 1992). Heath grass is a perennial weed of damp, often poor and acid, soils and may have survived the plough better before the advent of mouldboard ploughing. Also many of the sedges are plants of damp ground, but may have been more common in arable fields before improvements in drainage practices.

The phase III Corn drier

Contexts 163 and 352, from the corn drier feature 354, were much richer in carbonised material. The upper fill 163 produced a few cereal and cereal/large grass grains, and numerous crop processing by-products - mainly wheat glume bases, identified spelt glumes, and a few awns of both barbed and twisted types - the latter from oats. Weeds were relatively common, including sheep's sorrel, heath grass, stinking mayweed, fat hen, persicaria/red shank, ribwort plantain, cf. yellow rattle, timothy grass, and bartsia/ eyebright. Most of these occur as arable weeds, but timothy grass, bartsia/eyebright, and the relatively low growing heath grass are today grassland species. The lower fill 352 had a higher density of material generally and proportionately more cereal grains, although glume bases were more numerous, and the weed assemblage was similar to 163. Additional weeds included black bindweed, hardheads/knapweed, crested dog's-tail, brome grass, vetches, and daisy family. Again, whilst most of these are common in arable assemblages, crested dog's-tail, hardheads/knapweed, and members of the daisy and vetch families are typical grassland species. They are not present in sufficient quantities to suggest the presence of hay for fodder/bedding, and probably grew as weeds in the main crop, perhaps invading the field from its margins. In general the weeds are what may be expected growing on the heavy clay soils found in the environs of the site.

Discussion

Past agricultural practices can be inferred from large samples by comparing the relative proportions of carbonised plant materials. This is because crop preparation leaves behind different residues depending on the crop processing stage involved (Hillman 1981, 1984; Jones 1985). With glume wheats (i.e. emmer and spelt), threshing leaves the grain within the chaff (glumes), at which stage the cereal can be stored (as spikelets). To use the grain for food requires a further stage of parching and pounding to free off the glumes, followed by sieving to separate the chaff and weed seeds from the grain. These stages would be reflected by differing proportions of grain, chaff and weed seeds in large assemblages. Samples that are predominantly chaff and weed seed rich, i.e. waste by-products, are likely to occur in small quantities on a site where grain was being consumed, which might be represented by a thin scatter of waste material in samples. Whether a crop was locally produced is difficult to determine as small-scale production is hard to identify as large grain

rich deposits are likely to occur only on surplus 'producer' site (or redistribution sites), whilst small grain rich caches may occur on any site where consumption occurred.

Most samples from prehistoric and Romano-British sites in the region generally have a low density of carbonised plant remains (Moffett 1991). Clearly arable agriculture was occurring, but it may be that by-products were used for tinder, compost or fodder, whilst Midlands sites lack the grain rich 'storage pits' of southern England. Whilst some samples dealt with here conform to this pattern, with a thin spread of 'waste' material across the board, the corn drier samples in particular have a very high density of material (items/litre counts of 138.5 and 424.4). The relative proportions of the major constituents are shown in the following table (table 15) for these and the other two rich samples:-

Table 15. Relative constituents of the rich samples.

Context	Context type	Ratio 1	Ratio 2	% Grains	% Chaff	% Weeds
391	IA gully	9:0	7:0	0	75	25
199	RB floor	3:1	2:1	9.8	46.3	43.9
163	RB cd fill	47:0	36:1	0.9	67.5	31.6
352	RB cd fill	11:1	1:1	13.4	77.2	9.4

N.B. Ratio 1 is no. glume bases : no. glume wheat grains, Ratio 2 is no. weeds : no. cereals; %age calculations based on Jones (1985) i.e. chaff = glumes and complete rachis; cd = corn drier

In the wheat ear the ratio of glumes to grains is 1:1, so values much higher than 1 represent chaff debris (dehusking waste). The gully sample 391 has a ratio of 9:0, and clearly represents these cleaning by-products, with a low density of material confirming that this is derived material. This probably reflects small scale processing of grain as needed for consumption on site. Of the Roman contexts, 199 also has relatively few items and with less definite ratios, but probably represents crop-cleaning waste with some of the product accidentally mixed in. The activities carried out on this floor are probably related to the corn drier. Context 163 is almost totally cleaning waste (the dehusking by-product), whilst 352 has some grain mixed in but is mainly chaff. Experiments have shown that chaff can burn away more easily than grain, so these proportions must reflect the real assemblage. These fills probably reflect waste from earlier activities reused as kindling in the corn drier, with a little of the crop accidentally left behind. The use of chaff for fuelling corn driers has been attested elsewhere (Van der Veen 1989), regional examples including Norfolk St. (Leicester) and Empingham (Rutland) though both are small samples. The function of corn driers has been associated with brewing, which requires the germination (malting) of grain, as possibly at Empingham and Appleby Magna (A. Monckton pers. Comm.). None of the grain from Crown Hills showed evidence of germination however. It is highly likely that the corn drier was used for preparing grain for storage and consumption (parching/drying), but it is perhaps worth noting that these samples reflect only the final use of a feature that may have served various purposes. The cleaned grain product may have been stored for consumption on site, or traded. As the presence of corn driers is often taken as evidence for surplus production representing as they do the bulk processing of grain, it may well be that this site was involved in the supply of grain to other sites. Samples of a comparable date from excavations at Causeway Lane in Leicester (Monckton 1999) produced a similar weed assemblage to the Crown Hills material, but with little chaff. In an urban context it is likely that grain was brought in ready processed, except for final hand cleaning to remove contaminants, including odd chaff items and weed seeds. The site at Crown Hills may then

Table 16. Charred Plant Macrofossils from Crown Hills.

Phase	u/d	I	I	I	I	I	I	III	III	III	III	III	III	see key (below)
Sample No.	15	3/2	16/1	18	19	20	23	1/1	5/2	7/1	9/1	10/1	13/1	
Cut No.	399	288	35	34	34	34	34		301	354	354	356	27	
Context	306	278	7	391	393	394	389	199	70	163	352	105	14	
Context type	ph	ditch	hearth	gully	gully	gully	gully	floor	ditch	cd fill	cd fill	ditch	ditch	see key (below)
GRAINS														
Triticum spelta											3	2		Spelt wheat
Triticum *cf.* dicoccum											1			"
Triticum spelta/dicoccum							1	4	3		51	1		Spelt/emmer
Triticum sp.											4			Wheat
Triticum sp. tail grain											3			"
Cerealia									1		44	4		Cereal
Cerealia *tail grain*										1				"
Cerealia *frag.*										1				"
Cerealia/large grass							1	4	2				1	
Cerealia/large grass frag.			1	1	1		1	8		7	32	6	1	
CHAFF														
Triticum spelta glume base								5		3	196	1		Spelt wheat
Triticum cf. *spelta* glume base				1								3		"
Triticum spelta/dicoccum glume base				8	3	3	1	7		44	379	2	2	Spelt/emmer
Triticum spelta/dicoccum glume base frag		1		66	14	7	4	26	2	149	125	1	17	"
Triticum spelta spikelet											2			Spelt wheat
Triticum spelta/dicoccum spikelet											2			Spelt/emmer
Triticum spelta rachis frag											2			Spelt
Triticum rachis frag. brittle				12	6	1	1	7		30	25		6	Wheat
awn frag											4			
twisted awn frag										4	1			Oat (*Avena* sp.) type
barbed awn frag										2	5			Wheat/barley type
unid. chaff				1	2	1		1			2			

Phase	u/d	I	I	I	I	I	I	III	III	III	III	III	III	see key (below)
Sample No.	15	3/2	16/1	18	19	20	23	1/1	5/2	7/1	9/1	10/1	13/1	
Cut No.	399	288	35	34	34	34	34		301	354	354	356	27	
Context	306	278	7	391	393	394	389	199	70	163	352	105	14	
Context type	ph	ditch	hearth	gully	gully	gully	gully	floor	ditch	cd fill	cd fill	ditch	ditch	see key (below)
WILD PLANTS														
Medicago/Trifolium type								3		1	13	1		Medick/clover type
Rumex acetosella									2	7				Sheep's sorrel
Rumex cf. *acetosella*								2						"
Rumex sp.										4	19			Docks
Danthonia decumbens								1		2	1			Heath grass
cf. *Danthonia decumbens*								1			1			"
Anthemis cotula								1	1	1	17			Stinking mayweed
Carex *sp.*								3						Sedges
Polygonum aviculare									1					Knotgrass
Chenopodium album	1					1				1	1			Fat hen
Plantago lanceolata										2	8			Ribwort plantain
Persicaria sp.										2				Persicaria/red shank
cf. *Rhinanthus* sp.										1				Yellow rattle
Phleum sp.										1				Timothy grass
Euphrasia/Odontites										8				Eyebright/bartsia
Fallopia convolvulus											1			Black bindweed
Vicia/Lathyrus											1			Vetches
Asteraceae (small)											2			Daisy family
Centaurea nigra											1			Hardheads/knapweed
Cynosurus cristatus											1			Crested dog's-tail
Bromus secalinus											1	1		Brome grass
grass seed frag.												2		
Indet. weeds			1	5						6	7			
large grass				2				3				3	2	
small grass						1	1	2	1			2		
medium grass							2	2	2					
uncharred weeds		7	11	4	3	1	4	12	3	4		2	11	
OTHER														
stem frag													1	
Charcoal frequency in flot	++	+	+	++	+	+	+	+	+	+	+	+	+	see key (below)
TOTAL	1	1	2	96	26	14	12	80	15	277	955	29	30	(Items)
Vol. sample	6	5	6	5	7	6	6	5	6.5	4	4.5	5	6	(Litres)
Vol. flot	40	15	40	50	30	40	20	20	7	20	30	20	30	(mls)
%age flot sorted	50	all	all	50	all	all	all	all	all	50	50	all	all	
Items/litre	0.33	0.2	0.33	38.4	3.71	2.33	2	16	2.3	138.5	424.4	5.8	5	(Items/litre)

KEY: Charcoal frequency:- + present, ++ moderate, +++ abundant. cd=corn drier, ph = posthole. Phase I=late Iron Age, Phase III=late Roman, u/d=undated. Remains are seeds unless described otherwise.

have been involved in the supply of grain to Roman Leicester.

Conclusion

The samples produced charred material that provides evidence for on site processing of the glume wheats, spelt and probably emmer, and the weed seeds suggest that the crop was locally produced. No other food plant remains were identified. Identified weed seeds are mainly typical arable weeds, they commonly occur in archaeobotanical assemblages, and could have grown in the environs of the site. The presence of grassland species in some of the samples may just reflect a weed infested arable crop, though these species may be derived from other areas of disturbed ground, or perhaps brought in with other plant material.

The Iron Age samples produced a fairly low density of plant material, which suggests relatively small-scale production and consumption, with batches being processed as necessary, whereas the Roman corn drier samples suggest a much larger scale operation. This involved the bulk parching/drying of grain for consumption and/or storage, and probably in sufficient quantities for a surplus to be traded. The site may have been involved in supplying the urban population of Roman Leicester with processed grain.

7. Conclusions

The recent excavations at Crown Hills have provided a wealth of information regarding the growth and development of a well positioned rural settlement in the hinterlands of a rapidly developing urban settlement which was to become modern day Leicester.

Although there was some evidence for prehistoric activity (Mesolithic-Iron Age) on the site, as indicated by the presence of several flint tools (see section 6.3), these were unstratified finds recovered from the ploughsoil which could not be tied down to any particular activity on the site. It was not untill the Iron Age period that more formalised settlements appeared. At least one circular dwelling was constructed on the crest of the hill, in the southeast of the excavation area. It is likely that this dwelling was encircled by an enclosure ditch, which demarcated a small plot of land used for domestic subsistence horticulture (as indicated in chapter 6.6) and sheep farming (as discussed in chapter 6.5). Certainly small scale domestic grain processing is was indicated by the environmental assemblage associated with the fill of the buildings ring-ditch, as discussed in chapter 6.6.

At the time of the Roman conquest (1st-2nd century AD) agricultural activity at Crown Hills appears to have temporarily ceased. Only a few pits and post holes appear to have been formed during this lull period. In one instance (pit [158]) this transitional period appears to be continuous, with features apparently being formed in the Iron Age (phase I) period but remaining open and gradually silting up during the early Roman conquest (phase II) period.

The main explosion of activity at Crown Hills came during the 3rd-4th centuries when an area in excess of one hectare was demarcated by enclosure ditches for the purposes of large scale agriculture. The presence of complex drainage systems, a metalled track and grain

processing structures, including a corn drying oven and a threshing floor indicate that horticultural production on the site was no longer on a domestic scale, as it was during the Iron Age, but had developed in response to increased local demand for produce by the growing population of Roman *Ratae*, Leicester. Similarly animal husbandry increased dramaticly, with a general shift from sheep to cattle husbandry (possibly ranch style farming, using horses) during the 3rd-4th century. The lack of pig bones in the assemblage has been used (chapter 6.5) to suggest that the residents of this settlement were less Romanised than at other sites, since an increase in pig farming is found to be equated with the increased Romanisation of the settlers (King 1978.216).

Generally speaking the Leicestershire countryside appears to have been scarcely populated during this period, with only a handfull of known villa sites (including Medbourne, Norfolk St, Tixover, Whitwell, Empingham, Drayton, Rothley, Mount Sorrel, Sapcote and Wymondham). The adjacent county of Warwickshire has even fewer known villa sites. Trade in pottery, however, remains locally based with wares beng sourced to the Nene Valley, Oxfordshire and Mancetter.

The finds assemblage suggested that the Roman the activity recorded on site took place predominantly during the 3rd-4th centuries. The spatial distribution of the archaeological deposits would also suggest that the evidence represents the activities of a single working farmstead over a short timespan. There is little evidence for the continuity of the site beyond the 4th century and it is possible that after this time, the farmstead fell into disuse and became part of the open field system on the edge of the later parish boundary.

8. Archive

The site archive consisting of site notes, 8 trench record sheets, 418 Context sheets, 18 permagraph sheets of section/plan drawings, 202 slide photographs and 7 monochrome films (negatives and contact prints), original specialist notes and reports and an unbound copy and digital copy of this report will be held by the Leicestershire Museums Service under the Accession number A8.1999. A summary of the results was published in *Transactions of the Leicestershire Archaeological and Historical Society* vol. 74.

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Simon Chapman.
ULAS Report 00/41
25.09.00

Appendix 1

The following sites, in close vicinity to the site, are listed on the Sites and Monuments Record (SMR).

1.Prehistoric

6OSW T (SK 622 046) Neolithic blunted backed knife was found on Crown Hills allotments north of Coleman Road, Coleman ward.

2.Roman

6OSW BX (NGR SK 619 041) Roman villa site and finds northwest of General Hospital, Coleman ward. Pot sherds, tile, tesserae and a coin of Aemilianus (253 A.D.) were found on the allotments at Crown Hills in 1964 (East Midlands Archaeological Bulletin 1966,4). Finds, including pottery were also made when the houses around the allotments were constructed. Other finds in the area have included a bronze spatula and 'third brass' coin dated to c.330-337 AD. Samian and grey ware pottery fragments were recovered in the garden of 135 Broad Avenue in 1978.

6OSW R (NGR SK 615 043) Roman coin found at 25 Crown Hills Avenue, Coleman ward. This a late 3rd century coin of Antoninianus, possibly Claudius Gothicus, (268-270 A.D.).

6OSW CD (NGR SK 619 045 ?) Roman coins found at 7 and 9 Godston Walk, Coleman ward. No.7 produced a Sesterius of Trajan (114-117 AD) and no.9 an Antoninianus of Maximian (286-305 AD).

3. Medieval

6OSW BY (NGR SK 622 033) Medieval and Roman pottery found at 23 Blundell Road, Evington. Eight sherds of medieval pottery, including Stamford ware and a Roman white ware flagon fragment were found at this address in 1972.

6OSW BZ (SK 629 037) Medieval horse fitting found at Whitehall Road School, Evington. A 14th century stirrup was found on the site of the above school.

6OSW CT (SK 626 031 c) Medieval village of Evington. The historic core of Evington village has been deduced by R.F. Hartley.

Appendix 2

Table 17. Full list of site contexts.

Context	Area	Type	Comment
1	T2	Ditch	mid yellowish friable silty clay, fill of ditch , same as (14) & (135), contains pot, bone, tile & SF43.
2	T2	Ditch	dark greyish brown friable silty clay, fill of ditch, some burnt stone, not excavated.
3	T2	Pit	mottled greyish orange firm silty clay, fill of pit, some burnt stone & charcoal, same as .
4	T2	Ditch	mid brown firm silty clay, common pebble, same as (67),(105),(175) & (180), not excavated.
5	T6	Ditch	mid greyish brown friable silty sandy clay, secondary fill of ditch [26], contains pottery & bone.
6	T6	Ring gully	dark greyish brown friable sandy clay, secondary fill of ring ditch [34], same as(6), (63), (64) & (82), contains pottery & bone.
7	T6	Hearth	mid orange brown friable silty sandy clay, burnt stone rich deposit infilling cut [35], sample 16, contains burnt bone.
8	T5	Gully	dark greyish brown firm silty clay, fill of gully [343], some ironstone rubble, contains pot, bone & tile.
9	T5	Pit	dark greyish brown firm silty clay, fill of pit [36], contains tile.
10	T5	Pit	dark greyish brown friable silty clay,
11	T5	Ditch	mid greyish brown firm silty clay, fill of ditch, same as (133), contains pot, not excavated.
12	T5	Ditch	dark grey brown friable silty clay, fill of ditch [349], same as 133 & 173, contains ironstone, pottery & bone.
13	T5	Ditch	dark grey brown friable silty clay, fill of ditch [373], sample 14, contains bone & building materials.
14	T5	Ditch	dark greyish brown firm silty clay, sample 13, fill of ditch [27], same as (1) & (135).
15	T5	Pit	dark greyish brown firm silty clay, fill of pit, contains bone.
16	T5	Pit/ph	dark grey brown friable silty clay, fill of pit/ph, [38], sample 12, contains pottery & burnt bone.
17	T7	Pit/ph	dark grey brown firm silty clay, fill of pit/ph.
18	T7	Ditch	dark grey brown firm silty clay, fill of ditch, contains bone & tile.
19	T7	Pit	dark grey brown firm silty clay, fill of pit.
20	T7	Ditch	dark grey brown friable silty clay, fill of ditch.
21	T7	Pit	dark grey brown friable silty clay, fill of pit.
22	T7	ph	medium grey brown sticky silty clay, fill of ph.
23	T7	Pit	dark grey brown firm silty clay, fill of pit, contains bone.
24	T7	Ditch	dark grey brown firm silty clay, fill of ditch.
25	T6	Ditch	mid greenish brown plastic silty clay, primary fill of ditch [26], contains bone & SF.5 & 8.
26	T6	Ditch	Cut , containing (25).
27	T5	Ditch	Cut, containing (14)
28	T6	Gully	mid yellowish brown friable sandy clay, fill of [41], same as (264).
29	T6	Ditch	Cut, containing (30).
30	T6	Ditch	mid greyish orange plastic silty clay, fill of ditch [29], contains SF.9.
31	T5	ph	mid greyish brown firm silty clay, fill of ph [39], contains pot, CBM & slag.
32	T6	Gully	mid greyish brown firm silty clay, fill of gully, not excavated, same as (73).
33	T2	Gully	mid greyish brown firm silty clay, fill of gully.
34	T6	Ring gully	Cut of ring ditch, containing fills 6, 64, 65, 66, 82, 391, 392, 389, 390.
35	T6	Hearth	Cut, containing (7).
36	T5	Gully	Cut of gully butt end, containing (9).
37	T5	Gully	mid greyish yellow friable silty clay, fill of gully [36], contains tile.
38	T5	Pit/ph	Cut, containing (16).
39	T5	ph	Cut, containing (31).
40	T5	ph	mid greyish brown firm silty clay, fill of ph, contains tile, not excavated.
41	A	Ditch	mid greyish brown soft silty clay, fill of [159/386], same as (299), contains CBM.
42	A	Ditch	mid greyish brown firm silty clay, primary fill of ditch [402/418], contains bone & tile.

43	A	Ditch	mid greyish brown firm silty clay, fill of ditch butt end [418], contains bone, tile & SF. 4 & 103.
44	A	Ditch	mid greyish brown firm silty clay, fill of ditch [154], contains pottery & bone.
45	A	Pit	mid greyish brown soft silty clay, fill of pit [411], contains CBM.
46	A	Pit	mid greyish brown soft silty clay, fill of pit.
47	A	Pit	mid greyish brown soft silty clay, fill of pit.
48	A	Pit	mid yellowish brown firm silty clay, fill of pit [62], contains CBM.
49	A	Pit	mid yellowish brown plastic silty clay, fill of pit [412].
50	A	Ditch	dark greyish brown soft silty clay with charcoal flecks, fill of ditch [387/417], same as (314), sample 22, contains pot, bone & CBM.
51	A	Pit.ph	dark greyish brown friable silty sandy clay, secondary fill of ditch [149], contains pottery & bone.
52	A	ph	mid yellowish grey friable silty clay with charcoal and burnt bone flecks, fill of ph [414], contains pottery and bone.
53	A	Ditch	mid greyish brown firm silty clay, fill of ditch butt end, contains pot, bone & slag, not fully excavated.
54	A	Ditch	mid greyish brown soft silty clay, fill of ditch [413].
55	A	Pit	mid greyish brown soft silty clay, fill of pit [350], contains bone & tile.
56	A	Pit	light greyish brown firm silty clay fill of pit, not excavated.
57	A	ph	dark greyish yellow firm silty clay, fill of ph, contains bone, not excavated.
58	A	ph	dark greyish brown firm silty clay, fill of ph [81].
59	A	Pit	mid-light greyish brown firm silty clay with burnt bone frags., fill of pit.
60	A	Pit/ph	mid greyish brown firm silty clay, secondary fill of pit [185], contains pot, bone & Fe nails.
61	A	Pit	dark greyish brown friable silty clay, secondary fill of pit [158], contains pot, bone, CBM, baked clay & SF.39.
62	A	Pit	Cut, containing (48).
63	A	Ring gully	dark greyish brown friable sandy clay, fill of ring ditch [34] butt end, same as (6) & (64), contains pottery & bone.
64	A	Ring gully	dark greyish brown friable sandy clay, fill of ring ditch [34] butt end, same as (6) & (63), contains pot, flint & bone.
65	A	Ring gully	mid greyish yellow soft silty clay, primary fill of ring ditch [34], same as (66) & (85), contains pottery , bone & flint.
66	A	Ring gully	mid greyish yellow soft silty clay, primary fill of ring ditch [34], same as (65) & (85).
67	A	Ditch	mid yellowish brown firm silty clay, fill of ditch [153], same as (4),(105),(176), (180) & (384?)sample 21, contains bone.
68	A	Ditch	dark grey brown friable silty clay with charcoal fleck, fill of ditch [340],same as (73), sample 4, contains pot, CBM & coin SF.12.
69	A	ph	dark greyish brown soft silty clay, fill of ph, contains pot.
70	A	Ditch	mid greyish brown friable sandy clay, fill of ditch [301], sample 5, contains pot, bone, CBM and SF's 14 & 54.
71	A	Pit	mid greyish brown firm silty clay, fill of pit [326].
72	A	Pit	mid yellowish brown firm silty clay, fill of pit [329], contains flecks of burnt bone.
73	A	Ditch	dark grey brown friable silty clay with charcoal fleck, fill of ditch [379], same as (68), contains pot, CBM & bone.
74	A	Pit/ph	mid greyish brown firm silty clay, fill of pit/ph [378], contains tile.
75	A	Pit	dark greyish brown soft silty clay, fill of pit [376].
76	A	Pit	dark greyish brown soft silty clay, fill of pit [375], contains pot.
77	A	Pit	dark greyish brown soft silty clay, fill of pit [377], contains tile.
78	A	Pit	dark greyish brown soft silty clay, fill of pit.
79	A	Pit	dark greyish brown soft silty clay, fill of pit.
80	A	Spread	dark greyish brown firm silty clay.
81	A	ph	Cut, containing (58).
82	A	Ring gully	dark greyish brown friable sandy clay, secondary fill of ringditch [34], same as (6), (63), (64) & , contains pottery , flint & bone.
83	A	ph	mid greyish brown firm silty clay, fill of ph [84], contains pottery & bone.
84	A	ph	Cut, containing (83).
85	A	Ring gully	mid greyish yellow soft silty clay, primary fill of ring ditch [34], same as (65) & (66).
86	A	Pit	dark grey brown firm silty clay, fill of pit.
87	A	Pit	mid greyish brown firm silty clay, fill of pit.
88			Context not allocated.
89	A	Pit	light greyish brown firm silty clay, fill of pit.

90	A	Pit	dark greyish brown firm silty clay, fill of pit.
91	A	Pit	mid greyish brown firm silty clay, fill of pit, contains tile.
92	A	Pit	light greyish brown firm silty clay, fill of pit [370], contains pot.
93	A	Pit	mid greyish brown plastic silty clay, fill of pit [374], contains pottery & tile.
94	A	Pit	dark greyish brown plastic silty clay, fill of pit [366].
95	A	Pit	dark greyish brown soft silty clay, fill of pit [363].
96	A	Pit	mid greyish brown firm silty clay, fill of pit [367].
97	A	Ditch	mid greyish brown plastic silty clay, fill of ditch [364].
98	A	Pit/ph	mid greyish brown plastic silty clay, fill of pit/ph [357].
99	A	Pit/ph	mid greyish brown plastic silty clay, fill of pit/ph [358]
100	A	Pit/ph	light greyish brown firm silty clay, fill of pit/ph [359] .
101	A	Pit/ph	mid greyish brown plastic silty clay, fill of pit/ph [360].
102	A	Pit/ph	mid greyish brown plastic silty clay, fill of pit/ph [361].
103	A	Pit/ph	mid greyish brown plastic silty clay, fill of pit/ph [362].
104	A	Ditch	mid greyish brown plastic silty clay, fill of ditch, same as, (136), (160), (179), contains pottery & tile.
105	A	Ditch	dark greyish brown soft silty clay, fill of ditch [136], same as (4),(67), (175),(180), sample 10, contains pot, bone, CBM & bone.
106	A	Gully	mid greyish brown soft silty clay, fill of gully [273], contains tile.
107	A		Not real.
108	A		Not Real
109	A	Pit	dark greyish brown plastic silty clay, fill of pit [321].
110	A	Pit	dark greyish brown plastic silty clay with charcoal fleck, fill of pit [320].
111	A	Ditch	mid greyish brown firm silty clay, fill of ditch.
112	A	Ditch	dark greyish brown plastic silty clay, fill of ditch [216], contains pottery & bone.
113	A	Pit	mid greyish brown firm silty clay, fill of pit [327].
114	A	Pit/ph	mid greyish brown soft silty clay, fill of pit/ph [328].
115	A	Pit/ph	dark greyish brown soft silty clay, fill of pit/ph.
116	A	Pit	dark greyish brown firm silty clay, fill of pit.
117	A	Pit	mid greyish brown plastic silty clay, fill of pit.
118	A	Pit	mid greyish brown plastic silty clay, fill of pit.
119	A	Pit	mid greyish brown plastic silty clay, fill of pit.
120	A	Pit	mid greyish brown plastic silty clay, fill of pit.
121	A	Pit	dark greyish brown plastic silty clay with ironstone, fill of pit [333].
122	A	Pit/ph	light greyish brown friable silty clay, fill of pit/ph [330].
123	A	ph	mid greyish brown friable silty clay with charcoal fleck, fill of pit [331].
124	A	Pit	mid greyish brown plastic silty clay, fill of pit [341], contains pot, bone & tile.
125	A	Pit	dark greyish brown plastic silty clay, fill of pit [336].
126	A	Pit	dark greyish brown plastic silty clay, fill of pit [137], contains bone & tile.
127	A	Pit	dark greyish brown plastic silty clay, fill of pit [332], contains bone.
128	A	Pit	dark greyish brown plastic silty clay, fill of pit [342], contains pot.
129	A	Pit	dark greyish brown firm silty clay, fill of pit [344], contains tile.
130	A	Pit	dark greyish brown firm silty clay, fill of pit [345], contains bone.
131	A	Pit	mid greyish brown plastic silty clay, fill of pit [346].
132	A	Pit	mid greyish brown plastic silty clay, fill of pit [347], contains pot, bone & CBM.
133	A	Ditch	mid greyish brown plastic silty clay, fill of ditch [349], same as (12), contains CBM.
134	A	Ditch/gully	mid greyish brown plastic silty clay, fill of ditch/gully [274], contains CBM.
135	A	Ditch	dark greyish brown soft silty clay, fill of ditch [351], same as (1) & (14), contains bone, tile & coin SF.57.
136	A	Ditch	dark greyish brown friable silty clay, fill of ditch [348], same as (104), (160) & (179), contains pot, bone, CBM & SF.33 & 58.
137	A	ph	mid greyish brown firm silty clay, fill of ph, contains pottery & bone.
138	A	Pit	light greyish brown plastic silty clay, fill of pit, contains pot, bone & SF.99.
139	A	Pit	mid greyish brown firm silty clay, fill of pit, contains tile.
140	A	Pit	mid greyish brown plastic silty clay, fill of pit [275], contains bone.
141	A	Pit	mid greyish brown firm silty clay, fill of pit .
142	A	Pit	mid greyish brown firm silty clay, fill of pit.
143	A	ph	dark grey brown friable silty clay, fill of ph [144], sample 11, contains SF.100.
144	A	ph	Cut, containing (143).
145	A	Ditch	mid grey brown firm silty clay, fill of ditch [381], same as (8) & (147).
146	A	Pit	mid yellowish brown firm silty clay, fill of pit.
147	A	Ditch	mid grey brown firm silty clay, fill of ditch [369], same as (8) & (145), contains pot, bone & SF.47.

148	A	Pit	mid grey yellow plastic silty clay, primary fill of pit [149], contains bone.
149	A	Pit	Cut, containing (148).
150	A	ph	mid grey brown plastic silty clay, secondary fill of ph [144], contains burnt bone.
151	A	ph	mid grey brown plastic silty clay, primary fill of ph [38].
152	A	Ditch	Cut, containing (155).
153	A	Ditch	Cut, containing (67).
154	A	Ditch	Cut, containing (44).
155	A	Ditch	Ditch mid greyish orange plastic silty clay, fill of ditch [152], contains pottery & tile.
156	A	Pit	mid greyish yellow plastic silty clay, primary fill of pit [158], contains SF.39.
157	A	Pit	mid greyish yellow plastic silty clay, secondary fill of pit [158].
158	A	Pit	Cut, containing (157).
159	A	Ditch	Cut, containing (42), same as [300], [386] & [402].
160	A	Ditch	mid greyish brown firm silty clay, fill of ditch, same as (104), (136) & (179), contains pot.
161	A	Pit	dark greyish brown loose silty clay, fill of pit, not excavated.
162	A	Pit	mid greyish brown loose silty clay, fill of pit, not excavated.
163	A	Corn Dryer	dark greyish brown friable silty clay with common charcoal, fill of corn dryer [352], sample 7, contains pot.
164	A	Pit	dark greyish brown plastic silty clay, fill of pit [239], contains pottery & CBM.
165	A	Gully	mid greyish brown plastic silty clay, fill of gully [276], contains pottery , CBM & SF's. 86, 87, 88.
166	A	Pit	dark greyish brown plastic silty clay, fill of pit [232], contains bone.
167	A	Gully	dark greyish brown plastic silty clay, fill of gully [233], contains bone.
168	A	Pit	dark greyish brown plastic silty clay, secondary fill of pit [240], contains pot.
169	A	Pit	dark greyish brown plastic silty clay, fill of pit [407], contains bone.
170	A	Pit	dark greyish brown plastic silty clay, fill of pit [408], contains pot, bone & tile.
171	A	Ditch	dark greyish brown plastic silty clay, fill of pit, same as (73), not excavated.
172	A	Ditch	light greenish grey plastic silty clay, same as (12) & (173), contains pot.
173	A	Ditch	light greenish grey plastic silty clay, same as (12), & (172), contains SF's 44 & 45.
174	A	ph	dark grey brown plastic silty clay, fill of [174] .
175	A	Ditch	greyish orange brown friable silty clay, same as (4), (67), (105), (175) & (180), contains pot, bone & CBM.
176	A	ph	dark greyish brown plastic silty clay, fill of ph.
177	A	ph	dark greyish brown plastic silty clay, fill of ph.
178	A	ph	dark greyish brown plastic silty clay, fill of ph.
179	A	Ditch	mid greyish brown firm silty clay fill of ditch [368], same as (104), (136) &(160), contains tile.
180	A	Ditch	dark greyish brown soft silty clay, fill of ditch , same as (4),(67), (105), (175), contains bone.
181	A	Pit	dark grey brown friable silty clay with charcoal fleck, fill of pit.
182	A	Pit/ph	dark grey brown friable silty clay with charcoal fleck, fill of pit.
183	A	Pit	light grey brown friable silty clay, fill of pit.
184	A		Not real.
185	A	Pit/ph	Cut, containing (186) & (60).
186	A	Pit/ph	mid grey brown friable silty clay with charcoal fleck, primary fill of pit [185].
187	A	ph	mid grey brown friable silty clay with charcoal fleck, fill of ph [188].
188	A	ph	Cut, containing (187).
189	A	ph	mid yellowish orange friable silty clay with charcoal fleck, fill of [190].
190	A	ph	Cut, containing (187).
191	A	ph	mid grey orange friable silty clay with charcoal fleck, fill of ph [192].
192	A	ph	Cut, containing (191).
193	A	ph	mid grey brown plastic silty clay, fill of ph [415], contains bone.
194	A	Pit	mid grey brown plastic silty clay, fill of pit [416].
195	A	Pit	mid grey brown plastic silty clay, fill of pit, not excavated.
196	A	Track	mid grey brown plastic silty clay, contains 90% pebble (<30mm), overlays (197), contains bone.
197	A	Track	mid orange brown plastic silty clay, layer of track below (196), contains bone.
198	A	Thresh.flr.	dark grey brown loose silty clay, (pos. partly mixed topsoil), contains pot, bone, CBM and SF's 59, 60, 65, 66, 68, 69, 70, & 71.
199	A	Thresh.flr.	dark bluish grey firm silty clay with charcoal fleck, below (198), sample 1, contains pot, bone, CBM & SF's 61-64, 67 & 104.
200	A	Thresh.flr.	mid creamy grey plastic silty clay with v.common pebble (c.20-60mm), underlies

			(199), contains pottery and bone.
201	A	Layer	mid brown plastic silty clay with ironstone rubble, within [267], contains pottery & CBM.
202	A	gully ?	dark grey brown, plastic silty clay, fill of [227], contains pot.
203	A	Gully	mid grey brown firm silty clay, fill of gully [215].
204	A	Pit	dark grey brown plastic silty clay with occasional burnt stone, fill of [230], contains bone.
205	A	Pit	dark grey orange friable silty clay with charcoal fleck, fill of pit [231], contains pottery & bone.
206	A	Pit	mid orange brown firm silty clay with >300mm boulders, fill of pit [236].
207	A	ph	mid greyish brown firm silty clay, fill of ph.
208	A	Pit	dark grey brown plastic silty clay with charcoal fleck, fill of pit [228].
209	A	Pit	dark grey brown plastic silty clay with charcoal fleck, fill of pit [229], contains pot.
210	A	Pit/ph	mid grey brown firm silty clay, fill of pit/ph [234].
211	A	Pit/ph	mid grey brown firm silty clay, fill of pit/ph [235].
212	A	Ditch	mid grey brown friable silty clay with charcoal fleck, primary fill of ditch [218], contains pottery & bone.
213	A	Ditch	mid grey brown firm silty clay, fill of ditch [225], same as (269) & (279), contains pot.
214	A	Track	mid grey brown plastic silty clay, contains 90% pebble (<30mm), same as (196), contains pottery & bone.
215	A	Gully	Cut, containing (203).
216	A	Ditch	Cut, containing (112).
217	A	Ditch	light grey orange soft silty clay with charcoal fleck, primary fill of ditch [218], same as (288), contains bone.
218	A	Ditch	Cut, containing (217).
219	A	Gully	mid yellowish orange plastic silty clay with charcoal fleck, fill of gully [220], contains bone.
220	A	Gully	Cut, containing (219).
221	A	Gully	mid greenish orange friable silty clay, fill of gully [222].
222	A	Gully	Cut, containing (221).
223	A	Gully	mid greyish orange friable silty clay, fill of gully [224], contains pot.
224	A	Gully	Cut, containing (223).
225	A	Ditch	Cut, containing (213), same as [287]
226	A	Hobnails	Close distribution of iron hobnails within (198).
227	A	Depression	Cut, containing (202).
228	A	Pit	Cut, containing (208).
229	A	Pit	Cut, containing (209).
230	A	Pit	Cut, containing (204).
231	A	Pit	Cut, containing (205).
232	A	Pit	Cut, containing (166).
233	A	Gully	Cut, containing (167).
234	A	Pit/ph	Cut, containing (210).
235	A	Pit/ph	Cut, containing (211).
236	A	Pit/ph	Cut, containing (206).
237	A	ph	dark grey brown plastic silty clay, fill of [238], contains pot.
238	A	ph	Cut, containing (237).
239	A	Pit	Cut, containing (164).
240	A	ph	Cut, containing (168).
241	A	Ditch	Recut, containing (212).
242	A	ph	mid orange brown friable silty clay, primary fill of ph [240].
243	A	ph	mid orange brown friable silty clay, fill of ph. Not excavated.
244	A		Context not used.
245	A	Ditch	mid grey brown firm silty clay, fill of ditch, pos. same as (68) & (73).
246	A	Ditch	v.dark grey friable silty clay with mudstone, fill of ditch [288], same as (278).
247	A	Pit	mid grey brown firm silty clay, fill of pit.
248	A	Ditch/gully	mid grey brown firm silty clay, fill of ditch/gully [302], same as (265).
249	A	Gully	dark grey brown firm silty clay, fill of gully [319], contains pottery & bone.
250	A	Pit/ph	dark grey brown firm silty clay with charcoal fleck, fill of pit/ph, contains pottery & bone.
251	A	pit/ph	dark grey brown firm silty clay with charcoal fleck, fill of pit/ph.
251	A	Furrow	
252	A	Gully	mid grey brown plastic silty clay, fill of gully [277], contains pot.

253	A		Not real.
254	A	Layer	mid grey brown friable silty clay with common medium pebbles.
255	A		Natural
256	A		Natural
257	A	Gully	mid grey brown firm silty clay, fill of gully.
258	A	Pit	mid grey brown firm silty clay, fill of pit [322], contains pottery & bone.
259	A	Pit	mid grey brown firm silty clay, fill of pit [232].
260	A	Pit	mid grey brown firm silty clay with some burnt stone, fill of pit [324].
261	A	Pit	mid grey brown firm silty clay, fill of pit [325].
262	A	ph	mid grey brown firm silty clay with common large, fill of ph.
263	A	Gully	mid grey brown firm silty clay with charcoal fleck, fill of gully.
264	A	Gully	mid grey brown firm silty clay, fill of gully, pos. same as (28).
265	A	Gully	mid grey brown firm silty clay, fill of gully [318], contains pottery & bone, same as (248).
266	A	Ditch	mid brown plastic silty clay, fill of ditch [268].
267	A	Layer	mid grey brown plastic silty clay and cobble layer below (201).
268	A	Ditch	Cut, containing (266).
269	A	Ditch	mid grey brown firm silty clay, fill of [287], pos. same as (213) & (279).
270	A	Ditch	mid brown plastic silty clay, fill of ditch, pos. same as (213)
271	A	Pit	dark brown plastic silty clay with frequent charcoal, fill of pit [272], contains pot, bone and metal finds.
272	A	Pit	Cut, containing (271).
273	A	Gully	Cut, containing (106).
274	A	Ditch	Cut, containing (134).
275	A	Pit	Cut, containing (140).
276	A	Pit	Cut, containing (265).
277	A	Gully	Cut, containing (252).
278	A	Ditch	v.dark grey friable silty clay with mudstone, fill of ditch [288], same as (246), sample 3.
279	A	Ditch	mid grey brown firm silty clay, fill of [287], pos. same as (213) & (269).
280	A	Ditch	light orange brown firm silty clay, primary fill of ditch [288].
281	A	Gully	Cut, containing (281).
282	A	Gully	mid grey brown firm silty clay, fill of gully [282].
283	A	Pit	mid grey brown plastic silty clay, secondary fill of pit [290], contains pot.
284	A	Ditch	Cut, containing (289).
285	A	Ditch	mid grey brown firm silty clay, secondary fill of ditch [288].
286	A	Ditch	dark grey brown plastic silty clay with common charcoal fleck, tip layer within ditch [288], sample 2.
287	A	Ditch	Cut, containing (279/269), same as [225].
288	A	Ditch	Cut, containing (286).
289	A	Ditch	mottled orange grey plastic silty clay, primary fill of ditch [284].
290	A	Ditch	Cut, containing (283).
291	A	Ditch	pale orange brown firm sandy clay, fill of ditch [292].
292	A	Ditch	Cut, containing (291).
293	A	Ditch/gully	mid orange brown firm silty clay, fill of ditch /gully [294]
294	A	Ditch/gully	Cut, containing (293).
295	A	Pit	mid greyish brown firm silty clay, fill of pit [296].
296	A	Pit	Cut, containing (295).
297	A	Pit	mid greyish brown firm silty clay, fill of pit [298].
298	A	Pit	Cut, containing (297).
299	A	Ditch/gully	mid greyish brown firm silty clay, fill of ditch/gully [300], same as (42).
300	A	Ditch	Cut, containing (299), same as [159] & [402] ?
301	A	Ditch	Cut, containing (70).
302	A	Gully	Cut, containing (248), same as [318].
303	A	Ditch	mid greyish brown firm silty clay, fill of ditch, not excavated.
304	A	Pit	mid grey brown firm silty clay, fill of [409], contains pot.
305	A	Pit	mid grey brown firm silty clay, fill of [410].
306	A	Pit/ph	dark grey brown smooth silty sandy clay, secondary fill of pit/ph [399], sample 15, .
307	A	Pit	mid grey brown firm silty clay, fill of [380].
308	A	Pit	mid grey brown firm silty clay, fill of [397], contains CBM.
309	A	Pit	dark yellow brown firm silty clay, fill of pit [382], sample 25, contains pottery & bone.
310	A	Pit	mid grey brown firm silty clay, fill of [383].

311	A	Pit	mid orange brown firm silty clay, fill of pit [411], contains bone.
312	A	ph	mid grey brown firm silty clay, fill of [404], contains pot.
313			Context not used.
314	A	Ditch	mid grey brown firm silty clay, fill of [387], same as (50).
315	A	Pit/gully	mid orange brown firm silty clay, fill of [398], contains flecks of bone.
316	A	Pit	dark yellowish brown firm silty clay, fill of pit .
317	A	Ditch	dark yellowish brown firm silty clay, fill of ditch [388].
318	A	Gully	Cut, containing (265), same as [302].
319	A	Gully	Cut, containing [249].
320	A	Pit	Cut, containing (110)
321	A	Pit	Cut, containing (109).
322	A	Pit	Cut, containing (258).
323	A	ph	Cut, containing (259).
324	A	Pit	Cut, containing (260).
325	A	Pit	Cut, containing (261).
326	A	Pit	Cut, containing (71).
327	A	Pit	Cut, containing (113).
328	A	Pit	Cut, containing (114).
329	A	Pit	Cut, containing (72).
330	A	ph	Cut, containing (122).
331	A	ph	Cut, containing (123).
332	A	ph	Cut, containing (127).
333	A	Pit/ph	Cut, containing (121).
334	A	Pit/ph	dark greyish brown plastic silty clay with ironstone, fill of pit/ph [335], contains tile.
335	A	Pit/ph	Cut, containing (334).
336	A	Pit/ph	Cut, containing (125).
337	A	Pit/ph	Cut, containing (126).
338	A	Ditch	Cut, containing (339).
339	A	Ditch	dark yellowish grey firm silty clay, fill of ditch [338].
340	A	Ditch	Cut, containing (68).
341	A	Pit	Cut, containing (124).
342	A	Pit	Cut, containing (128).
343	A	Gully	Cut, containing (8), same as [369] & [381]
344	A	Pit	Cut, containing (129).
345	A	Pit/ph	Cut, containing (130).
346	A	Pit/ph	Cut, containing (131).
347	A	Pit/ph	Cut, containing (132).
348	A	Ditch	Cut, containing (136).
349	A	Gully	Cut, containing (12), same as [371].
350	A	Pit	Cut, containing (55).
351	A	Ditch	Cut, containing (135), same as [27].
352	A	Corn dryer	dark grey-black friable charcoal rich sandy clay, primary fill of [354], samples 6, 8 & 9.
353	A	Corn dryer	dark grey-black friable charcoal rich sandy clay, fill within [354] infilling depression, below (163).
354	A	Corn dryer	Cut containing (163), (352) & (153).
355	A	Corn dryer	orange red friable silty clay, scorched clay layer below (352) in corn dryer [354].
356	A	Ditch	Cut, containing (105).
357	A	ph	Cut, containing (98).
358	A	ph	Cut, containing (99).
359	A	ph	Cut, containing (100).
360	A	ph	Cut, containing (101).
361	A	ph	Cut, containing (102).
362	A	ph	Cut, containing (103).
363	A	Pit	Cut, containing (95).
364	A	Ditch	Cut, containing (97).
365	A	Ditch	Cut, containing (175), same as [156].
366	A	Ditch	Cut, containing (95).
367	A	Ditch	Cut, containing (96).
368	A	Ditch	Cut, containing (197).
369	A	Ditch	Cut, containing (147) same as [343] and [381].
370	A	Pit	Cut, containing (92).
371	A	Ditch	Cut, containing (12), same as [349].

372	A	Pit	Cut, containing (91).
373	A	Ditch	Cut, containing (13).
374	A	Pit	Cut, containing (93).
375	A	Pit	Cut, containing (76).
376	A	Pit	Cut, containing (75).
377	A	Pit	Cut, containing (77).
378	A	Pit/ph	Cut, containing (74).
379	A	Ditch	Cut, containing (73).
380	A	Pit	Cut, containing (307).
381	A	Ditch	Cut, containing (145), same as [343] & [369].
382	A	Pit	Cut, containing (309).
383	A	Pit	Cut, containing (310).
384	A	Ditch	dark grey brown firm silty clay with charcoal fleck, fill of ditch [385], same as (67)?, contains pottery & CBM.
385	A	Ditch	Cut, containing (384), same as [153] ?
386	A	Ditch	Cut, containing (42), same as [159], [402], & [300].
387	A	Ditch	Cut, containing (50), same as [417].
388	A	Ditch	Cut, containing (317).
389	A	Ring gully	dark grey brown firm sandy clay with charcoal fleck, secondary fill of ring gully [34], same as (391), (393) & (394), contains pot, bone & flint.
390	A	Ring gully	mid orange grey plastic silty clay with charcoal fleck, primary fill of ring gully [34], same as (392), contains pottery & flint.
391	A	Ring gully	dark grey brown firm sandy clay with charcoal fleck, secondary fill of ring gully [34], same as (389) , (393) & (394), sample 18, contains pottery & bone.
392	A	Ring gully	mid orange grey plastic silty clay with charcoal fleck, primary fill of ring gully [34], same as (390), (395) & (396).
393	A	Ring gully	mid grey brown compact silty clay with charcoal fleck, secondary fill of ring gully [34], same as (389) & (391), sample 19, contains pot.
394	A	Ring gully	dark grey brown firm sandy clay with charcoal fleck, secondary fill of ring gully [34], same as (389), (391) & (393), sample 20, contains pottery , bone & flint.
395	A	Ring gully	mid orange grey plastic silty clay with charcoal fleck, primary fill of ring gully [34], same as (390), (392) & (396).
396	A	Ring gully	mid orange grey plastic silty clay with charcoal fleck, primary fill of ring gully [34], same as (390), (392) & (395).
397	A	Pit	Cut, containing (308).
398	A	Pit/gully	Cut, containing (315).
399	A	Pit/ph	Cut, containing (306) & (400).
400	A	Pit/ph	light yellow brown smooth silty clay witch charcoal fleck, primary fill of [399].
401	A	Ditch	mottled redish blue firm silty clay with frequent pebble, secondary fill of [402].
402	A	Ditch	Cut, containing (42) & (402), same as [159] & [386].
403	A	Pit	Cut, containing (311).
404	A	ph	Cut, containing (312).
405	A	Gully	dark yellow brown firm silty clay, fill of gully [406], contains pot.
406	A	Gully	Cut, containing (405).
407	A	Pit	Cut, containing (169).
408	A	Pit	Cut, containing (170).
409	A	Pit	Cut, containing (304).
410	A	Pit	Cut, containing (305).
411	A	Pit	Cut, containing (45).
412	A	Pit	Cut, containing (49).
413	A	Gully	Cut, containing (54).
414	A	ph	Cut, containing (52).
415	A	ph	Cut, containing (193).
416	A	Pit	Cut, containing (194).
417	A	Ditch	Cut, containing (50).
418	A	Ditch	Cut, containing (43).

Appendix 3

Tables of Animal Bone.

Iron Age material (sorted by context)

Record	Context	Frags	Species	Element	/100	prox	dist	butch	burn	teeth	Notes
6	5	5	hor	tth							row of 5 upper molars (from back) only front one missing
7	5	2	hor	mand	1						frgs
84	6	1	large	rib frg	5						
85	6	1	ox	LM3	70					y	biting surface intact
86	6	1	ox	p4	90						
87	6	1	ox	p3	80						
88	6	3	large	sk frgs							poss. occipital
47	51	2	un	frags					y		white
48	51	5	large	rib							frgs
49	51	4	un	frags							
50	51	1	sh	metac	30	m	m				small and poss young
451	51	1	un	frg							
180	64	1	un	frag					y		burnt white on outside, grey on inside
181	64	2	un	frags							undiagn
182	82	13	un	frags							
183	82	1	large	rib frg							
184	82	1	un	frag					y		burnt black
185	82	1	un	frag					y		burnt white
186	82	1	sh	LP4	90						
187	82	2	pig	atlas frgs	20				y		prob same bone. Burning (black) on tip of caudal type of bone
146	83	1	sh	UM1/2	80						
147	83	1	sh	LM1/2	90						
349	205	7	un	frags							
350	205	1	sh	pelv	10	f			y		part of acetabulum & ischium
445	205	3	large	frags							
450	205	1	ox	pelv							acetabulum- frag of ischium

328	249	9 un	frgs					
320	278	1 hor	incisor	95				
321	278	1 shsize	tib	20 m	m			shft frg
322	278	1 ox	scap	10	m			shft frg with part of blade. In 2 pieces.
319	309	18 large	shft frgs					
312	391	8 large	frgs					
313	391	1 sh	LM1/2	80				
314	391	1 un	frg				y	med shft frg burnt grey
315	391	1 sh	mand	10				with p3
316	391	1 ox	cerv	10		y		
317	391	1 pig	pelv	5				frg of illium (where sacrum joins)
318	391	2 un	frgs					
454	391	1 ox	pelv	5 f		y		pubis - prob cut mark across ground facing side of bone. Quite thick.
433	393	1 sh	tooth frag					broken into 7 pieces
434	393	1 sh	decidm4	90				tws=h
435	393	1 sh	LM1/2	85				
331	394	1 sh	phal 1	100	f			broken in 2.
332	394	1 sh	rad	30 m	m			diagnostic shft.
333	394	2 sh	UM					
334	394	1 sh	metap	5	u			part of distal epiph.
335	394	29 med	sk frgs					
336	394	4 med	shft frgs					
405 278/3/1		9 un	shaft frags					
411 278/3/2		41 un	frags					
412 278/3/2		1 sh	UP					p3 or p4
413 278/3/2		1 med	shaft frag					poss tib
414 278/3/2		1 large	scap	5				frag of glenoid fossa
390 309/382/25		1 ox	tib	10 m	m			shaft only
391 309/382/25		9 large	shaft frags					
419 391/18		10 un	frags				y	burnt grey /black
420 391/18		31 un	frags					too small & undiagnostic to identify
421 391/18		3 med	vert?					fragments
422 391/18		2 un	frag				y	white
423 391/18		1 med	shaft frag	10			y	burnt grey white. Poss a sh tib?
424 391/18		1 pig	pelv	20 f				acetabulum & start of illium & ischium

425	391/18		1	sh	carpal	90			y			burnt grey/white
426	393/19		3	un	frags							
408	394/20		2	un	frags							
409	394/20		7	un	frags				y			burnt/charred
410	394/20		1	ox?	phal2	10	f					prox shaft frag
178		63	1	ox	phal 1	20		f				frg of distal part
			276									

Early Roman material

Record	Context	Frags	Species	Element	Side	/100	Prox	Dist	Burn	Gnaw	Notes
300	271	2	medium	shft frgs							
98	16	1	unident.	frag					y		burnt white
99	16	1	sheep	rad	r	15	m	m		y	diagnostic shft frg, signs of rodent? gnawing
438	60	1	large	frag							

Late Roman: 3rd and 4th century material (sorted by context).

Record	Context	Frags	Species	Element	Side	/100	prox	dist	butch	burn	gnaw	teeth	Notes	Measure
1	1	1	horse	rad	l	100	f	f					broken into 3 pieces not fresh breaks	Bp=8.32, Bd=7.37, GL=35.3
441	1	1	large	cerv		10							frag	
3	1	1	ox	metac		70	m	m			y		small to medium teeth marks at epiph. ends. Quite small.	
2	1	1	ox	metat		100	f	f					slight staining, also broken into 3 pieces	Bp=4.35, Bd=4.65, gl=21.0
440	1	1	ox	scap	l	10		m					frag of blade & shaft	
4	1	1	ox	ulna		10	m						frag pf prox end	
5	1	4	un	frags										
97	4	2	large	rib frgs										
12	7	1	large	shft frg		5	m	m		y			white on outside, black inside	
13	7	1	medium	shft frg		1	m	m						
8	8	6	horse	tth									lower -not clear if from same beast	
11	8	3	large	mand									frgs	
9	8	1	ox	mand	r	15							bottom piece with fossa	
10	8	1	sheep	rad		18	f	m					prox shft and prox end only	

72	12	1 horse	metac		20	m	f				bd=5.07
73	12	1 large	rib frg		5						
94	12	1 large	shft frg								
93	12	10 large	sk frgs								
444	12	4 large	frags								
82	12	1 medium	rib frg								
81	12	11 medium	shft frgs								
443	12	1 ox	cerv		5						
92	12	6 ox	horncore							frgs	
96	12	1 ox	rad	l	10	f	m		y	part of distal shft. Epiph shows gnaw marks	
76	12	1 sheep	LM1/2		90						
77	12	1 sheep	LM3	l	90				y		
78	12	1 sheep	LM3	l	80				y		
79	12	1 sheep	mand	l	20					part of symphysis & tooth cavity	
80	12	1 sheep	mand	l	5					coronoid process	
95	12	1 sheep	mand	r	80				y		
74	12	3 sheep	UM1& 2		90						
75	12	1 sheep	UP4		90						
455	12	1 un	frag								
403	13	1 horse	fem	l	20	m	m			fragment of distal shaft with lateral supracondylar fossa.	
20	13	1 large	frag			m	m				
14	13	1 large	rib		5					frg	
16	13	5 large	shft frg								
17	13	1 ox	fem		15	f	m			2 prox epip frgs (head)	
18	13	1 ox	fem		5					lesser trochanter	
15	13	1 ox	rad		8	f	f			broken into several pieces in centre	bp=8.65, bd=7.95
19	13	1 sheep	tib		15	m	m	y		shft frg	
21	14	1 ox	metat		70	f	m				bd=4.39
106	18	1 ox	cran							exoccipital	
107	25	1 horse	LM		80						
108	25	1 large	frag								
430	25	1 sheep	fem		5		u			part of patella area of distal epiphysis	
429	25	1 un	frag								
30	44	1 horse	fem		30	m	f			in 3 pieces- some old breaks	
27	44	1 horse	tth		85						
25	44	9 large	frags							shft frgs	
35	44	2 large	mand frgs							frgs	
33	44	9 large	shft frgs								
36	44	1 ox	fem		5	m	m			part of lateral condyle	
31	44	1 ox	hum		30	m	m			part of distal shaft only	
32	44	1 ox	hum		2	m	m			shft frg	
34	44	1 ox	mand		5					frg of bottom of mand	
24	44	1 ox	metac		60	f	m			projection/extra lip of bone just below prox epiph.	
29	44	1 ox	metac		10	m	f			broken in 2	
26	44	1 ox	molar		80					loose lower	
28	44	1 ox	phal 1		95	f	f				
37	44	1 ox	phal 2		40	m	f				

103	44	1	sheep	LM3		95		y
104	44	1	sheep	mand		5		part of coronoid process
105	44	1	sheep	mand	l			condyle
23	44	2	sheep	mand frgs				frgs of tth row
101	44	1	sheep	metat		10 m	m	shft only
22	44	1	sheep	molar		90		lower m1 or m2
102	44	1	sheep	mand		5		frg
38	44	1	un	shft frg				
379	50	1	gallus	ulna	l	20 f	m	
57	50	1	horse	metac	l	25 m	f	
68	50	1	horse	metac		30 f	m	
380	50	3	horse	teeth				virtually unworn
41	50	1	horse	tth		80		
53	50	5	horse	UM				
119	50	2	large	cerv				frgs
112	50	7	large	frags				
378	50	6	large	frags				
111	50	4	large	pelv				large frgs prob of 110
39	50	1	large	rib		10		
52	50	8	large	rib		frgs		
56	50	3	large	rib frgs				
46	50	7	large	shft frgs				undiagnostic
54	50	2	large	shft frgs				
377	50	2	large	sk frag				
55	50	1	large	sk frg				
114	50	1	large	sk frg				
59	50	1	ox	calc	r	50 m		
71	50	1	ox	calc	l	30 m		
44	50	1	ox	fem	l	25 f	m	fresh break in shft
45	50	1	ox	fem	l	30 m	f	could be part of same bone as above
51	50	1	ox	fem	r	35 m	m	part of shft with supracondylar fossa
113	50	1	ox	horncore		5		frg
40	50	1	ox	hum	l	15 m	m	frg of distal shft
448	50	2	ox	hum		5	f	part of distal epiph.
376	50	1	ox	metac		60 f	m	
115	50	1	ox	metap		30 m	m	shft frg
116	50	1	ox	metap		5 m	m	frg of distal epiphysis
58	50	1	ox	metat		45 m	u	2 frgs
42	50	3	ox	molar				loose upper
110	50	1	ox	pelv		40 f		pubis, acetab. and illium (3 large pieces)
117	50	1	ox	pelv	r	4		ischium portion of acetabulum
118	50	1	ox	pelv	l	5		ischium portion of acetabulum
381	50	1	ox	pelv	r	10 m		illium frag.
69	50	1	ox	tarsal		90		centrotarsal
43	50	1	ox	tth				
70	50	1	ox	ulna	l	30 m		
449	50	3	ox	hum				prob part of bone 449.

100	52	1	un	shft frgs						
109	53	1	sheep	LP4		90				
67	55	1	large	lumb		20				
62	55	1	large	rib		10				
60	55	7	large	shft frgs						
66	55	1	large	thorac		70				unfused
61	55	1	ox	LM1/2		70				
63	55	1	ox	mand	r	5				part close to symphysis
65	55	1	ox	pelv	l	30	f			illium and part of acetabulum
64	55	1	ox	rad		10	m	m		part of distal shaft
153	61	7	large	shft frgs						
155	61	5	medium	frags						
154	61	1	medium	rib frg		10				
156	61	1	ox	cran frg		5				palatinate
145	67	1	horse	tib	l	10	m	f		part of dist epiph & shft
144	67	1	large	shft						
141	67	1	ox	metat		10	m	f		bd=5.61
143	67	1	ox	rad	l	40	f	m		part of ulna fused to rad shaft at prox end
142	67	1	ox	tib	r	15	m	f		bd=5.78
140	67	1	un	frag						
171	68	1	horse	astrag	r	90			y	
347	68	4	large	frags						
346	68	1	large	mand		5				frag of ramus & coronoid process
169	68	8	large	rib frgs						
168	68	10	large	shft frgs						
167	68	1	large	thorac		90				unfused on both surfaces. In 2 pieces.
348	68	2	large	thoracic						frags
173	68	1	medium	rib		20				
172	68	1	sheep	horncore		50				fragment with tip. goat?
166	68	2	un	frags					y	burnt white on outside grey on inside
170	68	23	un	frags						
399	70	1	crow	ulna	l	100	f	f		
138	70	1	horse	metat		10	m	f		bd=4.52
137	70	1	horse	UM		80				
121	70	1	large	mand		5				frg
136	70	1	large	rib frg						
211	70	1	large	shft frg						
139	70	1	large	thorac		40				part of spine & centrum
214	70	1	large	thorac		20				part of neural spine only
215	70	1	large	thorac		10				posterior zygopophyses
372	70	1	large	shaft frags						poss ox femur
373	70	5	large	shaft frags						
129	70	1	medium	rib		10				
210	70	1	medium	shft frg						
120	70	1	ox	atlas		90				in 2 pieces also other fresh breaks
122	70	1	ox	cerv						
401	70	1	ox	cerv		60			y	

125	70	1	ox	fem	r	30	f	m			bp=14.1
128	70	1	ox	fem	r	20	m	m		prox shft with lesser trochanter	
371	70	1	ox	fem	l	20	m	f			
400	70	1	ox	horncore & sk		90			y		
123	70	1	ox	hum	r	90	s	f		prox semi fused.	bd=7.56
126	70	1	ox	hum	r	40	m	f			bd=8.9
135	70	1	ox	hum		10	u	m		frag of prox epiph & shaft	
375	70	1	ox	hum		5				frag of greater tubercle.	
216	70	1	ox	mand		5				coronoid process	
374	70	1	ox	pelv		10			?	fragment of acetabulum. poss chopped or is it break?	
127	70	1	ox	rad		10	m	m		diagnostic shft frg only	
212	70	1	ox	rib		20			y		
124	70	1	ox	tib	l	90	f	f		in 2 frags	bd=5.32
130	70	1	ox	UM1/2		70					
133	70	1	pig	incisor		60					
131	70	1	sheep	LM1/2	r	85					
132	70	1	sheep	LM3	r	85				y	
134	70	1	sheep	mand	r	10				coronoid process & condyle	
213	70	1	sheep	metac		60	m	m		shft only	
339	73	1	large	rib		10					
222	73	1	large	rib frg							
360	73	8	large	shaft frags							
364	73	1	large	sk frag							
223	73	1	medium	rib frg							
340	73	2	medium	shft frg							
343	73	1	medium	shft frg							
361	73	1	ox	lumb		65				including fused main body of vert.	
363	73	1	ox	premax	r	40					
362	73	1	sheep	metac		10	m	m		y shaft only. Signs of med gnawing. Or is it post depositional?	
341	73	1	sheep	metat		30	m	m		y poss rodent gnawing at distal end	
342	73	1	sheep	tib		20	m	m		frg of distal shft	
224	73	1	sheep	ulna	l	20	m				
150	104	1	large	rib		5				in 5 pieces	
351	105	1	large	axis		5					
176	105	1	large	shft frg							
174	105	2	medium	shft frg							
159	105	2	medium	shft frgs							
175	105	1	medium	vert frg							
157	105	1	ox	metac		80	m	f			bd=5.95
177	105	1	sheep	phal 1		100		f			
158	105	1	sheep	tib		70	m	f			bd=2.64
149	108	1	horse	ulna	r		f				
148	112	1	large	rib		15					
151	120	1	large	frag							
152	121	1	sheep	tib		20	m	m		y shft only but appears gnawed at distal end	
188	124	1	ox	UM1/2		90					
221	126	1	medium	shft frg							

161	128	1	horse	pelv	l	30	f		most of acetab. & ischium. Some modern breakage
164	128	5	large	frags					
165	128	1	large	thorac		20			part of dorsal side
163	128	1	ox	hum	l	10	m	f	medial epicondyle
162	128	1	ox	lumb		40			body of vert
160	128	1	ox	pelv	r	30	f	y	complete acetabulum with part of illium & ischium
204	129	6	medium	shft frgs					
206	129	1	medium	vert frg					
205	129	1	sheep	UM1/2		50			
217	131	1	large	frags					
218	131	1	medium	rib		10			
219	131	2	medium	scap		5		y	frg with indentation- poss tooth mark
220	131	1	pig	scap	r	10		m	
195	132	2	large	incisors					horse?
200	132	1	large	lumb		30			
196	132	4	large	rib frgs					
198	132	3	large	scap frgs					
197	132	1	medium	phal 1		90	u	f	could be deer or sheep
202	132	1	ox	carpal	r	100			ulnar (triquetrum)
203	132	1	ox	scap	r	15		f	
199	132	1	sheep	mand					
194	132	23	un	frags					
201	132	3	un	frags					
242	134	1	horse	mand	l	20			p2 & p3 present
243	134	3	horse	teeth					prob from mand 242
244	134	3	large	mand					frgs
357	134	1	large	pelv			m		prob part of illiac crest
356	134	8	large	shaft frags					
246	134	1	large	shft frg					
245	134	10	large	sk frgs					
355	134	1	ox	hum	l	10	m	m	lateral epicondyle frag.
239	135	1	horse	hum	l	40	m	f	y
240	135	2	large	shft frgs					
248	135	8	large	shft frgs					
250	135	1	medium	cerv		20			
251	135	1	medium	rib		10			artic ulation and part of shft
247	135	1	ox	fem	l	30	s	m	partially fused : head fused greater trochanter not fused.
249	135	1	ox	incisor					
258	136	1	horse	fem		20		y	broken. 4 pieces
259	136	10	large	shft frgs					
241	136	1	ox	tib	r	50	m	m	most of shft present
260	136	1	sheep	thorac		20			neural spine
432	137	1	sheep	LP		90			Lp4
431	137	3	un	frags					
290	138	1	ox	hum	r	30	m	m	
338	142	1	medium	shft frg					
354	145	1	medium	sk frag					

366	147	20	large	shaft frags				mostly fresh breaks- part of same bone.
365	147	1	ox	hum	l	5	m	medial epicondyle
301	170	1	horse	LP2	r	90		
305	170	1	horse	LP2	l	90		
302	170	2	horse	mand	l	5		condyle frgs
304	170	7	large	frgs				frgs
303	170	1	large	pelv		5		frg of acetabulum (pubis part)
306	170	1	ox	pelv	l	5		frg of acetab (ischium part)
226	175	1	horse	astrag	l	90		
230	175	1	horse	LM1	r	90		prob same jaw as others
231	175	1	horse	LM2	r	90		prob same jaw as others
227	175	1	horse	LP2	r	90		prob same jaw as others
228	175	1	horse	LP3	r	90		prob same jaw as others
229	175	1	horse	LP4	r	90		prob same jaw as others
299	175	1	horse	pelv	l	10		3 pieces. prob same bone. pary of acetab & illium
295	175	1	large	rib		10		
225	175	2	large	mand				frgs
296	175	1	ox	UM2		90		
297	175	1	ox	UP3		80		
298	175	3	un	frgs				
263	198	1	horse	astrag	r	90		
264	198	1	horse	UM		90		
457	198	1	horse	fem			u	frag of articulation distal femur.
442	198	8	large	frags				
456	198	22	large	frags				
271	198	3	large	scap frgs				
353	198	1	large	shaft frag		20	m	poss fem shaft.
262	198	10	large	tth				
270	198	1	ox	cran	l	5		lower orbit
274	198	5	ox	horncore				frgs. Not removed from skull.
268	198	1	ox	mand		5		coronoid process
269	198	1	ox	mand	l	10		part near symphysis
266	198	1	ox	scap	r	15	f	
265	198	1	ox	UM1/2		90		
352	198	1	ox	hum		5	u	frag of humeral head
272	198	1	sheep	rad	l	15	f m	
267	198	1	sheep	tib	r	20	f	bd=2.66
275	198	13	un	frgs				
273	198	7	un	sk frgs				
256	199	1	horse	UM		90		
437	199	1	large	caudal vert				fairly featureless but unfused
255	199	1	large	rib frg		10		
254	199	4	large	shft frgs				
252	199	1	ox	metat		50	m u	bone appears young & small
257	199	1	ox	patella		80		in 5 pieces
253	199	1	sheep	calc	r	50	f	slight pathological appearance of bone. 'Stringy' on surface of sustentaculum tali

436	200	4	large	frags					prob longbone epiph	
283	200	8	large	frgs						
289	200	44	large	shft frgs						
285	200	1	ox	atlas		10			3 pieces of bone not joining but prob same bone.	
284	200	1	ox	fem	r	10	m	m		
291	200	1	ox	fem	r	30	m	m		
288	200	1	ox	metac		100	f	f	broken into 3 pieces.	bp=6.11, bd=6.97, gl=19.5
282	200	1	ox	rad	l	40	f	m	in 5 pieces	
287	200	3	ox	sk frgs					poss 1 piece of occipital.	
286	200	2	ox	atlas?					frgs	
337	258	2	medium	shft frgs						
345	265	2	un	frags						
310	389	1	large	tarsal		10				
308	389	1	ox	mand		20			frg of tooth sockets. In 3 pieces.	
309	389	1	ox	mand		5			frg	
398	105/10/1	1	medium	sk frg						
397	105/10/1	10	un	frags						
396	105/10/2	2	medium	rib frags						
395	105/10/2	14	un	frags						
392	14/13/1	4	medium	shaft frags						
439	14/13/2	2	un	frags						
407	199/1/1	2	large	thoracic		5			frag of neural spine with posterior zygapophysis	
406	199/1/1	18	un	frags						
459	199/1/2	1	large	frags						
460	199/1/2	1	medium	rib frag						
404	199/1/2	44	un	shaft frags						
458	199/1/2	45	un	frags						
383	389/23/34	14	large	shft frags						
388	389/23/34	1	large	tooth frag						
384	389/23/34	1	medium	shaft frag						
389	389/23/34	1	ox	tib		5			shaft frag	
387	389/23/34	1	sheep	phal 1		90	u	f		
385	389/23/34	16	un	frgs					very small	
386	389/23/34	3	un	shft frags				y	burnt black	
416	70/5/1	2	medium	rad		10	m	m		
415	70/5/1	21	medium	shaft frags						
417	70/5/2	2	un	frags						
418	70/5/2	2	un	frags				y		
		926								