The Defences of Towcester, Northamptonshire.

by

CHARMIAN C.S. WOODFIELD

'Imminebat et parthicum et britannicum bellum' Scriptores Historiae Augustae, Marcus, xxii, I, (169 AD).

SUMMARY

Fragmentary traces of earlier occupation (a possible circular stone building, boundary ditches and back yard timber buildings) from the Conquest to the Antonine periods were swept away when Towcester was defended by a contemporary stone wall and wide bank of c. *170 AD. This was accompanied by at least one saucer-shaped wet ditch while an original multiple ditch system is suspected. The total width of the defences seems to have been in the region of 60 m, and appears to have included a counterscarp bank. No gates were examined, but the possibility of the survival of a putative Irchester gate or postern within the Bury Mount is raised. Identifiable activity in this defensive zone seems to have shortly come to an end, but not before a rich pit dating to pre* c. *175 AD from a well-to-do household had been dug through the tail of the rampart at the north east corner. Sterile 'black earth' had then accumulated over this pit and rampart backs suggesting allotment cultivation from the Severan period running into the 3rd century.*

There was no surviving trace of any refurbishment before the undated (but presumably later 4th century) addition of projecting bastions, possibly hollow, of uncertain form but probably some 10 m square, fragments of which were located at the north-west and north-east corners of the circuit. These seem to have been accompanied by the cutting of a shallow, wet, wide Great Ditch, estimated to be some 24 m wide, which survived recutting only at the south of the town. Here it contained pottery of the late 4th century, and environmental evidence for stagnant rubbish-filled water and overgrown banks, as well as evidence for exotic imports and gardens.

Sixth century sherds indicated an early Anglo-Saxon presence in the walled town. There was no clearly recognisable trace of the Anglo-Saxon defences of Edward the Elder, although a probable refacing of the Roman wall may be of this date. The recutting of the Great Ditch, deeper, and with steeper sides, evidenced in the northern third of the town, is thought more likely to relate to a partial refortification of the Roman defences in the early Norman period associated with the Bury Mount, than to be Late Saxon. The Civil War ditch of 1643 was located on the same defensive line at the north of the town, and a 5 m wide 17th century ditch occurred in the south of the town, here overlying Roman property boundaries and not the defensive zone.

Unusual finds included high-quality probably Rhineland glass beakers, carrot and possibly North African amphorae, and an Eifelkeramic jar.

INTRODUCTION AND ACKNOWLEDGEMENTS

The purpose of this paper is to report on quarter of a century's work on the Towcester defences between the years 1967 and 1992, and additionally to put these findings into the context of what is at present known of the defended towns of the later 2nd century which lay along the line of the western Catuvellaunian borders. This raises the possibility that the major internal rebellion hinted at in the Scriptores Historiae Augustae for 169 AD had real consequences for this area, despite the uncertainties of this particular source.

This report has been prepared by Charmian

Woodfield and combines site work, records and finds assembled by Michel Audouy, Gwen Brown, Dennis Jackson, Steve Parry, David Windell, and Paul and Charmian Woodfield for the Department of the Environment and its predecessors, and the Northants. Archaeological Unit. It also includes work by Rod Conlon and the late Terry Shirley and a reassessment of the work of John Alexander on the defences in 1954 (Brown and Alexander 1982, 24–59). The report on Samian is by H. Pengelly, that on mortaria by K. Hartley, on Site D Saxon pottery by T. Pearson, on Site C medieval wares by M. Gryspeert, on glass by D. Allen, on environmental evidence by M. Robinson, on wood identifications by G.C. Morgan, on the 'black earth' by R. Macphail, and on the animal bones by J. Holmes. Specialist notes on other finds are in the appropriate sections, with contributions by L. Cram, G. Egan, R. Jackson, D.T. Moore, W.R.G. Moore and M. Pearce. Post excavation work on the original excavator's drawings was by P. Woodfield, and they were redrawn for publication by David Williams, MAAIS. The pottery and other finds were drawn by J. Burbidge. The finds and records will be deposited with the Northants. Archaeology Archive.

DEDICATION

The report is dedicated to the memory of Margaret Nicholas and Terry Shirley who did much for the archaeology of Towcester.

THE SITE (FIG 1)

Towcester occupies a classic defensive site, being raised on a plateau with streams on two sides, and a flood plain on the third, being also the site of a river and marsh crossing. It lies on clay and sand on the north and west, gravel at the south and east. A pre-Roman settlement was suspected at site D which produced pottery of possible pre-conquest date and 'Belgic' types. This settlement has now been confirmed to have existed in the sharply angled bend of the river Tove, immediately to the north east of the Roman town at 69404892 (pers comm Graham Cadman 1991, Walker, 1992). 'Belgic' pottery of probably Conquest date, and early Roman finds, also occur thinly throughout the town. In addition Towcester sits on a nodal point of the early military road network, on the Watling Street and midway between Verulamium and Leicester at the point where the Street is met by the Dorchester-on-Thames/Alchester road, and it is from here, presumably, that the Irchester/Water Newton road leaves. An early fort can therefore be deduced here, and military bronzes are known (Brown and Alexander, 1982, 51 and FIG 18, 55) and from the south of the town (Allen's Yard, Parry and Woodfield, report forthcoming.) The site of the defences of the early fort, or fortress, is not known.

The various sites and their finds are described separately, in alphabetical order, each with its own résumé. The numbering used by their excavators for Sites Civ, D and E has been retained with slight modifications, but the annotation of watching briefs has been rationalised.

SUMMARY OF THE EVIDENCE.

Table 1: PRE TOWCESTER DEFENCES FEATURES.

	SITE A: GRAMMAR SCHOOL	SITE B: G.P.O.	SITE C: TEXACO. 164/6 WATLING ST. 156/8 WATLING ST. (MASONIC YARD)	SITE D: BURY MOUNT.	SITE E. CINEMA.
GEOLOGY	Clay and sand	Clay	Clay	Gravel	Gravel
EARLIER BOUNDARY DITCHES				'Belgic' enclosure	
CHANGES TO PLOT ALIGNMENTS	Plot ditches change from at right angles, to parallel with Watling St.in Hadrianic /early Antonine period	N/E	Present. N/E for or against change.	Back yard plots in late 1st/earlier 2nd century. Then realignment on Watling Street?	N/E. earlier plots. Mid 2nd century plots at right angles to Watling Street ?
EVIDENCE OF BACK YARD BUILDINGS DEMOLISHED TO CONSTRUCT DEFENCES.	Post hole and pebble floor buildings and beam slots.	N/E	Stone circular building. Beam slots. N/E for Watling Street frontage.	Post hole and pebble floor buildings.	N/E.
DATING OF ABOVE BUILDINGS	Late 1st to mid 2nd century.	N/E but pot implies occupation.	1st and 2nd century.	Probably earlier to mid 2nd century.	1st and 2nd century pot implies occupation.

N/E = No Evidence

TABLE 2: THE DATING AND DIMENSIONS OF THE TOWCESTER DEFENCES.

	SITE A: GRAMMAR SCHOOL	SITE B: G.P.O.	SITE C: TEXACO. 164-6 WATLING ST. 156/8 WATLING ST.	SIDE D: BURY MOUNT	SITE E: CINEMA
WIDTH OF DEFENSIVE ZONE	c.60m	N/E	N/E	N/E	c.60m
TOWN BANK WIDTH AND NATURE	c.11m Clay, loam, mortar. Contemporary with wall.	Evidence unclear	12m-13m. Clay, loam, mortar, gravel. Contemporary with wall.	c.12m but evidence unclear.	Evidence unclear.
TOWN BANK DATE	c.175 AD	N/E	Not after 175 A.D.	Contemporary with later 2nd century berm	Possible loam base suggests 2nd half 2nd century.
TOWN WALL WIDTH AND NATURE	c.2.5m - c.3m Foundation variable, set in clay. Trench built.	c.3m or more. Foundation set in clay. Uncertain.	2.5m - 2.9m. Damaged. Trench built.	c.3m - 3.9m. Complex robbing. Uncertain.	Minimum 2m. Foundation massive stones in clay. Uncertain.
*WIDTH OF BERM TO 2ND CENTURY DITCH.	c.8.5m. A 2m wide builders'trample confirms Antonine date.	c.6.25m	c.9m but ditch moves out for Cherter Gate when berm 17m.	c.13.5m. 3m wide builders' trample suggests Antonine date for wall.	c.12m.
WIDTH OF 2ND CENTURY INNER DITCH, AND NATURE.	c.5.5m. Wet, shallow. (Not published as separate feature.)	N/E	More than 8m. Wet, saucer shaped.	Minimum 2.5m. Wet, shallow.	c.5-6m. Wet, saucer shaped.
DEPTH OF 2ND CENTURY INNER DITCH.	c.1.8m	N/E, but internal lip indicates shallow. Filled for construction of bastion.	More than 1m.	If F. G.35 is this ditch, more than 1m.	More than 0.75m.
DATE OF 2ND CENTURY INNER DITCH.	N/E	N/E	N/E	Antonine and later.	Late Antonine and later.
**WIDTH OF 2ND CENTURY COUNTERSCARP.	More than 8m	c.12-13m and 1.5m high.	N/E	N/E	N/E
LIKELY WIDTH OF ?ORIGINAL 4TH CENTURY DITCH, BUT RECUT IN THE ANGLO SAXON OR NORMAN PERIOD.	c.22-23m	c.22-23m	Minimum 12m	? 22m (but Mill Leat complication)	4TH CENTURY DITCH. N/E FOR RECUTTING. Minimum 12-13m
LIKELY DEPTH OF ?ORIGINAL 4TH CENTURY DITCH, (BUT RECUT).	c.2m. Wet. Internal face steep. Late medieval pot upper fill.	N/E, Wet. Late medieval pot upper fill.	Minimum ?2.75m. Wet. Internal face steep. Late med/Tudor pot upper fill	Minimum 2.5m. Wet. Internal face steep.	0.8m. Wet. Internal face shallow. Only Roman pot in fill.
WIDTH OF BERM TO WIDE DITCH (AS 4TH CENTURY ROMAN BERM?)	Maximum c.10m	c.7m	c.19m - c.25m by Chester Gate	c.16m	c.22m - 23m
BASTION DIMENSIONS AND NATURE OF WALLS	N/E	3 bastion walls, tower c.10m wide, probably square. Small stones .15m to 0.25m. 1-way pitching 3-4 courses height 0.75m. Construction trench.	West wall of bastion only, but probably square. Small stones 0.2m average. 1-way pitching, 3-4 courses, height 0.5m. Construction trench.	Robbing suggests possible projection on berm.	N/E
WIDTH OF BASTION WALLS	N/E	1.5m	1.4m	N/E	N/E
EVIDENCE FOR REFACING/REPAIR POSSIBLY ANGLO-SAXON (BUT COULD BE LATE ROMAN) ***	Recorded in Tr.II.	N/E	Recorded on Site Civ, Tr.3	Differential robbing suggests refacing.	N/E
WIDTH OF 17TH CENTURY DITCH.	5m - 6m	Unknown.	5m - 6m	N/E	More than 5m
DEPTH AND FORM OF 17TH CENTURY DITCH.	c.2m. V-ditch. Wet. Flat bottom.	N/E, but Wet ooze noted.	2m. V-ditch. Wet. Flat bottom.	N/E	More than 1m. Wet. Steep edge. Flat bottom.
17TH CENTURY FIGHTING PLATFORM OF DRY STONE AND EARTH.	Present. Width 2.75m	N/E	Present in C.iv. Width c.2.65m	N/E	Uncertain.

NOTE:

Wall widths are variable due, not only to foundation and offset variations, but to uncertainty caused by multiple robbing trenches and oblique sections.

Ditch widths are calculated with reference to their contemporary ground surfaces, not as they appear cut into natural.

* An additional outer second century ditch is suspected.

** The distance from the front of the wall to the counterscarp bank was 38m at Site B in the Antonine period, implying a multi-ditched system.

*** A structure c.2m deep, length unknown, abutted the back of the wall on Site D, its foundation being shallower than the wall. It may be an ascensus or stair platform.

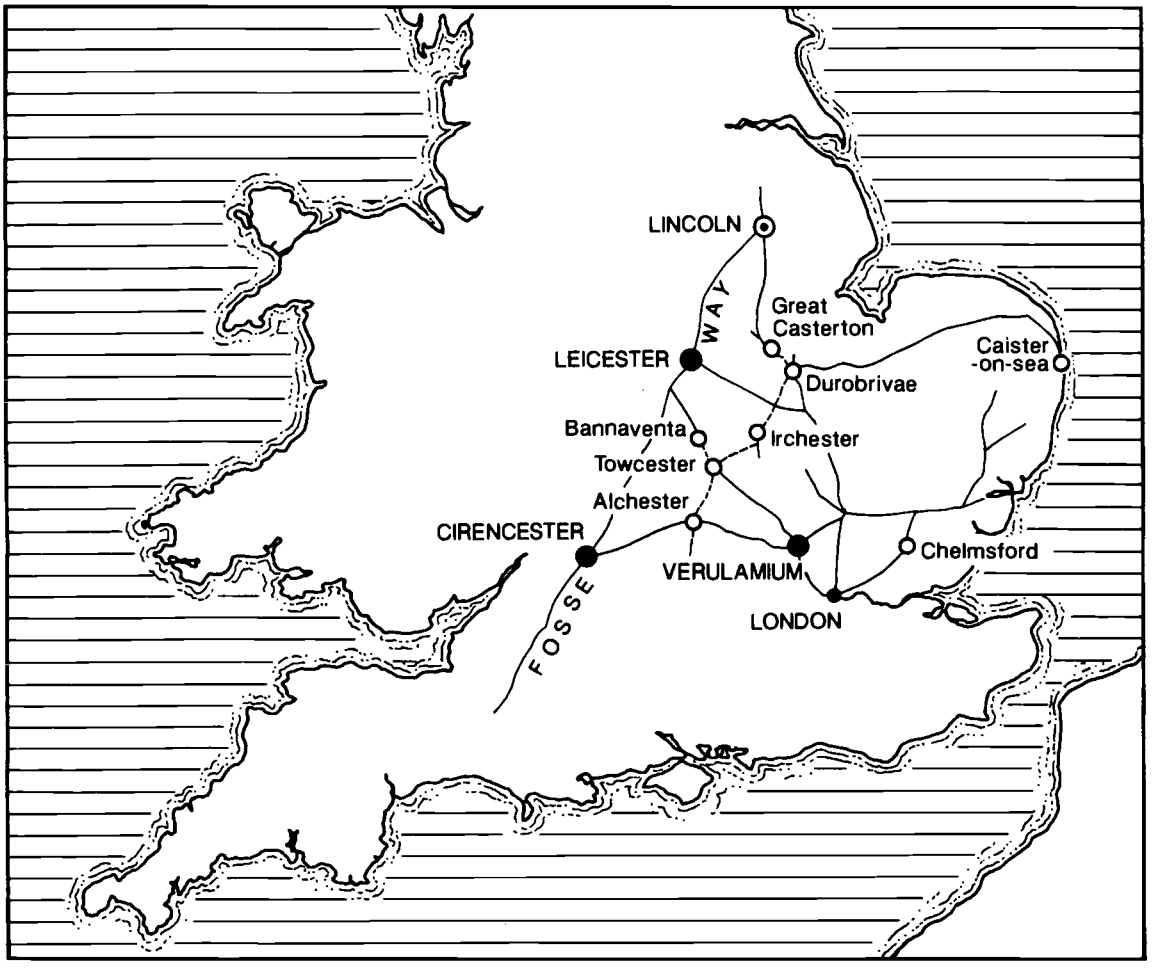

Fig 1 Towcester – location map.

The phasing used throughout this report is as follows for all sites:–

Phase 1: mid 1st to mid 2nd century AD Phase 2: mid 2nd to later 2nd century AD	Stone and timber buildings and recut plots. Construction of defences in early 170's
Phase 3: very late 2nd to early 3rd century AD	No known associated structures, virtually no pottery. 'Black earth' sites Ci and Civ
Intervening Period: no identified activity.	
Phase 4: later 4th century AD	Construction of Great Ditch, presumed building of corner bastions.
Phase 5: Dark Age	No certain structure but early potsherds present.
Phase 6: Early Norman?	Recutting of Great Ditch?
Phase 7: 17th century/ Civil War.	Defensive ditches cut. Fighting platform Civ.

SITE A. THE GRAMMAR SCHOOL

The following is a re-interpretation of the results of the 1954 season of excavations carried out by J. Alexander for MOPBW (published by Brown and Alexander 1982). The 1954 section through the defences is republished here (FIGS 2, 3, section A1) for comparative purposes with the later work here discussed.

From his 1954 excavations, Alexander concluded that the wall and bank of the Roman defences of Towcester were

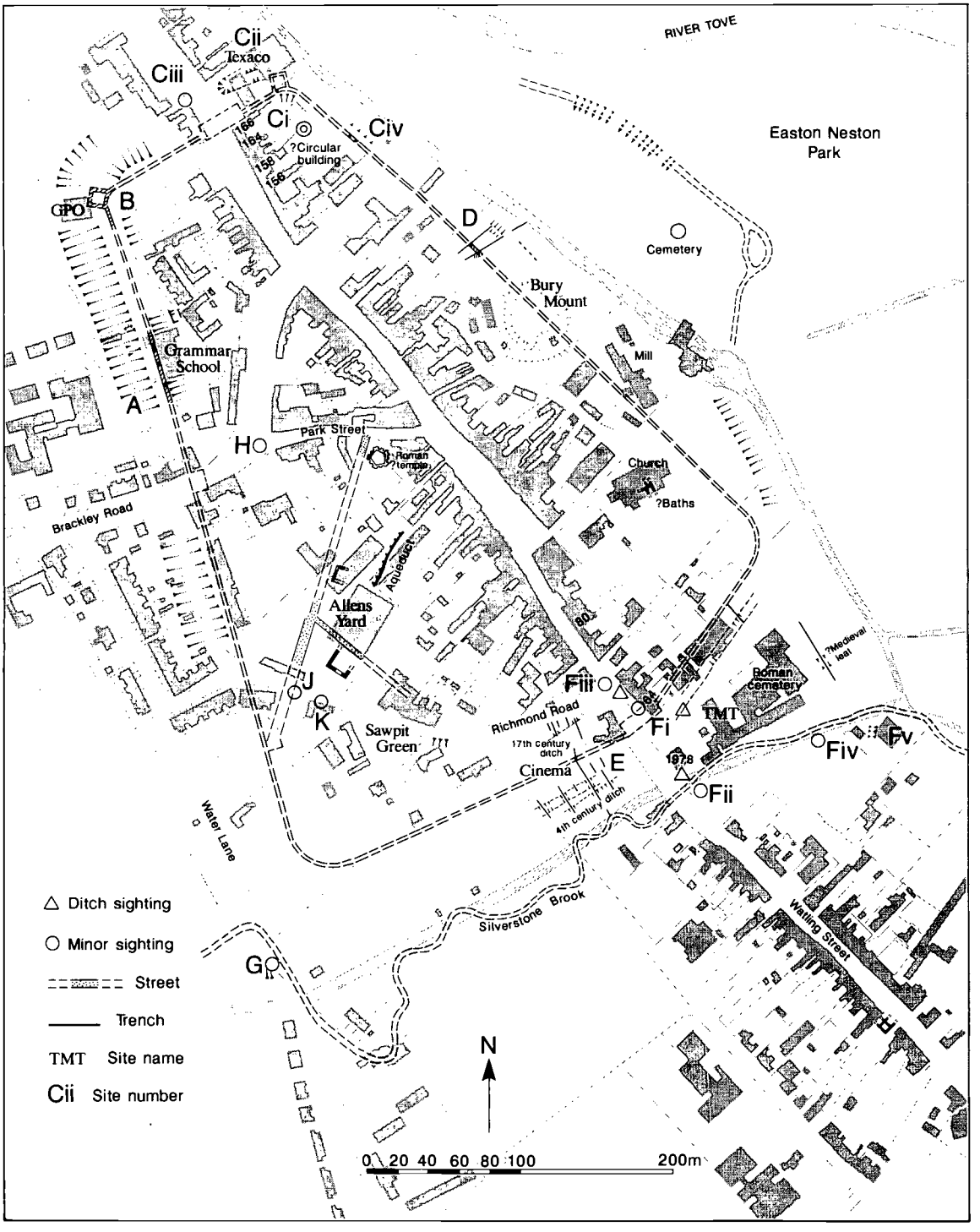

Fig 2 Towcester – plan showing the defences and locations of excavated and observed sites.

probably part of the same operation, and dated from the 170's (op. cit. 24, 28). His excavations had found trace lines of mortar/builders' trample throughout the bank (op. cit. FIG 3, Tr II; Tr I and quadrant 10 sections, and FIG 3 A1 this paper). These are now paralleled in sections Ci, Civ and DI/III/VIII. The cessation of civilian occupation after the construction of the defences (op. cit., 29) is also now confirmed. Alexander thought that the Roman Great Ditch was cleaned out and widened by some 5 ft (1.5 m) at some time between the 6th and 13th centuries, its new fill apparently containing St Neot's and Stamford ware sherds, some from 'the bottom of the ditch on the bedrock' (Alexander *c.* 1968, 29). These particular sherds are unfortunately no longer identifiable, but this comment remains of interest in view of the early Norman date suggested in this paper for the recutting of the ditch. This recutting was also confirmed at the north end of the town, sites B and C, but not at the south where the Roman fill remained. The 1643 ditch was confirmed at the north end of the town and probably at the south end, but here on a different line to the Roman defences.

It is possible however to reinterpret some of Dr Alexander's excavation results in the light of subsequent work. The Great Ditch is now assumed to have been originally later 4th century and not 2nd century in date, accompanying the bastions now known to exist. The 'eastern deeper part of Ditch 5b' (op. cit. 28 and partly underlying Tr I ditch fill 6, op. cit. FIG. 3) is here assumed to be the remains of a 2nd century wet, shallow, saucer-shaped ditch probably *c.* 5.5 m wide and *c.* 1.8 m deep, although its dimensions are difficult to estimate because of the cutting of later ditches ('1' on FIG 3 A1). Similar ditches were attested at sites B GPO, Cii Texaco filling station, D Bury Mount, and E, the Cinema, and dating evidence from these ditch fills at the last two sites suggested a 2nd century date, although the others were undated.

The 1982 argument for the 2nd century date of the wide ditch was that 'The location of the western marking out ditch (labelled '2' on FIG 3 A1) and of the clay spread outside it (labelled '3') imply a wide ditch at this time. It does seem possible that this was a marker for a 2nd century counterscarp bank, and the recorded profile of the clay dump hints at this. The 1982 paper also suggested that 'Alternatively more than one ditch may have been dug now.' (op. cit., 28). A hint of a different fill in the original records suggested that another 2nd century ditch probably existed at the outer (western) end of Alexander's wide ditch (pers. comm. A.E. Brown). Certainly the existence of another 2nd century ditch some 30 m out from the wall would be necessary to make sense of a counterscarp in this position. Of this putative additional shallow 2nd century ditch nothing is now very clearly discernible in the published record, except perhaps for a slight dip in the area immediately west of 5b, (op. cit. FIG 3, Tr I) but it could in any case have been partly removed by the construction of the Great Ditch or its recutting.

In relation to the suggested Norman work on the defences, it may be noted that the post-Roman heightening of the bank (op. cit. FIG 3, Tr I UIRF 3, FIG 3 and F4, this paper) contained a sherd of shelly pottery of *c.* 1100, (op. cit. 31) then thought to be intrusive.

The Civil War ditch here accompanying Prince Rupert's works at this site is labelled '5' on FIG 3 A1, this paper.

THE EXCAVATIONS

SITE B, THE GPO TELEPHONE EXCHANGE (FIGS 2, 4, AND M FIG 1)

No observations are known from the 1950's. Watching brief by Gwen Brown in 1967 for MOPBW. Drawn out in 1990 by Paul and Charmian Woodfield.

CIRCUMSTANCES OF THE EXCAVATION

In 1967 work was carried out on an extension to the telephone exchange which had been inserted into the north west corner of Towcester's defences in the 1950's. The extension lay over the Great Ditch and was supported on stanchions, and no sections were drawn across that feature, but during the course of the work the path to the north and west of the existing building was widened, and the north and west faces of that excavation drawn, (Sections A and D). In addition the cutting and measured drawing of sections at B/C and E (the last a sketch only) took place before the construction of a deeply cut road parallel and adjacent to the north face of the existing building, which gave access for lorries down into the ditches area, where a considerable quantity of their fill was removed, but with virtually no record.

The study of the records presented difficulties as they appeared to suggest that the Roman defensive wall projected awkwardly out to the north west, well beyond the crest of the bank and the wall's known/assumed positions. Not only would this have made the existence of a berm impossible, (which is hardly credible) but it would have taken the wall actually into the ditch. It appeared however that the scale sections had never been drawn out and combined with the working plan recording their positions. Mrs Brown's notes indicate that she was aware of some anomaly, for she commented on an apparent town wall of unacceptably great width, or possibly two walls, and also postulated the existence of some sort of projecting 'homwork'. The redrawn plan suggests a bastion, however. Tracings of the original sections and detailed interpretation of these are in microfiche.

PHASES OF OCCUPATION

The Civilian Town. Phases 1 and earlier 2 (FIG 4). A pit from below the lip of the apparent medieval ditch, which seemed to have cut away the counterscarp bank, suggested an Antonine or later date for the bank. This reinforces the Antonine date given to the bank on Site A (Brown and Alexander, 1982, UCS3a, TrI, FIG 3). There was no other record of features predating the defences, but the pottery that survives from cuts through the rampart, indicates an earlier civilian presence, of 1st to 2nd century date.

The Roman defences. Phase 2. Little detail was recorded of the heavily robbed wall, and virtually nothing of the probable clay and loam rampart, but an Antonine date for the initial counterscarp bank, 6.7 m away from the outer ditch lip and still standing 1.5 m high was strongly indicated. This suggested a 2nd century wide-ditched zone around the town. An apparently 2nd century inner ditch lip was recorded on section of shallow profile, with a 'light silty clay fill' clearly underlying the later

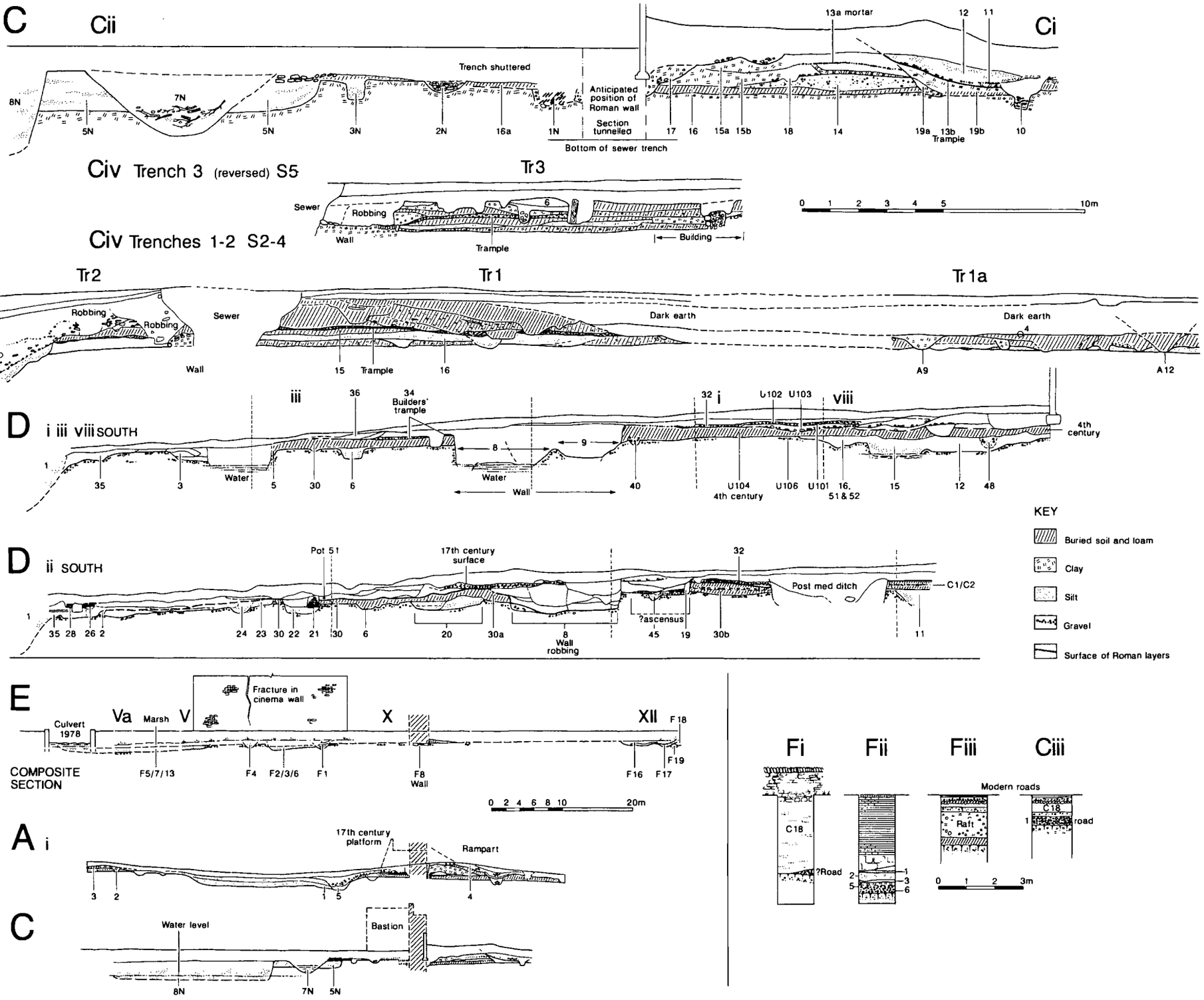

Fig 3 Towcester – Sites Ci, Cii, Civ, D and E sections. Sites A and C comparative sectionsSites Fi, Fii, Fiii and Ciii, sections

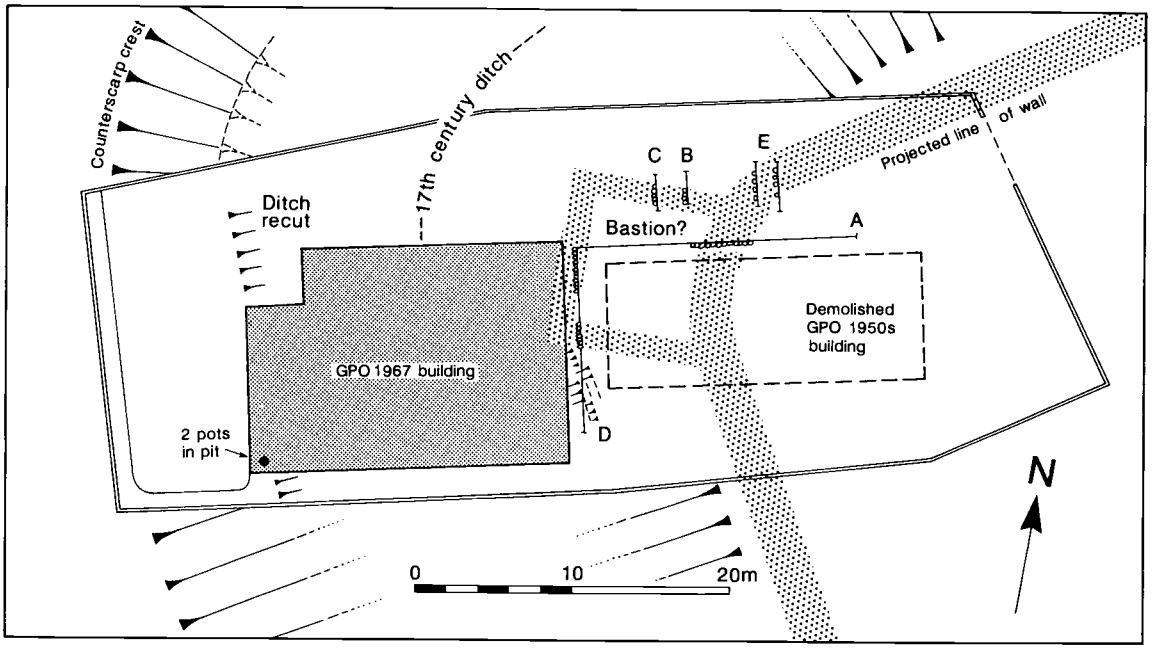

Fig 4 Towcester – plan of Site B, NW corner of defences (GPO Telephone Exchange).

bastion wall. There were descriptions of what seemed to be an outer ditch of the same date and fill lying against the counterscarp bank beneath a later recut. Both contained little pottery as on sites A and Cii. Only the inner edges of the three ditches against the berm are shown on FIG 4, as the precise position of their outer edges is not known.

The berm may have been as wide as 6.5 m in the 2nd century, but an accurate measurement is not possible.

Phase 4. The 2nd century ditch was apparently filled with clay and gravel for the construction of a *bastion*, probably, but not certainly, square in form, with walls of *c.* 1.5 m to 1.7 m wide. The bastion was possibly hollow, and packed with clay and ironstone at the base to a depth of at least 1.2 m. The walls were built with irregular small scale pitched stone, and the foundations of the bastion seem to have been cut down some 0.6 m lower than those of the town wall. The bastion was presumably built in the later 4th century, but the dating evidence from its 0.5 m thick black occupation levels does not appear to survive, though some unstratified 4th century potsherds exist. It seems to have been a large structure, probably some 10+ m across externally, and was standing to a height of 0.75 m. The existence of a tower at the north west corner had in fact previously been recorded by Bridges (Bridges 1791, 272). The base of the bastion walls seems to have been some 1.85 m below modern ground level (and that of the town wall some 2.75 m). Their depth reinforces a Roman date. The bastion was on a Scheduled Ancient Monument. Its total destruction and the continuing post war obliteration of the north west section of the defences is to be regretted.

A further recorded ditch lip fragment may have been a cut for the new Great Ditch accompanying the tower, only *c.* 1.05 m further out from the original ditch, and there are hints of its outer lip surviving as well. Its postulated course means a tower of any form would slightly project into it.

Human bone in isolated fragments (an 'arm bone' was 'clean cut above the wrist and below the elbow') seems to have been present, but it does not survive. Bone was also recorded in the bank and 'a skeleton was discovered *in situ*' but it was not stated where. They are undated but most likely to be late Roman. Human bone also occured at Site A, possibly in the fill of the Great Ditch.

Phase 5. The Anglo-Saxon or Norman defences. A third outer ditch lip was only about 0.25 m out from the second ditch, with an almost vertical edge and a distinctive dark silt fill with unusual 'white stone'. It appeared to be producing medieval pottery (which does not survive) from its upper levels. There were virtually no finds in its lower fill. This ditch seems to have oversailed two Roman ditches, one presumably the elusive outer 2nd century ditch, and to have cut into the counterscarp bank. 'The ditch' was recorded variously as '65 ft, 70 ft or 80 ft' wide, though a general unphased measurement nearer 22 m seems the most likely. There were hints of a bank heightening, possibly of this phase.

Phase 7. The Civil War defences. There is a hint ('wet black ooze') of the position of the ditch, but no details.

SITE Ci (164/166 WATLING STREET). 1976 Watching Brief by C. Woodfield for Department of the Environment.

SITE Cii (TEXACO FILLING STATION). 1976, C. Woodfield; 1982, Rod Conlon.

SITE Civ, MASONIC YARD (156/158 WATLING STREET). 1991, Dennis Jackson.

RESUME OF THE THREE SITES CI, CII AND CIV (FIGS 2, 3, 5A and 5B)

Phases 1/2. The civilian town. An apparent circular stone building with ambulatory (Civ), possible beam slots and fragments of ditches were noted, together with 1st and 2nd century pottery. There were no signs of later domestic habitation.

Phase 2. The defences. A contemporary bank, its back protected by 'metalling' (Ci), the damaged remains of the wall foundation (Civ), and an apparent wall trench of the 170's were recorded, with mortar builders' trample in and under those banks. Much dating material came from a large rich pit cutting the back of the rampart (Ci). These were accompanied by a shallow, wet, saucer shaped ditch (Cii), the rising and turning of which as it approached the Watling Street being hinted at in 1982. The ramparts were soon overlaid by a thick deposit of sterile 'black earth' and the ditch appeared also to be virtually sterile, suggesting that depopulation in the immediate area followed hard on the construction of the defences, a conclusion supported by the virtual absence of post *c.* 170 pottery.

Phase 4. The later defences. What appeared to be the west wall of an added bastion was sectioned, as was a wide, presumably late 4th century ditch, but here recut (Cii.) The ditch was turning to the north, the recut presumably preserving the Roman course.

Phase 5 or 6. The Anglo-Saxon or Norman Defences. The recutting of the Great Ditch produced medieval pottery high in its fill. Its primary date was not established, but the absence of late Roman pottery as compared with the south of the town makes it unlikely that anything was here left of the Roman ditch. A sherd of Middle Saxon pottery was said to have been recovered from the fill, and a sherd of possible 12th century date was found well trodden down on the berm. It is possible that the ditch was recut at both periods. Traces of possible refacing to the wall were undated but perhaps of these phases.

Phase 7. The Civil War defences. Prince Rupert's wet V-ditch was sectioned. There was evidence for its date and for its slighting by filling with poplar and elder branches. There were hints of a badly robbed fighting platform and/or wall reinforcement on Site Civ.

DETAILS OF SITES CI, CII AND CIV

A) SITE CI, BACK GARDEN OF 166 WATLING STREET.
As with Site B (GPO) it was not possible to make any plan records within the trench. Features on FIG 5a are extrapolated from section records, (FIG 3). Unless stated otherwise the alignment of cross trench features cannot be taken as being absolutely precise.

Phase 1. No structures were recorded that could be assigned to this date with certainty. F3N may, however, be a post hole or, more likely, beam slot and Fs 20 (plan only) and 2N may be boundary ditches of this phase. The presence of vessels 5, 6, 8, 11, 37 and 90, some dozen unillustrated sherds, and the early Samian, suggest that activity was taking place in the area.

Phase 2. The construction of the defences.
The Bank. Layers 11, 13 to 16 (top), 18, 19b. This consisted initially of a dump of orange gravel, F14, not derived from the immediate area, where the natural subsoil is clay. This contained a slot 0.4 m wide and 0.2 m deep on its front face, F18, with a spill of gravel in front of it. The pebble line above this comes to a stop against the back of this slot, and the clay level above turns up strangely, apparently against an obstacle. This, together with feature 19a (a slot cut down through the primary ground level and just into the natural clay), and the sharp back to the gravel 14, first suggested the existence of an earlier palisade and bank some 5 to 5.5 m wide, but only 1 m high as surviving. However an Antonine Samian sherd from layer 14, below F18, suggests that these features are contemporary with the main bank, and may represent some sort of staging. An Antonine emergency defensive work is not impossible, however.

Subsequently, further material – dumps of clay 15a and 15b – had been tipped in front of, behind, and over the above features. Level 19b, a mix of clay and buried soil, lay at the back of the rampart and was presumably derived from the foundation for the wall.

Layer 11 was a cobble and limestone deposit, apparently a floor or other surface, some 2.9 m wide as sectioned by the trench, its edge being just within the recorded area. It was some 0.04 m thick, overlying a clay level. It was also dated to the Antonine period by a Samian sherd. To the north west of it a yellow mortar trample, F13b, extended over the whole of layer 19b, perhaps coming from builders' activity in the last stages of the construction of the wall, or perhaps even representing the remains of a surface to protect the back of the bank from erosion, similar to the 'metalling' recorded at Irchester (Knight 1967, FIG 4). In either case it is of interest that the 'black earth' level, F12, directly overlay it. A structurally earlier mortar trample, 13a, extended over the top of the putative early bank. This is of particular interest as it parallels the mortar levels observed in the bank in 1954 (see Site A *supra*) which appear to be builders' tramples from a contemporary mortared town wall. These are also paralleled at site Civ and at Bury Mount (Tr D I/III/VIII, FIG 3). The minimum height of the surviving bank was 1.3 m, and a width of some 13 m is shown, but an adjustment for the angle of the trench would reduce that slightly. Pots 32 to 39 were recovered from the bank and the surface beneath it. They are not at variance with the date suggested for the wall by F10.

The Antonine soak-away pit cutting the back of the rampart. F10, a large pit about 1.8 m across at the top and 1.3 m deep, was sectioned by the contractors, with the loss of much material. This feature cut the cobble and limestone surface 11, which clearly post dated the construction of the main bank. The pit had a channel 0.45 m square at the bottom, packed with large sherds of Dressel 20 amphorae, representing apparently eight vessels, with smaller sherds and stone. It contained wet, dark organic material at the bottom, and was clearly still functioning as a soak-away. After filling, it had been

sealed with clay. Although it was impossible to completely excavate this feature, it produced sherds of some 50 Samian vessels and an estimated 74 other pots. Surviving glass included two fine Rhenish beakers with trailed 'chain' decoration. Clearly this represents the rubbish of some well-to-do household. There were very large quantities of food bone, oyster and mussel shell, some of which was recovered.

At the time of recording it was wondered whether layer 11, which appeared to be a well trampled and compacted cobble and broken limestone surface, could represent some sort of intervallum road, but the presence of the pit makes this unlikely. Layer 11 predates F10, so is not a path to that feature, but it could have been *metalling* to protect the back of the bank.

The form of the pit, with the soakaway at the bottom, coupled with the heavy lime deposit on much of the material, suggests that it was a latrine pit. There was unfortunately not time to clean and record the east face of the section, which was badly damaged by battering and collapse. However there seemed no doubt that F10 was a pit and not a ditch.

F20, an undated ditch, 1.5 m wide, flat bottomed, with 45 degree angled sides was observed in the area behind 164 Watling Street East. This was probably a plot boundary. It is most likely to have continued into this phase. If the town wall was built on a plot boundary, which seems likely, this might just indicate a plot of a little under 19 m wide, relating to the *c.* 19 m module observed in the suburbs in the late 2nd century (Brown and Woodfield 1983, 131/132).

The Town Wall. The late Mr Allen, owner of 166 Watling Street, refused to allow the demolition of his late 18th/19th century garden wall for the passage of the new sewer. As a result, the pipe trench was tunnelled through at a depth of about 3 m in natural subsoil at this point. It is possible to infer a width of some 2.5 m for the Roman town wall from the recorded section. It is not clear whether F17 is a robber trench (upper) and a construction trench (lower) or whether it represents multiple robbing of the town wall as at Bury Mount. Alexander's sections (op. cit. FIG 3), show that the wall was trench-built in that area at least, as indeed it was on Site Civ, so the second explanation is the most likely.

Phase 3. The 'Dark Earth'. F12. A thick, homogenous deposit, some 0.5 m to 0.7 m thick, of very dark brown sterile silt immediately overlay both the mortar trample, F13b, and the cobble and limestone surface, F11, at the back of the rampart. The analysis of this suggests a combination of wind-blown silt with the dumping of deliberately imported organic-rich soils brought in for the purpose of within-wall 'market garden' cultivation. This has been taken as evidence elsewhere at this date for the changing character of towns in later Roman Britain, and as a marked break in the continuity of normal land use. (Roskams, S. and Schofield, J. 1978, and Reece, R. 1980). The 'dark earth' is fully discussed in Dr McPhail's report (see below).

Phase 6? Unfortunately the scalloped battering of the top levels by the contractors to avoid shoring made observation difficult, and the pressure of time, coupled with the height of the levels from the bottom of the deep sewer trench, meant that recovery of material and detailed recording of these levels had to be sacrificed. Some of this *upper bank* material may well have been the equivalent of the 1954 bank heightening, and its description 'brown loam with many stones' could well serve for the lower of these upper levels. In 1954, this heightening was thought to be Anglo-Saxon (Brown and Alexander 1982, 31), but a Norman date is postulated in this paper. The higher levels appeared to be garden tipping and other modern deposits.

The turn of the rampart was still visible in 1976, although much reduced by cultivation, in the east section of the garden of 166 Watling Street. The protection of this and the adjoining garage area with its presumed bastion, seems highly desirable in view of the losses on the north west corner of the circuit, although the 17th century ditch may have destroyed much.

B) Cii, TEXACO FILLING STATION

The contractors drove in shuttering before the trenches were cut, concealing their upper parts. Ditches were recorded from the top of the trench and their position and profiles were clear, but there will have been loss of detail. The fills are described from their appearance in the section, and on the ground as brought up by the digger. Other features may not have been detected.

Phase 1? Trace Of Timber Building? F3N. This was a feature some 0.7 m square, cut into the natural clay, with a dark silt fill, probably a beam slot, (cf. Brown and Alexander, FIG 4, Q,4,3, and as shown on FIG 3). A buried soil ran over it.

Phase 2. The Berm. The wall, and the position of ditch F5N, are known within narrow limits and suggest a width at this point for the berm of just under 10 m in Phase 2. This distance will naturally be greater as the ditch approaches the Chester gate. The north east gate tower of that gate appears to have been destroyed during the construction of the filling station in the 1950's when 'massive masonry' was apparently observed (pers. comm. Dr Alexander), and a 'substantial structure containing Roman tile' was also recorded here by the late Terry Shirley (RCHM 1982, 153).

F2N was a *small ditch*, 1.10 m wide as surviving, cut 0.5 m into natural and overlying buried soil, 3.7 m back from the lip of F5N. This is a similar position to that of the marker ditch on the berm at the Grammar School site, and G24 at Bury Mount. It may well have performed that function, for it was filled with stone rubble, possibly from the construction of the wall, when a level berm would have been required. Its alignment could not be precisely determined.

Phase 2, Fill Phase 3? F5N was *a saucer shaped, presumably wet, defensive ditch*, some 8 m wide to *c.* 9 m, and as seen and recorded, of about 1 m deep. Buried soils of up to some 0.4 m thickness would have had to be cut to construct this ditch, and if comparisons with Bury Mount are made the original depth would be about 1.25 m. This compares with the defensive ditch at Alchester of at least 7 m width and about 0.75 m depth, (Young 1975/76, FIG 3). F5N had a grey silty fill, but unfortunately nearly all of this was removed by the contractors and little could be examined. However the impression was gained that there was very little material in the fill (as in 1982) and it remained without direct dating. The uniform nature of the fill and the profile suggest that it had been a water filled feature.

The alignment of ditch F5N (here exceptionally the alignment of the south east face could be seen in the trench base) was apparently moving away from the Town Wall and running towards the north west. This line has since been further

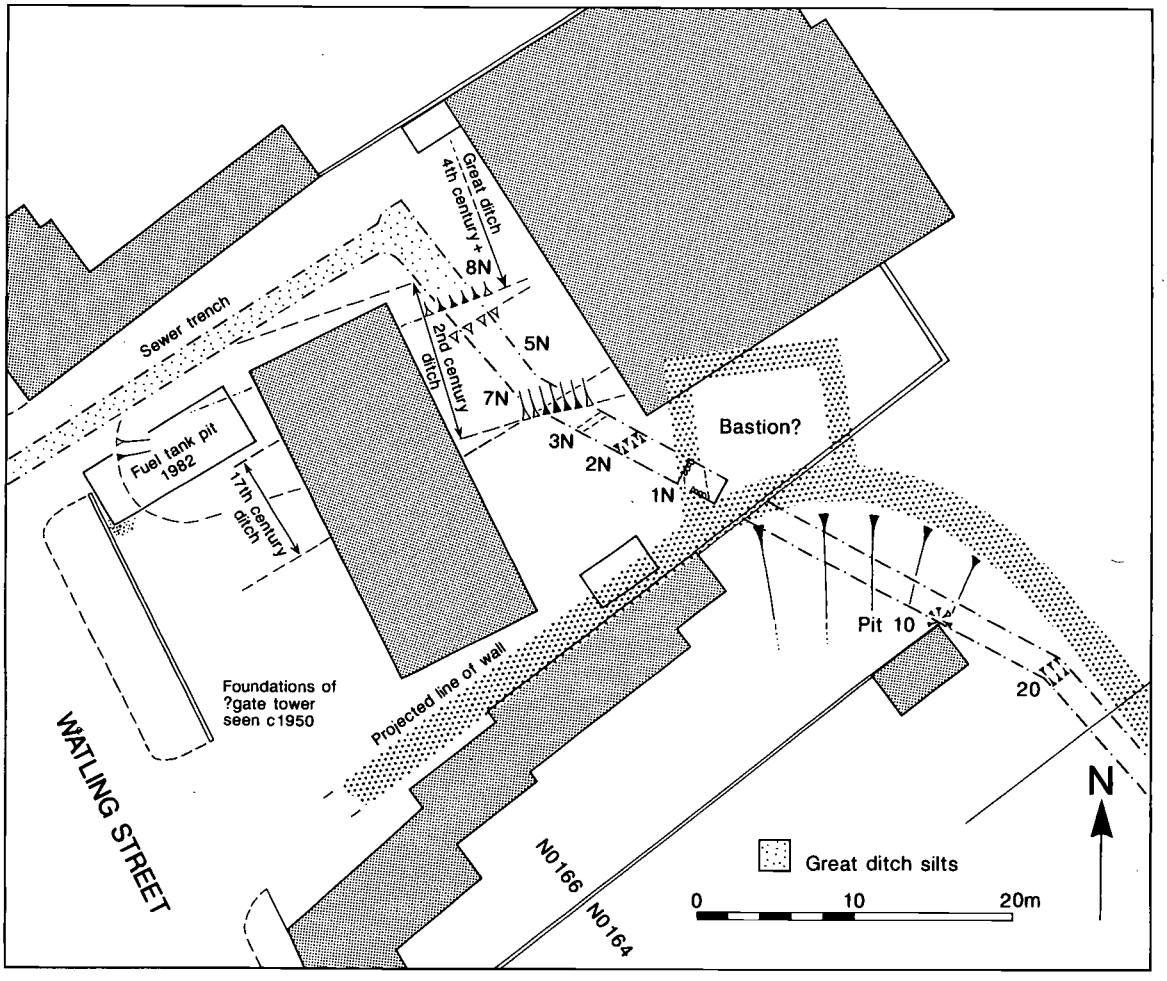

Fig 5a Towcester – plan of Site Ci (164/166 Watling Street) and Site Cii (Texaco Filling Station). NE area of defences.

suppported by Conlon's 1982 record (*vide infra*) which appeared to pick up its wide butt end. The lack of finds on both occasions in these obviously similar ditch silts confirm the suggested date of what was largely an aceramic period in walled Towcester.

The late 3rd/earlier 4th centuries: Nothing was found to suggest that an early 4th century double ditched defensive phase might ever have existed at Towcester.

Phase 4. The berm width can be estimated as at least 19 m in phase 4.

Phase 4? An Added Bastion? It was possible to partially record wall F1N at this site. It was 1.15 m to perhaps 1.40 m wide, although its south east end was obscured by shuttering, with an apparent construction trench to the south east of 0.12 m plus depth. It appeared to be splayed, being cut some 0.1 m into the clay natural, giving a total intended width of probably some 1.5 m. It consisted of some three to four courses of irregular rough stone laid on edge in the clay, and all aligned the same way, possibly originally of full herring-bone construction. The stones were quite small, averaging some 0.2 m in length and 0.06 to 0.08 m in thickness, as opposed to the slabs set on edge in the Roman wall foundation as observed in one of the three wall sections, which were some 0.6 m in length as recorded by Alexander. The F1N wall survived to a height of half a metre, as well as could be ascertained with the presence of the shuttering. Two sherds of an Antonine mortarium were recovered from the clay packing of the wall, although no later material was found. The presence of the construction trench showed that this was not part of an originally wider wall.

The coursing was curiously irregular, and the wall gave the impression of having been constructed hurriedly, or perhaps

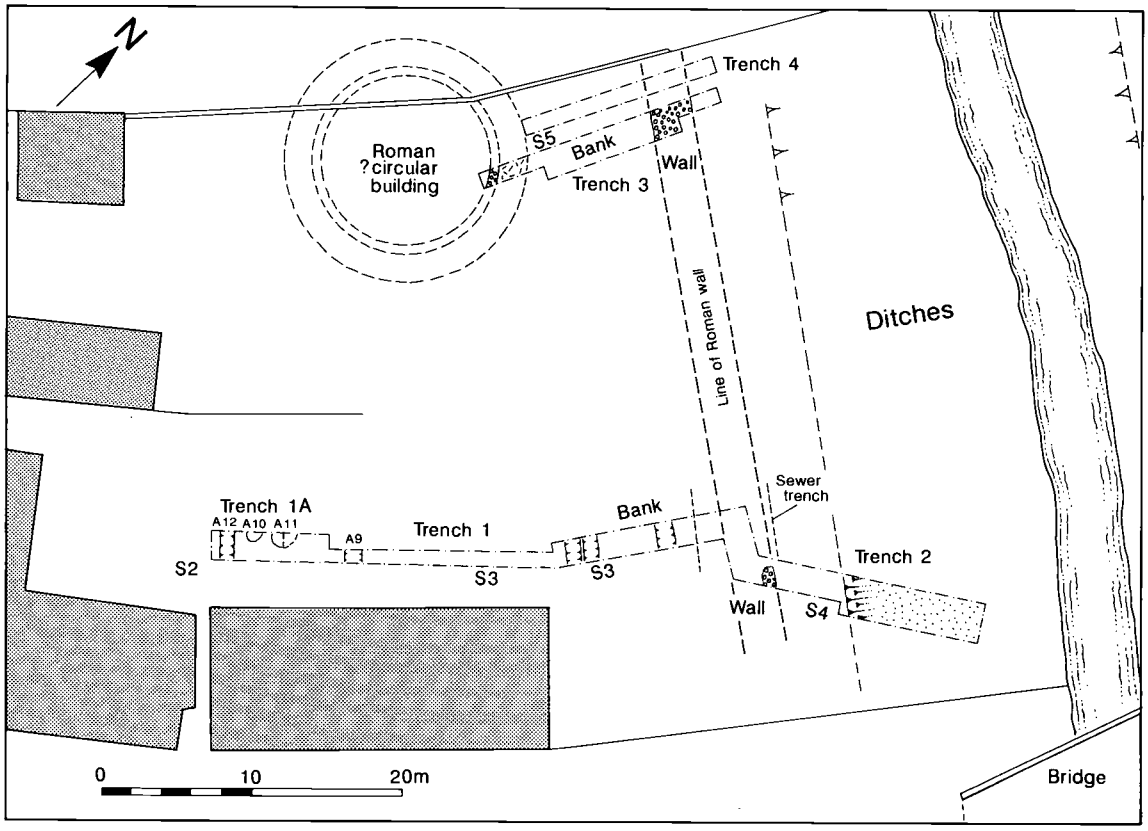

Fig 5b Towcester – plan of Site Civ, (Masonic Yard). 156–158 Watling Street. NE area of defences.

carelessly. A section across a temporary trench end, 0.6 m in front of this recorded stone work, showed an apparent continuation of this feature with three courses of again small-scale irregular pitching at the same level. Machining destroyed this feature and no plan was observable.

The position and nature of construction of this wall suggested at first sight that it might have been that constructed by Edward the Elder in the autumn of 917 (Whitelock 1961, 64–66). It now seems more likely to be some later added Roman work; there was a minimum 0.1 m gap between it and the likely site of the town wall. The angle at which it lies does in fact suggest a corner bastion to accompany that now known on Site B. In addition its curious one-way-pitched small stone construction was exactly that of the structure recorded on site B.

Phase 4, later 4th century?. Or Phases 5/6? Norman or ?Late Anglo-Saxon? F8N. The Great Ditch, recut. The Anglian Water Authority's sewer trench crossed the filling station yard, turned and ran back towards Watling Street. No northern edge was seen of feature F8N. The sewerage trench, at a depth of *c.* 3.5 m, was not sufficiently deep, certainly at its right angled bend, to clearly reveal the base of F8N. though what seemed to be natural subsoil came up on the occasional bucket as the trench proceeded towards Watling Street. The Great Ditch was, however, at least 8 m wide, this being probably a third of its original width by analogy elsewhere in Towcester.

The circumstances made it difficult to distinguish between the various dark grey smeared silts. However some material was retrieved from what appeared to be a homogenous wet fill, containing blue vivianite, decayed vegetation, freshwater mussels, pond snails and quantities of brushwood-sized material. The matrix fill for this was a uniform dark grey, and the finds were not frequent in view of the large amount of material worked through, but rubbish deposits from what appeared, where discernible, to be its higher levels did include animal bone, oyster and mussel shell, late medieval or Tudor knives, late medieval pottery, Tudor shoemakers' workshop material (to be published in a separate paper) and various glassy, vitrified and iron slags. Only one Samian chip was left as evidence of the Roman ditch, which may either have been largely cleared in this section, or been devoid of finds. It is possible, however, that the base of the silts seen were partially Roman, and that there may have been an Anglo-Saxon or Norman band of silting overlying this and underlying the later medieval material, but the difficulties of access to the site made cleaning of trench sides impossible, and the lack of late Roman pottery, with inhabited suburbs close by, makes it unlikely. The

profile of the edge was that of a very upright cut, and a turf revetment is a possibility.

The westem continuation of the trench was not observed by the excavator but what seems to have been this ditch was seen again in 1982 (*vide infra*). The ?Norman or Anglo-Saxon recut ran the whole extent of the sewer trench shown on FIG 5a, producing medieval and 16th century material all the way, apparently from its upper levels.

Phase 7. 17th Century (Prince Rupert's) Ditch. F7N was a V-ditch, some 5 m to 6 m wide and 2 m deep, with a conspicuously black, peaty, and water-logged fill, again with freshwater mussels and pond snails, decayed vegetation, fallen leaves and much elder and poplar brushwood and other wood up to 0.06 m in diameter. No direct evidence for defensive shaped or pointed stakes was recovered and the south east edge was obscured by tipped sump oil. There was very little pottery, not even Roman residual pottery, presumably echoing the lack of finds in F5N but examination of the silt and vegetation from this feature produced the handle from a Cistercian ware vessel (pot M79, presumably 17th century.) It is possible that this ditch was deliberately filled with brushwood as part of the slighting of these defences.

C) Cii. TEXACO FILLING STATION (1982 by Dr R. Conlon)
Further observations on this site were made in 1982 by R. Conlon during the construction of a new petrol tank. This revealed:

Phase 2? The butt end of the 2nd century ditch F5N, was again recorded, with a dark sterile silt fill.

Phases 4/5/6. Ditch F8N was again recorded, usefully confirming its deep (1.3 m) sterile early fill, immediately overlain by a layer producing late medieval pottery, as suggested during the 1976 machining. The base of this ditch seems to have occurred at a depth of some 2.35 m down from the garage forecourt concrete, which suggests that it was over 1 m shallower here than it had been at the east and perhaps the later ditch followed its Roman precursor by rising and turning to make a butt end to allow for the passage of Watling Street. This wide ditch looks to have been 7 m at least further to the west than its 2nd century predecessor, and hints at a possible blocking of the east carriageway, likely in the late Roman period and presumably copied in the early Middle Ages. This Roman blocking was apparently observed at Irchester in 1878 (Crickmore 1984, 118). There were again no finds recovered from the lower silts.

Phase 7. The wet black fill of the *17th century Civil War ditch* was also observed, stopping short of the modern Watling Street by at least 10 m.

Unphased. Road Metalling was glimpsed in the south comer of the fuel tank pit, with indications of an undated *road-side ditch* there and to the south east.

Dr. Conlon's report and M. Gryspeert's notes on medieval pottery are in fiche.

D) SITE Civ (158 WATLING STREET, MASONIC YARD). 1991, Dennis Jackson and Peter Morris.
(FIGS 2, 3 and 5b). This site was trenched in advance of proposed housing development.

Phase 1. Timber Buildings. The pottery suggests that occupation on the site commenced soon after the Roman Conquest, and there were hints on the recorded sections of stratigraphically early drainage gulleys, trench 1, and early gravel and pebble floor surfaces and possible beam slots, trench 1a, but little can be said in the absence of a plan record. The pottery from the primary occupation above natural in trench 1a produced sherds of later 1st to early 2nd century pottery, doubtless the date of these structures.

Phase 1/2. A masonry building. Part of a curved masonry wall, 0.8 m wide, enclosing a possible internal stone floor, and with a related external curved clay floor, 1.85 m wide, perhaps from a timber ambulatory, suggested that a circular building, possibly a shrine, lay in the north west of the site. The area produced sherds from some half dozen fine ware beakers, three of which were of unusual types for the area. These appeared to date from the mid 2nd century, and are just possibly related to the use of this structure. Given the normal rampart width the defences would have obliterated this probably 2nd century building, and the 'abundant charcoal' recorded overlying its external clay floor may relate to its clearance or earlier disaster.

Flue tile in an early fabric, and window glass of pre-300 AD type, suggesting additionally a nearby substantial 1st or 2nd century building, were recovered residually in a late context (A12).

Phase 2. Back Plot Boundary Ditches. A ditch, from its position probably a back plot boundary ditch relating presumably to a structure facing Watling Street 60 m away (unless there is an unknown intermediate road) was found under the bank, in trench 1. Stratigraphically it dates from the mid to later 2nd century. It contained charcoal, again perhaps from building clearance. The pottery from the site suggests a peaking of activity at this period.

Later Phase 2. The Defences. The alignment of the *Roman town wall* was established at two points some 32 m apart. It was 2.9 m wide in its surviving damaged state, with a footing of pitched limestone set in clay, the mortared courses having been robbed away, but the line of the robber trench suggested an offset of 0.2 m for these (Trench 3).

The *backing bank* appeared to have been at least 12 m wide in trench 1. The trench 3 section probably did not extend sufficiently far to the south west to pick up the rampart tail. The excavator detected hints of a very low *early bank* of perhaps the second quarter of the 2nd century. A substantial stone-packed post hole was recorded in trench 3, 5 m back from the wall, in the same position as a less substantial post hole recorded on the section at Ci. These seem all rather to relate to staging. Again, some earlier Antonine defensive work cannot be ruled out.

Dating evidence for the wall and bank came largely from Trench 1. There were two early to mid 2nd century (into the third quarter) Samian sherds in layer 15, primary upcast from the foundation trench, and a Samian sherd of 130 to 160 AD in the top of the pre bank ground surface 16. From the bank itself came an early soft pink grogged sherd and a Lower Nene Valley colour coated sherd apparently both of the third quarter of the 2nd century. There was little stratified pottery from Trench 3 – one pre-bank-surface sherd in a coarse grogged fabric – but this and some dozen unstratified coarse ware sherds dated from the mid to later 2nd century with an occasional earlier sherd, but

none later. No Samian was found here. The ceramic evidence therefore suggests a date for the construction of the wall and bank at some period in the 170's.

The most significant discovery in both trenches 1 and 3 was further confirmatory evidence that the *bank and stone wall were of one construction*. The builders' trample of mortar, stone and clay, within and under the bank and on the berm, was clearer than any previously recorded. It ran back from the wall, in a conspicuous yellow band, for a minimum of 12 m in trench 1 (probably by analogy the full bank width), and for some 8 m in trench 3. On the berm, the builders' trample directly overlay the 1st and 2nd century buried soil. In trenches 1 and 3 the trample lay in part on those buried soils, and in part over foundation trench upcast, layer 15.

Phases 2? (and 4? and ?6) Defensive ditches. The defensive ditch section, trench 2, suggests by its profile that a series of ditches might have existed, and by analogy, 2nd century, 4th century and early medieval cuts and recuts might be expected. The ditches from Trench 2 would however give a somewhat narrower berm than those recorded elsewhere at Towcester for these phases. There was no dating evidence.

Phase 3. Moved Back-Plot Boundaries. The 'Dark Earth'. Back boundaries of plots that underlay the defensive zone would clearly have to be moved to accommodate that zone, and a late grogged sherd from its top fill suggested that ditch A9 (Trench la) must date from the post-defences construction period and may represent the new back-plot boundary line, following on the loss of a 16 m strip of land to the defensive zone.

The evidence for dating the 'dark earth' in Trench la consisted of some half dozen Samian sherds from the last levels of occupation below the 'dark earth'. The Samian sherds do not go later than the Antonine period, and none are necessarily late Antonine. Some 50 coarse ware sherds from those occupation levels also confirm that *terminus post quem*, although the presence of four sherds from a type of orange beaker that normally occurs in the late 2nd/early 3rd centuries may take the trench la occupation into the Severan period. There were only two sherds from the 'dark earth' itself both probably, but not certainly, 3rd century. This material may represent horticultural activity as on site Ci. The dark earth overlay the tail of the bank, as on site Ci and extended back within the walled town for at least 20 m. It may represent a within-wall reversion to agricultural or horticultural activity.

Phase 5. The Anglo-Saxon Defences. The right-angled cut on the trench 1 section which appears to represent robbing of a structure forward of the Roman wall (and is not readily explicable in terms of the 1976 sewer trench) may represent robbing of a *re-facing of the wall*, perhaps of this period. It is paralleled at sites A and D (FIG 3). (I am grateful for this suggestion to A.E. Brown). This did not appear on the trench 3 section, so the refacing, of whatever date, presumably occurred intermittently where necessary. This feature remained undated throughout.

Phase 7. The Civil War. A fighting or protective platform, and ditch. The trench 2 section seems to depict on the berm, a badly robbed, dry-stone walled, earth and stone packed 2 m wide Civil War platform, whose function was both to provide a fighting platform and to absorb the shocks from cannon warfare. This was similar to that recorded on Site A (Brown and Alexander 1982, FIG 3, Trench 1 section). Additionally the tip line of stone fill recorded might be the edge of the 17th century Civil War ditch filled with stony material from slighting of that platform as on Site A. No dating evidence for these features was recovered on Site Civ.

This section of the site C structures report embodies much of the pottery evidence which is in microfiche.

SITE D BURY MOUNT

1984. Michel Audouy for Northants. Archaeological Unit and HBMC (FIGS 2, 3 & 6)

Despite the lack of structural detail, a reasonably clear historic sequence emerges. A résumé is given of the site to aid comprehensibility. Features related to the defences are described in full, and those not primarily so described in the microfiche. More work is urgently needed on what is an important and threatened site.

RESUME

The prehistoric period, unusually for Towcester, was represented here by struck flakes of Neolithic or Bronze Age types.

Phase 1. A possible 'Belgic' Settlement, and the Early Civilian Town. One ditch at least, G11, with possible gate posts, seemed to have had its origins in, or just before, the Roman Conquest period, and produced Late Iron Age ('Belgic') pottery in unusual quantity for Towcester, suggesting that this site may lie close to the area of the beginnings of Lactodorum. (G2 may also be of this date). Later traces of ditched back yard plots, with simple timber structures and pebble surfaces were recorded, mostly from the later 1st and first half of the 2nd century. The presence of sherds of a carrot amphora, commonly associated with early military sites, and of a Flavian/Trajanic Samian non-spill inkwell are of interest in relation to the occupants of the site in the later 1st century. Part of a Roman hay rake (unphased) presumably relates to use of the adjacent park water meadows.

Late Phase 1, Early Phase 2. There was a hint of the *re-alignment of plots* in the Hadrianic/earlier Antonine period to be parallel with the Watling Street (cf. Brown and Alexander 1982, 26 and FIG 2). Their distance back from the Watling Street (90 m to 95 m) might suggest the need for an intermediate road, as plots were 40m long at Allen's Yard, Towcester (personal observation by the writer). There are also hints elsewhere in Towcester at this period of some sort of urban improvement scheme. The nearby large public building with its bath suites under the parish church probably dates from this time (Frere 1984, 300).

Phase 2. The Defences. Despite erosion and robbing, it appears that a *coeval wall and bank*, suggested by a builders' mortary trample directly on the Antonine buried soil on the berm in front of the wall, together with a *shallow wet defensive ditch*, were

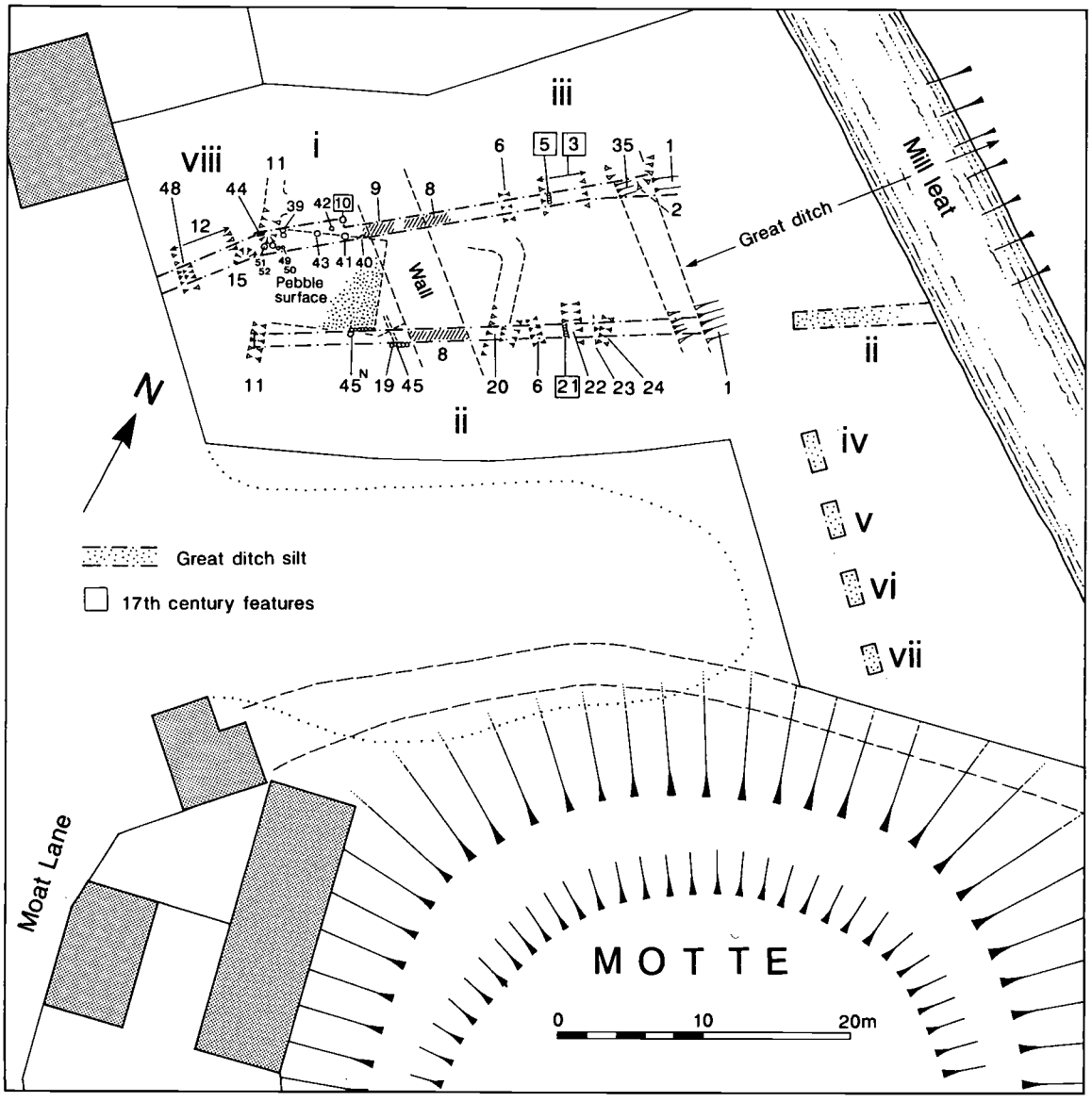

Fig 6 Towcester – plan of Site D (Bury Mount). Defences at East.

constructed in the Antonine period. Some of the Antonine pottery was covered with mortar spattering, probably related to the wall's construction, presumably of the AD 170's, as at sites A and C. A small amount of surviving structure suggests the existence of a possible *ascensus* or stair platform at the back of the wall, probably late in this phase from slight pottery evidence, but the fact that the stone robbers ignored it suggests an original straight joint, and it may be of later Roman date.

The presence of an Irchester Gate or postern in the area of Bury Mount, or perhaps to its immediate north, is a distinct possibility. It is possible that its ruins might survive within the Norman motte, and the elusive road to Irchester may exist under the permanent pastures of Easton Neston Park to the east. The finding (Walker 1992, 7) of at least one Roman burial some 75 m north north east of the Bury Mount may well indicate a Roman roadside cemetery, with inhumation suggesting a date not earlier than the Antonine period, although no traces of such a road were apparently recovered in 1992. There was however much disturbance from the construction of Medieval fish ponds.

Phase 3. A handful of sherds of late 2nd and 3rd century date here exceptionally suggest activity in the defensive zone after the 170's, possibly relating to movement through a nearby gate. They include an unusual jar sherd, probably of late 2nd to 3rd century date, from the Eifel region of Germany, which is unique to the area.

Phase 4. The Wall. The form of the robbing trenches suggest the possibility of a projection on the berm, apparently an addition. *The bank* seems to have been entirely removed, either in the 4th century or later. It seems likely that considerable remodelling took place, but the date and details cannot be ascertained from this small scale excavation.

The precise position and width (presumably some 23 m wide) of the late Roman *Great Ditch* has to be estimated largely from the topography, although what may be its inner lip was recorded, because of the problems caused by the high water table and the presence of the mill leat.

Phase 5. Early Anglo-Saxon Period. Pottery of this date was noted, exceptionally for Towcester, but there were no apparently associated structures.

Late Anglo-Saxon Defences. There is no evidence at Bury Mount for activity at this date. A late 9th or 10th century cross shaft fragment was recently found in the nearby parish church (See P. Woodfield, 'An Anglo-Saxon Stone from the Church of St Lawrence, Towcester', in the notes section of this journal) and some of the robbing trench complexities might relate to a refacing of the wall at this time, but this is uncertain.

Phase 6. It is possible that the bank might have been removed in the Norman period to help in the construction of the motte. There was virtually no Norman pottery, suggesting that the motte's construction was perhaps earlier rather than later in the Norman period, when more ceramic evidence would be expected.

It is possible that the recutting of the Roman Great Ditch dates from this Norman period, rather than from the period of the renewal of the Towcester defences by Edward the Elder in 921, but there was no direct evidence. The linkage of the ditch encircling the motte with the recut Roman Great Ditch survived into the 19th century at least (*vide* the 1882 Ordnance Survey). This may be the remnants of an original linkage, but the actual date of this connection is unknown. It is also not known where the recut ditch, if it were Norman, returns to the motte, but it seems likely to be in the vicinity of Park St. It is of interest that the local name for the triangle of land to the immediate north of Park Street was 'The Castle' or 'The Ruins'. The re-use of existing Roman defences is well attested in the Norman period, and Towcester was thought then to have been the centre of an extensive royal estate (VCH 1902, 305).

Phase 7. Little was added to our knowledge of the 17th century defences, though a good *yard surface* adjoining the wall on its west side appeared likely to be of this date, and may relate to the accommodation of troops associated with the suggested levelling off of the motte for two pieces of ordnance, 'planted on a hill towards Northampton' (RCHM 1982, 158).

DETAILS OF EXCAVATED DEFENSIVE FEATURES

For ease of reference, Trench VIII/I/III will be referred to as Trench I. It should be noted that all trenches were machine dug through to natural ground surface, except for I, this last being therefore the only trench with a plan record. References for features are given throughout to plans (PI, PII, FIG 6) and sections (SI, SII, FIG 3).

The detailed descriptions of possible Belgic ditches G2 and G11 with post holes 51 and 52, and plot boundary ditches 20, 23 and 24, together with structures comprising post holes 39, 40, 41, 43 and 45N, with pebble floors (cf. Brown and Alexander 1982, 26, FIG 2 and FIG 3, UIRF5g) are in microfiche. Details concerning post holes 42, 44, 49 and 50 and ditches G6, G12, G15, G20, G22–G24, together with levels G30a and G30b are found in fiche. All these appeared to be of phase 1, representing considerable activity in this period. Many ditches must represent the cutting and recutting of plot boundaries.

Phase 2. (Immediately preceding or related to the construction of the defences).

Marker ditch at back of rampart? Tr. VIII, G48. (PI, S1). A small truncated gulley of unknown alignment, 0.6 m wide as surviving, contained a Central Gaulish Antonine sherd covered with mortar spattering. This may have been a marker for the back of the rampart, giving a width for that feature of just over 12 m.

Boundary ditches. The construction of these ceased in this phase.

Trench VIII, Ditch end, or pit G15. (SI) Given its position this feature must predate the rampart. The Samian in the fill indicates an Antonine date. It could be a late recut of ditch 11. Machined trenches which destroy features before they can be planned make interpretation difficult.

Trenches II and III. G8 and 9 (PI, II. SI, II). These are discussed here, rather than under the actual date of those features (phase 7 or later). *The robbing trenches of the town wall* in Trench II suggest a structure 3.72 m wide (measured at the narrowest point of the robbing trench). This is wider than the wall recorded by Alexander (3 m with the rear offset recorded in Trench I, and 2.6 m without that feature) or by Woodfield, Site Ci, (maximum width 2.5 m), or by Jackson, Site Civ. Here in Trench III the robber trenches additionally suggest a double structure, one a feature of 1.4 m width on the rampart or inner side of the defences, the other a structure of 3.3 m on the ditch or outer side. However, conversely, it is also possible to interpret the section as suggesting a structure 3.9 m wide at the back or rampart side, with an additional structure of 1.7 m width, but this time at the front or ditch side, the robbing of which could be indicated by a change in level at that point in the middle of the robbing trench, although this involves the acceptance of an apparent hump of natural surviving undisturbed in the area of the wall core. The alignment of the wall in relation to ditches 1 and 35 suggests the latter hypothesis. Neither of these interpretations are very satisfactory however. One suggests a structure on the berm in Trench III with a curving or angled front, which would presumably be of late Roman date but could be part of some later work on the fortifications, again supported by the alignment, and the other hypothesis, a structure or repair on the back. This unfortunately means two possible alignments for the wall. A wall parallel with ditches 1 and 35 still seems the most likely, and is the line shown on plan here. The more easterly alignment is additionally unlikely as its prolongation to the south would take the wall

under the parish church, where the large public building with bath suites is known to exist, (Frere 1984, 300) and would very shortly lead it into the ditch area if prolonged to the north.

The excavator's original interpretation was that G9 is a wide flat bottomed ditch earlier than the defences, but the nature and date of its fill no longer supports this. No ditch fill separate from the general earthy/stony fill was noted, and the fill was in fact stated to be basically uniform, although it was recognised that at least two separate robbing activities were present. Pot 52, which is 3rd century in date, came from a point 0.35 m from the bottom of G9, and a 3rd century ditch here would be quite at variance with the rest of the evidence.

Trench III. G34. (SI) Builders' trample on berm? A layer 0.05 m to 0.08 m thick of limestone fragments, mortar, and sometimes clay, lay on the berm against the front of the wall trench directly on the Antonine buried soil. This level was overlain (Trench III, South, SI FIG 3) by dumped soil/turf material and additionally a dump of gravel and clay lumps, G36 which may be the spread from the construction of possible defensive ditch G35. Both levels were unfortunately undated. On this part of the site the Roman levels are immediately below modern garden soil and it is not necessary to suspect a late date for these dumps. A spread of redeposited natural, in that case sand, appeared on the berm from the excavation of the earlier 5m wide defensive ditch on the Towcester Grammar School site, (cf. Brown and Alexander 1982, FIG 3, Tr I section) and a similar spread of redeposited natural was found on the site Civ berm.

Likewise a mortar rich trample similar to G34 is also recorded by Alexander (his Tr. II section) extending forward on the berm for 2 m minimum, and truncated by a later feature. At Bury Mount the extent of the trample is some 3 m. It did not occur on the rampart side of the wall. The evidence favours the interpretation that this is an Antonine builders' trample from the construction of a coeval wall and bank as is indicated independently at site C and site A.

Trenches II and III. G35. (PI, II, SI, II) Ditch, possibly defensive. A shallow, presumably wet, ditch, silt filled, minimum width 2.5 m, and surviving depth 0.5 m (original depth probably *c.* 1.25 m) cut an eroded ground surface which contained Antonine pottery. It is clearer on the Trench I section. This seems likely to represent the remnants of a shallow saucer ditch coeval with the wall, but unfortunately there was much erosion and later disturbance on this part of the site.

Trench II, South section. G19. c. 2.5 m wide, length unknown. This feature suggests the partly robbed out remains of some *structure abutting onto the back of the town wall.* It is possible that this is a later repair at the back of that wall, or a near contemporary insertion or addition, the pattern of robbing suggesting a straight joint between this feature and the wall, perhaps an *ascensus* or staircase platform. The area between the mortared stones still *in situ* and the wall was back filled with robbing material, earth, limestone, clay and mortar. A sherd retrieved apparently from a redeposited tip of core clay, was of Antonine character (Pot 50). One course of neat stones, 0.14 m × 0.1 m, was laid over a bed of small stones, *c.* 0.08 m × 0.04 m, and the amount of yellow clay in the robbing fill suggested that the structure had a clay core.

Town Bank. Of this feature there were no surviving traces.

The Berm. If G35 is accepted as a defensive ditch, this would give a berm of some 13.5 m as compared with 13 m at the Cinema, site E, at this date.

Phase 3. The G9 robbing trench cannot be dated on ceramic or other evidence to a later phase than Period 3 (3rd century or later). It is however likely to be post-medieval in date. It is just possible that it represents a removal of the wall in the later Roman period.

Phase 4. Trenches II and III. G1. Cut for Great Ditch? It is assumed that this is 4th century in origin, but there is no direct evidence. It cuts G35, probably an earlier defensive ditch, and is not earlier than the Antonine period. The sections suggest a 45 degree side to this ditch where it cuts orange gravel natural. The distance to the far side of the existing leat is about 22 m, and it appears that the leat was inserted against the outer edge of the Great Ditch, that feature being 23 m wide at the Grammar School site.

Gl seems to have been cut only some 1 to 2 metres further out than the putative 2nd century ditch, G35, but it is not known for certain whether G1 is a 4th century, Anglo-Saxon/Norman, or indeed some later unknown recut. This is paralleled by the recut distance out at both the Grammar School, site A, and the GPO site B.

Trs IV, V, VI, and VII confirmed the continuation of the ditch to the south.

Trench I, Unit 104. Buried soil. This level, which appeared on excavation to equate with the group 30 buried soils of the late 1st and 2nd centuries was shown, on examination of the pottery, to be a 4th century deposit. This raises considerable problems of interpretation, as it of course occupies the area where the 2nd century bank would be expected to lie. It is possible that the whole of the bank was removed in this area with or without an accompanying breach in the town wall (see G9 under Phase 3 *supra*). If, however, the increased width of the robber trenches in Trench III were to represent the construction of a tower, or even some sort of small gate, then it might have been provided with a ground floor entrance from within the defensive circuit, which would require a clearance of the bank at that point. Another hypothesis is that the defences had crumbled or been cleared to such an extent that they had to be replaced *de novo* in the later 4th century, bank and all, in this sector.

Another possibility is that during Phase 6 , the period of the construction of the motte, presumably in the 11th or 12th century, the removal of the bank, an obvious source of material, was done so thoroughly that it descended into the pre-wall ground levels and somehow caused them to be contaminated by material from re-spread 4th century levels, then presumably still in existence in the area.

Yet another possibility is that the bank material was scooped up, together with 4th century levels perhaps from bank heightening or alterations at that date, placed on the motte during this phase, and then redeposited during Phase 7 when that feature was altered, perhaps even when it was truncated by Prince Rupert to make a platform to take guns (Oxford Record Society, III, 1952–53, 207, 219). The site has produced medieval pottery (about half a dozen sherds) and if the G32 yard surface were accepted as Prince Rupert's work, the hypothesis that Unit 104 was a mixed 4th and 2nd century bank deposited in the 11th or 12th century on the motte, and redeposited down

again in the 17th century without acquiring any later ceramic addition, is not as unlikely as it first appears.

It is also possible that the 2nd century bank was in fact never built in this sector, and indeed there is no evidence on the ground for its existence at Bury Mount. (See Pots 53, 54, 56–58, and discussion, for the dating evidence.)

Phase 5. ?Sub Roman and Dark Age. The two probable 6th century sherds from this phase were not related to any structural activitity and were residual or unstratified.

The late Anglo-Saxon Period. Neither structure nor ceramics could be definitely assigned to this date, although the hints of robbed refacing to the Roman wall may have their origin at this time. It is possible that the Gl ditch is an Anglo-Saxon recut of the putative 4th century ditch, but it may well be of Conquest date, or later.

Phase 6. Early Medieval. Construction of Motte. Apart from the possible activity discussed under Unit 104 *supra* there was no evidence for any construction works of this date, and only three sherds were recovered that might relate to this phase. This suggests a short period of occupation of the motte, which might support the hypothesis that the motte and recutting of the Roman ditch occurred in a short-lived early phase of a Norman conquest campaign.

Phase 7. Period of 17th Century Defences (or a little earlier or later).

Trenches I, II and VIII. G32 (SI and II). This was a good *yard* surface of pebbles, limestone fragments and some post medieval tile hard core. It occurs on the west of the town wall only, and 2 to 4 m away from it, and it is possible that some of that structure was still standing to form a boundary. The yard extended at least 8 m to the west; the pottery found on its surface indicated a 17th century date, and it may well relate to the activities of Prince Rupert, although it could pre or post date the 1640's by two or three decades. In Trench II the yard is laid directly on the surviving Phase 1 buried soil, all intermediate levels having been at some stage removed. In Trench I, south section only, it overlies Unit 103 (SI) in part, a stone surface at least 6 m in extent, and its overlying silt. This may be a late medieval or Tudor level (see pot 55) in its own right, but is more probably a levelling up for the 17th century yard surface. Otherwise the yard overlies the Unit 104 4th century soil. (For the problems which this presents see under Phase 4).

Post Hole. Trench I. G10 (PI). The relationship of this feature to the 17th century surface, G32, which lies only to its west, suggests that this may be part of a contemporary stable or similar building with large earthfast timber uprights. The post hole was at least 0.5 m wide.

Phase 7. Walls. Four walls, or perhaps even five, belonged to this phase, or later, three possible walls and a late robbed wall on the berm, G5 (PI, SI – the unpublished north section), G21, (PII, SII) G26/G28, (SII) and robber trench G3, (PI. SI), largely lost in Trench II in later disturbances. In addition a wall occurred in the bank area with its foundation at the same level as the 17th century yard, which it presumably post dates for reasons of stability. This was recorded on the Trench II North section only, in archive. The question of whether any of these represent an equivalent structure to the fighting platform recorded by Alexander and on Site Civ (cf. Brown and Alexander 1982, 32, plan, FIG 5 and section, FIG 3) presents itself, especially in view of the great tumble of stone recorded in the Great Ditch fill. G3 and G5, of which well cut stones of the western face survived, might represent a single robbed structure just under 3 m wide (2.4 m wide at the Grammar School site, some 2 m wide at Civ), and are the most likely candidates, although they are rather far forward on the berm. This could be occasioned by a mass of tumbled material between them and what survived of the town wall. This interpretation remains hypothetical however, as the alignment is not satisfactory.

17th Century Ditch. The Great Ditch was excavated to a depth of 2.5 m from the present ground surface, presumably in the eastern continuation of Trench II, but the high water table prevented any detailed examination or record. Where it was possible to recover material from the fill of the ditch this was stated to be post medieval. About 1 m down at the north east end of Trench III there was a great mass of angular stone, which may represent the slighting of the 17th century defences (Brown and Alexander 1982, 32). It is not clear whether they lay in the 17th century ditch, or whether that was further out in the present position of the mill leat.

Sundry post-medieval pits were recorded, but are not here described.

SITE E. DEFENCES AT THE SOUTH. THE CINEMA

August 1983, by Dennis Jackson for Northants. Archaeological Unit and Department of the Environment. February 1984, by the late Margaret Nicholas, the late Terry Shirley and C. Woodfield.

RESUME (FIGS 2, 3 & 7)

Phase 1. The Civilian Town. Boundary ditches, where discernible, seemed to be at right angles to the present Watling Street, but the alignments of the two earliest are unknown. Pottery indicated depopulation of this zone after phase 1. It is possible that the two most substantial ditches had defensive functions.

Phase 2. Position of the Defences. It had been previously suspected that the Roman defences lay further to the north, but no ditch or wall was apparent in 1976 in the sewer trench which ran along the centre of Richmond Road, moving to the south edge of that road as it approached Sawpit Green. For a sighting of a ditch east of the green, thought to be of the Civil War period *vide infra* under Phase 7. No Roman defences were recorded in Allen's Yard, nor on sites J and K (pers. comm. Roy Turland and Dennis Jackson respectively) nor at Fi, and it is scarcely likely that they lay still further to the north in what must be virtually the Roman town centre.

Phase 2. Structural Finds. The rapidly cut and refilled machine-dug trenches provided little detailed information on the function or dating of these features and explain the small scale section (FIG 3, E). *A massive wall* and *a wet saucer ditch*, probably of the later 2nd century, were recorded.

Phase 4. A wide, wet, shallow *Great Ditch* was dated to

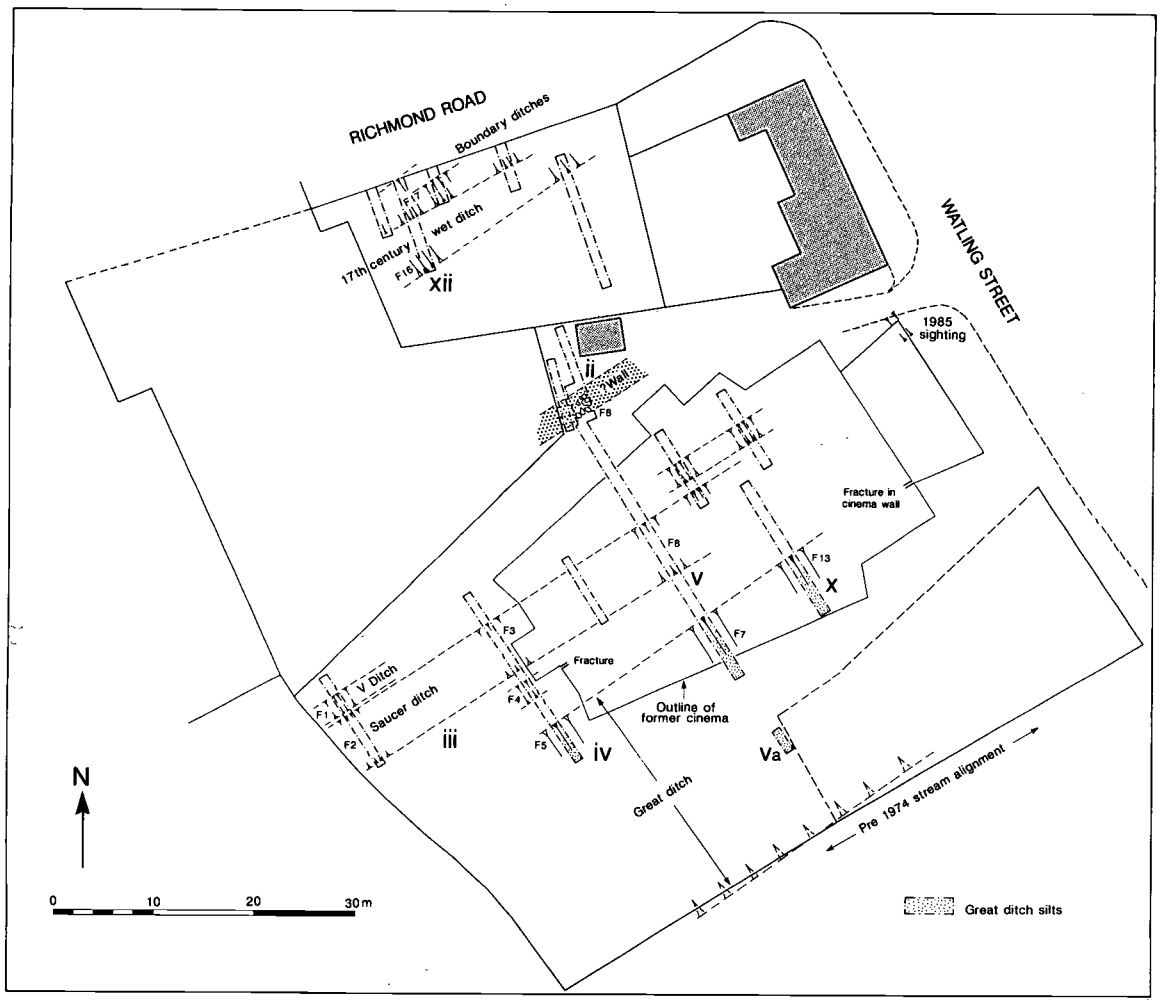

Fig 7 Towcester – plan of Site E (Cinema). Defences at South West.

the 4th century, and in at least its northern third, was without the complications of an Anglo-Saxon or Norman recut. The environmental report graphically indicates the state of a late Roman defensive moat, neglected and stagnant, overhung by willow and green with duckweed, the unkempt banks covered with nettles and docks. Similar conditions prevailed at Alchester, where the bank to the late ditch was covered with elder, hazel, nettles and blackberries (Young 1976, 168). Dr Robinson's report on the moat silts is given below.

Phase 4. The Late Civilian Town. The environmental evidence records, from waste dumping in the Great Ditch, horticultural and culinary activity and imports – (box and marigolds, figs and coriander) and the bone record, the dumping of a large horse estimated at over 15 hands, together with considerable food remains. Cobblers' waste was also recovered. All this may indicate extramural as much as intramural activity. There were no structural signs of 4th century occupation, although the presence of tile hinted at substantial, late, heated buildings.

Phases 5/6. The Anglo-Saxon/Norman Recut Ditch. There was no evidence for this. Possible Anglo-Saxon timber and ditched defences were noted in the south west area of Allen's Yard (Parry and Woodfield, forthcoming) and they may have run along the north of Richmond Road.

Phase 6, and the Later Middle Ages. This area appears to have become uninhabitable marsh, used for the disposal of rubbish. The ceramic material (none stratified) indicates a slight 12th century presence, and increasing quantities appear thereafter which date through to the late Middle Ages. Red deer antlers hint at the spread of forests.

Phase 7. A wide, but here flat-bottomed, *shallow wet 17th*

century ditch, was noted, and incompetent attempts at butchery suggested a military presence. There was again much wood and organic matter in the fill, as at Site C, with similar potsherds recovered. The Civil War defences are likely to have run along the line of Richmond Road.

G.C. Morgan's wood identifications are given below.

DETAILS OF EXCAVATED DEFENSIVE FEATURES

Phase 1? Ditches. Trench III and IV, F1 and F4. Trench XII, Fs 17, 18 and 19 (section only).

The likely interpretation for most of these features is as plot boundaries for properties facing the Watling Street. F17 appeared to be some 2 m wide and F18 and 19 some 1 m wide, but were truncated by a 17th century feature F16, (Phase 7 below) but F1 and F4 were apparently more substantial, 2 m to 2.5 m wide and 0.5 m to 1 m deep, as far as could be ascertained. All these features had lower fills of clayey silt, and F1 may well have been wet, for the fill contained twigs still with the bark preserved. F4 was sufficiently substantial to have caused a crack from top to bottom of the cinema brickwork at the point where its projected line ran under that building (marked by = on the plan). F17 to 19 would seem to be recuts of the same boundary, reminiscent of Bury Mount. F1 and F4 seem too far apart for this interpretation. All this may suggest a plot width of some 20 m, an intervening ditch having presumably not been picked up, as several were not, during trenching. Very little dating evidence was recovered for any of these presumed boundary ditches, (a sherd of Flavian Samian from F1) and even the relationship of F1 to F2, the ? defensive ditch, could not be determined with any certainty in the absence of any cleaning of the junction. A 1985 sighting of F1 by the writer produced a handful of tile fragments in 1st to 2nd century fabrics. F3 was not observed on that occasion.

Boundary plots of Phase 1 only would be expected here if this became an Antonine defensive zone, and indeed virtually all the Roman material recovered by various workers from this site was of this phase (Pots M72–74, 79–94, 96, and over 200 sherds). There were in fact only two sherds of late 2nd early 3rd century type from the site, the cut-off in the pottery at about 160 AD being most marked. However ditches of 2.5 m plus width, spaced some 5 m apart (F1 and F4), at one of the main entrances to a Roman town might represent some emergency defensive work earlier than the main defences.

Phase 2? The Wall? Trench II. F8. A raft of very large stones, some as large as 0.6 m × 0.2 m × 0.36 m, mainly wedge-shaped as far as could be ascertained, well and closely set in yellow clay, were inserted, apparently trench built, into the natural orange gravel. The machine destroyed this structure with the greatest difficulty. It appeared to have been robbed or cut away on both sides and after machining it was not easy to determine its extent, but it appeared to be at least 2 m wide. It was clearly the foundation of a large structure some 2 m below the largely 1800 surface, and in the absence of any medieval building of consequence the most likely interpretation is that it represents the town wall.

The marsh edge? Here the grey silty marshy material which was noted over natural in trenches in front of the putative wall was not noted in trenches behind it, where the deposit was brown loamy buried soil. The wall may therefore have been built on the last solid ground, and the 2nd and 4th century wet defensive ditches dug through the marsh. Primary marsh was also absent at Fi just behind the putative wall line.

The bank? Trench II. It is possible that some of the loamy materials glimpsed here overlying the natural gravel may repesent the bottom of the bank as well as, in part, a buried ground surface. Material rescued from the dumping of this by the mechanical digger suggests a date in the second half of the 2nd century (Pots No 72 to 74 in fiche).

Defensive ditch? Trenches III, IV and V. F2/3/6. This feature, some 5 to 6 m wide where it cut natural, and at least 0.75 m deep had a dark, blackish fill, and had presumably been a wet ditch, on account of its profile, its comparative shallowness and the nature of its fill. Eight sherds were recovered from Trench III, from what appeared to be the dark silts of this ditch, including a mid to late Antonine Samian sherd, all suggesting a later 2nd century date.

The berm? If F2/3/6 is accepted as a 2nd century defensive ditch comparable to those observed elsewhere in Towcester (FIGS 2 and 3, Sites A, B, C and D) and parallelled at Alchester (cf. Young 1975/76 where the wet conditions produced a defensive ditch some 0.75 m deep and 7 m wide of saucer shaped profile), then a berm of some 12–13+ m is indicated. The edge of this ditch and of the wall were imprecisely ascertained.

Phase 4. The Great Ditch? Trenches IV, V, Va and X. F5/7/13. What appeared to be the edge of the Great Ditch was observed in three cuts. The prolongation of the ditch line coincided with sagging visible at the front of the cinema before its demolition (photograph held by A.E. Brown; marked by = on plan FIG 7). This feature extended for at least 16 m to the south, and the usual 22–23 m width can be assumed, for although this is the Norman recut width, it presumably approximates to the original 4th century dimensions. This width would extend the Roman ditch to the south side of the present stream channel, but not beyond it. What appeared to be the same feature was also observed at Fii, and at the 1978 ditch sighting. The *c.* 1840 (NRO map 2922) course of the stream is shown on plan (FIG 2) and there is no record of canalisation here in medieval or post medieval times before *c.* 1870/80 (RCHM 1982, 156). The stream itself may have lain entirely to the south west of the Great Ditch in the Roman period, as it did for part of its course in the 19th century, and acted as a further outer defence.

The silts from the putative Great Ditch confirm that the water there was static, and not flowing (pers. comm. Mark Robinson, and report). The fill was dark and contained organic material, food bone, ironwork, leather, oak chippings from adzing, oak stakes and pottery. Where dateable none of this material was earlier than the 4th century, and indeed this was the only part of the site from which late Roman pottery, some eighteen sherds, was recovered. All the fill material came fom the inner 7 m or so of this ditch. The amount of 2nd century material recovered by various workers from the Great Ditch area suggested the existence of underlying 2nd century ditches, but their nature and position cannot now be ascertained.

The evidence suggests that this is the precursor of the wide ditch observed at the north, north west and north east of the town. It additionally suggests that at least this part of the course

of that feature was not recut in the Anglo-Saxon (or perhaps Norman) period. It is a pity that no material was looked for from Trench Va, 16 m out in the ditch.

The ditch appeared to be some 0.8 m deep, with very gently sloping sides and a flat bottom. This generally resembles the shallow outer profile of the Grammar School ditch, Site A, although it is not of course known how much that was altered by recutting. A ditch in this position indicates a 4th century berm of about 22–23 m. This is wide, but not without parallel elsewhere (eg some 20 m at the north west corner of the Margidunum defences, cf. Rodwell and Rowley, ed., 1975, FIG 1, 212). At London Blackfriars, where the late ditch is estimated as 6 m to 13 m wide (pers. comm. Jenny Hall, Museum of London) a berm also of some 24 to 31 m is suggested (Youngs, Clark and Barry 1986, 137).

Phase 5. The Anglo-Saxon Burh. No structural or ceramic evidence was noted for this phase.

Phase 7. The Civil War Ditch. Trench XII, F16 appeared to represent a flat bottomed ditch, with an estimated width of at least 5 m and possibly 8 m, assuming it also overlay Fs17–19, but this was not entirely clear. The date of this feature appeared to be 17th century, perhaps part of the Civil War defences. Sherds of Cistercian ware cups were recovered from the silt of this feature, (pot no. M77) and the presence of wood, again perhaps poplar brushwood suggested that it was probably wet. In addition food bone recovered here revealed incompetent amateur butchery on the head of a calf, which might suggest the presence of soldiery, and likewise the presence of bone gnawed by dogs, not attested on other sites, might suggest camping. Stone in the northern upper levels, above the brushwood, may just relate to the slighting of the 17th century defences.

What was probably an extension of this ditch to the east was observed in September 1976, by the writer, just south east of Fiii on plan, (FIG 2, position marked by a triangle), when a wet ditch base was observed 1.6 m down from ground level. There was about a metre of ditch fill, black and waterlogged at base, and containing many stones. No finds were recovered. This is perhaps parallelled by the 1976 sighting on the south edge of Richmond Road by Sawpit Green, where the south face of an undated 2 m deep ditch with a dark fill cut into gravel, was observed. The top of the ditch was 2.15 m down from ground level, indicating the late post-medieval dumping extended this far north. Taken with the evidence from Site E, this is most likely to be a re-entrant of the Civil War ditch, and it implies that the Civil War defences ran along the south line of Richmond Road. The ditch presumably cuts Watling Street, and represents Rupert's defences which 'brought the water about the town' (Philipps 1952/3, 195).

Post-Medieval Levelling. The dumping of a deep deposit of levelling and raising material was noted particularly in Trench I. Sherds recovered from this suggest a date of about 1800, as did parallel finds in the levelling deposit on the south edge of Richmond Road and at Fi. This means that the topography of the site would have been altered before the date of Baker's 19th century observations, casting doubt on his conclusions for this area. (Baker, (1836–41) 318 with FIG).

MINOR SIGHTINGS CIII, FI, FII, FIII, AND H (FIGS 2, 3 AND M FIG 1)

Phases 1 and 2. These small keyhole sections, recorded during the 1976 sewage works by C.T.P. and C.C. Woodfield, reinforce the suggestion of an *earlier Watling Street* lying to the east of the later Street, and realigned in the Hadrianic/Antonine period. This was possibly earlier than the construction of the defences, the re-alignment being presumably for reasons of town-planning. There was perhaps some further alteration when the defences were constructed (sites Ciii, Fi, and Fii.) The absence of the Watling Street was shown at Fiii.

The presence of the base of a masonry structure of uncertain, but presumably monumental, function was noted at Fiii, apparently fronting Watling Street to its east. The presence of the road ditch and rubbish-strewn cambered metalling of the apparent Roman road to Blacklands/King's Sutton which may have gone out of use, was noted at H. These were undated, but are presumably of Phases 1 to 2.

Phase 4. The sections also suggest that the late Roman Great Ditch overlay and/or cut through the east section of the Watling Street apparently present at Fii and in the 1978 ditch sighting, thereby implying the blocking of the east carriageway of the south Gate. They also imply that Watling Street was absent at Fiii, where it should have been expected if the south defences had been on the Richmond Road line. The north gate ditch recutting does not in fact seem to have cut through the Watling Street at this or any later phase.

In microfiche, there is a detailed description and further discussion of these sightings and the question of gate positions, some of which are threatened by modern development.

OTHER SOUTHERN SITES

A) Fiv and Fv. Towcester Mill and Trading Co yard. SOUTH YARD. 14 (1984 David Windell for Northants. Archaeological Unit).
NORTH YARD, (1985. Steve Parry, for Northants. Archaeological Unit). FIG 2

Phase 2. The presence of both more extensive marsh, here extending further north than it existed to the west of Watling St, and a cemetery in contemporary use ('hominem mortuum in urbe ne sepelito neve urito', Collingwood and Richmond 1969, 166), with the greater occurrence of flooding at this south east corner, probably caused the wall to seek a firmer course to the north to avoid these areas. Nothing was found in the trenches cut on this site which could be firmly identified as that structure. However a substantial, but undated, ditch, briefly recorded twice at the north, might be part of the earlier defences. A ditched cemetery is a possible further complication, as at Water Newton (Wilson 1975, 10).

A large Antonine ditch at Fv and a large late 2nd century ditch at G some 430 m upstream may hint at possible further or earlier Antonine *outer defences* south of the original stream course. (FIG 2)

Phase 4. A late 4th century possible defensive ditch, Fiv, probably a continuation of Fii, layer 1–5, here with the stream perhaps canalised through it, was suggested. There were

tenuous hints from a possible wide robbing trench and the clipping of some rubble footings in clay seen briefly in two sections, that a 4th century late defensive Wall might conceivably have been constructed. The evidence was slight, however, and it is not here shown on plan. It would have given a berm of just over 20 m. It is possible that the ditch *per. se.* was omitted in this particularly marshy area, cf. Tongres (Mertens 1983, 46).

Phases 5/6. The absence of medieval pottery, prevalent in overlying marshy deposits on the cinema site, indicates that, whether ditch or channel, Fiv and Fv had filled up and disappeared from view before the Middle Ages at the latest. This disappearance may account for the Norman/Anglo-Saxon failure to recut in the brook valley at the south, though the requirement for a reduced circuit may equally well apply here.

B) Site Fv. The TMT Settling Tank Ditch (Charmian Woodfield, 1976, for Department of the Environment).

Late Phase 2/Phase 3. An apparently later Antonine saucer-shaped wet substantial (at least 2.4 m wide) *ditch* was recorded here, together with the gravelling over of both this feature and the cemetery presumably to provide a *cleared area* in front of the defences, probably in the Severan period. Over the gravel lay a level resembling 'dark earth' .

C) Site G. Water Lane/Silverstone Brook Crossing. (The late Terry Shirley and C. Woodfield, 1977/78)

Phase 2. Flood relief works at the junction of Water Lane (Bickerstaffes Road) and the Silverstone Brook exposed the edge of what was clearly a deep *substantial ditch* still continuing down with an almost vertical side at a depth of 1 m. It was over 1.5 m wide, of unknown profile and ran roughly parallel to the stream. It may have turned to the north, a necessity shortly in any case to avoid the Alchester road, but not enough was seen to be certain. This ditch cut a primary occupation surface which produced later 2nd century material, and will be published with Allen's Yard and the other south town sites. It is included here as a hint, with Fv, that the defensive position at the south of the town may be more complex and deeper in extent than has been realised.

THE COARSE POTTERY
by Charmian Woodfield.

Fabric nos are those used in Brown and Alexander 1982, 35–36, and Woodfield in Brown and Woodfield 1983, 72–75. The relevant fabric descriptions are also given here in microfiche. Mortaria fabrics are given in K. Hartley's mortaria report, also in microfiche.

SITE B

Some material survives and is reported on in fiche.

SITE Ci, Garden of 166 Watling Street.
SITE Cii, Texaco filling station.
(FIGS 8, 9, pottery, section FIG 3, plan Fig 5a).

I. MATERIAL FROM SOAKAWAY PIT, F10, cutting the back of the town rampart (FIGS 3, 8 and 9.) An important group.
The estimated total of coarse ware vessels from the pit was 74. The extraordinarily low proportion of coarse ware vessels to Samian, virtually 2 to 1, is notable, as are the high numbers of BBI vessels (16), amphorae (8) and flagons (5). Material from the trench side digger spoil, although almost certainly, from its matrix and position from this pit, is not however, included in the coarse pottery report unless it actually joins fully stratified sherds. None of that spoil material, either by form or fabric, suggested a date at variance with the material reported on below.

Fine Red Sandy Fabrics. Vessel nos 2 (illustrated and unillustrated).

1. Fab 1. Burnished. (cf. Woods 1970, FIG 23, No. 153). Hadrianic/Antonine. The virtual absence of beakers in this fabric (apart from an additional rouletted sherd) suggests they are not yet fully current in the late Antonine period.

Heavily Sanded And Gritted Fabrics. Vessel nos estimated 12.

2. Fab 34. Pinkish buff to grey, rilled. cf. Woods 1970, FIG 28, No. 208, Antonine.
3. Fab 34. Dark grey to buff. This vessel has been wiped rather than rilled, and the channel has almost disappeared. There is a lime deposit on the interior. Probably late of its type, ie later Antonine. Another similar vessel with a very residual channel is not illustrated.
4. Fab 34. Buff/red. Buff wide-mouthed jars of this general form are common at Verulamium and at Brixworth in the Antonine period. The rim of another vessel (22 cm diameter, neck grooves) occurred.
5. and 6. Fab 33. Dark grey, with limestone grits and some shell. Combed and stabbed decoration. It is possible that these native-derived storage jars continue to be made into the Antonine period, (cf. Frere 1972, FIG 126, No. 919), but they are probably residual in this context.

Yellowish Cream Sandy Fabric (also flagons). Fabric 41 totals are given under no. 27 below.

7. Fab 41. Orange yellowy surface. This form with triple grooves at the neck was very common in the Antonine pit at Brixworth (cf. Woods 1967, FIG 4).

Grogged Fabrics. Vessel nos estimated 10.

8. Fab 35a. Brick red surfaces, conspicuous haematite grit in addition to grog. Probably residual.
9. Fab 35a/b Buff. The form, but not the fabric, is that of Brixworth (Woods 1970, FIG.18, No. 117), there dated late 2nd, first half of 3rd; the vessels in this fabric from the late Antonine/Severan fill of the road ditch in the Alchester road suburbs are much slacker in form, however, (cf. Woodfield in Brown and Woodfield 1983, FIG 23, Nos 75 and 76), and a date within the 2nd century seems more likely.
10. Fab 35a. Pale buff grey. Body sherds indicate a large shouldered jar, standing some 0.46 m high. The fabric is wiped rather than rilled, and is badly spalled.

The rim also occurred of a narrow-necked storage jar, diameter 2 cm in Fab 35a. The storage jar sherds often have a cream surface. There were in addition some half dozen residual small grogged sherds of Belgic/1st century appearance.

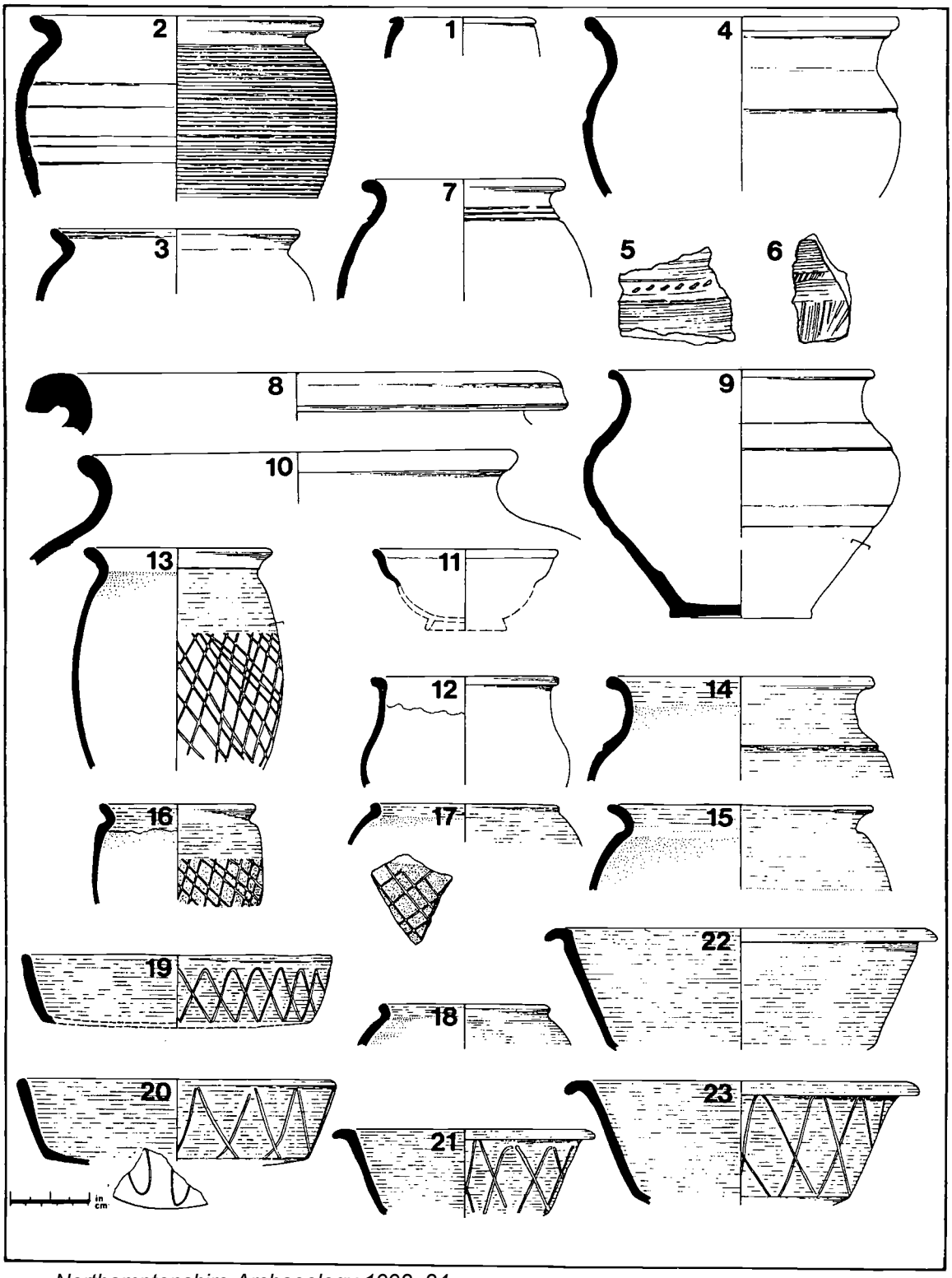

Fig 8 Towcester – Site C1. 1–23 Pottery from pit F10 cutting rampart. Phase 2. Scale 1/4 .

Grey Wares. Highgate Wood, Fabric C. Vessel nos 1.

11. Fab 27. Reddish grey, sandy, thick white slip. Form presumably imitating a Dr27. This form is not recorded in the material published from these kilns so far (Brown and Sheldon 1974, 224). Late 1st to mid 2nd centuries. The products of these kilns are extremely rare in this area, although some two or three sherds of fabric C occurred at Magiovinium, S. Bucks (pers. comm. Yvonne Parminter). They seem to be unknown at Milton Keynes (Marney, 1989).

Atypical Grey Ware. Vessel nos 1.

12. Fab 20. Dark grey slip on grey body, burnished. Dr Graham Webster (pers. comm.) thought the slack shape might indicate a 3rd century date, but this suggestion is not supported by the rest of the copious material from this pit. The diameter is uncertain and the vessel unusual.

Lower Nene Valley Grey Wares. None are present, although they are common in Phase 2 (*c.* 170 to *c.* 230) in the suburbs. (cf. Woodfield in Brown and Woodfield 1983, FIG 18).

Local Copies of BBI. Vessel nos 7.

13. Fab 21. Burnishing has removed pre-existing lattice. Wheel made. BBl copies of this type are Antonine at Brixworth (cf. Woods, 1970, FIG 24, Nos 170 to 172).
14. Fab 21. Hand burnished externally. It is perhaps copying the later 2nd century high necked and shouldered forms. The groove, however, suggests a Belgic derivation.
15. Fab 21. The sherd preserves a minute area of an unburnished zone, and hints of a lattice. Burnished, no internal wheel thrown markings visible. The rim form suggests a late 2nd century date for the prototype, but its suggestion of BB2 forms is puzzling, as they are not recorded in this area.

    Rims of two other vessels, probably BBl copies, occurred in this fabric, as did two latticed sherds.

Other Grey Wares. Vessel nos 5.

Sherds suggest some 5+ vessels in Fabs. 16, 19, 20 and 22, this last including a platter of late 1st century type, with an internal ledge.

Black Burnished Ware Category 1. Estimated nos. are cooking pots 11, and bowls and dishes, 5

16. Fab 15. Small cooking pot, or perhaps originally handled beaker? (cf. Lambrick 1980, FIG 26, No. 136), there Antonine. (cf. also Gillam 1976, FIG 2, No. 21, mid to later 2nd century).
17. Fab 15 (cf. Gillam 1976, FIG 3, No. 32, mid to later 2nd century). The angle of the lattice in a sherd which appears to belong to this vessel suggests a date rather later in the century than mid 2nd.
18. Fab 15.
19. Fab 15. The vessel seems to have been intended as a bead rim dish. The decoration is inverted chevrons, not continuous wavy lines. This decoration probably indicates a date in the later 2nd century.
20. Fab 15. The sagging base is decorated with a series of running loops. The form is current through most of the 2nd century (cf. Tyers and Marsh 1979, Fig. 242, IV.J.1, *c.* AD 120–180/200).
21. Fab 15 (cf. Gillam 1976, FIG 3, No. 38, mid to later 2nd century).
22. Fab 15. Rather eroded, but apparently never decorated, but in any case the form is not likely to be later than the 2nd century.
23. Fab 15. Date as 21. The very small chamfer, the splay of the wall and the decoration of these vessels indicate the later rather than the middle 2nd century.

Mortaria. See separate report by Kay Hartley, Total in pit 2.

24. Verulamium region. *c.* 130–180.
25. Verulamium region. A very similar but smaller vessel, *c.* 130–180.

A sherd of a Hartshill/Mancetter mortarium of *c.* 130–170 AD occurred in pit spoil.

Flagons. Flagon nos in all fabrics, 6.

26. Fab 36, pinkish buff. The poorly moulded rings suggest an Antonine date (cf. Brown and Alexander 1982, FIG 12, No. 127, from the town rampart, there dated later 2nd century).
27. Flagon fabrics present difficulties of identification, but the very micaceous fabric with pink quartz tempering here does indicate an Oxford white ware (cf. Young 1977, FIG 30, type W2, 100–240).

Other Flagons. Fab 41. 4 vessels (plus vessel 4, a jar in Fabric 41).

Amphorae. Estimated vessel nos 8.

28. Fab 45. Dressel 20. Dr D. Williams writes 'Drawing 28 appears to belong to Type 5 in the typological sequence of Dressel 20 rims proposed by Tchernia ('Les amphores romaines et l'histoire économique', *Journ. des Savants* 1987, 216–234). This form was common from the later second century AD into the third century' (cf. Brown and Alexander 1982, FIG 12, No. 128, from the rampart).
29. Fab 45. The neck and handles have been removed from this example, and it has been rubbed smooth to create a new vessel.

Some eighty Dressel 20 amphorae sherds were present, mostly used to make a soakaway at the bottom of the pit.

Colour Coated Vessels. Vessel nos 0.

No sherds of Nene Valley colour coated wares were recovered from the pit. In addition only single sherds are certainly associated with levels related to the defences at the Towcester Grammar School site, cf. Brown and Alexander 1982, 38–42, FIGS 10, 11, 12 and table 2, and Site Civ.

Rough Cast Beakers. Vessel nos 2.

30. Fab 14c. Cologne. Very hard fine white fabric, dull metallic all-over black 'onion skin' colour coat, which has peeled badly.
31. Colchester. Very hard, fine, dark red, well fired fabric, dark grey external matt finish, with typical firing line change of colour to red at foot of vessel.

Mica Dusted. Vessel nos 1.

Not illustrated. Fab 5. Part of a footring dish, in fine redware.

PERCENTAGES OF FABRICS

The percentage of vessels in their fabric types recovered from the pit is as follows. The large proportion of Samian not

included in these percentages (minimum 34 Samian vessels to 74 in coarse ware) should be borne in mind.

Local			Non local		
A. Sanded and gritted cooking pots and storage jars	12	16%	G. BBl, Dorset	16	22%
B. Grogged cooking pots and storage jars	10	14%	H. Amphorae Spain	8	8.25%
			I. Rough cast Cologne		
C. Local (Upper Nene type Fab 21) BBl copies	7	9.5%	Colchester	2	3%
			J. Mortaria Verulamium	2	3%
D. Other grey wares (3 are Fab 22)'Ecton' type	6+	8.25%	K. Highgate Wood		1.5%
E. Flagons (may include finer Verulamium fabrics)	5	7%	L. Oxford white ware	1	1.5%
Jar in flagon fabric	1	1.5%			
F. Fine red beakers burnished and rouletted.	2	3%	M. Mica-dusted	1	1.5%
	43	59.25%		31	40.75%

The one hand-made shelly vessel represented has been omitted as it appears to be 1st century and therefore residual.

A question that may be asked about the pit group of pottery is whether it would support a date for the construction of the defences in the time of Clodius Albinus (193–197), or a little later, rather than the date of *c.* 170 to *c.* 180 suggested by Brown and Alexander (1982) or the marginally earlier date suggested in the Samian report ('not necessarily any later than the third quarter of the second century') for this pit.

As the pit must be later than the defences, giving those an Albinian date one would expect it then to bear a close resemblance to the phase 2 (*c.* 170 to *c.* 230) pottery from the Towcester suburbs (Woodfield in Brown and Woodfield, 1983). In fact this does not seem to be the case. The main stumbling blocks to a later date for this material can be listed as follows, in the order of the material given with its percentages above.

Group A. Sanded and gritted cooking pots/storage jars. The percentage of this material (10.75%) is lower in the suburbs. This would be expected at a later date, as the material is clearly declining – i.e. 14.5% in suburbs phase 1, 1.2% in phase 3.

Group B. Grogged cooking pots and storage jars. The material in the pit dates from the rather ill-defined switch over from the hard native derived grogged fabrics (Fab 35a), presumably locally made, to true 'soft pink grogged' (Fab 35b) which appears to be made at a large centre, or perhaps centres, the location of which is unknown, but is probably near Towcester. Fab 35a. declined in the suburbs from 11% in phase 1 to 5% in phase 2, whereas Fab 35b increased in Phase 2 (a period which takes in a start of this 'SPG' explosion to its 38% minimum in Phase 3) to 15.5%. The figure in the pit of 19% is mostly Fab 35a, and the proportion of not more than *c.* 4% of Fab 35b is not high enough for a later date.

Group C. Local BB1 copies. These were represented by only one sherd in Phase 2, suburbs, despite their proportion of 9.5% in the pit. The pit quantities are high for a later date, even allowing for residual material.

Group D. Other grey wares. Three of these vessels are of Fabric 22, Ecton type. This brings the products from this source to 14%, whereas they are 5% in the suburbs, phase 2. The quantities are again too high for a later date.

Group E. Flagons. The number of these from the pit, five, can be compared with all the flagons from phases 1 and 2 in the suburbs, (fifteen). Again the number of flagons is very high for a date consistent with suburbs phase 2. (The numbers were also high on Site C iv).

Group F. Fine red burnished and rouletted beakers. There are none of these Fab 1 beakers in phase 2 at the suburbs, although they occurred very thinly in phase 1. More importantly the common orange beakers, with their coarser, softer fired fabrics (Fabrics 9, 10 and 11) do not occur in the pit, although they are 16% of the total in the suburbs at this date.

Group G. BB1. This very high BB1 percentage also occurs in the suburbs, in features which seem to be related to the initial lay-out of the industrial site in phase 2, although the forms are different, but the percentage for the phase as a whole has there declined slightly to 11.5% (12.5% in phase 1). More important perhaps is the lack of forms in the pit clearly of the very late 2nd and early 3rd centuries, i.e. the grooved pie dish, suburbs FIG 19, nos 16 to 18, and the absence of the developed intersecting arc (as opposed to the intersecting chevron) so conspicuous on that suburban site in phase 2 (FIG 19, nos 10, 11, 12 and 15–18). It should be noted that the features in which these occurred all produced late Antonine and early 3rd century Samian.

The question of the reason for the high proportion of BB1 at Towcester is again raised. It is not paralleled on other sites in the vicinity as far as is known (pers. comm. Pat Aird for Northamptonshire and Yvonne Parminter for Magiovinium). It is always 'rare' at Milton Keynes, and only 1.02% in a late 2nd century deposit (Marney 1989, 177, 29). It appears that the walling of certain towns in the south, e.g. Silchester, Winchester and Chichester, is accompanied by a surge of BB1 to proportions of 25% to 30% of all the coarse pottery (pers. comm. Malcolm Lyne), and the suggestion that this high proportion indicates the presence of some official agency at these times cannot be ignored.

Group H. Amphorae. There are the same number of amphorae (8) in the pit as from phases 1 and 2 in the suburbs. Again the numbers seem too high for a later date, though other factors may be involved here with what seems to be the rubbish from a well-off urban household.

Group I. Rough cast beakers. Cologne imports were not represented in the suburbs, although there were two small sherds of what appeared to be Colchester products. More important the Rhenish/Lezoux colour coats, which represent 1.5% in the suburban phase 2 deposits, could have been expected in a wealthy town pit at a later date.

Group J. Mortaria. These do not support a date after *c.* 170–180.

Most significant of all, perhaps, is the total absence here of Nene Valley colour coated wares, and the virtual absence (one

sherd each) of these wares from levels associated with the defences at the Grammar School site and Site Civ discussed above. There are only four of these sherds present in phase 1 (to *c.* 170) in the suburbs, but they have risen to 12.75% in phase 2. Their absence from a pit with this many vessels in the late 2nd or early 3rd centuries would be very hard to explain.

Under the circumstances it is not felt that the coarse wares in this pit support an Albinian date for the construction of the defences at this point on the circuit. Taken with the Samian, a date at the end of the third quarter of the 2nd century seems most likely for the construction of this soakaway, which implies a date in the earlier 170's at the latest for the construction of the defences.

II. MATERIAL FROM LAYER 16: THE PRE-RAMPART OCCUPATION LEVEL, SEALED BY THE CONSTRUCTION OF THAT FEATURE. (FIGS 3 and 9)

32. Fab 35 a/b, buff/pink grogged, reasonably hard. A very large storage jar (the diameter could well be larger). Later 2nd century.
33. Fab 34. Pinkish buff/sandy. The channel is very sharply cut.
34. Fab 34. Looks to be from the same kiln firing as no. 33, but the groove here is less pronounced (cf. Woods 1970, FIG 25, No. 184, Antonine or earlier). Both vessels are particularly well made and fired.
35. Fab 22. Dark grey, smoked. A common Antonine type, with the triple grooves at the neck.
36. Fab 22. Mid grey, darker burnished surfaces. These local variants of the poppy head beaker seem to go on being made into the Antonine period. Paul Tyers writes 'The type of poppy head beaker that you have at Towcester (with a short everted rim) is a subgroup of decorated beaker which is not amenable to the method of rim form analysis noted in my article (Tyers and Marsh 1979, FIG 239). Very similar beakers, with short everted rims such as your example, are known from the Flavian period till the end of the second century.' It seems however unlikely that they were made locally at the end of the Antonine period, as they barely occurred on the Alchester road suburbs in phase 2, except for some two or three very small eroded sherds (cf. Lambrick 1980, FIG 24, No. 74, dated 140 to 200).

Unillustrated sherds from this layer include 3 grogged sherds in Fab 35a and Fab 35b, 1 sherd in Fab 34, a base of a carinated bowl in grey ware Fab 18, a sherd in Fab 19, 4 sherds in Fab 22 (both grey wares) and a sherd apparently from an Oxford white ware flagon; also a large sherd from a Dressel 20 amphora. None of this pre-rampart material suggests a date at variance with the 170's for the construction of the defences.

III. FROM THE RAMPART (NO 6 PRE-RAMPART) LEVELS Layer 15 (FIGS 3 & 9).

The following sherds were numbered and removed from the section after that had been drawn. Sherds described in brackets are not illustrated. The pot numbers are recorded on the archive, not the published section, where they are placed in their appropriate layers. None of the material suggests a date necessarily later than the 170's for the rampart.

37. Pot 1. Terra nigra. Val Rigby writes '. . . IV1 . . Central mark. Hemispherical cup or bowl, with tall functional foot-ring. Pale grey fine-grained ware, with grog inclusions; darker streaked burnished surfaces. The interior shows considerable wear, and due to this, the die cannot be identified precisely, but it is probably a mark comprising repeated I and V motifs. There is a very similar stamp from Grandford March, Cambs. (C.F. and T.W. Potter 1982). The fabric is a well prepared fine-grained coarse ware, possibly from a local source, but it could have been imported from Gaul. After AD 85.' There is a similar platter in the London Museum, Accession No. 1938.58 146 34; there is in fact no obvious local source for this vessel. Layer 15b.

    (Pot 2. Fab 33. Small rilled sherd, presumably 2nd century. Layer 15a).
38. Pot 3a. Fab 21. Sooted cooking pot, wheel thrown, latticed zone unburnished, (cf. Woods 1970, FIG 24. Nos 170 and 171 for general type, there dated Antonine). Layer 15a.

    (Pot 3b. Sherd of ? Colchester rouletted beaker, red fabric, matt dark grey-brown colour coat. Probably later 2nd century. Layer 15a).

    (Pot 4, Sherd of a Dr 31R, Central Gaulish, Antonine, Layer 14).

    (Pot 5. Fab 21. Small BBI copy sherd with acute angled lattice. Presumably Antonine as illustrated examples. Layer 15b).

FROM PRE-RAMPART OCCUPATION: Layer 16. (FIG 9)

39. Pot 6. Fab 22. The form suggests a poppy head beaker base as no. 36. Probably 2nd century.

    (Pot 7. Fab 22. Small rim sherd of everted rim of a necked sooted cooking pot. 2nd century. Layer 15b).

    Pot 8. Dr.38. C.G. Antonine, Layer 11.)

Unstratified Fine ware, ?Import (FIG 9)

40. Fab 6. Grey sandy, light red surfaces, mica-dusted. Very precisely made and fired, with cut grooves on rim. This fabric has been noted in the Museum of London collections by the writer, and it is rare outside that city. It may be a Rhineland import rather than made in the London area, however. Late 1st century? Marsh 1978, type 26. These vessels were, however, thought to be mid 1st century at Camulodunum, (Hawkes and Hull 1947, 223, Form 41).

General unstratified pottery from the area seemed to indicate a cut-off of occupation here after the filling of the soakaway pit, late 2nd/early 3rd, 3rd and 4th century material being absent, except for a sherd from an Oxford C97 mortarium – the only late sherd.

SITE Cii, TEXACO FILLING STATION

The pottery from this site is reported on in microfiche.

F5N appeared to be aceramic. F8N produced nothing from the metre or so of lower silts, but produced late medieval material in the higher levels (lost while away for specialist report) and one Samian chip.

Phase 7. F7N. Prince Rupert's ditch. A cup or tyg handle was recovered, and is reported on (pot M.78) with the material from Site E.

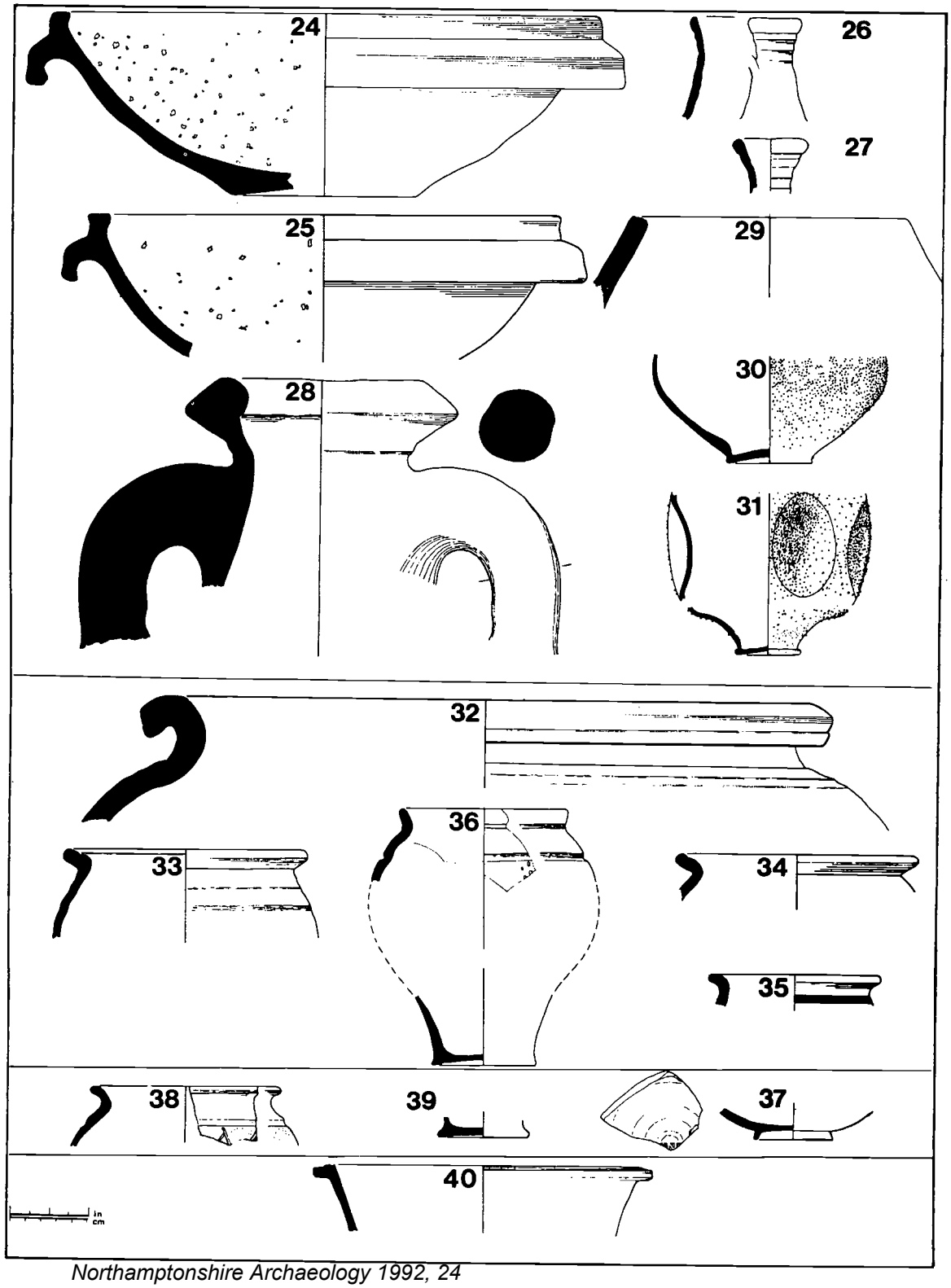

Fig 9 Towcester – Site Ci. 24–31 Pottery from pit F10 cutting rampart, Phase 2. 32–36 Pottery from pre-rampart levels, Phases 1–2. 37–39 Pottery from rampart body, Phases 1–2. 40 Unstratified. Scale 1/4.

SITE Civ, 156/158 WATLING STREET (MASONIC YARD). 1991

The full Samian and coarse ware pottery reports are in fiche. No vessels required illustration.

Phases 1 and 2. The Samian (17 sherds) and coarse ware (119 sherds) suggest that occupation on the site commenced shortly after the Roman conquest, with a peak of activity in the mid to later 2nd century, but not the last quarter of that century. There was a high proportion of flagons and some unusual fine ware beaker sherds. BB1 was well represented. Significantly the Samian, a Nene Valley sherd, and coarse wares again indicated a date for the wall and bank of the 170's.

Phase 4. Eight sherds of 3rd and 4th century Roman pottery occurred residually in medieval ditch A12, suggesting that 4th century levels above the 'black earth', now lost, were in situ in the Middle Ages.

SITE D, BURY MOUNT
(FIG 10, pottery, FIG 3, section)

Some 620 sherds were examined from the site. They show that occupation commenced with a 'Belgic' phase, apparently hard on the Roman conquest although no pre-Flavian Samian was recovered. There are slight hints of a Trajanic gap, and strong suggestions of a lull in activity in the late Antonine/Severan periods, when there is additionally no certain late Antonine Samian. Thereafter the evidence is thinner, but suggests little further activity except apparently in the mid to late 4th century.

The Norman period is represented by only three sherds despite the proximity of the excavations to the motte.

Some seven sherds hint that an apparent yard surface may relate to the activities of Prince Rupert in the 1640's but this is not certain. (Gp 32 Trs I and VIII).

Notable finds include no. 44, a carrot amphora, no. 71, an apparent Late North African amphora, and unillustrated 6th century sherds. These last suggest sub-Roman and Dark Age occupation, and the first hints at the presence of the military. Early Anglo-Saxon pottery has also been recorded nearby by the writer at the parish church.

The excavator's original field records for features and layers were in individual trench Units, replaced in early post excavation work by site Groups. The unbracketed layer numbers should be used for reference to published plans and sections.

Pottery From Phase 1. Early Occupation. Mid 1st to mid 2nd century. (FIG 10)

41. Belgic grogged, dark grey to black, reddish margins, black burnished externally. Hand made (cf. Partridge 1981, FIG 129, No. 46 for form and fabric, there described as 'native hand made ware').

This level produced six other sherds of later 1st to early 2nd century types, one apparently Terra Nigra. Tr D I, Unit 106 (Grp 30b). Primary buried soil.

(Not illustrated. A Dr29 rim flake, South Gaulish, probably *c.* 65–85. No coarse ware sherds were recovered, so this Samian sherd, exceptionally, is included here. Tr D II (Unit 244) Grp 30b. Primary buried soil.)

42. Fab 22. 'Ecton' grey, with unusually coarse rustication. The well-known late 1st and early 2nd century rusticated jars are not common in this area but cf. Lambrick 1980, FIG 22, No. 12. Also six other sherds all apparently late 1st and early 2nd). Tr D III plan. (Unit 327) Grp 2. Early ditch or pit cutting primary soil.
43. Fab 24. Grey, virtually neckless, short everted rim. Both form and fabric are later 1st/earlier 2nd, (+ one sherd of a Dressel 20, 1st and 2nd centuries). Tr D II (Unit 260) Grp 6. Small ditch.

(Not illustrated. One sherd of later 1st earlier 2nd type. Tr D II, (Unit 241) Grp 30b. Primary buried soil.

One sherd as above. Tr D II (Unit 264) Grp 20. Ditch(es).

One sherd as above. Tr D II (Unit 268) Grp 6 Small ditch.

One sherd as above. Tr D I plan (Unit 111) Grp 39, ph)

44. Dr Williams writes:- 'This is a bodysherd with horizontal rilling from a 'carrot amphora' (Camulodunum form 189, Schone-Mau form XV). The fabric is fairly hard, rough and sandy, red in colour throughout (between Munsell 2.5YR 5/6–5/8). This form of amphora normally has a plain or beaded rim, usually lacks a neck, has thick loop-handles and a tapering body generally covered with horizontal rilling. It is commonly associated with early military sites in Britain and Germany (Reusch 1970) though examples are known from Pompeii. The form occurs in early 1st century AD contexts at Wiesbaden and Vindonissa and is common at Claudian Hofheim (Reusch 1970) and Claudian-Neronian Colchester (Hawkes and Hull 1947). It is also found after AD 75 at Fishbourne (Cunliffe 1971b). The origin of this interesting form is unknown. Scanning electron microscopy of the quartz inclusions suggests an origin in a desert environment (Shackley 1975). Palestine has been mentioned as a possibility (Green 1980) though to the best of the writer's knowledge no examples of the form have been recovered from there. The contents carried are not known, although dates have been suggested (Reusch 1970)'.

    There are a variety of rim forms and the vessel did not necessarily have the one depicted. As far as is known carrot amphorae have not previously been recorded from Northants. Tr D II, (Unit 243) Grp 30a. Buried soil.
45. The fabric is either fine Verulamium or coarse Upper Nene – red sandy, grey core, white/cream slip. Flagons in a similar fabric date to 130–150/160 at Verulamium, although the form runs through most of the 2nd century. Tr D II, (Unit 243) Grp 30a. Buried soil.
46. Fab 26. Dark red brown, burnished black surfaces. The form suggests a Hadrianic, or perhaps very early Antonine date. (One other sherd, Fab 22, 1st and 2nd centuries). Tr D VIII, (Unit 363) Grp 12. Wide hollow.
47. Fab 22, grey ware. This vessel appears to be a platter rather than a lid, as it is well finished and burnished inside. Later 1st/earlier 2nd in either case, but more probably Flavian/Trajanic if a platter. Tr DI/VIII (see plan) (Units 11/114) Grp 11 and 16. Ditch/pit?, post holes 51 and 52.
48. 'Belgic' grogged. Base of buff/black platter? wheel made. Late 1st century, probably. As above.

These two units produced thirty-six dateable sherds in addition, of which twenty-three were of 'Belgic' character, i.e. from hand made shelly and grogged vessels. Some grogged sherds were as much as 10 mm thick, with sparse shell in addition. Cordons and grooves and cross combing occur. In wheel-made pottery a

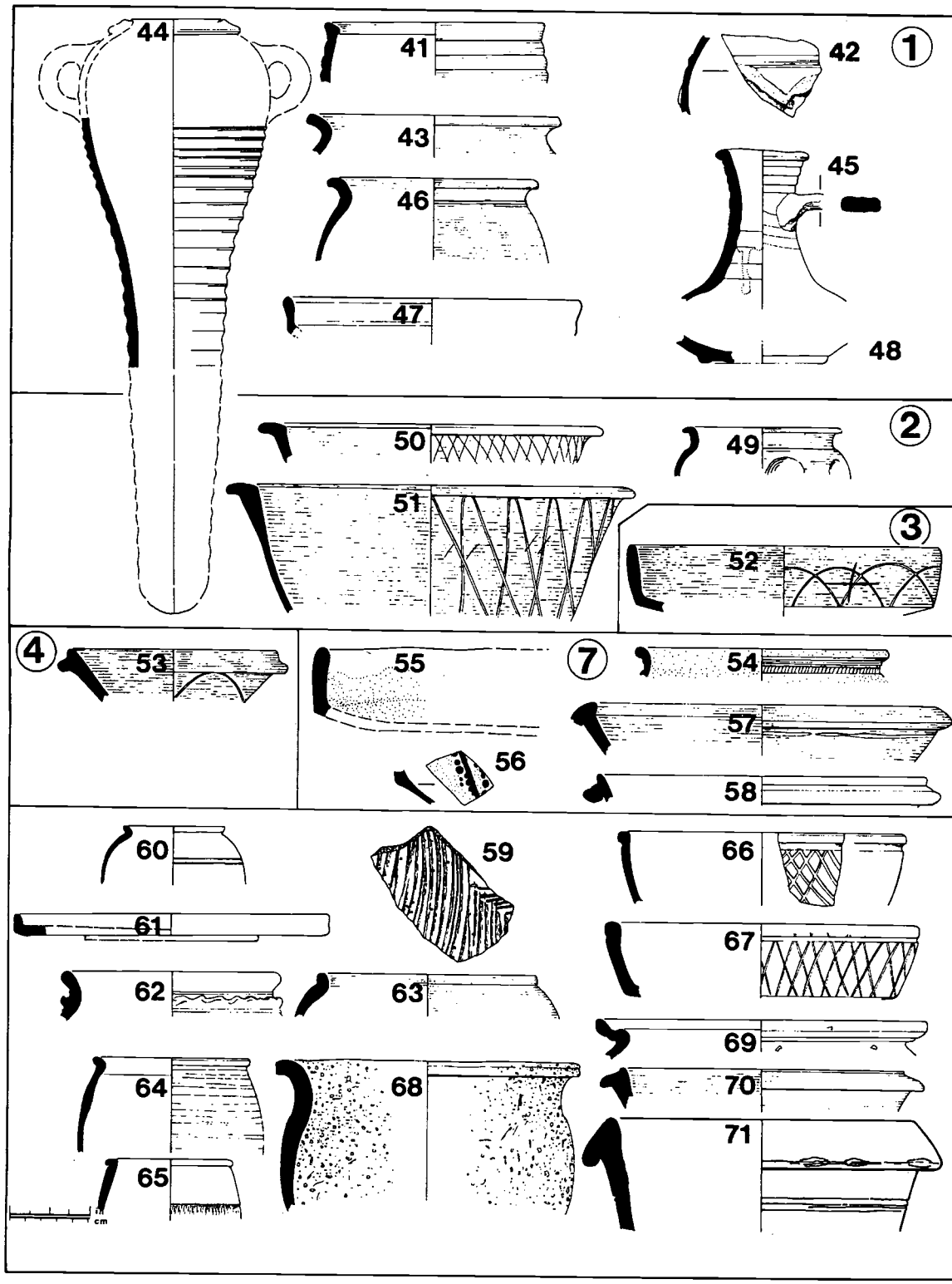

Fig 10 Towcester – Site D. 41–48 Pottery from primary levels, Phase 1. 49–51 From construction of defences, Phase 2. 52 Phase 3. 53 Reconstruction of the rampart Phase 4. 54–58 Tudor and residual late Roman, Phase 7. 59–71 Unusual and significant pottery, unphased. Scale 1/4.

rim of an orange-red beaker and a sherd with a sharp hollow cordon occurred, both typically 'Belgic'. 70% of the 'Belgic' material on the site came from these features. Four Samian sherds indicate a date range from the Flavian into the Antonine periods, an imported 'North Gaul I' colour coat dated from *c.* 80–120, and the other coarse wares indicate a date of the later 1st to mid 2nd centuries for these units. The unusually large amount of 'Belgic' material suggests an early date for one or other of those features, presumably conquest period or shortly before or after. A11 Grp 11 as pot no. 47.

Pottery From Phase 2. Immediately preceding or related to construction of defences? Mid to later 2nd century. (FIG 10).

49. Fab 1 Bright orange. Presumably not before mid 2nd century, nor much after when the fabric goes softer. (+ 3 other sherds, Hadrianic/Antonine character). Tr D II, (Unit 297A), Grp 30a. Buried soil.
50. Fab 21. A very close BB1 copy. The original vessel would date from the early to mid 2nd century. Some fifteen sherds occurred of Fab 21 BB1 copy vessels, three in Phase 1, and the others in Phase 2 (or residual). They appear to be a common early to mid Antonine type. Tr D II (Unit 300/301), Grp 19. *Ascensus* clay core.
51. BB1. Large part of a flat-rimmed bowl, several sherds, some with old breaks. The most complete vessel from the site. It appears likely to have been *in situ* as discarded. The decoration with inverted chevrons implies a date range between 160 and 200. There are curious parallel horizontal scratches.

N.B. This could be the ground surface on the berm which relates to the wall building. Equivalent Tr D II (Unit 240) Grp 30a, upper buried soil.

(Not Illustrated: Six sherds, one a base (of vessel 68?) in Fab 44b, 'prickly shelly' probably later Antonine. Tr D III, (Unit 326) Grp 30a, upper buried soil.

Two other mid 2nd century sherds. Equivalent Tr D II Unit 366, Grp 30a.

Large sherd of an Antonine Dr 38. It is covered with fine mortary spats ie associated with masonry construction, perhaps the wall? cf. vessel 64. + two other sherds of generally 2nd century character, not last quarter. Tr D VIII. (Unit 371) Gr 48. Gulley, ?demarcating rampart rear).

Pottery From Phase 3. Early 3rd century, or later. Less than half a dozen sherds appeared to indicate some sort of presence on the site at this time, but the nature of the activity is not known, nor are there related levels. (FIG 10).

52. BB1. Scribbling under base. The intersecting arcs indicate a date in the early 3rd century. There is a cross graffito, presumably an owner's mark. Tr D III (Unit 350), Grp 9. Robber trench?

Pottery From Phase 4. 4th century. In view of the position of this material where the 2nd century rampart ought to be, it should be either redeposited 4th century levels, or a contaminated phase 2 soil level or a total 4th century reconstruction of the rampart. (FIG 10)

53. BB1. Small flanged bowl, decorated with arcs (cf. Gillam, 1976, FIG 4, No. 46 for general type), late 3rd/early 4th century? If so an unusual date for this site, but see below.

This level also produced 4th century Oxford and Nene Valley colour coats (five sherds), a damaged rim of a coarse straight sided shelly dish, mid 4th century or later, and an Oxford W50, 240–300, again an unusual date for this site. Of the other sherds, seven appeared to be 1st century, ten later 1st/earlier 2nd, and sixteen Hadrianic/Antonine. If this was a phase 2 level disturbed, then one would have to accept 19.5% intrusive material. It is not unlikely that it represents a redeposit of material moved in the Norman period when there was clearly very little contemporary pottery on the site. All Tr D I, Unit 104. Buried soil, rampart area.

(Unillustrated. A small, pinky red, micaceous, colour coated sherd appears to be Oxford ware, later 4th century. The stratigraphy indicates that this sherd is intrusive in a Phase 1 post hole, not itself 4th century. Tr D I/III, plan, (Unit 108), Grp 41. Post hole).

Phase 5. Sub-Roman and Dark Age. No associated levels.

Unillustrated. Terry Pearson writes –

'a. Neck sherd of a ?biconical jar, probably 6th century.

Fabric: The overall appearance of the fabric is fairly fine with no large inclusions. The predominant grits were organic and are indicated by the voids; the shape of the voids would suggest grass (cylindrical/flattened voids with small o cross-section), and straw/reed (larger fluted and flattened voids). Background of small soft dull-red/brown grits, indicating iron-ore, clustered and small quartz grits (just visible to the eye) and isolated limestone.

Manufacture: The sherd is laminated with the outer surface only remaining. Hand-made, coil-built, with the coils flattened out which has caused the fault lines between coils and the sherd to laminate. The external surface is smoothed over and burnished. This was achieved by the use of a narrow-bladed tool (or rounded tool). Unstratified.

b. Body shed, jar?, probably 6th century.

Quartz tempered fabric with ironstone and isolated shell.

Manufacture: Hand made with laminations from joined coil interfaces (including thumb impressions). The overall appearance of this sherd would suggest a Saxon date although the drag marks on the surface are unusual'.

The unstratified amphora No. 71, may belong to this phase. No sherds were apparently dateable to the 7th to 11th centuries.

Phase 6. Early Medieval Construction Of Motte? Only three sherds were recovered from this phase, all shell tempered, two thumb-nail size. Two were identified as Northampton T.2.

Tr D I, Unit 103/4 top, residual. Tr D I, Unit 101, residual.

Tr D I, Unit 102, residual in modern level.

Late Medieval/Earlier Post Medieval, and Phase 7. (FIG. 10).

The late Roman residual material is illustrated to indicate activity at that date.

54. Oxford C75. Later 4th century. + 1 shelly sherd of Northants. T2, 12th/13th centuries, and a very small late medieval sherd. Of the twelve other sherds, two are again from Oxford colour coats, 4th century. Trench D1, unit 103/104, top.
55. Oval drip tray or roasting pan, with yellow lead glaze, buff sandy fabric. The vessel has been knife trimmed externally. Size uncertain. 'Midland Yellow', probably late 16th/17th centuries. Also base of dish, overfired green, same fabric and date. One sherd of medieval shelly ware occurred. Tr D 1 Below Unit 101.
56. Oxford red colour coated sherd, white painted decoration,

apparently from bowl of about 12–13 cm diameter, a C77 or C82? Internal painting is rare but not unknown (Chris Young, pers. comm.). Later 4th century. As above.

57. Fab 29a. Heavy hammer-head bowl, grey ware, grey metallic burnish. Post 350. As above.
58. Fab.30. Coarse grey, probably first half 4th century. As above.

(This level produced four other colour coated sherds of 4th century type and forty-three other sherds of 1st and 2nd century dates, three of the later 2nd. Two of the more interesting vessels are illustrated below, nos 62 and 69. Most of the sherds are small, and none appear to join; much is eroded. The impression indicates a redeposited level).

Unit 101 itself produced pottery (eight sherds) of 16th and 17th century date, and apart from one unglazed red earthenware rather crudely thrown sherd, there is no material likely to be later than that date. Where dateable the nine Roman sherds appeared to be 2nd century.

Unit 102 Produced 20th century material, and is counted as unstratified.

Unstratified and Residual Pottery (FIG 10).

Some 265 sherds were recovered in unstratified contexts and from Unit 102. This material, where dateable by fabric and form, could be broadly assigned to the following periods: 1st century, 10%; late 1st and 2nd centuries (not further differentiated) 21.5%; Hadrianic/Antonine, 33%; followed by a drop to late 2nd/early 3rd centuries, 4.25%; 3rd and 4th centuries, 4.25%. Medieval and post medieval represented 27%. The unstratified sherds illustrated are chosen (a) because they are unusual, (b) because they represent significant dateable types not otherwise illustrated, and (c) because they emphasize significant phases of activity.

59. Thick (12 mm) heavy grogged sherd from hand made storage jar of native type, deeply furrowed (cf. Frere 1972, FIG 101, No. 83 for general type, there dated 55 to 60, but an earlier date could be accepted.) Unusual in Towcester. Found by P. Woodfield on the Bury Mount in 1974.

The Bury Mount site has helped to increase the 'Belgic' evidence at Towcester from a thin scatter to a definite presence.

60. Beaker. The sharply everted rim and globular form indicate a later 1st century type. The very fine grey ware does not appear to be local. Tr D 1. Unit 104 Residual.

Beakers of poppy head type. Six sherds, one with white dots, phases 1 and 2, also occurred.

61. Sherd perhaps from an imitation Gallo-Belgic platter. Pink sandy, grey patchy core, light buff internally, light grey exterior. Not polished nor slipped. Well finished on inside, poorly underneath. Although the side is upright for a platter, it is more difficult to find parallels for a lid this shape. Presumably 1st century. Unusual. Platters were scarce on this site. Unstratified.
62. Fab 1, variant. Red, grey brown slip. Frilled rim jar. Vessels of this type occur in the second quarter of the 2nd century at Verulamium. Unusual here. Residual in Tr D I Unit 101.
63. BB1. Bead rim jar, 2nd century. Tr D I Unit 102. Residual.

In addition twenty sherds of BB1, representing some three to four cooking pots, two pie dishes, two triangular rim dishes of Antonine date, two dog dishes, one with arcs, and two other dishes (one with scribbling inside the base, and therefore presumably 4th century) occurred, as well as the five vessels illustrated. This proportion is high, and parallels the material from site Ci.

64. Fab 1. Burnishing has produced a red/grey–brown striped effect, this being a feature of the products of the Upper Nene kilns. The vessel was found in trench VIII in association with an Antonine Dr30 and the major part of a later 2nd century jar, in a Roman context that cannot now be precisely determined, and was covered with mortar splashes, presumably relating to masonry construction most likely the town wall. Tr D VIII Grp48? (with mortar splashed Samian?).
65. Fab 1. Rouletted beaker. Common in Towcester in the Hadrianic/early Antonine periods, represented here by some dozen sherds, the majority rouletted. The two or three other roughcast sherds seemed to be from one bowl, as Woods 1970, FIG 3, No. 67. Phase 2. Unstratified.
66. Fab 18? Light grey, imitating BB1. Probably second quarter of 2nd century. Copies of BB1 forms in fabrics other than Fab 21 ('Ecton' type) are not common and seem to be earlier, the Fab 21 copies becoming dominant in Phase 2. No. 67 was a similar vessel in Fab 28. Both unstratified.
67. Fab 36. An oxidised copy of a BB1 form, date as No. 66. Unstratified.
68. Fab 44b. Handmade. Unusually this vessel is orange. The rather surprising appearance of these vessels, in a period of some ceramic sophistication, is discussed in Woodfield in Brown and Woodfield (1983, 79). A second smaller vessel occurred. (The possible base of No. 68 occurred stratified in Unit 326, Phase 2, later 2nd). Both unstratified.
69. Mark Redknap writes 'This is a lid-seated jar of Oelmann's 'Niederbieber 89' type. It was a standard 2nd to 3rd century AD form in the Rhineland, and made at a number of centres, including Soller and Urmitz. The location is a little beyond the main British concentration for Mayen Ware, and is an important addition to the map.' The writer is grateful to Maggi Darling, Richard Pollard, and Roberta Tomber for initial help with this unusual sherd.

    The channel rim cooking pot is very common in Towcester from the Claudian Conquest to some time towards the later 2nd century, when it ceases to be made. Its absence here, other than 69, is curious. Tr D 1, Unit 101. Residual.
70. BB1. Flanged bowl with low bead, and no decoration. Perhaps late 3rd (cf. Gillam 1976, FIG 4, No. 45 and discussion p. 70) There were few finds from this period at Bury Mount, but even fewer from the Texaco site (one sherd). Unstratified.
71. Dr Williams writes: 'Triangular-shaped amphora rim with a pronounced undercut at the junction of the upper and lower rim section. Hard, fairly smooth micaceous fabric, buff to reddish brown in colour (Munsell 7.5YR 7/4 – between 2.5YR 6/4 and 5/4). Thin sectioning and study under the petrological microscope reveals frequent grains of quartz and flecks of mica, mostly muscovite, together with some fragments of limestone and quartz-mica-schist. The rim form of the Towcester sherd is reminiscent of certain cylindrical forms of late North African amphorae from Tunisia and Tripolitania (Keay 1984). However the micaceous fabric of the Towcester sherd is quite different to the range of normal amphora fabrics associated with these two regions (Fulford and Peacock 1984). A North African

source is still possible (?perhaps in the western region though at present other areas cannot be ruled out.) Unstratified.

Mike Fulford (pers. comm.) comments that N. African amphorae vessels can be late 5th–6th century in W. Britain, but in inland Britain might date from within the Roman period. The source and date therefore remain uncertain.

Anne Anderson's note on the *imported colour coated wares*, and description of the rest of the pottery (which as a group on its own would suggest virtually no activity on the site between the later 2nd century and the third quarter of the 4th century) are in fiche.

SITE E, THE CINEMA

The pottery from Site E is described in microfiche, and twenty six pots, 72 to 97, are illustrated.

Phase 1. The pottery suggested a slight 'Belgic' presence, with a range of later 1st to mid 2nd century for F1, a probable plot boundary.

Phase 2. Pre-rampart soils seemed early in this phase, with F2, the defensive ditch, post mid 2nd, and with a site cut off of *c.* 160–*c.* 170.

Phase 4. Fv, the Great Ditch, produced later 4th century pottery.

The *medieval* dark rubbish/marsh deposits produced sherds from the 12th through to the 15th centuries, the majority of the 14th and 15th centuries.

Phase 7, and later. Cistercian ware sherds came from Civil War ditches this site's F16, and F7N at Site Cii (vessels M 77 and 78). Deep deposits of *c.* 1800 had subsequently obliterated the site's topography.

SITE Fii

This produced late Phase 2 material from layer 5, and late Phase 4 material from layer 2.

SITE Fiv

Late 4th century material came from probable Great ditch silt. The Pottery from Fii and Fiv is further discussed in fiche.

THE SAMIAN (FIG 11)
by Hedley Pengelly

SITE Ci (RAMPART IN GARDEN OF 166 WATLING STREET).

PHASE 1

The presence of some half dozen Neronian/Flavian Samian sherds implies the presence of early Roman occupation in the nearby area.

PHASE 2

Material from the rampart.
Layer 11 Form 38, C.G. Antonine. Layer 14 Form 31R, C.G. Antonine.

Material from the Antonine Pit, F10, cutting the back of the town rampart. To *c.* 170–175 AD.
Despite loss from the cutting of the sewer trench the pit still produced 50 Samian vessels. (Retrieved from pit, 34; from trench side spoil, 16). None of the Samian, whether, as with the majority of sherds, directly retrieved from the pit, or from the trench side digger spoil from the fill, need necessarily date any later than the third quarter of the 2nd century.

The most striking aspect of this material is that it includes a number of Central Gaulish plainware vessels, in 'fresh' or 'freshish' condition, which give the impression of being deposited at the same time. The vessels in question comprise seven large cups of form Dr 33 and three flanged bowls of form Curle 21. Seven of these vessels were stratified in the pit, 5 x Dr 33, 2 x Curle 21, while sherds of the other three were found in the trench side pit spoil, two Dr 33, one Curle 21. These were considered to be almost certainly contemporary, and in several instances there were sherd cross joins between pit and spoil, (two Dr 33's and one Curle 21). Six of the cups and one of the bowls were present in amounts ranging from about one quarter complete to more or less complete and large, often conjoining fragments were present in fair quantity. The seventh cup and the two remaining bowls were in smaller amounts, though still in sizeable fragments.

Of the seven 33's only one retained its stamp (see below, S1). However there is no difficulty in placing the fabrics of the other six cups within the same range, (*c.* AD 150–180), nor, for that matter, the fabrics of the three Curle 21's. The seven cups were of pretty uniform size, having rim diameters in the order of 15.0–15.5 cm and wall heights averaging 6.0 cm (only one cup retained its base and footring and these gave an overall height of 7.5 cm). This uniformity of size (and to some extent general appearance) might point to a content of a discarded set of cups.

Of the three Curle 21's, which constitute 'kitchen' ware, each measured about 28.0 cm (across the flange) and one, almost a complete profile, had a projected height of about 11.5 cm. Two of these bowls were identical, in that each retained part of the spout, and two were similar in that the exterior wall ridging extended close up to the junction of the wall and flange (the third bowl, by contrast, was ridged only part of the way up). The more complete of the bowls had a remarkably thin base, of its kind, (of 3mm thickness or less within the footring) and both the footring and the basal interior appeared scarcely, if at all, worn. (FIG 11, 1).

The following Samian was also found.

A. Stratified Within The Pit

Decorated ware.
D1 Form Déchelette 72, Central Gaulish, with 'cut-glass' facets, cf. O and P pl. LXXVII, 1 and 3. A particularly fine example of the form with neat rim and thin walls. Mid 2nd century. (FIG 11, 2).

Also: D.2 Form 37, South Gaulish, two fragments. All the details, including the ovolo with large rosette tongue, birds

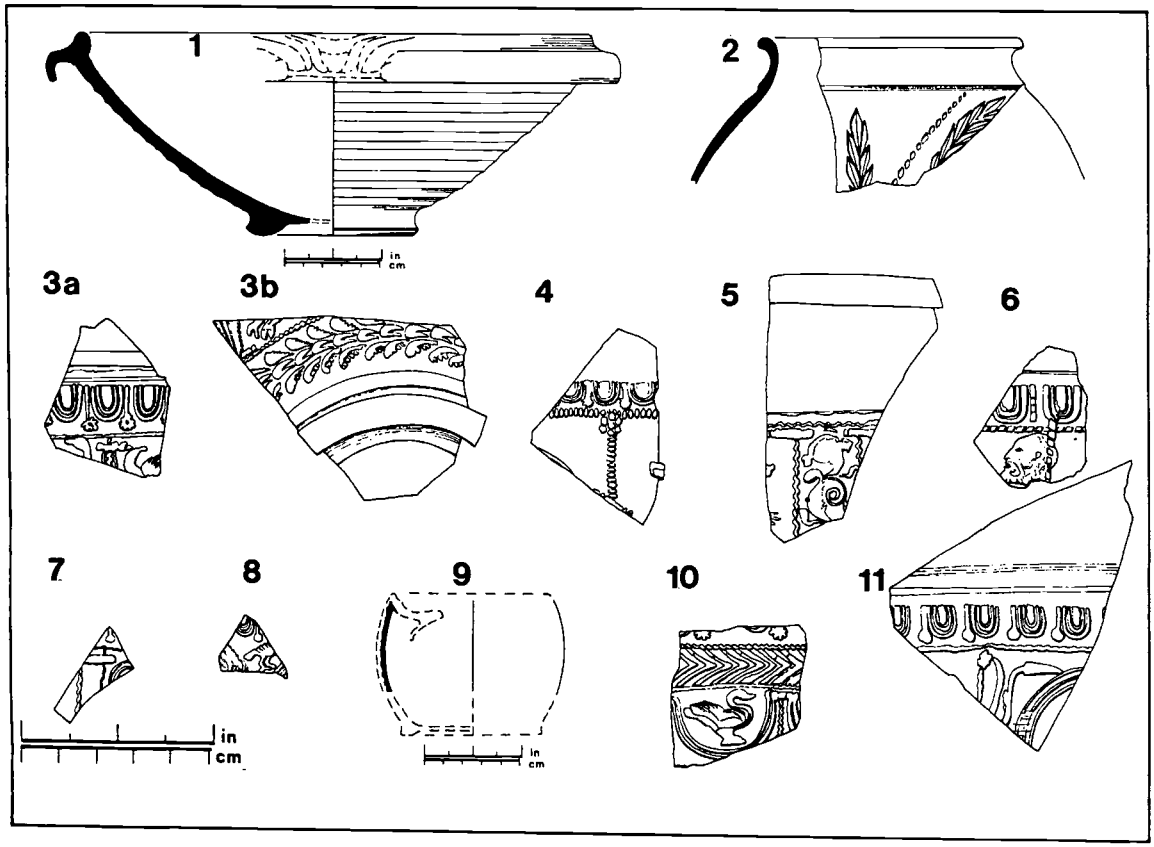

Fig 11 Towcester – Samian. 1–6 North defences (Sites Ci, Ciii). 7–9 North-east defences (Site D). 10–11 South defences. (Site E). Scale. Plain Samian, 1 and 9, 1/4. Decorated Samian 1/2.

(0.2247 and 2290) and dog (H. 26, 18) occur regularly in the work of the Graufesenque potter Frontinus. In general style, this is like some work of his shown on Knorr, 1952, Taf 25, *c.* AD 75–90. One fragment is from spoil (FIG 11, 3a and 3b).

Plain ware.

A collection of Central Gaulish products, predominantly fully Antonine in date and comprising one fragment, parts of an enclosed jar (or similar) and a flat dish, and forms 31 (3), 31R (3, 1 burnt, 1 with rivet-holes), 18/31R-31R (2), 33 (2), 44 (1). Also, in reverse date order -

Forms 33 and 35.	C.G. Hadrianic or Antonine
Form 18/31R–31R.	C.G. Hadrianic-Antonine
Form Curle 11.	C.G. Hadrianic or early Antonine
Form Curle 11.	S.G. Trajanic
Form 27 (two).	S.G. Flavian
Form 36.	S.G. Probably Flavian. Burnt
Form 15/17r or 18R, probably.	S.G. Neronian-Flavian.
Form Ritterling 12 or Curle11.	S.G. Neronian or early Flavian

Total of Samian vessels from the pit: 34.

B. Retrieved From Trench-Side Spoil By Pit

There was nothing in the material itself nor in the matrix deposit adhering to the sherds to imply error in the collection of this material.

Potter's stamp, S3. Peculiaris i, *c.* AD 140–170

Potter's stamp, S4. Regalis ii, *c.* AD 160–200 (160–185 for dish).

Decorated ware

D3 Form 37, Central Gaulish, from Les Martres-de-Veyre or Lezoux. Traces of ovolo and part of rim pierced for rivets. Probably *c.* AD 115–140.

D4 Form 37. Central Gaulish. The ovolo (Rogers B7), rosette (*ibid*, C 280) and bead rows were used by the anonymous potter X-13 who supplied moulds to the 'Donnaucus group'. Moulds in this style were used at both Les Martres-de-Veyre and Lezoux. This bowl is in Lezoux fabric. *c.* AD 120–145 (FIG 11, 4).

D5. Form 37, Central Gaulish, very thin-walled; ovolo largely destroyed by the bowl-finisher when he formed the rim. The device of wavy-line borders topped by rudimentary astragali occurs in the work of Potter X-5, as does the acanthus panel (Rogers M50), occasionally. The bear, just showing on the left

edge of the sherd, is probably the one on S. and S., pl. 65, 10, assigned to X-5. *c.* AD 125–155 (FIG 11, 5).

Plain ware

Central Gaulish Samian, fully Antonine in date, comprising form 33(2), 44(1). Also, in reverse date order:

Form 38.	C.G. Les Martres-de-Veyre. Probably early Antonine.
Form 33 or 33a.	E.G. Late Hadrianic or Antonine.
Form 18/31R.	C.G. Two dishes, one from Les Martres. Hadrianic/Antonine.
Form 36.	C.G. Hadrianic or Antonine.
Form 31.	C.G. Les Martres. Hadrianic or early Antonine.
Form 36.	C.G. Hadrianic. Slightly burnt.
Form 35.	S.G. Probably Flavian.

Total of Samian vessels from the spoil: 16.

Samian Stamps From Site Ci (See M FIG 7).

Note. The writer is indebted to Miss Brenda Dickinson for providing the generous information on which the notes on the potters' stamps are based.

Stratified Within The Antonine Pit, F10;

S1. Central Gaulish. Macrinus iii of Lezoux. A substantial amount (in fragments) of a large cup of form 33 stamped MACRINI. Die 5b. This stamp, which belongs to the later of the Central Gaulish Macrini, occurs also on forms 31 and 27, and at dated sites such as Chesters, Newstead and South Shields; also the Wroxeter Gutter (Atkinson 1942, 141, K11), as well as Lezoux. *c.* AD 150–180.

S2. Central Gaulish. Ianuaris ii of Lezoux. Two conjoining fragments of a form 33. The stamp is of Die 5a, used only on form 33. There is no satisfactory dating evidence for this particular stamp, though others of his are known at Ebchester and Lezoux, and on forms 18/31, 27 (indicating activity before AD 160) and, less frequently, 42. This potter also made decorated bowls of forms 30 and 37 in close association with Paternus i, and a bowl from Straubing is from a mould stamped jointly by them (Walke 1965, Taf. 144a). *c.* AD 130–160.

From The Trench-Side Spoil

S3. Central Gaulish. Peculiaris i of Lezoux. A small fragment from the base of a dish of form 18/31. The stamp is of Die 2a. This die, not itself known from Lezoux, is common enough in mid 2nd century contexts in Britain, including the Worcester Fire. Other sites include Bar Hill, Cadder, Camelon, Mumrills, Newstead, Hadrian's Wall (Chesters Museum) and Catterick. The range of forms involved includes 27, 18/31, 31 and Walters forms 79 and 80. *c.* AD 140–170.

S4. East Gaulish. Regalis ii of Rheinzabern. Form 18/31. The stamp is of Die 3c. This particular stamp was used on forms 31 and 32 while another was used to stamp a cup, of form 33, at Newstead. Broad dating within the period *c.* AD 160–200 seems to be required for this potter, though the Towcester dish looks earlier than that latter date, probably *c.* AD 160–185.

SITE Cii

PHASE 4

Residual in the Great Ditch, F8N. Section FIG 3.

Chip of Samian in Antonine C.G. fabric.

SITE Ciii

PHASE 1

Material from Police Station. Section FIG 3.

Layer 1. Orange gravel ? road deposited immediately over natural clay.

D6. Form 37, Central Gaulish. In the style of Libertus 1 of Lezoux, and with the ovolo with beaded tongue, Rogers B144 = Simpson and Rogers, 1969, FIG 1, 3. This ovolo seems to have been introduced by Libertus, but the basic type is much more familiar on a large class of bowls, all generally similar in style, and involving such potters as most of those featured on *ibid*, FIGS 2 and 3, though frequently neither stamped, nor signed. This ovolo type had a longish life and it occurs on a bowl of Paullus iv in the Wroxeter Gutter deposit (Atkinson 1942, pl. 35, G6). This particular example of the beaded-tongued ovolo is used in conjunction with a mask (D.711, O. 1215) within a scheme of panels having oblique borders. cf. S & S pl. 53, 624, with one of Libertus's more usual ovolos. *c.* AD 120–140. (FIG 11, 6).

D7. A tiny fragment of form 37. Central Gaulish, Hadrianic-Antonine.

SITE Civ, MASONIC YARD

The full Samian report is in fiche.

There was no late Antonine Samian, i.e. of *c.* 175 to *c.* 195 AD, from Civ.

PHASES 1 & 2

Trench I. From below the mortar spread, pre bank.

Form 33/33a. C.G. Les-Martres-de-Veyre. Early to mid 2nd century AD.

Form Walters 79. C.G. Early in the third quarter of the 2nd century.

Form 37. C.G. *c.* 130–160 AD (Accretions suggest smithing.)

In addition seven Samian (two possibly Neronian) sherds from Trench Ia gave a *terminus post quem* up to the Antonine period for the 'Black Earth'.

SITE D, BURY MOUNT

Unillustrated and residual Samian is in fiche.

The contexts in brackets do not appear on drawn plans and sections.

PHASE 1

Tr II. Group 30b (Unit 244). Primary buried soil.

1. Form 29 (rim) S.G. Probably *c.* AD 65–85. Slightly burnt.

Residual and unstratified Samian indicates a small peak of Flavian activity on the site. The next peak, at the end of Phase 1, beginning of Phase 2, implies considerable Hadrianic-Antonine/Antonine (but not late Antonine) activity. The absence of late Antonine Samian was also noted at Site A, the Grammar School, (Brown and Alexander, 192, 33) and Sites Civ and E.

Tr I (113/114). As 51/52/16 on drawn section, FIG 3. Fill of pre-rampart ditch or pit.

2. Small fragment, S.G., from the base of a dish, probably form 18, etc. Flavian or Flavian-Trajanic.

3. Form 27. C.G. Hadrianic.
4. Form 31. C.G. Antonine.
5. Form 31R. C.G. Antonine.

PHASE 2, CONSTRUCTION OF DEFENCES.

TR II, (Unit 238 (Pot: 1)). From yellow mortar of Wall. As 21 on drawn section, FIG 3. (This wall, however, is probably post-medieval.)

6. Form Curle 11. C.G. Hadrianic or early-Antonine. Slightly burnt.

Tr VIII, (Unit 371), Gr48. Fill of possible marker ditch at back of bank.

7. Form 3, C.G. Antonine.
   This large sherd is covered with fine mortary spats, ie associated with masonry construction, perhaps the town wall.

Tr VIII, Gp 48? Top ditch fill? (The coarse pottery from here has mortar spats, and this level may also relate to the construction of the town wall, see pot 64).

8. Form 30 (base). C.G. Antonine; possibly slightly burnt.

ILLUSTRATED (BUT UNSTRATIFIED) SAMIAN

The rest of the material is listed in fiche.

Residual in Phase 7. Trench I, Unit 101.

10. Form 37, C.G. The use of wavy lines doubled vertically occurs in the work of, amongst others, Sissus I of Lezoux (cf. S & S pl. 77, bottom 2 and 3) and this potter occasionally used the astragalus placement at the top of the wavy-lines. The ovolo tongue is of a kind used at Lezoux in Hadrianic to early-Antonine times and may belong to the ovolo Rogers B 28 used by Sissus I and the Quintilianus group with whom he was connected. The double circle to the right of the wavy-lines was also used by these potters. Hadrianic. (FIG 11, 7).

Unstratified in Trench I

19. Form 37. S.G. Small fragment of a thin-walled bowl, having a small, well-rounded, ovolo with distinctive splayed tongue, with rosette end. Below the ovolo, a small bird (0.227A) in a scroll with leaf with serrated edges. The absence of a border separating the ovolo from the main scheme of decoration is slightly unusual for such bowls. *c.* AD 65–80, slightly burnt. (FIG 11, 8).

Unstratified in Trench III

28. Form Ritterling 13. A fragment of a nonspillable inkwell, showing internal angle. Rim profile largely flaked away. S.G. fabric. Flavian or Flavian-Trajanic. Burnt. (FIG 11, 9).

SITE E. TOWCESTER CINEMA, 1984

Late Antonine Samian is again absent.

PHASES 1 & 2

From apparent fill of F1, ?plot boundary ditch.

1. Form 27g. S.G. Flavian.

From apparent fill of F2, saucer shaped ditch, probably defensive.

2. Form 31R. C.G. Mid-to-late-Antonine.

ILLUSTRATED (BUT UNSTRATIFIED)

6. Form 37. S.G. Ovolo with large rosette tongue, straight chevron wreath and a festoon with a swan (0.2220) used at La Graufesenque by such potters as Calvus i. The rosette-tongued ovolo is almost certainly one of Calvus's. *c.* AD 70–85. (FIG 11, 10).

SITE E. TOWCESTER, 1985

From builders' trenches in F1/F2 ditches area. Late Antonine Samian is again absent.

ILLUSTRATED (BUT UNSTRATIFIED)

9. Form 37. S.G. Part of a panelled bowl showing a corner tendril and a triple medallion. Cf. Frere, 1972, 240 D.76., also with the same ovolo. *c.* AD 75–90. (FIG 11, 11).

SITE Fii

LATE PHASE 2

Form 31 Central Gaulish, Antonine. Layer 5, ?road metalling.

THE MORTARIA
by Kay Hartley

The mortaria from sites Civ, D and E, and the mortarium Fabric Type Series are in fiche.

SITE Ci

PHASE 2

From the pit, F10, cutting the back of the rampart.

1. (FIG 9, 24) Fabric 1. About one quarter of a vessel. Verulamium region. AD 130–180 (cf. below Frere 1972).
2. (FIG 9, 25). Fabric 1, *c.* one-fifth of rim. Verulamium region. AD 130–180 (cf. Frere 1972, Fig 121, no. 778 and FIG 130, no 1034.)

From trench side digger spoil, almost certainly from pit F10.

3. Fabric 5. Mancetter-Hartshill. 2nd century, most likely to be between AD 130 and AD 170. It is unexpected to have mortarium from this source this early at Towcester.
4. Fabric 1, orange-brown slip. Verulamium region, *c.* AD 100–130/140.

As with the mortaria from the Grammar School defences site (Brown and Alexander 1982, 34), there is a gap post *c.* 180, and no vessels need be later than the middle years of the 2nd century.

PHASE 4

Ci Casual site find

5. Fabric 4, sherd of an Oxford C.97. 4th, commonly later 4th, century.

SITE Cii

From the footings of the apparent bastion, F1N, presumably residual.

6. Fabric 6. Two joining sherds. Upper Nene valley, probably Antonine.

Lower Nene valley mortaria were again absent from all sites (Hartley in Brown and Woodfield 1983, 73), Verulamium being the main supplier in the earlier periods, and Oxford in the later.

THE GLASS
by Denise Allen

Glass from a pit of c. the 170's, site Ci, F10, cutting the town bank. (FIG 12).

1. One rim and one body fragment of one or two beakers of high quality colourless glass. Rim vertical, and fire-rounded and slightly thickened. Body (or bodies) slightly convex-curved. Applied horizontal self-coloured trail beneath rim, further trails applied below curving together and then apart to form a horizontal 'chain'. Two horizontal wheel-cut lines survive beneath this zone of decoration. The body fragment also bears the applied chain 'trailing', with three horizontal wheel cut lines above or below. Diam. of rim ? *c.* 5.5 cm. The fragments do not join, and reconstruct awkwardly as one vessel, suggesting but not absolutely conclusively, two beakers, presumably a pair.

Trailed decoration of this type occurs on a variety of vessels, including a jug from a well at Verulamium, dated AD 160–190 (Wheeler 1936, 186–7, FIG 29, no. 25) and a flask from a burial of *c.* 150–250 AD at Hauxton Mill, Cambridge (Harden 1957, 12f, FIG 5). No exact parallels for the apparent beaker shape represented here are known to me, but there is a very similar body fragment from Verulamium, unfortunately unstratified (Verulamium Museum accn. no. 81.2391). Beakers of the same general type have been found in Cologne (e.g. Fremersdorf 1959, plates 108–9), and an origin in the Rhineland is perhaps most likely for the group as a whole.

2. Base fragment of amber glass. Pushed-in open base ring, diam. *c.* 8 cm. This is most likely to have come from one of a closely related group of jars and jugs, of a type discussed with reference to fragments from Park Street, Towcester (Price 1980, 66, FIGS 15–16, nos 9, 10 and 11). The date range spans the second half of the 1st and the first half of the 2nd centuries, but the colour here suggests a 1st century date.

Roman glass was not recovered from the other sites , except for a fragment of pre-300 AD window glass from Site Civ.

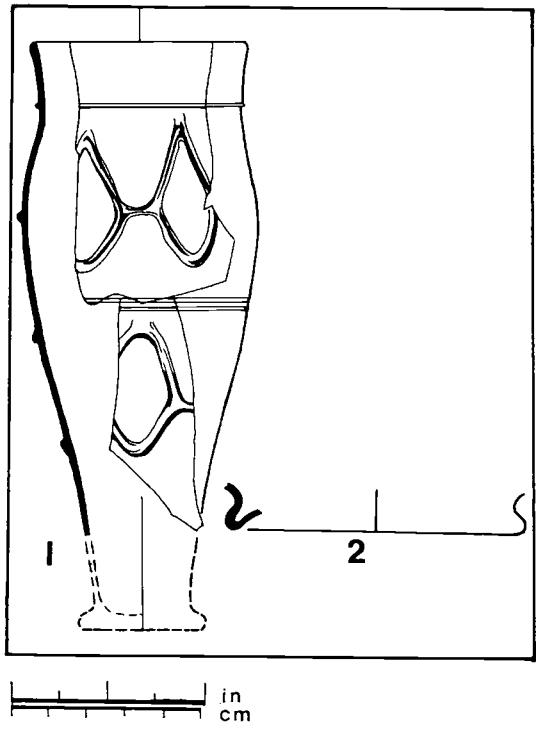

Fig 12 Towcester – glass. Site Ci. 1–2 from pit F10 cutting rampart, phase 2. Scale 1/2

THE SMALL FINDS.
With contributions by L. Cram, G. Egan, R. Jackson, D.T. Moore, W.R.G. Moore, and M. Pearce.

OBJECTS OF CU ALLOY (FIG 13)

SITE D, BURY MOUNT

1. Substantial Roman stud, head of just over 3 cm diameter, point missing. These large studs can be used for attaching fittings to wooden coffers, cf. a smaller (2.5 cm head) example from the first Butt Road box at Colchester (Crummy 1983, FIG 90, no. 2183). Site D, Tr I, unit 104. Phase 4.
2. Decorated buckle. Geoff Egan, Museum of London, writes (based on the examination of a drawing) :-
'Copper-alloy buckle, 38 × 20 mm, the frame sides and plate being made of a piece of bent sheeting, with a sheet roller on a separate rod forming the edge; the central bar and pin are missing; the flared plate has a frilled end and is decorated with engraved zigzags and oblique filed grooves along the centre the latter continuing on the sides.
This is one of a series of late-medieval buckles of similar basic form, but with varied ornamentation (Marshall and de Reuck 1989, 5, type IIB – second, fourth, fifth and eighth from left). The characteristic construction may relate to a specific function, e.g. for spurs, but further evidence is needed before this can be established.' Site D, Tr I, unit 102, residual in post medieval level.

Objects of Cu. alloy were only recovered at Bury Mount, apart from an apparent washer of scrap plate, 27 × 30 mm, single nail hole, context as 4 *infra*, (not illustrated).

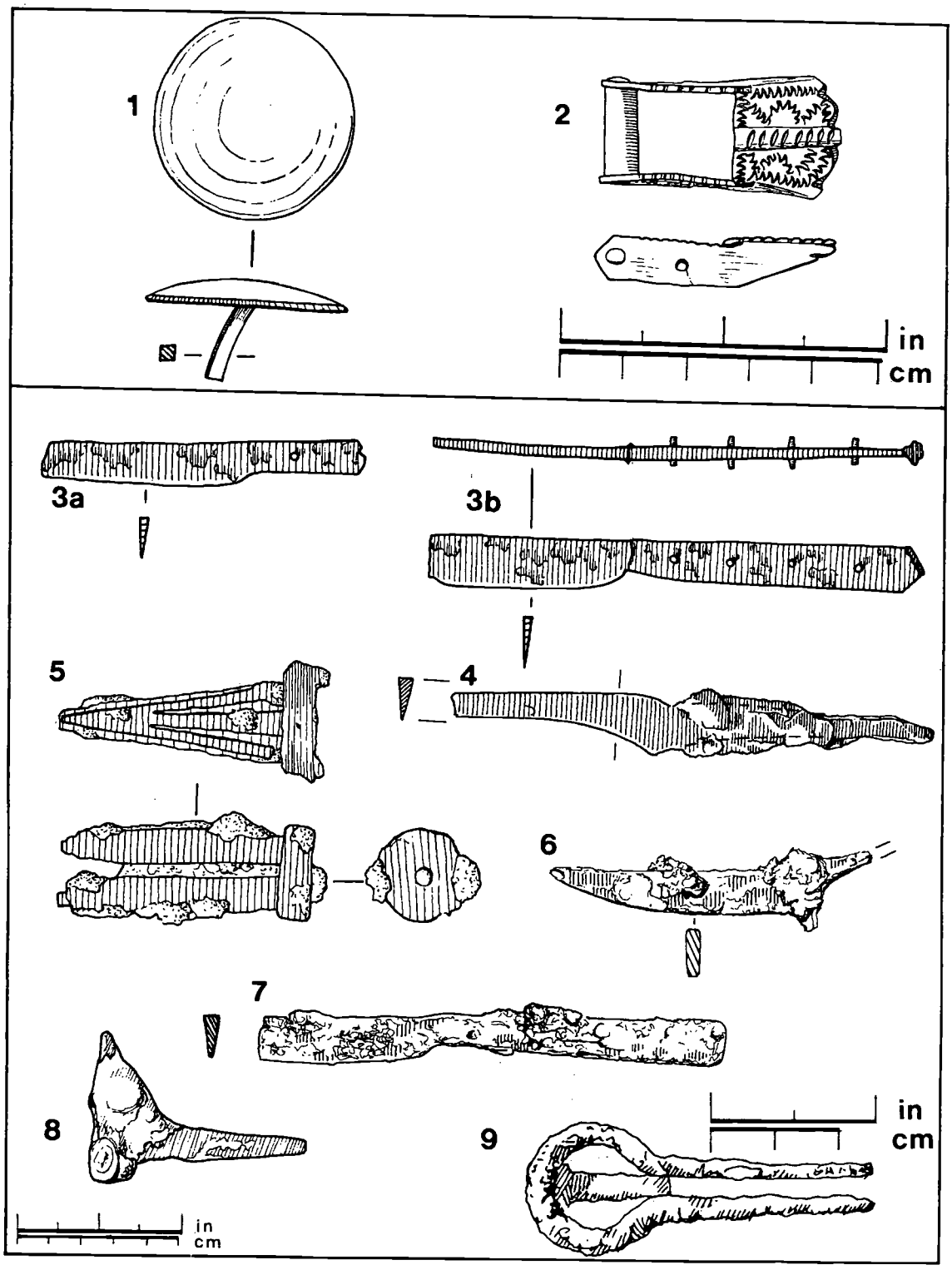

Fig 13 Towcester – Objects of Cu alloy. 1 Site D. Roman. 2 Site D. Medieval. Objects of Iron. 3–4 Site Cii. Medieval. 5–6 Site Ci. Roman. 7 Site E. Medieval. 8 Site E. Roman. 9. Site E. Medieval. Scale 1/20. 1, 2 and 9 are at double scale.

OBJECTS OF IRON. (FIG 13)

SITE Cii, TEXACO

3a. Part of iron knife. Texaco, Site Cii, from upper fill of Ditch F8N.

3b. Iron knife. Find place as 3a.

Molly Pearce, Sheffield Museum, writes: 'Knives like these with flat tangs, rivets for the attachment of the scales, and base metal shoulder bolsters and tang terminals are characteristic of the period from *c.* 1350 to *c.* 1550.'

4. Knife of characteristic medieval blade form, though altered with much sharpening, with whittle tang for insertion into handle. 1982, Ditch 2 (as 1976 ditch F8N) layer 5.

These possibly represent late medieval or Tudor cutler's waste.

SITE D, BURY MOUNT

Ralph Jackson, British Museum, writes (items 5 and 6):-

5. Padlock bolt. Length 8.3 cm.
There are two spines. One is equipped with two barb-springs; the other, set in a different plane, appears to have a single spring only, though corrosion may obscure a second spring. The stop is in the form of a thick disc and has a small central projecting knob.

There are two main types of Roman barb-spring padlock (see Manning 1985, 95ff, FIG 25, nos 10–11, Pl. 43, 067–070; and Jackson 1985, 147–8, FIG 54, nos 103–4), differentiated by their hasp, which is either straight (Type 1) or looped (Type 2). The present bolt belongs to a Type 2 padlock, in which the hasp was closed by the solid stop of the bolt. The type was in use throughout the Roman period in Britain (cf. Wheeler 1943, 284, nos 1–3, – 1st century AD; Brodribb et al. 1968, 102–3, FIG 34, no. 2 – 4th century AD). Padlock bolts are relatively common site finds, but the barb-springs are particularly vulnerable to corrosion. Type 2 bolts with a thick discoidal stop are known from Gadebridge Park Villa (Manning 1974, 160, 165, FIG 70, no. 381) and Maiden Castle (Wheeler 1943, 284–5, FIG 95, 2–3), but the closest parallel to the present bolt is from Rushall Down (Cunnington and Goddard 1934, 236–7, Pl. LXXIX, 9). It has two spines in different planes, each with two barb springs. Low knobs on the end of the stop are a feature of all the above examples and were presumably decorative. Site D, Tr I, Unstratified.

6. Rake prong. Length 10.2 cm.
A lightly curved tapering rod, of rectangular cross-section, with a blunt-pointed tip. The tang is broken short.

The normal Romano-British hay-rake comprised a wooden head (clog) with iron prongs fastened to it by means of a turned-over tang. A complete seven-pronged rake head of oak and iron was preserved at Newstead (Curle 1911, 283, Pl. LXI, 7) and a more fragmentary example, also of oak and iron, was found at Borough Hill, Daventry (Manning 1985, 59, Pl. 25, F63, F64). Individual prongs, when corroded, are easily overlooked, and the type is probably under-represented in the archaeological literature; but published examples include those from London (Rees 1979, 484–5, FIG 51, 255) and Vindolanda (Jackson 1985, 141–2, FIG 51, no. 59). Site D, Residual in Tr I, unit 102.

7. Knife, with flat tang, and rivets for the attachment of scales. Late medieval/Tudor. Site D, Residual in Tr I, unit 102.

SITE E, CINEMA

8. T-nail, damaged and corroded. Probably for fixing box flue tiles in position. With flue tile debris. Fill of F5, Phase 4. Iron slag also occurred in this ditch.
9. Jews' harp. These are instruments of mainly peasant communities widespread throughout Europe and Asia, and occur quite frequently in medieval archaeological contexts. (Rydbeck 1968). It is possible that they extend back to the Roman period, for they are said to occur in collections of Gallo-Roman antiquities. (Mme Geneviève Dournon-Taurelle, Musée de l'Homme, in litt). They are often mistaken for staples, as it is unusual for the reed to survive. For a published Tudor example see Woodfield 1981, FIG 3, no. 22. Per R. Conlon, 1985. Unstratified.

OBJECTS OF CLAY AND STONE (INCLUDING BUILDING MATERIALS). (FIG 14)

SITE Ci, 166 WATLING STREET

10. Fragment of *pila* or sub floor tile in a red, sandy fabric. Leslie Cram, Reading Museum, writes – 'Footprint of a small ruminant of the size of a sheep. It has a width of 28 mm, compared to the range from Silchester for sheep of 11–30 mm, with a mean of 20.8 mm, (Cram and Fulford, in McWhirr, ed., 1979, 201–209). The print is too indistinct for closer identification.' From Antonine pit, F10. Phase 2.
11. Part of sandstone hone. Mr D.T. Moore, British Museum (Natural History) writes: 'The rock is a Muscovite (with some biotite) and 'coal' bearing grit (ie a sharp sandstone), and is perhaps from the Coal Measures. Petrographic examination of hones, which has only been common since the 1960's, suggests that coal measures sandstone was used from Roman times until this century.' The find place suggests a date of the Tudor period, however, though this is not certain. Upper fill of F5N.

SITE D, BURY MOUNT

12. and 13. Flints. W.R.G. Moore, Northampton Museum, writes:– 'No. 12 is a secondary flake, found at the top of natural, and no. 13 a tertiary flake with slight edge trimming from the Late Iron Age/early Roman buried ground surface. Another four, one a thermal flake with slight edge trimming, two secondary flakes, and a primary flake, were from post-medieval or later levels, but all from the same area. These six struck flakes, two of which show slight edge trimming, testify to some Neolithic or Bronze Age activity in the area.' No. 12 Tr I, unit 106. No. 13, Tr I, unit 104.
14. Worn and damaged flue tile fragment in fine red sandy fabric, combed apparently with a four pronged comb. One of six flue or sub floor tiles from Bury Mount in this fabric. Late 1st or 2nd century. Residual in Tr I, unit 101.
15. Roof tile in two colours. Over-fired grogged fabric, dark grey body, pink/buff surfaces. Painted, apparently

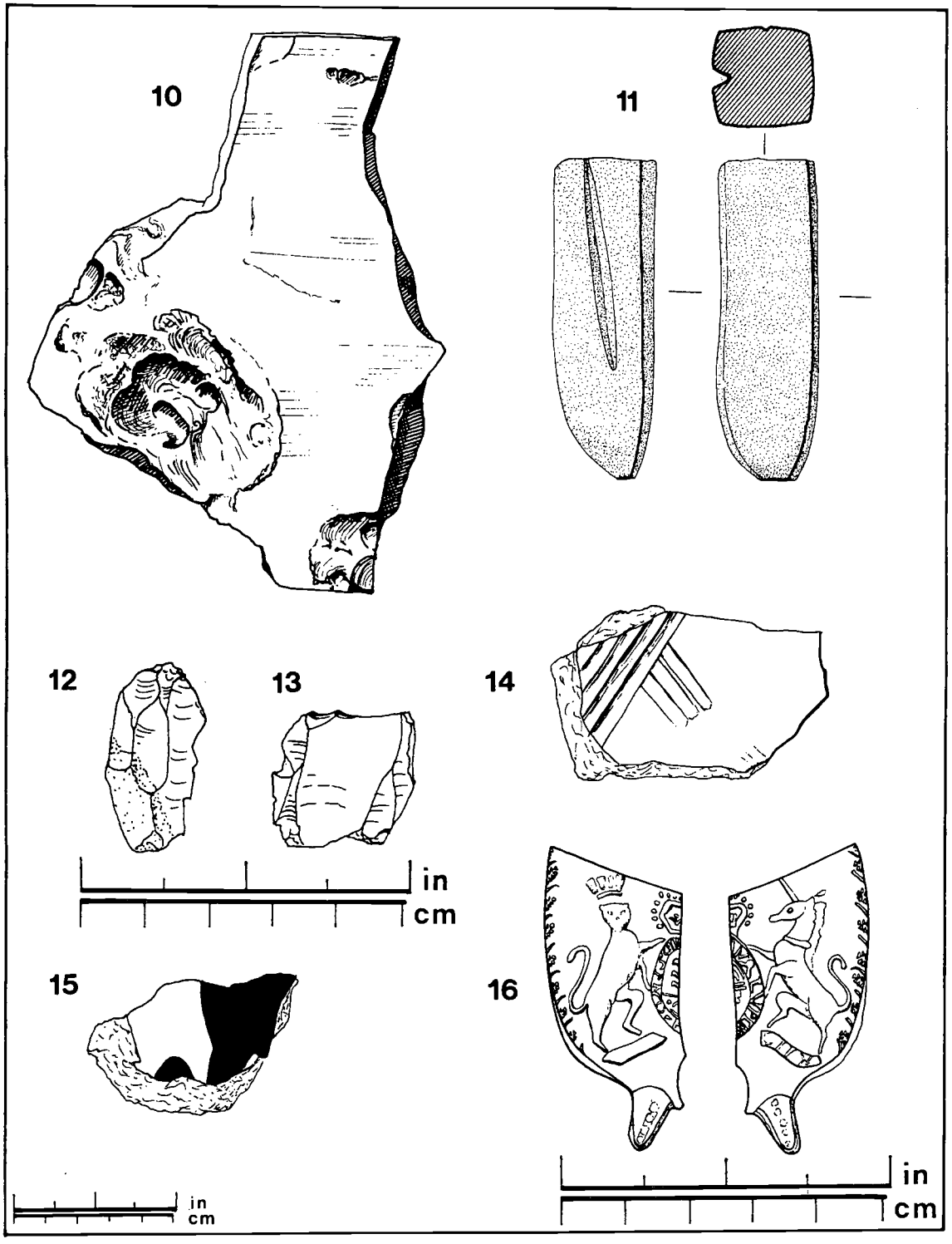

Fig 14 Towcester – Objects of clay and stone. 10 Site Ci Roman 11 Medieval/Tudor. 12–13 Site D. Prehistoric. 14–15 Roman tile. 16 SE corner of defences, c.1800 levelling. Scale 1/2. 12, 13 and 16 are at double scale.

randomly, in cream and maroon on upper face. Painted tiles in this fabric are common in this area, cf. Woodfield in Brown and Woodfield 1983, 78, but this is the first example known to the writer where the paint has been in two colours. The date range is late 2nd to 4th century. Residual in Tr 1, unit 101.

SOUTH DEFENCES

16. Clay pipe bowl, armorial type, with legend Honi Soit Qui Mal Y Pense W.R.G. Moore writes – 'The bowl shape and the small, neat leaf pattern on the front mould line points to a date of *c.* 1820.' From levelling up tips.

ROOF AND FLUE TILE, TESSERA.

Only 76 pieces of fragmentary Roman tile were recovered from the four sites. The amounts are too small for elaborate analysis, but nevertheless they confirm the absence of fabrics other than variants on the basic red sandy type in deposits of the later 1st and earlier 2nd centuries. All the tiles recovered at the Texaco site were of the early type, and at Bury Mount they were 80% of the total. Tiles in grogged and shelly fabrics occurred only in late or unstratified levels at Site Civ, Bury Mount and the Cinema, again a confirmation of their later date. At the Cinema, however, the later tiles were in a majority of 60%.

The tiles also confirm the presence in the town, about which so little is known, of substantial heated buildings of the late lst/2nd centuries, (15 fragments). Heated and re-roofed buildings also appear to have existed in the late Roman period, although tiles from heating systems of the earlier period were three times as numerous (15) as those from later buildings or repairs, (5). There is a hint that in the later 4th century, these were being cleared away and dumped in the Great Ditch.

SITE Cii, TEXACO

Phase 2

16 pieces in all. A dozen pieces of tile, *tegulae*, *imbrices* and *pilae*, were recovered from the Antonine pit, F10. They are all in a rather fine red sandy fabric, the rebate on the *tegulae* being cut at a diagonal with a knife, a feature of these tiles at this date. The one *pilae* fragment appears to have been made on a sand bed, a feature not apparent with the other tiles. Another *pilae* fragment with *opus signinum* adhering was recovered from the rampart area, layer 16, suggesting a substantial heated structure.

Tile was also recovered from *SITE Civ* in 1991. A red sandy fragment from ditch A10, and residual in medieval ditch A12 a combed box flue tile with round hole in the same fabric, together with an *imbrex* fragment in a shelly fabric of the late 3rd or 4th centuries.

SITE D, BURY MOUNT

36 pieces in all.

Phase 1. Only four pieces of tile, apparently roof, were recovered from stratified levels of this phase, from unit 111, group 39, and units 113/114, group 11/16. They were all in red sandy fabrics.

Phase 4. Six pieces of residual tile, one apparently sub-floor, in red sandy fabrics were recovered from unit 103/104, top. There were two fragments in later fabrics, one a shelly tile from a heated building with *opus signinum* adhering.

Unstratified and Residual. Twenty-four fragments were found. Nineteen fragments of red sandy tiles were recovered, of which five were flue (FIG 14, 14) or sub-floor tiles, some very highly burnt. It seems likely that these come from the bath house known to exist under the parish church of St Lawrence (Frere 1984, 300). Four fragments of tile in grogged fabrics were recovered, two being of slipped roof tile in red brown colours, one in a curious two-tone blotched effect rather than the usual all over slip (FIG 14, 15). One grogged fragment appeared to be from a sub-floor tile. There was only one tile in a shelly fabric.

SITE E, CINEMA SITE

Only fifteen pieces of tile were recovered. The nine roof tile fragments were divided equally into red sandy, grogged and shelly fabrics. In contrast to the pottery indications, the last two fabrics suggest that some 3rd and 4th century activity had presumably taken place in the vicinity. The other six fragments were flue and sub-floor/*pilae* tiles, these last all appearing to come from the fill of the Great Ditch, F5. Half were in red sandy fabrics, and half in the later shelly and grogged fabrics. They presumably indicate substantial buildings in the vicinity. A 'T' nail for the fastening of heating tiles also came from the fill of the Great Ditch (FIG 13, 8).

A rough red brick *tessera*, (2 × 2.25 cm), damaged, with trace of mortar adhering to its base and sides, was also found.

Post-medieval tile occurred in F16. confirming its late date.

SITES Fii & Fiv

Phase 4

In Fii/Fiv ditch or watercourse, nine pieces were found. The black ditch deposits, probably layer 2, but possibly 3, produced one piece of late shelly *tegulae*, and residually three pieces of combed box flue, three of *tegulae* and one of an *imbrex* in late 1st or 2nd century fabrics, all blackened.

Fiv produced in addition a piece of late grogged roof tile.

Tiles, including box flue tile in early fabrics, were plentiful in later 4th century contexts in the suburbs (Brown and Woodfield 1983, M66–71) and in the town, (Brown and Alexander 1982, 47–48). It is not clear whether all this material is waste from renovations, or hard core from derelict sites, but at this date the latter seems the most likely.

SOIL REPORT ON THE SITE Ci 'DARK EARTH'
by R.I. MacPhail

In 1982 a sample of 'Dark Earth' from a 1976 watching brief at Towcester, Northamptonshire, was received. The sample originated from a 'sterile layer', (layer 12) overlying a later Antonine rampart and a pit dated to *c.* 170–175 AD on Samian and pottery evidence. As there was a general lack of late 2nd and 3rd century pottery on the site, and indeed in other areas of the town, the excavator asked the question of what might have been going on at this time to produce this 'sterile layer' or 'Dark Earth' deposit, and what could be deduced about the history of the defences' area subsequent to the insertion of the pit, F10. The example was examined for organic matter content and scrutinised in thin section.

DISCUSSION OF RESULTS

Layer 12 comprises a relatively organic soil of a mull A horizon type which has been worked by an earthworm population. The soil sample consists of two differing soil microfabrics suggesting the deliberate mixing of two soil types, namely –

(i) a brown silty soil, and

(ii) a darker, more organic and sandier soil.

The former is of a probable anthropogenic context, containing small quantities of fine charcoal, and pot fragments, these not noticeable to the naked eye, and could possibly relate to Sheldon's (1978) concept of dumped street sweepings. The latter (ii) apparently relates to a more organic topsoil which has been intruded by perhaps 'digging in' and earthworm activity.

Two sequences of coatings may be present. An early sequence of fine coatings relating to soil disturbance caused by dumping and exposure to the elements; and a second series of coatings associated with the type (ii) soil material. These latter coatings are characterised by laminae of dusty argillans and silty agricutans of a greater organic matter content than the general soil plasma (i), and probably occur through continued cultivation of an overlying more organic rich topsoil or garden soil. According to the section drawing layer 12 lies a metre beneath later garden levels and is sealed by 'battered upper levels' which are likely to have been by analogy very late Roman or post Roman additions of stone and earth makeup to the bank (pers. comm. C. Woodfield) and so it may be assumed that the 'Dark Earth' is basically unaffected by this later soil and that the fabric is of an undisturbed later Roman character.

RESULTS

Analytical Data:

Layer %	Loss on Ignition	% Organic Carbon
12	3.29	1.03

Micromorphological Description:
Towcester, layer 12, Up to 70 cm.

Heterogeneous; with 72% brown silasepic (silty) material including areas of darker fine sandy plasma; fine subrounded blocky; 18% macrovoids; compound packing voids, metavughs,

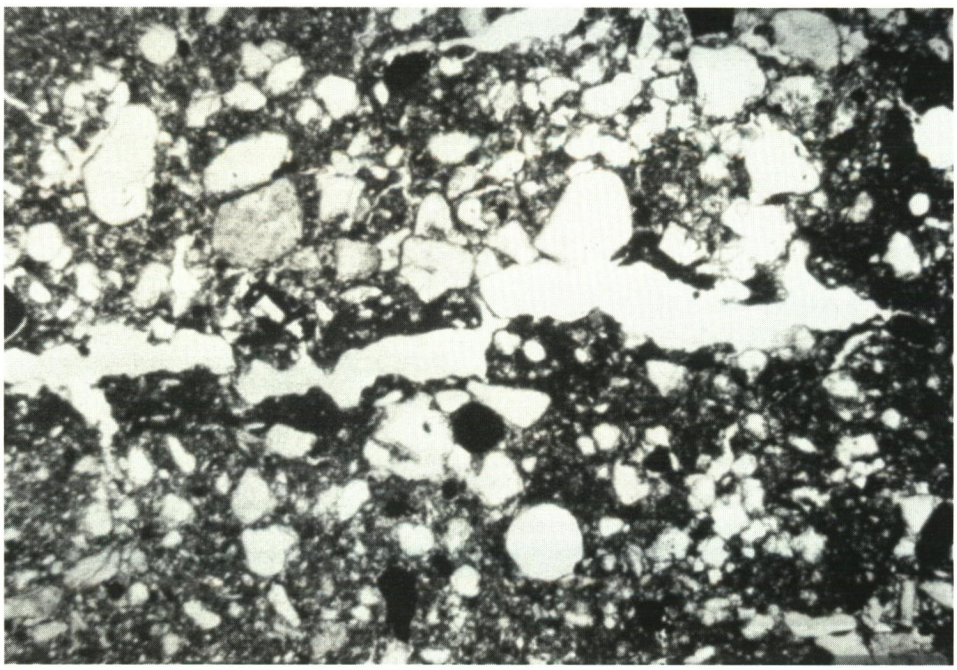

Plate 1 Towcester – Photomicrograph : Plane polarised light : 5.22 mm across. Two soil fabrics, 'dirty' channel coatings.

fine channels; 20% well sorted, rounded to sub-rounded (fine sandy) mineral grains; mainly quartz, few limonite and rare feldspar grains, few shell and rounded pot fragments; heterogeneous mix of organic matter and fine charcoal – concentrated in some plasma areas where intimately mixed, earthworm channels and void linings (as dusty argillans and agricutans); coarse charcoal fragments present; earthworm channels; 50% of voids lined with 'dirty' coatings: dusty argillans – agricutans – perhaps at least two sequences (a) fine lining, (b) more coarse including much organic matter and charcoal; common diffuse ferro-manganiferous nodules; mainly silasepic.

A comparison with other 'Dark Earth' sites suggests the 'Dark Earth' at Towcester differs from the 4th century deposit at GPO, Newgate Street, London (Roskams 1981; Macphail 1981; Macphail 1983) which are darker, more organic and contain very much more cultural material (e.g. pottery, oyster shell, charcoal, tile, mortar, bone, etc) and suggest more dumping of anthropogenic debris and more mixing by earthworms (i.e. fewer microfabric differences compared to Towcester). At Tanners Hall, Gloucester (Macphail 1983) deliberate dumping of several soil types produced 'Dark Earth' which again contains direct evidence of probable cultivation (i.e. agricutans) and the possible digging-in of of organic matter.

CONCLUSION

It may therefore be conjectured that at Towcester, during this late 2nd and 3rd century episode, relatively inorganic silts of the 'street sweepings' (Sheldon 1978) kind were dumped or perhaps more probably in part blown in, and a more organic topsoil added or developed through cultivation of this within-wall deposit. Roskams and Schofield (1978) have already suggested deliberate dumping of such soils for probable within-wall cultivation at the end of the 2nd century at Milk Street, London, as evidence of the changing character of later Roman England (Reece 1980). The soil contains evidence of post-depositional gleying (nodules).

This level was also present at Site Civ in 1991, but no samples were taken (CW).

THE ANIMAL BONES
by Jonathan Holmes

Only small quantities of bone were presented for investigation, from three sites, and of varying periods from early Roman to the Civil War. No attempt has been made to correlate the whole collection, and the samples will be described in turn under phases with the addition of a late medieval/Tudor group.

PHASE 1

SITE D, BURY MOUNT

(i) Tr I, As Group 51 and 52 (Unit 113/114, Groups 11 and 16). 18 fragments weighing 295 grams in total. Some of this material may just be pre-conquest.

Ox – 2 fragments (77 g): piece of mandible with one tooth; piece of pubis (L).
Dog – 1 fragment (13 g): distal scapula with fused epiphysis.
Oyster – 5 fragments (39 g).
10 fragments (166 g) were unidentifiable and consisted for the most part of pieces of long bone and rib, badly damaged and with evidence of chopping, but with no evidence of modern breakage.

(ii) Tr I, Group 30 (Unit 326) buried soil. 20 fragments weighing 71 grams in total.
Ox – 2 fragments (51 g): metacarpal shaft from a calf; piece of lumbar vertebra.
18 fragments (220 g) were unidentifiable and again consisted mostly of badly broken fragments of long bone. 3 showed evidence of modern breakage.

PHASE 2

SITE Ci, TEXACO

(iii) F10, Antonine pit. 37 fragments weighing 708 grams in total.
Ox – 3 fragments (333 g): horn core from a medium-horned animal (Armitage 1977): intact atlas; distal end of a metatarsal with fused epiphysis – chop marks across shaft.
Oyster – at least 16 shells (301 g).
Mussel – at least 13 shells (34 g).
5 fragments (40 g) were unidentifiable.

BONES OF PHASE 1 AND PHASE 2: Little can be said as only 19.5% of the bone of the small sample from this period was identified. Remains of an adult dog and adult and juvenile cattle were found.

PHASE 4

SITE E, CINEMA

(iv) Tr IV, fill of Great Ditch, F5.
12 fragments weighing 991 grams in total.
Ox – 5 fragments (669 g): L. humerus distal end (fused epiphysis) and shaft: L femur shaft and medial condyle of distal end (fused epiphysis): piece of nasal bone: rib head (epiphysis fused); piece of proximal shaft of L. femur.
Sheep – 2 fragments (29 g): L. radius proximal end (epiphysis fused); L. ulna shaft and articulation, but olecranon missing. These fragments fit together.
Horse – 1 fragment (280 g): an intact metacarpal, length 241 mm. From this figure a withers height of 154.5 cm (15.1 hands) can be estimated. This would be very much at the upper end of heights found for horses in the Roman period.
Cat – 1 fragment (5 g): an intact tibia, length 96 mm.
3 fragments (48 g) were unidentifiable.

All these bones were in a very good state of preservation, stained a rich dark brown, with a number having small light blue spot stains on them, apparently vivianite, and presumably resulting from their deposition in a wet ditch.

(v) Tr X, F13. Fill of the Great Ditch, here by the stream. (The half dozen sherds however, from these particular silts suggest

that these bone fragments might be from an underlying 2nd century deep feature). 4 fragments weighing 55 g in total.
Sheep – 1 fragment (16 g): part of a metacarpal.
3 fragments (39 g) were unidentifiable.

BONES OF ?PHASE 4 FROM SITE E: These finds from the wet fill of the Great Ditch were associated entirely with Roman pottery, with a suggested date of the late 4th century, possibly into the early 5th (with considerable residual Roman material). In the absence of this evidence the good state of preservation, and the large horse metacarpal might have raised the question of a later date, but the indications on Site E are that this feature was silting up by the late Roman period, and there is no evidence here, as there is at Site Cii, for an Anglo-Saxon recut. The material (v) was less well preserved and may be from a Phase 2 ditch underlying the Great Ditch.

All the bones found of ox, sheep, horse, cat and red deer were of adult animals, and could have come from a single individual in each case.

(vi) From ?medieval marshy layer overlying site E.
1 fragment weight 107 g.
Red Deer- 1 fragment of the base of the antler with the first prong intact. There are chop marks on one side.

LATE MEDIEVAL/TUDOR PERIOD

No structural phase.

SITE Cii, TEXACO

(vii) Late Roman/Anglo-Saxon Great Ditch, F8N. Higher level fill.
Associated material indicates a late medieval or Tudor date.
32 fragments weighing 680 grams in total.
Ox – 7 fragments (216 g): L. calf mandible, MI not emerged, temporary premolars hardly in wear: L. calf mandible of similar stage to the previous one: L. frontal bone of calf: R. frontal bone of calf: R. frontal bone of calf: L. fragment of frontal bone of calf: petrosal, tympanic, exoccipital bones of calf.
Sheep – 14 fragments (341 g): 4 intact metatarsals with all epiphyses fused – lengths 139, 132, 118, 138 mm – withers heights (factors of Teichert) 63.1, 59.9, 53.8, 62.7 cm respectively: 3 metatarsals with the distal end chopped off and proximal epiphyses fused: a metatarsal with distal epiphysis missing: an intact metacarpal with all epiphyses fused – length 112 mm – withers height 54.8 cm: a R. radius with proximal epiphysis fused but distal missing: a L. scapula partially damaged but with fused epiphysis: a piece of R. maxilla with 5 teeth: 2 mandibles intact except the rostral end, one L. one R. and so could match as the tooth wear is similar – both Stage E (Payne) so 2–3 years old.
Pig – 1 fragment (32 g); ilium of a young animal, acetabulum not fused.
Shellfish - 1 fragment each of oyster and mussel (24 g).

8 fragments (6 rib shafts, a tibia, and a metapodial bone from a young ruminant) (67 g) were unidentifiable.

(viii) From fill of F8N, retrieved from spoil. Matrix and colouring indicate there can be no reasonable doubt of the provenance of this material, however.
18 fragments weighing 261 grams in total.
Ox – 1 fragment (49 g); a R. calf mandible, M1 not emerged, temporary premolar 4 just in wear.
Sheep – 5 fragments (131 g): metatarsal intact with all epiphyses fused length 120 mm – withers height 54.5 cm: metacarpal intact with all epiphyses fused – length 118 mm – withers height 57.7 cm: distal end of tibia with fused epiphysis: mandible intact except the rostral end – probably stage F (Payne) so 3–4 yrs old; piece of frontal bone with horn core bud.
Pig – 2 fragments (52 g); piece of mandible with temp. premolar 4 + molar 1 but not molar 2 emerged so a young animal. L. exoccipital bone.
Chicken – 2 fragments (3 g): Piece tarso-metatarsus with spur; spur of tarso-metatarsus slightly charred.
Shellfish – 6 fragments (16 g): 3 pieces of mussel (at least 2 shells): 2 oysters: and a small whelk-type shell.

2 fragments (rib shafts) (10 g) were unidentifiable.

BONES OF THE LATE MEDIEVAL/TUDOR PERIOD: These bones were in an excellent state of preservation and mostly intact. All the oxbones were of very young calves but could have come from only 2 individuals. The evidence points to the sheep remains being for the most part from young adults. The mandibles were from sheep 2–4 years of age, and the metatarsal and radius with unfused epiphyses point to animals less than 1.5–2 years and 3.5 years old respectively, whereas the fused metapodial and tibial epiphyses imply the presence of animals more than 2 years old. The calculated withers heights suggest a large variation in size amongst the adult sheep population. Armitage (1977) found that sheep found in medieval layers at Barnards Castle were small, of comparable size to modern Soays. Some of these sheep at Towcester were obviously larger, though not taller than Romano-British or even some Iron Age Sheep found by Wilson (1978). There was a dramatic increase in the size of sheep during the fifteenth and sixteenth centuries (Seebohm 1976) and these larger sheep bones probably reflect these changes. The few pig bones were, as one might expect, from young animals, slaughtered for meat when a few months old.

Most of the bone recovered from this period is non-food bone, ie fragments from the skull and metapodial bones often considered as 'butchers' waste' rather than the remains of meals.

PHASE 7, SEVENTEENTH CENTURY

Material perhaps from Civil War activity.

Much of the material is 'butchers' waste' bone including inexperienced butchery and there is evidence of gnawing probably by dogs, both perhaps related to the presence of an encamped Royalist army. Both adult and juvenile cattle are represented.

SITE E, CINEMA

(ix) Tr XII, F16, 17th century ?Civil War ditch.
7 fragments weighing 211 grams in total.
Ox – 3 fragments (152 g); the frontal bone of a calf; a

piece of the articular surface of the squamosal bone; an atlas, partly intact, with sagittal chop marks caudally on the dorsal surface of the ventral lamina (a rather odd place for such marks suggesting crude, inexperienced hacking off of the head or meat from the severed head. It is tempting to suggest that this might have been done by a member of the Royalist army for whom butchery was not a normal occupation).

Sheep – 2 fragments (54 g); metatarsal proximal end with fused epiphysis; a horn core.

Chicken – 1 fragment (2 g); humerus.

1 rib fragment (3 g) was unidentifiable.

(x) As (ix), but rescued from digger spoil.

Ox – 1 fragment (24 g): a piece of the lesser trochanter of the femur.

Sheep – 3 fragments (52 g): 2 metatarsal proximal ends with fused epiphyses (one badly gnawed); a much-gnawed piece of metacarpal shaft.

WOOD IDENTIFICATIONS
by G.C. Morgan

SITE Cii TEXACO FILLING STATION

From Anglo-Saxon or Norman recut of the late Roman Great Ditch, F8N. The level from which these twigs came is most likely late medieval or Tudor. There was some vegetative matter, but not the brushwood of the Civil War ditch fill.

	mm dia/rings/years fast grown		
Poplar type	25	5	5

?Slighting of Civil War ditch, F7N.
This contained much substantial brushwood

Elder	50	5	6
Poplar type	25	5	5
	25	7	7

SITE E, CINEMA

Late Roman Great Ditch F5. Area by Watling Street.
Oak chips, probably about 100 mm diameter, apparently adzed. Perhaps from bridge construction?

Broken piles were seen *in situ* in natural before destruction, both from the Great Ditch area and in front of the cinema. One oak pile has a surviving length of 150 mm, width 70 mm tapering to 50 mm and there were apparently fragments of others.

Oak fragments	50+		
Oak and Poplar fragments	80+	30	35+

Conserved fragment of oak 200 mm dia, slow grown

C17 ditch, ? Civil War defence by Richmond Road. F16.
A small amount of brushwood was present.

	mm dia/rings/years fast grown		
Poplar type	60+	12	15

SITE F.ii. INSPECTION CHAMBER ON TMT SITE, SOUTH YARD.
Deep waterlogged level (3), apparently south edge of late Roman Great Ditch.

	mm dia/rings/years fast grown		
. . . Wooden ?knife handle, remains of setting for circular tang, diameter 5mm. Flattened end, with traces of oval Cu alloy end plate. Length 80 mm, width 22 mm tapering to 19.			
Poplar type?	60+	10	20+

Piece of squared wood, length 90mm, width *c.* 7 × 8 mm, with cut diagonal line, perhaps a tally, perhaps a chance cut.

A soft wood, identified from cross field pitting as *Taxus* spec. Both to be published with town material.

There was some evidence of waste from timber working. One piece of oak 80 mm × 50 mm, was cut from a tree of about 200+ mm diameter. Another piece with a cut end measured 150 mm × 30 mm. The oak may be tanning waste, in view of the presence of workshop leather.

There were some 30 fragments of brushwood or twigs.

Poplar type	30 mm
Hazel	25 mm
Oak	15 mm

SPECIES PRESENT IN ROMAN DEPOSITS.

Oak	*Quercus* spec.	(the most common)
Hazel	*Corylus avellana*	
Poplar	*Populus* spec.	

Also an unidentified softwood, probably yew, *Taxus* spec.

SPECIES PRESENT IN MEDIEVAL AND 17TH CENTURY DEPOSITS.

Poplar	*Populus* spec.	(the most common)
Elder	*Sambucus nigra*	

MOAT AND GARDENS: PLANT AND INVERTEBRATE REMAINS FROM THE ROMAN GREAT DITCH TRENCH IV, 1984, F5, SITE E, THE CINEMA, TOWCESTER.
by Mark Robinson

A 1.0 kg sample of dark grey organic silt with many tree leaf fragments was washed over a 0.2 mm aperture sieve and the residue sorted for plant and animal remains. The results have been listed in Tables 1–6. Nomenclature for plants follows Clapham et al. (1962); Coleoptera, Kloet and Hincks (1977); and Mollusca, Kerney (1976) and Walden (1976).

The fine sediments containing leaf fragments which accumulated in the Great Ditch during the late 4th century, and possibly early 5th, show that the aquatic regime was one of silting. The mollusca did not include species which require moving water. In contrast shells from a putative Roman ditch, or possible Roman watercourse, at the TMT yard, Towcester, site Fiv, included *Theodoxus fluviatilis*, *Valvata piscinalis* and *Ancylus fluviatilis*, all flowing water species (Boycott 1936, 140–2). The silts of the Great Ditch contained *in situ* paired valves of *Sphaerium corneum* which had been living in the mud on the ditch bottom. It will live in both running and stagnant water but it does not like dirty water nor does it tolerate ponds which sometimes dry out (Boycott 1936, 135). The other aquatic molluscs from the ditch have less fastidious requirements and occur in all but the worst 'slum' aquatic habitats (Sparks 1959–60).

Few species of aquatic plant were represented but seeds of duckweed (*Lemna* sp.) were particularly abundant. There were also some seeds of water plantain (*Alisma* sp.) The herbaceous vegetation along the bankside seems mostly to have been stinging nettles (*Urtica dioica*), with a range of other species that included buttercup (*Ranunculus* cf. *repens*) docks (*Rumex* spp) and white dead nettle (*Lamium* cf. *album*). The sample contained much evidence for the proximity of willow (*Salix* sp.) trees, with numerous leaf fragments, capsules and bud scales from them. Almost half the Coleoptera were water beetles, comprising a fauna of still or slowly moving water. They included *Helophorus brevipalpis* gp, ready colonists of ponds and puddles, *Hydrobius fuscipes*, a beetle of stagnant water especially where plant detritus covers the bottom, and *Anacaena globulus*, an amphibious species which often occurs amongst wet or decaying vegetation on banksides. Several of the other beetles in Table 4 are likely to have occurred on wet ground alongside the margin of the ditch including *Bembidion* spp. and *Dryops* sp. or on the bankside vegetation such as *Brachypterus* sp., a nettle feeder. The evidence for willow trees is reinforced by the presence of three individuals of *Phyllodecta* cf. *vitellinae*, a leaf beetle which feeds on *Salix* and *Populus* spp. The ditch also contained the remains of various other aquatic invertebrates such as cladoceran ephippia (water flea eggs) and chironomid midge larvae.

The plant and invertebrate evidence together suggests that the Great Ditch at the Cinema site, Towcester, contained a permanent body of reasonably well oxygenated stagnant or slowly moving water. If the feature had been an active natural stream, seeds of a greater range of aquatic plants, and shells of flowing water molluscs would have been expected to have been washed into the deposit. It is possible that the feature was linked to a flowing water course, but it could have stood in isolation. It seems most likely on biological grounds that the feature was a substantial man-made ditch, although the possibility of it being a cut-off stream channel cannot be excluded. It would have served well as a moat along the south side of the Roman town. In the late 4th century AD, when the ditch was partly silted and perhaps somewhat neglected, it probably presented a picture of duckweed covered water, overhung by willow branches through which sufficient sunlight penetrated to allow the duckweed to set seed.

The ditch also contained evidence for other aspects of the environment of Roman Towcester. The remainder of the Coleoptera were mostly species which would not seem out of place in grassland, such as the dung beetle *Geotrupes* sp., the elaterid *Selatosomus incanus* and the clover weevil *Sitona* sp. There was a single bark beetle, *Leperesinus varius*. It usually occcurs in ash trees, and a seed of *Fraxinus excelsior* was identified. Grain beetles and other synanthropic species which tend to live indoors were a significant part of some coleopteran assemblages from Roman deposits outside the town (Girling 1983) but the Coleoptera from the Cinema Site did not give any suggestion of the close proximity of human habitation.

The seeds included several grassland species and there were some from annual weed of disturbed ground which, given the context of the ditch, is hardly surprising. There was, however, a most interesting range of remains from cultivated species. The sample contained 14 stones from a small fruited variety of plum, perhaps a bullace or damson (*Prunus domestica* cf. spp. *insititia*), a fig (*Ficus carica*) seed (achene) and a fragment of apple (*Malus sylvestris*) core (endocarp). There were also three achenes of marigold (*Calendula* sp.) Remains from this genus have previously only been recorded from medieval contexts in Britain (Murphy 1983, 92; Williams 1977, 18–19). There are several species of *Calendula* native to Europe but *C. arvensis* and *C. officinalis* are the most likely possibilities for these seeds. *C. arvensis* is an arable weed in the Mediterranean region and it is possible that the seeds were sometimes contaminants in imported grain. *C. officinalis* is the pot marigold, now a familiar garden flower, and long cultivated as a medicinal herb. It too was of Mediterranean origin. Apparently *C. arvensis* as well as *C. officinalis* was cultivated in England during the 16th and 17th centuries as a pot herb (Gerarde 1597, 599–604; Larkcom 1985, 108). A further cultivated species from the site was box (*Buxus sempervirens*), represented by a leaf. Box has now been recorded from several Roman sites in Britain (e.g. Lambrick and Robinson 1979, 127).

The remains of the culinary species commonly occur in cess pits, but it is unlikely that the ditch contained a significant sewage component. The molluscs did not suggest very polluted conditions in the water of the ditch. Cereal bran is usually the major constituent of the food remains from waterlogged cess pits but it was absent. Neither was there the abundance of small seeds of edible species that often characterise cess pits. The fig seed was probably from imported dried fruit and it is uncertain whether the apple core was from a cultivated or a wild tree. The presence of the box leaf, however, raises the possibility that the remains of cultivated species were amongst garden refuse dumped into the ditch. Town gardens are well known from Roman Italy, as at Pompeii, and the excavation at Fishbourne demonstrated that the classical garden tradition was introduced to Britain early in the Roman period (Cunliffe, 1971a, 123–31). These results need not be seen as exceptional as there are now several examples of exotic plant remains from Romano-British towns (e.g. Willcox, 1977).

TABLE 1 WATERLOGGED SEEDS

		Number of seeds
Ranunculus cf. *acris* L	Buttercup	2
R cf. *repens* L	Buttercup	8
Capsella bursa-pastoralis (L) Med	Shepherds Purse	1
Rorippa cf. *sylvestris* (L) Bes	Yellow-cress	1
Cerastium cf. *holosteoides* Fr	Mouse-ear Chickweed	1
Stellaria media gp	Chickweed	3
Atriplex sp.	Orache	3
Malva sylvestris L	Common Mallow	1
Prunus domestica L cf. spp. *insititia*	Bullace, Damson	14
Scandix pecten-verenis L	Shepherds Needle	1
Polygonum aviculare agg	Knotgrass	2
Rumex cf. *acetosa* L	Sorrel	1

R. cf. *crispus* L	Dock	1
R. conglomeratus Murr	Dock	2
Rumex spp.	Dock	4
Urtica urens L	Small Nettle	2
U. dioica L	Stinging Nettle	157
Ficus carica L	Fig	1
Fraxinus excelsior L	Ash	1
Solanum cf. *dulcemara* L	Woody Nightshade	2
S. nigrum L	Black Nightshade	1
Rhinanthus sp.	Yellow Rattle	2
Lamium cf. *album* L	White Dead-nettle	6
Plantago major L	Great Plantain	1
Galium sp.	Bedstraw	1
Sambucus nigra	Elder	1
Calendula sp.	Marigold	3
Anthemis cotula L	Stinking Mayweed	5
cf. *Cirsium* sp.	Thistle	2
Leontodon sp.	Hawkbit	2
Sonchus asper (L) Hill	Sow Thistle	4
Taraxacum sp.	Dandelion	1
Alisma sp.	Water Plantain	6
Lemna sp.	Duckweed	72
Typha sp.	Reedmace	1
Carex sp.	Sedge	1
Gramineae gen. et. sp. indet	Grass	19
Ignotum		1
Total		337

TABLE 2 CARBONISED SEEDS

Hordeum sp.	Barley	2

TABLE 3 OTHER WATERLOGGED PLANT REMAINS

Buxus sempervirens L (box)	leaf fragment	1
Crataegus or *Prunus* sp. (hawthorn or sloe)	thorn	1
Malus sylvestris Mill (apple)	endocarp fragments	+
Salix sp. (willow)	capsules	30
Salix sp. (willow)	bud scales	32
Trifolium sp. (clover)	calyces	2
Bud scales (not *Salix*)		1
Deciduous leaf fragments including *Salix*		1
Moss stem fragments		+

+ present but unquantified

TABLE 4 COLEOPTERA

	Minimum number of individuals
Nebria brevicollis (F)	1
Patrobus sp.	2
Bembidion biguttatum (F)	1
B. guttula (F)	1
Agabus bipustulatus (L)	1
Agabus sp. (not bipustulatus)	1
Helophorus aquaticus (L) or *grandis* Ill	2
Helophorus sp. (*brevipalpis* size)	17
Cercyon unipunctatus (L)	1
Cercyon sp.	1
Megasternum obscurum (Marsh)	1
Hydrobius fuscipes (L)	4
Anacaena globulus (Pk)	3
Anacaena sp.	1
Limnebius papposus Muls	1
Platystethus arenarius (Fouc)	1
Lathrobium sp.	1
Tachyporus sp.	1
Tachinus sp.	1
Aleocharinae gen. et sp. indet	2
Geotrupes sp.	1
Aphodius fimetarius (L)	1
A. cf. *sphacelatus* (Pz)	1
Scirtidae gen. et sp. indet	1
Dryops sp.	1
Selatosomus incanus (Gyl)	1
Anobium punctatum (Deg)	1
Brachypterus sp.	1
Meligethes sp.	1
Corticariinae gen. et sp. indet	1
Phyllodecta c.f. *vitellinae* (L)	3
Apion sp.	1
Sitona sp.	1
Hypera sp. (not *punctata*)	1
Leperesinus varius (F)	1
Total	61

TABLE 5 MOLLUSCA

	Minimum number of Individuals
Lymnaea peregra (Mull)	8
Lymnaea sp.	3
Planorbis planorbis (L)	12
P. carinatus Mull	8
Bathyomphalus contortus (L)	2
Trichia hispida gp.	3
Helix aspersa Mull	1
Sphaerium corneum (L)	2
Total	39

TABLE 6 OTHER INVERTEBRATES

	Minimum number of individuals
Cladocera ephippia	+
Ostracoda	+
Trichoptera larval case	1
Chironomidae larval head capsule	+
Diptera puparia	3
Diptera adults	1
Myrmica sp. worker	1
Hymenoptera adults	3

+ Present but unquantified .

RESUME, DISCUSSION, FUTURE WORK AND CONCLUSION

RESUME

THE COURSE OF THE DEFENCES IN LATER 2ND CENTURY (PHASE 2) TOWCESTER (FIG 2)

It now seems incontrovertible that the central, naturally defended area of Towcester, which had by the late 2nd century developed in long road-side ribbons, (RCHM, 1982, 151) was given unusually substantial defences with a co-eval stone wall and bank, enclosing an area of *c.* 11.765 ha., in about 170–5 AD. The site of the defences in the north-west two thirds of the town have been located without difficulty, but the course of Richmond Road, which marks the end of the medieval tenements, and, more recently, the hint of a substantial structure at Fiii (FIG 2) together with the recorded presence of ridge and furrow running north west/south east, south of Sawpit Green (shown on 1947 aerial photographs (CPE/UK/1994, 2078) has suggested a defensive line in this general area to observers since the mid 18th century (Stukeley, 1766, II, 40 and Bridges, 1791, 272). Baker's account (Baker 1836–1841, 310, 320) however makes it clear that the traces of the south west defences had been largely obliterated in his time, (RCHM 1982, IV, 151), a statement confirmed by the deep tips described in this paper, which makes topographical observations as to their course dubious. The presence of Anglo-Saxon ditches and a possible palisade trench at the south west end of Allen's Yard (Parry and Woodfield, forthcoming) may indicate that the line preserved by Richmond Road is in fact that of the Anglo-Saxon defences, reinforced probably by the line of the Civil War ditch (FIG 2).

THE EVIDENCE FROM SITE E

The defences appear to be represented on site E by the footings of a massive wall, inexplicable in terms of other periods, built at the edge of firm ground, by a berm of 12 m (less than that attested at Site D, Bury Mount) and a shallow wet ditch 5 to 6 m wide, all acceptable as the defensive sequence. Other ditches may also have existed but were destroyed by later work. The shallow ditch is paralleled at, for example Alchester, where the excavator commented that 'the unusual profile of the 2nd century ditch' was probably 'accounted for by the extreme wetness of the site' (Young 1975, 154).

However, no apparent continuation of this sequence was found during trenching on the TMT cemetery site east of the Watling Street. It may well be that the wall turns back sharply here (as suggested on FIG 2) in areas that were not trenched. The partially recorded, apparently substantial, ditch revealed there may simply be a continuation of the 2nd century inner ditch, but this is uncertain, for it appeared to be deeper than that feature. Additionally it seems unlikely that the defences would be carried through a cemetery currently in use, (C. and P. Woodfield, personal observation, report forthcoming) or that the wall would be built on the very marshy ground here, at the confluence of the two streams. It is, of course, possible that the defences were incomplete, as they apparently were at Godmanchester, where they could not be traced over a 116 m stretch on the south west side (Crickmore, J. 1984, 113), or that a canalised stream and/or a marsh which flooded, may have acted as a defensive zone, as the Chesterton Brook and marsh seem to have done at Alchester (Rowley 1975, 121). What does seem to establish the Site E features as defensive is the failure of any defensive sequence to appear to the north in Allen's Yard or sites J and K and the difficulty otherwise of explaining the presence there of the wall.

THE SCALE AND FORM OF THE TOWCESTER DEFENCES

The defensive zone at Towcester, from the back of the 2nd century rampart to the outer edge of the 2nd century counterscarp bank, is some 60 m wide, and must have cut a massive swathe through the existing town structures. The Towcester bank width of some 12 m is that of an unusually large rampart, but the town wall width at *c.* 3 m is in fact only a little over average size. The 2nd century berm is variable from 6.25 m to 13.5 m, probably rather larger than normal, but this is doubtless decided by topography. There are slight hints in the record of a multiple 2nd century ditch system, although only the inner ditch, being of some 5.5 to 8 m wide, was at all

clearly observed, outer ditches not surviving recutting. The stratigraphical records at site A and the 2nd century counterscarp surviving at Site B, give a width of some 38 m from the front of the wall to the crest of the counterscarp bank, confirming the likelihood of a wide 2nd century ditched zone, as at Exeter where the second ditch is some 25 m out from the wall (pers. comm. C. Henderson) and Chelmsford where there is an inner wider ditch of 5 m width, and two other smaller outer ditches, (Allen 1988, 458). Both of these defences date from the later 2nd century, Chelmsford probably between 160–175 AD.

The impressive nature of the fortifications raises the question of the status of the town, presumably that of a *pagus* centre.

THE ARCHITECTURAL WEALTH OF THE TOWN

Although little is known in detail of the buildings, the wealth of the town in architectural terms is hinted at by the apparently 2nd century architectural masonry recovered (P. Woodfield, 1978, 71–73, 77, 81–82, 85, FIGS 2, 4 and 5), and the elaborate, presumably public, bath building known under the parish church (Frere, 1984, 300). In addition a stone apparently pentagonal temple or other public building was recorded near the junction of the Watling Street and Alchester roads (Lambrick 1980, FIG 4, 44–45) and in 1991 a circular stone structure was briefly seen on Site Civ.

THE PERIOD FOLLOWING THE CONSTRUCTION OF THE DEFENCES

The expense of the construction of the defences does not appear to have been followed by a general decline of the town's prosperity, which apparently did not take place for some half century afterwards (Brown and Woodfield 1983, 52; Lambrick 1980, 45–49), but activity does seem to cease in the area of the defensive zone, and at Allen's Yard. This last may have been caused by the possible removal of the ironworkers from the town to planned suburbs (Brown and Woodfield 1983, 133), strongly suggested also by the cut-off of occupation of the iron-working area at Allen's Yard within the walls in or about 160–170 AD (Parry and Woodfield forthcoming).

DISCUSSION

EARLY COEVAL BANKS AND STONE WALLS: THE EVIDENCE FOR LATE 2ND CENTURY DEFENDED TOWNS ALONG THE WESTERN BOUNDARY OF THE CATUVELLAUNIAN TERRITORY

PHASE 2

The date of *c.* 170 AD for the Towcester defences suggested by Brown and Alexander in 1982, and confirmed in this paper, implies the walling of this town possibly a decade or two before London (Maloney 1983, 96). This apparent anomaly appears to be repeated in towns that occur in a south west/north east line running from Alchester, through Towcester, probably Irchester, and Water Newton, with an outlier at Great Casterton, that is along the line of the apparent western Catuvellaunian boundary. These Roman towns are all on known or suspected early military sites, and it may be that we are looking at the refortification of an earlier line. Great Casterton seems likely to be an 'outpost', or rather perhaps a back stop, to this line, and Bannaventa, the history of whose defences remains confused, may have had a similar function. This would appear to protect the Akeman (Alchester), Watling (Towcester) and Ermine (Water Newton and Gt. Casterton) Streets, although Irchester does not protect a known major road.

A re-examination of the evidence for these towns suggests that the fortifications comprised a wide, late 2nd century defensive zone with coeval stone walls and banks, and a multiple ditch system with the outer ditch 25–30m from the wall. The published accounts of the excavations on these towns is re-examined in detail (see fiche).

A comparison of the defences of this group of towns reveals that wall widths are at their widest at Towcester and Irchester at *c.* 3 m, but they vary very little in the other towns, between some 2.5 m and 3 m, usually nearer the lower figure.

Banks are widest at Towcester and Irchester, both 12 m, but half that at Alchester. At all these sites, except at Bannaventa where the evidence did not survive, the bank seems to have been similarly built up behind the wall as the construction of the latter advanced.

With regard to the ditches, if one were to advance the hypothesis of a standard 2nd century ditch of some 5–7 m, particularly the inner ditch, this would include the inner ditches of Towcester, Irchester, Alcester and Bannaventa, although the

date of the Irchester inner ditch is uncertain but thought to be early. It would also include the middle ditches at Gt. Casterton and Bannaventa, the Bannaventa date being tentatively 2nd century. Possible third ditches at Gt. Casterton (6.1 m) and Irchester (4.2 m) the last probably of this date, later recut, suggest that a triple ditch system was also possible. It has been already noted that the outer later 2nd century ditch at Exeter was also some 25 m out from the wall and that a triple ditch system of this date is known at Chelmsford.

THE POSSIBLE CONTEXT FOR THESE DEFENCES: THE LATE ANTONINE FIRES OF NORTH BUCKINGHAMSHIRE AND SOUTH NORTHANTS AND THE ESSEX LATE ANTONINE FIRES

It seems likely that the construction of these defences is related to some serious internal difficulties in the south and east area of the province. The problem of the Late Antonine fires in the South Northants./North Bucks. area has been recently discussed (Woodfield, C. 1989, 264), but the late Antonine fire question had been referred to previously (Rodwell W., 1975, 85–101) where reference is made to several small towns and rural sites suffering disastrous fires in the closing years of the 2nd century. In Essex, these have been linked to the construction of defences at Chelmsford and Wickford. Drury refers to the Antonine fire deposits at these two towns containing human bone, and Samian suggesting a date of *c.* 150 to 180 for these fires. (Drury et al., 1984, 29–30).

It is not the purpose of this paper to re-examine this problem but political, military or social troubles spreading from the north west, or perhaps Wales, might at first be thought to provide a possible cause. It seems however more likely that these town walls are defences to protect the heart of the midlands from contagion spreading from the east. In this connection the provision of Caister-on-Sea with a contemporary stone wall and bank of the later 2nd century is of interest (Rodwell 1975, 93, and FIG 5) and may be relevant even if the dating of this site has currently moved forward into the very early 3rd century (pers. comm. Maggi Darling). If trouble from the north west had been the cause, then one would have expected a clearer indication of the wide-spread provision of equivalent defences of this date from the Fosse Way than appears to be the case. The position of Lincoln, Leicester and Cirencester is clearly particularly relevant, but remains more imprecise than Towcester as to coevality of stone walls and banks and dating, although it seems likely that all had defences of some sort at this time. At Lincoln the Upper Colonia was of course already defended, and some sections at least of the contemporary stone wall and bank of the Lower Colonia might be of this date (Colyer 1975, 234–235, FIG 7). At Leicester the date of the defences is thought possibly to be of the later 2nd century (Buckley and Lucas 1987) and the wall and bank at the Elbow Lane site were thought by the excavator likely to be contemporary (Buckley and Lucas 1987, 40, and pers. comm. John Wacher). At Cirencester there was an earth rampart and ditch of the late 2nd century, with gateways and interval towers, a stone wall being therefore presumably an intention (pers. comm. Linda Viner). At Verulamium the town wall bank seems to be 2nd century, and the walls and bastions post late Antonine and contemporary (pers. comm. Rosalind Niblett). The clarity of the Towcester structures and dating is absent.

PHASE 4

Defensive planning in the area appears to have taken a less unified form towards the end of the Roman period. Towcester, Chesterton/Durobrivae and Great Casterton were, however, all provided with bastions and wide ditches at some time later in the 4th century. Alchester, Irchester, and probably Bannaventa, are likely to have had all or some of their ditches recut, but whether at the same period in the 4th century as each other, or indeed the first group, is not clear.

The defences of Towcester in the later Roman period must have been in a poor structural state after the long 3rd century recession (Brown and Woodfield 1983; 52–53, Lambrick 1980, 45–49) but no evidence survives to indicate any refurbishment such as multiple ditch recutting in the late 3rd or first half of the 4th centuries. At some period a wide ditch was added to the defences, the ceramic evidence from the Great Ditch at the south of the town suggesting a date in the later 4th century. This has been virtually entirely cut away at sites A, B, C and D by a recutting, possibly of the Norman period, and was

only very partially examined at the south. It seems, however, likely that the ditch was wet and shallow. Very shallow defensive ditches are known elsewhere, the ditch at Tongres being just over 1m deep, (Mertens 1983, FIG 58, feature 11) and some 25 m+ wide. This is comparable to Chesterton/ Durobrivae, where the ditch seems to have been some 26 m wide (Frere et al., 1987, Pl. V), which puts Towcester at the wider end of the range, which generally extends from some 10 to 30 m. At Gt. Casterton the ditch was narrower, 18.3 m wide.

The Site E 4th century ditch, which the enviromental evidence showed to be filled with stagnant water, seems to disappear into a stream on the TMT site east of the Watling St. This may parallel the situation at Gt. Casterton where the ditch can be seen dying away into the old river terrace. However the River Churn ran into ditches of all dates at Colchester, and a stream ran in the Cirencester ditch, where there was a large berm to avoid undermining and there were also problems with flood damage (Crickmore 1984, 147). If the ditch and stream were in fact the same feature at Towcester on the TMT site this therefore need occasion no surprise. There are further parallels with the 'moats' at Dorchester (Hogg and Stevens 1937, 70–71). The problems of this area may again partly have their origin in the defences being on two separate lines at different periods as they are at Thorpe by Newark (Crickmore 1984, 131) and Mildenhall (Crickmore 1984, 127), and if the mill leat at the east of Towcester equates with the late ditch, then a divergence of line exists at Site D Bury Mount.

The berm to this ditch varied from 7 m to 19 m, swinging out to perhaps 25 m at the Chester Gate at the north. It was 22 m to 23 m at the south. Late wide berms are known elsewhere, for example at London, where they measured from 24 m to 31 m (pers. comm. Jenny King, Museum of London, and Youngs et al., 1986, 139, item 67). In Gaul wide ditches occur very far out from the wall, 33.25 m out at Tongres (Mertens 1983, 46) and 32.5 m at Famars (Mertens 1983, 53).

Presumably at the same time as the recutting of the ditch, in the mid to later 4th century, corner bastions were added at least to the north west and north east corners of the circuit, presumably implying a professional military presence which could use *ballistae* and *onagri*, the new artillery weapons. The presence of bowmen is also likely. Unfortunately only fragments of these towers have been recorded, and there was no dating evidence. They were probably, but not certainly, square and the north west corner bastion remains indicated a width of some 10 m, it being apparently hollow. These seem to be the first bastions known north of Verulamium on the Watling Street, and the only ones between Wroxeter and Verulamium. Ermine Street, on the other hand, was bastioned all the way to Lincoln, rectangular bastions being present at both Gt. Casterton and Water Newton, at this date presumably under some separate defensive scheme.

An added back projection to the wall was recorded at Bury Mount, some 2.5 m deep, but its length, and phase were unknown. This may be an internal ramp or stairway as at Caister by Yarmouth (Ellison 1969, 45–73, plan FIG 3) or merely a thickening at the rear (Wilson 1974, FIG 7, 424).

PHASE 5: THE EARLY ANGLO-SAXON PERIOD

We do not know how late the Towcester walls continued in use, though it would be reasonable to suggest that the town is likely, having had its defences refurbished late in the Roman period, to have continued in some sub-Roman form. The position of the church over what may have been the mansio, and certainly seems to be some sort of public building (Frere 1984, 300) implies long and continuous use. In Biddle (1976, 104) the suggestion is made that 'ceaster' implies a town with a high curtain and projecting bastions, presumably being utilised by new arrivals, and early Anglo-Saxon pottery is indeed now known from Towcester. Only one cemetery is known, from metal detector finds and salvage recording by the County Unit in July 1992, producing evidence for both inhumations and cremations, finds including saucer and small long brooches, occurring about 1 km west of the walled town. There are additionally casual finds from the area for example the chip-carved niello-inlaid silver gilt and garnet princely sword mount from the area of the Alchester road suburb (Moore 1979, 107).

PHASES 5/6: THE LATE ANGLO-SAXON/NORMAN PERIOD

'It was so fortified that the Danes were not able to take it by Seige, and K Edwd. the Elder is said to have encompassed it afterward with a Strong Wall of Stone, the Footsteps of which are hardly now discernable.' (Owen 1720, 53).

Nothing has indeed been found that could be firmly assigned to the works of Edward the Elder in the early 10th century (Whitelock 1961, 64–66). The robbed refacings to the Roman wall noted on Sites A, Civ and D may represent work of this period, but their form and dating remain uncertain.

The recut late wide ditch, 22–23 m wide, suggested itself as Anglo-Saxon, but it seems rather wide for a defensive ditch of that date, the normal width being *c.* 12 m, and there is an absence of late Anglo-Saxon pottery. The labour of recutting so wide a ditch should also have merited a reference in the Anglo-Saxon Chronicle.

PHASE 6

It seems more likely that the recutting, which is attested only in the north west two thirds of the Roman walled town, dates from the early Norman period, and is related to the construction of the Bury Mount motte. Unfortunately the ceramic material from this phase has suffered loss and dispersal. Alexander's original unfinished typescript referred to Stamford and St. Neots wares from the excavation of the bottom of the recut ditch in 1954, with no ceramic material occurring later than Stamford ware nor earlier than St. Neots. It was not possible to confirm this when the site was written up for publication nearly 30 years later, and the comment can only remain a hint, of probable early Norman rather than early 10th century activity. A sherd of early medieval black shelly ware was recovered well trodden down into the top of the Roman surface layer 16a on the berm on site Cii – another slight hint of early medieval activity – but was lost, together with the material from ditch 8N, (including other shelly wares) while away for specialist report.

The evidence is too slight to warrant an extended discussion, but it seems possible that Towcester might have served as a temporary campaign fortification – what has been called the 'fighting-hub of an appropriated estate' (Platt 1982, 1) – and there are several well-known parallels for the re-use of Roman defences at this time, for example Caerwent, Cambridge, Cardiff, Carisbrooke, Dover, London, Pevensey and Rochester (Platt 1982, 1, 4). Not enough is known of the Bury Mount itself, nor the date or dimensions of the ditches that used to surround it to know whether this suggested first expedient was followed by a motte and bailey of classic type. Nothing is known either of a ditch cutting off that southern part of the Roman town which appears not to have been included.

PHASE 7: THE CIVIL WAR

17th century ditches occurred, the circumstances of their construction being discussed in Brown and Alexander 1982, 31–32. The 5 m wide 17th century ditch at Site E cut what appeared to be small recut Roman boundary ditches, not a Roman defensive circuit. The robbed remains of apparent fighting platforms occurred on the berms at Sites A and Civ.

The cutting of the mill leat, perhaps in the 17th century (Bridges 1791, 272) probably preserves the line of the Civil War defences (and indeed the Roman and early medieval line) from the north east corner to just above Bury Mount. How much of its course thereafter is due to the presence of defensive circuits is uncertain, but the slight bank to the east of the churchyard may represent the 17th century line.

FUTURE WORK

Work on a larger scale than trenching, especially one-day trenching, is obviously desirable. Most of the east length of the wall is under threat from current building plans. The south west corner is also the subject of a planning application (1992) with a long section of the defences at the south. The future of the Radstone Car Park, which should contain the Alchester Road gate, is also uncertain. The precise location of the south east and south west corners and the full examination of any corner bastions is urgently needed. There may also be interval towers. No gates of the town have been examined, although the north gate was damaged in the 1950's (RCHM 1982, 153). The angle of the Alchester road and its gate to the wall, and the Bury Mount area, require elucidation.

CONCLUSION

The inevitability of the narrow 2nd century defensive ditch zone model, and likewise the model of the 2nd century earthen bank, refaced with stone in the late 3rd century, are here challenged. The Towcester defences are further

seen not as an unacceptable curiosity standing on their own, but as part of a planned defensive line along the western marches of Catuvellaunian territory, brought into being by serious trouble in the area, the source of which appears likely to have been eastern Britain.

TOWCESTER DEFENCES MICROFICHE CONTENTS

BIBLIOGRAPHY

ABBREVIATIONS

D. Figure-type in Déchelette, J., *Les Vases céramiques ornés de la Gaul romaine, tome ii,*. Paris, 1904.

H. Figure-type in Hermet, F., *La Graufesenque (Condatomago)*, Paris, 1934.

O. Figure-type in Oswald, F., *Index of Figure-Types on Terra Sigillata*, Liverpool, 1936–7.

O. & P. Oswald, F., & Pryce, T-D., *An Introduction to the Study of Terra Sigillata*, London, 1920, (Reprinted 1966).

S. & S. Stanfield, J.A. and Simpson, G., *Central Gaulish Potters*, London, 1958.

Alexander, J., *c.* 1967–8. *Towcester.* Unpublished preliminary report on the 1954 excavations.

Allen, P., 1988. In Frere, S.S., Roman Britain in 1987, East Anglia, *Britannia*, XIX, 458.

Anderson, A.C., 1981. Some Continental Beakers of the First and Second centuries A.D., in Anderson, A.C. and Anderson R.S. (eds.), *Roman Pottery Research in Britain and North-West Europe*. BAR International Series 123ii, Oxford, 321–347.

Armitage, P.L., 1977. *The Mammalian remains from the Tudor site of Baynard's Castle, London. A Biometrical and Historical Analysis.* Ph D thesis, University of London.

Arthur, P., & Marsh G. (ed.), 1978. *Early Fine Wares in Roman Britain*. BAR British Series, 57, Oxford.

Atkinson, D., 1942. *Report on the Excavations at Wroxeter, 1923–27.* Oxford.

Baker, G., 1836–41. *The History and Antiquities of Northamptonshire, Vol. II.* John Bowyer, Nicholas and Son, London.

Biddle, M., 1976. Towns. In Wilson, D.M. (ed.), *The Archaeology of Anglo-Saxon England.* CUP, Cambridge, 99–150.

Boon, G.C., 1966. Roman Window Glass in Wales, *Journal of Glass Studies*, 8, 41–45.

Bonsor, G.E., 1931. *The Archaeological Expedition along the Guadalquivir, 1889–1901.* New York.

Boycott, A.E., 1936. The Habitats of Fresh-water Mollusca in Britain, *Journal of Animal Ecology*, 5, 116–86.

Bridges, J., 1791. *History of Northamptonshire. Volume I.* Oxford.

Brodribb, A.C.C., Hands, A.R., and Walker, D.R., 1968. *Excavations at Shakenoak Farm, near Wilcote, Oxfordshire. Part I: Sites A and D.* Privately published, Oxford.

Brown. A.E. & Alexander, J.A., 1982. Excavations at Towcester 1954: the Grammar School Site, *Northamptonshire Archaeology*, 17, 24–59.

Brown, A.E. and Sheldon, H.L., 1974. Highgate Wood; the pottery and its production, *The London Archaeologist*, Winter, 1974.

Brown, A.E. and Woodfield, C., 1983. Excavations at Towcester, Northamptonshire: the Alchester road suburb, *Northamptonshire Archaeology*, 18, 43–140.

Buckley, R. and Lucas, J., 1987. *Leicester Town Defences.* Leicester Museums and Art Galleries.

Castle, S.A., 1978. Amphorae from Brockley Hill, 1975, *Britannia*, IX, 383–392.

Collingwood, R.G., and Richmond, I., 1969. *The Archaeology of Roman Britain*. Methuen, London.

Colyer, C., 1975. Excavations at Lincoln 1970–1972: The Western defences of the Lower Town. An interim report, *Antiquaries Journal*, 55, 2, 227–266.

Conlon, R., and Woodfield, C. 1982. Late Medieval and early Tudor Watling Street, Towcester, *Northamptonshire Archaeology*, 17, 85–90.

Corder, P., (ed.), 1951. *The Roman Town and Villa at Great Casterton, Rutland*. University of Nottingham.

Corder, P., (ed.), 1954. *The Roman Town and Villa at Great Casterton, Rutland, Second Interim Report*. University of Nottingham.

Corder, P., (ed.), 1961. *The Roman Town and Villa at Great Casterton, Rutland, Third Interim Report*. University of Nottingham.

Cram, L., & Fulford, M., 1979. Silchester tile making - the faunal environment, in McWhirr, A., (ed.), *Roman Brick and Tile*. BAR International Series, 68, Oxford, 201–209.

Crickmore, J., 1984. *Romano-British Urban Defences*. BAR British Series, 126, Oxford.

Crummy, N., 1983. *The Roman small finds from excavations in Colchester 1971–9*. Colchester Archaeological Report 2, Colchester Archaeological Trust and Dept. of the Environment, Colchester.

Cunliffe, B.W., 1971a. *Excavations at Fishbourne 1961–1969 Vol. I, The Site*. Research Report of the Committee of the Society of Antiquaries of London, 27.

Cunliffe, B.W., 1971b. *Excavations at Fishbourne 1961–1969 Vol II: The Finds*. Research Report of the Committee of the Society of Antiquaries of London, 27.

Cunnington, M.E., and Goddard, E.H., 1934. *Catalogue of the antiquities in the museum of the Wiltshire Archaeological and Natural History Society at Devizes, Part II*. Devizes.

Curle, J., 1911. *A Roman frontier post and its people: the fort of Newstead in the parish of Melrose*. Maclehose, Glasgow.

Dix, B., and Taylor, S., 1988. Excavations at Bannaventa (Whilton Lodge, Northants.) 1970–71, *Britannia* XIX, 299–339.

Drury, P.J., 1984 The Temple of Claudius at Colchester reconsidered, *Britannia* XV, 7–50.

Ellison, J.A., 1969. Excavations at Caister-on-Sea, 1962–63, *Norfolk Archaeology*, 34, 45–73.

Fremersdorf, F., 1959. Römische Gläser mit Fädenauflage in Köln. *Die Denkmäler des römischen Köln, V*. Cologne.

Frere, S.S., 1972. *Verulamium Excavations. Vol I*. Research Report of the Society of Antiquaries of London, 28, Oxford.

Frere, S.S., 1984. Roman Britain in 1983 I, Sites explored. 5, The Midlands, *Britannia* XV, 290–305.

Frere, S.S., Rivet, A.L.F., and Sitwell, N. H. H., 1987. *Tabula Imperii Romani. Britannia Septentrionalis*. British Academy, Oxford University Press, London.

Fulford, M.G. and Peacock, D.P.S., 1984. *Excavations at Carthage: The British Mission*, Vol. 1, 2. Sheffield.

Gerarde, J., 1597. *The Herball or Generall Historie of Plantes*. Norton, London.

Gillam, J.P., 1976. Coarse fumed ware in North Britain and beyond, *Glasgow Archaeological Journal*, 4, 57–80.

Girling, M.A., 1983. The environmental implications of the excavations of 1974–76, in Brown, A.E. and Woodfield, C., 1983, Excavations at Towcester, Northamptonshire: The Alchester Road Suburb, *Northamptonshire Archaeology*, 18, 128–130, M 131.

Green, C., 1980. The Roman pottery, in Jones, D.M., Excavations at Billingsgate Buildings 'Triangle', Lower Thames Street, 1974, *Transactions of the London & Middlesex Archaeological Society*, Special Paper no. 4, 39–79.

Greenfield, E., 1958. In Roman Britain in 1957, The Midlands, *Journal of Roman Studies*, 48, 139.

Gryspeerdt, M., 1979. The Pottery, in Williams, F., Excavations in Marefair, Northampton, 1977, *Northamptonshire Archaeology*, 14, 57–67.

Hall, D.N., and Nickerson, N., 1967. Excavations at Irchester, 1962–3, I, *Archaeological Journal*, 124, 65–99.

Harden, D.B., 1957. Four Roman glasses from Hauxton Mill, Cambridge, 1870, *Proceedings of the Cambridge Antiquarian Society*, 51, 4–16.

Hartley, K.F., 1983. The Mortaria, in Brown, A.E., and Woodfield C., 1983, Excavations at Towcester, Northamptonshire: The Alchester Road Suburb, *Northamptonshire Archaeology*, 18, 72–73, Fig 18.

Hawkes, C.F.C. and Hull M.R., 1947. *Camulodunum*. Research Report for the Committee of the Society of Antiquaries of London, 14.

Hogg, A.H.A., and Stevens, C.E., 1937. The Defences of Roman Dorchester, *Oxoniensia*, 2, 70–77.

Jackson, R., 1985. Chapter XI. The Objects of iron, in Bidwell, P.T., *The Roman Fort of Vindolanda at Chesterholm, Northumberland*. HBMCE Archaeological Report no 1, London.

Keay, S.J., 1984. *Late Roman Amphorae in the Western Mediterranean*. BAR International Series 196, Oxford.

Kerney, M.P., 1976. A list of the fresh and brackish-water Mollusca of the British Isles, *Journal of Conchology*, 29, 26–8.

Kloet, G.S. & Hincks, W.C., 1977. *A check list of British insects part 3, Coleoptera and Strepsiptera*. (2nd edition, Royal Entomological Society handbook for the identification of British insects XI).

Knight, J.K., 1967. Excavations at the Roman Town of Irchester, II, 1962–3, *Archaeological Journal*, 124, 100–128.

Knorr, R., 1952. *Terra-Sigillata-Gefässe des ersten Jahrhunderts mit Topfernamen*. Stuttgart.

Lambrick, G.H. and Robinson, M.A., 1979. *Iron Age and Roman riverside settlements at Farmoor, Oxfordshire*. CBA Research Report 32.

Lambrick, G.H., 1980. Excavations in Park St, Towcester, *Northamptonshire Archaeology*, 15, 35–118.

Larkcom, J., 1985. An exhibition of seventeenth century vegetables, *The Garden*, 110, 106–110.

Macphail, R.I., 1981. Soil and botanical studies of the 'Dark Earth'. In Jones, M., and Dimbleby, G. (eds.). *The environment of man: the Iron Age to the Anglo-Saxon period*. BAR British Series 87, 309–331.

Macphail, R.I., 1983. The micromorphology of the 'Dark Earth' from Gloucester, London and Norwich. An analysis of urban anthropogenic deposits from the Late Roman to Early Medieval Periods in England. In Bullock, P., and Murphy, C. (eds.), *Proceedings of the Vth Working Meeting on Soil Microscopy*, London, 245–252.

Maloney, J., 1983. Recent work on London's defences. In Maloney and Hobley (eds), *Roman Urban Defences in the*

West. CBA Research Report 51, London, 96–117.

Maloney, J. and Hobley, B. (eds.), 1983. *Roman Urban Defences in the West*. CBA Research Report 51, London.

Manning, W.H., 1974. Objects of iron in Neal, D.S., *The excavation of the Roman Villa at Gadebridge Park, Hemel Hempstead 1963–68*. Society of Antiquaries Research Report 32, London, 157–187.

Manning, W.H., 1985. *Catalogue of the Romano-British iron tools fittings and weapons in the British Museum*. British Museum Publications, London.

Marney, P., 1989. *Roman and Belgic Pottery from Excavations in Milton Keynes 1972–1982*, Buckinghamshire Archaeological Society Monograph Series 2.

Marsh, G., 1978. Early Second Century Fine Wares in the London Area. In Arthur, P., and Marsh, G. (eds.), *Early Fine Wares in Roman Britain*, BAR British Series 57, Oxford.

Marshall, C. and de Reuck, A., 1989. *Buckles*, privately circulated. Copies available at the Museum of London and the Tower Armouries.

McCarthy, M.R., 1979. The Pottery, in Williams, J.H., *St Peter's Street, Northampton, Excavations, 1973–1976*. Northampton Development Corporation, 151–229.

McWhirr, A., (ed.) 1979. *Roman Brick and Tile*. BAR International Series 68, Oxford.

Mertens, J., 1983. Urban wall-circuits in Gallia Belgica in the Roman period, in Maloney, J., and Hobley, B., (eds), *Roman Urban Defences in the West*. CBA Research Report 51, London, 42–57.

Millet, M., 1990. *The Romanisation of Britain*. CUP, Cambridge.

Moore, W.R.G., 1979. Note in Archaeology in Northamptonshire 1978, *Northamptonshire Archaeology*, 14, 102–112.

Moore, W.R.G., 1980. *Northamptonshire Clay Tobacco-Pipes and Pipemakers*. Northamptonshire Museum and Art Gallery.

Murphy, P., 1983. Environmental evidence, in Ayers, B. and Murphy, P., *A waterfront excavation at Whitefriars Street Car Park, Norwich, 1979*. East Anglian Archaeology Report 17, 28–51.

Owen, J., 1720. *Britannia Depicta or Ogilvy Improved*. Thomas Bowles, London.

Panella, C., 1973. Appunti su un Gruppo di Anfore della Prima, Media e Tarda Eta Imperiale, *Ostia III*, 460–633.

Partridge, C., 1981. *Skeleton Green. A Late Iron Age and Romano-British Site*. Britannia Monograph Series 2, Society for the Promotion of Roman Studies. London.

Peacock, D.P.S., 1978. The Rhine and the problem of Gaulish wine in Roman Britain, in du Plat Taylor, J., and Cleere, H., (eds.), *Roman Shipping and Trade. Britain and the Rhine Provinces*. CBA Research Report 24, 49–51.

Peacock, D.P.S. and Willams, D.F., 1986. *Amphorae and the Roman Economy*. Longmans, London.

Philipps, I.G., (ed.), 1952/53. *The Journal of Sir Samuel Luke, Scoutmaster General to the Earl of Essex 1643–44*. Oxfordshire Record Society, Vol. 3.

Platt, C., 1982. *The Castle in Medieval England and Wales*. Secker and Warburg, London.

Potter, T.W. and Potter, C.F., 1982. *A Romano-British village at Grandford March, Cambs*. British Museum Occasional Paper No. 35.

Price, J., 1980. The Glass, in Lambrick, G.H., Excavations in Park Street, Towcester, *Northamptonshire Archaeology*, 15, 63–68.

Reece, R., 1980. Town and country: the end of Roman Britain, *World Archaeology*, 12, 1, 77–92.

Reusch, W., 1970. Kleine, Spitzkomische amphoren, *Saalburg Jahrbuch*, 27, 54-62.

Robinson, M., 1975 (1976). The Environment of the Roman Defences at Alchester and its Implications, in Young, C.J., The Defences of Roman Alchester, *Oxoniensia*, 40, 161–170.

Rodwell, W., 1975. Trinovantian Towns and their Setting, in Rodwell, W., and Rowley, T. (eds.). *Small Towns of Roman Britain*, BAR, British Series, 15, 85–101.

Rogers, G.B., 1974. *Poteries sigillées de la Gaule centrale, tome i, Les Motifs non figurés*, XXVIIème supplement à Gallia, Paris.

Roskams, S., 1981. GPO Newgate Street, 1975–79; the Roman levels, *The London Archaeologist*, 403–407.

Roskams, S., and Schofield, J., 1978. The Milk Street excavation, Part 2. *The London Archaeologist*, 3, 9, 227–234.

RCHM, 1982. *An inventory of Archaeological sites in South West Northamptonshire, IV*.

Rowley, T., 1975. The Roman Towns of Oxfordshire, in Rodwell, W., and Rowley, T., (eds.), The *Small Towns of Roman Britain*. BAR British Series 15, 115–123.

Rydbeck, M., 1968. Maultrommeln in Funden aus den schwedischen Mittelalter. *Res Mediaevalis*.

Shackley, M., 1975. *Archaeological Sediments*. Butterworth, London.

Sheldon, H.L., 1978. The 1972–74 Excavations. Their contribution to Southwark's history. In: *The Southwark Excavations 1972–4. Joint publication No. 1, Southwark and Lambeth Archaeological Excavation Committee*. London and Middlesex Archaeological Society. Surrey Archaeological Society.

Seebohn, M.E., 1976. *The Evolution of the English Farm*. E.P. Publishing, Wakefield.

Simpson, G., and Rogers, G.B., 1969. 'Cinnamus de Lezoux et quelques Potiers Contemporains, *Gallia, XXVII*, 3–14.

Sparks, B.W., 1959–60. The ecological interpretation of Quaternary non-marine Mollusca, *Proceedings of the Linnean Society of London* 172, 71–80.

Stewkley, W., 1766. *Itinerarium Curiosum, II*.

Tchernia, A., 1987. Les amphores romaines et l'histoire économique, *Journal des Savants*, 1987, 216–234.

Teichert, M., 1975. Osteometrische Untersuchungen zur Berehinung der Widerristhöhe bei Schaffen. In Clason, A.T., (ed.) *Archaeo-zoological Studies*, 51–69.

Todd, M., 1973. *The Coritani*. Duckworth, London.

Todd, M., 1969 (1970). Excavations at Margidunum, *Transactions of the Thoroton Society*, 73, 42–53.

Tyers, P., and Marsh, G., 1979. The Roman Pottery from Southwark, in *The Southwark Excavations, 1972–1974*, Joint Publication No. 1. London & Middlesex Archaeological Society/Surrey Archaeological Society, 533–619.

VCH, 1902. *Victoria County History, Northamptonshire, vol I*.

Walden, H.W., 1976. A nomenclatural list of the land Mollusca of the British Isles, *Journal of Conchology*, 29, 21–5.

Walke, N., 1965. Das römische Donaukastell Straubing-Sorviodunum. *Limesforschungen Band 3*, Berlin.

Walker, G., 1992. *Towcester Retail Development,*

Northamptonshire. Interim Report of the results of an Archaeological Investigation. Cotswold Archaeological Trust, Cirencester.

Wheeler, R.E.M. and Wheeler, T.V., 1936. *Verulamium, a Belgic and Two Roman Cities*. Report of the Research Committee of the Society of Antiquaries, 11, Oxford.

Wheeler, R.E.M., 1943. *Maiden Castle, Dorset*. Research Report for the Society of Antiquaries of London, 12.

Whitelock, D et al, 1961. The Anglo-Saxon Chronicle. London.

Wilcox., G.H., 1977. Exotic plants from Roman waterlogged sites in London, *Journal of Archaeological Science*, 4, 269–282.

Williams, D., 1977. The plant macrofossil contents of Medieval pits at Sewer Lane, Hull. in Armstrong, P. Excavations in Sewer Lane, Hull, 1974, *East Riding Archaeologist*, 3, 18–32.

Williams, J.H., 1979. *St. Peter's Street, Northampton, Excavations 1973–76*. Northampton Development Corporation.

Wilson, D.M., (ed.) 1976. *The Archaeology of Anglo-Saxon England*. CUP, Cambridge.

Wilson, D.R., 1970. Roman Britain in 1969. The Midlands, *Britannia*, I, 289.

Wilson, D.R., 1974. Roman Britain in 1973, *Britannia*, V, 397–460.

Wilson, D.R., 1975. The Small Towns of Roman Britain from the air, in Rodwell, W., and Rowley, T., (eds.), *Small Towns of Roman Britain*. BAR British Series 15, 9–19.

Wilson, M.G., 1972. Catalogue of the Pottery in Frere, S.S., *Verulamium Excavations, Vol., I*. Research Report of the Society of Antiquaries of London, 28, Oxford, 265–370.

Wilson, R., 1979. Methods and results of bone analysis/ general conclusions and discussion of the bone sample. In: Parrington, M., (ed.) *The Excavation of an Iron Age Settlement, Bronze Age Ring-Ditches and Roman Features at Ashville Trading Estate, Abingdon 1974–76*. Oxfordshire Archaeological Unit Report 1. CBA Research Report 28, 110–126 and 133–139.

Windell, D., 1984. Irchester Roman Town: excavations 1981–82, *Northamptonshire Archaeology*, 19, 31–51.

Woodfield, C., 1981. Finds from the Free Grammar School at the Whitefriars, Coventry, *c.* 1545–*c.*1557/8, *Post-Medieval Archaeol.*, 15, 81–159.

Woodfield, C., 1983. The Roman Pottery, in Brown, A.E. and Woodfield, C., 1983, Excavations at Towcester, Northamptonshire: the Alchester Road suburb, *Northamptonshire Archaeology*, 18, 43–100.

Woodfield, C., 1989. A Roman Site at Stanton Low, on the Great Ouse, Buckinghamshire, *Archaeological Journal*, 146, 135–278.

Woodfield, P., 1978. Roman Architectural Masonry from Northamptonshire, *Northamptonshire Archaeology*, 13, 1978, 67–86.

Woods, P.J., 1970. Excavations at Brixworth Northamptonshire 1965–1970. The Romano British villa part I: The Roman coarse pottery and decorated Samian ware, *Journal of the Northampton Museum and Art Gallery*, 8, 1–102.

Young, C.J., 1975 (1976). The Defences of Roman Alchester. *Oxoniensia* 40, 136–170.

Young, C.J., 1977. *Oxfordshire Roman Pottery*, BAR, British Series, 43, Oxford.

Youngs, S.M., Clark, J., Barry, T., 1986. Medieval Britain and Ireland in 1985, *Medieval Archaeology*, 30, 114–198.

This article was published with assistance from English Heritage.