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Excavation in Durham's Old Borough, 1995

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SUMMARY

Excavation in 1995 to the rear of Crossgate in Durham has provided the first archaeological sequence of occupation within an area of the medieval Old Borough which lay to the west of the Framwellgate bridgehead.

Dumping of sandy loams containing thirteenth century pottery on the southern edge of the valley of the Milburn was temporarily halted for the construction of a series of features including a cess pit and a corn-drying kiln (the last firing of the kiln dated by archaeomagnetic analysis to the fourteenth or early fifteenth century). The resumption of dumping sealed these features and terminated with the construction of a very substantial revetment wall along the edge of the Milburn slope flanked on its northern face by a flagged walkway with a sunken feature beyond.

Demolition of this wall and the lowering of ground surface on its southern flank preceded the insertion of parallel freestanding tenement walls running back from the Crossgate frontage. The western wall, at least, terminated in a vertical and finished face on the edge of the slope down to the Milburn. Exactly when this physical definition of properties occurred is uncertain although it was certainly not before the later sixteenth century.

By the eighteenth century, buildings bounded the area of excavation, those to the south (I and III) subsumed but conformed to the alignment of the freestanding boundary walls and the building to the north (II) was constructed against an extension of the western burgage boundary. Nineteenth century developments included the insertion of a brick linking structure (building IV) between buildings I and II associated with cobbled yards. The construction of Archibald's Department store in the 1950s swept away large areas of archaeological deposits within the angle of land between Crossgate and North Road prior to the 1995 development.

INTRODUCTION

Archaeological investigations were carried out within the City of Durham during 1995 by The Archaeological Practice, Department of Archaeology, University of Newcastle in response to redevelopment by Norwich Union Building Society of an area of land to the west of Framwellgate Bridge within the angle between Crossgate and North Road (fig. 1A/B). Although North Road is a nineteenth-century addition to the street pattern, Crossgate, along with Milburngate and South Street, which also fan out from the Framwellgate bridgehead, are part of the medieval street plan of the area of Durham known in the Middle Ages as the Old Borough, one of the several administrative divisions of the city. The redevelopment required extensive groundworks and involved the complete demolition

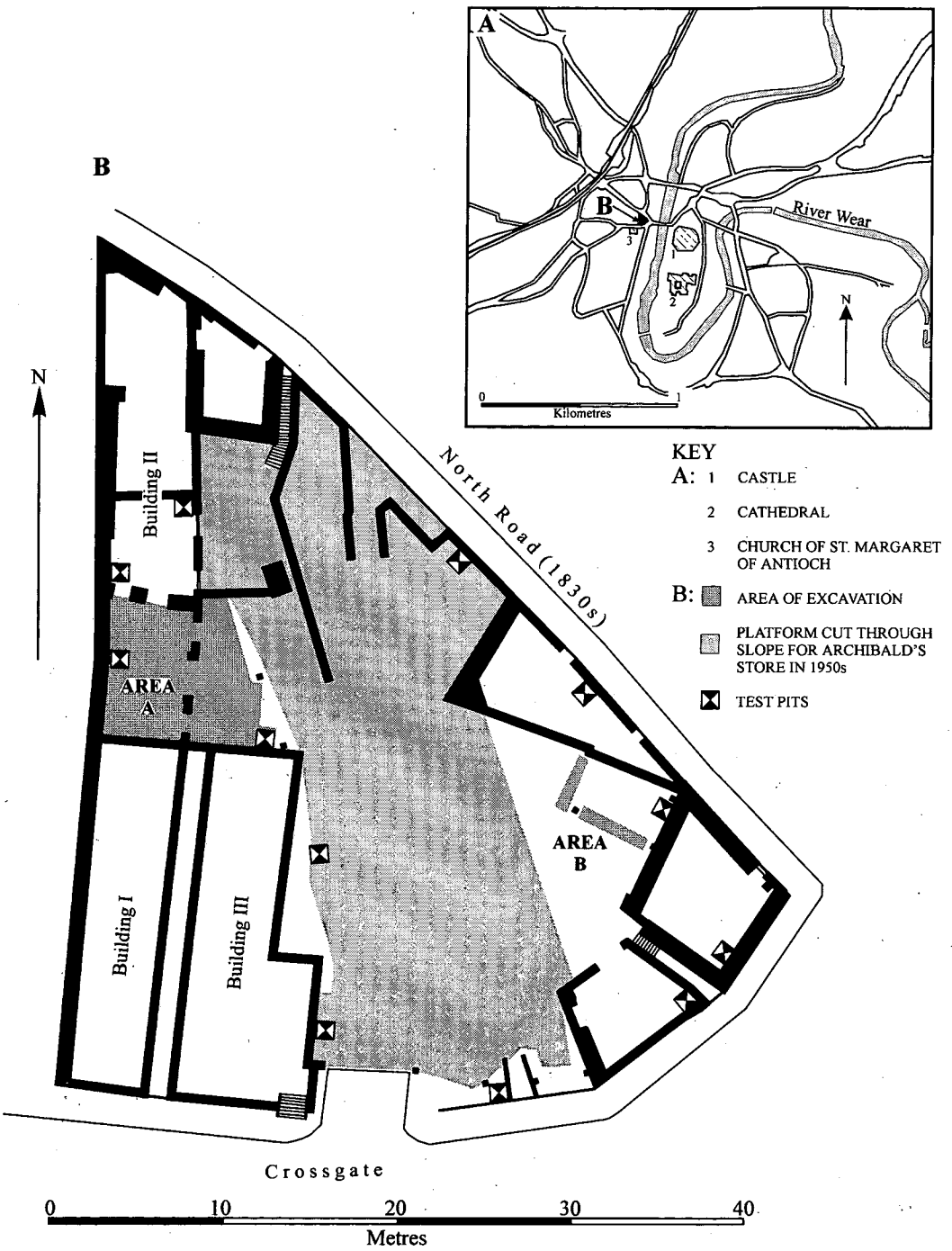

Fig. 1 A: Location of the development area within the City of Durham. B: The development area.

of the well-known Archibald's Department Store (itself a radical construction of the 1950s) along with a number of unstable earlier structures.

The following report consists of a description of the areas excavated during the development, a brief review of pre-development standing structures, specialist input on artefacts and organic remains recovered from the site, and a synthesis of all these reports to establish a context for the site within the known development of the Old Borough. An archive, consisting of site records, specialist reports and artefactual material, has been deposited at the Archaeological Museum, Old Fulling Mill, City of Durham.

THE EXCAVATIONS

Alan Williams and Philip Wood

The North Road site lies at the end of a spur of land falling both eastwards towards the River Wear (down the line of Crossgate towards Framwellgate Bridge) and northwards towards the now conduited Milburn[1]. The survival of subsurface archaeological deposits over this spur is closely related to past construction techniques, with successive structures either cutting into slopes or filling and terracing out from them. Whilst eighteenth and nineteenth century structures had in places cut down into the spur, undoubtedly truncating or removing earlier deposits, the greatest loss to the archaeological potential of the area came during the 1950s when Archibald's Department Store was constructed. This involved the destruction of a number of buildings and the cutting of a platform to level the slope between Crossgate and North Road (fig. 1B).

Identification of surviving archaeological deposits within the development area was facilitated by evidence from geotechnical test pits cut in early 1995 and from the results of historical research into the sequence of building development over the site. Two locations within the area of the store were selected during this assessment for full excavation; Area A, on the western edge of the site and Area B, towards the east (fig. 1B). Little was revealed within this latter area apart from a fine, probably nineteenth century, flagged floor over subsoil. No further description of this area will be provided. Area A, on the other hand, produced significant archaeological deposits which are described below. In the following text, context numbers are placed within square brackets [ ]. If a context is mentioned but not illustrated, the letter 'n' is appended to the bracketed number.

AREA A

Area A consisted of an island of archaeological stratigraphy 10m by 8m on the extreme west of the development site about equidistant between the Crossgate and North Road frontages and on the edge of the slope towards the Milburn. The western edge of this area was bounded by a sandstone wall of uncertain age but clearly of some antiquity, beyond which ground surface had been lowered by several metres during developments in the 1970s. To the north, the area was bounded by a cellared eighteenth century brick building and to the east the platform cut across the spur for the Archibald's development had also lowered the level of the ground surface substantially. The only extension of archaeological stratigraphy from the defined area of excavation was to the south, beyond the rear walls of eighteenth century brick buildings I and III, towards the Crossgate frontage and beyond the area of intrusive groundworks. The geology of the slope towards the Milburn, where exposed by construction works, was seen to consist of banded fluvioglacial sands overlying bedded sandstone.

PHASE 1: THIRTEENTH TO FIFTEENTH CENTURY (FIGURES 2, 3, 4 AND 5)

Sub Phase 1A

A series of dumps of sandy loam, [245], [255], [258n] and [262] immediately overlying a layer of dark compressed loam [267n], possibly a developed topsoil, began to raise ground level in the lower, western area of the site and also down the slope towards the Milburn. The

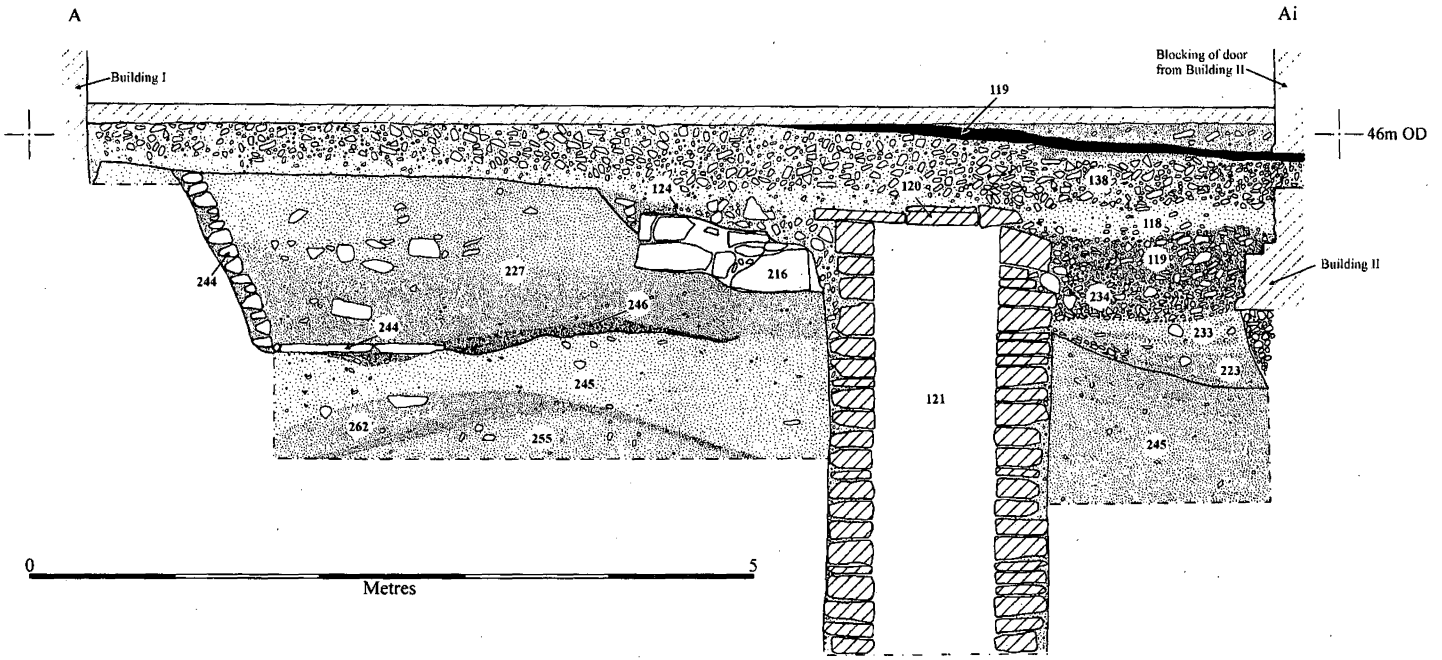

Fig. 2 Main north-south section. Location of this section is indicated on all the phase plans.

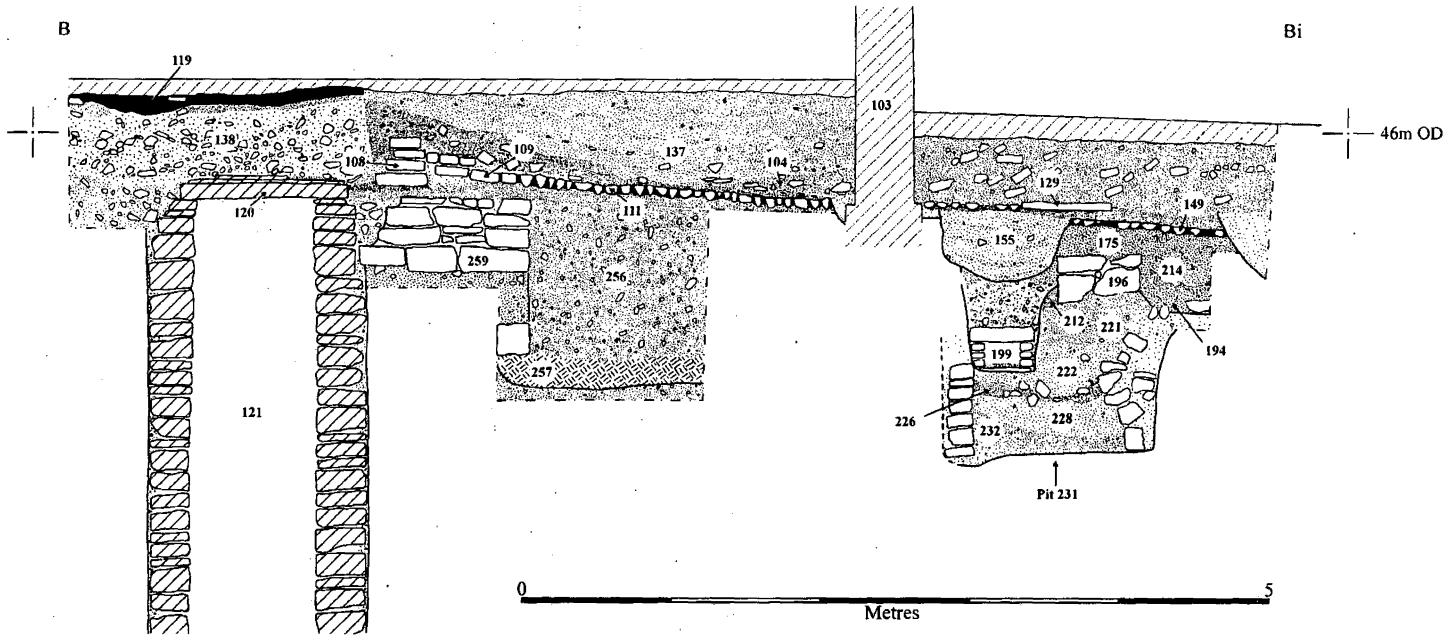

Fig. 3 Main east-west section. Location of this section is indicated on all the phase plans.

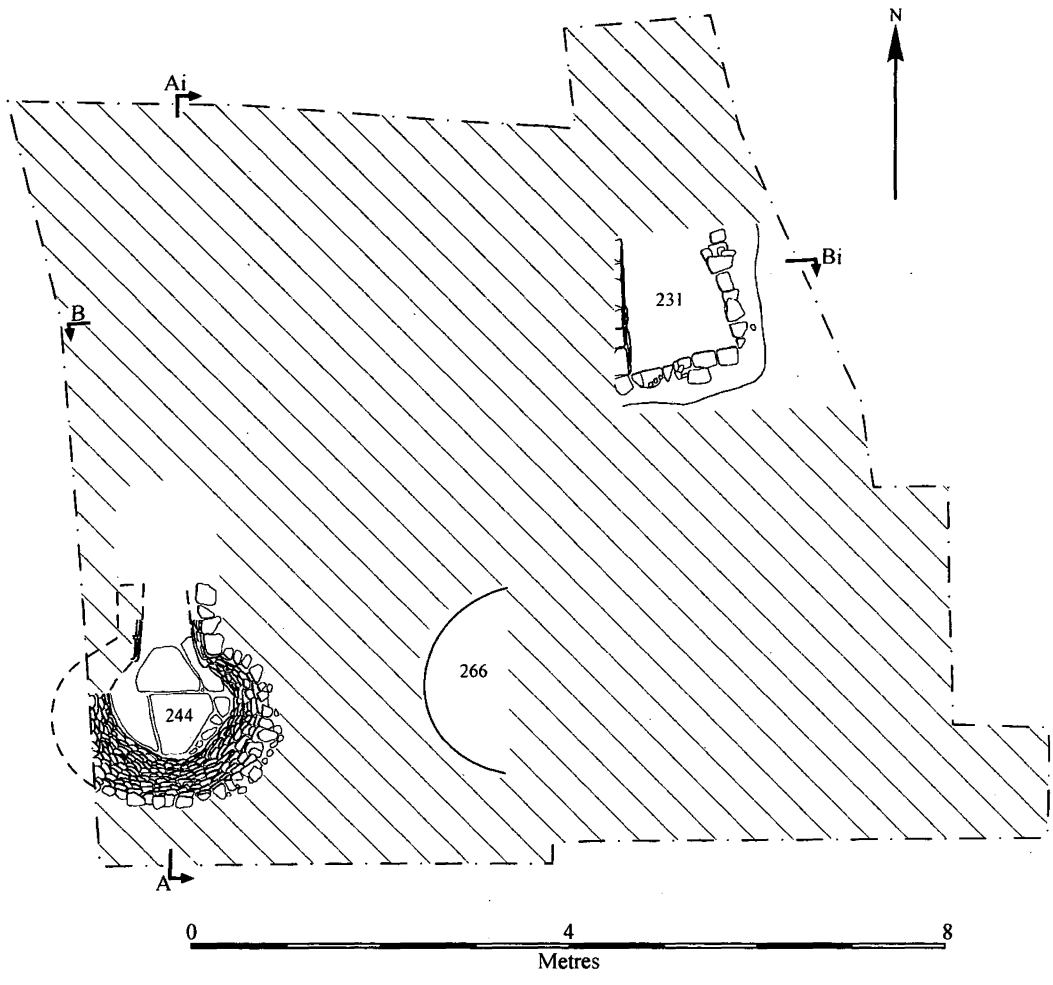

Fig. 4 Area A, Phase 1 features. Hatched area represents zones cut away by later intrusions, or obscured.

material was presumably deposited either as a conscious attempt to level the area and bring it into use or as dumps in a readily available open area away from occupation.

Sub Phase 1B

A series of features was now cut either into the phase 1A dumps or directly into subsoil. They included a stone-lined kiln [244]; a rectilinear stone-lined pit [231]; and immediately to the east of kiln [244] a large, unlined, bowl-shaped pit [266]. This latter feature was filled with dumped sandy loams similar to those through which it was cut.

Kiln [244]

This was of an inverted cone shape (maximum surviving diameter 2.2m and 1.1m deep) with an unmortared sandstone lining and floored with large sandstone slabs. A stone-lined flue, 0.5m in width, ran to the north. The flagged floor of the kiln was considerably reddened as was layer [245] into which it had been cut. The floor of the kiln and the flue were partially covered with the

Fig. 5 Area A, kiln [244]. This view is from the south-east.

ashy residue [246] of its last firing. A kiln of almost identical form and scale was excavated in Back Silver Street on the Durham peninsula in 1975-6 (Clipson 1980, 110) where it was interpreted as a grain-drying kiln. Pottery from the Back Silver Street kiln suggested that it had been in use during the thirteenth century. Kiln [244] was the subject of archaeomagnetic analysis. This provided dates for its last firing of between either 1325 and 1340 or 1370 and 1410.[2]

Stone-lined pit [231]

This was a rectilinear feature with an unmortared sandstone lining. The pit had a maximum surviving depth of 1m and an internal width (east-west) of 1m. Although the function of the pit has not been certainly established, its primary fill [232] contained quantities of acid-etched blackberry pips, the etching indicating that they had passed through a stomach (see palaeoenvironmental report below) suggesting that [231] was either a cess pit or at some stage had been reduced to that use; the lack of any sealing between its lining stones meant that it was certainly not watertight and therefore interpreting it as a processing pit holding liquids for industrial processes, such as tanning, would seem unlikely. Its eastern face eventually tumbled

(layers [228] and [226] contained numerous facing stones), partially infilling the pit.

The resumption of widespread dumping over the area is marked by the deposition of sandy loams into and over kiln [244] (layers [227] and [125] respectively) and the levelling of pit [231] with sandy loams [221] and [222].

Pottery recovered from the early dumps (phase 1A), from the discrete features (phase 1B) and from the subsequent levelling of these features with the reintroduction of dumping on the site, along with the archaeomagnetic date provided for kiln [244], provides a general chronological picture for the sequence of events which occurred over phase 1. Pottery within the earliest dumps is predominantly of the thirteenth and fourteenth centuries. Its character did not suggest that the material was residual, an assumption supported by the absolute dates provided for the last firing of kiln [244], *i.e.* during the fourteenth or early fifteenth century. The resumption of dumping would then fit within the fifteenth century as suggested by the presence of pottery typologically later than Buff/White Wares (which had fallen out of use during the first half of the fourteenth century) and by the absence of any demonstrably post-medieval pottery forms.

Obviously, given the small area excavated and its location, the sequence given above cannot safely be used to demonstrate the pattern of development towards the unseen Crossgate frontage. However, the lack of any residual artefactual material of an earlier date, especially within the dumped deposits, might be interpreted as suggesting a lack of earlier occupation throughout the tenement.

PHASE 2 ?SIXTEENTH CENTURY (FIGURES 2, 3, 6, AND 7)

A substantial east to west running sandstone wall [216] 1.2m thick and surviving up to 0.5m high was now constructed on an east-west alignment parallel with the edge of the slope down to the Milburn. Its original extent cannot now be established due to truncation to east and west which has also made it difficult to determine what its purpose was. It certainly acted as a retaining wall for dumps of soil which built up against its southern, unfaced, side, however, whereas its northern side, looking out over the Milburn slope, was carefully faced and plastered.

Ground level to the south side of wall [216] was lowered during later activity and the surface contemporary with the wall has been lost. The ground surface to the north of the wall was lower than that to the south throughout phase 2, however, and survived this truncation. A line of flagstones [224] (two surviving, the impression of a third still visible in the bedding sand) was laid along the northern edge of wall [216], functioning as a walkway between this wall and sunken feature [257] beyond. Only a very small portion of this latter feature was seen. In the limited area exposed it was rectilinear in plan and floored with clay; its sides built up of small, but fairly regular, sandstone blocks with a substantial bonding formed of the same clay as the floor. Interpretation of the feature is problematic; possibilities range from a simple "semi-cellar" or storage structure (compare, for instance, the "semi-cellar" structures excavated in the suburbs of medieval Northampton: Shaw 1998, 129) to a processing pit. There was no indication of any build up of residue within the feature to test this latter interpretation. A rectilinear plaster structure [220] was constructed at some time on flagstones [224] and against the face of wall [216] containing a shallow fill of charcoal [219]. The ground surface to the north of wall [216] beyond this series of features accumulated through this phase with the dumping of ashy sandy loams [223] and [233].

The dating of phase 2, given the very small quantity of pottery and other artefactual material recovered, remains problematic. The thirteenth to fourteenth century Buff/White Ware pottery found in the matrix of packing underneath flagstones [224] is clearly residual because the latest pottery from the preceding phase 1 dump [125] can be dated to the fifteenth century. A date in the sixteenth century is therefore implied.

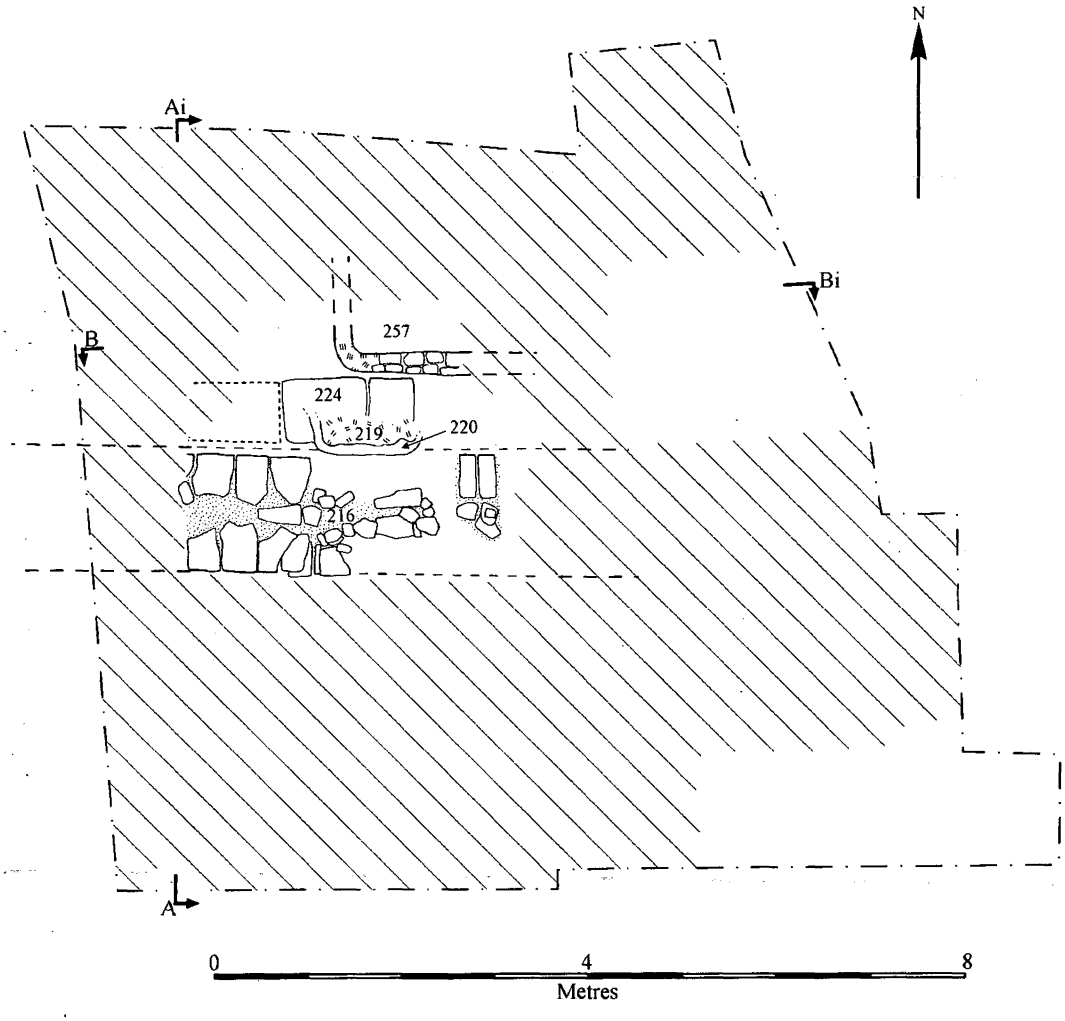

Fig. 6 Area A, Phase 2 features.

PHASE 3 SEVENTEENTH CENTURY (FIGURES 2, 3 AND 8)

Wall [216] and the ground surface to the south of the wall were truncated in this phase, facilitating the construction of parallel north-south sandstone walls [158a] and [196]. These walls would seem to represent free-standing tenement boundaries running back from the Crossgate frontage; the excavation area included the complete width of one (6.5m – *c* 21 feet) and a portion of the width of a second of these properties. The remnants of wall [216] were incorporated into wall [158a] and wall [196] sat directly above the infilled pit [231]. Within the area of excavation at least, the walls were not following any pre-existing boundaries. Although obscured by plaster to the east, the western face of wall [158a] was clear of render and could be inspected from the roof of the adjacent property. It was formed of large, roughly coursed rubble, heavily eroded, with substantial roughly-shaped quoins at its northern end, terminating in a vertical face 2m short

Fig. 7. Area A, looking south. The Phase 2 wall [216] runs across the centre of the frame; associated slabs [224] lie to the north of the wall.

of the northern edge of the area of excavation. Presumably its function was simply to extend the boundary of the property fronting on Crossgate out to the edge of the slope down to the Milburn. The character of the wall would not be out of place in the sixteenth or seventeenth centuries.

A minor wall [194] with stone footings and a brick superstructure was constructed at right-angles to wall [196] at some point during this phase. Structure [259] survived as a sandstone socle, with the remains of one course of brick upperworks, probably against the end of wall [158a]. Its eastern wall sat on the lip of the (still open) feature [257]. Dating of this phase is again a problem, because although feature [257] contained pottery, much of it is evidently intrusive. The introduction of brick buildings in phase 4 is unlikely to have been before the early eighteenth century which provides a limited chronological framework.

PHASE 4 EIGHTEENTH CENTURY (FIGURES 2, 3 AND 9)

Wall line [158a] was retained in this next phase when the area of excavation was closed in to north and south by three substantial stone and brick buildings. Probably no earlier than of eighteenth century date, these buildings included two structures running back from the Crossgate frontage (building I, constructed against wall [158a], and building III, to the east of the line of wall [196]) with another building (II, the "hip-roofed structure") fronting onto the area of excavation from the north. This latter structure was constructed against a pre-existing wall [158b], built of thinly-coursed sandstone topped with a steeply-pitched coping, effectively a garden wall, which butted against the vertical end of wall [158a] and continued the western boundary of the Crossgate property down the slope of the Milburn.

Buildings I and III were separated by a

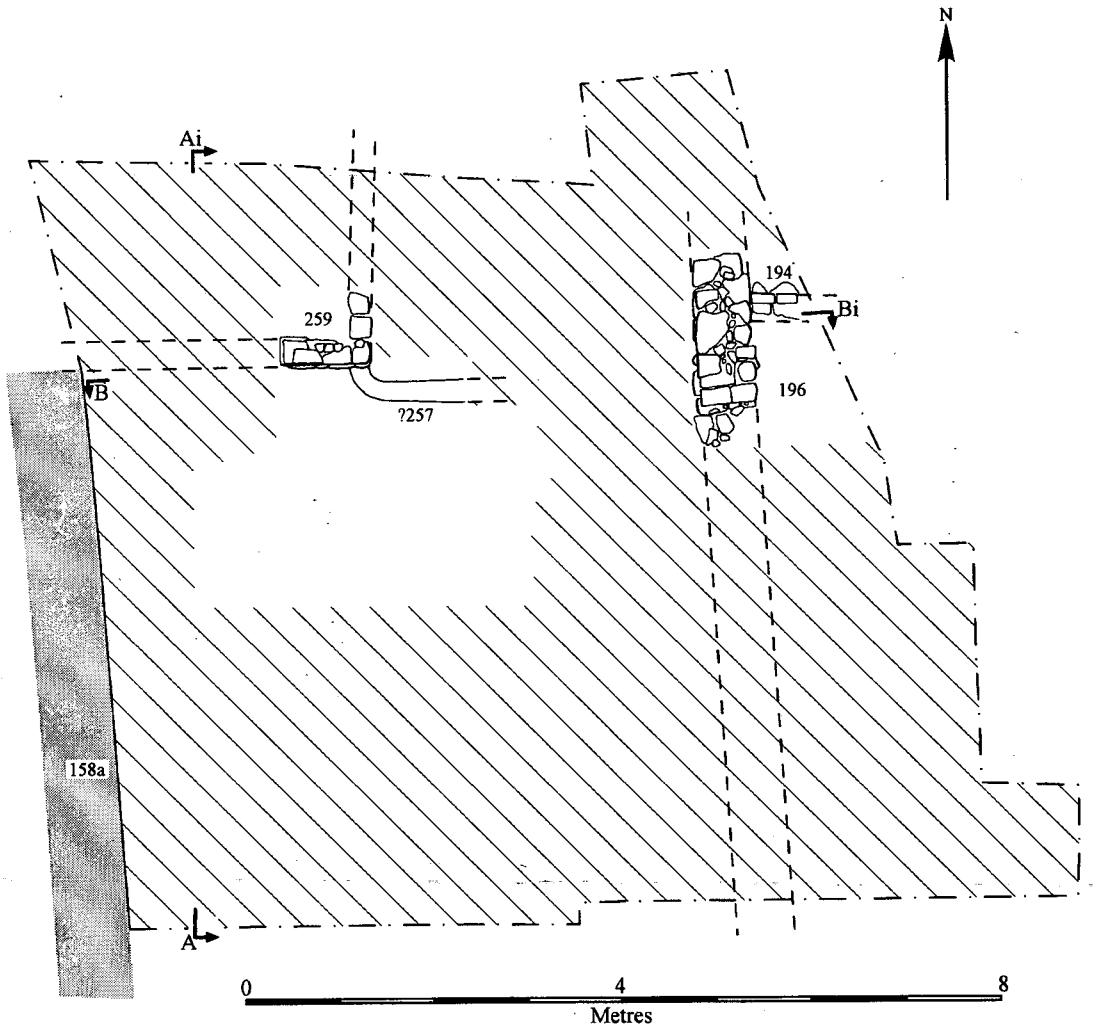

Fig. 8 Area A, Phase 3 features. Features [257] still in use from previous phase.

passageway or vennel, originally providing access to building II and possibly back to the Milburn. Whether freestanding wall [196] had been levelled during this period of construction or retained as a physical boundary is uncertain, although the former would seem more likely. Structure [259] had certainly been demolished by this time as a sandstone-lined well [121] was cut through it. During the construction of this well the ground surface in the lower, northern, half of the open area between the three buildings was brought almost level by the insertion of dumps, including [234] and [119] which included great quantities of plaster stripped from planks, perhaps deriving from the upper parts of a demolished building, of which [259] formed part. Precisely when the rear of building III was extended as a cellar block is uncertain, but it may possibly have been within this phase. The excavated cellar, [201], was floored with heavy sandstone flags [202].

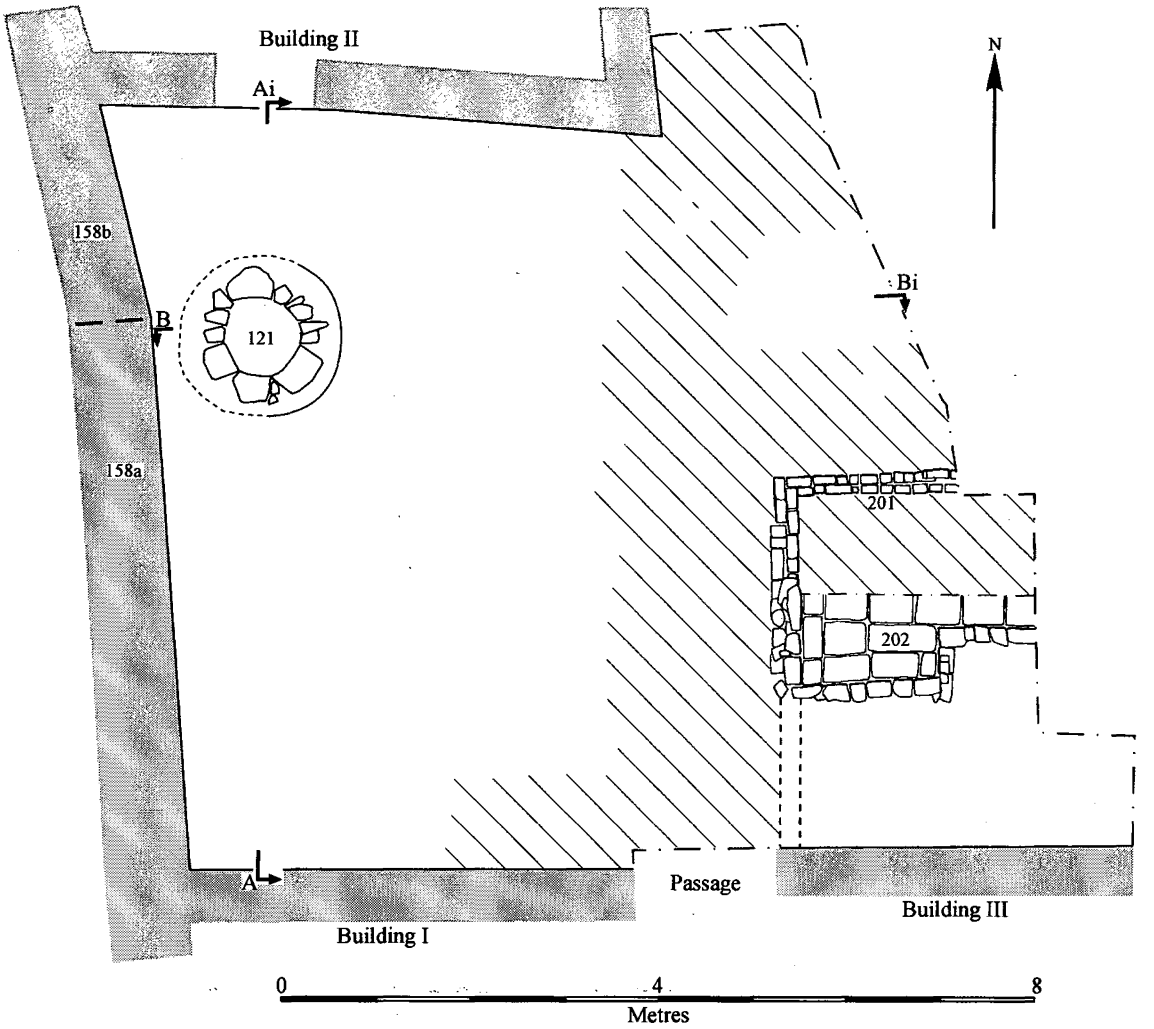

Fig. 9 Area A, Phase 4 features.

PHASE 5: NINETEENTH CENTURY (FIGURES 2, 3, 10 AND 11)

The western portion of the open area between brick buildings I and II was now infilled with a lean-to structure (building IV) erected against wall [158a/b]. It comprised a brick frontage wall [107/108] which butted against buildings I and II. The ground surface within the structure was raised with the deposition of layers [118] and [138], the new floor level running over the threshold of the door into building II. Well [121] lay within the area of this lean-to and when the floor level was raised was carefully capped off with large sandstone slabs [120] and a pump inserted. Both the slabs used to cap the well (one a finely moulded sandstone plinth) and the foundation slabs for the lean-to walls (sandstone roof tiles) were reused materials, no doubt from the buildings bounding

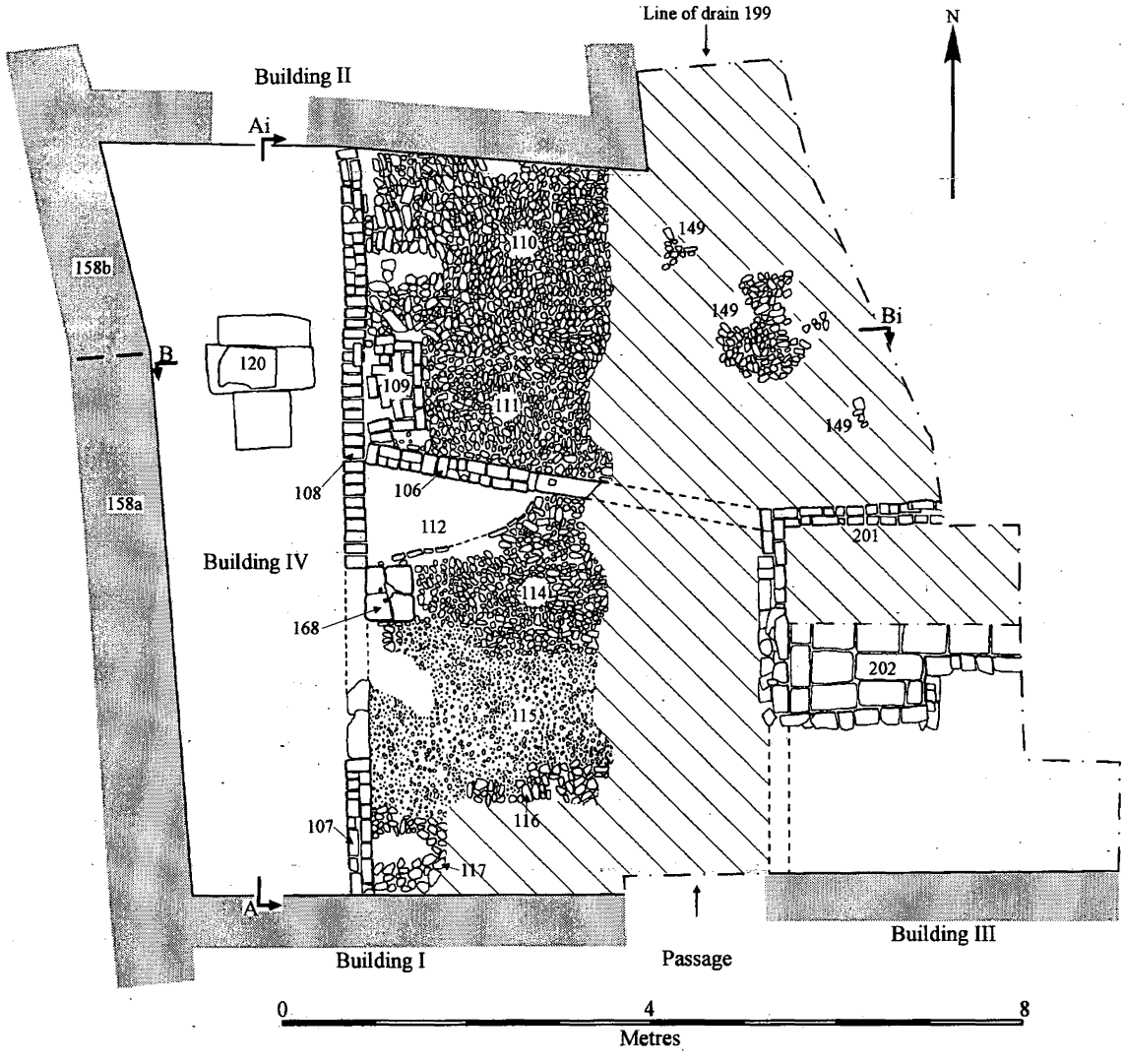

Fig. 10 Area A, Phase 5 Building IV and cobbled yards.

the area of excavation which must have been extensively remodelled at this time.

The remaining open area to the east was provided with a substantial drain [168], which fed into the main drain [199] falling from the Crossgate frontage along the alleyway, and the whole area was cobbled ([110], [111] [114] to [117] and [149]). A number of small pits were dug immediately before the cobbling was laid, one of which, [209], included a saucer found in several pieces, perhaps, a good luck deposit for the new structure?

Access to the lean-to from the cobbled yard was via a door adjacent to the well (though the actual evidence for the door was destroyed), reached by two brick steps [109]. The yard was divided by brick wall [106] with a central doorway (the sandstone threshold of which was a reused slab) providing access between Crossgate, building II and North Road beyond. Sit-

Fig. 11 Area A, looking south. The Phase 5 Building IV lies to the right of the central wall [108] with its associated cobbled yard to the left.

ting against the southern face of this wall was a curved brick-edged feature [112] of uncertain purpose; it was filled with a fine grey loam [170] which contained the buried skeletons of two young cats and a rabbit (see animal bone report below). One could postulate their presence as "ritual" deposits of some description, perhaps the burial of family pets. The cellar [201] within the rear of building III was altered during this phase with the insertion of a blocking wall into the already partially infilled structure.

PHASE 6

Phase 6A

The pattern of use of the area altered. The lean-to structure (building IV) was demolished and a substantial brick wall was inserted flush with the eastern edges of buildings I and II (as seen in figure 1B) and roofed over to wall [158]. The area to the east of this new block was, for a time, retained as open space; it incorporated a new drainage system [155] sealed by a cobbled and flagged surface [129] which maintained the path connecting Crossgate with North Road. The cellar block in building III was completely infilled and a set of coal bunkers inserted.

Phase 6B

The pattern of properties between Crossgate and North Road was radically altered with the construction of Archibald's Department Store in the 1950s. A wide terrace was cut between the two roads (see figure 1B for the extent of this terrace) removing all archaeological deposits within it. The whole area was incorporated into the department store and any access between Crossgate and North Road (other than through the store itself) was lost.

DISCUSSION

It is uncertain when a settlement first grew up to the west of the ford or bridgehead across the River Wear from the peninsula and the defended centre of Durham. The first documented activity in the area is the construction of the Old (now Framwellgate) Bridge around 1120 by Bishop Flambard (possibly superseding a ford) and a charter of c.1128 which records the return to the priory of land 'beyond the bridge of Durham'. Henry I's confirmation of this charter values the land in question (probably the priory's expected rental income) as £1. 18s. per annum, implying little wealth within the community. Wealthy or not, the Old Borough (one of the several administrative divisions of the city of Durham) was quite soon served by a chapel, the earliest surviving fabric in the church of St Margaret of Antioch which stands on the southern side of Crossgate dates to the twelfth century (Pevsner 1985, 220). A corn mill on the Milburn (the burn forming the boundary between the Old Borough and the Bishop's Borough) is also known to have been in existence during Flambard's episcopacy (1099-1128).

Archaeological investigations to the west of the peninsula prior to 1995 were limited to work carried out by Peter Clack along Milburngate in 1983 (Clack 1984, 73) some 150m to the north of the present site and beyond the Old Borough. The main area of this excavation, the south tenement, revealed stratigraphy up to 2m deep and seven early organic phases built up against "a stable north tenement boundary fence". Artefactual material recovered from phases 1 to 5 within these deposits consisted of one sherd of pottery dated to the early-mid twelfth century (ibid, 76). These deposits were sealed by a "loose spongey organic deposit" which contained thirteenth-century pottery. A preliminary palaeoenvironmental analysis of a sample from the phase 3 organic deposit was carried out which, though containing a large number of seeds, had a low species total "slightly unusual for urban contexts" (ibid, 76). These early deposits on Milburngate with their dearth of dating evidence and some ambiguity over their nature (urban or agricultural) cannot be used to suggest the nature or likely inception of occupation further to the south in the Old Borough.

As such, the chance to investigate an area of land in the proximity of the river crossing, at the centre of the Old Borough and within medieval tenements belonging to both Milburngate and Crossgate was of considerable archaeological importance. However, considerable limitations to any archaeological input on the site had already been imposed by post-medieval building activity: The major loss to the archaeology of the development area was caused by the cutting of a platform through the ridge between Crossgate and North Road during the construction of Archibald's Department Store in the 1950s. This removed a block of medieval tenements along the Crossgate frontage back as far as North Road (the construction of which had itself removed part of these tenements in the 1830s). It is also evident from the architectural review of the development area prepared by Peter Ryder that components of standing buildings which survived from the Archibald's development displayed little early fabric; the earliest walls are of possibly seventeenth century date, and cellaring associated with these post medieval buildings had destroyed most of the frontages. Negotiating these constraints, two areas of archaeological potential were identified for full excavation; A and B. During the 1995 excavation it became clear that Area B had already been truncated almost to subsoil, probably in the nineteenth century. This left only Area A, amounting to 8% of the development area and 22m back from the Crossgate frontage.

Despite the extensive destruction of deposits over the site, Area A has produced a sequence of activity from the thirteenth century onwards. The lack of even one sherd of residual earlier pottery is significant, not because it can be used to prove the absence of occupation along the line of Crossgate in the twelfth century (which it clearly cannot) but because it suggests that any earlier occupation is unlikely to have been as dense or as extensive as that of the thirteenth, fourteenth or fifteenth centuries.

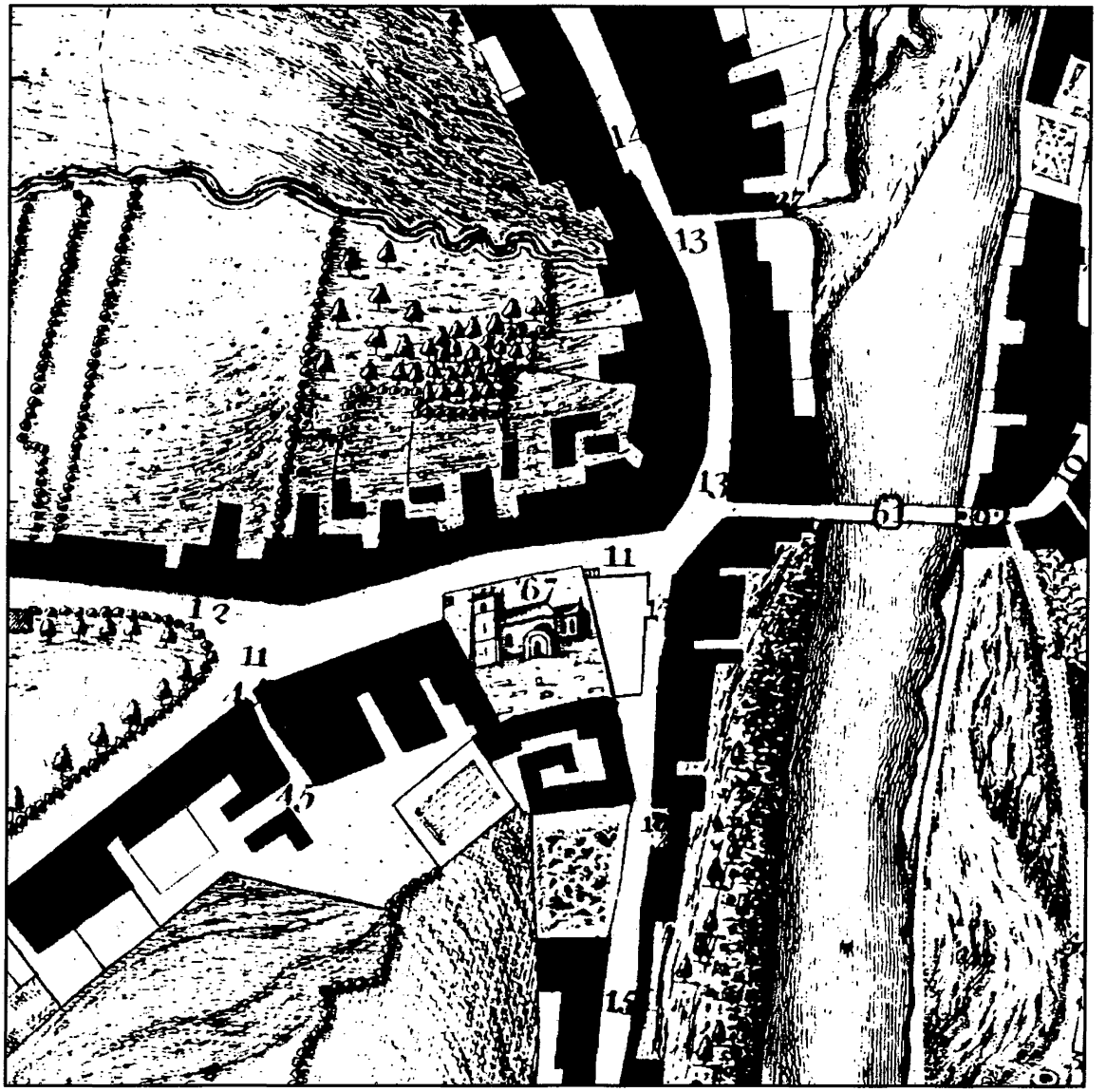

Fig. 12 A section of Foster's 1720 plan of the City of Durham.

Only by the very end of the middle ages (and quite possibly considerably later (phase 3)), were physical tenement boundaries in the form of free-standing walls [158a] and [196] extended across the area of excavation. The westernmost of the two boundaries, at least, terminated on the edge of the Milburn slope. Two tenements lay within the excavated area, the full width of the westernmost being 6.5m (21 feet). The apparent absence of physical boundaries before these walls were constructed need not imply that some other form of tenement boundaries was not in existence; some tenements along Crossgate were

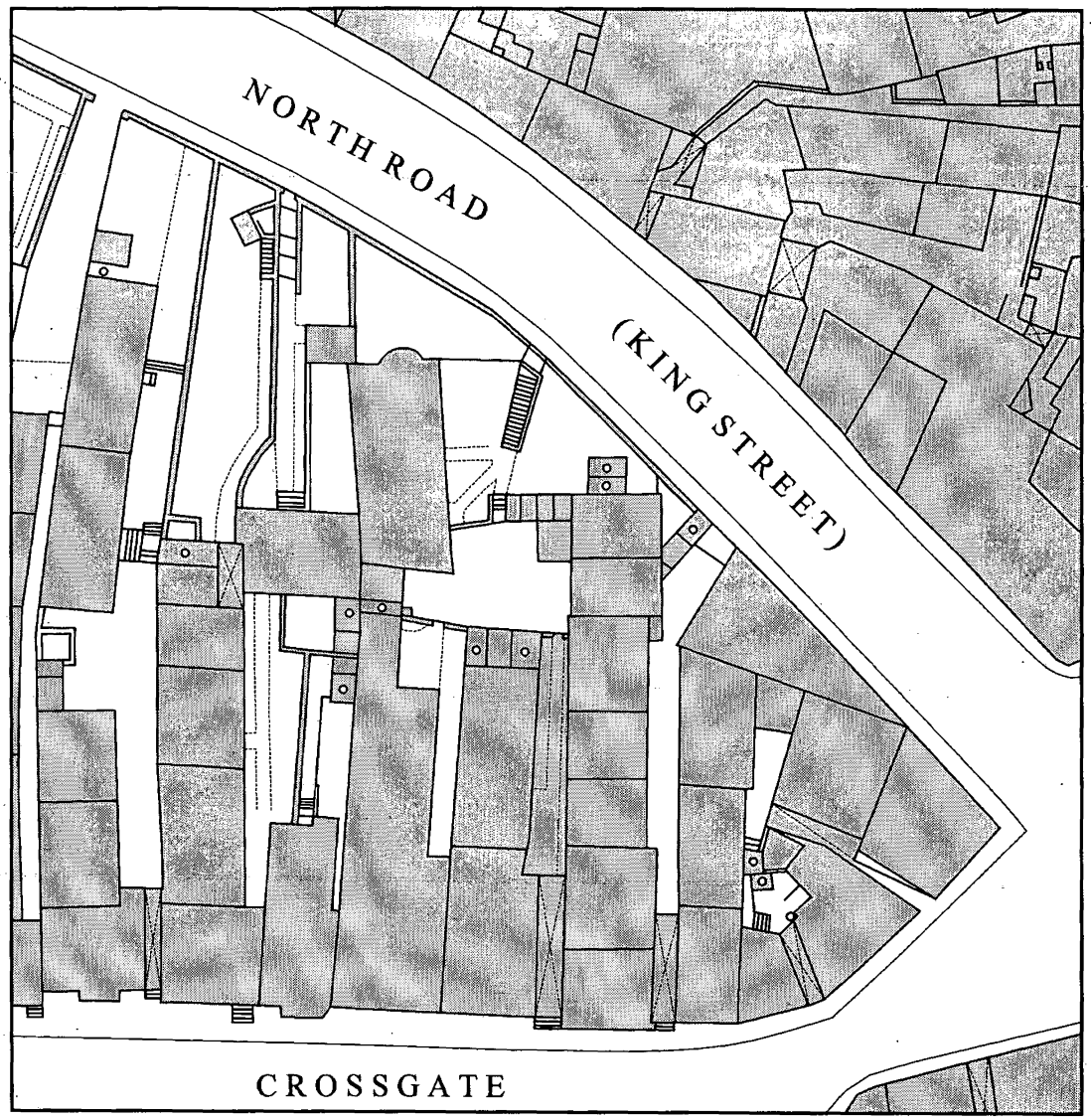

Fig. 13 First edition Ordnance Survey (1:500) of Durham (1856).

described in the fourteenth century as lying "in length from the roadway as far as the Milneburn" (Bonney 1990, 69) whilst others may have terminated on the edge of the Milburn slope as described above. Foster's plan of the town although only made in 1720 (fig. 12) indicates just such a varied picture with some boundaries to the north of Crossgate extending to the Milburn whilst others terminate prior to the slope down to the burn.

Subsequent to the construction of walls [158a] and [196] tenement widths would seem to have remained constant. The admittedly limited evidence from the excavation suggests

that the rear of the tenements fronting onto Crossgate were not built over until the eighteenth century when a building was constructed on the slope of the Milburn (building II) within the western tenement, and buildings extended to within the southern edge of the excavation from the Crossgate frontage within both tenements. These latter buildings were divided by a passageway or vennel along the boundary line of the tenements (phase 4).

Later activity in part conformed to the pre-existing pattern. A lean-to (building IV) was inserted in the open space between buildings I and II within the western tenement, but the cobbling and division of a yard area between buildings I, II and III ran across tenement boundaries (phase 5). The results of excavation (figure 8) can be directly compared with the First Edition 1:500 Ordnance Survey of Crossgate (fig. 13). Further adaptation to this pattern (the demolition of building IV and the insertion of a full width linking block between buildings I and II) retained the pathway between buildings which was only swept away with the radical Archibald's development of the 1950s.

Recovered evidence for occupations or crafts within the excavated tenements is limited: Kiln [244] may well represent a malting oven, preparing grain for the brewing process and here it is relevant to note that a list of brewers presented to the prior's representative in 1395 to have measures checked included 16 from the Old Borough, six of whom were women (Bonney 1990, 152). There is little if any evidence for other crafts or industries. There was no equivalent to the large numbers of horn cores found on Clack's Milburngate excavation associated with the tanning, skinning or horn working industries which is known to have been a common occupation of tenants of the northern Crossgate properties; in 1316, for instance, Roger de Ask, skinner, granted his burgage above the Milburn to Richard de Bolum, also a skinner. The land to the west of this burgage was held by a barker in 1447 (bark being used in the tanning process) and the land to the east by a tanner in 1510 (Bonney 1990, 47).

Identification of the excavated area with specific documentary material has proved problematic even for the nineteenth century, but the general character of the north Crossgate tenements is illustrated in returns from the census of 1851. The majority of properties on lower Crossgate are shown as divided among several sub-tenants (nine families lived within no.57, for instance). The census information also demonstrates the wide range of occupations and trades of the inhabitants, with weaving and shoemaking being the most frequent trades in the mid nineteenth century. Sanitary conditions throughout Durham and along Crossgate in particular at this time were graphically described in the Report to the General Board of Health by George Thomas Clark, the superintending inspector for Durham: 'The houses at the angle between South Street and Crossgate, and Crossgate and North Road are in a bad state from open ash-pits receiving the drainage of privies, some of which from their height, drain upon the lower houses' and on the north side of Crossgate 'where the drainage is bad, there has been fever' (Butler 1997, 13). The presence of rat bones in the excavated nineteenth century drain falling towards North Road from Crossgate would fit all too well with this picture.

MEDIEVAL POTTERY

Lucy Whittingham

A total of 679 sherds (6.7kg) constitute this assemblage. A full quantification of all the sherds has been prepared by weight, rim diameter and other attributes such as glaze colour and decorative motifs. Fabric identification has been established with the aid of ×20 magnification and classified with reference to previous work in Durham City (Lowther et al. 1993), in the county of Durham (Jarrett and Edwards 1961, Addis 1989, O'Mahoney 1987) and in Newcastle upon Tyne (Ellison 1981 and Bown 1988). All of the pottery in this assemblage divides into four fabric types dating from the thirteenth to fifteenth centuries.

A Buff/White Ware (EBW:B or B/WW)

The majority of the pottery in this assemblage, 588 sherds (5.4kg) occurs in one type of Buff /White

Ware. This type of fabric is common in both Durham City and County and has been discussed previously (Ellison 1981, Lowther et al. 1993 and Addis 1989). The exact provenance of this type of ware at North Street is, therefore, unknown, but can be equated with "Fabric EBW:B: Local thirteenth/early-fourteenth century buffwares, sub-type B" in the City of Durham Archaeological Survey type series (Lowther et al. 1993).

The fabric matrix is moderately tempered with subangular quartz of 0.2-0.4mm, occasional larger subangular quartz of 0.5-0.7mm, moderate very fine red iron oxides ranging from less than 0.1 up to 0.3 mm, occasional quartz sandstones 1-2mm and moderate mica of 0.1mm. All the sherds have yellow/white (10YR 8/2) or pink/yellow (5YR 8/3) surfaces with a reduced pale grey (7.5YR 5/0) core or internal surface.

A minimum of 47 vessels are represented by rims. These include 35 cooking pots, one shallow bowl or pancheon and 11 jugs. The cooking pots are all of a typical form with squared or rounded everted rims. These range from small vessels of 14cm rim diameter with an internal lid seating (see Bown 1988 Fig. 22.147) to larger cooking vessels of 22 cm rim diameter (see Lowther et al 1993 Figs 44, 46, 47 and 55). Base sherds are flat and crudely finished on the interior. Occasional examples are knife trimmed on the exterior edge to create a smooth surface. All of the diagnostic sherds from cooking vessels have a splashed lead glaze on the exterior and continuous lead glaze on the interior of the bases.

Less popular are jugs, of which there are nine tall and two short vessels. The nine tall vessels have squared/thickened rims of 10-11 cm diameter and strap handles (see Bown 1988 Fig. 20.108-112). Some of the strap handles have stamped notch or thumbed decoration. The two short and globular jugs have plain upright rims, pinched spouts, thumbed sagging bases and rod handles. A number of these jugs have decoration in the form of parallel incised lines around the body, parallel lines of rouletted notch decoration, applied thumbed pads, applied scale and pad decoration, applied scales in a contrasting red clay and applied cordons. Approximately half of the sherds in this fabric type are found with a clear lead or splashed copper green glaze. Base sherds with an internal lead glaze appear to be from both cooking vessels and jugs. The following profiles appear on figures 14 and 15.

1. Cooking pot with small squared rim (14cm). [125] ph.1.
2. Cooking pot with small squared rim (14cm) and internal lid-seating. Sooted externally. [125] ph.1.
3. Cooking pot with small squared rim (16cm) Sooted externally. [125] ph.1.
4. Cooking pot with small everted thickened rim (18cm). [245] ph.1.
5. Cooking pot with thickened squared rim (18cm) and cordon on shoulder. Splashed lead glaze on rim. [245] ph.1.
6. Cooking pot with thickened squared rim (24cm). [125] ph.1.
7. Cooking pot with thickened squared rim (18cm). [125] ph.1.
8. Cooking pot with thickened squared rim and lid seating (20cm). [226] ph.1.
9. Cooking pot with thickened squared rim (18cm). [245] ph.1.
10. Cooking pot with thickened squared rim (23cm) and lid seating. [125] ph.1.
11. Cooking pot with thickened squared rim and flattened top (26cm). [245] ph.1.
12. Cooking pot with small thickened rounded rim and internal lid seating (12cm). [125] ph.1.
13. Cooking pot with small thickened rounded rim (11cm). [222] ph.1.
14. Cooking pot with thickened rounded rim (20cm). [245] ph.1.
15. Cooking pot with thickened rounded rim (24cm). Splashed lead glaze on interior surface. [125] ph.1.
16. Cooking pot with flattened everted rim with rounded edge (14cm). Splashed lead glaze on exterior. Heavily sooted on exterior. [192] ph.5.
17. Cooking pot with everted, lid seated, thickened rim with rounded edge (22cm). Sooted internally. [125] ph.1.
18. Jug with large thickened square rim and cordon on neck (12cm). Splashed orange lead glaze on exterior. [125] ph.1.
19. Jug with thickened square rim and cordon on neck (10cm). Scar from large strap handle attached over cordon. Splashed green lead glaze on external surface. [125] ph.1.
20. Jug with thickened square rim and cordon on neck (10cm). Grooved strap handle attached over cordon to neck. Glossy dark olive green lead glaze on exterior. [247] ph.1.
21. Small rounded jug with pinched spout, rod handle and plain upright rim (10cm). The body of the vessel is rilled. Continuous olive-green lead-glaze over centre of vessel. [222] ph.1.
22. Jug with plain upright rim and incised rod handle (10cm). Patches of olive-green lead-glaze on exterior. [224] ph.2.

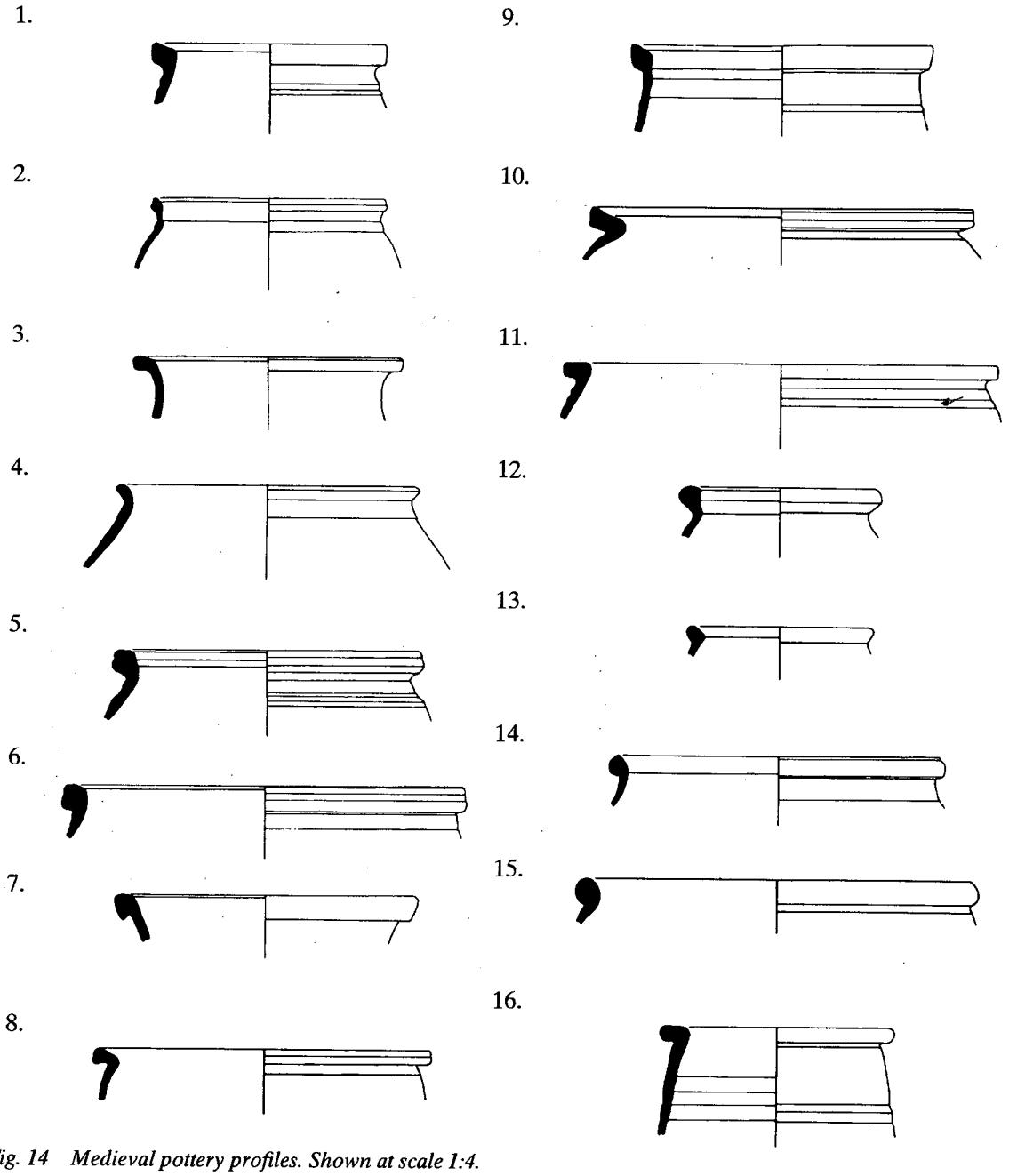

Fig. 14 Medieval pottery profiles. Shown at scale 1:4.

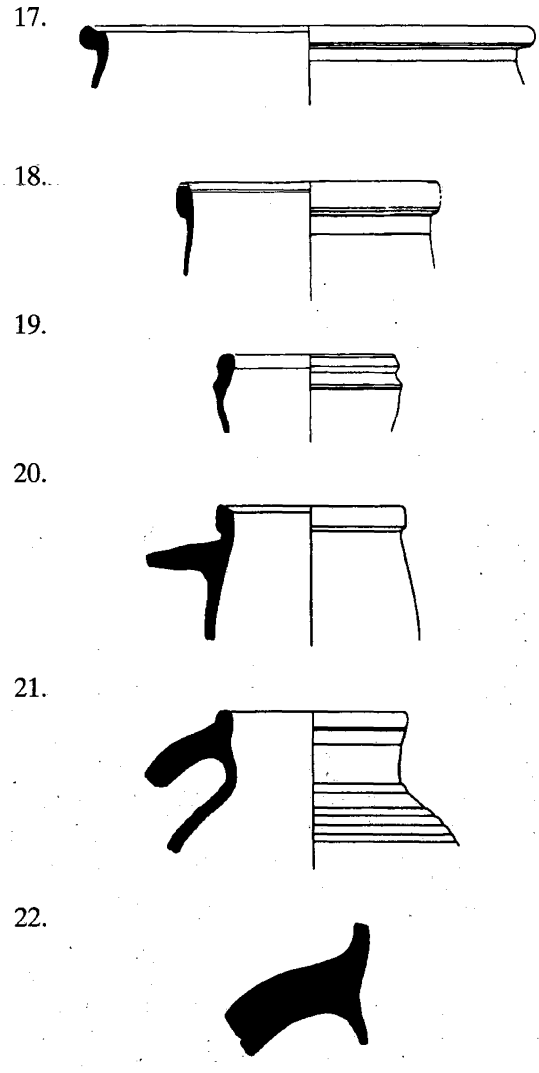

Fig. 15 Medieval pottery profiles. Shown at scale 1:4.

Scarborough Ware

Six sherds (0.05kg) with a copper green glaze are from a minimum of two tall jugs with thumbed sagging bases. These jugs are typical early thirteenth to mid/late fourteenth-century Scarborough Ware products (Farmer 1979).

Early Reduced Green Ware (ERG:E or RGW1)

This fabric type is represented by thirty five sherds (0.3kg). These sherds are classified in Durham City as "Reduced Green Ware (ERG:E), thirteenth to early fourteenth century, sub-type E" (Lowther et al. 1993) and typical of thin walled, coarse tempered Reduced Green Ware type 1 as found in Newcastle upon Tyne (Ellison 1981, Bown 1988). The fabric contains moderate subangular quartz of between 0.2 and 0.4mm, occasional large quartz sandstones of 1 mm, abundant fine mica, moderate red iron oxides of 0.2-0.3mm and occasional large red iron oxides of 1 mm. Sherds are usually dark grey (7.5YR 4-3/0) with a thin oxidised white

Table 1 Summary of vessel forms in total assemblage

Context/Phase	Fabric	Sherd Number	Weight (g)	Vessel Type
125/ Ph 1	EBW:B	15	282	15 cooking pots
		1	10	1 pan/shallow bowl
		5	72	5 jugs
125/ Ph 1	ERG:L	2	30	2 jugs
192/ Ph 5	EBW:B	1	44	1 cooking pot
197/ Ph 5	EBW:B	1	18	1 cooking pot
222/ Ph 1	EBW:B	2	18	2 cooking pots
		6	138	1 jug
224/ Ph 2	EBW:B	1	108	1 jug
226/ Ph 1	EBW:B	4	52	3 cooking pots
226/ Ph 1	ERG:L	1	26	1 jar
227/ Ph 1	EBW:B	2	22	2 jugs
		4	50	4 cooking pots
227/ Ph 1	ERG:L	1	8	1 jug
245/ Ph 1	EBW:B	1	26	1 jug
		5	122	5 cooking pots
245/ Ph 1	ERG:E	2	18	1 jar
247/ Ph 1	EBW:B	1	66	1 jug
249/ Ph 1	EBW:B	2	10	1 cooking pot
255/ Ph 1	EBW:B	1	36	1 cooking pot
254/ Ph 1	EBW:B	1	18	1 cooking pot
256/ Ph 5	EBW:B	1	6	1 cooking pot

(7.5YR 8/4) external margin. Some sherds have oxidised interior and exterior surfaces. All sherds have a splashed green lead glaze. One diagnostic sherd is the rim of a cooking vessel/jar which is inturned with a rolled/thickened edge. Two sherds have iron stained decorative motifs; a vertical strip and applied pad, typical of jugs in this fabric.

Late Reduced Green Ware (ERG:L or RGW4)

Fifty two reduced sherds (0.8kg) and four oxidised sherds (0.1kg) occur in this distinctive fine fabric. This ware is classified in Durham City as "Reduced Green Ware (ERG:L); late fourteenth/fifteenth century sub-type L" (Lowther et al 1993) and typical of Reduced Green Ware type 4 found in Newcastle upon Tyne (Ellison 1981, Bown 1988). The abundant fine quartz inclusions are all less than 0.1 mm and barely visible by eye. All sherds are glazed with an even continuous green lead glaze and reduced dark grey throughout (7.5YR 5-4/0). Diagnostic sherds include three jugs, one jar and cistern handles. Two types of jug rim occur; a plain upright form and an upright thickened form, both of 10cm diameter. The jar rim is an everted form of 22cm diameter. Cisterns are represented by large grooved strap handles. The four sherds which are oxidised throughout display a common characteristic of this fabric type which is of no chronological significance.

SITE INTERPRETATION

All of the fabrics in this assemblage are typical of the types of pottery found in Durham City between the thirteenth and fifteenth centuries. The assemblage can be divided into two chronological groups; a thirteenth to early fourteenth-century group containing Buff/White Wares, Early Reduced Green Ware and Scarborough Ware and a late fourteenth to fifteenth-century group containing the Late Reduced Green Ware. 90% of the total assemblage is found in situ in eighteen phase 1 and 2 contexts. The remaining 10% is residual in fourteen post-medieval contexts in phases 3, 5 and 6 (see Table 2).

87% of the pottery in Phases 1 and 2 is Buff/White Ware, 4% Early Reduced Green Ware and 1 % Scarborough Ware. These wares are associated with all of the features (pit 231, pit 266, kiln 244, dumps 125, 245, 247, 255, 254, flagstones 218/224 and layer 233) in phases 1 and 2. Contexts 125, 222, 226, 227 and 245 contain particularly large assemblages of more than fifty sherds. Context 125 contains the majority of the cooking vessels and the decorated sherds in Buff/White Ware and the two

Scarborough Ware jugs. Also present in phases 1 and 2 is the majority of the late 14th to 15th-century Late Reduced Green Ware from the site. 79% of this ware occurs as 7% of the pottery in phase 1 and 2, but its later date makes it incompatible with the large assemblages of 13th to early 14th century Buff/White Ware also in these contexts. Its presence as the minority of the sherds in the uppermost fills of pit 231, kiln 244, dumps 125 and 245 implies that it is intrusive in phase 1. A possible explanation is that these contexts were abandoned in the early fourteenth century but used again or contaminated by late 14th to 15th-century activity on the site. An alternative interpretation is that Buff/White Ware continues in use beyond the early fourteenth century and is still contemporary when the Late Reduced Green Ware are introduced into the sequence in the late fourteenth century. Buff/White Wares were found at the Newcastle Quayside from the mid thirteenth to late fifteenth century (Bown 1988), though a similar ware at the Castle Ditch was dated as early to mid fourteenth century (Ellison 1981).

The phase 1 and 2 assemblage appears to be a closely dated group with no evidence of residual earlier wares or later subsequent disturbance by post medieval wares. The state of preservation of the sherds is reasonably good, as indicated by 15% of the rim fragments surviving in most of the vessel forms and an average sherd size of 20g in all of the fabric types. The degree of abrasion on most sherds is slight. All of the above factors indicate that the stratigraphy is well preserved.

REGIONAL INTERPRETATION

All of the fabrics in this assemblage are common types in the North East and have been fully described and defined by Lowther et al. (1993). The Buff/White and Reduced Wares are part of a large scale tradition found throughout the county, for example at Finchale Priory (Jarrett and Edwards 1961) at Thrislington Manor (Types 15 and 16 Addis 1989) and at Castle Eden, Peterlee (O'Mahoney 1987). L Addis states that the buff to pinkish/buff ware at Thrislington occurs in both urban and rural contexts in County Durham and is of a tradition which occurs in most Medieval village sites in the county. It is also generally accepted that the Reduced Green Wares are a successive tradition to the Buff/White wares (Addis 1989 and Lowther et al. 1993) throughout the county. Both of these traditions are prevalent in Durham City assemblages between the thirteenth and fifteenth centuries. Scarborough Ware is the only imported ware present in this assemblage and though less common on inland sites than at the major coastal ports, it is known at other Durham City sites and in the county at, for example, Thrislington Manor (Addis 1989).

POST MEDIEVAL POTTERY

Jenny Vaughan

The assemblage consists of 323 sherds (6.15kg) which can be divided into nine broad wares, some of which incorporate sub types. The material is predominantly from two phases (5 and 6). Most of the material recovered was very fragmented and generally unremarkable although three makers marks were identified: John Carr and Son(s) (1854-1900) in [191] (Ph. 5) and John Wood (1872-1910) and Maling (1853-1908) in [241] (Ph. 5).

English Redwares. Code: RW Group No. 27

Light red-brown fabric with lead glaze; this is the seventeenth century type. Not always closely datable but distinct from those wares listed under 32.

Table 2 Summary of fabric types, by sherd number and weight (g) in each phase

Fabric Types	Phase 1		Phase 2		Phase 3		Phase 5		Phase 6		Total	
	Sherds	Weight	Sherds	Weight	Sherds	Weight	Sherds	Weight	Sherds	Weight	Sherds	Weight
EBW:B (B/WW)	520	4746	16	172	1	22	44	498	1	8	582	5446
ERG:E (RGW1)	23	182	6	36			6	34			35	252
ERG:L (RGW4)	39	726	5	78	11	102	1	2			56	908
Scarborough	6	52									6	52
Total	588	5706	27	286	12	124	51	534	1	8	679	6658

Table 3 Post Medieval Pottery

Context/Phase	Fabric and Comments	Sherd Number	Weight (g)	Vessel Types
110/Ph 5	27 ?	1	1	?
	32 Slipped	5	38	Bowl
	33 ?Pearlware	5	18	?
	37 CW	3	9	?
				?
111/Ph 5	33	4	11	?
112/Ph 5	10	1	6	
	27 Slip decorated	1	1	?
	32	1	3	Flower pot
	33	5	8	?
	33 Brown glaze	3	8	?
	37 CW	4	8	?
115/Ph 5		1	7	Saucer
	33	5	17	Ring base
	33	2	4	?
	37 CW			
127/Ph 6	33	1	4	?
	35	2	112	Dish
135/Ph 6	32 Slipped	1	13	?
	33 'China'	1	1	?
	33	3	12	?
	34 Misc.	1	4	
137/Ph 6	31	1	1	?
	32 'Jackfield'	1	2	?
	32	1	5	?
	32	6	128	Dish
	33	17	49	?
	33	1	4	?
	37	1	11	?
	37	2	21	?
138/Ph 5	32	11	249	Bowl
	33	4	40	Jam jar
	34	1	14	Jam jar
	35 Util st	1	9	?
	37	1	26	Ring base
139/Ph 5	32	1	66	?
	33	4	25	base??
	36 Porcelain	1	2	
	37	1	30	
141/Ph 5	33	9	243	Bowl
143/Ph 5	33	5	22	?
	33	1	3	
145/Ph 5	32	1	10	?
	33	3	4	?
	37	1	2	?
	37	1	16	?
148/Ph 5	32	1	37	
	33	1	17	?ring base
	37	2	23	?ring base

Table 3 Post Medieval Pottery *(continued)*

Context/Phase	Fabric and Comments	Sherd Number	Weight (g)	Vessel Types
149/Ph 5	27	1	7	?
	33	1	9	?
	34 Misc	1	4	
	35	1	65	Jar
	37	1	2	?
151/Ph 6	32	1	53	Jar
	32	2	6	Flower pot
	33	22	111	Dish
	33	7	59	?
	34 Misc	1	29	?
	34	5	33	?
	37	2	32	Plates
152/Ph 5	33	5	122	Saucer
	33	1	1	?
154/Ph 5	28	1	42	?
	33	2	11	?
	34 Misc	1	17	?
	35	1	29	?
168/Ph 5	32	1	36	Jar
	33 China	2	17	Cup
	33	16	59	plates, jars
	33	1	6	?
	34	1	4	?
	35	4	74	Jar
	37	1	3	?
171/Ph 5	37	1	3	?
176/Ph 5	32	2	12	?
191/Ph 5	31	1	7	
	32	8	573	Bowl and Plate
	32	3	198	Plates
	32	2	723	Flower pots
	32	1	178	Dish
	33	2	27	Saucer
	33	6	74	?
	33	1	6	?
	33	6	223	Plate
	34	11	288	Mug and Bowl
192/Ph 5	32 Ungl	4	83	Dish
241/Ph 5	32	11	353	Plates
	32	2	30	Flower pot
	32	1	40	Plate
	33	24	291	Plate, Saucer (?)
	33	3	12	?
	34	8	130	Jam jar
	35	5	329	Jam jar (?)
256/Ph 5	27	1	82	Plate
	32	1	37	(?)
	33	4	22	Cup (?)
	37	1	8	Jug

Tin-Glazed Earthenwares. Code: TGE Group No. 28

Off-white often quite soft fabric with with tin-oxide glaze. Generally indicative of later seventeenth century date, when fairly large quantities of these wares were imported into the North East, but production between late sixteenth and late eighteenth centuries.

Eighteenth-Century Stonewares. Code: ES Group No. 31

Nottinghamshire Stonewares typically have a rich brown stained glaze. Early eighteenth century.

Late Eighteenth and Nineteenth-Century Glazed Redwares. Code: LGRE Group No. 32

Generally harder fired and a darker red-brown than the earlier redwares. These wares can be identified with the 'brownwares' produced in Newcastle and Sunderland. Several variations of ware occur:

i. Internal white slip with yellow or blue tinged clear glaze. External complete or partial glaze.
ii. As above with brown (manganese or iron) mottling/sponging
iii. With slip trailed decoration.
iv. With black/iron glaze (Jackfield type can be mid eighteenth century). With plain glaze, no slip.

White Glazed White Earthenware and "China". Code: WGWE Group No. 33

Covers a wide range of types including transfer printed and painted wares. nineteenth and twentieth centuries. Some fragments within this group identified as "china" to indicate hard/fused white bodied wares. Some marks give an indication of date. Banded decoration also occurs on creamware and pearlware and can be as early as late eighteenth century.

Miscellaneous Earthenwares. Code: ME Group No. 34

Covers miscellaneous eighteenth to twentieth century earthenwares including utilitarian types like jam jars.

Modern Stonewares. Code: MS Group No. 35

Nineteenth and twentieth century types.

Porcelain. Code: P Group No. 36

Pearlwares and Creamwares. Codes PW and CW Group No. 37

Creamware was made as early as 1743 and up to the early nineteenth century. Reproduction fabrics produced into the twentieth century. Pearlware a whiter refinement of the earthenware body produced about 1780 and still made up to 1865.

Site Related

Phases 5 and 6 (from which all the post-medieval pottery was recovered) cannot be readily chronologically separated on the basis of ceramics. They are broadly datable to the later nineteenth and twentieth centuries although four fragments of possibly seventeenth century English redware were recovered, a sherd from [112] probably genuinely of this date, three other sherds (one each from contexts [110], [149] and [256] may just be softer fired later redware in the style of the earlier redware.

The commonest fabric was white glazed earthenware with glazed redwares of eighteenth and nineteenth century date as the as the second most common. These two groups represent, respectively, fine tablewares and utilitarian kitchen wares, both evidence of domestic activity on the site.

CLAY PIPES

Jenny Vaughan

The small assemblage (20 fragments) is catalogued below (Table 4). The fragments from [152] and [168] give a date range of 1875 to 1906 (Parsons 1964) confirming dates suggested by manufacturers marks from pottery within the same contexts. One possibly earlier stem fragment from [154] was within the same context as an abraded tin-glazed pedestal base.

VERTEBRATE AND MARINE MOLLUSC REMAINS

Dr Sue Stallibrass

A full archive report quantifying and detailing vertebrate and marine mollusc remains recovered from the excavation is retained within the site archive. The following is a summary account of results.

A small quantity of animal bone (1.3kg) was recovered during the excavation. This included 393g from medieval phase 1; 27g from phases 2 to 4 (between the fifteenth and the eighteenth centuries); 838g from the nineteenth century phase 5; and 63g from twentieth century deposits. The material includes a mixture of fragments, generally

Table 4 Clay Pipes

Context/Phase	No. of Fragments and Origin	Bore	Type	Comments	Date
115/Ph. 5	1: stem and base	5/64	n/a	'briar' moulded	late C 19
137/Ph. 6	4: stem	4/64–5/64	n/a	-	-
	1: bowl	5/64	n/a	moulded swags? side lug feet	late C 19
145/Ph. 5	1: stem	4/64	n/a	mouthpiece	late C 19
151/Ph. 6	1: bowl	–	n/a	–	-
	1: stem	5/64	n/a	mouthpiece	mid/late C 19
	1: stem	5/64	n/a	start of cartouche	-
	1: bowl	-	n/a	–	-
152/Ph. 5	1: bowl and stem	5/64	Edw. 18	stem side stamps: *TENNANT/NEWCASTLE TW* in subrect. cartouche on rear of bowl	late C 19
154/Ph. 5	1: stem	6/64	n/a	–	possibly C 18
168/Ph. 5	1: stem	5/64	Pars. d	stem side stamps: *WH.../... SGOW*	late C 19/20
	1: stem	5/64	n/a	–	-
	1: bowl and stem	5/64	Pars. d	stem side stamps: *G.RUDDICK/BURNS CUTTY*	1871–1906
	1: bowl	5/64	Edw. 18	milled mouth, side lug feet	late C 19/20
	1: bowl	5/64	n/a	Basket weave moulding	late C 19
191/Ph. 5	1: stem	5/64	n/a	-	-
192/Ph. 5	1: stem and bowl	4/64	n/a	low spur, poss. ribbing	first half C 19

derived from domestic food waste but includes three deliberate animal burials. Apart from an incised piece of a cow's long bone [267] there is no indication of craft use or specialised butchery or processing techniques.

PHASE 1

Domestic cattle and pig bones most frequent with a few sheep or goat and one rabbit bone. This latter (from [245]) is a double maxilla fragment. The breadth of the bone is almost as great as mountain hare but the teeth much smaller. The animal was probably a large domestic rabbit bred for consumption. Two bird bones were also recovered; one a wild greylag or a domestic goose and one from a chicken. No fish bone or marine mollusc shell was recovered from this phase.

PHASES 2 TO 4

Little material recovered, but includes a cockle shell, an oyster shell and bone from a member of the gadid family (cod).

PHASE 5

Of the 391 fragments recovered from this phase (nineteenth century) 300 derive from three animal burials within [112]. The remaining material consists mainly of cattle and sheep/goat with a few pig bones. There was also, however, a sizeable assemblage (21 pieces) of fish bones of which 20 come from the fill of drain [168]. They all derive from large sea fish including gadid (cod) average length of about 0.9m to 1m, a piece of caudal vertebrae from a plaice and another from a large flatfish. All are good food fish which would have been landed locally on the Durham coast at ports such as Shields or Hartlepool. Also derived from the sea were one cockle and one winkle shell. A femur from an immature rodent was also found within drain [168], quite probably an occupant of the semi-filled conduit.

The three animal "burials" found within [112] are of particular interest. They comprise a young cat of between four to six months old (from status of erupting teeth; Silver 1969), a cat of about 8 months to one year old (teeth fully erupted but epiphysial fusion lines still evident on some long bones) and an

Table 5 Palaeoenvironmental Samples

Sample No	Context and Phase	Volume in litres	Contained
1	125 Phase 1B	35	Occasional fragment bone. Waterlogged fig, blackberry and elderberry ?faecal material
2	219 Phase 2	0.9	No seeds seen
3	232 Phase 1B	27.5	Occasional fragments mammal bone, fish vertebrae and other fish bones. Sample contains many blackberry pips. Faecal material
4	246 Phase 1A	3.2	Occasional fragment of blackberry and variety of charred seeds
5	260 Phase 1A	12.5	Occasional tiny bone fragments and variety of charred seeds.
6	267 Phase 1A	11	Occasional tiny fragments of fish and mammal bone, one a piece of cattle long bone. One fragment of 6-row barley rachis

adult, and very large, rabbit. All three of the skeletons were virtually complete and missing bones were all small and probably lost due to recovery bias. None of the skeletons exhibited the slightest trace of having been skinned or de-fleshed. No bones showed any signs of overt pathology and the causes of death of the three individuals remains unknown.

THE GENERAL ASSEMBLAGE

Of interest is the comparative absence of evidence for scavenging throughout the assemblage when compared to most other urban assemblages: Only two bones appear to have been chewed by dogs, both from post-medieval contexts; [194] and [112]. Two fragments had been chewed by cats (which have considerably smaller but sharper teeth than dogs producing recognizable incisions) again both from post-medieval contexts; [168] and [230]. In contrast, a considerable number of bones washed into drain [168] had been gnawed by rat-sized rodents.

There is some evidence for butchery techniques within the assemblage which reinforces the general rule that saws were not used for routine butchery until the post-medieval period, saw cuts are evident on fragments from a range of phase 5 contexts. A particularly distinctive use of the butchers' saw is seen on material from phase 5 drain [168]. The fragments, from a variety of bones, usually cattle though including some sheep, have parallel sawn edges with cut lines about 10mm apart. As noted elsewhere, there is no evidence for any specialized use of the bone or by implication of animal carcases such as in boneworking, hornworking or tanning industries.

PALAEOENVIRONMENTAL ANALYSIS

Dr Jacqui Huntley

A full archive report quantifying and detailing palaeoenvironmental analysis of soil samples from the excavation is retained within the site archive. The following is a summary account of results.

Six soil samples were taken during the excavation of Area A (see table 5) from either phases 1 or 2. Dry samples were floated in the laboratory and both flot and residue retained on 500 micron mesh. Flots were examined under a microscope and all plant remains identified by comparison with modern reference material held in the Biological Laboratory, Department of Archaeology, University of Durham.

The only evidence for preservation of material through waterlogging was seen within samples 1 and 3. From the nature of the residue and flot from sample 3 ([232] the primary fill of phase 1 pit [231]) it is highly likely to be cess or to have at least contained high levels of faecal material. Although differential preservation within the sample precluded detailed analysis the material contained great quantities of blackberry pips and some elderberry seeds. The blackberry pips were often fragmentary and showed signs of what is probably acid etching-"worn" patches on their surfaces; strongly suggestive that the material had passed through a gut. Moderate numbers of tiny fragments of unidentified bone were also recovered from the sample, again with indications of acid etching on surfaces. Although in smaller quantities, the material from sample 1 (context [125], the major phase 1 dump) was similar, containing blackberry, elderberry and fig pips, again

suggesting that a component of the dump was derived from faecal material.

Limited evidence for the wider environment was also gained from charred material in the remainder of the samples: Oat, probably the cultivated type, was the commonest grain, although no chaff was present. Bread wheat grains were also recorded as were hulled barley grains and rye grain and chaff. Spelt wheat was represented by a single glume base. A variety of other plant remains were also represented including a range of weeds characteristic of cultivation of crops on dry, acidic sandy soils, very similar in fact to the weed range associated with oat cultivation in northern Scotland today suggesting a similar association on arable fields around Durham in medieval times.

RECORDING OF STANDING FABRIC

Peter Ryder

Whilst below-ground archaeological evidence shows that the development site between Crossgate and North Road had been in intensive use throughout the late medieval period, none of the pre 1950s standing structures appeared to be of such an early date. No 1 North Street, a three-storeyed block of eighteenth or possibly earlier date incorporated what had once been an open vennel between it and No 77 Crossgate (itself a late nineteenth century brick building) to the west. All external walls of No 1 North Road were of stone. Lacking stylistic features providing a close date is impossible but they could quite easily belong date to the seventeeth or early eighteenth centuries. Greenwells building on North Road had been cut through obliquely when North Road was constructed in the 1830s. It probably represents the remnants of two eighteenth century structures. One of the dividing walls between Greenwells and 1 North Road had originally been freestanding and coped and possibly marked an early boundary, similar to wall [158b] seen during the excavation of Area A.

Building II was the oldest relatively complete building within the development site. It was of similar character to the buildings to the south of the area of excavation which fronted on to Crossgate (numbers 69/70) i.e. of early or mid-eighteenth century date but building II had been run into the sloping ground on the edge of the valley of the Milburn (first floor to the north was at original ground level to the south bordering the area of excavation). The block had a hip-ended roof with three copybook king-post trusses. Although the block had been greatly altered, it would appear to have formed a house in its own right with access to the north prior to the insertion of North Road.

ACKNOWLEDGEMENTS

Archaeological investigations at the Crossgate/North Road site and the publication of this report were completely funded by the developers, Norwich Union Building Society. Timetabling of archaeological input into a long and often complex redevelopment scheme was facilitated by David Kershaw of RPS Clouston and Philip Spring and Paul Johnson of Spring and Company Ltd. Particular thanks are given to the North Road Site Manager, Jim Dutton of Ballast Needam Construction Ltd., who battled on during what was literally and metaphorically an uphill task.

The archaeological team for the excavation consisted of Dawn Heywood, Tony Liddell, Richard Park and Dr. Alan Rushworth. Again, their cheerfulness during often difficult working conditions was greatly appreciated. The desk based assessment of the site and inspection of the geotechnical test pits was conducted by Colm O'Brien. All site illustrations were prepared by Tony Liddell. Dr. Eric Cambridge kindly visited the excavation on a number of occasions and offered much valuable advice and has also commented most helpfully on drafts of the text. Monitoring of archaeological works was carried out by Niall Hammond, Archaeological Officer for County Durham.

NOTES

[1] The spelling Milburn has been used throughout this paper, to conform to the modern spelling. As with most historical features, a range of historical spellings exist for the burn, including Milneburn and Milnburn.

[2] The principles and methods used to determine an absolute date for the last firing of kiln [244] are detailed in a report held with the site archive (Geo-

Quest Associates 1995). The process of archaeomagnetic dating is based upon the assumption that the established natural remanent ("fossilised") magnetism within a fired structure can be compared with a calibrated reference curve for the United Kingdom to give an absolute date for this firing. The dark grey-red colouration of much of the sandstone floor of kiln [244] suggested this would make a good candidate for archaeomagnetic analysis to determine a date for its last firing. The floor was found to contain a thermoremanent magnetisation of variable intensity and high stability as a result of having been fired in the geomagnetic field. Comparison of the mean archaeomagnetic vector with the UK Master Curve provides a date range for the last firing of either 1325-40 or 1370-1410.

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