

27 Close, Newcastle upon Tyne: Archaeological Investigation, 1994

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SUMMARY

This report describes a small excavation undertaken in advance of landscaping on the south side of the Close, adjacent to the High Level Bridge, and bounded on the west by a lane formerly known as Javel Group. Despite significant disturbance from cellaring associated with the post-medieval Cannon Inn, the remains of presumed medieval wharfage structures was revealed, extending southward over the river foreshore and dating to the late twelfth–thirteenth centuries. A small quantity of residual Roman material recovered from probable reclamation deposits is suggested to derive from medieval terracing into the bank on the north side of the Close.

BACKGROUND

SITUATED WITHIN the City Council's Central Conservation Area, the site of the investigation (fig. 1) lay on a traffic island formed by alterations to the road system in the early 1970s, and on the south side of the historic street of the Close. The traffic island lies below the High Level Bridge and includes one of the bridge piers. To the north of the road, a steep escarpment, referred to in the medieval period as the *hoga*, rises from the former river edge to the site of the Roman Fort of *Pons Aelius*, later used as a Saxon cemetery and subsequently the Norman and later medieval castle.

The site lies in an area of intensive medieval development which followed the reclamation of the river foreshore and the development of the Close as a formal street in the course of the thirteenth century. On its west side, but only partly within the investigation area, was a passage or side-street called, since the early fourteenth century, 'Javel Group'. Although latterly known as '27 Close' following the street numbering system established in late nineteenth century, the area of investigation also encompassed numbers 23 and 25 Close to the east.

The excavation was prompted by proposals from Tyne and Wear Development Corporation to clear the site of the remaining derelict buildings and create a hard-landscaped area with a feature — a stone ball on a pillar — alluding to its history. It had been thought that 27 Close was the site of the medieval town house of the Earls of Northumberland and known as the Earl's Inn. The entrance to the Earl's Inn from the Close had been known as the 'Round Stone Entry', apparently because a large stone ball lay beside one of the gateway pillars (Bourne 1736, 126). A brief assessment of documentary and map sources showed that the Earl's Inn in fact lay well to the east, on the west side of Bower Chare (see fig. 6).

Nevertheless, because the redevelopment would potentially impact upon any surviving archaeological deposits or features in this historic area, the County Archaeologist for Tyne and Wear requested a trial excavation to identify the level at which significant archaeological remains survived. This provided an opportunity for limited investigation of the origin and

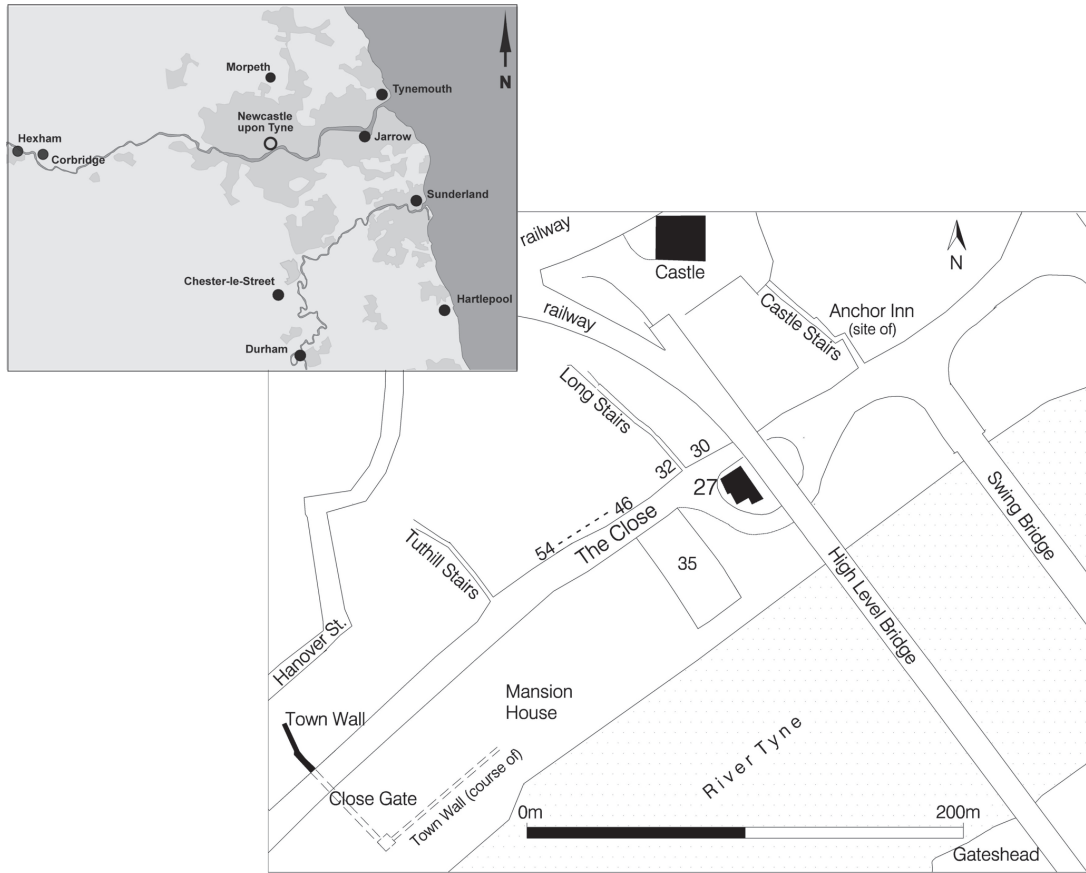


Fig. 1 Location Plan.

development of Javel Group and the buildings on its east side, and for sampling the reclamation deposits overlying the early river foreshore. For the developer, this was also an opportunity to obtain information on the actual history of the site which could be used to inform the landscaping and interpretation.

The investigation took place over seven weeks in January and February 1994, after clearance of derelict buildings, including the former River Police Mortuary, occupying the site. The area available for excavation was dictated by proximity to the High Level Bridge pier, live services, post-medieval cellars, and modern concrete intrusions. Severe weather conditions during this time also limited the scope of the investigation, and the data which could be recovered.

Following the investigation a draft report was prepared as part of the interpretation and landscaping of the site and lodged in the Historic Environment Record in 1994. No further progress on bringing that to a publishable level was made before the City Archaeology Unit was disbanded in 1997. This report re-appraises the earlier draft and re-assesses aspects of the finds and interpretation, taking into account the archaeological work in the Close area which has been undertaken during the intervening twenty-three years.

HISTORICAL SETTING

It is now generally accepted that the Close (first named in 1291–2, Oliver 1924, No. 324) had its origin as a track along the high water mark of the Tyne's northern foreshore. The stages by which this developed into a street in the course of the thirteenth century are however still not entirely clear. On the basis of northern and southern boundaries given in thirteenth century deeds, Harbottle and Clack (1976, 121) suggested the eastern end of the street — the *via regia* — emerged between c. 1230–40 and 1276–7. Fraser *et al.* (1995, 145) postulated the street then gradually developed west, first being mentioned as a property boundary c. 1272. Yet in 1294 (Oliver 1924, No. 9) and even as late as 1302/3 (*ibid.*, No. 12) properties in 'le Clos' were still being described as extending uninterruptedly from the *heugh path* or *hoga* (the escarpment above the river) to the ground-ebb of the River Tyne. This may be a result of copying boundaries from earlier deeds, but it could also suggest that boundary descriptions omitting the *via regia* or (after 1291) *le Clos*, need not literally mean that no street existed, but rather that some ownerships extended across the street. In these later deeds the term 'ground-ebb' may mean the southern limit of already reclaimed land. A deed of c. 1272 granting land on the south side of the *via regia* permitted the new owner as much of the river as he 'can reasonably acquire', implying that further encroachment into the river was anticipated.

Javel Group, the lane or passage which lay on the west side of the excavation area, may have developed from the out-fall of a watercourse running off the escarpment, possibly on the line of Long Stairs. With the progressive reclamation of the Tyne foreshore in the thirteenth century this may have been formalised as an inlet between wharfs, though the name does not appear in any surviving thirteenth-century document. Brand considered 'Javel' to be a corruption of *gaol* and suggested, followed later by Longstaffe, that there was an established route — the Long Stairs being the most obvious candidate — leading from the river at this point up to the castle (Longstaffe 1860, 126). It may be synonymous with the 'little common grip' — the term 'grip' or 'grippe' meaning a ditch for leading off water (Brockett 1846, 200) — which in 1292 formed one boundary to a property leased by Thomas de Clyveden to Adam de Lanton (Oliver 1924, No. 325).

At its western end, the Close may have been bounded by a defensive ditch between 1311 and 1316 as the first stage of the western re-alignment and extension of the town's mural defences. This was augmented by a stone curtain — the town wall, including the Close Gate — which was in existence by the mid-fourteenth century. After the completion of the town wall, Newcastle was divided into wards, that of Close Gate extending on its south side as far east as, but not including, Javel Group which came into White Friar Ward.

In 1311 Edward II granted his 'vacant place' in Newcastle called *Gaolegrippe* to John Gategang on condition that space was left on its *east* side for passage of men and the mooring of boats (Welford 1884, 22). This is the earliest known use of the name, which appears at this date to have applied to more than just an opening — but perhaps also to wharfage on both sides. Gategang's property may be the same as that conveyed by Thomas de Tynedale to Waleran de Lomley in January 1318 (Oliver 1924, No. 330) and 1333, and then by Normannus de Bidyk to Waleran de Lomely in 1335 (Walton 1927, No. 155), which in all documents is described as having a '*commune grippum*' as its eastern boundary. In 1335 a waste place belonging to the king called '*Aldegaole*' was granted by Edward III to Richard de Galeway (Longstaffe 1860, 125–6), and the Sheriff of Northumberland's accounts for 1357–8 record payment for carriage from '*Gaolegrip*' of timber for rebuilding a prison in the Castle called *Heronpit* (*ibid.*, 131).

Further details of the topography of this part of the Close appears in the foundation deed of St Catherine's Hospital (1425), describing property bequeathed to the Hospital by its founder, Roger Thornton. One of these is a messuage formerly belonging to Agnes Eton and lying between the large house called '*Percyjn*' (the Earl's Inn, on the west side of Bower Chare) on the east and '*a certain wasteland of the King called Ald Javell, on the north-east corner of a lane called Javelgrippe*' (Lumley Mss., 4401). 'Ald Javell' may be equated with the 'Aldegaole' of 1335, and nearly a century later was still 'waste', though this may just mean it was open, rather than derelict. It is likely that Thornton's property bounded the east side of the 27 Close site (Oliver 1830, Nos 12 and 13), and that the '*wasteland*' can therefore be identified as the later Cannon Inn. Thornton also bequeathed a messuage on the west side of 'Javelgrippe'.

In 1504/5 a 'piece of land' on the east side of 'gavell grype' was let by Christopher Brigham, then Mayor, to John Blaxton, merchant (TWA 575/41/2/51). The continued use of the term 'land' suggests that no permanent structures had yet appeared. By c.1540 it had become *Javil-grippe* (Richardson 1855, 139), and *Jayle Groupe* by 1590 (North-Country Lore And Legend 1889, 351).

Some indication of an inlet from the river in approximately the location of Javel Group is visible on a sixteenth-century 'bird's-eye' view of Newcastle (Halliwell 1844), and again on Speed's plan of '*Newcastle*' (1611) and Jacob Astley's plans of 1638–9. It is first shown clearly on Martin Beckman's map of Newcastle in 1684, and its name first appears on Isaac Thompson's map of 1746. These plans all seem to show the site fully built over. In 1736 'Gavell Groop' was one of the passages in the Close confirmed by the Common Council as a public space, with masons being forbidden to work or set flags there since it was 'a usual, useful, and convenient landing place for all persons coming up or going down the river' (TWA 589/13, f. 332–3).

Following the destruction of the medieval Tyne bridge in the flood of 1771 a Newcastle master mason, Edward Hutchinson, proposed a new bridge across the river from Javel Group to Pipewellgate, but this was abandoned (Mackenzie 1827, 211; Manders and Potts 2001, 39). The buildings on either side of the entrance to Javel Group from the Close were demolished before 1827 in order to widen the road, and rebuilt with their facades some 14 feet (4.26 m) further south (Mackenzie 1827, 166).

The first detailed plan of the buildings occupying the excavation area is by Thomas Oliver (1830), with a book of reference published the following year (fig. 2). Oliver shows four domestic-looking units around a central yard accessed from the Close by a passageway, and owned by Mrs. Sarah Tweddall (Oliver 1830, No. 14; Oliver 1831, 1). To the south, just outside the area of excavation, was a large warehouse-like building belonging to Edward Hall Campbell, and to the east a long north-south range belonging to Mrs. Mary Ann Coward. Sarah Tweddell appears in Parson and White's Directory for 1827, and again in 1833, as '*Victualler, Cannon, No. 63*'. The latter also lists a joiner and cabinet maker — David Cowan — at the same address. A few years later (1838) Sarah was still managing the Cannon, with John Tweddell, a wholesale and retail chemist and druggist, and William Chicken a grocer and flour dealer, operating from the same premises.

By 1847 the 'Cannon Inn' was kept by Ann Dorward and had been renumbered as 60 Close. Construction of the High Level Bridge which began that year cut a broad swathe through properties north and south of the Close but had minor impact upon the Cannon — a bridge pier intruded into the north-east corner of Tweddell's property, involving some minor remodeling. The rest of the Cannon's frontage was left projecting well forward of the south line of

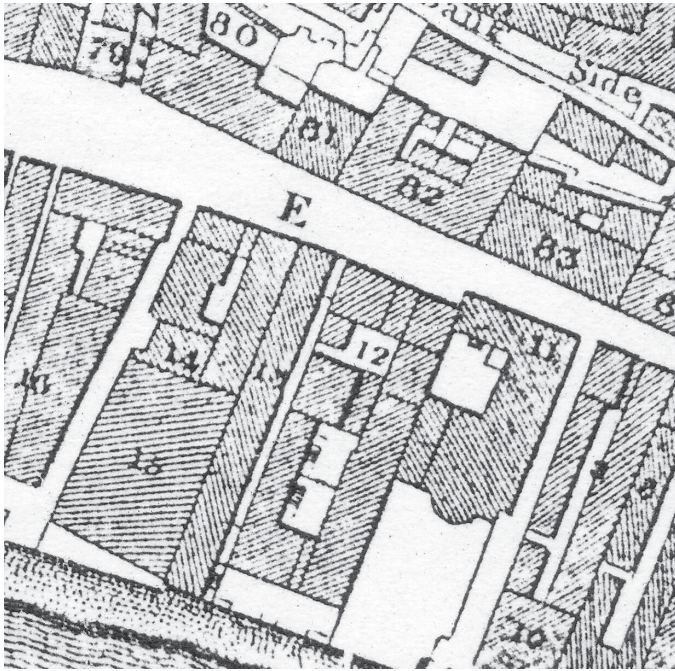


Fig. 2 Part of Oliver's map of 1830.

the street defined by the bridge pier. Coward's premises, and much to the east, were demolished. In 1850 the Cannon had reverted to being No. 63 again, and was kept by John Charlton (Ward's Directory). Five years later 'J. Proud' was innkeeper, and the pub had become No. 27. 'The Cannon P.H' is shown on the 1st edition Ordnance Survey map, surveyed in 1859, as occupying the western part of the premises fronting the Close.

In 1876 the publican was G. Hodgson. Two years later, in July 1878, it belonged to Richard Thompson of the Wheat Sheaf on Gateshead High Street. By this time there had been changes in the ownership boundaries shown on Oliver. Cambell's premises had been acquired by Robert Brown, whose flour mill stood to the east. A fire at the mill in 1866 almost destroyed the High Level Bridge deck above. Brown had also acquired the southern part of Tweddell's former property, rebuilding it as warehousing in 1869 (T186/3528; 3600).

In July 1878 Thompson submitted plans to the town Improvement Committee for minor alterations to the north façade of the 'Cannon' (fig. 3) involving angled doorways at the east and west corners. The frontage is shown as two-storied. The plans were rejected, and in September the same year a further proposal was submitted for rebuilding the whole of the street frontage over 2 m further south, bringing it in line with the High Level Bridge pier on the south side of the street (fig. 4). These plans were again marked 'rejected' but although there are no subsequent re-submissions or 'approved' drawings, the frontage had been rebuilt on the proposed new line by 1894 (OS2 and see fig. 6). These north elevations are the only known images of the Cannon, which seems to have entirely escaped any photographic record.

The plan of September 1878 (fig. 5) is the only detailed record of the layout of ground floor of the Cannon Inn. The through-passage indicated in 1830 and possibly surviving, was blocked by large L-shaped bar occupying most of the street frontage, with a lounge at the south end of the range facing onto Javel Group. In the central yard an enclosed stairway on

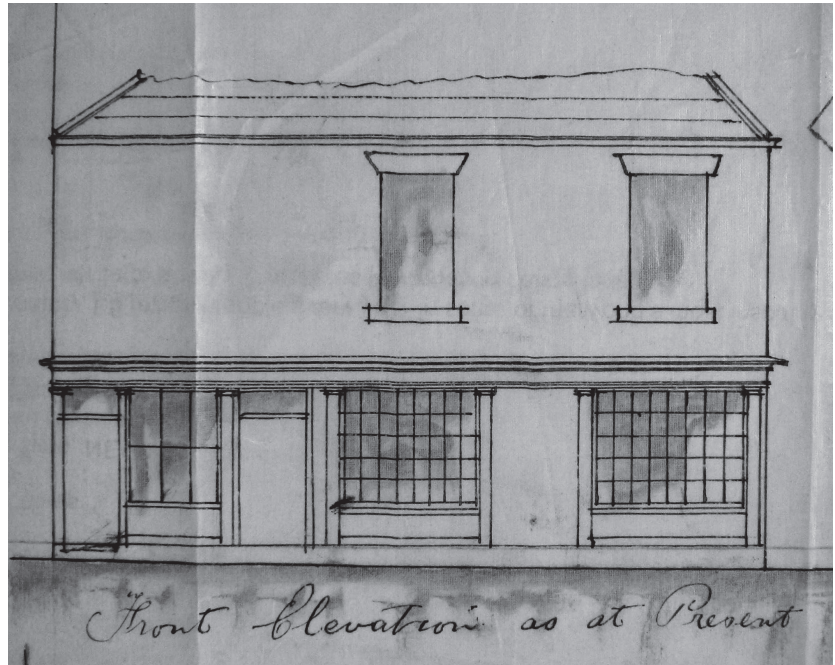


Fig. 3 Existing elevation of the Cannon in 1878 (TWA T186/8473). With permission of the Chief Archivist.



Fig. 4 Elevation (proposed) after moving the frontage, 1878 (TWA T186/8535). With permission of the Chief Archivist.

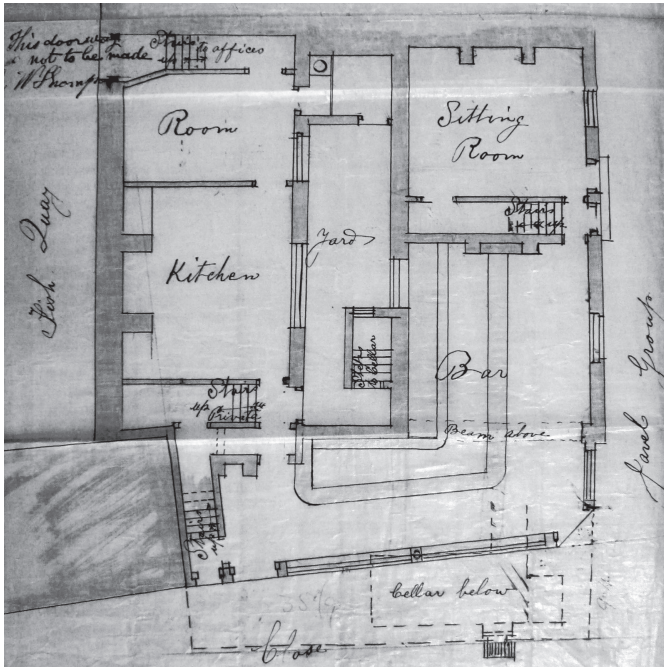
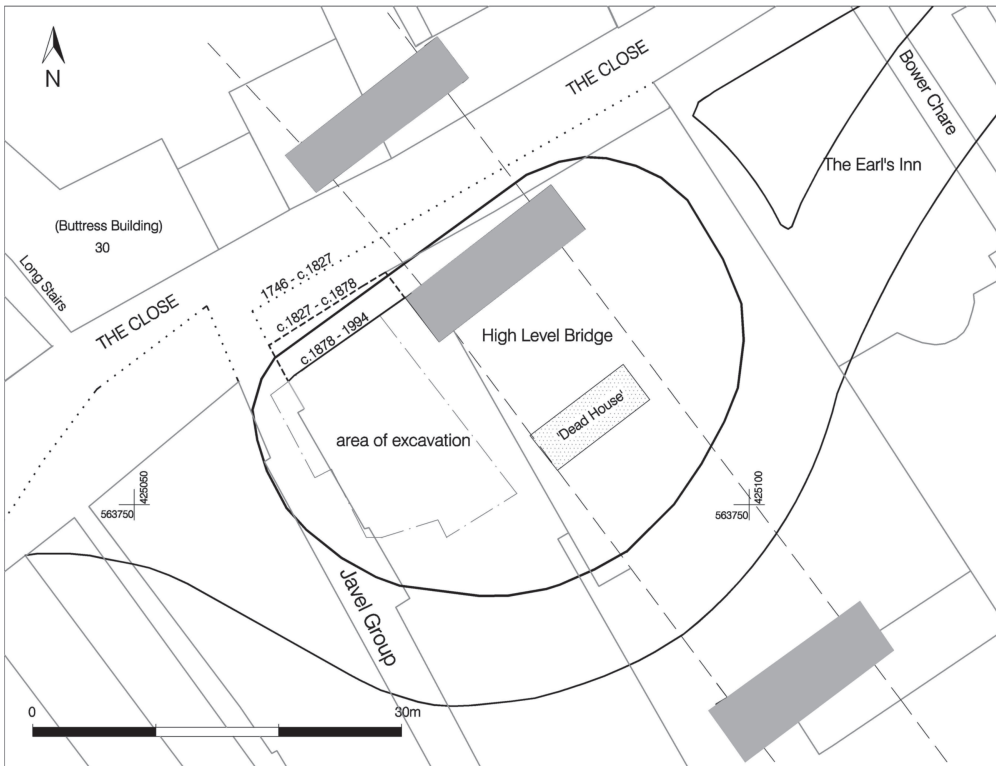


Fig. 5 (left) Ground plan of the Cannon, September 1878, showing proposed alterations associated with moving the façade further south (TWA T186/8535). With permission of the Chief Archivist.

Fig. 6 (below) The retreat of the southern street frontage related to the mid-nineteenth-century street layout, the High Level Bridge and the modern roundabout.



the west led down to a cellar (Cellar A, see below), and there was a 'privy' at the south end. On the east side of the yard lay the kitchen. By 1885 the 'Cannon Inn' appears in Ward's Directory as number 25 Close, and the 1894 Ordnance Survey map shows the inn occupying the full length of the street frontage. To the south was a cotton seed store, a fish store, and boat house (Goad 1899).

When Goad's Insurance Plan was reissued in 1930 the street frontage was given three numbers: 23, 25, and 27. Number 25, which Trade Directories list as the Cannon, appears to have been the street frontage with 23 and 27 respectively the east and west ranges to the south. All seem to have been part of the public house, owned since 1922 by Mrs M. A. Anderson. To the south, Robert Brown's warehouses were occupied by a hardwood dealer, provisions and a fodder warehouse. Some time between Goad's 1899 and 1930 plans a small building, the River Police Mortuary also known as the 'Dead House', had appeared to the east and below the High Level Bridge (see Note below).

The last known publican of the Cannon Inn was J. Burton (Ward 1940). By the 1950s only the range fronting the street survived, used by 'general distributors' Lloyds Retailers Ltd. In 1950 (Kelly), and as a hardware and cycle store in 1952 (Goad). The buildings to the south had been demolished, perhaps as part of the programme of slum clearance around the mid-1930s which had also removed 29, 31 and 33 on the west side of Javel Group. The remaining parts of the former public house were demolished, possibly c.1953, and rebuilt in somewhat suburban-looking style as premises for the National Union of Seamen (Kelly 1959 and 1962).

Work on constructing the new road system on the south side of Nos. 25 and 27, which now forms the present 'gyratory', took place between October 1971 and January 1972 (NCL 42611, 43712, 43713, 43756, 43677) leaving the rebuilt house and the River Police Mortuary isolated on a traffic island. Both buildings fell derelict and were demolished in 1994 before the excavation took place.

PREVIOUS ARCHAEOLOGICAL WORK IN THE CLOSE.

The earliest excavation in the Close was at its western end, by Barbara Harbottle in 1968, abutting the outer face of the town wall where it runs northward up the embankment (Harbottle 1969). In 1970–1, during work to consolidate the northern bankside immediately east of the High Level Bridge on the former site of the Duke of Cumberland public house (26 Close) an unofficial 'watching brief' was conducted by the late Jack Slade, who noted that infilled cellars were being exposed on the south side of the Close during road works to create the 'gyratory' system. This was followed by some excavation by Barbara Harbottle in 1972 (Harbottle and Clack 1976, 121 and Harbottle 1973). In 1986 excavation and recording took place on the inner face of the town wall on the north side of the Close, between the site of the Close Gate and Hanover Street (Nolan 1989). Here the edge of the pre-reclamation river foreshore was located. More extensive excavations took place in 1988–9 on the reclaimed land south of the Close, at the Riverside Tower, and at the Mansion House in 1990 (Fraser *et al.* 1994 and 1995). That same year an excavation on the site of the Anchor Inn, on the east side of Castle Stairs, in Sandhill, encountered a deposit containing a quantity of Roman pottery, apparently redeposited (O'Brien *et al.* 1991, which mistakenly called it the Angel Inn), and later structural recording and interpretation was carried out at 32–34 Close (Heslop and Truman 1993). More recently there has been excavation near Tuthill Stairs (Mabbitt 2007), at 45–54 Close (Platell 2013), and within 30 Close (Addyman Archaeology, unpublished).



Fig. 7 Medieval Development Periods 1 (left) and 2 (right).

THE EXCAVATION

Medieval: Period 1 (fig. 7)

The earliest deposits investigated lay in a small area at the north-eastern part of the excavation where, by virtue of being further up the former river foreshore, the overlying deposits were shallower. These were however cut by post-medieval cellar walls on the south and west.

The lowest level reached here was a surface of pungent grey-brown clay [155], which sloped southward from 2.19m OD at its highest to 1.96m OD where it was cut by a cellar wall. This was overlain by yellow sand [154]. Neither layer produced any finds and they were probably naturally deposited: the sand may have been river-lain.

These deposits were cut by a drain [152] built of sandstone and capped by large slabs which enclosed a channel *c.* 0.3 m wide, falling from north to south (fig. 8). Levels on the capstones were between 2.86m OD (north) and 2.35m OD (south). Running parallel to the drain and just *c.* 0.6m to the east, was the west (inner) face of what appeared to be a wall of sandstone rubble [153] also aligned north — south. The courses of masonry were not laid horizontally but sloped down southwards, presumably following the slope of the foreshore. The wall appeared to be butted by the sand [154]. Neither the drain nor the wall could be fully investigated — the presumed outer (east) face of [153] being overlain by a mass of later mortared masonry.



Fig. 8 Drain [152] from the west with wall [153] behind.

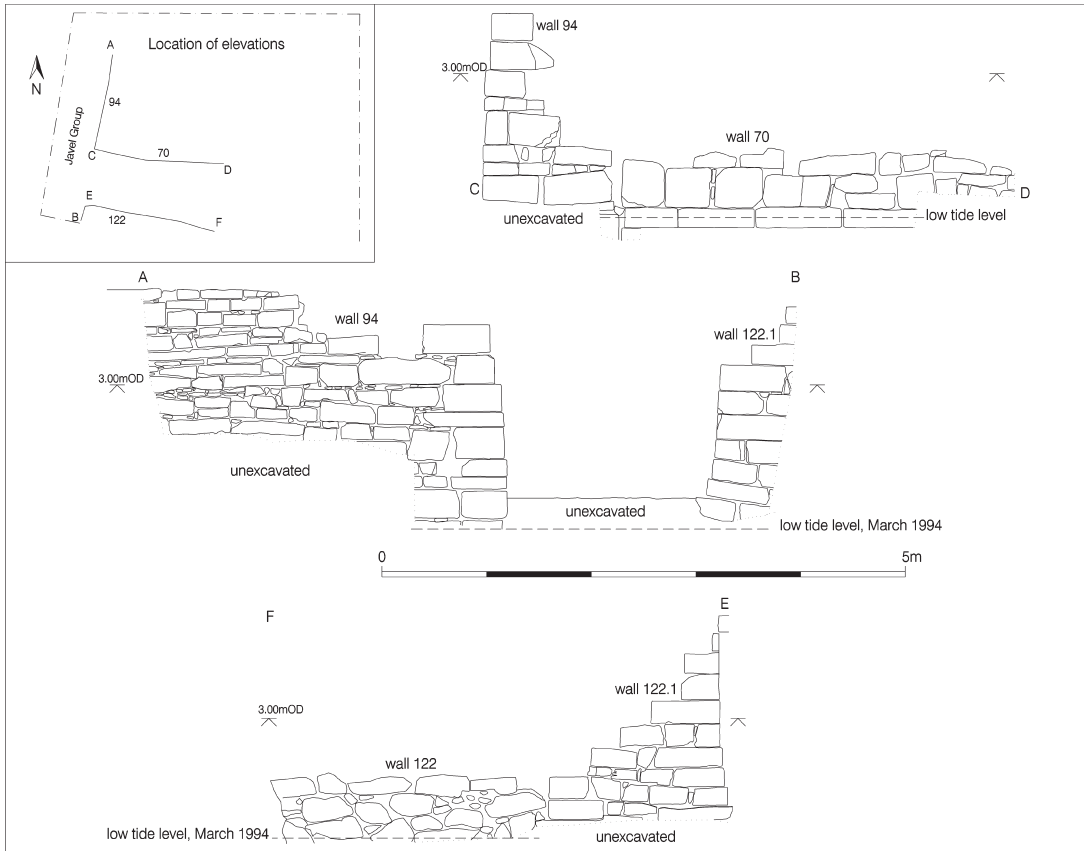


Fig. 9 Elevations of walls [70], [94], [122] and [122.1].

Further south, truncated by the floor of the post-medieval cellar but possibly associated with the suggested reclamation deposit, was a south-facing stone revetment wall [70], three courses of which were exposed above the level of groundwater and were butted by black silt (elevation fig. 9). Because of flooding the base of the wall could not be reached. Wall [70] continued eastwards beyond the excavated area; to the west a return northward became apparent. The west face of this was encased by a later medieval wall [94] (see *Medieval: Period 2* below and fig. 10 and fig. 16), and to the east it was obscured by the post-medieval cellar wall [8]. A length of this was removed, exposing more of the northern return of [70], which was traceable for 1.9m and again continued beyond the excavated area. The wall-face was clay-bonded sandstone rubble and survived in one place several courses high (fig. 16). Within the angle formed by wall [70] was a mass of un-mortared sandstone rubble. It is possible that wall [153] to the east (see above) may have formed a corresponding northern return to [70], the whole forming a structure resembling a pier or wharf some 7m wide projecting onto the river foreshore.

Both drain [152] and wall [153] were sealed by a layer of charcoal-flecked grey-brown clay and rubble [145] containing twelfth-thirteenth century pottery together with thirteen residual



Fig. 10 Wall [70] from the south with later wall [94] encasing its western side.

Roman sherds and two pieces of Roman tile. It is possible that this was redeposited material derived from terracing of the bankside to the north. Apparently overlying [145] was an organic grey-black clay silt [131] containing pottery of the same date range as did the overlying deposit of brown clay and stones [127]. This also contained some probable Roman tile, which may have been disturbed from [145].

Medieval : Period 2 (see fig. 7)

In the north-east area, more possibly redeposited material accumulated [110]. Apparently within this was part of another, smaller, stone drain [109], constructed from re-used stone roof-flags, aligned north-west to south-east, and at a higher level than the drain [152] (see above). Only a very short length of this feature survived within the excavation area, and it had evidently been truncated at its south-east end. Overlying [109] was a deposit of large sandstone rubble and some dressed ashlar [97] which may have been associated with [112/113] to the east. These appeared to be associated with an area of disturbance [107] above the earlier drain, which may account for the truncation of feature [109].

Wall [153] was overlain by a 'platform' of large sandstone blocks with crushed sandstone and mortar [113] containing thirteenth century pottery. The 'platform' ended raggedly on its western edge. Taken together with the truncated drain to the west, this might suggest both features actually pre-dated and had been cut by drain [152], though site drawings clearly show that [113] overlay the latter — at its northern end at least. There was however some



Fig. 11 Walls [122] and [122.1] from the north.

evidence for disturbance [107] between the truncated later drain and the west edge of the 'platform'.

Above the easterly part of the 'platform' and possibly contemporary with it, was a mortared sandstone wall 1.1 m wide [112], aligned north-south, its footings formed by pitched sandstone rubble (visible above [153] in fig. 9). At the point where the wall ran into the north section and overlying the rubble foundation, two squared blocks appeared to represent the remains of a robbed course of ashlar facing to the east. This may have been equivalent to wall [94] on the west side.

The western side of the 'pier' wall [70] was encased by additional mortared stone facing [94] *c.* 1.25 m in thickness (figs. 9 and 10). This ran parallel to wall [112] on the east, and the two features may represent strengthening of or extension to the original 'pier', which was now 8.1 m wide.

Some 2 m south of [70] and running almost parallel to it, was a north-facing wall of irregular sandstone rubble with many small packing stones [122] (fig. 11) and a similar rubble core behind. Again this had been truncated by post-medieval cellarage and as with wall [70] only the upper three courses of the masonry were visible above the water level (fig. 9). At its western end this appeared to butt more regular masonry forming the north-east return of another ashlar-faced north-south wall [122.1]. However only a short length of the latter could be seen within the excavation area and the relationship between the two sections of masonry was not absolutely clear.

The west face of [122.1] was in line with that of [94] to the north, suggesting the two were contemporary, and that the southern structure was some form of extension associated with

the strengthening or widening of the earlier 'pier' described above. If so, the reason for the gap between the two features is unknown. Possibly it was a water channel, making the projecting stone 'pier' less vulnerable to water pressure, particularly if, at the time of its construction, the foreshore to the west was still largely open to the river.

Butting the wall faces of these features were silts with considerable organic content, and broadly dating to the late thirteenth/early fourteenth century. These included [125] which contained a piece of board or plank with a nail hole and the impression of a broad-headed nail, [149] which contained some wood and broken stone roof-flags, [151/251] which produced a number of fragments of bark and branch, and [159] which contained a section of rounded stake. The wood may relate to nearby on-shore activities, though it is just as likely to be driftwood, brought downstream by the river. A large fragment of late thirteenth-early fourteenth century stone finial (fig. 22) came from this area.

At some point in the fourteenth century the gap between the north and south 'piers' was blocked by a revetment wall [96] (shown in fig. 12 for convenience). Presumably the gap between the earlier 'piers' was then infilled, though any such deposits had been truncated by post-medieval Cellar A. Perhaps in consequence of this the character of deposits in Javel Group changed, the silts giving way to more ash and clay, while pot joins between group of contexts [120, 126, 128, 129 and 136] suggested the accumulation of a series of contemporaneous dumped deposits. Associated with these and abutting wall [96] was a patch of rough metallurgy [118], above which further deposits of ash, clay and sand accumulated [121, 117, 106, 99]. Again these showed considerable pottery inter-linkage suggestive of a series of contemporary dumps, possibly to raise the surface of the 'grippe' above high water level. Above these was another patch of metallurgy [116].

A large proportion of the pottery recovered from Javel Group during this period was later thirteenth- to early fourteenth-century buff-whiteware, much of it occurring in large sherds suggesting breakage close to the point of deposition. Whilst there may have been some structural development on the west side of the 'grippe' by this date which could be the source of domestic refuse, there is no documentary evidence yet for buildings on the east side of the inlet. Perhaps the large sherds represent breakages of river-borne cargo landed at the 'pier'? Although a 'local' type rather than an import, it is possible that river-craft were used to transport such goods over short distances or across the river. The same could be suggested as the origin of the broken sandstone roof flags in contexts [149], [135] and [130].

The late medieval to early post-medieval (fig. 12)

A number of features of later fourteenth- to fifteenth-century date were recorded, but because of extensive post-medieval truncation and interventions these are difficult to fit into a clear chronological or structural sequence.

A stone wall [40/58] was built over the earlier sandstone and mortar platform, on an approximately north-south alignment, possibly defining the western side of a through passage leading off the Close. Much of this wall had been destroyed by later rebuilding, and particularly by construction of the post-medieval Cellar A, though its line could be traced as a fragmentary alignment of masonry for over 5 m to the south, linking to wall [157] in the south-east area. The latter was of a different build and presumably represents a later extension. Its southern end was butted by another, clearly later, section of wall [60] which extended beyond the excavation area.



Fig. 12 Late medieval (left) to early post-medieval (right) development.



Fig. 13 Cobbles [82].

East of [40/58] wall [112] was subsequently demolished, producing a spread of sandstone rubble and mortar [38] including some pinkish-yellow bricks, and replaced by a clay-bonded wall [41/42] running parallel to and *c.* 2 m east of [40/58]. The west face of [41/42] just overlay the eastern side of demolished wall [112]. Further west in Javel Group, wall [94] may have been partly rebuilt at this time.

South-east of wall [157] an extension of the excavation area exposed parts of a cobbled surface [77] and [82], bisected by a later north-south wall [50]. The western area of cobbles [82] was also cut by wall [60] on the west. These cobbles dipped noticeably southwards from a level of 3.64 m OD to 3.3 m OD suggesting the existence of some underlying feature, perhaps an earlier east-west riverside revetment, with the slope being caused by settlement of later reclamation deposits to the south (fig. 13). The cobbling can be broadly dated by associated pottery to the later fourteenth / fifteenth century. The eastern area of cobbles [77] was also truncated by post-medieval features.

North of Cellar B was another small patch of cobbles within which was an east-west alignment of larger stones, cut by later wall [41] and possibly originally associated with [77] and [82]. Overlying this was a quantity of apparently unused 'yellow — pale pink' bricks [132] of a form known locally as 'Type 5', one of the main medieval types (Harbottle and Ellison 1981, 172; Fraser *et al.* 1995, 186) with a date range between the fifteenth and mid-sixteenth century (see the *Finds*). It is not known if, or how, the cobbles related to the wall line represented by [40/58] and [157]. Possibly the cobbled areas were part of an open yard or quayside which had been covered over in the early post-medieval period as reclamation of the riverside advanced.

Further evidence for early post-medieval structural activity on the site was indicated by pottery from the fill of a cut [52] at the northern end of the excavation area, which contained a short length (not contexted) of east-west aligned rubble wall footings. The footings overlay wall [40/58], and then appear to have made a southward return following the line of the earlier wall. This north-south alignment, cut by later features, was traceable for some 6 m and possibly joined wall [157]. It is possible that these fragmentary walls represent the north and east sides of a substantial building with the partly rebuilt [94] as its west side. The line of the possible south wall is indicated on the plan.

The post-medieval period (figs. 14 and 15)

A small amount of seventeenth-century material was recovered from Javel Group in ashy material [158] lying over the latest medieval sand deposit [92]. This may have been cinders from domestic hearths put down as a form of surfacing. Two pits had been dug into this surface [102, 104] both containing mid to late seventeenth-century material.

Any evidence for more formal surface treatment of the Group above this level had been removed by nineteenth- and twentieth-century services and demolition. A small area of seventeenth-century deposits [47], truncated by later cellar walls, also survived in the north-east area. This may have been the bedding for a flagged floor.

The suggested sixteenth-century structure (or structures) overlying the medieval wharfs was substantially re-modelled in the eighteenth century. As part of this, wall [94] on the west was faced in brick, the foundation courses lying on the seventeenth-century ground surface [158]. This resulted in a distinct projection of the western wall-face into Javel Group. This is not shown on Isaac Thompson's 1746 map of Newcastle, although a projection on the west side of Javel Group is clearly marked, suggesting the re-facing occurred in the second half of the eighteenth century. To the east, wall [41/42] (and its continuation [50]) formed the western side of a long north-south range and a passageway leading from the Close into a small yard, which appears to be indicated on Thompson's map.

It is possible that as part of this re-modelling the large, brick-walled and arched Cellar A was constructed within the footprint of the sixteenth-century building. The principal walls [9–11, 16, 19, 20 and 22] were in alternating header-stretcher bond and the west wall [22] was founded on an offset stone footing [32] which ran across the gap between the two medieval 'piers'. The bricks were hand-moulded and of a form broadly spanning the late eighteenth and early nineteenth centuries. The floor was presumably sandstone-flagged, though only a narrow strip survived in the centre of the cellar [26]. Access to the cellar appears to have always been by a staircase on the east side, which descended from the open yard mentioned above. The walls of the stair-well were sandstone and brick [12–14]: the treads [15] were of

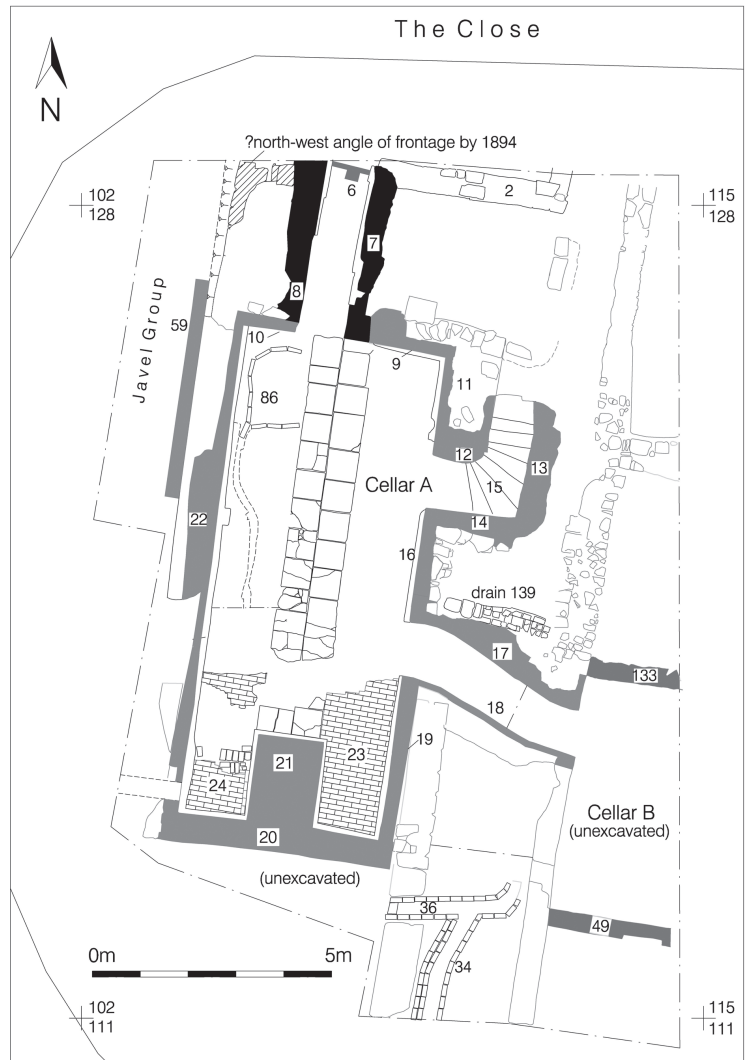


Fig. 14 Later post-medieval development.

sandstone but had later been replaced by, or covered in, a cement screed scored with 'anti-slip' grooves. Approximately mid-way down the eastern wall of the cellar was an opening leading to a brick-lined channel [139] rising to the yard area. If this had been intended as a drain it would have emptied directly into the cellar so possibly it functioned as a ventilation shaft.

Subsequently the cellar underwent a number of modifications which cannot be precisely dated. A curving passage floored with a mixture of brick, stone and concrete [28], was broken through the east wall. Its flanking walls [17 and 18] were built of brick in English Garden Wall bond (three courses of stretchers to one of headers). The passage led to another cellar — Cellar B — which extended beyond the area of investigation and was not excavated. The



Fig. 15 The cellar from High Level Bridge.

north wall [133] was stone, the south wall [49] was of brick and stone, showing it to be post-medieval. It butted wall [50] (the west side of Oliver's building number 13 on fig. 2).

South of the east passageway, Cellar A was divided by a substantial brick pier [21] into two, brick-floored and vaulted recesses [23–24]. The arch of the vault of the eastern recess rose higher than that of Cellar A. The eastern and southern walls [19 and 20] were in English Garden Wall bond and apparently part of the same build as wall [18] of the east passage, so the whole may represent an extension to the original cellar. The building plan from 1878 (fig. 5) shows a large fireplace, or possibly a range, at ground floor level and above the brick pier, which it was presumably supporting.

It is known that the Close was widened before 1827, moving the southern street frontage over 4m southward and producing the line shown on Oliver (1830) and the 1st edition Ordnance Survey plan (surveyed 1859) (fig. 6). These alterations presumably entailed a significant rebuild of the street frontage range, perhaps accounting for the mixture of sandstone and medieval and later brick noted in the footings of wall [2], which formed the south wall of the rebuilt frontage range. Finds from the fill [4] of the construction cut for this feature would be compatible with a very late eighteenth- or early nineteenth-century date. It may have been at this time that a brick-arched passage with side walls [7 and 8] of brick and stone was broken through the north wall of Cellar A. The 1878 plan (fig. 5) shows that this passage led into a small vaulted cellar below the rebuilt street frontage, with a gridded light-well in the street.

At the southern end of the excavation area, between walls [50] and [60], part of a branching brick-lined drain system [33 and 36] was exposed. The bricks were hand made, possibly of the first half of the nineteenth century. When the 1878 building plan was superimposed on the site plan it was clear that the drain had served a 'privy' at the south end of the Cannon Inn's yard. The drain appears to have joined a 6" soil pipe installed as part of Robert Brown's 1869 warehouse extension, which ran west into Javel Group (T186/3600). A gold ring with a lidded recess within the bezel was found within the drain fill [5] (see *Finds*).

Much of the flagged floor of Cellar A was removed in the second half of the nineteenth century and replaced by a cement screed, below which was a halfpenny of 1861. This left a central strip of flagstones which may have carried timber supports to the apex of the vault: the 1878 plan shows the bar of the Cannon Inn at ground floor level running along this line. The cement screed overlay a drain [86], with base, sides, and capping of hand-made brick. In the northern part of the drain cylindrical earthenware pipes in one foot (300 mm) sections had been laid — a form associated more usually with agricultural field drainage. The drain appeared to be contemporary with the cement floor, and may have been an attempt to cope with tidal river flooding.

The cement surfacing extended along the north passage and was overlain by a later blocking wall [6] roughly built of re-used brick, and on the line of wall [2]. This appears to have been constructed when the street frontage was again moved southward between 1878 and 1894 (fig. 6), and an annotation to the 1878 plan states that the cellar below the existing frontage was to be 'filled up'. The blocking had a crude projecting 'buttress' on its south side, suggesting that it was retaining infill material in the cellar under the former frontage range and that Cellar A continued in use for a time. The buildings above were progressively demolished, and the frontage completely rebuilt in the 1950s.

DISCUSSION

The early masonry features represented by walls [70/94/112] and [122/122.1] may represent the progressive extension southwards, across the river foreshore, of a pier, wharf, or jetty belonging to a burgage plot on the north side of the Close. A similar form of riverside development has been recorded further east, on the Quayside (O'Brien *et al.* 1988, 7–9) where it is suggested that the open areas between projecting wharfs were themselves progressively infilled, gradually pushing the river frontage further south. At 27 Close, the western side of the pier may have been maintained as a navigable inlet, later developing into a passage, being part of a convenient route for transporting goods and materials up the *hoga* or heugh, into the Castle. The suggestion of a pier may find support in the Sheriff of Northumberland's accounts for 1357–8 (see *Historical Setting* above).

The presence of Roman and twelfth-century pot sherds in clay and rubble associated with the northern 'pier' might be evidence for activity along the foreshore considerably earlier than the thirteenth century, when documentary sources suggest the street later called the Close came into being. This would be unsurprising with the fort of *Pons Aelius* and the Norman castle on the plateau above, and Roman and medieval bridging points nearby. A deposit containing a quantity of apparently residual Roman pottery overlying the natural ground surface, and interpreted as Roman period levelling was recorded at the Anchor Inn to the north-west of 27 Close (O'Brien *et al.* 1991). No undisputedly *in situ* Roman features or deposits have however yet been found on the south side of the street.

However this is possibly all redeposited material, perhaps derived from terracing of the bankside to the north. Excavations further west suggest the earliest developments along the bottom of the heugh found a foothold by terracing into the base of the slope, and that further terracing took place as these properties were progressively extended up-slope (Platell 2013, 203). It is a reasonable assumption that spoil arising from such operations could have been disposed of locally as reclamation material. Whether the medieval structures on the site that became the Cannon Inn were an adjunct to a property on the north side of the street is unknown, though its apparently early association as Crown land may suggest not. There is however an intriguing coincidence with the east and west boundaries of a property now forming the eastern end of the Buttress building (30 Close). The drain apparently associated with the 'pier' may then have carried domestic waste from that burgage on the north side, or acted as a culvert for a natural stream falling from the heugh. Similar drains, running southwards, were found in excavations on the north side of the Sandhill at the Anchor Inn and at 46–54 Close (O'Brien *et al.* 1991; Platell 2013).

There was no indication within the area of excavation for the deep reclamation deposits recorded at Close Gate and Mansion House. This may well be a consequence of the limited area that was available for investigation, and similar depths of dumped material may survive further south. However it might also be that patterns of riverside reclamation differed between the east and west ends of the Close, for chronological or functional reasons. There was no evidence for stone 'piers' at either Close Gate or Mansion House.

The gap left between the first and second 'piers' seems too narrow to have functioned as a dock or wharf for any but the smallest and narrowest craft. Could this have been simply a channel, acting like the arch of a bridge, to relieve the pressure of the river current on a structure projecting out into the stream? It may not have been open, but either arched over like a culvert, or spanned by timber decking. Perhaps as encroachments into the river developed to the west, the gap between the 'piers' was blocked and infilled at some point in the mid-fourteenth century, but on the west side the inlet of Javel Group remained open, as stipulated in the 1311 lease. However rubbish, including large quantities of broken pottery and ridge-tiles, accumulated in this area in the later thirteenth to early fourteenth century, suggesting that it was not regularly used as a thoroughfare at this period though it could have been usable as a mooring place at high water.

Documentary sources from 1335 to 1504/5 describe the area east of Javel Group as 'waste'. The meaning of this is open to interpretation, but the inference is that there were no buildings — at least not domestic dwellings — on the site during this period. It is possible that it was an open wharf area where materials were landed for works to the castle and possibly for other major works such as ecclesiastical buildings. This may account for the quantity of unused fourteenth-century bricks and for the decorated stone finial fragment, the latter perhaps broken during trans-shipment. The ridge tiles found lying against the east side of Javel Group may however have been discards from roof repairs to property on the west side of the Group.

It is suggested that a building or buildings developed on the site in the late fifteenth to sixteenth century, overlying the earlier masonry structures and with areas of cobbling to the east. These buildings might have resembled the extant structures at 35 Close to the west of the site, with long north-south 'warehouse' ranges flanking a through-passage to the Close. Certainly the site appears to have been wholly built-over by the late seventeenth century, and remained so until progressive clearance between c. 1930 and 1994.

Although the initial premise for the investigation, that this site was that of the Round Stone Entry, had been disproved before site work began, the investigation did provide evidence for landscape interpretation in the form of the outline of the Cannon Inn cellar. Ironically one of the finds, from the rubble infilling Cellar A, was an actual stone ball, though at just c. 25 cm diameter this is unlikely to have migrated from the Earl's Inn. It may be an allusion to the Cannon Inn's name, and it may not be coincidental that ball finials are shown on the pediment of the proposed September 1878 rebuild. The original 'Round Stone' at the Earl's Inn may now be one of those in the landscaped area west of the Castle Keep, the larger of these having apparently been 'obtained from near the river side below the castle' (Bates 1901, 40).

A NOTE ON THE RIVER POLICE MORTUARY (fig. 17)

Also known as the 'Dead House' this was a small, single-storey building of brick with ashlar sills and lintels, and a slated pitched roof with louvres. It had double doors to east, barred windows north and south, and ventilation slots in each gable. It was used by the Coroner's Court as a mortuary and dissection room for bodies retrieved from the river by the River Police. No record of the date of its construction can be found, but it is not on the 1894 Ordnance Survey or on the October 1899 revision of Goad. Apparently it ceased to be used when bodies were taken to Lemington, though this too is undated. Unlisted and derelict, it was demolished in 1994.



Fig. 17 The 'dead house'.

FINDS

Pottery

Pottery recovered from the site ranged from Roman to nineteenth-century transfer-printed wares. Full processing was restricted to types, broadly speaking, earlier than the eighteenth century. These numbered about 2500 sherds with nearly 75% of the material coming from the narrow strip of Javel Group available for excavation. The bulk of this pottery appears to have been discarded over a relatively short length of time, from the late thirteenth century up to the middle of the fourteenth century. The rest of the site assemblage indicated both earlier and later medieval activity but quantities were relatively small.

The initial pottery analysis and draft report were completed soon after the site work in 1994. Since then knowledge of the medieval pottery sequence on Tyneside and patterns of distribution and consumption has advanced through the study of the large medieval pottery assemblage from Newcastle Castle and a number of other smaller site assemblages. This work has resulted in a better understanding of the fabric groupings and some changes to the terminology which has been used in some earlier reports. The original 27 Close pottery catalogue has been imported into Access and amended to reflect these changes but the pottery itself has not been comprehensively re-sorted. It was thought that any revisions which might result would not materially affect the conclusions presented here as the assemblage is relatively small and limited in range.

The charts in fig. 18 show a simple breakdown of the assemblages from the three main areas of the site. The numbers refer to the fabric groups (FG) listed below and are not specific to this site. Each pair of columns represents the percentage of the total number of sherds/total weight from that area for the fabric type.

- 1 Roman
- 2 Early medieval wares (11th/12th century)
- 3 Coarsely gritted light-firing (i.e. buff wares)
- 4.1 Buff-white wares (13th/14th century)
- 4.2 Orange buff-white wares (later 13th/14th century)
- 5 'Orange' wares — oxidized generally iron-rich fabrics (13th/14th century)
- 6 Sandy early green-glazed wares (13th century)
- 7 Later reduced green-glazed (including type 4) and oxidised equivalent
- 10 Other medieval wares — unidentified
- 11 Scarborough ware
- 12 French wares — e.g. Saintonge
- 14 Siegburg and Langerwehe stoneware (i.e. 14th/15th century)
- 16 Raeren/unidentifiable Rhenish stonewares (15th/16th century)
- 20 Low Countries wares — red and grey
- 27 17th century types e.g. redwares, tin glazed earthenware

The charts illustrate the differences between these main areas of the site. The material from the NE area of the site is more evenly spread across the fabric types. There was a relatively large proportion of the gritty wares of FG 3 as well as a small number of 'residual' Roman

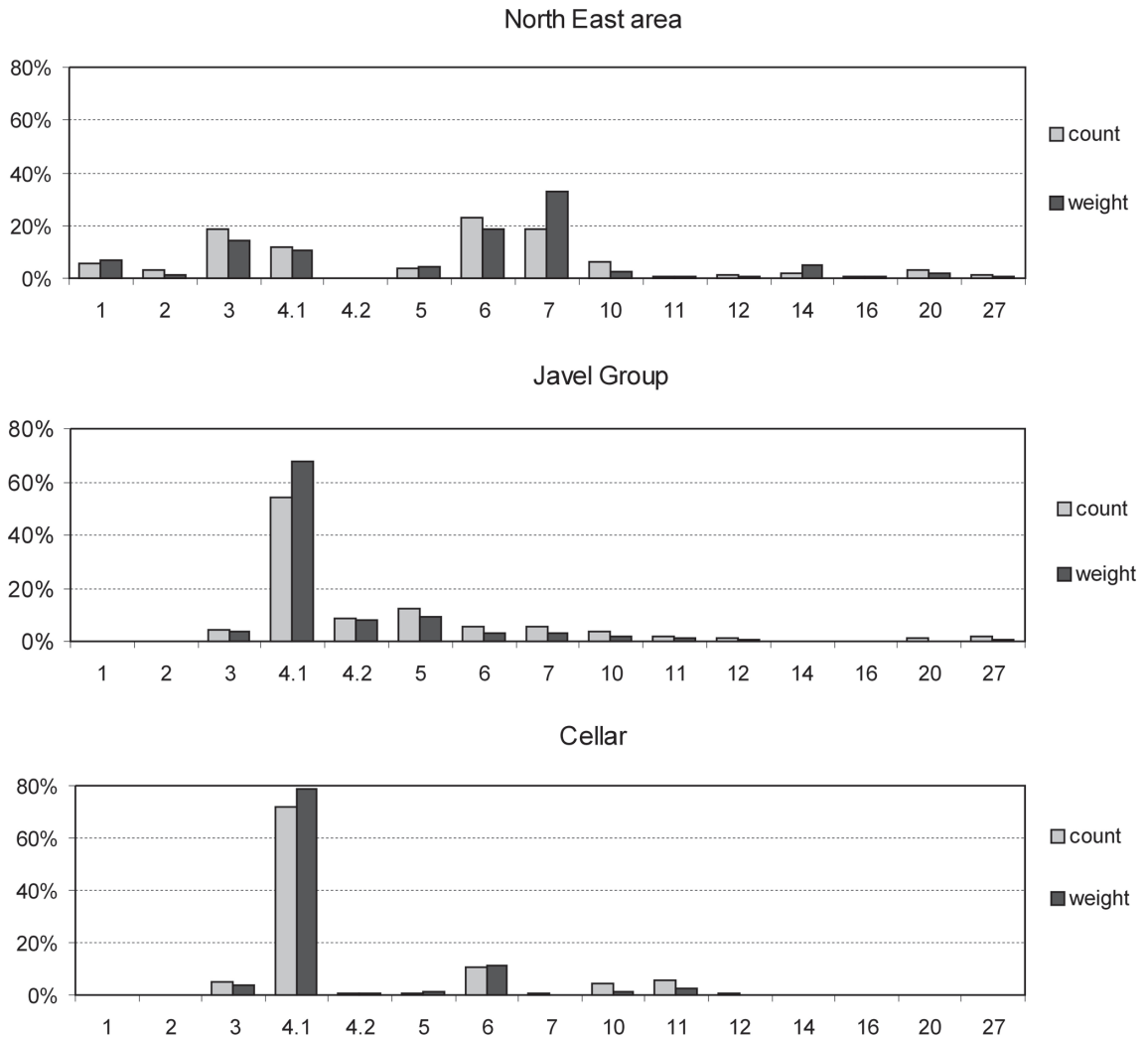


Fig. 18 The pottery assemblage (see text). Fabric Group numbers are along the bottom of each chart.

and early medieval wares. Most of the pottery came from contexts which produced a broad range of types. The later reduced wares were more in evidence here, related to the late medieval building activity shown in fig. 12. By contrast the group of pottery from beneath Cellar A is very limited in its range of fabrics, and was contemporary with that from the lower levels in Javel Group.

ROMAN POTTERY

Eniko Hudak, Pre-Construct Archaeology

A very small quantity of residual Romano-British pottery (22 sherds, 349g) and a single fragment of Roman tile were recovered from the excavations. Despite the small size of the assemblage there is a wide range of Romano-British and imported fabrics represented, dating to the mid- to late Roman period (second to fourth centuries AD), all of which are well attested at the Roman Fort of *Pons Aelius* (Bidwell and Croom 2002). The composition of the assemblage and the rather abraded state of the sherds suggests that the Roman pottery arrived on the site with landfill material.

Four of the sherds were from Javel Group the rest from the NE area. The Javel Group sherds included one of Huntcliffe calcite gritted ware. From the NE area there were three sherds of Samian, one a dish rim, and a base sherd of black slipped ware, from Central Gaul. Another continental import was a piece of Baetican amphora. The Romano-British sherds included two of mortaria, one a flange, rims in various reduced wares of a jar, a bowl and a beaker, possibly funnel necked, and two small sherds of colour-coated ware. Full details are in the archive.

EARLY MEDIEVAL WARES (FG 2)

The term 'early medieval wares' refers to a very small group (15 sherds/102 grms) of sherds which are thought to be of twelfth-century, or earlier, date. Most were small body sherds of Dog Bank kiln type (Bown 1988a) and are residual. There was also a single rim sherd in a somewhat finer fabric from the NE area in a probably redeposited context [145] which also contained Roman material. This sherd was of thin-walled collared form in a dark-red fabric and is similar to one illustrated from Queen Street (Bown 1988b, no. 33) which was included with a group of residual material thought to be eleventh- to twelfth-century date.

MEDIEVAL POTTERY FROM JAVEL GROUP AND BELOW CELLAR A (FIGS. 19 AND 20)

It was evident that substantially complete vessels had been discarded in these areas as much of the material was relatively unfragmented. Some large parts of vessels were discovered lying shattered apparently where they had first fallen (or been thrown). Undoubtedly, had a wider area of Javel Group remained undisturbed by more recent services many more complete vessel profiles would have come together.

A breakdown of the vessel types in the main period of dumping is given in fig. 19. The vessel count was based on form sherds except in two cases where a large part of the body of a vessel was present which clearly did not belong to any of the form sherds present. The vessels have been divided into three broad categories — 'jar', 'jug' and 'other'. Most of the jars appear to have been used for cooking, or heating as evidenced by sooting. 'Other' could probably be divided between the other two groups in the same proportions as the definitely identified vessels.

Coarsely gritted wares (fabric group 3)

This category covers fabrics which are more heavily or coarsely gritted than types in FGs 4, 5 and 6. In the Javel Group/Cellar assemblage this group consists only of lighter-firing gritty

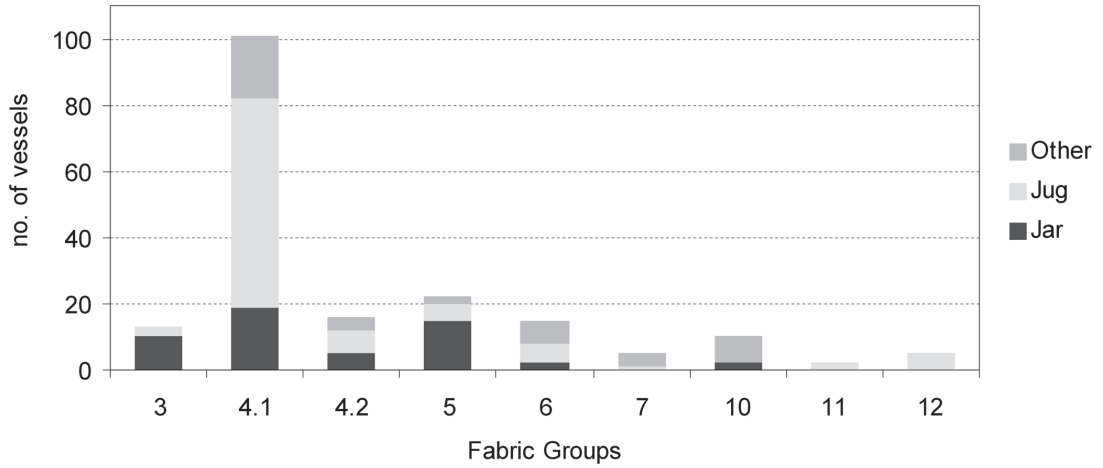


Fig. 19 Vessels from Javel Group and the cellar.

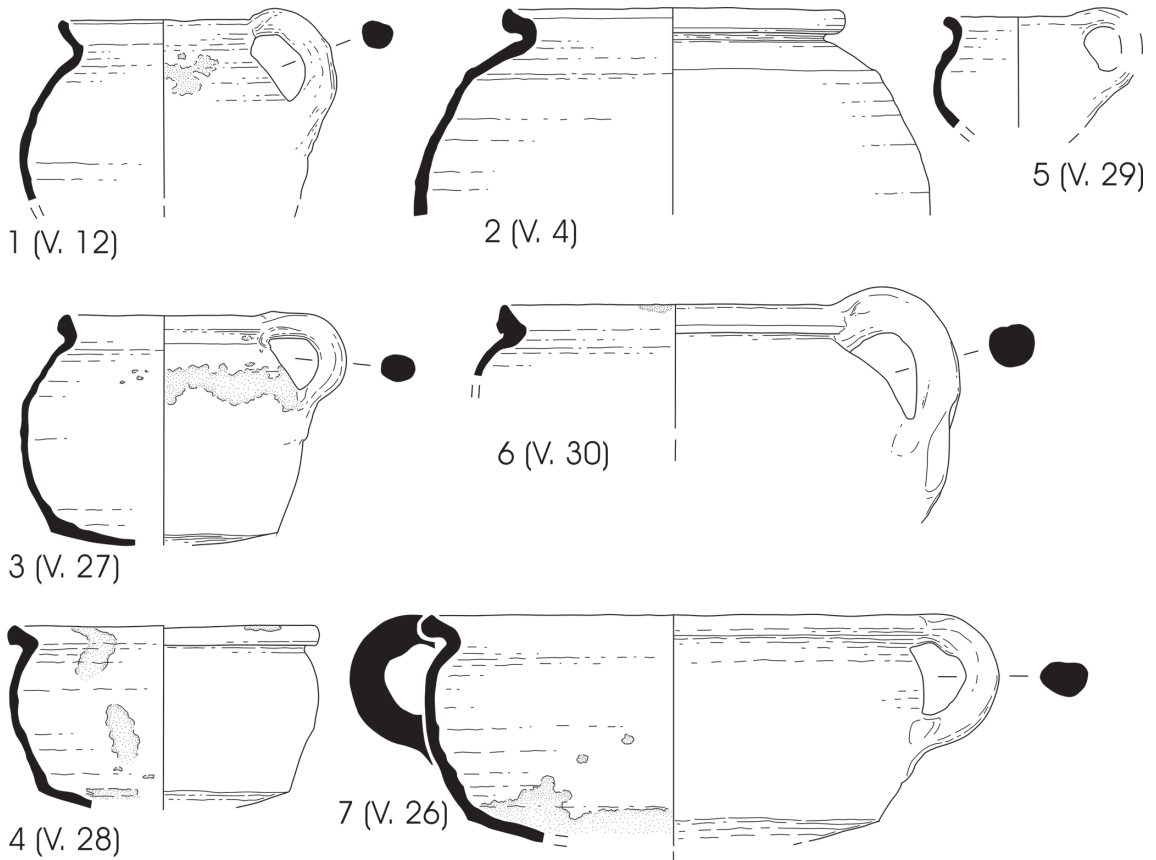


Fig. 20 Pottery, scale 1:4.

wares and most would appear to be contemporary with the more finely gritted types. As most of the identified vessels were jars/cooking pots it may be simply that less refined clay was used, or more inclusions added when such vessels were being made. Two of the three jugs are represented by handles which themselves are sometimes made in a coarser fabric than the rest of the vessel.

1. Buff/brown fabric with moderate/frequent black (iron oxide) inclusions. Everted rim with concave lid seating. Sooted and with splashes/small zones of glaze. V.12 [151]

Buff/white wares (fabric group 4.1)

Pottery made from light- firing clays is a major component of assemblages in the region broadly in the thirteenth and fourteenth centuries. In Newcastle it was dominant in the later thirteenth and first half of the fourteenth century and was first defined in the Castle Ditch report (Ellison 1981, 105–106). Since then the study of assemblages from other sites e.g. Newcastle Castle and Mansion House (Sage and Vaughan 2006 and 2018, Fraser *et al.* 1995) has indicated that earlier, thirteenth century wares were less highly-fired and paler than later wares. Fabrics varied on the present site but most of them were fairly hard-fired. About half of the jars had rather coarser fabrics than the jugs. Most of the jugs were large vessels and of the 29 handles present 24 were rods and only three straps. The other two were handles with a more oval cross-section.

2. Cooking pot in fairly gritty buff fabric with darker surfaces which were smoothed. Heavily sooted. Everted rim and distinct shoulder carination. V.4 [151]

Orange buff-white wares (fabric group 4.2)

This group was first identified on the Closegate site (Vaughan 1994, 107), and covers fabrics from clay sources with a higher iron content than buff-white ware but the same range of inclusions. On the Mansion House site (*op. cit.* 169) it was noted that it first appeared later than buff-white ware. This was later confirmed at the Castle. There was very little from the earliest deposits in Javel Group and below Cellar A. There is considerable variation in quantity and size of inclusions and in the degree of firing although most vessels were hard to very hard.

3. Cooking pot in dark red-brown hard gritty fabric with splashes of metallic glaze. V.27 [136]

4. Similar to above with patches of glaze internally. Sooted. V.28 [136]

5. Small jar/cooking pot. Hard mid-grey fabric with brown internal surface and patches of purple/brown glaze externally. V.29 [136]

6. Cooking pot with everted rim and loop handle. V. 30 [140]

Orange wares (fabric group 5)

This group, which remains one of the less well-defined regional fabric groups, covers a range of iron-rich generally sandy/quartz gritted wares which elsewhere are known to occur both in twelfth–thirteenth century, and later, contexts (Vaughan and Sage 2006).

7. Two handled jar with everted rim. Heavily sooted. V.26 [136]. One other similar rim but in a slightly coarser fabric.

There was a large sooted jar with a wavy rim as *Close Gate* 26 (V.22 [126]). Two other rims were of this form. There were also four other everted rims and three flat-topped (i.e. horizontal) rims. Two small cooking pot rims had spouts. Three jug strap handles and one of rod form were present.

Early green-glazed wares (fabric group 6)

This group of fabrics appears in earlier reports as early reduced greenware, and included Reduced Greenware (RG) types 1, 2 and 3 as first defined in the Castle Ditch report (Ellison 1981, 107–108). These are quartz-gritted grey fabrics often with whitish or buff surfaces. They are currently referred to as Early Glazed wares (EG).

Two possible jars/cooking pots were present and six jugs, mostly represented by rims, with one fragment of a rod handle. One unusual vessel from the cellar in a coarse fabric appeared to have a frilled base, unfortunately the upper part was missing but the fragments present had full external cover of green glaze. Six other vessels could not be positively identified although one with an applied iron-stained strip was probably a jug.

Reduced green-glazed wares (fabric group 7)

These are green-glazed wares produced from generally iron-rich clay and with finer fabric and usually better glaze cover than FG 6 wares. One jug was represented by a strap handle. Other vessels could not be identified. Small quantities of these wares appear to be contemporary with buff-white wares in the first half of the fourteenth century although the more developed reduced greenwares, eg. Types 4 and 5 as originally defined in the Ditch report (Ellison *op. cit.* 108) appear somewhat later.

(NB. In fig. 18 the FG 7 category includes all later reduced greenwares of broadly 14th to 16th century in date.)

Imports

Fragments from two Scarborough Ware (FG 11) jugs were present. One was represented by a handle the other by body sherds.

French Wares (FG 12) probably all Saintonge types, were present in slightly larger numbers; five jugs were identified. Two were painted and two had mottled green glaze, the other was represented by an unglazed wide strap handle.

A greyware base with pinched foot, probably an import from the Low Countries (FG 20), came from one of the later contexts in the sequence. (This single vessel is not included in the chart.)

Discussion

Overall jugs outnumbered jars by a factor of about 5:3. Most of them were large, although there were four with rims less than 8cm in diameter suggesting quite small vessels. Rim diameter is not generally speaking a good guide to size of jugs as most are usually around 10cm whatever the capacity. No jugs are illustrated as the form is well represented in other reports.

A selection of cooking pots/jars are illustrated. They varied considerably in size, and although most of them had fairly simple out-turned rims of one form or another, there were several substantially more complete than previously published examples and demonstrating the presence of handles.

In the earlier phases at the Castle jars outnumbered jugs with the proportion gradually diminishing during the thirteenth century from about 3:1 until in the period dominated by buff-white ware the situation is reversed and jugs outnumber jars by 5:1. At three other sites in Newcastle studied by the current writer the pattern is very different. At Gallowgate (unpublished, Vaughan 2006) jars were slightly more numerous than jugs in all phases, while in excavations at Newcastle University (Vaughan 2013) proportions were about even in comparable phases, and there were only slightly more jugs overall. On a site at the bottom of Westgate Road (Vaughan 2018) jugs did outnumber jars but only in a ratio of at the most 2:1.

The first two mentioned sites are outside the medieval town walls and both have an industrial element so it is perhaps not surprising that the use of pottery is at variance with that of the inhabitants of the Castle. However, the Westgate Road site is less than 200 metres from the Castle Garth. One of the nearest excavated sites to 27 Close is the Mansion House (see Fraser *et al.* 1995). The ratio of jugs to jars there was approximately 3:2 during the period comparable with the 27 Close material (information derived from digital archive held by writer). Other rough calculations from published data suggest that the pattern seen at the Castle is indeed the exception. The assemblages from Javel Group and below Cellar A can now be seen as a variation of a 'normal' pattern.

Buff-white wares completely dominated this assemblage and together with the 'orange buff-white' variant made up 63% by estimated numbers of vessels. The coarser light-firing wares added another 7%. The oxidised wares of FG 5 made up the next largest group of vessels, the majority being jars/cooking pots. It was noted at the extra-mural sites referred to above that a significant proportion of the jars were made in the oxidised iron-rich fabrics.

The Javel Group assemblage has usefully provided us with a group of vessels and fabrics which we can assume are broadly contemporary, without the problems of residuality inherent in material from redeposited rubbish deposits. More importantly, reviewing this material now in the light of the other assemblages recovered since 1994 has served to underline the complexity of distribution and consumption, and suggested other aspects which should be taken into account when analysing and interpreting other urban assemblages in the future.

Clay Tobacco Pipes

Over 130 fragments of clay pipe were recovered, over half were stem fragments, either unstratified or from eighteenth- and nineteenth-century contexts. The majority of these were plain but McKenna and Hardy of Gateshead and Tennant of Berwick, all of whom were active in the second half of the nineteenth century, were represented amongst the marked items. Three decorated bowls were also recovered.

The largest group of pipe fragments was recovered from [158] (Javel Group). Most of these were also plain stems but there was a stem stamped John Thompson and two late seventeenth- to early eighteenth-century bowls, one of which (three joining fragments) had a length of stem with the top of an Edward Craggs (Craggs) stamp visible. The dates for this maker are c.1678 to 1717 (Edwards 1988, 39). There were two John Thompsons who could

have been using this form of stamp. Their working lives span the period c. 1683–1713 (*ibid.*, 101).

Other early fragments were two stems (both from Javel Group) with fleur-de-lys in a lozenge shaped stem stamp: one was quartered with four (context [93]), and one had a single fleur-de-lys (context [103])

Ceramic Building Material

BRICK

(Dimensions when given are in millimetres: length × width × thickness.)

Over 120 bricks or fragments of brick were recovered. This does not include a quantity of apparently unused medieval bricks from context [132] which were stolen before they had been fully recorded. Two ‘samples’ survived and are of Type 5 as defined in the Mansion House report (Fraser *et al.* 1995, 186)

Post-medieval examples from contexts [23] and [24] were 245 mm × 120 mm × 60 mm, and are probably late seventeenth–eighteenth century.

Six medieval/late medieval bricks occurred residually in context [4]. These were in the same type of sandy fabric — yellow-buff or pinkish-red — but three were small bricks about 178 mm × 80 mm × 40 mm (Type 3, see Fraser *et al. op. cit.*) and the others somewhat bigger at 225 mm × 110 mm × 50 mm thick. One of the smaller bricks had a pair of dog’s paw-prints deeply impressed on its wiped upper surface.

The largest groups were from context [38] and [105]. [38] produced eight pink or yellow-buff bricks with measurable dimensions, complete examples were 210 mm × 105 mm × 50 mm and 215 mm × 110 mm × 50 mm. There were no complete examples from [105] and most of the fragments were in a coarse red or orange fabric, some with gravel inclusions. Width and thickness were within the same range as the bricks from [38].

Three complete (uncontexted) yellow bricks had wiped upper surfaces, with mould-marks, and remains of a thick, coarsely-gritted lime mortar. Two half-bricks with the same mortar adhering had been cleanly cut using a sharp chisel / axe — ‘marking out’ lines for cutting could be seen scored on their upper faces. These appeared to be late medieval, possibly 16th century. Similar bricks can be seen in 35 Close.

ROOF TILE

Roman

All Roman material was residual. A fragment of roof-tile was noted amongst the residual Roman pottery (see above). When the medieval and later ceramic building material was examined, another seven potentially Roman fragments were found: one from [96], two from [127], one of which was curved like an imbrex, one from [131], two from [145] (one with a nail hole), and one from [159]. All but one of these fragments were hard-fired with the dark red margins and reduced core usually characteristic of Roman material. However the fragment from [96] had a patch of clear glaze on its surface. It is unclear if this has been accidentally introduced by ‘ash glaze’, or if the apparently ‘Roman’ fragments are in fact medieval. Plain tiles with grey reduced cores found at the Swirle (Quayside) have been identified as Low Countries imports (Ellison *et al.* 1993, 205).

Medieval

Eighty fragments were retained. All appeared to be ridge-tile; no obvious flats or hips were noted, suggesting the roof pitches were stone slated, wood shingled, or possibly thatched. Where original dimensions could be determined, lengths were 410 mm (16") – 460 mm (18"), basal splay width 220 mm and depth 117 mm. These predate the 1477 regulation of tile sizes which set the length of ridge or crest tiles at 13½" (343 mm) (Salzman 1952, 230). Fabric thickness varied from 6 mm–15 mm.

All had wiped outer and sanded inner surfaces, the sand acting as a separator when the tile was moulded, though in one case grass/straw had been used. Some showed knife trimming along the edges of the 'skirt', but otherwise the edges exhibited a longitudinal 'groove'. Colour and inclusions varied. Some from [147] had dark greyish cores and patchy dark purple-brown glaze, resembling over-fired forms of local buff-white pottery. A few were in a heavily gritted fabric with reduced 'black' cores and pale grey margins, similar to early green-glazed wares. Other gritty fabrics had oxidised margins. There were also some fragments from [126] in softer-fired pinkish-red fabric.

Two ridge-tiles showed the remains of holes having been poked through the apex of the ridge from the 'inner' side while the clay was still plastic. On one example, the full length of which could be reconstructed, there appeared to have been two holes, approximately 20 mm diameter, placed about 85 mm apart. These piercings appear too small to be effective as smoke-vents, and there was no obvious sooting on the undersides of the pierced tiles. Possibly the holes served another purpose, perhaps for nailing/pegging to a ridge beam, or even for mounting a decorative finial.

Several 'end-edges' had traces of lime mortar on the outer surface, suggesting the ridge-tiles had been laid slightly overlapping, and bedded with mortar.

The tiles were initially formed as 'flats', the clay being pressed into a mould or former on a sanded surface. The 'flats' were then presumably left to 'cure' — a dog's pawprint on the 'skirt' of one tile could only have been imprinted before the tile was formed into a ridge and while there was still some moisture in the clay. The 'flats' were shaped while still plastic, perhaps by pressing into a trough-mould using the tile-maker's forearm as there was some suggestion of the imprint of folds of material on the sanded undersides. In some cases central perforations were made, and the outer surface wiped causing slight lipping along the upper edge — a similar lip along the inside edge may have been caused in the moulding, the two creating the 'groove' described above. The tiles were then presumably set on end to finish drying, any other position would be liable to cause distortion, and partially dusted with galena before firing. There are no known references to tile making on Tyneside in the medieval period, but the similarity of fabrics to local pottery types suggests they were products of the same industry.

FLOOR TILE

Seven fragments of glazed medieval floortile were recovered. Only one had an edge chamfer, a corner from [66] 23 mm thick which had lime mortar on its upper surface, suggesting it had been reused. Four with straight edges came from [105], two of which were complete tiles 195 mm square and 24 mm thick. Two other fragments from [68] and [103] were thicker (32–34 mm) and showed signs of use.

Iron

A number of ferrous concretions, four of which were probably nails, came from thirteenth- and fourteenth-century contexts in Javel Group ([129], [130], [140], and [151]). Other probable nails came from thirteenth- and fourteenth-century contexts [39] [107] and [144] in the north-east area. A large nail (105 mm long) with a wide flat head, and a hold-fast with square-sectioned shank, were recovered from medieval deposits [91] and [125], below Cellar A. Another large nail with square shank and wide upset head came from a later medieval context [85] at the south-eastern end of the site. Five concretions resembling forge 'cakes' came from a possibly thirteenth-century context [44] in the north-eastern area.

Copper alloy

MEDIEVAL

Only three fragmentary objects were identifiable: a pin or nail 15 mm long, from [42], a binding strip fragment, 16 mm wide, with short 'return' ending in a cut edge and three small pins / nails from [39], and a corroded fragment, possibly part of a pin, from [136] in Javel Group.

POST-MEDIEVAL

Three items were recovered from the fill [33] of drain [34]: a ring (possibly not for a finger) with narrow band and butted terminals, a nail or stud, and part of a possibly square-framed buckle.

Unstratified items, all post-medieval, were a fragment of curved strip, a hat-pin with a very small upset head which possibly once retained a glass bead. And a small four-hole button

Lead

No medieval lead was recovered. A piece of sheet with a fine scored line parallel to one edge, probably an off-cut from flashing, came from the fill of drain [34], and a spout or section of flattened, drawn water-pipe with a 'collar' and short tubular projection beyond was intrusive in medieval deposit [91] in Cellar A.

Other

A gold finger-ring (Sf. 1) was recovered from the fill [5] of drain [36] (fig. 21). The hoop (21 mm diameter) had a butt-joint suggesting it had been re-sized, and the bezel was hollow with a hinged lid inlaid with a shield shape in turquoise paste. The cavity was empty. There were no hallmarks, but some faint scratches which may have been jeweller's or pawnbroker's marks. Rings such as this possibly held a keepsake, perhaps a lock of hair. It cannot be closely dated, but is likely to be mid-nineteenth century and to have been lost from the 'privy' within the Cannon Inn which the drain served.

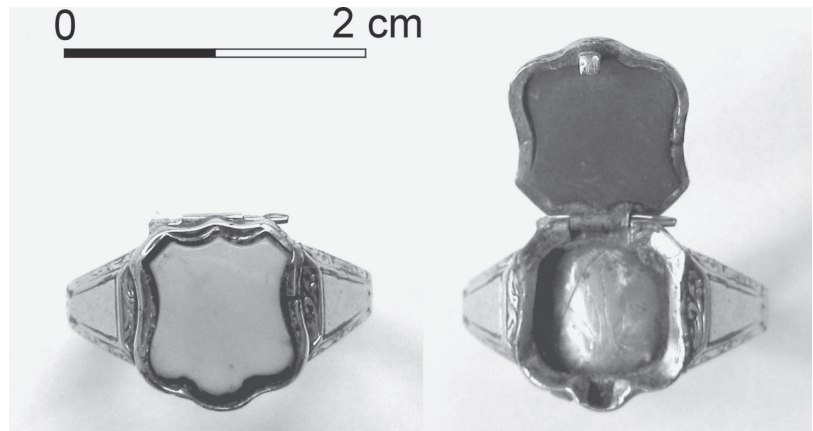


Fig. 21 Ring from Drain [36].

Coins

The only coin was a halfpenny of Queen Victoria dated 1861 from the floor of Cellar A.

Glass

Two fragments of thick, blue-green, vessel glass were recovered from contexts [113] and [127]. These contexts contained residual Roman material and the glass fragments are most probably of the same date.

Post-medieval glass: three small clear window fragments 2 mm thick from [63], one from [66] and a late nineteenth- to early twentieth-century plate glass fragment 7 mm thick from [142] fill of drain [138]. As the drain appears to have been constructed as part of the cellar this was presumably intrusive. A piece of ?bottle in green metal and an 87 mm long section of hollow tube (or stirring rod) in white metal 87 mm long 9 mm diameter with a 2 mm bore came from [66].

Leather

Thirty-eight fragments of leather were found. Apart from a very dessicated fragment, possibly of shoe upper from the fill of a drain in the cellar ([87]) all the pieces came from the late thirteenth- and early fourteenth-century deposits in Javel Group.

The largest pieces comprised a complete turn-shoe sole for the right foot, worn completely through at the big toe and almost so at the heel, and the possibly associated remains of an upper with one surviving knotted leather fastening 'toggle'. These may have formed an ankle boot.

There were five other fragments of shoe soles — one with a pointed toe and three showing signs of patching — a toe repair patch, a heel patch and a number of offcuts and possible pieces of uppers.

There was also a small short sheath, or the lower part of a larger one, showing a raised back seam and traces of tooled decorative lines. Length c. 130 mm. (By the time of writing, some shrinkage would have occurred.)

Organics

Samples (10 litre buckets) were taken from the fill of the Period 1 drain [152], and from waterlogged contexts [151], [140], [125] and [91] between the Period 1 and Period 2 'piers'. These were submitted for environmental assessment in 1994 but no copy of the report could be traced when the site archive was examined for writing this report.

Waterlogged wood was recovered from thirteenth- to fourteenth century contexts [151] and [159], and included a possible stake fragment. More fragments came from fourteenth century contexts [125], [140] and [149], including a piece of board or planking [125] with a nail-hole and the impression of a broad squared nail-head or rove. Unfortunately the report on species identification was not received in time for inclusion in this report.

A dessicated wooden object, originally round-sectioned and possibly a bung came from the fill of drain [152].

Stone

DECORATED FRAGMENT (FIG. 22)

Stuart Harrison

This is an unusual sort of carved stone and appears to have been a finial with projecting crockets. Only about half of the piece has survived having been split vertically on what appears to have been the bed line of the stone. In other words it was worked edge-bedded with the grain of the stone set vertically. At the bottom there is a broken attachment point to the lost base section which may actually have been a tenon to secure the piece into a socket on another stone. The actual start of the object is a circular ring moulding at the base from which it flares outwards at a shallow curvature of bell-shape. From the apex radiating outwards and downwards are a series of fillet-like stems which are attached to two different types of crocket. The smaller of the two has a



Fig. 22 Stone finial.

heart-shaped leaf terminal and the larger a leaf with petalled edges and which is tied with a band around it.

Looking at the way the stems radiate on the top it seems these two types of decoration alternated around the piece and a second larger crocket has clearly been broken off. The apex of the stone is clearly damaged and additional decorative elements have probably been lost as a result. The larger type of crocket is a form seen in the late thirteenth and early fourteenth century and that is the most likely date for the piece. Notably the lack of any weathering to the fabric suggests it was either well sheltered from the elements or was in an internal setting. It is the sort of fitment one would expect on an elaborate tomb or screen. The finish is not of a high quality which reinforces the idea of a high up setting where this would not be obvious.

ROOFING

Ten fragments of sandstone roof-flags were kept. Seven came from context [135] in Javel Group, and included an almost complete flag (in two pieces) 440 mm long and 190 mm broad, with a single punched nail hole and one side knapped to a straight edge. Three other fragments had the remains of a single, punched, nail hole, and one fragment appeared to be from a 'wrestler'. Another complete flag from context [143] (also Javel Group) measuring 620 mm × 30 mm had a single punched nail-hole to one side, the opposing side being apparently chipped into a shallow curve. Either this flag had originally had two nail-holes and one corner had been broken off, or the flag had been shaped to fit against or around a feature, perhaps a louvre. The upper part of the flag showed traces of white lime mortar on one face. Two fragments from context [149] (in the cellar area) were from lighter flags, one measuring 220 mm and the other 160 mm in breadth.

OTHER

Two possible sharpening stones in a fine-grained sandstone were recovered. One, a rectangular block with squared and very smooth sides (length 90 mm, width 60 mm) came from the fill of the construction cut for wall [2]. One face had some scored grooves suggesting use as a sharpening stone. Another fragment with a very smooth surface had broken or unfinished sides, and may have been part of a paving stone ([4], post-medieval context).

The Animal Bones
Louisa Gidney

This is an edited version of the full analytical report which is in the site archive.

INTRODUCTION

A small assemblage of four boxes of animal bones and marine shells was recovered. The pottery indicates a twelfth- to thirteenth-century date for the earliest deposits encountered. The majority of the faunal remains had been deposited in the thirteenth- to fourteenth-century contexts, particularly in the lane known as Javel Group. A smaller proportion of the assemblage was associated with the post-medieval occupation of the site.

PRESERVATION

Preservation varied both within and between the chronological groups. The earlier deposits both from the NE area, Javel Group and the cellar produced fragments with the dark brown patina characteristic of waterlogging. Mixed preservation was seen throughout, with degraded cattle bone associated with well preserved bones of infant calf and puppy, birds and fish. This indicates incorporation of "background" detritus with freshly discarded refuse.

With regard to patterns of food consumption and refuse disposal, the bone preservation suggests that the larger cattle bones may indicate broader trends of exploitation in Newcastle while the bones of the smaller species may represent discrete episodes of consumption and rubbish dumping.

BUTCHERY AND GNAWING

Chop mark butchery is commonplace throughout the assemblage, principally on the cattle bones but also apparent on sheep and pig bones. Cattle and sheep carcasses appear to have been routinely split into two sides in all periods. Marrow bearing limb bones were broken to facilitate extraction of the fat. Some limb bones had been explicitly split longitudinally to expose the marrow. Sheep skulls were split and the horns chopped off. More curious is a cattle tibia with a facet chopped from the shaft. There is a total absence of saw mark butchery on the eighteenth- and nineteenth-century finds, suggesting either conservatism in butchery methods or residuality from earlier activity.

Examples of dog gnawing marks were seen throughout but were generally uncommon compared to butchery chop marks. The exception is the waterlogged deposits, where gnaw marks occur with roughly half the frequency of chop marks. This suggests that much evidence for dog gnawing marks has been obscured by poor surface preservation on the suggested residual cattle bones from the later deposits.

Rodent gnawing marks were seen on five fragments spanning the medieval occupation, which may be indirect evidence for black rats introduced by shipping. Bird bones from the contemporary medieval quayside deposits at Queen Street also exhibited rodent gnawing marks (Allison 1988, 133). In contrast, there are no rodent gnawing marks on the post-medieval bones.

METHODOLOGY

Bones were identified to species using the author's modern comparative reference collection, published works (Schmid 1972, Cohen and Serjeantson 1996) and the Durham University Department of Archaeology reference collection. Only identifiable fragments with 'zones', or cheek teeth, were counted for the common domestic farm animals: cattle, sheep/goat and pig. Loose incisor teeth were not counted. All fragments of all other species present were counted. The zones used are those described by Rackham (1986). A zone is a unique diagnostic feature on an element and is only recorded if at least half of the feature is present. This procedure reduces the over-recording of heavily fragmented bones.

The categories of cattle-size or sheep-size indicate rib and vertebrae fragments and will be considered with cattle and sheep/goat respectively for some discussion. Only proximal ribs with the capitulum, or vertebrae with a zone, were counted.

The standard term sheep/goat is used as goat remains have been recovered from other excavations in Newcastle upon Tyne. However, as the diagnostic skull fragments were of sheep and no evidence was seen for the presence of goat, the term sheep is used in general discussion.

No quantification or tabulation has been made of unidentified fragments.

SPECIES

It can be seen from Table 1 that the majority of the identifiable fragments derive from the domestic farm animals reared for meat: cattle, sheep and pig. Only the earlier deposits in

Table 1 Fragment count for the species present.
JG = Javel Group/Cellar thirteenth / fourteenth century,
LPM = late post-medieval (eighteenth / nineteenth century)

	12th/13th C.	JG	14th C.	L. Med	16th C.	17th C.	LPM
Cattle	17	57	2	19	1	8	12
Cattle size	2	17		8	3	3	3
Sheep/goat	4	20	1	19	1	7	7
Sheep	1	2					
Sheep size		8		3		3	1
Pig	2	7	2	5	1		2
Horse		1		1			
Dog		2					
Cat				2			
Fallow deer		1					
Roe deer		1		1			
Rabbit		1					
D. Fowl		7		4			1
Goose		3	1				
Brent goose	3						
Cormorant	1						
Grouse		1					
Woodcock				1			
Oyster	2	12		9	5	3	1
Mussel		1		1	1		
Limpet		1		1			
Periwinkle				3			
Clam				1			
Cockle				2			
Fish	1	9	1				
Totals	33	151	7	80	12	24	27
Grand Total	334						

Table 2 Relative proportions of the domestic species.

	Medieval		Post-Medieval	
Cattle and Cattle size	122	62%	30	58%
Sheep/Goat and Sheep size	58	30%	19	37%
Pig	16	8%	3	5%
Total	296		52	

Javel Group had a range of other mammal species represented. Bird bones are sparsely distributed, with a small concentration of domestic fowl and goose bones also in Javel Group. Marine molluscs were most numerous, and the most species were represented, in the later medieval contexts. Bones from large species of fish were only found in the earlier medieval deposits.

Since the overall assemblage is small, comparison of broad trends in supply and consumption is generally only made between the medieval, twelfth to sixteenth centuries, and post-medieval collections.

However, the evidence for freshly broken pottery in Javel Group gives some pointers to faunal remains from possible associated meals, such as sheep skull fragments [136]; pig, fallow deer, fowl and fish bones [151]; veal calf, sucking pig, domestic fowl and red grouse [125].

Overall, Table 2 demonstrates a similar pattern of proportions of cattle to sheep/goat to pig fragments, with a suggestion of an increase of sheep relative to cattle fragments in the post-medieval group. This pattern may be more the product of taphonomic factors than human selection processes, with residual cattle fragments throughout the assemblage.

Cattle

The overall pattern in the disposal of cattle bone refuse on this site in Table 3 shows that there are very few bones from the feet and head, usually removed from the carcass at the time of

Table 3 Body part representation of the domestic species.

	Medieval			Post-Medieval		
	Cattle	Sheep/goat	Pig	Cattle	Sheep/goat	Pig
Head: skull, jaw, loose teeth	9	11	4	4	1	
Forelimb: scapula, humerus, radius, carpals	19	12	4	6	7	2
Vertebrae and ribs	32	12	1	9	4	1
Hindlimb: pelvis, femur, patella, tibia, tarsals	46	18	6	6	5	
Feet: metapodials	8	3	1	1	1	
Toes: phalanges	8	2		4	1	

skinning. Metapodials, phalanges and loose teeth are all very dense, survive well after burial and are readily recognised during excavation, suggesting that there is a genuine paucity of such body parts on this site. In contrast, there is a high proportion of fragments from the hind limb, far outnumbering those of the forelimb. Again, this is not a product of differential preservation as fragments from fore and hind limbs generally survive in comparable numbers.

There were too few teeth for estimation of mortality pattern. The stages of epiphysial fusion give an indication of the medieval cull pattern. The medieval deposits produced two calf bones, one clearly butchered and representing veal, the other foetal, indicating breeding females in the vicinity. The unfused and fusing epiphyses suggest that cattle were culled between two and five years old. The vertebrae indicate that few beef carcasses were from older animals.

Only one cattle bone exhibited abnormality, a distal metatarsal from [127]. The medial condyle is expanded with exostosis on the anterior aspect. The small size and gracile build of the specimen suggests it is female.

There was little evidence to suggest the sex ratio of the cull cattle, though both males and females are represented in the medieval deposits. The post-medieval cattle bones are robust, though it is not clear if these are merely from male animals or represent an 'improved' type.

Sheep/Goat

The pattern of body part distribution for sheep in Table 3 is suggestive that whole carcasses were utilised in the vicinity. Unlike the pattern seen for the medieval cattle, elements from the head are well represented relative to the axial skeleton and limb bones. Metapodials survive well, so the comparative paucity of these lower leg bones may indicate removal in the skin. The small post-medieval group shows a comparable pattern, though there are slightly more fragments from the forelimb than the hindlimb.

Four mandibles with complete tooth rows indicate one first year lamb and three second year animals in the medieval deposits. Overall the tooth eruption and wear data showed that few animals survived into their third year. Similarly the sparse medieval epiphysial fusion data demonstrate a similar pattern, with no fully fused limb bone epiphysial ends among the elements that fuse after two years of age. The scant post-medieval data show corresponding evidence for immature animals only.

Three medieval fragments showed female characteristics and one complete metacarpal indicates a withers height of 0.54 m (Driesch and Boessneck 1974, 339).

Pig

Table 2 demonstrates how few fragments of pig bone were recovered. Little can therefore be inferred about the utilisation of this species. The distribution of body parts in Table 3 suggests refuse from whole carcasses. The waterlogged preservation in [125] has led to the survival of a mandible fragment from an infant sucking pig, together with a maxilla from an adult pig with the permanent dentition present. A radius from a larger piglet was found in [99]. The presence of bones from such young piglets suggests that breeding pigs were kept in the vicinity.

Companion Animals: Horse, Dog, Cat

Two fragments of horse bone were recovered, part of a maxilla with the molar teeth present and in wear [159] and part of a mandibular hinge [64].

Although dog gnawing marks were observed throughout the assemblage, remains of dog were confined to medieval deposits in the Javel Group, with a skull from [159]. No teeth are *in situ* and have probably been lost *post mortem*. There is pitting and resorption of the alveolar margins, an indication of inflammation and / or disease of the gums in life. This is probably an age-related condition as the sutures of the skull are largely obliterated, indicative of advanced age. In contrast, a radius with unfused epiphysial ends found in [126] is from a very young puppy. Like the cattle and pigs, dogs may have bred in the vicinity.

Cat is represented only in later medieval context [64] by a radius and tibia. Both bones have unfused epiphysial ends and may derive from the same animal.

Wild species: Deer and Rabbit

The find of fallow deer, noted above from the Javel Group [151], was a complete radius with fused epiphysial ends. A roe deer tibia was also present in the same context. A complete, shed, roe deer antler was found in later medieval context [69]. A rabbit femur was found in context [96].

The fallow deer and rabbit were both managed, emparked, species while the roe deer was wild and actively hunted. Access to these species was reserved for the privileged, landed, few. Such evidence for consumption of game might indicate deposition of refuse generated by the castle, or gifts of game to wealthy merchants able to offer commensurate services to landed gentry or royalty. The shed antler is probably not food refuse. Although this roe deer antler is unworked, it may have been obtained as potential raw material for a tool handle or been attached to a skin for tawing. It would certainly have had to be collected in the countryside and deliberately brought into town.

Birds

Bird bones were infrequent finds. Domestic fowl bones are most numerous, with small concentrations in Javel Group and later medieval contexts. Domestic goose is represented only in Javel Group and medieval context [115]. Early medieval context [145] contained a radius, ulna and carpo-metacarpal from one wing of a wild goose, comparable with Brent goose. The same context also produced a single bone of cormorant. Cormorants are still to be seen on the Tyne in Newcastle. Brent geese are migratory and winter in Britain. The game birds represented are red grouse in Javel Group [125] and woodcock in later medieval context [58]. These species will have entered town from the same sources as the game animals.

Marine Molluscs

Oyster shells were the most commonly recovered marine shells, found in both medieval and post-medieval deposits. The greatest range of species came from later medieval contexts, with mussel, periwinkle, a clam species and cockle represented. There appears to be a relative increase in marine shell deposition in later medieval to seventeenth-century contexts, which complements the absence of fish bones.

Fish

The hand recovered fish bones were all comparable with large specimens of the cod family and were principally bones of the head. Such fish bones were only seen in the earlier medieval deposits. These are unlikely to be representative of the range of fish species and skeletal elements originally deposited, as demonstrated by the fish bone assemblage from Queen Street (Nicholson 1988, 138–147).

The absence of fish bones and slight increase in marine shells in the later medieval contexts might tentatively indicate some change in season of deposition. Nicholson (1988, 147) suggests that the Queen Street fish were probably caught in summer and autumn whereas marine molluscs are traditionally in season from September to April.

DISCUSSION

The faunal assemblage recovered is small for the chronological span represented. Many of the trends observed may therefore merely be the product of small sample size. However, other excavations in the vicinity have produced assemblages for comparison of broader trends.

Excavation at 46–54, The Close produced a small assemblage of faunal remains broadly assigned to medieval and post-medieval activity (Arch Services 2005). Though preservation was good, with some waterlogged bones in excellent condition, the assemblage was deemed too small to warrant detailed analysis. However, the range of species is noteworthy for the high proportion of poultry bones and presence of game animals, roe deer and hare, in such a small collection. The pig bones also included an example from an infant piglet. This area of the Close appears to have received refuse from a similar source to the assemblage from Javel Group.

On the north side of The Close, excavation at Tuthill Stairs produced a more substantial faunal assemblage spanning the thirteenth to fifteenth centuries, recovered from individual occupation Plots (Arch Services 2007). Plot 1 appears to have disposed of more faunal refuse on site and enjoyed a high proportion of pig and poultry meat in the diet. A single crane bone suggests an episode of very high status dining. All these establishments may have contributed to the refuse dumped in, for example, the Javel Group.

Complementing the cormorant and Brent goose from Group 1, Tuthill Stairs produced a single find of black or red throated diver. A single guillemot bone was found at Crown Court (Gidney 1989a). Allison (1988, 136) notes a Manx shearwater from Queen Street and suggests that such examples of individual sea birds may have been unintentionally, or opportunistically, caught in fishing nets in the North Sea.

It is of note that the small assemblages from 27 and 46–54, The Close have produced a suite of wild birds and game animals when the very large assemblage from Queen Street contained only three roe deer and two rabbit bones (Rackham 1988, 121) besides one woodcock bone (Allison 1988, 134). Again, the large assemblage from Crown Court only produced single examples of rabbit and grouse bones (Gidney 1989a). It would appear that the Close was nearer to the source of high status refuse, whether the households of wealthy merchants associating with the nobility or the castle itself.

The large assemblage from Close Gate and Mansion House (Davis 1991) was derived from deposits deliberately dumped as landfill of the waterfront. Though spatially nearer to 27 The Close, few bones from wild game species were recovered. Davis (1991, 7) observed that the

refuse dumped in Close Gate appears to have originated in lower status households than those of the documented wealthy merchant class, known to have had residences in the Close.

The small collection from Hanover Street was chiefly notable for the high proportion of weathered cattle bone but good preservation of fragile poultry bones from the same deposits (Gidney 1989b). A comparable trend was observed at 27 The Close.

Clearly, large numbers of cattle carcasses were being processed within the town. Both the castle garrison and the merchant shipping would have been victualled with preserved beef, in addition to the fresh meat consumed within the town. Some at least of the bone waste from such processes appears to have ended up as landfill on the quayside. In contrast, the well preserved bones from smaller species and juvenile animals appear to represent patterns of consumption and waste disposal from domestic establishments in the vicinity of the quayside. Though the assemblages recovered from individual sites are small, trends are beginning to appear in overview of the sites excavated along the river front.

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SOURCES

Primary sources

Astley, Sir Jacob *A Description of The Wallles of the Towne of Newcastle upon Tyne, 1638*, held by the National Archives State Paper Office: reference MPF 1/333. [Reproduced in Welford, R. 1887 'The Walls of Newcastle in 1638', *AA*² 12, 230–235].

Beckman, Martin, 1684. *Plan of Newcastle upon Tine* (Copied for the Board of Ordnance 1743).

Goad, Charles, Insurance Plans of Newcastle (various dates)

TWA – Tyne and Wear Archive references

Newcastle Central Library, Roads and Streets – photographic collection:

36952 Javel Group c. 1935.

34927 Javel Group c. 1930.

45541 Close, showing No. 27. c. 1967.

43677 Close, showing No. 27 1971.

Various directories (e.g. Kelly, Ward, Parson and White) are referred to in the text with relevant dates.

BIBLIOGRAPHY

ADDYMAN ARCHAEOLOGY, unpublished, Buttress Building,

ALLISON, E. 1988 'The Bird Bones', in C. O'Brien *et al.*, 133–137.

ARCHAEOLOGICAL SERVICES 2005. 46–54 *The Close, Newcastle upon Tyne: archaeological works*.

Archaeological Services Durham University Report 1081.

- ARCHAEOLOGICAL SERVICES 2007. *Tuthill Stairs, Newcastle upon Tyne: palaeoenvironmental analysis*. Archaeological Services Durham University Report 1646.
- BATES, C. J. (ed.) 1901 *Guide to the Castle of Newcastle*, the Society of Antiquaries of Newcastle upon Tyne.
- BIDWELL, P. and CROOM, A. 2002 'The Roman Pottery' in Bidwell, P. and Snape, M. 'The Roman Fort at Newcastle upon Tyne' *AA⁵*, 31, 139–172.
- BROCKETT, J. T. A. 1846 *Glossary of North Country Words*, Newcastle.
- BOURNE, H. 1736 *History of Newcastle*.
- BOWN, L. 1988a 'The Pottery: Dog Bank Kiln Ware', in O'Brien *et al.*, 33–38.
- BOWN, L. 1988b 'The Queen Street Pottery', in O'Brien *et al.*, 41–77.
- COHEN, A. and SERJEANTSON, D. 1996. *A Manual for the Identification of Bird Bones from Archaeological Sites*. London: Archetype Publications.
- DAVIS, S. J. M. 1991. *Faunal Remains from Closegate I & II, Newcastle, Tyne and Wear, 1988 & 1990 Excavations*. Ancient Monuments Laboratory Report 81/91. [NB: These sites are Close Gate, not Closegate].
- DRIESCH, A. VON DEN and BOESSNECK, J. 1974. Kritische Anmerkungen zur Widerristhöhenberechnung aus Langenmassen vor- und frühgeschichtlicher Tierknochen. *Säugetierkundliche Mitteilungen* 22, 325–48.
- EDWARDS, L. 1988 'Seventeenth and Eighteenth Century Tyneside Tobacco Pipe Makers and Tobacconists', in Peter Davey (ed.) *The Archaeology of the Clay Tobacco Pipe* 11, BAR British Series 192.
- ELLISON, M. 1981 'The pottery' in Harbottle, B. and Ellison, M. 'An Excavation in the Castle Ditch, Newcastle upon Tyne, 1974–76' *AA⁵*, 9, 95–164.
- ELLISON, M. *et al.*, 1993 'Excavations at Newcastle Quayside: Waterfront Development at the Swirle' *AA⁵*, 21, 151–234.
- FRASER, R., MAXWELL, R. and VAUGHAN, J. E., 1994 'Excavation adjacent to Close Gate, Newcastle, 1988–89'. *AA⁵*, 22, 85–151.
- FRASER, R., JAMFREY, C. and VAUGHAN, J. E., 1995 'Excavation on the site of the Mansion House, Newcastle, 1990', *AA⁵*, 23, 145–213.
- GIDNEY, L. J. 1989a. *The mammal and bird bone from the 1986 excavations at Crown Court, Newcastle upon Tyne, Tyne & Wear. Parts 1 & 2*. Ancient Monuments Laboratory Report 108/1989. London, English Heritage.
- GIDNEY, L. J. 1989b. 'The Animal Bone'. in Nolan, J. 1989, 49–50.
- HALLIWELL, J. O. 1844 'Bird's-eye View of Newcastle upon Tyne, from a drawing preserved in the British Museum [Cottonian MSS]', *AA¹*, 3, 124.
- HARBOTTLE, R. B. 1969 'The town wall of Newcastle upon Tyne: excavation and survey 1968', *AA⁴*, 47.
- HARBOTTLE, R. B. 1973, 'No. 26 The Close, Newcastle upon Tyne' in *Archaeological Newsbulletin for CBA Regional Group 3, Northumberland, Cumberland, Westmorland and Lancashire-north-of-the-Sands*, No. 4 May 1973, 10–11.
- HARBOTTLE, R. B. and CLACK, P. A. G. 1976, 'Newcastle upon Tyne: Archaeology and Development' in Clack, P. A. G. and Gosling, P. F. *Archaeology in the North* (Harding, D. W. ed.), Northern Archaeological Survey.
- HESLOP, D. H. and TRUMAN L. 1993 'The Cooperage 32–34 The Close: a timber framed building in Newcastle upon Tyne', *AA⁵*, 21, 1–14.
- LONGSTAFFE, W. H. D. 1860 'The New Castle upon Tyne', *AA²*, 4, 45–139
- LUMLEY MSS. Catalogue of the Earl of Scarborough's Archive, National Register of Archives 1954.
- MABBITT J. 2007 Quayside Lofts, Tuthill Stairs. Grey literature report in Tyne & Wear Historic Environment Record.
- MACKENZIE, E. 1827, *History of Newcastle upon Tyne*, Vols 1 and 2.
- MANDERS, F. and POTTS, R. 2001 *Crossing the Tyne*, Tyne Bridge Publishing
- NICHOLSON, R. 1988 'The Fish Remains' in O'Brien *et al.* 1991, 138–147.

- NOLAN, J. 1989 'An Excavation on the Town Wall between the Close and Hanover Street' in Nolan, J., Fraser, R., Harbottle, B. and Burton, F. C. 'The Medieval Town Defences of Newcastle upon Tyne: Excavation and Survey 1986–87'. *AA*⁵, 17, 32–50.
- MONTHLY CHRONICLE OF NORTH-COUNTRY LORE AND LEGEND, 3, 1889. Walter Scott, Newcastle.
- O'BRIEN, C., BOWN, L., DIXON, S. and NICHOLSON, R. 1988, *The Origins of Newcastle Quayside, Excavations at Queen Street and Dog Bank*. The Society of Antiquaries of Newcastle upon Tyne Monograph Series 3
- O'BRIEN, C., PASSMORE, D. and DORE, J. 1991, 'Roman riverside deposits at Castle Stairs, Sandhill', *AA*⁵, 19, 17–24.
- OLIVER, A. M. (ed.) 1924, *Early deeds relating to Newcastle upon Tyne*. Durham.
- OLIVER, T. 1830, *Plan of Newcastle upon Tyne and Gateshead* (Book of Reference 1831)
- OS2, Ordnance Survey 2nd edition, 1:500, 1894.
- PLATELL, A. C. 2013 'Excavations at 46–54 The Close, Newcastle upon Tyne', *AA*⁵, 42, 181–206.
- RACKHAM, D. J. 1986. Assessing the Relative Frequencies of Species by the Application of a Stochastic Model to a Zooarchaeological Database in L. H. van Wijngaarden-Bakker (ed.) *Database Management and Zooarchaeology*. Strasbourg: PACT 14, 185–192.
- RACKHAM, D. J. 1988 'The Mammal Bones from Medieval and Post-Medieval Levels at Queen Street', in O'Brien, C. *et al.*, 120–132.
- RICHARDSON, G. B. 1855 'A Muster of the Fencible Inhabitants of Newcastle-upon-Tyne in the year 1539, derived from the Original in the Rolls Chapel; preceded by some Observations on the System of Watch and Ward', *AA*¹, 4, 119–140.
- SALZMAN, L. F. 1952 *Building in England down to 1540: a documentary history*. Oxford.
- SCHMID, E. 1972. *Atlas of Animal Bones*. Amsterdam.
- VAUGHAN, J. E. 1994 'The Pottery' in Fraser R., Maxwell R. and Vaughan J. E. 'Excavation adjacent to the Close Gate', *AA*⁵, 22, 105–119.
- VAUGHAN, J. E. and SAGE, A. P. 2006 *Draft report on the medieval pottery from the castle, Newcastle upon Tyne*.
- VAUGHAN, J. E. 2006, Unpublished report on the pottery from the Gallowgate site (St James Boulevard) prepared for Northern Archaeological Associates.
- VAUGHAN, J. E. 2013, 'Pottery' in 'Excavations at Newcastle University, Percy Street', *AA*⁵, 42, 218–220.
- VAUGHAN, J. E. 2018, 'Medieval Ceramics' in Jackson, D. 'Westgate Road, Newcastle upon Tyne: Archaeological Investigations at the Former Parcels Office', *AA*⁵, 47, 57–67.
- WALTON, J. 1927 *The Greenwell Deeds preserved in the Public Library, Newcastle upon Tyne, calendared by Joseph Walton*, *AA*⁴, 3.
- WELFORD, R. 1884 *History of Newcastle and Gateshead during the fourteenth and fifteenth centuries century* [Volume 1].

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