

THE EXCAVATION OF ROMAN, MEDIEVAL AND CIVIL WAR REMAINS AT TRENT LANE, NEWARK, NOTTINGHAMSHIRE

by

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INTRODUCTION

An archaeological strip and record exercise was carried out by Birmingham Archaeology at Trent Lane, Newark Nottinghamshire (centred on NGR SK 8025 5479, Fig 1) during July 2003. The work was commissioned by John Samuels Archaeological Consultants on behalf of Limes Developments Ltd as a condition of a planning application. Planning proposals included a new retail store with associated parking to the south-east and service parking and a garden centre to the north-east. John Samuels Archaeological Consultants also conducted a watching brief between August and November 2003, during the excavation of drains and foundation pads. All the archaeological work was carried out within the development area shown on Figure 2.

The site and its environs were the subject of two desk-based assessments (Appleton and Kinsley 1994; Kinsley 2002) that suggested a high potential for archaeology from several periods. A trial-trench evaluation of the site identified the presence of Romano-British ditches and the south-western corner of a Civil War defensive earthwork known as the King's Sconce. A layer of early post-medieval building debris and robbed wall trenches were also exposed towards the southern extent of the site.

The earliest archaeological features identified during the strip, map and record exercise were dated to the 3rd and 4th centuries AD, and comprised

enclosure ditches, several small gullies and an articulated skeleton with associated grave goods. Four post-holes located within the enclosure may represent the remains of a raised granary, but no dating evidence was recovered. Enclosure ditches in the north-eastern corner of the site, also dated to the 3rd and 4th centuries, were subject to 100% excavation prior to the construction of a pumping station. Foundation trenches located at the southern end of the site may be associated with remains from the medieval Hospital of St. Leonard, (later converted into a private dwelling known as Exeter House) which was destroyed during the Civil War. The southern-most bastion of a Civil War defence known as the King's Sconce was also identified within the site.

SITE BACKGROUND (FIGURES 1 AND 2)

The site is located c. 0.7 km from the centre of Newark and comprises a roughly 'L'-shaped area of ground. To the southwest is Trent Lane and to the southeast and northeast is Maltkiln Lane. The site lay between 13.2 and 14m above Ordnance Datum with the exception of spoil heaps and earthwork banks which comprise the remains of the Baird's Maltings, buildings destroyed by fire in 1990. The geology comprises Mercia Mudstone, which lies immediately to the north of a fragment of the lowest gravel terrace of the River Trent.

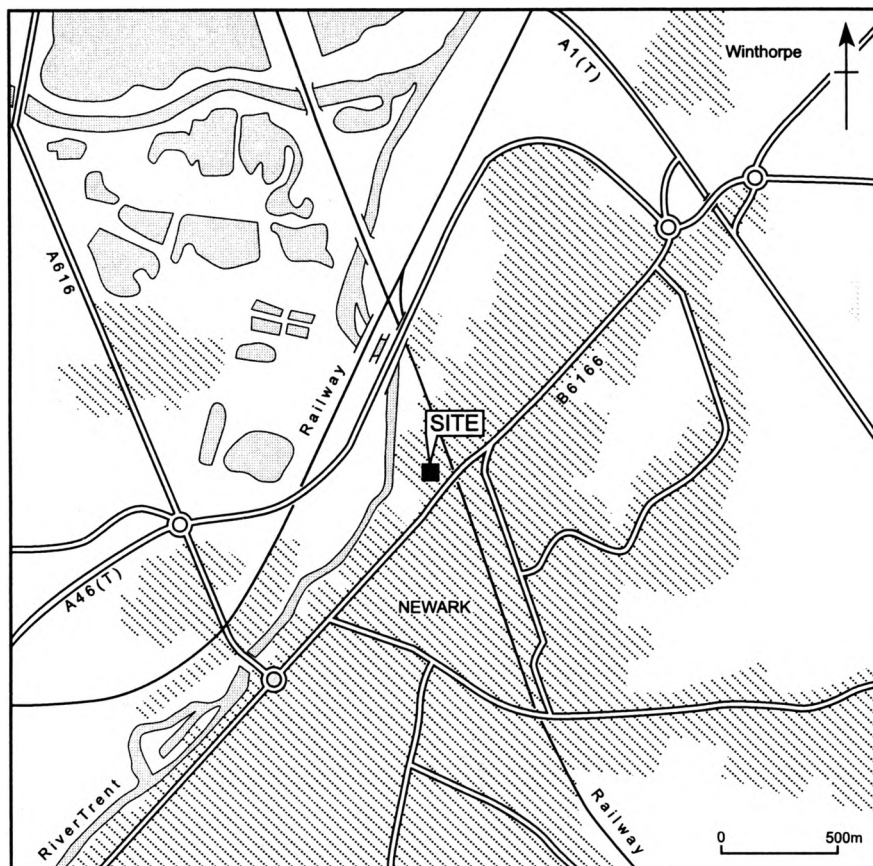


FIGURE 1: Location plan, Newark.

THE ROMANO-BRITISH PERIOD

North Gate lies approximately 25m to the southeast of the site. This overlies the Fosse Way, a Roman road linking Exeter, Leicester and Lincoln. In addition to this the site lies immediately to the northeast of the focus of an important and extensive Romano-British small town. Artefacts from previous excavations adjacent to the site spanned the 1st to the 4th centuries AD.

THE MEDIEVAL HOSPITAL OF ST LEONARD

It appears that the southern extent of the site lies within the boundary of the medieval Hospital of St Leonard. The exact date of the foundation of the Hospital is not known, although it must be prior to

1135 (Bishop 1983, 23). The hospital lay in the hamlet of Osmundthorpe. This was formerly in the area of North Gate from Queen's Road to the railway and consisted of a mansion house and church/chapel described in a chantry certificate of 1546. The hospital was founded by Alexander de Blois (Alexander the Magnificent) who was Bishop of Lincoln from 1123 to 1147. He was nephew of Roger, Bishop of Salisbury and emulated the building programmes instituted by his uncle (celebrated as the greatest builder of his age) by erecting castles at Newark, Sleaford, and Banbury. By 1609 the hospital was leased to William Cecil, Earl of Exeter, who embarked on an extensive building programme including a new house with stables and outbuildings. These works incorporated the refurbishment of the old hospital mansion. Following the death of the Earl in 1640 an Act of

Parliament mentions the new house as having been built before 1634 (Hodgkinson 1920, 57-57). The countess was granted a new lease for the refurbished property, and within three years was to build a new hospital property, enclosing one acre of ground. Thus the hospital was to move to a new site closer to Newark, though still on North Gate, with the old hospital and buildings constructed before 1634 becoming known as Exeter House.

The first possible evidence for the hospital was uncovered in 1929 when the grave of a priest was discovered close to the Fosse Way. Further excavation revealed structural remains including a section of walling, plasterwork and a beaten floor sealed by a thick burnt layer containing fragments of melted

glass and lead. The remains of 90 other individuals were also recorded (Fig 2; Bishop 1983, 25). These remains were interpreted as belonging to the hospital cemetery and possibly the church. Further work in 1979 excavated a minimum of 54 burials dated between 1133 and 1642 on the south side of a probable church (Fig 2) during engineering works on the Lincoln Road viaduct (Bishop 1983, 33).

THE CIVIL WAR AND THE KING'S SCONCE

As a Royalist stronghold, Newark was besieged in 1643, 1644 and 1645 during the course of the Civil War. As a result the town became surrounded by military defences and siege works, which were eventually mapped by an engineer in Cromwell's

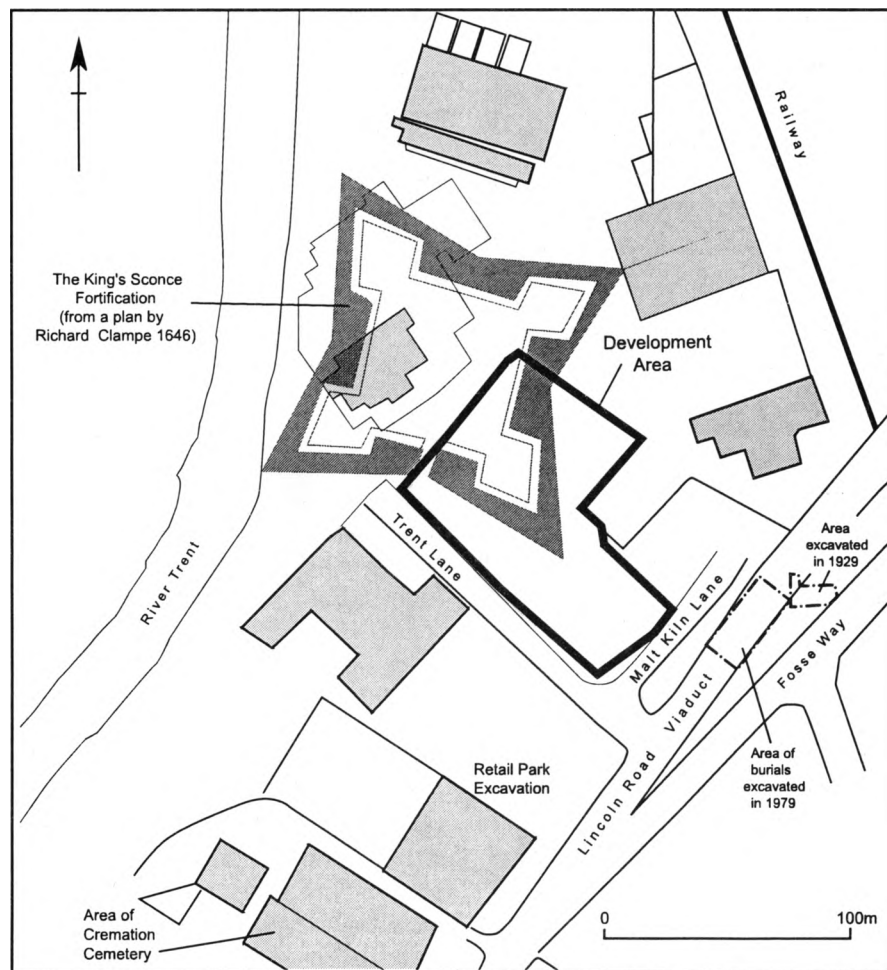


FIGURE 2: Site location and overlay of King's Sconce.

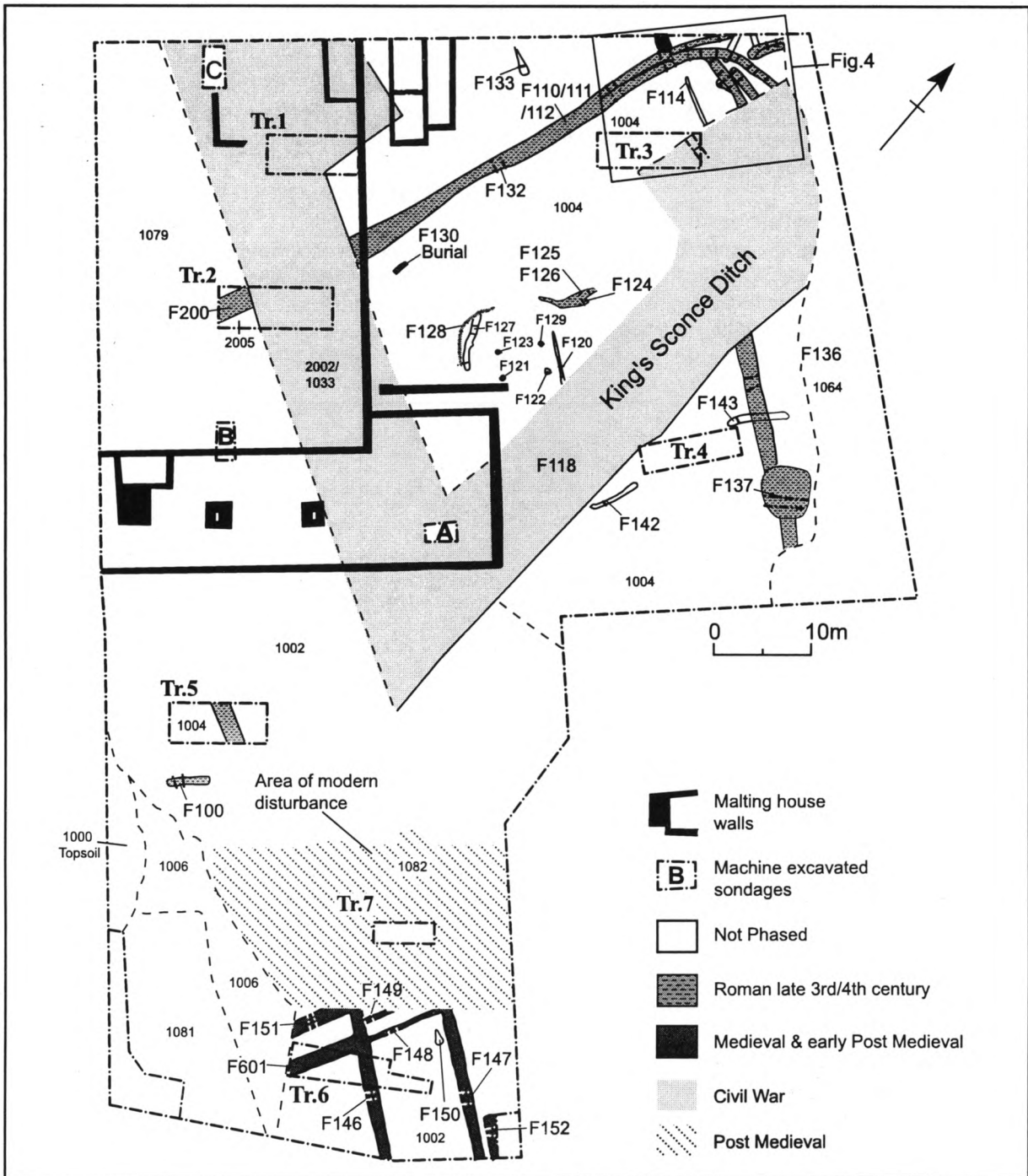


FIGURE 3: Plan of all Features.

army, Richard Clampe. Newark was never taken by the Parliamentary army and only surrendered to a large force of Scottish troops after the king was captured in May of 1646 (Holyoak 1997, 120).

The Civil War defences were first built in 1642 and enlarged in 1643 after the first siege. After the second siege in 1644 the ruins of Exeter House were demolished and the King's Sconce built adjacent to the site. This was one of a pair of defences constructed at the same time. The second defence, the Queen's Sconce remains as an earthwork to the southwest of the town and is of a similar size. Clampe's plan shows the sconce as a diamond shape with angle-bastions at each corner and a large ditch forming a defensive circuit on the outside. An entrance is shown to the southwest with two cannon pointing towards the northeast. As the sconce was constructed the upcast from the ditch would have been used to construct the bastions and ramparts. These would have left a low square in the middle of the fortification, which would have afforded protection to the garrison. At the end of the Civil War the local people were ordered to assist in the demolition of the fortifications. The King's Sconce lay within and to the north of the development area, with the southernmost part of the defensive ditch identified during the evaluation (Cuttler and Duncan 2003; Fig. 3, Trenches 1, 2 and 3).

THE LATE POST-MEDIEVAL

Towards the end of the 19th century the site comprised gardens and pasture. In 1866 the Midland and Great Northern Railway was constructed to the northwest of the development area. Between 1883 and 1900 Baird's Malting occupied the northern half of the site.

METHOD

Archaeological mitigation work involved a strip and record exercise during the reduction of the overburden in advance of the construction. No further archaeological work other than mapping was required on the King's Sconce ditch, although sections were hand excavated across other archaeological features. In some areas the uppermost archaeological horizon was not exposed (1002, 1064 and 1079, Fig 3), while

in other parts of the site the formation level stopped at the highest surviving level of archaeological remains (1004 and the very southern extent of the site). Areas of disturbance relating to the malthouse were removed by machine (Pits A, B and C, Fig 3). Changes to the design of a pumping station in the north-eastern corner of the site meant that the archaeology within the footprint could not be preserved in situ. All of the archaeology which was to be destroyed by the new scheme was therefore excavated and "preserved by record". A watching brief was finally conducted during the excavations for the foundation pads and drains. This detailed similar deposits to the strip and record and, where relevant, is included in the results. A full description is detailed within the post-excavation report (Cuttler and Ramsey 2004).

RESULTS (FIGURE 3)

The reduced level for the new store only reached the depth of the natural mudstone subsoil (1004) in the northern half of the site, suggesting that elsewhere the ground had been built up, most probably when the King's Sconce earthwork was levelled. Evidence for this comprised layers of red re-deposited clay over much of the site.

Roman (3rd- 4th centuries)

Evidence for activity during the Roman period was mainly characterised by enclosure ditches (Figures 3 and 4), which mostly cut the natural. However, within Trench 2 there was also a layer of grey silt and clay (2005) 0.2m in depth which was cut by the enclosure ditches. This layer may relate to earlier activity but produced no finds. The main enclosure, located at the northern extent of the excavation, appears to have been recut at least twice. Within what appeared to be the interior of the enclosure was a solitary burial.

The earliest ditch (F110, Fig 6, S1) may have formed an enclosure with an east-west aligned ditch (F106/F157, Fig 4, Fig 6, S2). During the watching brief this ditch and recuts (7002, JSAC) could not be excavated stratigraphically and therefore the finds cannot be attributed to a specific ditch. Other small gullies (F109, F156 and F161, Fig 6, S5) to the north and west of the enclosure may also be contemporary. The early enclosure (F110) was cut

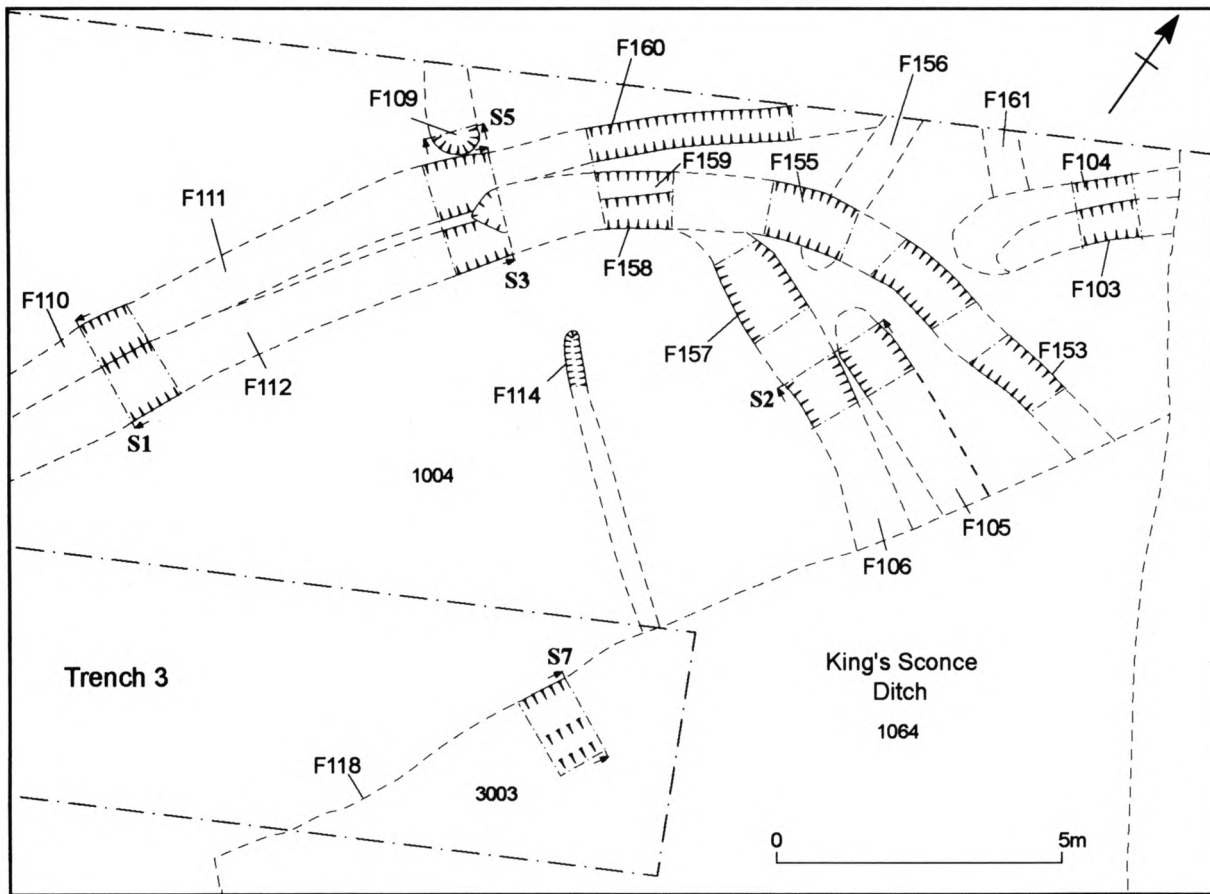


FIGURE 4: Features excavated in the northern corner.

by a later ditch (F111/F160), which continued northwards beyond the edge of the excavation. This may have formed a northern entrance with the western terminus of ditch F105. This may also have been the southern extent of another enclosure to the northeast, along with ditch F103 to the north. The final re-cut of the enclosure ditch (F112/F155/F158) cut all of the earlier ditches. This turned to the east (F153), and appeared to be respected by a north-south aligned ditch (F104) to the north.

Another ditch (F200) identified during the evaluation (Trench 2) may also be part of this system of enclosures. This ditch measured 1.4m in width, 0.6m in depth and produced Roman pottery sherds. It seems likely that this is a continuation of the latest recut (F112/F132). The enclosures were heavily truncated by the King's Sconce (F118), and were obscured by later layers 1064 and 1079 (Figures 3 and 5). The only feature exposed during the watching brief that was not identified during the initial works was feature 734, possibly a pit cut by narrow linear feature F143 (Fig 3).

During the evaluation a ditch (F506, Trench 5, Figures 3, 5 and 6, S4) of Roman date was subject to several recuts (F501 to F505), which were severely truncated by the final recut (F500). The deepest of these originally measured at least 1.10m in depth.

The extent of these ditches was not exposed during the strip and record, as the dig depth did not reach the natural subsoil. The alignment however, suggests it could form part of the system of enclosures at the north end of the site. While there was a small amount of 2nd century redeposited material from the enclosure ditches it is difficult to differentiate features chronologically on the basis of ceramic assemblage and most produced pottery dating to the late 3rd/early 4th centuries.

A rectangular grave-cut (F130, Figures 3 and 7), only 0.15m in depth was located inside the main enclosure. The skeleton lay on its back and was orientated north-south, with the skull at the northern end. The right arm was laid across the waist at right angles and the left arm was parallel to the body. A bone hair-pin (SF1) was resting on the right side of the skull, and a copper alloy earring/bracelet (SF2) was recovered from just below the right side of the skull. The majority of the long bones were present and intact, while the skull, ribs, pelvis, metacarpals, tarsals, metatarsals, and phalanges were present but broken. The fill of the grave cut (1046) contained Roman pottery.

Four post-holes (F121, F122, F123 and F129) were set in a rectangular pattern roughly 2.5m wide and 5m long. These post-holes were approximately 60cm in diameter, and were packed

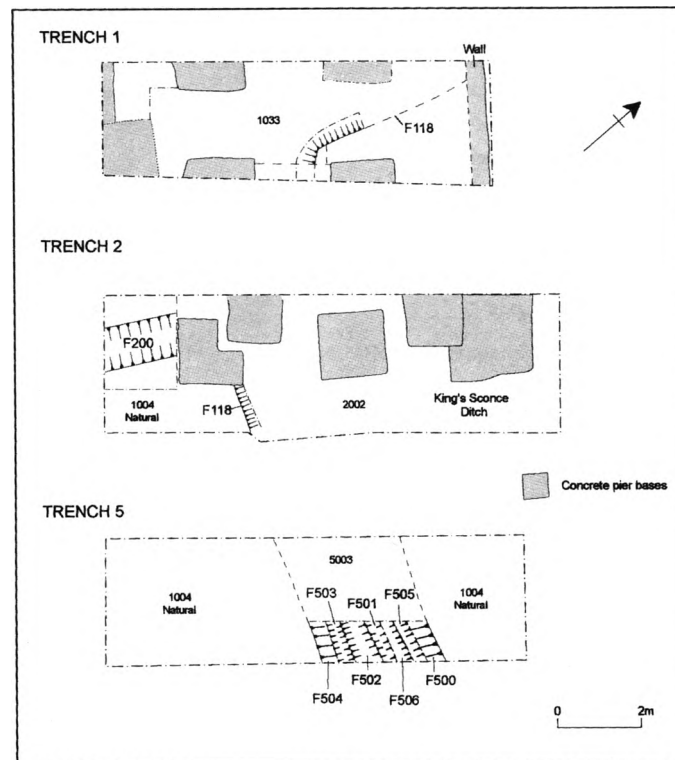


FIGURE 5: Evaluation trenches 1, 2 and 5.

with fragments of stone. Part of a curvilinear gully (F128) and four irregular gullies (F124, F125, F126 and F127) were located within the enclosure. To the south of Trench 5 was a short ditch (F100), aligned northeast-southwest. This ditch was approximately 1m wide and the fill (1003) produced Roman pottery. A large, shallow scoop (F137; 730/7016, Fig 3) was identified in the north-east corner and appears to be one of the latest Roman features on the site. This pit truncated the upper fills of the enclosure ditch F136, and was filled with two layers of brown silt (1055 and 1054) which contained Swanpool colour-coated ware, Dales shelly ware, Nene Valley colour-coated ware, whiteware mortaria and large quantities of East Midlands grey ware. This dates the group to the second half of the 4th century.

Medieval to Early Post-Medieval

At the southern end of the site a layer of red-brown silt (1002) was cut by a series of foundation trenches (F146 to F152 and F601). These would appear to be robbed out foundation trenches. No internal features or floor surfaces remained and a paucity of finds means that the dating of these features cannot be secure.

The foundation trenches were cut with steep sides and a flat base, approximately 1m to 1.4m wide and 0.4m deep, with fills

comprising mostly mortar and broken stone. Two main trenches were aligned east-west (F146 and F147, Fig 6 S8 and S9) with the northern most (F147) producing fragments of brick/tile and a clay pipe stem. Two narrower trenches (F148, F149) were on a north-south alignment, with the base of one (F149) filled with larger stones. Trench F151 (Fig 6, S6) and F601 continued further to the south, but were sealed by pebble layer 1006. Since the trenches clearly cut layer 2002 (a layer of silt sealing later Roman features) it seems unlikely that these foundations relate to a Roman building. An area of modern disturbance (1082) to the north also truncated the northern extent of these features.

Civil War

A large defensive ditch (F118, Figures 3 and 6) forming the southern corner of the King's Sconce dominated the northern half of the site. Figure 3 shows a plan of the ditch which measured 11m wide, increasing in width to 20m at the northern corner of the site. The western side of the ditch was truncated by the malthouse wall foundations, and also obscured by a mixed layer of re-deposited natural clay and rubble (1079).

Sections across the ditch (F118) were excavated to a depth of 1.5m (Fig 6) but not to the base of the ditch. The profile was steep

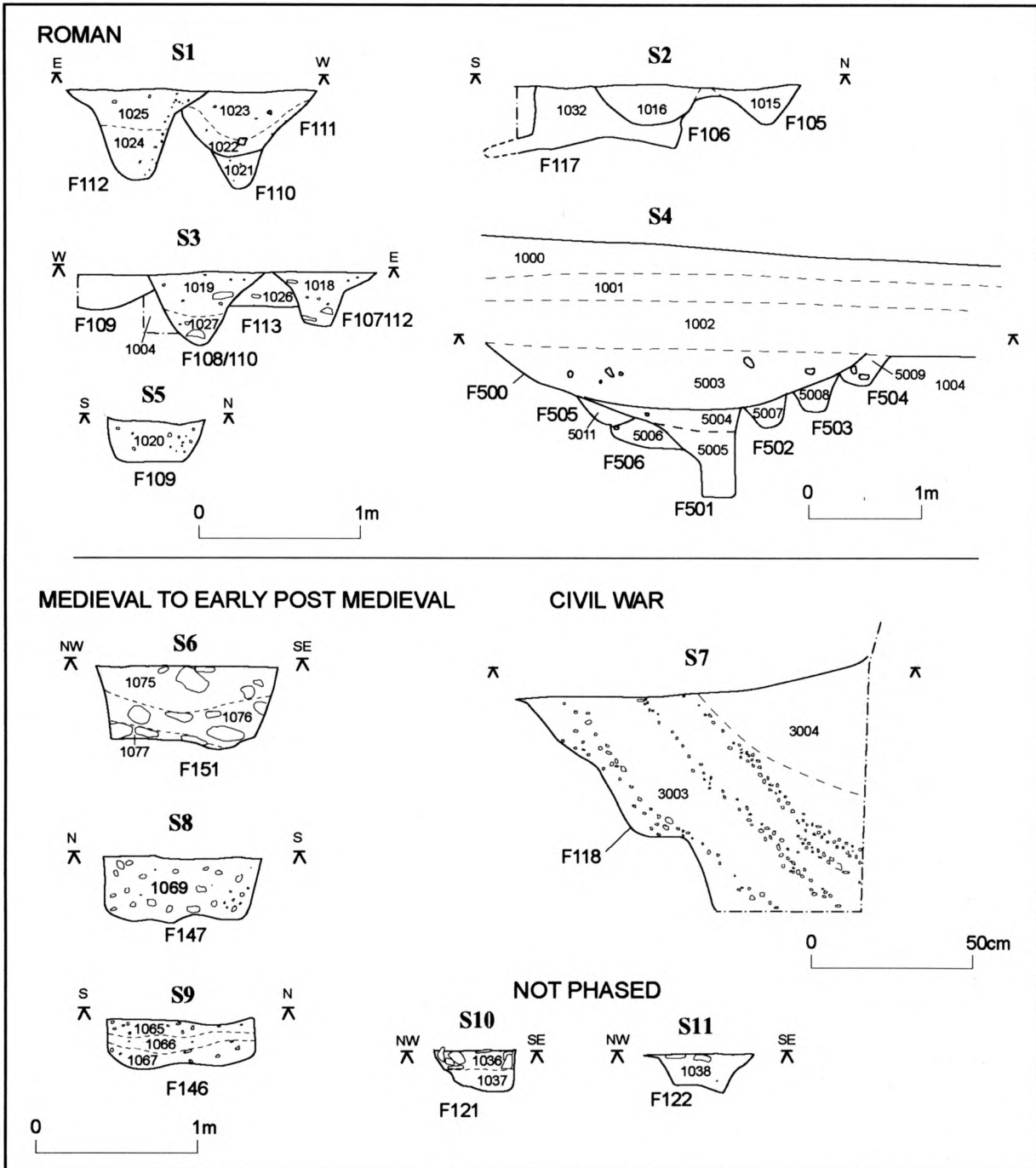


FIGURE 6: Sections.

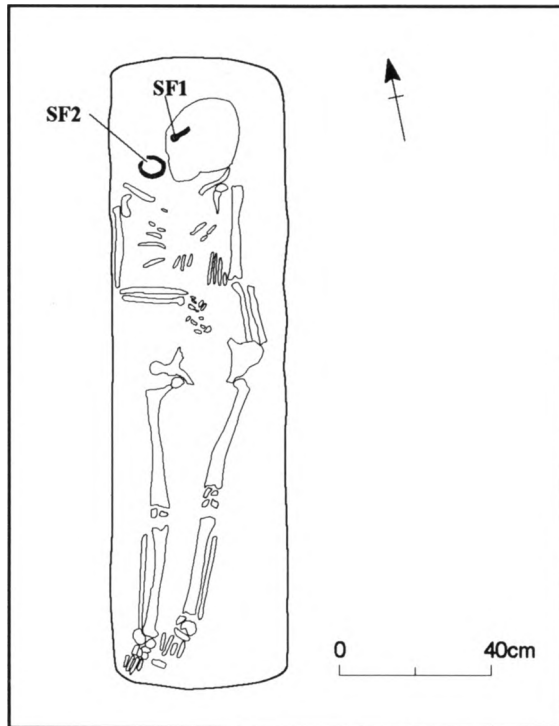


FIGURE 7: The Burial.

and the fill comprised loose brown silt and clay with numerous small, sub-angular stones (2004 and 3003, Trenches 2 and 3). This was sealed by an upper fill of brown silt and clay (1033, 2002, 2003 and 3004, Trenches 1, 2 and 3), which may be the result of deliberate backfilling from the demolition of the Sconce. The sections excavated during the evaluation, strip and record and the watching brief have provided a clear plan of the ditch within the development site. The layers and deposits of rubble, re-deposited natural, and silt present over the north-east (1064), west (1079) and south (1001, 1006, 1081) may also be associated with the levelling of the King's Sconce earthwork, and the raising of the ground level.

Post-medieval

Evidence for activity during the post-medieval period comprised the wall foundations and concrete piers of the malthouse, and associated drains.

The walls consisted of a concrete foundation, approximately 1m deep and 1m wide, and survived to a height of 3-4 courses, which were approximately 0.4m wide. Two to three courses of brickwork were removed and the concrete malthouse pier bases grubbed out to a depth of approximately 0.4m. These cut the fill of the Sconce ditch (1033) and deposits of re-deposited natural and rubble (1079). Deeper areas of modern disturbance removed relate to the sack hoist, the grain elevator and the grain store of the malthouse. There were no basements or cellars relating to the malthouse.

Features not phased

Several small, undated features cut the natural in the northern part of the site. The majority of these were shallow gullies (F114, F120, F133, F142 and F143/732).

THE FINDS

Romano-British Pottery

By Jane Timby

A moderately small assemblage of some 872 sherds of Romano-British pottery weighing 16.6 kg was recovered from the evaluation, strip and record and watching brief. The complete assemblage appears to date to the later Roman period, specifically the 3rd-4th centuries. The sherds are quite well preserved and in fairly fresh condition reflected in an overall average sherd weight of 19g.

The sherds were examined macroscopically and sorted into fabrics based on the type, size and frequency of the inclusions in conjunction with firing colour and surface finish. Named traded or specialist wares are coded using the National Roman fabric reference collection codes (Tomber and Dore 1998). Local wares, or wares of unknown provenance, are coded specific to this report. The entire assemblage was quantified by sherd count, weight and rim EVE (an estimated vessel equivalence based on totalling the percentages of rim present). The data was entered onto an Excel spreadsheet, a copy of which is deposited with the site archive. Table 1 provides a quantified summary of the defined fabrics. Details such as decoration, surface finish and evidence of use (sooting for example) were also noted.

Fabric descriptions and associated forms

Continental imports

Samian: Just four very small sherds of samian are present.

Moselkeramik black slipped ware (MOS BS) (Tomber and Dore 1998, 60). Two sherds from a folded beaker came from pit/ditch F100.

Amphora: A single bodysherd with a handle springing from a *Camulodunum* type 186C amphora (Peacock and Williams 1986, class 18) came from context 1008. This amphora, made near Cadiz, Southern Spain was usually used for fish-based products and is probably residual here.

Regional imports

Dorset black burnished ware (DOR BB1) (Tomber and Dore 1998, 127). Two sherds of Dorset black burnished ware came from gully F127 and ditch F506 respectively, the former a jar, the latter from a 3rd century grooved rim bowl.

Lower Nene Valley colour-coated ware (Tomber and Dore 1998, 118); *Lower Nene Valley white ware* (Tomber and Dore 1998, 119).

Table 1: Romano-British pottery quantification

	Fabric	Description	No	%	Wt	%	EVE	%
Imports	CGSAM	Central Gaulish samian	4	0.46	3	0.02	0	0.00
	MOS BS	Moselkeramik black slip	2	0.23	6	0.04		0.00
	Cam 186	Spanish amphora	1	0.11	334	2.00	0	0.00
Regional	DOR BB1	Dorset black burnished ware	2	0.23	18	0.11	7	0.67
Local	LTC WH	Lincoln College mortaria	3	0.34	77	0.46	5	0.48
	LNV WH	Lower Nene Valley whiteware	10	1.15	416	2.50	42	4.01
	LNV CC	Lower Nene Valley colour-coat	48	5.50	662	3.97	81	7.74
	SWN CC	Swanpool colour-coat	3	0.34	168	1.01	1	0.10
	SWN WS	Swanpool white-slipped ware	2	0.23	115	0.69	0	0.00
	DAL SH	Dales shelly ware	92	10.55	1535	9.21	63	6.02
	EMID RE	East Midlands grey ware	404	46.33	9592	57.56	471	44.99
	EMID OX	East Midlands oxidised ware	3	0.34	22	0.13	18	1.72
	BW	black sandy ware	31	3.56	310	1.86	33	3.15
	BWF	fine black ware	2	0.23	3	0.02	0	0.00
	BWMIC	micaceous black ware	8	0.92	51	0.31	21	2.01
	GW1	Grey ware	26	2.98	421	2.53	54	5.16
	GW2	Grey ware	30	3.44	482	2.89	15	1.43
	GW3	Grey ware	162	18.58	2028	12.17	157	15.00
	GW4	Grey ware	4	0.46	38	0.23	20	1.91
	GW5	Grey ware	20	2.29	232	1.39	34	3.25
	GWLI	Grey ware with limestone	8	0.92	98	0.59	25	2.39
	GWF	fine grey wares	7	0.80	54	0.32	0	0.00
TOTAL			872	100.00	16665	100.00	1047	100.00

Lower Nene Valley colour-coated wares are moderately well represented accounting for 5.5% by sherd count of the assemblage. Featured vessels include plain-rimmed dishes (Fig 8.5), flanged bowls and jars largely dating to the 3rd-4th centuries. Ten sherds of whiteware are also present including at least five mortaria, four with hammer-head rims (Fig 8. 1) and one with a reeded rim. One mortarium sherd from ditch F136 is partially burnt.

Local wares

Dales shelly ware (DAL SH) (Tomber and Dore 1998, 157; Loughlin 1977).

Handmade Dales ware or Dales-type wares account for 10.6% of the assemblage by count, 9.3% by weight. The featured vessels all appear to comprise jars with everted rims (Fig 8.3: 8, 11). Dales ware is renowned for the conservatism of its forms (Loughlin 1977) and remained basically unchanged from its inception in the later 2nd century through to the later 4th century.

Lincoln Technical College white ware (LTC WH) (Tomber and Dore 1998, 160). Three mortarium sherds present from ditches F153, F158 and F160 are probably redeposited. Production of this ware is thought to date to the 2nd century (Darling 1977, 34).

Swanpool colour-coated ware (SWN CC) (Tomber and Dore 1998, 163; Darling 1977). *Swanpool white-slipped ware* (SWN WS) (Tomber and Dore 1998, 164).

Just three sherds of Swanpool colour-coated ware were recovered from pit F137 and ditch F159 and two sherds of white-slipped ware, one from a mortarium, from ditch F111 and recut ditch F500. This late Roman industry saw its maximum period of

production in the second half of the 4th century although its origins may lie in the later 3rd century (Darling 1977, 36).

East Midlands burnished grey ware (EMID RE) (Todd 1968). Hard fired light grey wares with frequent use of burnishing are very common accounting for some 46% by sherd count and 58% by weight. This ware belongs to the group defined by Todd (1968), which became extremely common in the East Midlands in the later Roman period. Forms include large wide-mouthed bowls (Fig. 8.2, 7), large jars with rolled beaded rims (Fig 8.4), narrow and wide-mouthed jars (Fig 8.6, 14, 16), cupped mouthed jars (Fig 8.10), flanged bowls (Fig 8. 9, 13), other bowls (Fig 8.12) and straight-sided dishes (Fig 8.15).

Grey wares

GW1: A grey sandy ware with a grey core with brown margins. The sandy paste contains grey argillaceous inclusions. Featured sherds include jars and curved wall dishes.

GW2: A hard, dark grey-black ware with a sandy texture. The core is brown with a grey inner core. The paste contains some mica and a common frequency of moderately well sorted rounded quartz and a scatter of dark brown, fine argillaceous pellets. Vessels include jars and a flanged rim bowl. A vessel with a handle springing came from ditch F501.

GW3: A light grey, hard sandy ware. Not as highly fired as the East Midlands ware. Mainly occurs in jar forms and occasionally flat rim bowls.

GW4: A very hard, well-fired dark blue-grey ware with a bright orange-red semi-vitrified core. At x20 magnification sparse fine sub-angular to angular quartz and iron grains are visible. Represented by a single vessel, a jar with burnished decoration (Fig 8.17).

GW5: A uniform dull grey ware with a fine sandy, slightly powdery feel. At x20 magnification the paste shows a sparse scatter of visible fine angular quartz and no other inclusions. Very even textured. Vessels, mainly jars and less commonly bowls are burnished or have burnished decoration.

GWF: A very fine grey sandy ware with a smooth finish and no macroscopically visible inclusions. The only rim is from a beaker.

BWF: A fine black sandy ware. Represented by a single sherd decorated with a burnished line.

BWMIC: A dark grey-black ware with a red-brown core and light grey inner core. The paste is very micaceous and contains a sparse scatter of sub-angular to rounded, ill-sorted quartz. A small group amongst which is a bowl and a jar with a grooved rim.

BW: A moderately hard, black sandy ware. The paste contains a moderate to common frequency of well-sorted quartz sand. Included in this group is a single handmade thick-walled sherd with a striated surface recovered from the watching brief. Forms include flanged bowls, disc-necked flasks, bowls and jars. A loop handle came from ditch 111.

GWL1: As GW 2 but with a sparse scatter of limestone and fossil shell fragments. All the sherds are from jars.

Pottery was associated with some 31 individual features with an additional 25 sherds recovered from the topsoil. With the exception of pit F137 which produced some 212 sherds (3247g) most of the individual assemblages are quite small. Slightly larger groups came from four ditches (F112/F155/F153; F106; F111/F160; F503/506): a total of 169 sherds (5886g). It is thus difficult to discriminate many of the features chronologically on the basis of the pottery and it is clear there is a small amount of redeposited material dating to the 2nd century. On the basis of the fineware it is suggested that the earlier features, dating to the 3rd century, include ditch F153, gullies F100, F124 and F128. Features containing types which cannot date before the late 3rd century and thus could be late 3rd or 4th century, include ditches F155 and 157. Pit 137 appears to be one of the latest Roman features on the site and this produced two of the three Swanpool colour-coated wares along with Dales shelly ware, Nene Valley colour-coated ware and whiteware mortaria and large quantities of East Midlands grey ware. The group would appear to securely belong to the 4th century, probably the second half. The other Swanpool sherds were associated with recut ditch 500, ditches 108 and 159 and these features could also potentially date to the 4th century.

Table 2: Summary of forms by EVE (% rim)

Form	EVE	%
<i>Jar total</i>	740	71.64
<i>Jar/beaker</i>	25	2.42
<i>Beaker</i>	23	2.23
<i>Bowl/dish</i>	168	16.26
<i>Mortaria</i>	47	4.55
<i>Lid</i>	18	1.74
<i>Jug</i>	12	1.16
TOTAL	1033	100.00

The assemblage would appear to belong to one main phase of activity spanning the 3rd and 4th centuries. East Midlands grey ware very much dominates the group accounting for some 46% by count, 58% by weight with other grey wares contributing a further 34% by count (22% by weight). Continental imports are notably sparse and although this is partly a reflection of the lateness of the group, it also suggests a very locally based economy. There is just a single amphora sherd, (NOT the ubiquitous Dressel 20 olive oil type) two sherds of Moselkeramik blackslipped beaker, and four very small sherds of samian. Overall, traded and specialist wares account for 8.67% by count of the assemblage, over half of this being contributed by Nene Valley colour-coated ware. This is perhaps higher than one might expect for a rural site but on the low side for an urban site. In terms of forms (Table 2) the total estimated vessel (rim) equivalent (EVE) for the assemblage is 1033. The assemblage is dominated by jars, 71.64% (EVE) followed by bowls/dishes at 16.26%. This pattern could perhaps again be seen as more typical of a rural assemblage (*cf.* Evans 2002) but there are few other quantified assemblages from the region with which to make comparisons.

The medieval and post-medieval pottery

By Stephanie Ratkai

Medieval Pottery

Four medieval sherds were recovered from the site:

Topsoil (1000)

Wheelthrown, olive-glazed, gritty sherd, 13th-14th centuries
Unglazed wheel-thrown body sherd, orange surfaces and margins, grey core, 13th-14th centuries.

Context (1001)

Olive glazed, ribbed rod handle in a sandy pale grey-pale orange Nottingham-type sandy ware, 13th-14th centuries.

Context (1011)

Sandy, dark green glazed jug rim sherd, internal surface and margin orange, external surface and margin pale grey, dark grey core, 13th-14th centuries

The glazed medieval pottery may have been made at Nottingham or possibly Lincoln, although the former is perhaps more likely since the Trent would have provided access to Newark from Nottingham.

Post Medieval Pottery

Ten post-medieval sherds came from topsoil (1000), (1007) or were unstratified. All but one of these sherds were later 19th or 20th century in date. One unstratified brown-glazed base sherd was stamped ROCKINGHAM. The only sherd possibly earlier than these sherds was a coarseware rim from a large bowl, which could have been 18th or 19th century in date.

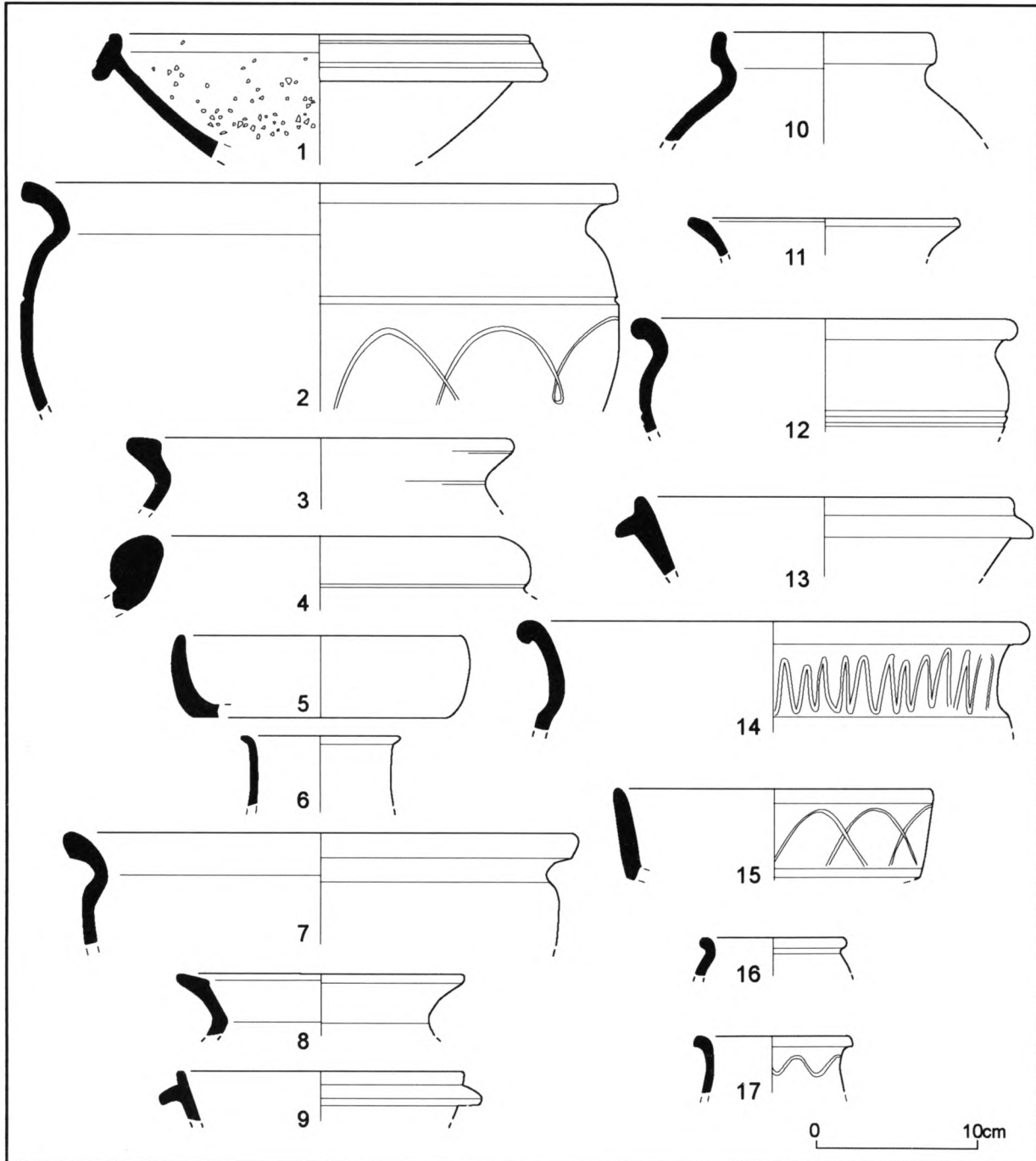


FIGURE 8: The Roman pottery forms.

- Fig 8 1. Hammer-head mortarium. Fabric: LNV WH. Gully F100 (1003).
 Fig 8 2. Large bowl decorated with a burnished line. Fabric: EMID RE. F101.
 Fig 8 3. Wide-mouthed jar. Fabric: DAL SH. Feature F200 (2007).
 Fig 8 4. Large rolled rim jar. Fabric: EMID RE. Ditch F158 (1088).
 Fig 8 5. Plain rim dish. Fabric: LNV CC. Black colour-coat; sooted on the lower exterior. Ditch F158 (1088).
 Fig 8 6. Narrow-necked jar. Fabric: EMID RE. Ditch 159 (1089).
 Fig 8 7. Bowl with a rolled undercut rim. Fabric: EMID RE. Ditch F159 (1089).
 Fig 8 8. Jar. Fabric: DAL SH. Ditch F157 (1087).
 Fig 8 9. Flanged bowl. Fabric: EMID RE. Ditch F157 (1087).
 Fig 8 10. Cup-mouthed jar. Fabric: EMID RE. F160 (1090).

- Fig 8 11. Jar. Fabric: DAL SH. Pit F137 (1054).
 Fig 8 12. S-shaped bowl. Fabric: EMID RE. Pit F137 (1054).
 Fig 8 13. Flanged rim conical bowl. Fabric: EMID RE. Pit F137 (1054).
 Fig 8 14. Wide-mouthed jar with burnished line decoration. Fabric: EMID RE. Pit F137 (1054).
 Fig 8 15. Plain-rimmed dish with burnished line decoration. Fabric: EMID RE. Pit F137 (1054).
 Fig 8 16. Small beaded rim jar. Fabric: EMID RE. Pit F137 (1054).
 Fig 8 17. Narrow-necked jar decorated with a wavy burnished line. Fabric: GW4. Pit F137 (1054).

Other Finds By Erica Macey-Bracken

Coins – Identifications by Dr. R. White

A Roman coin (1033) was recovered from the upper fill of the King's Sconce ditch (F118). The coin was a coin of Constantinopolis, issued between 330 – 337AD. This coin was in better condition than the jetton, although the mint marks were unreadable.

A late medieval jetton was recovered from the evaluation (F202, 2004). The jetton was a Hans Krauwinkle piece, dating to the 16th/17th century. Only one face was legible, the other worn beyond identification.

Copper Alloy – Identifications by Dr. R. White

A near-complete copper alloy bracelet (1046) 3mm thick, with a diameter of 59mm, was recovered from the burial (F130). The bracelet is not diagnostic, but is of late Roman date. A second bracelet was recovered from a large pit (F137). The bracelet had been flattened and broken into three pieces and was of Roman appearance. It measured 4mm in width with a chevron pattern on the largest piece, although this was partially obscured by corrosion. This fragment also had the remains of a circular opening that had formed part of the clasp; a small hooked end could be seen on one of the other fragments. It cannot be assumed that bracelets and other ornaments are found solely within female burials. While hairpins may be seen as exclusively female ornaments, there are a number of examples of males buried wearing bracelets (Philpott 1991, 144).

Worked Bone

An incomplete bone pin (1046, SF1) with a circular shaft 3mm thick and a slightly flattened globular head 9mm in diameter was recovered from the burial F130. The item was found in close proximity to the skull, suggesting that it was probably a hairpin. The length of hairpins varied with different hairstyles, although shorter pins tend to be of a later date than longer pins. The surviving sections of the pin measure 90mm in length, but as the shaft has broken, the original length of the pin is uncertain. Lying close to the skull (Fig 7) the pin seems likely to be a hairpin rather than a shroud fastener. Glass and metal hairpins are also found close to or on the skulls of female burials of this date from Butt Road, Colchester (Crummy 1983, 19), and it would seem reasonable to suggest that the pin that was recovered from the grave F130 had served the same purpose. Pins are regularly found in male graves as shroud fasteners, though not as hair ornaments (Philpott 1991, 144). Romano-British inhumations with hairpins are found from the 2nd to 4th centuries.

A second pin fragment with a flattened globular head 9mm in diameter was recovered from a large pit (F137, 1054). Only 56mm of the pin survived, and its original size is difficult to estimate. Crummy has established a chronology for six different types of bone pin recovered from excavations at Colchester (Crummy 1979, 157 – 63), and it would appear that both pins are of Crummy's Type 3A (Crummy 1983, 21 – 22), with globular heads and a slight swell to the shaft. Since both pins are of similar style, and both were recovered from features containing well-dated pottery, a 3rd and 4th century date seems likely.

Ceramic Tile and Brick

The majority of the tile was of Roman appearance and was recovered from the Roman enclosure ditches in the northern area of the site. The tile assemblage consisted of 33 fragments of tile, weighing 2244g. The tile was fragmentary, and no complete examples were noted. With the exception of a fragment of *tegula* (1030), a piece of *imbrex* (1000) and small fragment of *tubulus* (U/S) most of the tile was not diagnostic. The *tegula* retained the flange and part of a cutaway on the reverse of the flange. The *imbrex* showed comb marks and was more abraded than the rest of the assemblage.

Clay Pipe

Three complete pipe bowls (2008-F118), a bowl fragment (2003-F118) and sixteen pipe stems were also recovered (1069-F147 x 1, 2003-F118 x 10, 2008-F118 x 5). Except for a single band of rouletting around the top of the bowl all of the stems were plain. One of the bowls has an indistinct mark on the flat heel, which may originally have been a stamp, but is too worn to identify with any certainty. The three bowls were identical in size and shape and are of early 17th century date (Ayto 1999, 2 and 5). The pipes are possibly not a local product as Newark's first recorded clay pipe maker, James Headon, was working towards the end of the 17th century (Hammond 1985, 86), and no earlier pipe makers are recorded in the area.

Iron Objects

The iron assemblage consisted of twelve items, weighing a total of 129g. Some of the iron was not diagnostic (1054 x 2, 2003 x 1). The identifiable iron items included a nail (1003) recovered from a Roman linear feature (F100), and a second nail (1002), which was found in a layer between the medieval/early post-medieval linear features F146 and F147. Seven hobnails were also recovered from the burial (F130, 1046). These were recovered from around the area of the feet and had come from the footwear worn by the deceased. Studies would suggest that there is no significant variation on the basis of sex between burials with, and burials without, hobnails (Keegan 2002, 97).

Other Finds

Small quantities of oyster shell, weighing a total of 119g, were recovered from the Roman enclosure ditches and are probably domestic refuse.

A single creamy-white tessera was recovered from an undated linear feature (F127, 1048).

THE HUMAN BONE By Rachel Ives

The burial of an articulated individual was excavated from a rectangular cut (F130, Figures 3 and 7). The bone surface preservation was generally quite poor with some regions such as the pelvis suffering removal of the outer layers of bone (Grade 4) by taphonomic variables such as root action or soil abrasion (Brickley and McKinley 2004). The skeleton was assessed as approximately 25-50% complete (following Buikstra and Ubelaker 1994), with poor survival of the majority of the vertebrae and ribs. The skull and pelvis were incomplete and

consequently a sex could not be assigned to the individual. Residual traces of epiphyseal fusion lines were observable on the distal fibula and distal ulna. These regions typically fuse between 12-18 years (fibula combined sexes) and 15-20 years (ulna combined sexes). However, the near complete degree of fusion at these sites as well as the completed fusion of the femoral heads indicates that this individual was most probably a young adult.

While most of the long bone shafts were present, the majority of the joint surfaces did not survive. Overall, there was little evidence for pathology on the bones of this individual. The distal left ulna joint surface presented a small patch of osteoarthritis evident as an eburnated or polished bone surface caused by direct bone articulation of the distal ulna with the distal radius. Unfortunately, the corresponding part of the radius did not survive. This type of joint disease can occur as a result of age-related degeneration of the joint capsule, or can develop as a secondary response to trauma. Roberts and Cox identified an

increase in the prevalence of joint disease apparent between the Iron Age and the Roman period in Britain, including joint disease at the wrist (2003, 145). This pattern could be related to differences in working habits or lifestyle between the two periods. The only other evidence for pathology on this individual was dental enamel hypoplasia, whereby 8 of the 27 teeth observable showed one or more linear enamel defects (the individual teeth affected are summarised below). Dental enamel defects can be caused by periods of stress such as a dietary deficiency or childhood illness occurring during the development of the tooth. A disturbance in enamel deposition can also occur in relation to a trauma (Hillson 1996, 165; Roberts and Cox 2003, 51). When the stress or illness has been overcome enamel deposition resumes and residual pits or grooves in the tooth surface can be recognised. Roberts and Cox also noted an increase in the number of dental defects apparent between the Iron Age and Roman periods in Britain and they suggest this trend may indicate a poorer diet or an increase in childhood illnesses during the Roman period (2003, 140).

Summary of the observable bones and teeth.

Age: Adult

Sex: Indeterminate

Stature: Indeterminate

Preservation: Variable, Grade 4 in worst areas

Completeness: 25-50%

Bones present: fragmentary left and right parietals, temporals, maxilla, mandible, partial frontal and sphenoid. Right orbit present. Five fragments of un-sided rib shaft. Very fragmentary vertebrae. Left and right humeri, ulnae, radii, femora, tibiae and fibulae. Proximal femoral joint surfaces and left distal ulna present. Part of the left distal tibia and right distal fibula joint surface present. Iliac less than 25% complete; no ischia or pubes present. Partial right scapula (less than 25%). Partial left and right clavicles and left patella present. Various foot bones present.

Dentition:

L1					L2					L2	L1	L1	L1	L1	
1	2	3	4	5	6	7	8	/	10	11	12	13	14	15	16
32	31	30	29	28	/	/	25	24	23	22	21	20	19	18	17
U										L1					U

Notes: 1 = right maxillary third molar, 16 = left maxillary third molar, 17 = left mandibular third molar, 32 = right mandibular third molar. / tooth missing post-mortem. U tooth unerupted. L linear enamel hypoplasia, number refers to number of lines observable.

Dental pathology: no caries, calculus (1/27) (tooth 24). No abscesses. Results of tooth wear and periodontal disease are in paper archive.

Non-metric traits: N/A

Skeletal pathology: Osteoarthritis of distal left ulna.

A single human vertebra came from an undated context, and showed signs of extensive exostosis, possibly caused by some form of degenerative disease such as arthritis.

THE ANIMAL BONE

by Matilda Holmes

The majority of bones came from Roman contexts and nearly all other fragments were undated. As a result, only the Roman assemblage will be considered during this report. The bones were generally in good condition, only 11 were burnt, and 36 had been gnawed. A number of articulated remains were found dated to the

Roman period – the front leg and partial skeleton of a dog were found in contexts 1012 and 1088 respectively, a partial horse skull came from 7018, and a cattle hoof from context 1022. A nearly complete domestic fowl (chicken) skeleton came from the undated context 1085.

Table 3: Species present (fragment count)

Species	Roman		Medieval	Civil War	Undated
	n	%	n	n	n
Cattle	134	49	1	1	11
Sheep	3	-			1
Sheep/Goat	82	31	1		3
Pig	12	4		1	
Horse	28	10			9
Dog	15	5			
Chicken	1	-			24
Human		1			
Total Identified	275		2	2	49
Unidentified mammal	198				5
Unidentified large	210				4
Unidentified medium	79				4
Unidentified small	2				
Total	764		2	2	62

Fusion and tooth wear data, used to age the animals in the assemblage was not abundant, although results from the two methods gave similar results. Many cattle died as mature adults, although a large number were culled at around 3 years of age, and a few before reaching 18 months. Only 15 sheep bones produced ageing data. Most were fused, indicating a population that died after reaching 3 years of age, although there are examples of animals that died before 28 months. The two pig bones suitable for ageing came from animals between one and two years at death. All dog and horse bones were fused. The horse mandibles came from an individual older than 3½ years at death. The only pathological animal bone was a cattle maxilla showing evidence of periodontal disease, which may have been caused by infection of the gums.

Two cattle bones were complete enough to use to calculate withers heights of 1.12m and 1.17m, respectively, and two sheep bones gave shoulder heights of 0.62 and 0.61m (using indices from von den Dreisch and Boessneck 1974). Animals of similar sizes are documented at sites in Chichester, Leicester and Chelmsford (Luff 1992).

Conclusion

The high fragmentation of the assemblage, coupled with the presence of butchery marks on limb, mandible and pelvis bones of cattle, sheep and horse, points to the deposition of food waste. Evidence for the consumption of horses is found on other Roman sites such as Winchester (Maltby 1994). The relative proportions of the main domestic species are similar to those described by King (1984) as indicative of 'Romanised settlements', as opposed to native sites where sheep may be expected to predominate in the assemblage, or military sites where cattle and horses are found in much higher numbers.

THE PLANT REMAINS *by Val Fryer*

Introduction

Twenty litre samples for the extraction of the plant macrofossil assemblages were taken from contexts that were perceived to be both secure and as having produced good dating evidence.

Curvilinear gully F127	Context [1048]	Sample 1
Burial cut F130	Context [1046]	Sample 2
Ditch F111	Context [1023]	Sample 3
Ditch F112	Context [1025]	Sample 4

Methods

The samples were bulk floated by Birmingham Archaeology, collecting the flots in a 500 micron mesh sieve. The dried flots were sorted under a binocular microscope at magnifications up to x 16, and the plant macrofossils and other remains noted are listed in Appendix 1. Identifications were made by comparison with modern reference specimens. Nomenclature within the table follows Stace (1997). All plant remains were charred. Modern contaminants, including fibrous roots and seeds, were present throughout.

With the possible exception of Sample 2, all assemblages were from material deposited in secondary contexts, and as a result, quantification of the material was not undertaken. Therefore, the density of remains within the assemblages is expressed as follows: x = 1 – 10 specimens, xx = 10 – 100 specimens and xxx = 100+ specimens. Plant macrofossils have been categorised as cereals, herbs, wetland plants, tree/shrub macrofossils and other plant remains. The presence of mollusc shells and other material types has also been noted.

Sample composition

Plant macrofossils

Cereal grains and chaff, and seeds of common weeds and wetland plants were present at varying densities in all four samples. Preservation was moderately good, although most grains in Sample 4 were very puffed and distorted, probably as a result of high temperatures during combustion.

Cereals

Oat (*Avena* sp.), barley (*Hordeum* sp.), wheat (*Triticum* sp.) and possibly rye (*Secale cereale*) grains are recorded, with barley (including a single asymmetrical lateral grain of six-row barley (*H. vulgare*)) being moderately common in all four samples. A sprouted barley grain is present in Sample 2, and indeterminate cereal sprout fragments are noted from Samples 3 and 4. Although sprouted grains may be indicative of malting, accidental germination can also occur where grain has been inappropriately stored. The wheat grains are mostly of an elongated 'drop-form' type typical of spelt (*T. spelta*) although shorter, more rounded specimens, possibly of bread wheat (*T. aestivum/compactum*) type, are also present in Sample 4. Double keeled spelt glume bases occur in all four samples, and are particularly abundant in Sample 4.

Herbs

Seeds of common weed species are present throughout. Segetal taxa are predominant and include brome (*Bromus* sp.), fat hen (*Chenopodium album*), grasses (*Poaceae*), wild radish (*Raphanus raphanistrum*), dock (*Rumex* sp.) and vetch/vetchling (*Vicia/Lathyrus* sp.). The presence of stinking mayweed (*Anthemis cotula*) seeds and nutlets of both sedge (*Carex* sp.) and spike-rush (*Eleocharis* sp.) may indicate that agricultural production was largely based on heavy clay soils or newly cultivated areas of damp grassland. However, some utilisation of lighter sandy soils may be inferred from the occurrence of sheep's sorrel (*Rumex acetosella*) in Sample 3.

Other plant macrofossils

Charcoal fragments are common or abundant in all four samples along with pieces of charred root or stem. Heather (*Ericaceae*) stem fragments are present in Samples 1 and 2 and are common in Sample 4. Other plant macrofossils are rare although indeterminate inflorescence fragments and seeds are recorded.

Molluscs

A small number of mollusc shells are recorded from Samples 1 and 2. Although burnt specimens are not present, all shells are fragmented and abraded, and for this reason it is assumed that they are contemporary with the contexts from which they were taken. Three of Evans' (1972) ecological groups of terrestrial molluscs are represented, with woodland/shade loving taxa being predominant.

Other materials

The fragments of black porous 'cokey' material, black tarry material and the siliceous globules are all probable residues of the combustion of organic remains (including cereal grains and

grass/straw) at extremely high temperatures. The globules of vitrified material noted in Samples 2, 3 and 4 may also possibly be indicative of high temperature combustion. Although some of the recovered coal fragments may be contemporary, others may be intrusive.

Discussion

Sample 1 is from the fill of a curvilinear gully (F127), which appeared to encircle four undated post-holes. With the exception of charcoal fragments, plant macrofossils are rare. It appears most likely that the assemblage is partly or wholly derived from material which accidentally became incorporated into the gully, possibly in the form of wind-blown detritus.

Plant macrofossils are again comparatively rare in the assemblage from Sample 2, from the fill (1046) of grave cut F130. Although cereals are present, chaff and weed seeds also occur, probably indicating that the material is derived not from an offering to the deceased, but rather from a low-density scatter of burnt cereal processing waste. Processing debris is frequently seen as a contaminant on Romano-British sites and it is common to find it incorporated into most features, including burials.

Samples 3 and 4 are both from the fills of the double ditches (F111 and F112) which delineate the main enclosure. Both assemblages contain a moderate density of chaff and weed seeds and are almost certainly derived from burnt processing waste. However, fragments of charred root/stem (probably derived from dried plant material pulled up by the roots) and, most notably, pieces of heather stem are also common or abundant. It would, therefore, appear most likely that these assemblages are derived from deposits of fuel waste, which were dumped within the ditches. This interpretation is supported by the heavily burnt condition of the grains and seeds, especially within Sample 4, where severe puffing has been caused by high temperature combustion. Heather was commonly used as a fuel for ovens, and was especially favoured as it attained a high, even temperature in a short space of time. It was also used, along with cereal processing waste, as kindling/fuel for light industrial purposes, for example for pottery production at Snettisham, Norfolk (Fryer 2004).

One soil sample was collected from an early phase of the enclosure ditch (F501/5004), which is of a 3rd to 4th century AD date. This contained a few charred grains of hulled barley (*Hordeum vulgare* L.) and some waterlogged/modern seeds of bramble (*Rubus* sp.). The exclusive presence of barley grains suggests localised cooking activities or a storage facility.

Conclusions

While the study of four assemblages provides only limited data, and intrusive material may be present, their composition is still informative regarding localised activities during the Romano-British period. Agriculture, and particularly the production and processing of cereals, would have formed a major component of the local economy, with crops probably being grown on a range of local soil types. Possibly due to the advent of larger, more efficient ploughs, some areas of damp grassland may have been cultivated for the first time. Cereal processing waste, dried plant

material and heather stems appear to have been used as kindling/fuels for ovens or light 'industrial processes, although no trace of these procedures remains within the archaeological record.

DISCUSSION

The excavations at Trent Lane have added to the growing corpus of information on Roman Newark. With little evidence for settlement within the site during the early part of the Roman period, enclosures were established during the 3rd and 4th centuries, with the area used for at least one extended burial towards the end of the Roman period. The excavations also exposed footings that may relate to the medieval Hospital of St. Leonard (Exeter House) and clearly defined the southern extent of the Civil War defence known as the King's Sconce.

Romano-British enclosures and burial

A small amount of residual pottery suggests 2nd century activity on or near to the site during this period, however there appears to be very little occupation on the site prior to the 3rd century AD. A Roman cremation cemetery (Fig 2) was recorded 180m to the south (for reasons of hygiene individuals were buried outside settlements), cremation being the main form of burial until the 3rd century when inhumation became increasingly popular.

It appears that the Roman settlement began to use the area of the site from the 2nd century onwards, with the ceramic evidence pointing to a single phase of activity spanning the 3rd and 4th centuries AD. It also seems likely that many of the unphased features date to this period. While many of these were heavily truncated, a group of four postholes (F121, F122, F123 and F129, Fig 3) may be the remains of a raised granary. Apart from finds of tessera and Roman brick and tile, this was the only evidence of possible Roman structures. No mortared stone footings or clay floors similar to those found during the Retail Park excavations (Kinsley 2002, 6) appear to have been located within the site.

The ceramic assemblage suggests that the earliest enclosure (F157) is dated to the late 3rd century and the latest enclosure to the late 3rd or 4th century

(ditches F112, F132, F155 and F157). During this period the enclosure ditches (Figures 3 and 4) were constantly redefined with one ditch (Trench 5, F500) being re-cut at least six times. Clearly the ditches were regularly maintained and there is no evidence that the system of land division was ever subject to any major redefinition. The presence of the Fosse Way to the south may have been partly responsible, or perhaps the presence of the River Trent to the north. Both would have been defining landscape features. Indeed, the same general alignment of ditches appears to have been retained into the post-medieval period. Roman ditches observed during a watching brief (50m to the north, Samuels 1993) and ditches recorded during the Retail Park excavations to the south probably belong to the same enclosure system. Although there is a paucity of continental imports, grey wares dominate the pottery assemblage from the ditches. Traded and specialist wares average at less than 9%, more than may be expected for an average rural site, but significantly less than from an urban. While the late date of the assemblage may have some bearing, the evidence still points towards a locally based economy in line with rural sites.

The presence of barley grains, a raised granary and a corn dryer (Retail Park excavations) are indicative of crop-processing, storage and food preparation. With a localised arable economy the settlement appears to have had a fair degree of self-sufficiency. This is reinforced by a bone assemblage typical of a rural economy. The cattle bones are also fairly typical of a mixed pastoral/arable system by which animals were used for secondary products such as dairying and traction and then culled for meat at around three years old. Sheep, horse and dog, however, would appear generally to have lived more than three years.

Burnt cereal processing waste dumped within the ditches probably provided kindling/fuel. But with the exception of heather recovered from the environmental samples (F112, F127 and F130) there was little evidence for industrial activity. As a preferred fuel for ovens, heather attained a high, even temperature in a very short space of time. A Roman grey ware kiln of indeterminate date was discovered approximately 30m to the northwest of the site (Brown 1904, 6-7).

The latest Roman features appear to be a pit (F137) dating to the second half of the 4th century and a burial (F130). The burial comprised an extended inhumation, fairly characteristic of 3rd to 4th century burial practices, and indeed the ornaments worn by the deceased, including a bone hairpin and a copper alloy earring/bracelet point to a late 3rd to 4th century date. A study of Roman burial practices from cemeteries at Lankhills, Winchester and Poundbury (Keegan 2002, 98) suggested that there was no significant variation on the basis of sex of any particular jewellery items. However, multiple jewellery deposits were associated with young adult females (Keegan 2002, 102). Analysis, however, could only confirm that the skeleton is that of a young adult, who possibly suffered childhood-illness or had a poor diet.

The alignment of the burial with enclosure ditch F132 may suggest that these features were contemporary, although it seems more likely that the grave orientation is connected with burial practices rather than with landscape features. A north-south alignment has traditionally been linked with burials of a pagan origin, although Philpott (1991, 240) has suggested that for most burials of this type, Christian and pagan were buried in identical fashion in the same cemeteries. The absence of a coffin as such may not indicate low status, and the interpretation of wealth and status from Romano-British burials is problematic as burials may be poorly furnished for a wide range of reasons other than poverty (Philpott 1991, 228). What is perhaps most striking is that the burial seems to indicate a change of land use as a result of a declining population in the late 4th century. The general contraction of settlements in the 4th century saw inhumation cemeteries developed in previously occupied areas as at Ancaster, Godmanchester and Great Chesterford (Burnham 1990, 31), although quite why no other inhumations were present remains a mystery. Possibly the later ramparts of the King's Sconce afforded the burial some protection, while burials close to the ditch were destroyed. Other features also suggest that there were other Roman burials in the locality. A bracelet and hairpin from pit F137 bear a close similarity to those recovered from the burial, and the presence of unstratified human bone suggests that other burials were later disturbed (although no provenance can be

given for the age of this bone). The construction of a factory approximately 60m to the north in 1986 revealed the skeleton of an adult female (SMR 5812a) which, given the proximity of the medieval hospital and the King's Sconce, was at first thought to be post-Roman. Further analysis showed this was of Roman origin, possibly part of a dispersed cemetery, of which our single burial (F130) may be part.

From the expanding settlement and enclosures of the 3rd and 4th centuries, the molluscs recovered from the burial would suggest further contraction with reversion to woodland towards the end of the 4th century.

The Medieval Hospital and the King's Sconce

The hospital and Exeter House appear to have lain within an area currently part of Malt Kiln Lane and the Lincoln Road Viaduct. This probably comprised several structures including a chapel and a main hall and to some extent may have been based on monastic planning. The location of the hospital is also fairly typical and, like St. Helen's medieval hospital in Derby (Hislop 2003), was situated on a main route rather than the more remote areas favoured by monastic buildings. As only a small proportion of the structure associated with the robbed footings was exposed, it is difficult to determine the plan of the building. It is not unreasonable to suggest that these footings may be part of the refurbished medieval Hospital of St. Leonard, or part of Exeter House built between 1609 and 1634. Exeter House was burnt out in late February 1643 during the first Parliamentarian assault on Newark and the shell of the building was used as the headquarters of Meldrum's army during the second siege in 1644. Following the second siege of Newark Exeter House was demolished and the King's Sconce built adjacent to the site (Thoroton 1677). Exeter House was not rebuilt after the Civil War and the site reverted to fields (Bishop 1983, 25).

The excavations exposed the entire southern bastion of the King's Sconce. Figure 2 shows a plan of the fortification produced by Richard Clampe in 1646. This has been re-scaled and overlain as closely as possible onto a current plan of the area using the excavation plan. As the fill of the Sconce ditch was similar to natural, the ditch probably had a very short

life span. At the end of the Civil War the sconce was slighted and the local townsfolk were once again forced to assist, this time in the demolition of the siegeworks. However, as an earthwork King's Sconce

remained visible until the 19th century when Baird's Maltings was constructed on the site between 1883 and 1900 (Ordnance Survey 1883 and 1900).

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MAPS

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Appendix 1: The plant macrofossils and other remains

Sample No.	1	2	3	4
Context No.	1048	1046	1023	1025
Feature No.	F127	F130	F111	F112
Cereals				
<i>Avena</i> sp. (grains)				x
<i>Hordeum</i> sp. (grains)				xcf
(sprouted grains)		x		
(rachis nodes)			x	x
<i>H. vulgare</i> L. (lateral asymmetrical grains)		xcf		
<i>Secale cereale</i> L. (grains)	xcf			
<i>Triticum</i> sp. (grains)				
(glume bases)		x	x	x
(spikelet base)		x		x
(rachis internodes)		x	x	x
<i>T. spelta</i> L. (glume bases)		x	xx	xxx
Cereal indet. (grains)	x	x	x	xx
(sprout frags.)			x	x
Herbs				
<i>Anthemis cotula</i> L.			x	x
Apiaceae indet.				x
<i>Atriplex</i> sp.				x
<i>Bromus</i> sp.			xcf	xx
<i>Centaurea cyanus</i> L.			x	
<i>Chenopodium album</i> L.			x	
Chenopodiaceae indet.				x
<i>Medicago lupulina</i> L.		x		
Small Poaceae indet.			x	x
Large Poaceae indet.		x		x
<i>Raphanus raphanistrum</i> L. (silique frags.)			x	x
<i>Rumex</i> sp.			x	x
<i>R. acetosella</i> L.			x	
<i>Vicia/Lathyrus</i> sp.		x	x	x
Wetland plants				
<i>Carex</i> sp.		x	x	
<i>Eleocharis</i> sp.		x	x	x
Tree/shrub macrofossils				
<i>Corylus avellana</i> L.		x		
Other plant macrofossils				
Charcoal <2mm	xx	xxx	xxx	xxx
Charcoal >2mm			x	
Charred root/rhizome/stem	x	x	xxx	xxx
Ericaceae indet. (stem)	x	x		xx
Indet.inflorescence frags.				x
Indet.seeds	x	x		x
Molluscs				
Woodland/shade loving species				
<i>Aegopinella</i> sp.		xcf		
<i>Discus rotundatus</i>	x	x		
<i>Vitrea</i> sp.		x		
Open country species				
<i>Vallonia</i> sp.		x		
Marsh species				
<i>Vertigo</i> sp.	x			
Other materials				
Black porous 'cokey' material	x	x	x	x
Black tarry material		x		x
Burnt/fired clay		xx		
Mineralised arthropods			x	
Small coal frags.	xx	xx		x
Vitrified material		x	x	x
Sample volume (litres)				
Volume of flot (litres)	<0.1	<0.1	<0.1	<0.1
% flot sorted	100%	100%	100%	100%